# APPENDIX H CONCEPTUAL COST ESTIMATES



DRAFT NOVEMBER 2024
PRELIMINARY FEASIBILITY STUDY
U.S. 23 CORRIDOR STUDY, PID 112768

	203	O Construction Costs - LOW								203	O Construction Costs - HIGH			
NB	E	D	С	В	Α			NB		E	D	С	В	Α
			\$	81,592,987 \$	351,282,600	1.00	<b>1S</b>					\$	101,991,233 \$	439,103,250
		\$ 62,141,905 \$	76,817,215 \$	91,042,976 \$	136,917,197	added	1N				\$ 77,677,382 \$	96,021,518 \$	113,803,720 \$	171,146,496
		\$ 115,565,014 \$	128,438,069 \$	165,394,446 \$	182,563,935	contingency	2				\$ 144,456,268 \$	160,547,586 \$	206,743,058 \$	228,204,919
		\$ 109,680,267 \$	130,414,997 \$	160,018,825 \$	193,454,645		3				\$ 137,100,333 \$	163,018,747 \$	200,023,532 \$	241,818,306
		\$ 99,373,157 \$	132,293,080 \$	158,691,846 \$	271,305,008		4				\$ 124,216,446 \$	165,366,349 \$	198,364,807 \$	339,131,260
	\$ 98,585,094	\$ 136,401,300 \$	181,297,889 \$	203,193,049 \$	262,984,305		5		\$	123,231,367	\$ 170,501,624 \$	226,622,361 \$	253,991,312 \$	328,730,382
		\$ 61,787,142 \$	78,542,288 \$	223,818,101 \$	336,562,607		6				\$ 77,233,927 \$	98,177,860 \$	279,772,626 \$	420,703,259
		\$ 25,277,604 \$	60,499,430 \$	80,232,156 \$	124,696,799		7				\$ 31,597,005 \$	75,624,287 \$	100,290,195 \$	155,870,999
		ROW Costs - LOW	1								ROW Costs - HIGH			
NB	E	D	С	В	Α			NB		E	D	С	В	Α
			\$	6,288,574 \$	136,680,519	0.75	1\$					\$	10,480,956 \$	227,800,864
		\$ 38,661,184 \$	56,970,915 \$	71,395,790 \$	175,001,461	factor	1N				\$ 64,435,306 \$	94,951,525 \$	118,992,983 \$	291,669,102
		\$ 38,836,756 \$	41,647,825 \$	70,702,779 \$	78,529,780		2				\$ 64,727,927 \$	69,413,042 \$	117,837,966 \$	130,882,966
		\$ 10,298,924 \$	11,263,092 \$	9,799,232 \$	18,869,942		3				\$ 17,164,873 \$	18,771,819 \$	16,332,053 \$	31,449,903
		\$ 16,133,489 \$	21,610,467 \$	30,105,421 \$	36,151,089		4				\$ 26,889,148 \$	36,017,445 \$	50,175,701 \$	60,251,815
	\$ 13,458,829	\$ 16,446,544 \$	34,217,001 \$	40,719,496 \$	51,876,031		5		\$	22,431,381	\$ 27,410,907 \$	57,028,334 \$	67,865,827 \$	86,460,051
		\$ 11,197,869 \$	7,706,800 \$	29,342,798 \$	39,658,565		6				\$ 18,663,116 \$	12,844,667 \$	48,904,663 \$	66,097,609
		\$ 71,709 \$	542,066 \$	589,931 \$	860,574		7				\$ 119,514 \$	903,444 \$	983,219 \$	1,434,290
	•		•									•		
		ROW Costs w/Inflat	ion								ROW Costs w/Inflation	n		
NB	E	D	С	В	Α			NB		E	D	С	В	Α
\$	- \$ -	\$ - \$	- \$	8,515,110 \$	185,073,712	35%	15	\$	- \$	-	\$ - \$	- \$	14,191,850 \$	308,456,186
\$	- \$ -	\$ 52,349,587 \$	77,142,074 \$	96,674,230 \$	236,962,592	inflation	1N	\$	- \$	-	\$ 87,249,312 \$	128,570,123 \$	161,123,716 \$	394,937,654
\$	- \$ -	\$ 52,587,323 \$	56,393,681 \$	95,735,852 \$	106,334,085		2	\$	- \$	-	\$ 87,645,538 \$	93,989,468 \$	159,559,753 \$	177,223,474
\$	- \$ -	\$ 13,945,368 \$	15,250,909 \$	13,268,754 \$	25,551,045		3	\$	- \$	-	\$ 23,242,279 \$	25,418,182 \$	22,114,590 \$	42,585,076
\$	- \$ -	\$ 21,845,722 \$	29,261,883 \$	40,764,565 \$	48,950,767		4	\$	- \$	-	\$ 36,409,537 \$	48,769,805 \$	67,940,942 \$	81,584,612
\$	- \$ 18,224,070	\$ 22,269,619 \$	46,331,894 \$	55,136,668 \$	70,243,292		5	\$	- \$	30,373,450	\$ 37,116,031 \$	77,219,823 \$	91,894,446 \$	117,072,153
\$	- \$ -	\$ 15,162,594 \$	10,435,475 \$	39,731,928 \$	53,700,103		6	\$	- \$		\$ 25,270,990 \$	17,392,459 \$	66,219,880 \$	89,500,171
\$	- \$ -	\$ 97,098 \$	733,991 \$	798,803 \$	1,165,270		7	\$	- \$	-	\$ 161,830 \$	1,223,318 \$	1,331,338 \$	1,942,116
		Total Cost									Total Cost			
NB	E	D	C	В	Α			NB		E	D	С	В	Α
\$	- \$ -	\$ - \$	- \$	90,000,000 \$	535,000,000		1\$	\$	- \$	-	\$ - \$	- \$	115,000,000 \$	750,000,000
\$	- \$ -	\$ 115,000,000 \$	155,000,000 \$	190,000,000 \$	375,000,000		1N	\$	- \$	-	\$ 165,000,000 \$	225,000,000 \$	275,000,000 \$	565,000,000
\$	- \$ -	\$ 170,000,000 \$	185,000,000 \$	260,000,000 \$	290,000,000		2	\$	- \$	-	\$ 230,000,000 \$	255,000,000 \$	365,000,000 \$	405,000,000
\$	- \$ -	\$ 125,000,000 \$	145,000,000 \$	175,000,000 \$	220,000,000		3	\$	- \$	-	\$ 160,000,000 \$	190,000,000 \$	220,000,000 \$	285,000,000
	- \$ -	\$ 120,000,000 \$	160,000,000 \$	200,000,000 \$	320,000,000		4	\$	- \$	-	\$ 160,000,000 \$	215,000,000 \$	265,000,000 \$	420,000,000
\$	445 000 000	· · · · · ·	230,000,000 \$	260,000,000 \$	335,000,000		5	\$	- \$	155,000,000	, , ,	305,000,000 \$	345,000,000 \$	445,000,000
\$ \$	-   \$ 115.000.000		7, ,				-	-			\$ 105,000,000 \$	115,000,000 \$	345,000,000 \$	510,000,000
\$ \$ \$	- \$ 115,000,000 - \$ -	\$ 75,000,000 \$	90,000.000   \$	265.000.000 l \$	390,000.000		ь	\$	-   5	-	1.2 TO2'000'000 1.3	TT2'000'000 F 2	343,000.000 1.3	210,000,000
\$ \$	- \$ -	\$ 75,000,000 \$ \$ 25,000,000 \$	90,000,000 \$	265,000,000 \$ 80,000,000 \$	390,000,000 125,000,000		6 7	\$	- \$ - \$		\$ 105,000,000 \$	75,000,000 \$	100,000,000 \$	160,000,000

# SEGMENT 1 CONCEPT A - OVERALL

SEGMENT 1S - CONCEPT A	Quantity
Construction Subtotal	\$155,907,000
Contingency (30%)	\$46,772,000
Construction Total	\$202,679,000
Right-of-Way	\$0
Engineering (18%)	\$36,482,000
Construction Engineering (10%)	\$20,268,000
Project Subtotal	\$259,429,000
Inflation (30%)	\$77,828,700
Subtotal	\$337,258,000
SEGMENT 1N CONCEPT A - RANGE 1	Quantity
Construction Subtotal	\$7,429,000
Contingency (30%)	\$2,229,000
Construction Total	\$9,658,000
Right-of-Way	\$0
Engineering (18%)	\$1,738,000
Construction Engineering (10%)	\$966,000
Project Subtotal	\$12,362,000
Inflation (30%)	\$3,708,600
Subtotal	\$16,071,000
SEGMENT 1N CONCEPT A - RANGE 2	<b>+</b> 20,012,000
Construction Subtotal	\$2,852,000
Contingency (30%)	\$856,000
Construction Total	\$3,708,000
Right-of-Way	\$0
Engineering (18%)	\$667,000
Construction Engineering (10%)	\$371,000
Project Subtotal	\$4,746,000
Inflation (30%)	\$1,423,800
Subtotal	\$6,170,000
SEGMENT 1N CONCEPT A - RANGE 3	
Construction Subtotal	\$39,149,000
Contingency (30%)	\$11,745,000
Construction Total	\$50,894,000
Right-of-Way	\$0
Engineering (18%)	\$9,161,000
Construction Engineering (10%)	\$5,089,000
Project Subtotal	\$65,144,000
Inflation (30%)	\$19,543,200
Subtotal	\$84,687,000
SEGMENT 1N CONCEPT A - RANGE 4	
Construction Subtotal	\$11,336,000
Contingency (30%)	\$3,401,000
Construction Total	\$14,737,000
Right-of-Way	\$0
Engineering (18%)	\$2,653,000
Construction Engineering (10%)	\$1,474,000
Project Subtotal	\$18,864,000
Inflation (30%)	\$5,659,200
Subtotal	\$24,523,000

SEGMENT 1 - OVERALL	
SEGMENT 1S - CONCEPT A	\$337,258,000
SEGMENT 1N CONCEPT A - RANGE 1	\$16,071,000
SEGMENT 1N CONCEPT A - RANGE 2	\$6,170,000
SEGMENT 1N CONCEPT A - RANGE 3	\$84,687,000
SEGMENT 1N CONCEPT A - RANGE 4	\$24,523,000
Total - Segment 1 - Overall	\$468,709,000

Segment 1S

Construction w/ Contingency w/out Inflation: \$259,429,000

Segment 1N

Construction w/ Contingency w/out Inflation: \$101,116,000





### SEGMENT 1S - CONCEPT A

270 Interchange to	

270 Interchange to Northwoods Bivd					
Roadway					
Description	Quantity	Unit	Unit Cost	Total	
PAVEMENT REMOVED	48,300	SY	\$20.00	\$966,000.00	
CULVERT REMOVED	250	FT	\$100.00	\$25,000.00	
RETAINING WALL REMOVED	1	LUMP	\$200,000.00	\$200,000.00	
EXCAVATION	85,200	CY	\$40.00	\$3,408,000.00	
EMBANKMENT	540,587	CY	\$45.00	\$24,326,418.33	
GUARDRAIL	6,000	FT	\$22.00	\$132,000.00	
MEDIAN BARRIER	13,622	FT	\$120.00	\$1,634,640.00	
CURB AND GUTTER	11,500	FT	\$42.00	\$483,000.00	
CONCRETE MEDIAN		SY	\$100.00	\$0.00	
CONCRETE WALK	20,000	SF	\$13.00	\$260,000.00	
Roadway Subtotal					

Erosion Control						
Description	Quantity	Unit	Unit Cost	Total		
EROSION CONTROL	2,500,000	EACH	\$1.00	\$2,500,000.00		
EROSION CONTROL PLAN	1	LUMP	\$500,000.00	\$500,000.00		
BMPs	1	LUMP	\$2,125,000.00	\$2,125,000.00		
SEEDING AND MULCHING	250,000	SY	\$2.00	\$500,000.00		
Frosion Control Subtotal						

Drainage						
Description	Quantity	Unit	Unit Cost	Total		
CULVERT	500	FT	\$600.00	\$300,000.00		
STORM SEWER SYSTEM	34,500	FT	\$300.00	\$10,350,000.00		
UNDERDRAINS	147,600	FT	\$15.00	\$2,214,000.00		
Drainage Subtotal						

Pavement						
Description	Quantity	Unit	Unit Cost	Total		
FULL-DEPTH PAVEMENT (ASPHALT)	104,294	SY	\$100.00	\$10,429,366.67		
FULL-DEPTH PAVEMENT (CONCRETE)	35,600	SY	\$150.00	\$5,340,000.00		
PAVEMENT PLANING AND RESURFACING	60,400	SY	\$54.00	\$3,261,600.00		
SHARED USE PATH		SY	\$42.00	\$0.00		
Pavement Suhtotal						

Traffic Control - Signing and Pavement Marking					
Description	Quantity	Unit	Unit Cost	Total	
SIGNING	5.28	MILE	\$250,000.00	\$1,320,000.00	
PAVEMENT MARKINGS - THERMO		MILE	\$14,000.00	\$0.00	
PAVEMENT MARKINGS - RECESSED	5.28	MILE	\$30,000.00	\$158,400.00	
Traffic Control - Signing and Pavement Marking Subtotal				\$1,478,400.00	

Traffic Signal and Surveillance				
Description	Quantity	Unit	Unit Cost	Total
STANDARD TRAFFIC SIGNAL	4	EACH	\$300,000.00	\$1,200,000.00
TRAFFIC SIGNAL FOR R-CUT		EACH	\$780,000.00	\$0.00
FIBER OPTIC COMMUNICATION	5.28	MILE	\$170,000.00	\$897,600.00
CCTV	4	EACH	\$123,000.00	\$492,000.00
Traffic Control - Traffic Signal Subtotal				

Roadway Lighting						
Description	Quantity	Unit	Unit Cost	Total		
FULL INTERCHANGE LIGHTING	1	EACH	\$500,000.00	\$500,000.00		
PARTIAL INTERCHANGE LIGHTING		EACH	\$300,000.00	\$0.00		
CONTINUOUS ROADWAY LIGHTING	34500	FT	\$100.00	\$3,450,000.00		
Traffic Control - Traffic Signal Subtotal						

Utility Relocations - Gas, Electric, Water, Wastewater						
Description	Quantity	Unit	Unit Cost	Total		
HIGH PRESSURE GAS LINE		FT		\$0.00		
WATERLINE 36" OR LARGER		FT		\$0.00		
HIGH VOLTAGE TOWER	14	EACH	\$1,500,000.00	\$21,000,000.00		
SANITARY LINE 36" OR LARGER		FT		\$0.00		
DAM MODIFICATION		LUMP		\$0.00		
		Water/W	estowator Subtotal	¢21 000 000 00		

Structures				
Description	Quantity	Unit	Unit Cost	Total
RETAINING WALL	231,800	SF	\$90.00	\$20,862,000.00
BRIDGE	140,100	SF	\$220.00	\$30,822,000.00
			Pavement Subtotal	\$51,684,000.00

Quantity	Unit	Unit Cost	Total
1	LUMP	\$250,000.00	\$250,000.00
1	LUMP	\$4,000,000.00	\$4,000,000.00
1	LUMP	\$2,000,000.00	\$2,000,000.00
	Misc	ellaneous Subtotal	\$6,250,000.00
	Quantity 1 1 1	1 LUMP 1 LUMP 1 LUMP	1 LUMP \$250,000.00 1 LUMP \$4,000,000.00

Project Summary	Subtotal
Roadway	\$31,435,058
Erosion Control	\$5,625,000
Drainage	\$12,864,000
Pavement	\$19,030,967
Traffic Control - Signing and Pavement Marking	\$1,478,400
Traffic Signal and Surveillance	\$2,589,600
Roadway Lighting	\$3,950,000
Utility Relocations - Gas, Electric, Water, Wastewater	\$21,000,000
Structures	\$51,684,000
Incidentals	\$6,250,000
Total	\$155,907,000

Contingency (30%)	\$46,772,00	\$40,535,800.00	20
		\$30,401,850.00	15
	Subtotal \$202,679,0	\$20,267,900.00	10
		\$10,133,950.00	5
Right-of-Way	\$0	\$2,026,790.00	1
Engineering (18%)	\$36,482,00	00	
		_	
Construction Engineering (10%)	\$20,268,00	00	
		_	

nflation (30%) \$77,828,700

Project Total (2030 Dollars) \$337,258,000



SEGMENT 1N CONCEPT A - RANGE 1 Northwoods Blvd South TO Northwoods Blvd North

Roadway				
Description	Quantity	Unit	Unit Cost	Total
PAVEMENT REMOVED	2,500	SY	\$20.00	\$50,000.00
CULVERT REMOVED		FT	\$100.00	\$0.00
EXCAVATION	3,000	CY	\$40.00	\$120,000.00
EMBANKMENT	1,500	CY	\$45.00	\$67,500.00
GUARDRAIL		FT	\$22.00	\$0.00
MEDIAN BARRIER	3,000	FT	\$120.00	\$360,000.00
CURB AND GUTTER	300	FT	\$42.00	\$12,600.00
CONCRETE MEDIAN		SY	\$100.00	\$0.00
CONCRETE WALK	13,500	SF	\$13.00	\$175,500.00
Roadway Subtotal				\$785,600.00

Erosion Control				
Description	Quantity	Unit	Unit Cost	Total
EROSION CONTROL	150,000	EACH	\$1.00	\$150,000.00
EROSION CONTROL PLAN	1	LUMP	\$30,000.00	\$30,000.00
BMPs	1	LUMP	\$75,000.00	\$75,000.00
SEEDING AND MULCHING	16,800	SY	\$2.00	\$33,600.00
		Frosion C	ontrol Subtotal	\$288 600 00

Drainage				
Description	Quantity	Unit	Unit Cost	Total
CULVERT		FT	\$600.00	\$0.00
STORM SEWER SYSTEM	3,800	FT	\$300.00	\$1,140,000.00
UNDERDRAINS	18,600	FT	\$15.00	\$279,000.00
Drainage Subtotal				\$1,419,000.00

Pavement				
Description	Quantity	Unit	Unit Cost	Total
FULL-DEPTH PAVEMENT (ASPHALT)	28,600	SY	\$100.00	\$2,860,000.00
FULL-DEPTH PAVEMENT (CONCRETE)		SY	\$150.00	\$0.00
PAVEMENT PLANING AND RESURFACING	5,600	SY	\$54.00	\$302,400.00
SHARED USE PATH	1,900	SY	\$42.00	\$79,800.00
Pavement Subtotal				\$3,242,200.00

Traffic Control - Signing and Pavement Marking					
Description	Quantity	Unit	Unit Cost	Total	
SIGNING	0.38	MILE	\$250,000.00	\$95,000.00	
PAVEMENT MARKINGS - THERMO		MILE	\$14,000.00	\$0.00	
PAVEMENT MARKINGS - RECESSED	0.38	MILE	\$30,000.00	\$11,400.00	
Traffic Control - Signing and Pavement Marking Subtotal					

Traffic Signal and Surveillance				
Description	Quantity	Unit	Unit Cost	Total
STANDARD TRAFFIC SIGNAL	1	EACH	\$300,000.00	\$300,000.00
TRAFFIC SIGNAL FOR R-CUT		EACH	\$780,000.00	\$0.00
FIBER OPTIC COMMUNICATION	0.38	MILE	\$170,000.00	\$64,600.00
CCTV	1	EACH	\$123,000.00	\$123,000.00
Traffic Control - Traffic Signal Subtotal				\$487,600.00

Roadway Lighting				
Description	Quantity	Unit	Unit Cost	Total
FULL INTERCHANGE LIGHTING		EACH	\$500,000.00	\$0.00
PARTIAL INTERCHANGE LIGHTING		EACH	\$300,000.00	\$0.00
CONTINUOUS ROADWAY LIGHTING	3000	FT	\$100.00	\$300,000.00
Traffic Control - Traffic Signal Subtotal				\$300,000.00

Utility Relocations - Gas, Electric, Water, Wastewater					
Description	Quantity	Unit	Unit Cost	Total	
HIGH PRESSURE GAS LINE		FT		\$0.00	
WATERLINE 36" OR LARGER		FT		\$0.00	
HIGH VOLTAGE TOWER		EACH		\$0.00	
SANITARY LINE 36" OR LARGER		FT		\$0.00	
DAM MODIFICATION		LUMP		\$0.00	
Water/Wastewater Subtotal					

Structures					
Description	Qu	antity	Unit	Unit Cost	Total
RETAINING WALL			SF	\$90.00	\$0.00
BRIDGE		X	SF	\$220.00	\$0.00
			Pav	ement Subtotal	\$0.00

Incidentals				
Description	Quantity	Unit	Unit Cost	Total
CONSTRUCTION LAYOUT STAKES	1	LUMP	\$50,000.00	\$50,000.00
MAINTENANCE OF TRAFFIC	1	LUMP	\$350,000.00	\$350,000.00
MOBILIZATION	1	LUMP	\$400,000.00	\$400,000.00
		Miscellane	ous Subtotal	\$800,000.00

Project Summai	у		Subtotal
Roadway			\$785,600
Erosion Control			\$288,600
Drainage		,	\$1,419,000
Pavement			\$3,242,200
Traffic Control -	Signing and Pavement Marking		\$106,400
Traffic Signal an	d Surveillance		\$487,600
Roadway Lightin	ng .		\$300,000
Utility Relocatio	ns - Gas, Electric, Water, Wastewater		\$0
Structures			\$0
Incidentals			\$800,000
		Total	\$7,429,000

Contingency (30%)			\$2,229,000	\$1,931,600.00	20%
				\$1,448,700.00	15%
		Subtotal	\$9,658,000	\$965,800.00	10%
				\$482,900.00	5%
Right-of-Way			\$0	\$96,580.00	1%
Engineering (18%)			\$1,738,000		
Construction Engineering	(10%)		\$966,000		

Project Total (2030 Dollars) \$16,071,000

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Roadway				
Description	Quantity	Unit	Unit Cost	Total
PAVEMENT REMOVED	2,500	SY	\$20.00	\$50,000.00
CULVERT REMOVED	0	FT	\$100.00	\$0.00
EXCAVATION	900	CY	\$40.00	\$36,000.00
EMBANKMENT	500	CY	\$45.00	\$22,500.00
GUARDRAIL	500	FT	\$22.00	\$11,000.00
MEDIAN BARRIER	600	FT	\$120.00	\$72,000.00
CURB AND GUTTER	2,200	FT	\$42.00	\$92,400.00
CONCRETE MEDIAN	125	SY	\$100.00	\$12,500.00
CONCRETE WALK	2,600	SF	\$13.00	\$33,800.00
Roadway Subtotal				\$330,200.00

Erosion Control				
Description	Quantity	Unit	Unit Cost	Total
EROSION CONTROL	45,000	EACH	\$1.00	\$45,000.00
EROSION CONTROL PLAN	1	LUMP	\$15,000.00	\$15,000.00
BMPs	1	LUMP	\$30,000.00	\$30,000.00
SEEDING AND MULCHING	7,000	SY	\$2.00	\$14,000.00
Erosion Control Subtotal				\$104,000,00

Drainage				
Description	Quantity	Unit	Unit Cost	Total
CULVERT		FT	\$600.00	\$0.00
STORM SEWER SYSTEM	1,800	FT	\$300.00	\$540,000.00
UNDERDRAINS	8,400	FT	\$15.00	\$126,000.00
Drainage Subtotal				\$666,000.00

Pavement				
Description	Quantity	Unit	Unit Cost	Total
FULL-DEPTH PAVEMENT (ASPHALT)	9,400	SY	\$100.00	\$940,000.00
FULL-DEPTH PAVEMENT (CONCRETE)	1,600	SY	\$150.00	\$240,000.00
PAVEMENT PLANING AND RESURFACING	4,200	SY	\$54.00	\$226,800.00
SHARED USE PATH	700	SY	\$42.00	\$29,400.00
Pavement Subtotal				\$1,436,200.00

Traffic Control - Signing and Pavement Marking					
Description	Quantity	Unit	Unit Cost	Total	
SIGNING	0.11	MILE	\$250,000.00	\$27,500.00	
PAVEMENT MARKINGS - THERMO		MILE	\$14,000.00	\$0.00	
PAVEMENT MARKINGS - RECESSED	0.11	MILE	\$30,000.00	\$3,300.00	
Traffic Control - Signing and Pavement Marking Subtotal					

Traffic Signal and Surveillance				
Description	Quantity	Unit	Unit Cost	Total
STANDARD TRAFFIC SIGNAL		EACH	\$300,000.00	\$0.00
TRAFFIC SIGNAL FOR R-CUT		EACH	\$780,000.00	\$0.00
FIBER OPTIC COMMUNICATION		MILE	\$170,000.00	\$0.00
CCTV		EACH	\$123,000.00	\$0.00
Traffic Control - Traffic Signal Subtotal				\$0.00

Roadway Lighting				
Description	Quantity	Unit	Unit Cost	Total
FULL INTERCHANGE LIGHTING		EACH	\$500,000.00	\$0.00
PARTIAL INTERCHANGE LIGHTING		EACH	\$300,000.00	\$0.00
CONTINUOUS ROADWAY LIGHTING	600	FT	\$100.00	\$60,000.00
Traffic Control - Traffic Signal Subtotal				\$60,000.00

Utility Relocations - Gas, Electric, Water, Wastewater						
Description		Quantity	Unit	Unit Cost		Total
HIGH PRESSURE GAS LINE			FT			\$0.00
WATERLINE 36" OR LARGER			FT			\$0.00
HIGH VOLTAGE TOWER	4		EACH			\$0.00
SANITARY LINE 36" OR LARGER			FT			\$0.00
DAM MODIFICATION			LUMP			\$0.00
Water/Wastewater Subtotal						\$0.00

Structures				
Description	Quantity	Unit	Unit Cost	Total
RETAINING WALL		SF	\$90.00	\$0.00
BRIDGE		SF	\$220.00	\$0.00
		Pave	ement Subtotal	\$0.00

Incidentals			
Description	Quantity	Unit Un	nit Cost Total
CONSTRUCTION LAYOUT STAKES	1	LUMP \$25	,000.00 \$25,000.00
MAINTENANCE OF TRAFFIC	1	LUMP \$100	0,000.00 \$100,000.00
MOBILIZATION	1	LUMP \$100	0,000.00 \$100,000.00
		Miscellaneous	Subtotal \$225,000.00

Project Summary	Subtotal
Roadway	\$330,200
Erosion Control	\$104,000
Drainage	\$666,000
Pavement	\$1,436,200
Traffic Control - Signing and Pavement Marking	\$30,800
Traffic Signal and Surveillance	\$0
Roadway Lighting	\$60,000
Utility Relocations - Gas, Electric, Water, Wastewater	\$0
Structures	\$0
Incidentals	\$225,000
Tota	\$2,852,000

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Contingency (30%)			\$856,000	\$741,600.00	20%
				\$556,200.00	15%
		Subtotal	\$3,708,000	\$370,800.00	10%
		V		\$185,400.00	5%
Right-of-Way			\$0	\$37,080.00	1%
				_	
Engineering (18%)			\$667,000	]	
	1			_	
Construction Engineer	ing (10%)		\$371,000		

Project Total (2030 Dollars) \$6.170,000

Estimate completed by:

ms consultants, in
engineers, architects, phanne

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Roadway	Roadway					
Description	Quantity	Unit	Unit Cost	Total		
PAVEMENT REMOVED	13,100	SY	\$20.00	\$262,000.00		
CULVERT REMOVED		FT	\$100.00	\$0.00		
EXCAVATION	14,000	CY	\$40.00	\$560,000.00		
EMBANKMENT	17,400	CY	\$45.00	\$783,000.00		
GUARDRAIL	3,500	FT	\$22.00	\$77,000.00		
MEDIAN BARRIER	6,250	FT	\$120.00	\$750,000.00		
CURB AND GUTTER	16,000	FT	\$42.00	\$672,000.00		
CONCRETE MEDIAN	8,500	SY	\$100.00	\$850,000.00		
CONCRETE WALK	19,800	SF	\$13.00	\$257,400.00		
Roadway Subtotal				\$4,211,400.00		

Erosion Control				
Description	Quantity	Unit	Unit Cost	Total
EROSION CONTROL	750,000	EACH	\$1.00	\$750,000.00
EROSION CONTROL PLAN	1	LUMP	\$120,000.00	\$120,000.00
BMPs	1	LUMP	\$500,000.00	\$500,000.00
SEEDING AND MULCHING	250,000	SY	\$2.00	\$500,000.00
Erosion Control Subtotal				\$1,870,000.00

Drainage				
Description	Quantity	Unit	Unit Cost	Total
CULVERT		FT	\$600.00	\$0.00
STORM SEWER SYSTEM	17,900	FT	\$300.00	\$5,370,000.00
UNDERDRAINS	78,400	FT	\$15.00	\$1,176,000.00
Drainage Subtotal				\$6.546,000,00

Pavement				
Description	Quantity	Unit	Unit Cost	Total
FULL-DEPTH PAVEMENT (ASPHALT)	71,000	SY	\$100.00	\$7,100,000.00
FULL-DEPTH PAVEMENT (CONCRETE)	11,300	SY	\$150.00	\$1,695,000.00
PAVEMENT PLANING AND RESURFACING	5,000	SY	\$54.00	\$270,000.00
SHARED USE PATH	4,700	SY	\$42.00	\$197,400.00
Pavement Subtotal				\$9,262,400.00

Traffic Control - Signing and Pavement Marking				
Description	Quantity	Unit	Unit Cost	Total
SIGNING	2.88	MILE	\$250,000.00	\$720,000.00
PAVEMENT MARKINGS - THERMO		MILE	\$14,000.00	\$0.00
PAVEMENT MARKINGS - RECESSED	2.88	MILE	\$30,000.00	\$86,400.00
Traffic Control - Signing and Pavement Marking Subtotal				\$806,400.00

Traffic Signal and Surveillance				
Description	Quantity	Unit	Unit Cost	Total
STANDARD TRAFFIC SIGNAL		EACH	\$300,000.00	\$0.00
TRAFFIC SIGNAL FOR R-CUT		EACH	\$780,000.00	\$0.00
FIBER OPTIC COMMUNICATION		MILE	\$170,000.00	\$0.00
CCTV		EACH	\$123,000.00	\$0.00
Traffic Control - Traffic Signal Subtotal				\$0.00

Roadway Lighting						
Description	Quantity Unit Unit Cost					
FULL INTERCHANGE LIGHTING	1	EACH	\$500,000.00	\$500,000.00		
PARTIAL INTERCHANGE LIGHTING		EACH	\$300,000.00	\$0.00		
ROUNDABOUT LIGHTING	3	EACH	\$175,000.00	\$525,000.00		
CONTINUOUS ROADWAY LIGHTING	15200	FT	\$100.00	\$1,520,000.00		
	\$2,545,000.00					

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Utility Relocations - Gas, Electric, Water, Wastewater				
Description	Quantity	Unit	Unit Cost	Total
HIGH PRESSURE GAS LINE		FT		\$0.00
WATERLINE 36" OR LARGER		FT		\$0.00
HIGH VOLTAGE TOWER		EACH		\$0.00
SANITARY LINE 36" OR LARGER		FT		\$0.00
DAM MODIFICATION		LUMP		\$0.00
		Water/Wa	stewater Subtotal	\$0.00

Structures					
Description		Quantity	Unit	Unit Cost	Total
RETAINING WALL		35,000	SF	\$90.00	\$3,150,000.00
BRIDGE	-	28,900	SF	\$220.00	\$6,358,000.00
				Pavement Subtotal	\$9,508,000.00

Incidentals					
Description		Quantity	Unit	Unit Cost	Total
CONSTRUCTION LAYOUT STAKES		1	LUMP	\$200,000.00	\$200,000.00
MAINTENANCE OF TRAFFIC		1	LUMP	\$3,000,000.00	\$3,000,000.00
MOBILIZATION		1	LUMP	\$1,200,000.00	\$1,200,000.00
Miscellaneous Subtotal					\$4,400,000,00

Project Summary		Subtotal
Roadway		\$4,211,400
Erosion Control		\$1,870,000
Drainage		\$6,546,000
Pavement		\$9,262,400
Traffic Control - Signing and Pavement Marking		\$806,400
Traffic Signal and Surveillance		\$0
Roadway Lighting		\$2,545,000
Utility Relocations - Gas, Electric, Water, Wastewater		\$0
Structures		\$9,508,000
Incidentals		\$4,400,000
	Total	\$39,149,000

Contingency (30%)		\$11,745,000	\$10,178,800.00
			\$7,634,100.00
		Subtotal \$50,894,000	\$5,089,400.00
			\$2,544,700.00
Right-of-Way		\$0	\$508,940.00
			_
Engineering (18%)		\$9,161,000	
Construction Engineering (10	%)	\$5,089,000	

Construction Engineering (10%)		\$5,089,000
	Subtotal	\$65,144,000

Project Total (2030 Dollars) \$84,687,000



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Roadway					
Description	Quantity	Unit	Unit Cost	Total	
PAVEMENT REMOVED	6,700	SY	\$20.00	\$134,000.00	
CULVERT REMOVED	200	FT	\$100.00	\$20,000.00	
EXCAVATION	4,200	CY	\$40.00	\$168,000.00	
EMBANKMENT	3,800	CY	\$45.00	\$171,000.00	
GUARDRAIL	500	FT	\$22.00	\$11,000.00	
MEDIAN BARRIER	4,800	FT	\$120.00	\$576,000.00	
CURB AND GUTTER	2,600	FT	\$42.00	\$109,200.00	
CONCRETE MEDIAN	800	SY	\$100.00	\$80,000.00	
CONCRETE WALK	5,600	SF	\$13.00	\$72,800.00	
Roadway Subtotal				\$1,342,000.00	

Erosion Control					
Description	Quantity	Unit	Unit Cost	Total	
EROSION CONTROL	270,000	EACH	\$1.00	\$270,000.00	
EROSION CONTROL PLAN	1	LUMP	\$50,000.00	\$50,000.00	
BMPs	1	LUMP	\$135,000.00	\$135,000.00	
SEEDING AND MULCHING	42,800	SY	\$2.00	\$85,600.00	
		Erosion C	ontrol Subtotal	\$540,600,00	

Drainage					
Description	Quantity	Unit	Unit Cost	Total	
CULVERT	200	FT	\$600.00	\$120,000.00	
STORM SEWER SYSTEM	6,700	FT	\$300.00	\$2,010,000.00	
UNDERDRAINS	32,200	FT	\$15.00	\$483,000.00	
Drainage Subtotal					

Pavement				
Description	Quantity	Unit	Unit Cost	Total
FULL-DEPTH PAVEMENT (ASPHALT)	33,700	SY	\$100.00	\$3,370,000.00
FULL-DEPTH PAVEMENT (CONCRETE)		SY	\$150.00	\$0.00
PAVEMENT PLANING AND RESURFACING	17,200	SY	\$54.00	\$928,800.00
SHARED USE PATH	800	SY	\$42.00	\$33,600.00
Pavement Subtotal				

Traffic Control - Signing and Pavement Marking						
Description	Quantity	Unit	Unit Cost	Total		
SIGNING	1.36	MILE	\$250,000.00	\$340,000.00		
PAVEMENT MARKINGS - THERMO		MILE	\$14,000.00	\$0.00		
PAVEMENT MARKINGS - RECESSED	1.36	MILE	\$30,000.00	\$40,800.00		
Traffic Control - Signing and Pavement Marking Subtotal						

Traffic Signal and Surveillance						
Description	Quantity	Unit	Unit Cost	Total		
STANDARD TRAFFIC SIGNAL		EACH	\$300,000.00	\$0.00		
TRAFFIC SIGNAL FOR R-CUT		EACH	\$780,000.00	\$0.00		
FIBER OPTIC COMMUNICATION		MILE	\$170,000.00	\$0.00		
CCTV		EACH	\$123,000.00	\$0.00		
	Traffic Control - Traffic Signal Subtotal					

Roadway Lighting						
Description	Quantity	Unit	Unit Cost	Total		
FULL INTERCHANGE LIGHTING		EACH	\$500,000.00	\$0.00		
PARTIAL INTERCHANGE LIGHTING		EACH	\$300,000.00	\$0.00		
CONTINUOUS ROADWAY LIGHTING	7200	FT	\$100.00	\$720,000.00		
Traffic Control - Traffic Signal Subtotal						

Utility Relocations - Gas, Electric, Water, Wastewater						
Description	Quantity	Unit	Unit Cost	Total		
HIGH PRESSURE GAS LINE		FT		\$0.00		
WATERLINE 36" OR LARGER		FT		\$0.00		
HIGH VOLTAGE TOWER		EACH		\$0.00		
SANITARY LINE 36" OR LARGER		FT		\$0.00		
DAM MODIFICATION		LUMP		\$0.00		
	W	ater/Waste	water Subtotal	\$0.00		

Structures				
Description	Quantity	Unit	Unit Cost	Total
RETAINING WALL	4,800	SF	\$90.00	\$432,000.00
BRIDGE		SF	\$220.00	\$0.00
		Pavi	ement Subtotal	\$432,000.00

Incidentals				
Description	Quantity	Unit	Unit Cost	Total
CONSTRUCTION LAYOUT STAKES	1	LUMP	\$75,000.00	\$75,000.00
MAINTENANCE OF TRAFFIC	1	LUMP	\$500,000.00	\$500,000.00
MOBILIZATION	1	LUMP	\$400,000.00	\$400,000.00
		Miscella	neous Subtotal	\$975,000.00

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I	Project Summary		Subtotal
4	Roadway		\$1,342,000
ı	Erosion Control		\$540,600
ı	Drainage	1	\$2,613,000
ı	Pavement		\$4,332,400
ı	Traffic Control - Signing and Pavement Marking		\$380,800
4	Traffic Signal and Surveillance		\$0
I	Roadway Lighting		\$720,000
ı	Utility Relocations - Gas, Electric, Water, Wastewater		\$0
ı	Structures		\$432,000
L	Incidentals		\$975,000
I		<b>Total</b>	\$11,336,000

Contingency (30%)			\$3,401,000
		Subtota	\$14,737,000
Right-of-Way			\$0
Engineering (18%)			\$2,653,000
Construction Engineer	ing (10%)		\$1,474,000

Subtotal| \$18,864,000

Project Total (2030 Dollars) \$24,523,000

Estimate completed by:

ms consultants, in
engineers, architects, planne



# SEGMENT 1 CONCEPT B - OVERALL

SEGMENT 1 CONCEPT B - RANGE 1S	
Construction Subtotal	\$36,212,000
Contingency (30%)	\$10,864,000
Construction Total	\$47,076,000
Right-of-Way	\$0
Engineering (18%)	\$8,474,000
Construction Engineering (10%)	\$4,708,000
Project Subtotal	\$60,258,000
Inflation (30%)	\$18,077,400
Subtotal	\$78,335,000
SEGMENT 1N CONCEPT B - RANGE 1	, 5,555,555
Construction Subtotal	\$7,204,000
Contingency (30%)	\$2,161,000
Construction Total	\$9,365,000
Right-of-Way	\$0
Engineering (18%)	\$1,686,000
Construction Engineering (10%)	\$937,000
Project Subtotal	\$11,988,000
Inflation (30%)	\$3,596,400
Subtotal	\$15,584,000
SEGMENT 1N CONCEPT B - RANGE 2	<del>+</del>
Construction Subtotal	\$1,690,000
Contingency (30%)	\$507,000
Construction Total	\$2,197,000
Right-of-Way	\$0
Engineering (18%)	\$395,000
Construction Engineering (10%)	\$220,000
Project Subtotal	\$2,812,000
Inflation (30%)	\$843,600
Subtotal	\$3,656,000
SEGMENT 1N CONCEPT B - RANGE 3	
Construction Subtotal	\$14,515,000
Contingency (30%)	\$4,355,000
Construction Total	\$18,870,000
Right-of-Way	\$0
Engineering (18%)	\$3,397,000
Construction Engineering (10%)	\$1,887,000
Project Subtotal	\$24,154,000
Inflation (30%)	\$7,246,200
Subtotal	\$31,400,000
SEGMENT 1N CONCEPT B - RANGE 4	
Construction Subtotal	\$16,997,000
Contingency (30%)	\$5,099,000
Construction Total	\$22,096,000
Right-of-Way	\$0
Engineering (18%)	\$3,977,000
Construction Engineering (10%)	\$2,210,000
Project Subtotal	\$28,283,000
Inflation (30%)	\$8,484,900
Subtotal	\$36,768,000

SEGMENT 1 - OVERALL	
SEGMENT 1 CONCEPT B - RANGE 1S	\$78,335,000
SEGMENT 1N CONCEPT B - RANGE 1	\$15,584,000
SEGMENT 1N CONCEPT B - RANGE 2	\$3,656,000
SEGMENT 1N CONCEPT B - RANGE 3	\$31,400,000
SEGMENT 1N CONCEPT B - RANGE 4	\$36,768,000
Total - Segment 1 - Overall	\$165,743,000

Segment 1S

Construction w/ Contingency w/out Inflation: \$60,258,000

Segment 1N

Construction w/ Contingency w/out Inflation: \$67,237,000

Estimate completed by:

Estimate completed by:



### SEGMENT 1S CONCEPT B

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Roadway				
Description	Quantity	Unit	Unit Cost	Total
PAVEMENT REMOVED	14,200	SY	\$20.00	\$284,000.00
CULVERT REMOVED	150	FT	\$100.00	\$15,000.00
EXCAVATION	28,300	CY	\$40.00	\$1,132,000.00
EMBANKMENT	82,100	CY	\$45.00	\$3,694,500.00
GUARDRAIL	2,800	FT	\$22.00	\$61,600.00
MEDIAN BARRIER	3,400	FT	\$120.00	\$408,000.00
CURB AND GUTTER	3,500	FT	\$42.00	\$147,000.00
CONCRETE MEDIAN		SY	\$100.00	\$0.00
CONCRETE WALK	20,000	SF	\$13.00	\$260,000.00
		Ro	adway Subtotal	\$6,002,100.00

Erosion Control				
Description	Quantity	Unit	Unit Cost	Total
EROSION CONTROL	600,000	EACH	\$1.00	\$600,000.00
EROSION CONTROL PLAN	1	LUMP	\$100,000.00	\$100,000.00
BMPs	1	LUMP	\$400,000.00	\$400,000.00
SEEDING AND MULCHING	80,000	SY	\$2.00	\$160,000.00
Erosion Control Subtotal				\$1,260,000.00

Drainage				
Description	Quantity	Unit	Unit Cost	Total
CULVERT	500	FT	\$600.00	\$300,000.00
STORM SEWER SYSTEM	9,400	FT	\$300.00	\$2,820,000.00
UNDERDRAINS	40,800	FT	\$15.00	\$612,000.00
		Dra	ainage Subtotal	\$3,732,000.00

Pavement				
Description	Quantity	Unit	Unit Cost	Total
FULL-DEPTH PAVEMENT (ASPHALT)	33,800	SY	\$100.00	\$3,380,000.00
FULL-DEPTH PAVEMENT (CONCRETE)	23,000	SY	\$150.00	\$3,450,000.00
PAVEMENT PLANING AND RESURFACING	57,000	SY	\$54.00	\$3,078,000.00
SHARED USE PATH		SY	\$42.00	\$0.00

Traffic Control - Signing and Pavement Marking					
Description	Quantity	Unit	Unit Cost	Total	
SIGNING	2.73	MILE	\$250,000.00	\$682,500.00	
PAVEMENT MARKINGS - THERMO		MILE	\$14,000.00	\$0.00	
PAVEMENT MARKINGS - RECESSED	2.73	MILE	\$30,000.00	\$81,900.00	
Traffic Control - Signing and Pavement Marking Subtotal				\$764,400.00	

Traffic Signal and Surveillance				
Description	Quantity	Unit	Unit Cost	Total
STANDARD TRAFFIC SIGNAL	2	EACH	\$300,000.00	\$600,000.00
TRAFFIC SIGNAL FOR R-CUT		EACH	\$780,000.00	\$0.00
FIBER OPTIC COMMUNICATION	2.73	MILE	\$170,000.00	\$464,100.00
CCTV	2	EACH	\$123,000.00	\$246,000.00
Traffic Control - Traffic Signal Subtotal				

Roadway Lighting					
Description	Quantity	Unit	Unit Cost	Total	
FULL INTERCHANGE LIGHTING		EACH	\$500,000.00	\$0.00	
PARTIAL INTERCHANGE LIGHTING	1	EACH	\$300,000.00	\$300,000.00	
CONTINUOUS ROADWAY LIGHTING	14400	FT	\$100.00	\$1,440,000.00	
Traffic Control - Traffic Signal Subtotal				\$1,740,000.00	

Utility Relocations - Gas, Electric, Water, Wastewater				
Description	Quantity	Unit	Unit Cost	Total
HIGH PRESSURE GAS LINE		FT		\$0.00
WATERLINE 36" OR LARGER		FT		\$0.00
HIGH VOLTAGE TOWER		EACH		\$0.00
SANITARY LINE 36" OR LARGER		FT		\$0.00
DAM MODIFICATION		LUMP		\$0.00
	W	ater/Waste	water Subtotal	\$0.00

Structures		7		
Description	Quantity	Unit	Unit Cost	Total
RETAINING WALL	37,500	SF	\$90.00	\$3,375,000.00
BRIDGE	23,500	SF	\$220.00	\$5,170,000.00
		Pav	ement Subtotal	\$8,545,000.00

Incidentals				
Description	Quantity	Unit	Unit Cost	Total
CONSTRUCTION LAYOUT STAKES	1	LUMP	\$150,000.00	\$150,000.00
MAINTENANCE OF TRAFFIC	1	LUMP	\$2,000,000.00	\$2,000,000.00
MOBILIZATION	1	LUMP	\$800,000.00	\$800,000.00
		Miscella	neous Subtotal	\$2,950,000,00

	Project Summary	Subtotal
	Roadway	\$6,002,100
	Erosion Control	\$1,260,000
	Drainage	\$3,732,000
۹	Pavement	\$9,908,000
	Traffic Control - Signing and Pavement Marking	\$764,400
	Traffic Signal and Surveillance	\$1,310,100
	Roadway Lighting	\$1,740,000
	Utility Relocations - Gas, Electric, Water, Wastewater	\$0
	Structures	\$8,545,000
	Incidentals	\$2,950,000
	Total	\$36,212,000

Contingency (30%) \$10,864,000	\$9,415,200.00	20%
	\$7,061,400.00	15%
Subtotal \$47,076,000	\$4,707,600.00	10%
	\$2,353,800.00	5%
Right-of-Way \$0	\$470,760.00	1%
Engineering (18%) \$8,474,000		

Construction Engineering (10%)		\$4,708,000
	Subtotal	\$60,258,000
Inflation (30%)		\$18.077.400





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Roadway				
Description	Quantity	Unit	Unit Cost	Total
PAVEMENT REMOVED	1,600	SY	\$20.00	\$32,000.00
CULVERT REMOVED		FT	\$100.00	\$0.00
EXCAVATION	4,300	CY	\$40.00	\$172,000.00
EMBANKMENT	3,700	CY	\$45.00	\$166,500.00
GUARDRAIL	1,000	FT	\$22.00	\$22,000.00
MEDIAN BARRIER	1,600	FT	\$120.00	\$192,000.00
CURB AND GUTTER	1,600	FT	\$42.00	\$67,200.00
CONCRETE MEDIAN		SY	\$100.00	\$0.00
CONCRETE WALK	13,300	SF	\$13.00	\$172,900.00
Roadway Subtotal				\$824,600.00

Erosion Control				
Description Quantity Unit Unit Cost				Total
EROSION CONTROL	150,000	EACH	\$1.00	\$150,000.00
EROSION CONTROL PLAN	1	LUMP	\$25,000.00	\$25,000.00
BMPs	1	LUMP	\$85,000.00	\$85,000.00
SEEDING AND MULCHING	25,000	SY	\$2.00	\$50,000.00
Erosion Control Subtotal				\$310,000.00

Drainage				
Description Quantity Unit Unit Cost				Total
CULVERT		FT	\$600.00	\$0.00
STORM SEWER SYSTEM	2,400	FT	\$300.00	\$720,000.00
UNDERDRAINS	11,200	FT	\$15.00	\$168,000.00
Drainage Subtotal				\$888,000.00

Pavement				
Description	Quantity	Unit	Unit Cost	Total
FULL-DEPTH PAVEMENT (ASPHALT)	15,600	SY	\$100.00	\$1,560,000.00
FULL-DEPTH PAVEMENT (CONCRETE)		SY	\$150.00	\$0.00
PAVEMENT PLANING AND RESURFACING	8,900	SY	\$54.00	\$480,600.00
SHARED USE PATH	500	SY	\$42.00	\$21,000.00
Payament Subtotal				\$2.061.600.00

Traffic Control - Signing and Pavement Marking					
Description Quantity Unit Unit Cost					
SIGNING	0.45	MILE	\$250,000.00	\$112,500.00	
PAVEMENT MARKINGS - THERMO		MILE	\$14,000.00	\$0.00	
PAVEMENT MARKINGS - RECESSED	0.45	MILE	\$30,000.00	\$13,500.00	
Traffic Control - Signing and Pavement Marking Subtotal					

Traffic Signal and Surveillance				
Description	Quantity	Unit	Unit Cost	Total
STANDARD TRAFFIC SIGNAL		EACH	\$300,000.00	\$0.00
TRAFFIC SIGNAL FOR R-CUT		EACH	\$780,000.00	\$0.00
FIBER OPTIC COMMUNICATION		MILE	\$170,000.00	\$0.00
CCTV		EACH	\$123,000.00	\$0.00
Traffic Control - Traffic Signal Subtotal				\$0.00

Roadway Lighting				
Description				
FULL INTERCHANGE LIGHTING		EACH	\$500,000.00	\$0.00
PARTIAL INTERCHANGE LIGHTING	1	EACH	\$300,000.00	\$300,000.00
CONTINUOUS ROADWAY LIGHTING	2400	FT	\$100.00	\$240,000.00
Traffic Control - Traffic Signal Subtotal				\$540,000.00

Utility Relocations - Gas, Electric, Water, Wastewater					
Description	Quantity	Unit	Unit Cost	Total	
HIGH PRESSURE GAS LINE		FT		\$0.00	
WATERLINE 36" OR LARGER		FT		\$0.00	
HIGH VOLTAGE TOWER		EACH		\$0.00	
SANITARY LINE 36" OR LARGER		FT		\$0.00	
DAM MODIFICATION		LUMP		\$0.00	
Water/Wastewater Subtotal				\$0.00	

Structures		7		
Description	Quantity	Unit	Unit Cost	Total
RETAINING WALL	4,500	SF	\$90.00	\$405,000.00
BRIDGE	6,700	SF	\$220.00	\$1,474,000.00
		Pav	ement Subtotal	\$1,879,000.00

Incidentals				
Description	Quantity	Unit	Unit Cost	Total
CONSTRUCTION LAYOUT STAKES	1	LUMP	\$75,000.00	\$75,000.00
MAINTENANCE OF TRAFFIC	1	LUMP	\$300,000.00	\$300,000.00
MOBILIZATION	1	LUMP	\$200,000.00	\$200,000.00
		Miscella	neous Subtotal	\$575,000,00

Project Summary	Subtotal
Roadway	\$824,600
Erosion Control	\$310,000
Drainage	\$888,000
Pavement	\$2,061,600
Traffic Control - Signing and Pavement Marking	\$126,000
Traffic Signal and Surveillance	\$0
Roadway Lighting	\$540,000
Utility Relocations - Gas, Electric, Water, Wastewater	\$0
Structures	\$1,879,000
Incidentals	\$575,000
Tota	\$7,204,000

			_	
Contingency (30%)		\$2,161,000	\$1,873,000.00	20%
			\$1,404,750.00	15%
	Subtota	\$9,365,000	\$936,500.00	10%
			\$468,250.00	5%
Right-of-Way		\$0	\$93,650.00	1%
			_	
Engineering (18%)		\$1,686,000		

Construction Engineering (10%)	\$937,000
Subtotal	\$11,988,000
Inflation (20%)	\$3 596 400





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Roadway				
Description	Quantity	Unit	Unit Cost	Total
PAVEMENT REMOVED	1,700	SY	\$20.00	\$34,000.00
CULVERT REMOVED		FT	\$100.00	\$0.00
EXCAVATION	2,500	CY	\$40.00	\$100,000.00
EMBANKMENT	1,200	CY	\$45.00	\$54,000.00
GUARDRAIL		FT	\$22.00	\$0.00
MEDIAN BARRIER	600	FT	\$120.00	\$72,000.00
CURB AND GUTTER		FT	\$42.00	\$0.00
CONCRETE MEDIAN		SY	\$100.00	\$0.00
CONCRETE WALK	2,500	SF	\$13.00	\$32,500.00
Roadway Subtotal				\$292,500.00

Erosion Control				
Description	Quantity	Unit	Unit Cost	Total
EROSION CONTROL	35,000	EACH	\$1.00	\$35,000.00
EROSION CONTROL PLAN	1	LUMP	\$5,000.00	\$5,000.00
BMPs	1	LUMP	\$25,000.00	\$25,000.00
SEEDING AND MULCHING	3,900	SY	\$2.00	\$7,800.00
Erosion Control Subtotal				\$72,800.00

Drainage				
Description	Quantity	Unit	Unit Cost	Total
CULVERT		FT	\$600.00	\$0.00
STORM SEWER SYSTEM	600	FT	\$300.00	\$180,000.00
UNDERDRAINS	3,600	FT	\$15.00	\$54,000.00
Drainage Subtotal				\$234,000.00

Pavement				
Description	Quantity	Unit	Unit Cost	Total
FULL-DEPTH PAVEMENT (ASPHALT)	4,200	SY	\$100.00	\$420,000.00
FULL-DEPTH PAVEMENT (CONCRETE)		SY	\$150.00	\$0.00
PAVEMENT PLANING AND RESURFACING	6,000	SY	\$54.00	\$324,000.00
SHARED USE PATH	500	SY	\$42.00	\$21,000.00
Pavement Subtotal				\$765,000,00

Traffic Control - Signing and Pavement Marking					
Description	Quantity	Unit	Unit Cost	Total	
SIGNING	0.11	MILE	\$250,000.00	\$27,500.00	
PAVEMENT MARKINGS - THERMO		MILE	\$14,000.00	\$0.00	
PAVEMENT MARKINGS - RECESSED	0.11	MILE	\$30,000.00	\$3,300.00	
Traffic Control - Signing and Pavement Marking Subtotal				\$30,800.00	

Traffic Signal and Surveillance				
Description	Quantity	Unit	Unit Cost	Total
STANDARD TRAFFIC SIGNAL		EACH	\$300,000.00	\$0.00
TRAFFIC SIGNAL FOR R-CUT		EACH	\$780,000.00	\$0.00
FIBER OPTIC COMMUNICATION		MILE	\$170,000.00	\$0.00
CCTV		EACH	\$123,000.00	\$0.00
Traffic Control - Traffic Signal Subtotal			\$0.00	

Roadway Lighting					
Description	Quantity	Unit	Unit Cost	Total	
FULL INTERCHANGE LIGHTING		EACH	\$500,000.00	\$0.00	
PARTIAL INTERCHANGE LIGHTING		EACH	\$300,000.00	\$0.00	
CONTINUOUS ROADWAY LIGHTING	600	FT	\$100.00	\$60,000.00	
Traffic Control - Traffic Signal Subtotal				\$60,000.00	

Utility Relocations - Gas, Electric, Water, Wastewater					
Description	Quantity	Unit	Unit Cost	Total	
HIGH PRESSURE GAS LINE		FT		\$0.00	
WATERLINE 36" OR LARGER		FT		\$0.00	
HIGH VOLTAGE TOWER		EACH		\$0.00	
SANITARY LINE 36" OR LARGER		FT		\$0.00	
DAM MODIFICATION		LUMP		\$0.00	
Water/Wastewater Subtotal				\$0.00	

Structures		y		
Description	Quantity	Unit	Unit Cost	Total
RETAINING WALL		SF	\$90.00	\$0.00
BRIDGE		SF	\$220.00	\$0.00
		Pave	ement Subtotal	\$0.00

Incidentals				
Description	Quantity	Unit	Unit Cost	Total
CONSTRUCTION LAYOUT STAKES	1	LUMP	\$20,000.00	\$20,000.00
MAINTENANCE OF TRAFFIC	1	LUMP	\$115,000.00	\$115,000.00
MOBILIZATION	1	LUMP	\$100,000.00	\$100,000.00
		Miscella	neous Subtotal	\$225,000,00

Project Summary	Subtotal
Roadway	\$292,500
Erosion Control	\$72,800
Drainage	\$234,000
Pavement	\$765,000
Traffic Control - Signing and Pavement Marking	\$30,800
Traffic Signal and Surveillance	\$0
Roadway Lighting	\$60,000
Utility Relocations - Gas, Electric, Water, Wastewater	\$0
Structures	\$0
Incidentals	\$235,000
Total	\$1,690,000

			-	
Contingency (30%)		\$507,000	\$439,400.00	20
			\$329,550.00	15
	Subtota	\$2,197,000	\$219,700.00	10
			\$109,850.00	5
Right-of-Way		\$0	\$21,970.00	1
			_	
Engineering (18%)		\$395,000		
			-	

Construction Engineering (10%)	\$220,000
Subtotal	\$2,812,000
Inflation (30%)	\$843,600
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Roadway					
Description	Quantity	Unit	Unit Cost	Total	
PAVEMENT REMOVED	8,300	SY	\$20.00	\$166,000.00	
CULVERT REMOVED		FT	\$100.00	\$0.00	
EXCAVATION	8,200	CY	\$40.00	\$328,000.00	
EMBANKMENT	8,400	CY	\$45.00	\$378,000.00	
GUARDRAIL	1,700	FT	\$22.00	\$37,400.00	
MEDIAN BARRIER	1,100	FT	\$120.00	\$132,000.00	
CURB AND GUTTER	2,200	FT	\$42.00	\$92,400.00	
CONCRETE MEDIAN	600	SY	\$100.00	\$60,000.00	
CONCRETE WALK	21,100	SF	\$13.00	\$274,300.00	
Roadway Subtotal				\$1,468,100.00	

Erosion Control						
Description	Quantity	Unit	Unit Cost	Total		
EROSION CONTROL	330,000	EACH	\$1.00	\$330,000.00		
EROSION CONTROL PLAN	1	LUMP	\$40,000.00	\$40,000.00		
BMPs	1	LUMP	\$165,000.00	\$165,000.00		
SEEDING AND MULCHING	50,000	SY	\$2.00	\$100,000.00		
Erosion Control Subtotal						

Drainage						
Description	Quantity	Unit	Unit Cost	Total		
CULVERT		FT	\$600.00	\$0.00		
STORM SEWER SYSTEM	5,000	FT	\$300.00	\$1,500,000.00		
UNDERDRAINS	26,800	FT	\$15.00	\$402,000.00		
Drainage Subtotal						

Pavement					
Description	Quantity	Unit	Unit Cost	Total	
FULL-DEPTH PAVEMENT (ASPHALT)	32,900	SY	\$100.00	\$3,290,000.00	
FULL-DEPTH PAVEMENT (CONCRETE)		SY	\$150.00	\$0.00	
PAVEMENT PLANING AND RESURFACING	21,700	SY	\$54.00	\$1,171,800.00	
SHARED USE PATH	3,400	SY	\$42.00	\$142,800.00	
Payament Subtotal					

Traffic Control - Signing and Pavement Marking						
Description Quantity Unit Unit Cost To						
SIGNING	0.95	MILE	\$250,000.00	\$237,500.00		
PAVEMENT MARKINGS - THERMO		MILE	\$14,000.00	\$0.00		
PAVEMENT MARKINGS - RECESSED	0.95	MILE	\$30,000.00	\$28,500.00		
Traffic Control - Signing and Pavement Marking Subtotal						

Traffic Signal and Surveillance					
Description	Quantity	Unit	Unit Cost	Total	
STANDARD TRAFFIC SIGNAL	1	EACH	\$300,000.00	\$300,000.00	
TRAFFIC SIGNAL FOR R-CUT		EACH	\$780,000.00	\$0.00	
FIBER OPTIC COMMUNICATION	0.95	MILE	\$170,000.00	\$161,500.00	
CCTV	1	EACH	\$123,000.00	\$123,000.00	
Traffic Control - Traffic Signal Subtotal					

Roadway Lighting						
Description	Quantity	Unit	Unit Cost	Total		
FULL INTERCHANGE LIGHTING		EACH	\$500,000.00	\$0.00		
PARTIAL INTERCHANGE LIGHTING	1	EACH	\$300,000.00	\$300,000.00		
CONTINUOUS ROADWAY LIGHTING	5000	FT	\$100.00	\$500,000.00		
Traffic Control - Traffic Signal Subtotal						

Utility Relocations - Gas, Electric, Water, Wastewater			1	
Description	Quantity	Unit	Unit Cost	Total
HIGH PRESSURE GAS LINE		FT		\$0.00
WATERLINE 36" OR LARGER		FT		\$0.00
HIGH VOLTAGE TOWER		EACH		\$0.00
SANITARY LINE 36" OR LARGER		FT		\$0.00
DAM MODIFICATION		LUMP		\$0.00
Water/Wastewater Subtotal				

Structures		J		
Description	Quantity	Unit	Unit Cost	Total
RETAINING WALL	10,200	SF	\$90.00	\$918,000.00
BRIDGE	10,600	SF		\$2,332,000.00
		Pave	ement Subtotal	\$3,250,000.00

Incidentals				
Description	Quantity	Unit	Unit Cost	Total
CONSTRUCTION LAYOUT STAKES	1	LUMP	\$105,000.00	\$105,000.00
MAINTENANCE OF TRAFFIC	1	LUMP	\$500,000.00	\$500,000.00
MOBILIZATION	1	LUMP	\$400,000.00	\$400,000.00
		Miscella	neous Subtotal	\$1,005,000,00

Summary		Subtotal
у		\$1,468,100
Control	1	\$635,000
ė		\$1,902,000
nt		\$4,604,600
Control - Signing and Pavement Marking		\$266,000
ignal and Surveillance		\$584,500
y Lighting		\$800,000
elocations - Gas, Electric, Water, Wastewater		\$0
res	4	\$3,250,000
als		\$1,005,000
	Total	\$14,515,000
	Summary  Y  Control be ent  Control - Signing and Pavement Marking ignal and Surveillance by Lighting eleocations - Gas, Electric, Water, Wastewater res tals	by Control le te tontrol Signing and Pavement Marking Signal and Surveillance V Lighting Lelocations - Gas, Electric, Water, Wastewater es Eas

		_	
Contingency (30%)	\$4,355,00	\$3,774,000.00	20%
		\$2,830,500.00	15%
	Subtotal \$18,870,00	\$1,887,000.00	10%
		\$943,500.00	5%
Right-of-Way	\$0	\$188,700.00	1%
		<u></u>	
Engineering (18%)	\$3,397,00	0	
		<del></del>	

Subtotal	\$24,154,000
Inflation (30%)	\$7,246,200

Project Total (2020 Dollars) \$21 400 000



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Roadway				
Description	Quantity	Unit	Unit Cost	Total
PAVEMENT REMOVED	8,000	SY	\$20.00	\$160,000.00
CULVERT REMOVED	200	FT	\$100.00	\$20,000.00
EXCAVATION	25,000	CY	\$40.00	\$1,000,000.00
EMBANKMENT	65,000	CY	\$45.00	\$2,925,000.00
GUARDRAIL	2,500	FT	\$22.00	\$55,000.00
MEDIAN BARRIER	3,300	FT	\$120.00	\$396,000.00
CURB AND GUTTER	300	FT	\$42.00	\$12,600.00
CONCRETE MEDIAN		SY	\$100.00	\$0.00
CONCRETE WALK	3,000	SF	\$13.00	\$39,000.00
		Ro	adway Subtotal	\$4,607,600.00

Erosion Control				
Description	Quantity	Unit	Unit Cost	Total
EROSION CONTROL	300,000	EACH	\$1.00	\$300,000.00
EROSION CONTROL PLAN	1	LUMP	\$40,000.00	\$40,000.00
BMPs	1	LUMP	\$180,000.00	\$180,000.00
SEEDING AND MULCHING	50,000	SY	\$2.00	\$100,000.00
		Erosion C	ontrol Subtotal	\$620,000.00

Drainage				
Description	Quantity	Unit	Unit Cost	Total
CULVERT	200	FT	\$600.00	\$120,000.00
STORM SEWER SYSTEM	7,100	FT	\$300.00	\$2,130,000.00
UNDERDRAINS	38,200	FT	\$15.00	\$573,000.00
Drainage Subtotal				

Pavement					
Description	Quantity	Unit	Unit Cost	Total	
FULL-DEPTH PAVEMENT (ASPHALT)	37,800	SY	\$100.00	\$3,780,000.00	
FULL-DEPTH PAVEMENT (CONCRETE)		SY	\$150.00	\$0.00	
PAVEMENT PLANING AND RESURFACING	20,000	SY	\$54.00	\$1,080,000.00	
SHARED USE PATH	4,200	SY	\$42.00	\$176,400.00	
		Doug	omant Cubtatal	¢r 020 400 00	

Traffic Control - Signing and Pavement Marking						
Description	Quantity	Unit	Unit Cost	Total		
SIGNING	1.34	MILE	\$250,000.00	\$335,000.00		
PAVEMENT MARKINGS - THERMO		MILE	\$14,000.00	\$0.00		
PAVEMENT MARKINGS - RECESSED	1.34	MILE	\$30,000.00	\$40,200.00		
Traffic Control - Signing and Pavement Marking Subtotal				\$375,200.00		

Traffic Signal and Surveillance				
Description	Quantity	Unit	Unit Cost	Total
STANDARD TRAFFIC SIGNAL		EACH	\$300,000.00	\$0.00
TRAFFIC SIGNAL FOR R-CUT		EACH	\$780,000.00	\$0.00
FIBER OPTIC COMMUNICATION		MILE	\$170,000.00	\$0.00
ссти		EACH	\$123,000.00	\$0.00
Traffic Control - Traffic Signal Subtotal				\$0.00

Roadway Lighting					
Description Quantity Unit Unit Cost					
FULL INTERCHANGE LIGHTING		EACH	\$500,000.00	\$0.00	
PARTIAL INTERCHANGE LIGHTING		EACH	\$300,000.00	\$0.00	
CONTINUOUS ROADWAY LIGHTING	7100	FT	\$100.00	\$710,000.00	
Traffic Control - Traffic Signal Subtotal				\$710,000.00	

Utility Relocations - Gas, Electric, Water, Wastewater				
Description	Quantity	Unit	Unit Cost	Total
HIGH PRESSURE GAS LINE		FT		\$0.00
WATERLINE 36" OR LARGER		FT		\$0.00
HIGH VOLTAGE TOWER		EACH		\$0.00
SANITARY LINE 36" OR LARGER		FT		\$0.00
DAM MODIFICATION		LUMP		\$0.00
Water/Wastewater Subtotal				

Structures		7		
Description	Quantity	Unit	Unit Cost	Total
RETAINING WALL	850	SF	\$90.00	\$76,500.00
BRIDGE	7,900	SF		\$1,738,000.00
		Pave	ement Subtotal	\$1,814,500.00

Incidentals				
Description	Quantity	Unit	Unit Cost	Total
CONSTRUCTION LAYOUT STAKES	1	LUMP	\$110,000.00	\$110,000.00
MAINTENANCE OF TRAFFIC	1	LUMP	\$500,000.00	\$500,000.00
MOBILIZATION	1	LUMP	\$400,000.00	\$400,000.00
		Miscella	neous Subtotal	\$1,010,000,00

Project Summary		Subtotal
Roadway		\$4,607,600
Erosion Control	1	\$620,000
Drainage		\$2,823,000
Pavement		\$5,036,400
Traffic Control - Signing and Pavement Marking		\$375,200
Traffic Signal and Surveillance		\$0
Roadway Lighting		\$710,000
Utility Relocations - Gas, Electric, Water, Wastewater		\$0
Structures	4	\$1,814,500
Incidentals		\$1,010,000
	Total	\$16,997,000

			_	
Contingency (30%)		\$5,099,000	\$4,419,200.00	20%
			\$3,314,400.00	15%
	Subtot	al \$22,096,000	\$2,209,600.00	10%
			\$1,104,800.00	5%
Right-of-Way		\$0	\$220,960.00	1%
			_	
Engineering (18%)		\$3,977,000		

Construction Engineering (10%)	92,210,000
Subtotal	\$28,283,000
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Project Total (2020 Dollars) \$36,768,000



## SEGMENT 1 CONCEPT C - OVERALL

SEGMENT 1 CONCEPT C - RANGE 1	Quantity
Construction Subtotal	\$7,204,000
Contingency (30%)	\$2,161,000
Construction Total	\$9,365,000
Right-of-Way	\$0
Engineering (18%)	\$1,686,000
Construction Engineering (10%)	\$937,000
Project Subtotal	\$11,988,000
Inflation (30%)	\$3,596,400
Subtotal	\$15,584,000
SEGMENT 1 CONCEPT C - RANGE 2	
Construction Subtotal	\$1,690,000
Contingency (30%)	\$507,000
Construction Total	\$2,197,000
Right-of-Way	\$0
Engineering (18%)	\$395,000
Construction Engineering (10%)	\$220,000
Project Subtotal	\$2,812,000
Inflation (30%)	\$843,600
Subtotal	\$3,656,000
SEGMENT 1 CONCEPT C - RANGE 3	
Construction Subtotal	\$14,515,000
Contingency (30%)	\$4,355,000
Construction Total	\$18,870,000
Right-of-Way	\$0
Engineering (18%)	\$3,397,000
Construction Engineering (10%)	\$1,887,000
Project Subtotal	\$24,154,000
Inflation (30%)	\$7,246,200
Subtotal	\$31,400,000
SEGMENT 1 CONCEPT C - RANGE 4	
Construction Subtotal	\$10,683,000
Contingency (30%)	\$3,205,000
Construction Total	\$13,888,000
Right-of-Way	\$0
Engineering (18%)	\$2,500,000
Construction Engineering (10%)	\$1,389,000
Project Subtotal	\$17,777,000
Inflation (30%)	\$5,333,100
Subtotal	\$23,110,000

SEGMENT 1 - OVERALL	
SEGMENT 1 CONCEPT C - RANGE 1	\$15,584,000
SEGMENT 1 CONCEPT C - RANGE 2	\$3,656,000
SEGMENT 1 CONCEPT C - RANGE 3	\$31,400,000
SEGMENT 1 CONCEPT C - RANGE 4	\$23,110,000
Total - Segment 1 - Overall	\$73,750,000

Construction w/ Contingency w/out Inflation: \$56,731,000

Estimate completed by:



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Roadway				
Description	Quantity	Unit	Unit Cost	Total
PAVEMENT REMOVED	1,600	SY	\$20.00	\$32,000.00
CULVERT REMOVED		FT	\$100.00	\$0.00
EXCAVATION	4,300	CY	\$40.00	\$172,000.00
EMBANKMENT	3,700	CY	\$45.00	\$166,500.00
GUARDRAIL	1,000	FT	\$22.00	\$22,000.00
MEDIAN BARRIER	1,600	FT	\$120.00	\$192,000.00
CURB AND GUTTER	1,600	FT	\$42.00	\$67,200.00
CONCRETE MEDIAN		SY	\$100.00	\$0.00
CONCRETE WALK	13,300	SF	\$13.00	\$172,900.00
		Roa	adway Subtotal	\$824,600.00

Erosion Control				
Description	Quantity	Unit	Unit Cost	Total
EROSION CONTROL	150,000	EACH	\$1.00	\$150,000.00
EROSION CONTROL PLAN	1	LUMP	\$25,000.00	\$25,000.00
BMPs	1	LUMP	\$85,000.00	\$85,000.00
SEEDING AND MULCHING	25,000	SY	\$2.00	\$50,000.00
Erosion Control Subtotal				\$310,000.00

Drainage				
Description	Quantity	Unit	Unit Cost	Total
CULVERT		FT	\$600.00	\$0.00
STORM SEWER SYSTEM	2,400	FT	\$300.00	\$720,000.00
UNDERDRAINS	11,200	FT	\$15.00	\$168,000.00
Drainage Subtotal				\$888,000.00

Pavement				
Description	Quantity	Unit	Unit Cost	Total
FULL-DEPTH PAVEMENT (ASPHALT)	15,600	SY	\$100.00	\$1,560,000.00
FULL-DEPTH PAVEMENT (CONCRETE)		SY	\$150.00	\$0.00
PAVEMENT PLANING AND RESURFACING	8,900	SY	\$54.00	\$480,600.00
SHARED USE PATH	500	SY	\$42.00	\$21,000.00
		Doug	omant Cubtatal	¢2 004 000 00

Traffic Control - Signing and Pavement Marking				
Description	Quantity	Unit	Unit Cost	Total
SIGNING	0.45	MILE	\$250,000.00	\$112,500.00
PAVEMENT MARKINGS - THERMO		MILE	\$14,000.00	\$0.00
PAVEMENT MARKINGS - RECESSED	0.45	MILE	\$30,000.00	\$13,500.00
Traffic Control - Signing and Pavement Marking Subtotal				\$126,000.00

Traffic Signal and Surveillance				
Description	Quantity	Unit	Unit Cost	Total
STANDARD TRAFFIC SIGNAL		EACH	\$300,000.00	\$0.00
TRAFFIC SIGNAL FOR R-CUT		EACH	\$780,000.00	\$0.00
FIBER OPTIC COMMUNICATION		MILE	\$170,000.00	\$0.00
CCTV		EACH	\$123,000.00	\$0.00
	Traffic Conf	rol - Traffic	Signal Subtotal	\$0.00

Roadway Lighting				
Description	Quantity	Unit	Unit Cost	Total
FULL INTERCHANGE LIGHTING		EACH	\$500,000.00	\$0.00
PARTIAL INTERCHANGE LIGHTING	1	EACH	\$300,000.00	\$300,000.00
CONTINUOUS ROADWAY LIGHTING	2400	FT	\$100.00	\$240,000.00
Traffic Control - Traffic Signal Subtotal				\$540,000.00

Utility Relocations - Gas, Electric, Water, Wastewater				
Description	Quantity	Unit	Unit Cost	Total
HIGH PRESSURE GAS LINE		FT		\$0.00
WATERLINE 36" OR LARGER		FT		\$0.00
HIGH VOLTAGE TOWER		EACH		\$0.00
SANITARY LINE 36" OR LARGER		FT		\$0.00
DAM MODIFICATION		LUMP		\$0.00
Water/Wastewater Subtotal				\$0.00

Structures				
Description	Quantity	Unit	Unit Cost	Total
RETAINING WALL	4,500	SF	\$90.00	\$405,000.00
BRIDGE	6,700	SF	\$220.00	\$1,474,000.00
		Pave	ement Subtotal	\$1,879,000.00

Incidentals				
Description	Quantity	Unit	Unit Cost	Total
CONSTRUCTION LAYOUT STAKES	1	LUMP	\$75,000.00	\$75,000.00
MAINTENANCE OF TRAFFIC	1	LUMP	\$300,000.00	\$300,000.00
MOBILIZATION	1	LUMP	\$200,000.00	\$200,000.00
		Miscella	neous Subtotal	\$575,000,00

Project Summary		Subtotal
Roadway	_	\$824,600
Erosion Control	1	\$310,000
Drainage		\$888,000
Pavement		\$2,061,600
Traffic Control - Signing and Pavement Marking		\$126,000
Traffic Signal and Surveillance		\$0
Roadway Lighting		\$540,000
Utility Relocations - Gas, Electric, Water, Wastewater		\$0
Structures	4	\$1,879,000
Incidentals		\$575,000
	Total	\$7,204,000

Contingency (30%)		\$2,161,000	\$1,873,000.00	20%
			\$1,404,750.00	15%
	Subtotal	\$9,365,000	\$936,500.00	10%
			\$468,250.00	5%
Right-of-Way		\$0	\$93,650.00	1%
			-	
Engineering (18%)		\$1,686,000		
			-	

Subto	tal \$11,988,000
Inflation (30%)	\$3,596,400

Project Total (2030 Dollars) \$15,584,000



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Roadway				
Description	Quantity	Unit	Unit Cost	Total
PAVEMENT REMOVED	1,700	SY	\$20.00	\$34,000.00
CULVERT REMOVED		FT	\$100.00	\$0.00
EXCAVATION	2,500	CY	\$40.00	\$100,000.00
EMBANKMENT	1,200	CY	\$45.00	\$54,000.00
GUARDRAIL		FT	\$22.00	\$0.00
MEDIAN BARRIER	600	FT	\$120.00	\$72,000.00
CURB AND GUTTER		FT	\$42.00	\$0.00
CONCRETE MEDIAN		SY	\$100.00	\$0.00
CONCRETE WALK	2,500	SF	\$13.00	\$32,500.00
Roadway Subtotal				\$292,500.00

Erosion Control				
Description	Quantity	Unit	Unit Cost	Total
EROSION CONTROL	35,000	EACH	\$1.00	\$35,000.00
EROSION CONTROL PLAN	1	LUMP	\$5,000.00	\$5,000.00
BMPs	1	LUMP	\$25,000.00	\$25,000.00
SEEDING AND MULCHING	3,900	SY	\$2.00	\$7,800.00
Erosion Control Subtotal			\$72,800.00	

Drainage				
Description	Quantity	Unit	Unit Cost	Total
CULVERT		FT	\$600.00	\$0.00
STORM SEWER SYSTEM	600	FT	\$300.00	\$180,000.00
UNDERDRAINS	3,600	FT	\$15.00	\$54,000.00
Drainage Subtotal			\$234,000.00	

Pavement				
Description	Quantity	Unit	Unit Cost	Total
FULL-DEPTH PAVEMENT (ASPHALT)	4,200	SY	\$145.00	\$609,000.00
FULL-DEPTH PAVEMENT (CONCRETE)		SY	\$145.00	\$0.00
PAVEMENT PLANING AND RESURFACING	6,000	SY	\$54.00	\$324,000.00
SHARED USE PATH	500	SY	\$42.00	\$21,000.00
Payament Subtotal				¢054 000 00

Traffic Control - Signing and Pavement Marking				
Description Quantity Unit Unit Cost				
SIGNING	0.11	MILE	\$250,000.00	\$27,500.00
PAVEMENT MARKINGS - THERMO		MILE	\$14,000.00	\$0.00
PAVEMENT MARKINGS - RECESSED	0.11	MILE	\$30,000.00	\$3,300.00
Traffic Control - Signing and Pavement Marking Subtotal				\$30,800.00

Traffic Signal and Surveillance				
Description	Quantity	Unit	Unit Cost	Total
STANDARD TRAFFIC SIGNAL		EACH	\$300,000.00	\$0.00
TRAFFIC SIGNAL FOR R-CUT		EACH	\$780,000.00	\$0.00
FIBER OPTIC COMMUNICATION		MILE	\$170,000.00	\$0.00
CCTV		EACH	\$123,000.00	\$0.00
Traffic Control - Traffic Signal Subtotal				\$0.00

Roadway Lighting				
Description	Quantity	Unit	Unit Cost	Total
FULL INTERCHANGE LIGHTING		EACH	\$500,000.00	\$0.00
PARTIAL INTERCHANGE LIGHTING		EACH	\$300,000.00	\$0.00
CONTINUOUS ROADWAY LIGHTING	600	FT	\$100.00	\$60,000.00
Traffic Control - Traffic Signal Subtotal				\$60,000.00

Utility Relocations - Gas, Electric, Water, Wastewater			1	
Description	Quantity	Unit	Unit Cost	Total
HIGH PRESSURE GAS LINE		FT		\$0.00
WATERLINE 36" OR LARGER		FT		\$0.00
HIGH VOLTAGE TOWER		EACH		\$0.00
SANITARY LINE 36" OR LARGER		FT		\$0.00
DAM MODIFICATION		LUMP		\$0.00
Water/Wastewater Subtotal				\$0.00

Structures		y		
Description	Quantity	Unit	Unit Cost	Total
RETAINING WALL		SF	\$90.00	\$0.00
BRIDGE		SF	\$220.00	\$0.00
		Pave	ement Subtotal	\$0.00

Incidentals				
Description	Quantity	Unit	Unit Cost	Total
CONSTRUCTION LAYOUT STAKES	1	LUMP	\$20,000.00	\$20,000.00
MAINTENANCE OF TRAFFIC	1	LUMP	\$115,000.00	\$115,000.00
MOBILIZATION	1	LUMP	\$100,000.00	\$100,000.00
		Miscella	neous Subtotal	\$225,000,00

Project Summary	Subtotal
Roadway	\$292,500
Erosion Control	\$72,800
Drainage	\$234,000
Pavement	\$954,000
Traffic Control - Signing and Pavement Marking	\$30,800
Traffic Signal and Surveillance	\$0
Roadway Lighting	\$60,000
Utility Relocations - Gas, Electric, Water, Wastewater	\$0
Structures	\$0
Incidentals	\$235,000
Tota	\$1,879,000

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Contingency (30%)		\$564,000	\$488,600.00	20%
			\$366,450.00	15%
	Subtotal	\$2,443,000	\$244,300.00	10%
			\$122,150.00	5%
Right-of-Way		\$0	\$24,430.00	1%
Engineering (18%)		\$440,000		
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Construction Engineering (10%)		\$244,000
	Subtotal	\$3,127,000
Inflation (30%)		\$938,100



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Roadway				
Description	Quantity	Unit	Unit Cost	Total
PAVEMENT REMOVED	8,300	SY	\$20.00	\$166,000.00
CULVERT REMOVED		FT	\$100.00	\$0.00
EXCAVATION	8,200	CY	\$40.00	\$328,000.00
EMBANKMENT	8,400	CY	\$45.00	\$378,000.00
GUARDRAIL	1,700	FT	\$22.00	\$37,400.00
MEDIAN BARRIER	1,100	FT	\$120.00	\$132,000.00
CURB AND GUTTER	2,200	FT	\$42.00	\$92,400.00
CONCRETE MEDIAN	600	SY	\$100.00	\$60,000.00
CONCRETE WALK	21,100	SF	\$13.00	\$274,300.00
Roadway Subtotal				\$1,468,100.00

Erosion Control				
Description	Quantity	Unit	Unit Cost	Total
EROSION CONTROL	330,000	EACH	\$1.00	\$330,000.00
EROSION CONTROL PLAN	1	LUMP	\$40,000.00	\$40,000.00
BMPs	1	LUMP	\$165,000.00	\$165,000.00
SEEDING AND MULCHING	50,000	SY	\$2.00	\$100,000.00
Erosion Control Subtotal				\$635,000.00

Drainage				
Description	Quantity	Unit	Unit Cost	Total
CULVERT		FT	\$600.00	\$0.00
STORM SEWER SYSTEM	5,000	FT	\$300.00	\$1,500,000.00
UNDERDRAINS	26,800	FT	\$15.00	\$402,000.00
Drainage Subtotal				\$1,902,000,00

Pavement				
Description	Quantity	Unit	Unit Cost	Total
FULL-DEPTH PAVEMENT (ASPHALT)	32,900	SY	\$145.00	\$4,770,500.00
FULL-DEPTH PAVEMENT (CONCRETE)		SY	\$145.00	\$0.00
PAVEMENT PLANING AND RESURFACING	21,700	SY	\$54.00	\$1,171,800.00
SHARED USE PATH	3,400	SY	\$42.00	\$142,800.00
Payament Subtotal				¢¢ 005 100 00

Traffic Control - Signing and Pavement Marking				
Description	Quantity	Unit	Unit Cost	Total
SIGNING	0.95	MILE	\$250,000.00	\$237,500.00
PAVEMENT MARKINGS - THERMO		MILE	\$14,000.00	\$0.00
PAVEMENT MARKINGS - RECESSED	0.95	MILE	\$30,000.00	\$28,500.00
Traffic Control - Signing and Pavement Marking Subtotal				\$266,000.00

Traffic Signal and Surveillance				
Description	Quantity	Unit	Unit Cost	Total
STANDARD TRAFFIC SIGNAL	1	EACH	\$300,000.00	\$300,000.00
TRAFFIC SIGNAL FOR R-CUT		EACH	\$780,000.00	\$0.00
FIBER OPTIC COMMUNICATION	0.95	MILE	\$170,000.00	\$161,500.00
CCTV	1	EACH	\$123,000.00	\$123,000.00
Traffic Control - Traffic Signal Subtotal				\$584,500.00

Roadway Lighting				
Description	Quantity	Unit	Unit Cost	Total
FULL INTERCHANGE LIGHTING		EACH	\$500,000.00	\$0.00
PARTIAL INTERCHANGE LIGHTING	1	EACH	\$300,000.00	\$300,000.00
CONTINUOUS ROADWAY LIGHTING	5000	FT	\$100.00	\$500,000.00
Traffic Control - Traffic Signal Subtotal				\$800,000.00

Utility Relocations - Gas, Electric, Water, Wastewater				
Description	Quantity	Unit	Unit Cost	Total
HIGH PRESSURE GAS LINE		FT		\$0.00
WATERLINE 36" OR LARGER		FT		\$0.00
HIGH VOLTAGE TOWER		EACH		\$0.00
SANITARY LINE 36" OR LARGER		FT		\$0.00
DAM MODIFICATION		LUMP		\$0.00
Water/Wastewater Subtotal				

Structures		J		
Description	Quantity	Unit	Unit Cost	Total
RETAINING WALL	10,200	SF	\$90.00	\$918,000.00
BRIDGE	10,600	SF	\$220.00	\$2,332,000.00
		Pav	ement Subtotal	\$3,250,000.00

Incidentals				
Description	Quantity	Unit	Unit Cost	Total
CONSTRUCTION LAYOUT STAKES	1	LUMP	\$105,000.00	\$105,000.00
MAINTENANCE OF TRAFFIC	1	LUMP	\$500,000.00	\$500,000.00
MOBILIZATION	1	LUMP	\$800,000.00	\$800,000.00
		Miscella	neous Subtotal	\$1 405 000 00

Project Summary	Subtotal
Roadway	\$1,468,100
Erosion Control	\$635,000
Drainage	\$1,902,000
Pavement	\$6,085,100
Traffic Control - Signing and Pavement Marking	\$266,000
Traffic Signal and Surveillance	\$584,500
Roadway Lighting	\$800,000
Utility Relocations - Gas, Electric, Water, Wastewater	\$0
Structures	\$3,250,000
Incidentals	\$1,405,000
Tota	\$16,396,000

Contingency (30%)	\$4,9	19,000 \$4,263,000.00	20%
		\$3,197,250.00	15%
	Subtotal \$21,3	\$2,131,500.00	10%
		\$1,065,750.00	5%
Right-of-Way		\$0 \$213,150.00	1%
		<u> </u>	
Engineering (18%)	\$3,8	37,000	

	Subtotal	\$27,284,000
Inflation (30%)		\$8,185,200

Project Total (2030 Dollars) \$35,469,000



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Roadway					
Description	Quantity	Unit	Unit Cost	Total	
PAVEMENT REMOVED	6,600	SY	\$20.00	\$132,000.00	
CULVERT REMOVED	200	FT	\$100.00	\$20,000.00	
EXCAVATION	7,800	CY	\$40.00	\$312,000.00	
EMBANKMENT	6,900	CY	\$45.00	\$310,500.00	
GUARDRAIL	400	FT	\$22.00	\$8,800.00	
MEDIAN BARRIER	2,800	FT	\$120.00	\$336,000.00	
CURB AND GUTTER		FT	\$42.00	\$0.00	
CONCRETE MEDIAN	400	SY	\$100.00	\$40,000.00	
CONCRETE WALK	3,100	SF	\$13.00	\$40,300.00	
		Roa	adway Subtotal	\$1,199,600.00	

Erosion Control					
Description	Quantity	Unit	Unit Cost	Total	
EROSION CONTROL	240,000	EACH	\$1.00	\$240,000.00	
EROSION CONTROL PLAN	1	LUMP	\$35,000.00	\$35,000.00	
BMPs	1	LUMP	\$120,000.00	\$120,000.00	
SEEDING AND MULCHING	30,000	SY	\$2.00	\$60,000.00	
		Erosion C	ontrol Subtotal	\$455,000.00	

Drainage					
Description	Quantity	Unit	Unit Cost	Total	
CULVERT	200	FT	\$600.00	\$120,000.00	
STORM SEWER SYSTEM	5,200	FT	\$300.00	\$1,560,000.00	
UNDERDRAINS	30,600	FT	\$15.00	\$459,000.00	
Drainage Subtotal				\$2,139,000.00	

Pavement				
Description	Quantity	Unit	Unit Cost	Total
FULL-DEPTH PAVEMENT (ASPHALT)	28,800	SY	\$145.00	\$4,176,000.00
FULL-DEPTH PAVEMENT (CONCRETE)		SY	\$145.00	\$0.00
PAVEMENT PLANING AND RESURFACING	22,300	SY	\$54.00	\$1,204,200.00
SHARED USE PATH	3,400	SY	\$42.00	\$142,800.00
		Pave	amont Subtotal	¢E E22 000 00

Traffic Control - Signing and Pavement Marking							
Description	Quantity	Unit	Unit Cost	Total			
SIGNING	0.98	MILE	\$250,000.00	\$245,000.00			
PAVEMENT MARKINGS - THERMO		MILE	\$14,000.00	\$0.00			
PAVEMENT MARKINGS - RECESSED	0.98	MILE	\$30,000.00	\$29,400.00			
Traffic Control - Signing and Pavement Marking Subtotal							

Traffic Signal and Surveillance				
Description	Quantity	Unit	Unit Cost	Total
STANDARD TRAFFIC SIGNAL	1	EACH	\$300,000.00	\$300,000.00
TRAFFIC SIGNAL FOR R-CUT	0.5	EACH	\$780,000.00	\$390,000.00
FIBER OPTIC COMMUNICATION	1.00	MILE	\$170,000.00	\$170,000.00
CCTV	1	EACH	\$123,000.00	\$123,000.00
Traffic Control - Traffic Signal Subtotal			\$983,000.00	

Roadway Lighting					
Description	Quantity	Unit	Unit Cost	Total	
FULL INTERCHANGE LIGHTING		EACH	\$500,000.00	\$0.00	
PARTIAL INTERCHANGE LIGHTING		EACH	\$300,000.00	\$0.00	
CONTINUOUS ROADWAY LIGHTING	5200	FT	\$100.00	\$520,000.00	
Traffic Control - Traffic Signal Subtotal				\$520,000.00	

Utility Relocations - Gas, Electric, Water, Wastewater				
Description	Quantity	Unit	Unit Cost	Total
HIGH PRESSURE GAS LINE		FT		\$0.00
WATERLINE 36" OR LARGER		FT		\$0.00
HIGH VOLTAGE TOWER		EACH		\$0.00
SANITARY LINE 36" OR LARGER		FT		\$0.00
DAM MODIFICATION		LUMP		\$0.00
Water/Wastewater Subtotal				

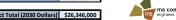
Structures		y		
Description	Quantity	Unit	Unit Cost	Total
RETAINING WALL		SF	\$90.00	\$0.00
BRIDGE		SF	\$220.00	\$0.00
		Pave	ement Subtotal	\$0.00

Incidentals					
Description		Quantity	Unit	Unit Cost	Total
CONSTRUCTION LAYOUT STAKES		1	LUMP	\$85,000.00	\$85,000.00
MAINTENANCE OF TRAFFIC	/	1	LUMP	\$400,000.00	\$400,000.00
MOBILIZATION		1	LUMP	\$600,000.00	\$600,000.00
	Miscellaneous Subtotal \$1,085,000.0				

Project Summary Roadway	\$1,199,600 \$455.000
	CAFE OOO
Erosion Control	\$455,000
Drainage	\$2,139,000
Pavement	\$5,523,000
Traffic Control - Signing and Pavement Marking	\$274,400
Traffic Signal and Surveillance	\$983,000
Roadway Lighting	\$520,000
Utility Relocations - Gas, Electric, Water, Wastewater	\$0
Structures	\$0
Incidentals	\$1,085,000
Total	\$12,179,000

Contingency (30%)		4	\$3,654,000	\$3,166,600.00	20%
				\$2,374,950.00	15%
		Subtotal	\$15,833,000	\$1,583,300.00	10%
				\$791,650.00	5%
Right-of-Way			\$0	\$158,330.00	1%
Engineering (18%)			\$2,850,000	l	
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Construction Engineering (10%)	\$1,583,000
Subtotal	\$20,266,000
Inflation (20%)	\$6,079,800





## SEGMENT 1 CONCEPT D - OVERALL

SEGMENT 1 CONCEPT D - RANGE 1	Quantity
Construction Subtotal	\$6,308,000
Contingency (30%)	\$1,892,000
Construction Total	\$8,200,000
Right-of-Way	\$0
Engineering (18%)	\$1,476,000
Construction Engineering (10%)	\$820,000
Project Subtotal	\$10,496,000
Inflation (30%)	\$3,148,800
Subtotal	\$13,645,000
SEGMENT 1 CONCEPT D - RANGE 2	
Construction Subtotal	\$1,760,000
Contingency (30%)	\$528,000
Construction Total	\$2,288,000
Right-of-Way	\$0
Engineering (18%)	\$412,000
Construction Engineering (10%)	\$229,000
Project Subtotal	\$2,929,000
Inflation (30%)	\$878,700
Subtotal	\$3,808,000
SEGMENT 1 CONCEPT D - RANGE 3	
Construction Subtotal	\$12,131,000
Contingency (30%)	\$3,639,000
Construction Total	\$15,770,000
Right-of-Way	\$0
Engineering (18%)	\$2,839,000
Construction Engineering (10%)	\$1,577,000
Project Subtotal	\$20,186,000
Inflation (30%)	\$6,055,800
Subtotal	\$26,242,000
SEGMENT 1 CONCEPT D - RANGE 4	
Construction Subtotal	\$7,381,000
Contingency (30%)	\$2,214,000
Construction Total	\$9,595,000
Right-of-Way	\$0
Engineering (18%)	\$1,727,000
Construction Engineering (10%)	\$960,000
Project Subtotal	\$12,282,000
Inflation (30%)	\$3,684,600

SEGMENT 1 - OVERALL	
SEGMENT 1 CONCEPT D - RANGE 1	\$13,645,000
SEGMENT 1 CONCEPT D - RANGE 2	\$3,808,000
SEGMENT 1 CONCEPT D - RANGE 3	\$26,242,000
SEGMENT 1 CONCEPT D - RANGE 4	\$15,967,000
Total Comment 1 Overall	¢E0 662 000

Construction w/ Contingency w/out Inflation: \$45,893,000

Estimate completed by:



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Roadway				
Description	Quantity	Unit	Unit Cost	Total
PAVEMENT REMOVED	1,600	SY	\$20.00	\$32,000.00
CULVERT REMOVED		FT	\$100.00	\$0.00
EXCAVATION	2,600	CY	\$40.00	\$104,000.00
EMBANKMENT	1,400	CY	\$45.00	\$63,000.00
GUARDRAIL	450	FT	\$22.00	\$9,900.00
MEDIAN BARRIER	800	FT	\$120.00	\$96,000.00
CURB AND GUTTER	3,200	FT	\$42.00	\$134,400.00
CONCRETE MEDIAN	700	SY	\$100.00	\$70,000.00
CONCRETE WALK	13,200	SF	\$13.00	\$171,600.00
Roadway Subtotal				

Erosion Control				
Description	Quantity	Unit	Unit Cost	Total
EROSION CONTROL	150,000	EACH	\$1.00	\$150,000.00
EROSION CONTROL PLAN	1	LUMP	\$25,000.00	\$25,000.00
BMPs	1	LUMP	\$85,000.00	\$85,000.00
SEEDING AND MULCHING	14,000	SY	\$2.00	\$28,000.00
Erosion Control Subtotal			\$288,000.00	

Drainage				
Description	Quantity	Unit	Unit Cost	Total
CULVERT		FT	\$600.00	\$0.00
STORM SEWER SYSTEM	2,400	FT	\$300.00	\$720,000.00
UNDERDRAINS	9,600	FT	\$15.00	\$144,000.00
Drainage Subtotal			\$864,000.00	

Pavement					
Description	Quantity	Unit	Unit Cost	Total	
FULL-DEPTH PAVEMENT (ASPHALT)	13,200	SY	\$145.00	\$1,914,000.00	
FULL-DEPTH PAVEMENT (CONCRETE)		SY	\$145.00	\$0.00	
PAVEMENT PLANING AND RESURFACING	15,000	SY	\$54.00	\$810,000.00	
SHARED USE PATH	500	SY	\$42.00	\$21,000.00	
Payament Subtatal				\$2.74E.000.00	

Traffic Control - Signing and Pavement Marking							
Description	Quantity	Unit	Unit Cost	Total			
SIGNING	0.30	MILE	\$250,000.00	\$75,000.00			
PAVEMENT MARKINGS - THERMO		MILE	\$14,000.00	\$0.00			
PAVEMENT MARKINGS - RECESSED	0.30	MILE	\$30,000.00	\$9,000.00			
Traffic Control - Signing and Pavement Marking Subtotal							

Traffic Signal and Surveillance						
Description Quantity Unit Unit Cost						
STANDARD TRAFFIC SIGNAL	1	EACH	\$300,000.00	\$300,000.00		
TRAFFIC SIGNAL FOR R-CUT		EACH	\$780,000.00	\$0.00		
FIBER OPTIC COMMUNICATION	0.30	MILE	\$170,000.00	\$51,000.00		
CCTV	1	EACH	\$123,000.00	\$123,000.00		
Traffic Control - Traffic Signal Subtotal				\$474,000.00		

Roadway Lighting					
Description	Quantity	Unit	Unit Cost	Total	
FULL INTERCHANGE LIGHTING		EACH	\$500,000.00	\$0.00	
PARTIAL INTERCHANGE LIGHTING		EACH	\$300,000.00	\$0.00	
CONTINUOUS ROADWAY LIGHTING	1600	FT	\$100.00	\$160,000.00	
Traffic Control - Traffic Signal Subtotal				\$160,000.00	

Utility Relocations - Gas, Electric, Water, Wastewater					
Description	Quantity	Unit	Unit Cost	Total	
HIGH PRESSURE GAS LINE		FT		\$0.00	
WATERLINE 36" OR LARGER		FT		\$0.00	
HIGH VOLTAGE TOWER		EACH		\$0.00	
SANITARY LINE 36" OR LARGER		FT		\$0.00	
DAM MODIFICATION		LUMP		\$0.00	
	W	ater/Waste	water Subtotal	\$0.00	

Structures		7		
Description	Quantity	Unit	Unit Cost	Total
RETAINING WALL	3,300	SF	\$90.00	\$297,000.00
BRIDGE		SF	\$220.00	\$0.00
		Pav	ement Subtotal	\$297,000.00

Incidentals				
Description	Quantity	Unit	Unit Cost	Total
CONSTRUCTION LAYOUT STAKES	1	LUMP	\$65,000.00	\$65,000.00
MAINTENANCE OF TRAFFIC	1	LUMP	\$250,000.00	\$250,000.00
MOBILIZATION	1	LUMP	\$400,000.00	\$400,000.00
		Miscella	neous Subtotal	\$715,000.00

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	Project Summary	Subtotal
	Roadway	\$680,900
	Erosion Control	\$288,000
	Drainage	\$864,000
٧	Pavement	\$2,745,000
	Traffic Control - Signing and Pavement Marking	\$84,000
	Traffic Signal and Surveillance	\$474,000
	Roadway Lighting	\$160,000
	Utility Relocations - Gas, Electric, Water, Wastewater	\$0
	Structures	\$297,000
	Incidentals	\$715,000
	Total	\$6,308,000

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Contingency (30%)		\$1,892,000	\$1,640,000.00	20%
			\$1,230,000.00	15%
	Subtota	\$8,200,000	\$820,000.00	10%
			\$410,000.00	5%
Right-of-Way		\$0	\$82,000.00	1%
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Engineering (18%)		\$1,476,000		

Subtotal	\$10,496,000
Inflation (30%)	\$3,148,800





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Roadway					
Description	Quantity	Unit	Unit Cost	Total	
PAVEMENT REMOVED	1,200	SY	\$20.00	\$24,000.00	
CULVERT REMOVED		FT	\$100.00	\$0.00	
EXCAVATION	1,000	CY	\$40.00	\$40,000.00	
EMBANKMENT	600	CY	\$45.00	\$27,000.00	
GUARDRAIL		FT	\$22.00	\$0.00	
MEDIAN BARRIER	600	FT	\$120.00	\$72,000.00	
CURB AND GUTTER		FT	\$42.00	\$0.00	
CONCRETE MEDIAN	300	SY	\$100.00	\$30,000.00	
CONCRETE WALK	1,700	SF	\$13.00	\$22,100.00	
Roadway Subtotal				\$215,100.00	

Erosion Control				
Description	Quantity	Unit	Unit Cost	Total
EROSION CONTROL	35,000	EACH	\$1.00	\$35,000.00
EROSION CONTROL PLAN	1	LUMP	\$5,000.00	\$5,000.00
BMPs	1	LUMP	\$25,000.00	\$25,000.00
SEEDING AND MULCHING	3,900	SY	\$2.00	\$7,800.00
Erosion Control Subtotal				\$72,800.00

Drainage				
Description	Quantity	Unit	Unit Cost	Total
CULVERT		FT	\$600.00	\$0.00
STORM SEWER SYSTEM	600	FT	\$300.00	\$180,000.00
UNDERDRAINS	3,600	FT	\$15.00	\$54,000.00
Drainage Subtotal			\$234,000.00	

Pavement				
Description	Quantity	Unit	Unit Cost	Total
FULL-DEPTH PAVEMENT (ASPHALT)	3,800	SY	\$145.00	\$551,000.00
FULL-DEPTH PAVEMENT (CONCRETE)		SY	\$145.00	\$0.00
PAVEMENT PLANING AND RESURFACING	6,300	SY	\$54.00	\$340,200.00
SHARED USE PATH	500	SY	\$42.00	\$21,000.00
Payament Subtotal				¢012 200 00

Traffic Control - Signing and Pavement Marking				
Description	Quantity	Unit	Unit Cost	Total
SIGNING	0.11	MILE	\$250,000.00	\$27,500.00
PAVEMENT MARKINGS - THERMO		MILE	\$14,000.00	\$0.00
PAVEMENT MARKINGS - RECESSED	0.11	MILE	\$30,000.00	\$3,300.00
Traffic Control - Signing and Pavement Marking Subtotal			\$30,800.00	

Traffic Signal and Surveillance				
Description	Quantity	Unit	Unit Cost	Total
STANDARD TRAFFIC SIGNAL		EACH	\$300,000.00	\$0.00
TRAFFIC SIGNAL FOR R-CUT		EACH	\$780,000.00	\$0.00
FIBER OPTIC COMMUNICATION		MILE	\$170,000.00	\$0.00
CCTV		EACH	\$123,000.00	\$0.00
Traffic Control - Traffic Signal Subtotal			\$0.00	

Roadway Lighting				
Description	Quantity	Unit	Unit Cost	Total
FULL INTERCHANGE LIGHTING		EACH	\$500,000.00	\$0.00
PARTIAL INTERCHANGE LIGHTING		EACH	\$300,000.00	\$0.00
CONTINUOUS ROADWAY LIGHTING	600	FT	\$100.00	\$60,000.00
Traffic Control - Traffic Signal Subtotal			\$60,000.00	

Utility Relocations - Gas, Electric, Water, Wastewater				
Description	Quantity	Unit	Unit Cost	Total
HIGH PRESSURE GAS LINE		FT		\$0.00
WATERLINE 36" OR LARGER		FT		\$0.00
HIGH VOLTAGE TOWER		EACH		\$0.00
SANITARY LINE 36" OR LARGER		FT		\$0.00
DAM MODIFICATION		LUMP		\$0.00
Water/Wastewater Subtotal				\$0.00

Structures		y		
Description	Quantity	Unit	Unit Cost	Total
RETAINING WALL		SF	\$90.00	\$0.00
BRIDGE		SF	\$220.00	\$0.00
		Pave	ement Subtotal	\$0.00

Incidentals				
Description	Quantity	Unit	Unit Cost	Total
CONSTRUCTION LAYOUT STAKES	1	LUMP	\$20,000.00	\$20,000.00
MAINTENANCE OF TRAFFIC	1	LUMP	\$115,000.00	\$115,000.00
MOBILIZATION	1	LUMP	\$100,000.00	\$100,000.00
		Miscella	neous Subtotal	\$235,000.00

Project Summary	Subtotal
Roadway	\$215,100
Erosion Control	\$72,800
Drainage	\$234,000
Pavement	\$912,200
Traffic Control - Signing and Pavement Marking	\$30,800
Traffic Signal and Surveillance	\$0
Roadway Lighting	\$60,000
Utility Relocations - Gas, Electric, Water, Wastewater	\$0
Structures	\$0
Incidentals	\$235,000
Total	\$1,760,000

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Contingency (30%)		\$528,000	\$457,600.00	20%
			\$343,200.00	15%
	Subtotal	\$2,288,000	\$228,800.00	10%
			\$114,400.00	5%
Right-of-Way		\$0	\$22,880.00	1%
Engineering (18%)		\$412,000		
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Construction Engineering (10%)	\$229,000
Subtotal	\$2,929,000
Inflation (30%)	\$878,700

roject Total (2030 Dollars)	\$3,808,000	ms



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Roadway				
Description	Quantity	Unit	Unit Cost	Total
PAVEMENT REMOVED	4,300	SY	\$20.00	\$86,000.00
CULVERT REMOVED		FT	\$100.00	\$0.00
EXCAVATION	5,300	CY	\$40.00	\$212,000.00
EMBANKMENT	4,700	CY	\$45.00	\$211,500.00
GUARDRAIL	700	FT	\$22.00	\$15,400.00
MEDIAN BARRIER	800	FT	\$120.00	\$96,000.00
CURB AND GUTTER	8,500	FT	\$42.00	\$357,000.00
CONCRETE MEDIAN	1,700	SY	\$100.00	\$170,000.00
CONCRETE WALK	17,700	SF	\$13.00	\$230,100.00
Roadway Subtotal				

Erosion Control				
Description	Quantity	Unit	Unit Cost	Total
EROSION CONTROL	300,000	EACH	\$1.00	\$300,000.00
EROSION CONTROL PLAN	1	LUMP	\$40,000.00	\$40,000.00
BMPs	1	LUMP	\$150,000.00	\$150,000.00
SEEDING AND MULCHING	40,000	SY	\$2.00	\$80,000.00
Erosion Control Subtotal				\$570,000.00

Drainage				
Description	Quantity	Unit	Unit Cost	Total
CULVERT		FT	\$600.00	\$0.00
STORM SEWER SYSTEM	4,000	FT	\$300.00	\$1,200,000.00
UNDERDRAINS	20,400	FT	\$15.00	\$306,000.00
Drainage Subtotal				\$1,506,000,00

Pavement				
Description	Quantity	Unit	Unit Cost	Total
FULL-DEPTH PAVEMENT (ASPHALT)	23,200	SY	\$145.00	\$3,364,000.00
FULL-DEPTH PAVEMENT (CONCRETE)		SY	\$145.00	\$0.00
PAVEMENT PLANING AND RESURFACING	30,000	SY	\$54.00	\$1,620,000.00
SHARED USE PATH	3,500	SY	\$42.00	\$147,000.00
		Dave	amont Subtotal	¢E 121 000 00

Traffic Control - Signing and Pavement Marking					
Description Quantity Unit Unit Cost					
SIGNING	0.64	MILE	\$250,000.00	\$160,000.00	
PAVEMENT MARKINGS - THERMO		MILE	\$14,000.00	\$0.00	
PAVEMENT MARKINGS - RECESSED	0.64	MILE	\$30,000.00	\$19,200.00	
Traffic Control - Signing and Pavement Marking Subtotal				\$179,200.00	

Traffic Signal and Surveillance				
Description	Quantity	Unit	Unit Cost	Total
STANDARD TRAFFIC SIGNAL		EACH	\$300,000.00	\$0.00
TRAFFIC SIGNAL FOR R-CUT	1	EACH	\$780,000.00	\$780,000.00
FIBER OPTIC COMMUNICATION	0.64	MILE	\$170,000.00	\$108,800.00
CCTV	3	EACH	\$123,000.00	\$369,000.00
Traffic Control - Traffic Signal Subtotal				\$1 257 800 00

Roadway Lighting				
Description	Quantity	Unit	Unit Cost	Total
FULL INTERCHANGE LIGHTING		EACH	\$500,000.00	\$0.00
PARTIAL INTERCHANGE LIGHTING		EACH	\$300,000.00	\$0.00
CONTINUOUS ROADWAY LIGHTING	3400	FT	\$100.00	\$340,000.00
Traffic Control - Traffic Signal Subtotal				\$340,000.00

Utility Relocations - Gas, Electric, Water, Wastewater			1	
Description	Quantity	Unit	Unit Cost	Total
HIGH PRESSURE GAS LINE		FT		\$0.00
WATERLINE 36" OR LARGER		FT		\$0.00
HIGH VOLTAGE TOWER		EACH		\$0.00
SANITARY LINE 36" OR LARGER		FT		\$0.00
DAM MODIFICATION		LUMP		\$0.00
Water/Wastewater Subtotal				\$0.00

Structures		J		
Description	Quantity	Unit	Unit Cost	Total
RETAINING WALL	5,100	SF	\$90.00	\$459,000.00
BRIDGE		SF	\$220.00	\$0.00
		Pav	ement Subtotal	\$459,000.00

Incidentals				
Description	Quantity	Unit	Unit Cost	Total
CONSTRUCTION LAYOUT STAKES	1	LUMP	\$110,000.00	\$110,000.00
MAINTENANCE OF TRAFFIC	1	LUMP	\$400,000.00	\$400,000.00
MOBILIZATION	1	LUMP	\$800,000.00	\$800,000.00
		Miscella	neous Subtotal	\$1 310 000 00

Project Summary		Subtotal
Roadway		\$1,378,000
Erosion Control		\$570,000
Drainage		\$1,506,000
Pavement		\$5,131,000
Traffic Control - Signing and Pavem	ent Marking	\$179,200
Traffic Signal and Surveillance		\$1,257,800
Roadway Lighting		\$340,000
Utility Relocations - Gas, Electric, W.	ater, Wastewater	\$0
Structures		\$459,000
Incidentals		\$1,310,000
	Total	\$12,131,000

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Contingency (30%)		\$3,639,000	\$3,154,000.00	20%
			\$2,365,500.00	15%
	Subtotal	\$15,770,000	\$1,577,000.00	10%
			\$788,500.00	5%
Right-of-Way		\$0	\$157,700.00	1%
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Engineering (18%)		\$2,839,000	i	
			•	

Subtotal	\$20,186,000
Inflation (30%)	\$6,055,800





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Roadway				
Description	Quantity	Unit	Unit Cost	Total
PAVEMENT REMOVED	6,400	SY	\$20.00	\$128,000.00
CULVERT REMOVED	200	FT	\$100.00	\$20,000.00
EXCAVATION	4,900	CY	\$40.00	\$196,000.00
EMBANKMENT	4,400	CY	\$45.00	\$198,000.00
GUARDRAIL	400	FT	\$22.00	\$8,800.00
MEDIAN BARRIER		FT	\$120.00	\$0.00
CURB AND GUTTER	4,900	FT	\$42.00	\$205,800.00
CONCRETE MEDIAN	2,200	SY	\$100.00	\$220,000.00
CONCRETE WALK	3,100	SF	\$13.00	\$40,300.00
Roadway Subtotal				\$1,016,900.00

Erosion Control					
Description	Quantity	Unit	Unit Cost	Total	
EROSION CONTROL	150,000	EACH	\$1.00	\$150,000.00	
EROSION CONTROL PLAN	1	LUMP	\$30,000.00	\$30,000.00	
BMPs	1	LUMP	\$100,000.00	\$100,000.00	
SEEDING AND MULCHING	24,300	SY	\$2.00	\$48,600.00	
		Erosion C	ontrol Subtotal	\$328,600.00	

Drainage				
Description	Quantity	Unit	Unit Cost	Total
CULVERT	200	FT	\$600.00	\$120,000.00
STORM SEWER SYSTEM		FT	\$300.00	\$0.00
UNDERDRAINS	18,600	FT	\$15.00	\$279,000.00
Drainage Subtotal			\$399,000.00	

Pavement					
Description	Quantity	Unit	Unit Cost	Total	
FULL-DEPTH PAVEMENT (ASPHALT)	17,400	SY	\$145.00	\$2,523,000.00	
FULL-DEPTH PAVEMENT (CONCRETE)		SY	\$145.00	\$0.00	
PAVEMENT PLANING AND RESURFACING	22,500	SY	\$54.00	\$1,215,000.00	
SHARED USE PATH	4,400	SY	\$42.00	\$184,800.00	
		Dove	omont Cubtotal	¢2 022 000 00	

Traffic Control - Signing and Pavement Marking					
Description	Quantity	Unit	Unit Cost	Total	
SIGNING	0.59	MILE	\$250,000.00	\$147,500.00	
PAVEMENT MARKINGS - THERMO		MILE	\$14,000.00	\$0.00	
PAVEMENT MARKINGS - RECESSED	0.59	MILE	\$30,000.00	\$17,700.00	
Traffic Control - Signing and Pavement Marking Subtotal				\$165,200.00	

Traffic Signal and Surveillance				
Description	Quantity	Unit	Unit Cost	Total
STANDARD TRAFFIC SIGNAL	1	EACH	\$300,000.00	\$300,000.00
TRAFFIC SIGNAL FOR R-CUT		EACH	\$780,000.00	\$0.00
FIBER OPTIC COMMUNICATION	0.59	MILE	\$170,000.00	\$100,300.00
CCTV	1	EACH	\$123,000.00	\$123,000.00
Traffic Control - Traffic Signal Subtotal				\$523,300.00

Roadway Lighting					
Description	Quantity	Unit	Unit Cost	Total	
FULL INTERCHANGE LIGHTING		EACH	\$500,000.00	\$0.00	
PARTIAL INTERCHANGE LIGHTING		EACH	\$300,000.00	\$0.00	
CONTINUOUS ROADWAY LIGHTING	3100	FT	\$100.00	\$310,000.00	
Traffic Control - Traffic Signal Subtotal				\$310,000.00	

Utility Relocations - Gas, Electric, Water, Wastewater				
Description	Quantity	Unit	Unit Cost	Total
HIGH PRESSURE GAS LINE		FT		\$0.00
WATERLINE 36" OR LARGER		FT		\$0.00
HIGH VOLTAGE TOWER		EACH		\$0.00
SANITARY LINE 36" OR LARGER		FT		\$0.00
DAM MODIFICATION		LUMP		\$0.00
Water/Wastewater Subtotal				\$0.00

Structures		y		
Description	Quantity	Unit	Unit Cost	Total
RETAINING WALL		SF	\$90.00	\$0.00
BRIDGE		SF	\$220.00	\$0.00
		Pave	ement Subtotal	\$0.00

Incidentals					
Description		Quantity	Unit	Unit Cost	Total
CONSTRUCTION LAYOUT STAKES		1	LUMP	\$65,000.00	\$65,000.00
MAINTENANCE OF TRAFFIC		1	LUMP	\$250,000.00	\$250,000.00
MOBILIZATION		1	LUMP	\$400,000.00	\$400,000.00
Miscellaneous Subtotal			\$715,000.00		

Project Summary	Subtotal
Roadway	\$1,016,900
Erosion Control	\$328,600
Drainage	\$399,000
Pavement	\$3,922,800
Traffic Control - Signing and Pavement Marking	\$165,200
Traffic Signal and Surveillance	\$523,300
Roadway Lighting	\$310,000
Utility Relocations - Gas, Electric, Water, Wastewater	\$0
Structures	\$0
Incidentals	\$715,000
Total	\$7,381,000

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Contingency (30%)		\$2,214,000	\$1,919,000.00	20%
			\$1,439,250.00	15%
	Subtotal	\$9,595,000	\$959,500.00	10%
			\$479,750.00	5%
Right-of-Way		\$0	\$95,950.00	1%
	_		_	
Engineering (18%)		\$1,727,000		
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Subtotal	\$12,282,000
Inflation (30%)	\$3,684,600

ct Total (2030 Dollars) \$15,967,000



## SEGMENT 2 CONCEPT A - OVERALL

SEGMENT 2 CONCEPT A - RANGE 1	Quantity
Construction Subtotal	\$30,920,000
Contingency (30%)	\$9,276,000
Construction Total	\$40,196,000
Right-of-Way	\$0
Engineering (18%)	\$7,235,000
Construction Engineering (10%)	\$4,020,000
Project Subtotal	\$51,451,000
Inflation (30%)	\$15,435,300
Subtotal	\$66,886,000
SEGMENT 2 CONCEPT A - RANGE 2	
Construction Subtotal	\$14,368,000
Contingency (30%)	\$4,310,000
Construction Total	\$18,678,000
Right-of-Way	\$0
Engineering (18%)	\$3,362,000
Construction Engineering (10%)	\$1,868,000
Project Subtotal	\$23,908,000
Inflation (30%)	\$7,172,400
Subtotal	\$31,080,000
SEGMENT 2 CONCEPT A - RANGE 3	
Construction Subtotal	\$35,738,000
Contingency (30%)	\$10,721,000
Construction Total	\$46,459,000
Right-of-Way	\$0
Engineering (18%)	\$8,363,000
Construction Engineering (10%)	\$4,646,000
Project Subtotal	\$59,468,000
Inflation (30%)	\$17,840,400
Subtotal	\$77,308,000

SEGMENT 2 - OVERALL	
SEGMENT 2 CONCEPT A - RANGE 1	\$66,886,000
SEGMENT 2 CONCEPT A - RANGE 2	\$31,080,000
SEGMENT 2 CONCEPT A - RANGE 3	\$77,308,000
Total - Segment 2 - Overall	\$175,274,000

Construction w/ Contingency w/out Inflation \$134,827,000





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Roadway					
Description	Quantity	Unit	Unit Cost	Total	
PAVEMENT REMOVED	32,500	SY	\$20.00	\$650,000.00	
CULVERT REMOVED	500	FT	\$100.00	\$50,000.00	
EXCAVATION	18,400	CY	\$40.00	\$736,000.00	
EMBANKMENT	25,200	CY	\$45.00	\$1,134,000.00	
GUARDRAIL	2,000	FT	\$22.00	\$44,000.00	
MEDIAN BARRIER	4,300	FT	\$120.00	\$516,000.00	
CURB AND GUTTER	7,900	FT	\$42.00	\$331,800.00	
CONCRETE MEDIAN	2,000	SY	\$100.00	\$200,000.00	
CONCRETE WALK		SF	\$13.00	\$0.00	
Roadway Subtotal \$3,66				\$3,661,800.00	

Erosion Control				
Description	Quantity	Unit	Unit Cost	Total
EROSION CONTROL	450,000	EACH	\$1.00	\$450,000.00
EROSION CONTROL PLAN	1	LUMP	\$100,000.00	\$100,000.00
BMPs	1	LUMP	\$225,000.00	\$225,000.00
SEEDING AND MULCHING	97,300	SY	\$2.00	\$194,600.00
Erosion Control Subtotal				\$969,600.00

Drainage				
Description	Quantity	Unit	Unit Cost	Total
CULVERT	500	FT	\$600.00	\$300,000.00
STORM SEWER SYSTEM	11,000	FT	\$300.00	\$3,300,000.00
UNDERDRAINS	66,200	FT	\$15.00	\$993,000.00
Drainage Subtotal				\$4,593,000.00

Pavement				
Description	Quantity	Unit	Unit Cost	Total
FULL-DEPTH PAVEMENT (ASPHALT)	109,100	SY	\$100.00	\$10,910,000.00
FULL-DEPTH PAVEMENT (CONCRETE)		SY	\$150.00	\$0.00
PAVEMENT PLANING AND RESURFACING	12,800	SY	\$54.00	\$691,200.00
SHARED USE PATH		SY	\$42.00	\$0.00

Traffic Control - Signing and Pavement Marking					
Description	Quantity	Unit	Unit Cost	Total	
SIGNING	0.85	MILE	\$250,000.00	\$212,500.00	
PAVEMENT MARKINGS - THERMO		MILE	\$14,000.00	\$0.00	
PAVEMENT MARKINGS - RECESSED	0.85	MILE	\$30,000.00	\$25,500.00	
Traffic Control - Signing and Pavement Marking Subtotal				\$238,000.00	

Traffic Signal and Surveillance				
Description	Quantity	Unit	Unit Cost	Total
STANDARD TRAFFIC SIGNAL	2	EACH	\$300,000.00	\$600,000.00
TRAFFIC SIGNAL FOR R-CUT		EACH	\$780,000.00	\$0.00
FIBER OPTIC COMMUNICATION	0.85	MILE	\$170,000.00	\$144,500.00
CCTV	2	EACH	\$123,000.00	\$246,000.00
	\$990 500 00			

Roadway Lighting					
Description	Quantity	Unit	Unit Cost	Total	
FULL INTERCHANGE LIGHTING	1	EACH	\$500,000.00	\$500,000.00	
PARTIAL INTERCHANGE LIGHTING		EACH	\$300,000.00	\$0.00	
CONTINUOUS ROADWAY LIGHTING		FT	\$100.00	\$0.00	
Traffic Control - Traffic Signal Subtotal					

Utility Relocations - Gas, Electric, Water, Wastewater				
Description	Quantity	Unit	Unit Cost	Total
HIGH PRESSURE GAS LINE		FT		\$0.00
WATERLINE 36" OR LARGER		FT		\$0.00
HIGH VOLTAGE TOWER		EACH		\$0.00
SANITARY LINE 36" OR LARGER		FT		\$0.00
DAM MODIFICATION		LUMP		\$0.00
	\$0.00			

Structures		y		
Description	Quantity	Unit	Unit Cost	Total
RETAINING WALL	14,000	SF	\$90.00	\$1,260,000.00
BRIDGE	25,500	SF	\$220.00	\$5,610,000.00
		Pave	ement Subtotal	\$6,870,000.00

Incidentals				
Description	Quantity	Unit	Unit Cost	Total
CONSTRUCTION LAYOUT STAKES	1	LUMP	\$225,300.00	\$225,300.00
MAINTENANCE OF TRAFFIC	1	LUMP	\$70,800.00	\$70,800.00
MOBILIZATION	1	LUMP	\$1,200,000.00	\$1,200,000.00
		Miscella	neous Subtotal	\$1,496,100,00

Project Summary		Subtotal
Roadway		\$3,661,800
Erosion Control	1	\$969,600
Drainage		\$4,593,000
Pavement		\$11,601,200
Traffic Control - Signing and Pavement Marking		\$238,000
Traffic Signal and Surveillance		\$990,500
Roadway Lighting		\$500,000
Utility Relocations - Gas, Electric, Water, Wastewater		\$0
Structures		\$6,870,000
Incidentals		\$1,496,100
	Total	\$30,920,000

Contingency (30%)	\$9,276,000
Subtotal	\$40,196,000
Right-of-Way	\$0
	,
Engineering (18%)	\$7,235,000
Construction Engineering (10%)	\$4,020,000
Subtotal	\$51,451,000





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Roadway				
Description	Quantity	Unit	Unit Cost	Total
PAVEMENT REMOVED	20,500	SY	\$20.00	\$410,000.00
CULVERT REMOVED	500	FT	\$100.00	\$50,000.00
EXCAVATION	2,900	CY	\$40.00	\$116,000.00
EMBANKMENT	21,300	CY	\$45.00	\$958,500.00
GUARDRAIL	2,500	FT	\$22.00	\$55,000.00
MEDIAN BARRIER	3,900	FT	\$120.00	\$468,000.00
CURB AND GUTTER	2,600	FT	\$42.00	\$109,200.00
CONCRETE MEDIAN	1,200	SY	\$100.00	\$120,000.00
CONCRETE WALK		SF	\$13.00	\$0.00
Roadway Subtotal				\$2,286,700.00

Erosion Control				
Description	Quantity	Unit	Unit Cost	Total
EROSION CONTROL	200,000	EACH	\$1.00	\$200,000.00
EROSION CONTROL PLAN	1	LUMP	\$40,000.00	\$40,000.00
BMPs	1	LUMP	\$100,000.00	\$100,000.00
SEEDING AND MULCHING	34,800	SY	\$2.00	\$69,600.00
Erosion Control Subtotal				\$409,600.00

Drainage				
Description	Quantity	Unit	Unit Cost	Total
CULVERT	500	FT	\$600.00	\$300,000.00
STORM SEWER SYSTEM	5,400	FT	\$300.00	\$1,620,000.00
UNDERDRAINS	36,400	FT	\$15.00	\$546,000.00
Drainage Subtotal				\$2,466,000.00

Pavement					
Description	Quantity	Unit	Unit Cost	Total	
FULL-DEPTH PAVEMENT (ASPHALT)	62,500	SY	\$100.00	\$6,250,000.00	
FULL-DEPTH PAVEMENT (CONCRETE)		SY	\$150.00	\$0.00	
PAVEMENT PLANING AND RESURFACING	1,400	SY	\$54.00	\$75,600.00	
SHARED USE PATH		SY	\$42.00	\$0.00	
Dougnant Cubtotal				¢¢ 335 ¢00 00	

Traffic Control - Signing and Pavement Marking					
Description	Total				
SIGNING	0.97	MILE	\$250,000.00	\$242,500.00	
PAVEMENT MARKINGS - THERMO		MILE	\$14,000.00	\$0.00	
PAVEMENT MARKINGS - RECESSED	0.97	MILE	\$30,000.00	\$29,100.00	
Traffic Control - Signing and Pavement Marking Subtotal				\$271,600.00	

Traffic Signal and Surveillance				
Description	Quantity	Unit	Unit Cost	Total
STANDARD TRAFFIC SIGNAL		EACH	\$300,000.00	\$0.00
TRAFFIC SIGNAL FOR R-CUT		EACH	\$780,000.00	\$0.00
FIBER OPTIC COMMUNICATION		MILE	\$170,000.00	\$0.00
CCTV		EACH	\$123,000.00	\$0.00
Traffic Control - Traffic Signal Subtotal				\$0.00

Roadway Lighting				
Description	Quantity	Unit	Unit Cost	Total
FULL INTERCHANGE LIGHTING		EACH	\$500,000.00	\$0.00
PARTIAL INTERCHANGE LIGHTING		EACH	\$300,000.00	\$0.00
CONTINUOUS ROADWAY LIGHTING		FT	\$100.00	\$0.00
Traffic Control - Traffic Signal Subtotal				\$0.00

Utility Relocations - Gas, Electric, Water, Wastewater				
Description	Quantity	Unit	Unit Cost	Total
HIGH PRESSURE GAS LINE		FT		\$0.00
WATERLINE 36" OR LARGER		FT		\$0.00
HIGH VOLTAGE TOWER		EACH		\$0.00
SANITARY LINE 36" OR LARGER		FT		\$0.00
DAM MODIFICATION	4	LUMP		\$0.00
	14/	/11/	works or Cook and all	40.00

Structures		y		
Description	Quantity	Unit	Unit Cost	Total
RETAINING WALL		SF	\$90.00	\$0.00
BRIDGE	7,600	SF	\$220.00	\$1,672,000.00
		Pave	ement Subtotal	\$1,672,000.00

Incidentals				
Description	Quantity	Unit	Unit Cost	Total
CONSTRUCTION LAYOUT STAKES	1	LUMP	\$104,300.00	\$104,300.00
MAINTENANCE OF TRAFFIC	1	LUMP	\$32,600.00	\$32,600.00
MOBILIZATION	1	LUMP	\$800,000.00	\$800,000.00
		Miscella	neous Subtotal	\$936,900.00

Project Summary	Subtotal
Roadway	\$2,286,700
Erosion Control	\$409,600
Drainage	\$2,466,000
Pavement	\$6,325,600
Traffic Control - Signing and Pavement Marking	\$271,600
Traffic Signal and Surveillance	\$0
Roadway Lighting	\$0
Utility Relocations - Gas, Electric, Water, Wastewater	\$0
Structures	\$1,672,000
Incidentals	\$936,900
Tot	al \$14,368,000

Contingency (30%)	\$4,310,000
Subtota	\$18,678,000
Right-of-Way	\$0
Engineering (18%)	\$3,362,000
Construction Engineering (10%)	\$1,868,000
Subtota	\$23,908,000
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	42 420 400



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Roadway				
Description	Quantity	Unit	Unit Cost	Total
PAVEMENT REMOVED	21,200	SY	\$20.00	\$424,000.00
CULVERT REMOVED		FT	\$100.00	\$0.00
EXCAVATION	20,300	CY	\$40.00	\$812,000.00
EMBANKMENT	38,800	CY	\$45.00	\$1,746,000.00
GUARDRAIL	2,200	FT	\$22.00	\$48,400.00
MEDIAN BARRIER	3,500	FT	\$120.00	\$420,000.00
CURB AND GUTTER	9,400	FT	\$42.00	\$394,800.00
CONCRETE MEDIAN	300	SY	\$100.00	\$30,000.00
CONCRETE WALK		SF	\$13.00	\$0.00
Roadway Subtotal				\$3,875,200.00

Erosion Control				
Description	Quantity	Unit	Unit Cost	Total
EROSION CONTROL	600,000	EACH	\$1.00	\$600,000.00
EROSION CONTROL PLAN	1	LUMP	\$130,000.00	\$130,000.00
BMPs	1	LUMP	\$300,000.00	\$300,000.00
SEEDING AND MULCHING	115,800	SY	\$2.00	\$231,600.00
	Erosion Control Subtotal			

Drainage				
Description	Quantity	Unit	Unit Cost	Total
CULVERT		FT	\$600.00	\$0.00
STORM SEWER SYSTEM	18,400	FT	\$300.00	\$5,520,000.00
UNDERDRAINS	57,000	FT	\$15.00	\$855,000.00
Drainage Subtotal				\$6,375,000.00

Pavement				
Description	Quantity	Unit	Unit Cost	Total
FULL-DEPTH PAVEMENT (ASPHALT)	104,400	SY	\$100.00	\$10,440,000.00
FULL-DEPTH PAVEMENT (CONCRETE)		SY	\$150.00	\$0.00
PAVEMENT PLANING AND RESURFACING	2,100	SY	\$54.00	\$113,400.00
SHARED USE PATH		SY	\$42.00	\$0.00

Traffic Control - Signing and Pavement Marking				
Description	Quantity	Unit	Unit Cost	Total
SIGNING	0.38	MILE	\$250,000.00	\$94,696.97
PAVEMENT MARKINGS - THERMO		MILE	\$14,000.00	\$0.00
PAVEMENT MARKINGS - RECESSED	0.38	MILE	\$30,000.00	\$11,363.64
Traffic Control - Signing and Pavement Marking Subtotal				\$106,060.61

Traffic Signal and Surveillance				
Description	Quantity	Unit	Unit Cost	Total
STANDARD TRAFFIC SIGNAL	1	EACH	\$300,000.00	\$300,000.00
TRAFFIC SIGNAL FOR R-CUT		EACH	\$780,000.00	\$0.00
FIBER OPTIC COMMUNICATION	0.38	MILE	\$170,000.00	\$64,393.94
CCTV	1	EACH	\$123,000.00	\$123,000.00
	\$487,393.94			

Roadway Lighting				
Description	Quantity	Unit	Unit Cost	Total
FULL INTERCHANGE LIGHTING	1	EACH	\$500,000.00	\$500,000.00
PARTIAL INTERCHANGE LIGHTING		EACH	\$300,000.00	\$0.00
CONTINUOUS ROADWAY LIGHTING		FT	\$100.00	\$0.00
Traffic Control - Traffic Signal Subtotal				\$500,000,00

Utility Relocations - Gas, Electric, Water, Wastewater				
Description	Quantity	Unit	Unit Cost	Total
HIGH PRESSURE GAS LINE		FT		\$0.00
WATERLINE 36" OR LARGER		FT		\$0.00
HIGH VOLTAGE TOWER		EACH		\$0.00
SANITARY LINE 36" OR LARGER		FT		\$0.00
DAM MODIFICATION		LUMP		\$0.00

Structures		y		
Description	Quantity	Unit	Unit Cost	Total
RETAINING WALL		SF	\$90.00	\$0.00
BRIDGE	50,000	SF	\$220.00	\$11,000,000.00
		Pave	ement Subtotal	\$11,000,000.00

Incidentals				
Description	Quantity	Unit	Unit Cost	Total
CONSTRUCTION LAYOUT STAKES	1	LUMP	\$288,500.00	\$288,500.00
MAINTENANCE OF TRAFFIC	1	LUMP	\$90,500.00	\$90,500.00
MOBILIZATION	1	LUMP	\$1,200,000.00	\$1,200,000.00
Miscellaneous Subtotal				\$1,579,000.00

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	Project Summary	Subtotal
	Roadway	\$3,875,200
	Erosion Control	\$1,261,600
	Drainage	\$6,375,000
۹	Pavement	\$10,553,400
	Traffic Control - Signing and Pavement Marking	\$106,061
	Traffic Signal and Surveillance	\$487,394
	Roadway Lighting	\$500,000
	Utility Relocations - Gas, Electric, Water, Wastewater	\$0
	Structures	\$11,000,000
	Incidentals	\$1,579,000
	Total	\$35,738,000

Contingency (30%)	\$10,721,000
Subt	total \$46,459,000
Right-of-Way	\$0
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Engineering (18%)	\$8,363,000
Construction Engineering (10%)	\$4,646,000
Subt	total \$59,468,000

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## SEGMENT 2 CONCEPT B - OVERALL

SEGMENT 2 CONCEPT B - RANGE 1	Quantity
Construction Subtotal	\$35,036,000
Contingency (30%)	\$10,511,000
Construction Total	\$45,547,000
Right-of-Way	\$0
Engineering (18%)	\$8,198,000
Construction Engineering (10%)	\$4,555,000
Project Subtotal	\$58,300,000
Inflation (30%)	\$17,490,000
Subtotal	\$75,790,000
SEGMENT 2 CONCEPT B - RANGE 2	
Construction Subtotal	\$14,872,000
Contingency (30%)	\$4,462,000
Construction Total	\$19,334,000
Right-of-Way	\$0
Engineering (18%)	\$3,480,000
Construction Engineering (10%)	\$1,933,000
Project Subtotal	\$24,747,000
Inflation (30%)	\$7,424,100
Subtotal	\$32,171,000
SEGMENT 2 CONCEPT B - RANGE 3	
Construction Subtotal	\$23,498,000
Contingency (30%)	\$7,049,000
Construction Total	\$30,547,000
Right-of-Way	\$0
Engineering (18%)	\$5,498,000
Construction Engineering (10%)	\$3,055,000
Project Subtotal	\$39,100,000
Inflation (30%)	\$11,730,000
Subtotal	\$50,830,000

SEGMENT 2 - OVERALL	
SEGMENT 2 CONCEPT B - RANGE 1	\$75,790,000
SEGMENT 2 CONCEPT B - RANGE 2	\$32,171,000
SEGMENT 2 CONCEPT B - RANGE 3	\$50,830,000
Total - Segment 2 - Overall	\$158,791,000

Construction w/ Contingency w/out Inflation \$122,147,000





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Roadway				
Description	Quantity	Unit	Unit Cost	Total
PAVEMENT REMOVED	44,100	SY	\$20.00	\$882,000.00
CULVERT REMOVED	500	FT	\$100.00	\$50,000.00
EXCAVATION	15,900	CY	\$40.00	\$636,000.00
EMBANKMENT	13,100	CY	\$45.00	\$589,500.00
GUARDRAIL	2,000	FT	\$22.00	\$44,000.00
MEDIAN BARRIER	5,800	FT	\$120.00	\$696,000.00
CURB AND GUTTER	14,400	FT	\$42.00	\$604,800.00
CONCRETE MEDIAN	4,300	SY	\$100.00	\$430,000.00
CONCRETE WALK		SF	\$13.00	\$0.00
Roadway Subtotal \$3,932,300.0				\$3,932,300.00

Erosion Control				
Description	Quantity	Unit	Unit Cost	Total
EROSION CONTROL	550,000	EACH	\$1.00	\$550,000.00
EROSION CONTROL PLAN	1	LUMP	\$80,000.00	\$80,000.00
BMPs	1	LUMP	\$275,000.00	\$275,000.00
SEEDING AND MULCHING	113,400	SY	\$2.00	\$226,800.00
Erosion Control Subtotal				\$1,131,800.00

Drainage				
Description	Quantity	Unit	Unit Cost	Total
CULVERT	500	FT	\$600.00	\$300,000.00
STORM SEWER SYSTEM	13,600	FT	\$300.00	\$4,080,000.00
UNDERDRAINS	70,600	FT	\$15.00	\$1,059,000.00
		Dra	inage Subtotal	\$5,439,000.00

Pavement				
Description	Quantity	Unit	Unit Cost	Total
FULL-DEPTH PAVEMENT (ASPHALT)	127,200	SY	\$100.00	\$12,720,000.00
FULL-DEPTH PAVEMENT (CONCRETE)		SY	\$150.00	\$0.00
PAVEMENT PLANING AND RESURFACING	16,800	SY	\$54.00	\$907,200.00
SHARED USE PATH		SY	\$42.00	\$0.00

Traffic Control - Signing and Pavement Marking				
Description	Quantity	Unit	Unit Cost	Total
SIGNING	0.85	MILE	\$250,000.00	\$212,500.00
PAVEMENT MARKINGS - THERMO		MILE	\$14,000.00	\$0.00
PAVEMENT MARKINGS - RECESSED	0.85	MILE	\$30,000.00	\$25,500.00
Traffic Control - Signing and Pavement Marking Subtotal				\$238,000.00

Traffic Signal and Surveillance				
Description	Quantity	Unit	Unit Cost	Total
STANDARD TRAFFIC SIGNAL	3	EACH	\$300,000.00	\$900,000.00
TRAFFIC SIGNAL FOR R-CUT		EACH	\$780,000.00	\$0.00
FIBER OPTIC COMMUNICATION	0.85	MILE	\$170,000.00	\$144,500.00
CCTV	3	EACH	\$123,000.00	\$369,000.00
Traffic Control - Traffic Signal Subtotal				\$1,413,500.00

Roadway Lighting				
Description	Quantity	Unit	Unit Cost	Total
FULL INTERCHANGE LIGHTING		EACH	\$500,000.00	\$0.00
PARTIAL INTERCHANGE LIGHTING	2	EACH	\$300,000.00	\$600,000.00
CONTINUOUS ROADWAY LIGHTING		FT	\$100.00	\$0.00
Traffic Control - Traffic Signal Subtotal			\$600,000.00	

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Quantity	Unit	Unit Cost	Total
	FT		\$0.00
	FT		\$0.00
	EACH		\$0.00
	FT		\$0.00
	LUMP		\$0.00
		FT FT EACH FT LUMP	FT FT EACH FT

Structures		y		
Description	Quantity	Unit	Unit Cost	Total
RETAINING WALL		SF	\$90.00	\$0.00
BRIDGE	32,300	SF	\$220.00	\$7,106,000.00
		Pave	ement Subtotal	\$7,106,000.00

Incidentals				
Description	Quantity	Unit	Unit Cost	Total
CONSTRUCTION LAYOUT STAKES	1	LUMP	\$265,500.00	\$265,500.00
MAINTENANCE OF TRAFFIC	1	LUMP	\$83,000.00	\$83,000.00
MOBILIZATION	1	LUMP	\$1,200,000.00	\$1,200,000.00
		Miscella	neous Subtotal	\$1,548,500,00

Project Summary	Subtotal
Roadway	\$3,932,300
Erosion Control	\$1,131,800
Drainage	\$5,439,000
Pavement	\$13,627,200
Traffic Control - Signing and Pavement Marking	\$238,000
Traffic Signal and Surveillance	\$1,413,500
Roadway Lighting	\$600,000
Utility Relocations - Gas, Electric, Water, Wastewater	\$0
Structures	\$7,106,000
Incidentals	\$1,548,500
Total	\$35,036,000

Contingency (30%)	\$10,511,000
Subtotal	\$45,547,000
Right-of-Way	\$0
Engineering (18%)	\$8,198,000
Construction Engineering (10%)	\$4,555,000
Subtotal	\$58,300,000

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Roadway				
Description	Quantity	Unit	Unit Cost	Total
PAVEMENT REMOVED	15,000	SY	\$20.00	\$300,000.00
CULVERT REMOVED	500	FT	\$100.00	\$50,000.00
EXCAVATION	1,100	CY	\$40.00	\$44,000.00
EMBANKMENT	18,900	CY	\$45.00	\$850,500.00
GUARDRAIL	2,200	FT	\$22.00	\$48,400.00
MEDIAN BARRIER	3,900	FT	\$120.00	\$468,000.00
CURB AND GUTTER	1,800	FT	\$42.00	\$75,600.00
CONCRETE MEDIAN	2,000	SY	\$100.00	\$200,000.00
CONCRETE WALK		SF	\$13.00	\$0.00
Roadway Subtotal				\$2,036,500.00

Erosion Control				
Description	Quantity	Unit	Unit Cost	Total
EROSION CONTROL	250,000	EACH	\$1.00	\$250,000.00
EROSION CONTROL PLAN	1	LUMP	\$50,000.00	\$50,000.00
BMPs	1	LUMP	\$125,000.00	\$125,000.00
SEEDING AND MULCHING	34,100	SY	\$2.00	\$68,200.00
Erosion Control Subtotal				\$493,200.00

Drainage				
Description	Quantity	Unit	Unit Cost	Total
CULVERT	500	FT	\$600.00	\$300,000.00
STORM SEWER SYSTEM	7,100	FT	\$300.00	\$2,130,000.00
UNDERDRAINS	29,500	FT	\$15.00	\$442,500.00
Drainage Subtotal				\$2,872,500.00

Pavement				
Description	Quantity	Unit	Unit Cost	Total
FULL-DEPTH PAVEMENT (ASPHALT)	65,200	SY	\$100.00	\$6,520,000.00
FULL-DEPTH PAVEMENT (CONCRETE)		SY	\$150.00	\$0.00
PAVEMENT PLANING AND RESURFACING	1,400	SY	\$54.00	\$75,600.00
SHARED USE PATH		SY	\$42.00	\$0.00

Traffic Control - Signing and Pavement Marking				
Description	Total			
SIGNING	0.97	MILE	\$250,000.00	\$242,500.00
PAVEMENT MARKINGS - THERMO		MILE	\$14,000.00	\$0.00
PAVEMENT MARKINGS - RECESSED	0.97	MILE	\$30,000.00	\$29,100.00
Traffic Control - Signing and Pavement Marking Subtotal				\$271,600.00

Traffic Signal and Surveillance					
Description	Quantity	Unit	Unit Cost	Total	
STANDARD TRAFFIC SIGNAL		EACH	\$300,000.00	\$0.00	
TRAFFIC SIGNAL FOR R-CUT		EACH	\$780,000.00	\$0.00	
FIBER OPTIC COMMUNICATION		MILE	\$170,000.00	\$0.00	
CCTV		EACH	\$123,000.00	\$0.00	
	Traffic Control - Traffic Signal Subtotal				

Roadway Lighting				
Description	Quantity	Unit	Unit Cost	Total
FULL INTERCHANGE LIGHTING		EACH	\$500,000.00	\$0.00
PARTIAL INTERCHANGE LIGHTING		EACH	\$300,000.00	\$0.00
CONTINUOUS ROADWAY LIGHTING		FT	\$100.00	\$0.00
Traffic Control - Traffic Signal Subtotal				\$0.00

Utility Relocations - Gas. Electric, Water, Wastewater				
Description	Quantity	Unit	Unit Cost	Total
HIGH PRESSURE GAS LINE		FT		\$0.00
WATERLINE 36" OR LARGER		FT		\$0.00
HIGH VOLTAGE TOWER		EACH		\$0.00
SANITARY LINE 36" OR LARGER		FT		\$0.00
DAM MODIFICATION	4	LUMP		\$0.00
				40.00

Structures		y		
Description	Quantity	Unit	Unit Cost	Total
RETAINING WALL		SF	\$90.00	\$0.00
BRIDGE	7,600	SF	\$220.00	\$1,672,000.00
		Pave	ement Subtotal	\$1,672,000.00

Incidentals				
Description	Quantity	Unit	Unit Cost	Total
CONSTRUCTION LAYOUT STAKES	1	LUMP	\$99,700.00	\$99,700.00
MAINTENANCE OF TRAFFIC	1	LUMP	\$31,200.00	\$31,200.00
MOBILIZATION	1	LUMP	\$800,000.00	\$800,000.00
Miscellaneous Subtotal				\$930,900.00

Project Summary		Subtotal
Roadway	-1	\$2,036,500
Erosion Control	1	\$493,200
Drainage		\$2,872,500
Pavement		\$6,595,600
Traffic Control - Signing and Pavement Marking		\$271,600
Traffic Signal and Surveillance		\$0
Roadway Lighting		\$0
Utility Relocations - Gas, Electric, Water, Wastewater		\$0
Structures	- 4	\$1,672,000
Incidentals	4	\$930,900
	Total	\$14,872,000

Contingency (30%)	\$4,462,000
Subtota	\$19,334,000
Right-of-Way	\$0
Engineering (18%)	\$3,480,000
Construction Engineering (10%)	\$1,933,000
Subtota	\$24,747,000
Inflation (200/)	¢7 424 100



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Roadway					
Description	Quantity	Unit	Unit Cost	Total	
PAVEMENT REMOVED	17,200	SY	\$20.00	\$344,000.00	
CULVERT REMOVED		FT	\$100.00	\$0.00	
EXCAVATION	15,200	CY	\$40.00	\$608,000.00	
EMBANKMENT	26,900	CY	\$45.00	\$1,210,500.00	
GUARDRAIL	2,000	FT	\$22.00	\$44,000.00	
MEDIAN BARRIER	3,500	FT	\$120.00	\$420,000.00	
CURB AND GUTTER	9,300	FT	\$42.00	\$390,600.00	
CONCRETE MEDIAN	3,000	SY	\$100.00	\$300,000.00	
CONCRETE WALK		SF	\$13.00	\$0.00	
Roadway Subtotal				\$3,317,100.00	

Erosion Control					
Description	Quantity	Unit	Unit Cost	Total	
EROSION CONTROL	450,000	EACH	\$1.00	\$450,000.00	
EROSION CONTROL PLAN	1	LUMP	\$100,000.00	\$100,000.00	
BMPs	1	LUMP	\$225,000.00	\$225,000.00	
SEEDING AND MULCHING	120,800	SY	\$2.00	\$241,600.00	
Erosion Control Subtotal				\$1,016,600.00	

Drainage					
Description	Quantity	Unit	Unit Cost	Total	
CULVERT		FT	\$600.00	\$0.00	
STORM SEWER SYSTEM	11,100	FT	\$300.00	\$3,330,000.00	
UNDERDRAINS	37,500	FT	\$15.00	\$562,500.00	
Drainage Subtotal				\$3,892,500.00	

Pavement					
Description	Quantity	Unit	Unit Cost	Total	
FULL-DEPTH PAVEMENT (ASPHALT)	87,800	SY	\$100.00	\$8,780,000.00	
FULL-DEPTH PAVEMENT (CONCRETE)		SY	\$150.00	\$0.00	
PAVEMENT PLANING AND RESURFACING		SY	\$54.00	\$0.00	
SHARED USE PATH		SY	\$42.00	\$0.00	

Traffic Control - Signing and Pavement Marking					
Description	Quantity	Unit	Unit Cost	Total	
SIGNING	0.38	MILE	\$250,000.00	\$95,000.00	
PAVEMENT MARKINGS - THERMO		MILE	\$14,000.00	\$0.00	
PAVEMENT MARKINGS - RECESSED	0.38	MILE	\$30,000.00	\$11,400.00	
Traffic Control - Signing and Pavement Marking Subtotal				\$106,400.00	

Traffic Signal and Surveillance				
Description	Quantity	Unit	Unit Cost	Total
STANDARD TRAFFIC SIGNAL	1	EACH	\$300,000.00	\$300,000.00
TRAFFIC SIGNAL FOR R-CUT		EACH	\$780,000.00	\$0.00
FIBER OPTIC COMMUNICATION	0.38	MILE	\$170,000.00	\$64,600.00
CCTV	1	EACH	\$123,000.00	\$123,000.00
Traffic Control - Traffic Signal Subtotal				\$487 600 00

Roadway Lighting					
Description	Quantity	Unit	Unit Cost	Total	
FULL INTERCHANGE LIGHTING	1	EACH	\$500,000.00	\$500,000.00	
PARTIAL INTERCHANGE LIGHTING		EACH	\$300,000.00	\$0.00	
CONTINUOUS ROADWAY LIGHTING		FT	\$100.00	\$0.00	
Traffic Control - Traffic Signal Subtotal				\$500,000,00	

Utility Relocations - Gas, Electric, Water, Wastewater				
Description	Quantity	Unit	Unit Cost	Total
HIGH PRESSURE GAS LINE		FT		\$0.00
WATERLINE 36" OR LARGER		FT		\$0.00
HIGH VOLTAGE TOWER		EACH		\$0.00
SANITARY LINE 36" OR LARGER		FT		\$0.00
DAM MODIFICATION		LUMP		\$0.00

Structures		y		
Description	Quantity	Unit	Unit Cost	Total
RETAINING WALL		SF	\$90.00	\$0.00
BRIDGE	18,000	SF	\$220.00	\$3,960,000.00
		Pave	ement Subtotal	\$3,960,000.00

Incidentals				
Description	Quantity	Unit	Unit Cost	Total
CONSTRUCTION LAYOUT STAKES	1	LUMP	\$181,000.00	\$181,000.00
MAINTENANCE OF TRAFFIC	1	LUMP	\$56,800.00	\$56,800.00
MOBILIZATION	1	LUMP	\$1,200,000.00	\$1,200,000.00
		Miscella	neous Subtotal	\$1,437,800,00

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	Project Summary	Subtotal
	Roadway	\$3,317,100
	Erosion Control	\$1,016,600
	Drainage	\$3,892,500
۹	Pavement	\$8,780,000
	Traffic Control - Signing and Pavement Marking	\$106,400
	Traffic Signal and Surveillance	\$487,600
	Roadway Lighting	\$500,000
	Utility Relocations - Gas, Electric, Water, Wastewater	\$0
	Structures	\$3,960,000
	Incidentals	\$1,437,800
	Total	\$23,498,000

Contingency (30%)		\$7,049,000
	Subtotal	\$30,547,000
Right-of-Way		\$0
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Engineering (18%)		\$5,498,000
Construction Engineering (10%)		\$3,055,000
	Subtotal	\$39,100,000



## SEGMENT 2 CONCEPT C - OVERALL

SEGMENT 2 CONCEPT C - RANGE 1	Quantity
Construction Subtotal	\$22,692,000
Contingency (30%)	\$6,808,000
Construction Total	\$29,500,000
Right-of-Way	\$0
Engineering (18%)	\$5,310,000
Construction Engineering (10%)	\$2,950,000
Project Subtotal	\$37,760,000
Inflation (30%)	\$11,328,000
Subtotal	\$49,088,000
SEGMENT 2 CONCEPT C - RANGE 2	
Construction Subtotal	\$12,041,000
Contingency (30%)	\$3,612,000
Construction Total	\$15,653,000
Right-of-Way	\$0
Engineering (18%)	\$2,818,000
Construction Engineering (10%)	\$1,565,000
Project Subtotal	\$20,036,000
Inflation (30%)	\$6,010,800
Subtotal	\$26,047,000
SEGMENT 2 CONCEPT C - RANGE 3	
Construction Subtotal	\$22,271,000
Contingency (30%)	\$6,681,000
Construction Total	\$28,952,000
Right-of-Way	\$0
Engineering (18%)	\$5,211,000
Construction Engineering (10%)	\$2,895,000
Project Subtotal	\$37,058,000
Inflation (30%)	\$11,117,400
Subtotal	\$48,175,000

SEGMENT 2 - OVERALL	
SEGMENT 2 CONCEPT C - RANGE 1	\$49,088,000
SEGMENT 2 CONCEPT C - RANGE 2	\$26,047,000
SEGMENT 2 CONCEPT C - RANGE 3	\$48,175,000
Total - Segment 2 - Overall	\$123,310,000

Construction w/ Contingency w/out Inflation \$94,854,000





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Roadway					
Description	Quantity	Unit	Unit Cost	Total	
PAVEMENT REMOVED	26,100	SY	\$20.00	\$522,000.00	
CULVERT REMOVED	500	FT	\$100.00	\$50,000.00	
EXCAVATION	12,200	CY	\$40.00	\$488,000.00	
EMBANKMENT	8,100	CY	\$45.00	\$364,500.00	
GUARDRAIL	3,300	FT	\$22.00	\$72,600.00	
MEDIAN BARRIER	2,400	FT	\$120.00	\$288,000.00	
CURB AND GUTTER	14,600	FT	\$42.00	\$613,200.00	
CONCRETE MEDIAN	4,100	SY	\$100.00	\$410,000.00	
CONCRETE WALK		SF	\$13.00	\$0.00	
	\$2,808,300.00				

Erosion Control					
Description	Quantity	Unit	Unit Cost	Total	
EROSION CONTROL	350,000	EACH	\$1.00	\$350,000.00	
EROSION CONTROL PLAN	1	LUMP	\$60,000.00	\$60,000.00	
BMPs	1	LUMP	\$175,000.00	\$175,000.00	
SEEDING AND MULCHING	60,400	SY	\$2.00	\$120,800.00	
	\$705,800.00				

Drainage					
Description	Quantity	Unit	Unit Cost	Total	
CULVERT	500	FT	\$600.00	\$300,000.00	
STORM SEWER SYSTEM	11,800	FT	\$300.00	\$3,540,000.00	
UNDERDRAINS	60,400	FT	\$15.00	\$906,000.00	
	\$4,746,000.00				

Pavement					
Description	Quantity	Unit	Unit Cost	Total	
FULL-DEPTH PAVEMENT (ASPHALT)	83,100	SY	\$100.00	\$8,310,000.00	
FULL-DEPTH PAVEMENT (CONCRETE)		SY	\$150.00	\$0.00	
PAVEMENT PLANING AND RESURFACING	21,500	SY	\$54.00	\$1,161,000.00	
SHARED USE PATH		SY	\$42.00	\$0.00	
Pavement Subtotal				\$9.471.000.00	

Traffic Control - Signing and Pavement Marking					
Description	Quantity	Unit	Unit Cost	Total	
SIGNING	0.85	MILE	\$250,000.00	\$212,500.00	
PAVEMENT MARKINGS - THERMO		MILE	\$14,000.00	\$0.00	
PAVEMENT MARKINGS - RECESSED	0.85	MILE	\$30,000.00	\$25,500.00	
Traffic Contro	\$238,000.00				

Traffic Signal and Surveillance				
Description	Quantity	Unit	Unit Cost	Total
STANDARD TRAFFIC SIGNAL	4	EACH	\$300,000.00	\$1,200,000.00
TRAFFIC SIGNAL FOR R-CUT		EACH	\$780,000.00	\$0.00
FIBER OPTIC COMMUNICATION	0.85	MILE	\$170,000.00	\$144,500.00
CCTV	1	EACH	\$123,000.00	\$123,000.00
	\$1,467,500.00			

Roadway Lighting					
Description	Quantity	Unit	Unit Cost	Total	
FULL INTERCHANGE LIGHTING		EACH	\$500,000.00	\$0.00	
PARTIAL INTERCHANGE LIGHTING		EACH	\$300,000.00	\$0.00	
CONTINUOUS ROADWAY LIGHTING		FT	\$100.00	\$0.00	
Traffic Control - Traffic Signal Subtotal					,

Utility Relocations - Gas, Electric, Water, Wastewater				
Description	Quantity	Unit	Unit Cost	Total
HIGH PRESSURE GAS LINE		FT		\$0.00
WATERLINE 36" OR LARGER		FT		\$0.00
HIGH VOLTAGE TOWER		EACH		\$0.00
SANITARY LINE 36" OR LARGER		FT		\$0.00
DAM MODIFICATION		LUMP		\$0.00
	water Subtotal	\$0.00		

Structures		7		
Description	Quantity	Unit	Unit Cost	Total
RETAINING WALL		SF	\$90.00	\$0.00
BRIDGE	8,300	SF	\$220.00	\$1,826,000.00
	Pavement Subtotal			\$1,826,000.00

Incidentals				
Description	Quantity	Unit	Unit Cost	Total
CONSTRUCTION LAYOUT STAKES	1	LUMP	\$174,400.00	\$174,400.00
MAINTENANCE OF TRAFFIC	1	LUMP	\$54,700.00	\$54,700.00
MOBILIZATION	1	LUMP	\$1,200,000.00	\$1,200,000.00
		Miscella	neous Subtotal	\$1,429,100.00

Project Summary		Subtotal
Roadway	$\overline{}$	\$2.808.300
Erosion Control	- 1	\$705,800
Drainage	- [	\$4,746,000
Pavement		\$9,471,000
Traffic Control - Signing and Pavement Marking		\$238,000
Traffic Signal and Surveillance		\$1,467,500
Roadway Lighting		\$0
Utility Relocations - Gas, Electric, Water, Wastewater	L	\$0
Structures	- 4	\$1,826,000
Incidentals	4	\$1,429,100
To	otal	\$22,692,000

Contingency (30%)		<b>A</b>	\$6,808,000
		Subtotal	\$29,500,000
	_		
Right-of-Way			\$0
Engineering (18%)			\$5,310,000
Construction Engineering	g (10%)		\$2,950,000
		Subtotal	\$37,760,000

tion (30%) \$11,328,000



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Roadway				
Description	Quantity	Unit	Unit Cost	Total
PAVEMENT REMOVED	28,600	SY	\$20.00	\$572,000.00
CULVERT REMOVED	500	FT	\$100.00	\$50,000.00
EXCAVATION	1,100	CY	\$40.00	\$44,000.00
EMBANKMENT	18,900	CY	\$45.00	\$850,500.00
GUARDRAIL	1,200	FT	\$22.00	\$26,400.00
MEDIAN BARRIER	3,000	FT	\$120.00	\$360,000.00
CURB AND GUTTER	1,000	FT	\$42.00	\$42,000.00
CONCRETE MEDIAN	500	SY	\$100.00	\$50,000.00
CONCRETE WALK		SF	\$13.00	\$0.00
		Roa	adway Subtotal	\$1,994,900.00

Erosion Control				
Description	Quantity	Unit	Unit Cost	Total
EROSION CONTROL	200,000	EACH	\$1.00	\$200,000.00
EROSION CONTROL PLAN	1	LUMP	\$30,000.00	\$30,000.00
BMPs	1	LUMP	\$100,000.00	\$100,000.00
SEEDING AND MULCHING	28,600	SY	\$2.00	\$57,200.00
Erosion Control Subtotal				\$387,200.00

Drainage				
Description	Quantity	Unit	Unit Cost	Total
CULVERT	500	FT	\$600.00	\$300,000.00
STORM SEWER SYSTEM	3,900	FT	\$300.00	\$1,170,000.00
UNDERDRAINS	30,600	FT	\$15.00	\$459,000.00
Drainage Subtotal				\$1,929,000.00

Pavement				
Description	Quantity	Unit	Unit Cost	Total
FULL-DEPTH PAVEMENT (ASPHALT)	55,700	SY	\$100.00	\$5,570,000.00
FULL-DEPTH PAVEMENT (CONCRETE)			\$150.00	\$0.00
PAVEMENT PLANING AND RESURFACING	300	SY	\$54.00	\$16,200.00
SHARED USE PATH		SY	\$42.00	\$0.00

Traffic Control - Signing and Pavement Marking				
Description	Quantity	Unit	Unit Cost	Total
SIGNING	0.87	MILE	\$250,000.00	\$217,500.00
PAVEMENT MARKINGS - THERMO		MILE	\$14,000.00	\$0.00
PAVEMENT MARKINGS - RECESSED	0.87	MILE	\$30,000.00	\$26,100.00
Traffic Contro	\$243,600.00			

Traffic Signal and Surveillance				
Description	Quantity	Unit	Unit Cost	Total
STANDARD TRAFFIC SIGNAL	2	EACH	\$300,000.00	\$600,000.00
TRAFFIC SIGNAL FOR R-CUT		EACH	\$780,000.00	\$0.00
FIBER OPTIC COMMUNICATION	0.87	MILE	\$170,000.00	\$147,900.00
CCTV	2	EACH	\$123,000.00	\$246,000.00
	Traffic Cont	rol - Traffic	Signal Subtotal	\$002.000.00

Roadway Lighting					
Description	Quantity	Unit	Unit Cost	Total	
FULL INTERCHANGE LIGHTING		EACH	\$500,000.00	\$0.00	
PARTIAL INTERCHANGE LIGHTING		EACH	\$300,000.00	\$0.00	
CONTINUOUS ROADWAY LIGHTING		FT	\$100.00	\$0.00	
Traffic Control - Traffic Signal Subtotal			\$0.00		

Utility Relocations - Gas, Electric, Water, Wastewater				
Description	Quantity	Unit	Unit Cost	Total
HIGH PRESSURE GAS LINE		FT		\$0.00
WATERLINE 36" OR LARGER		FT		\$0.00
HIGH VOLTAGE TOWER		EACH		\$0.00
SANITARY LINE 36" OR LARGER		FT		\$0.00
DAM MODIFICATION		LUMP		\$0.00
	\$0.00			

Structures		7		
Description	Quantity	Unit	Unit Cost	Total
RETAINING WALL		SF	\$90.00	\$0.00
BRIDGE		SF	\$220.00	\$0.00
		Pave	ement Subtotal	\$0.00

Incidentals			4	
Description	Quantity	Unit	Unit Cost	Total
	Qualitity	HUMP	\$80,800,00	\$80.800.00
CONSTRUCTION LAYOUT STAKES	1		1 - 1 - 1 - 1 - 1	1 7
MAINTENANCE OF TRAFFIC	1	LUMP	\$25,300.00	\$25,300.00
MOBILIZATION	1	LUMP	\$800,000.00	\$800,000.00
		Miscella	neous Subtotal	\$906 100 00

Project Summary	Subtotal
Roadway	\$1,994,900
Erosion Control	\$387,200
Drainage	\$1,929,000
Pavement	\$5,586,200
Traffic Control - Signing and Pavement Marking	\$243,600
Traffic Signal and Surveillance	\$993,900
Roadway Lighting	\$0
Utility Relocations - Gas, Electric, Water, Wastewater	\$0
Structures	\$0
Incidentals	\$906,100
Total	\$12,041,000

Contingency (30%)	\$3,612,000
Subtota	\$15,653,000
Right-of-Way	\$0
Engineering (18%)	\$2,818,000
Construction Engineering (10%)	\$1,565,000
Subtota	\$20,036,000
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engineers, architects, planne

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Roadway					
Description	Quantity	Unit	Unit Cost	Total	
PAVEMENT REMOVED	17,700	SY	\$20.00	\$354,000.00	
CULVERT REMOVED		FT	\$100.00	\$0.00	
EXCAVATION	15,200	CY	\$40.00	\$608,000.00	
EMBANKMENT	26,900	CY	\$45.00	\$1,210,500.00	
GUARDRAIL	2,200	FT	\$22.00	\$48,400.00	
MEDIAN BARRIER	3,500	FT	\$120.00	\$420,000.00	
CURB AND GUTTER	8,100	FT	\$42.00	\$340,200.00	
CONCRETE MEDIAN	2,400	SY	\$100.00	\$240,000.00	
CONCRETE WALK		SF	\$13.00	\$0.00	
Roadway Subtotal					

Erosion Control				
Description	Quantity	Unit	Unit Cost	Total
EROSION CONTROL	350,000	EACH	\$1.00	\$350,000.00
EROSION CONTROL PLAN	1	LUMP	\$60,000.00	\$60,000.00
BMPs	1	LUMP	\$175,000.00	\$175,000.00
SEEDING AND MULCHING	111,500	SY	\$2.00	\$223,000.00
Erosion Control Subtotal			\$808,000.00	

Drainage					
Description	Quantity	Unit	Unit Cost	Total	
CULVERT		FT	\$600.00	\$0.00	
STORM SEWER SYSTEM	10,800	FT	\$300.00	\$3,240,000.00	
UNDERDRAINS	42,700	FT	\$15.00	\$640,500.00	
Drainage Subtotal			\$3.880.500.00		

Pavement					
Description	Quantity	Unit	Unit Cost	Total	
FULL-DEPTH PAVEMENT (ASPHALT)	75,900	SY	\$100.00	\$7,590,000.00	
FULL-DEPTH PAVEMENT (CONCRETE)			\$150.00	\$0.00	
PAVEMENT PLANING AND RESURFACING		SY	\$54.00	\$0.00	
SHARED USE PATH		SY	\$42.00	\$0.00	

Traffic Control - Signing and Pavement Marking				
Description	Quantity	Unit	Unit Cost	Total
SIGNING	0.38	MILE	\$250,000.00	\$95,000.00
PAVEMENT MARKINGS - THERMO		MILE	\$14,000.00	\$0.00
PAVEMENT MARKINGS - RECESSED	0.38	MILE	\$30,000.00	\$11,400.00
Traffic Control - Signing and Pavement Marking Subtotal				\$106,400.00

Traffic Signal and Surveillance				
Description	Quantity	Unit	Unit Cost	Total
STANDARD TRAFFIC SIGNAL	2	EACH	\$300,000.00	\$600,000.00
TRAFFIC SIGNAL FOR R-CUT		EACH	\$780,000.00	\$0.00
FIBER OPTIC COMMUNICATION	0.38	MILE	\$170,000.00	\$64,600.00
CCTV	1	EACH	\$123,000.00	\$123,000.00
Traffic Control - Traffic Signal Subtotal			\$787,600.00	

Roadway Lighting				
Description	Quantity	Unit	Unit Cost	Total
FULL INTERCHANGE LIGHTING	1	EACH	\$500,000.00	\$500,000.00
PARTIAL INTERCHANGE LIGHTING		EACH	\$300,000.00	\$0.00
CONTINUOUS ROADWAY LIGHTING		FT	\$100.00	\$0.00
Traffic Control - Traffic Signal Subtotal				\$500,000.00

Utility Relocations - Gas, Electric, Water, Wastewater			_	
Description	Quantity	Unit	Unit Cost	Total
HIGH PRESSURE GAS LINE		FT		\$0.00
WATERLINE 36" OR LARGER		FT		\$0.00
HIGH VOLTAGE TOWER		EACH		\$0.00
SANITARY LINE 36" OR LARGER		FT		\$0.00
DAM MODIFICATION		LUMP		\$0.00
Water/Wastewater Subtotal			\$0.00	

Structures		y		
Description	Quantity	Unit	Unit Cost	Total
RETAINING WALL		SF	\$90.00	\$0.00
BRIDGE	18,000	SF	\$220.00	\$3,960,000.00
		Pave	ement Subtotal	\$3,960,000.00

Incidentals					
Description		Quantity	Unit	Unit Cost	Total
CONSTRUCTION LAYOUT STAKES		1	LUMP	\$165,400.00	\$165,400.00
MAINTENANCE OF TRAFFIC		1	LUMP	\$52,000.00	\$52,000.00
MOBILIZATION		1	LUMP	\$1,200,000.00	\$1,200,000.00
Miscellaneous Subtotal \$1,417,400.00					\$1,417,400.00

Project Summary	Subtotal
Roadway	\$3,221,100
Erosion Control	\$808,000
Drainage	\$3,880,500
Pavement	\$7,590,000
Traffic Control - Signing and Pavement Marking	\$106,400
Traffic Signal and Surveillance	\$787,600
Roadway Lighting	\$500,000
Utility Relocations - Gas, Electric, Water, Wastewater	\$0
Structures	\$3,960,000
Incidentals	\$1,417,400
Total	\$22,271,000

Contingency (30%)	\$6,681,000
Subtotal	\$28,952,000
Right-of-Way	\$0
Engineering (18%)	\$5,211,000
Construction Engineering (10%)	\$2,895,000
Subtotal	\$37,058,000
Inflation (200/)	\$11 117 400

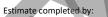


# SEGMENT 2 CONCEPT D - OVERALL

SEGMENT 2 CONCEPT D - RANGE 1	Quantity
Construction Subtotal	\$21,935,000
Contingency (30%)	\$6,581,000
Construction Total	\$28,516,000
Right-of-Way	\$0
Engineering (18%)	\$5,133,000
Construction Engineering (10%)	\$2,852,000
Project Subtotal	\$36,501,000
Inflation (30%)	\$10,950,300
Subtotal	\$47,451,000
SEGMENT 2 CONCEPT D - RANGE 2	
Construction Subtotal	\$14,472,000
Contingency (30%)	\$4,342,000
Construction Total	\$18,814,000
Right-of-Way	\$0
Engineering (18%)	\$3,387,000
Construction Engineering (10%)	\$1,881,000
Project Subtotal	\$24,082,000
Inflation (30%)	\$7,224,600
Subtotal	\$31,307,000
SEGMENT 2 CONCEPT D - RANGE 3	
Construction Subtotal	\$14,882,000
Contingency (30%)	\$4,465,000
Construction Total	\$19,347,000
Right-of-Way	\$0
Engineering (18%)	\$3,482,000
Construction Engineering (10%)	\$1,935,000
Project Subtotal	\$24,764,000
Inflation (30%)	\$7,429,200
Subtotal	\$32,193,000

SEGMENT 2 - OVERALL	
SEGMENT 2 CONCEPT D - RANGE 1	\$47,451,000
SEGMENT 2 CONCEPT D - RANGE 2	\$31,307,000
SEGMENT 2 CONCEPT D - RANGE 3	\$32,193,000
Total - Segment 2 - Overall	\$110,951,000

Construction w/ Contingency w/out Inflation \$85,347,000





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Roadway					
Description	Quantity	Unit	Unit Cost	Total	
PAVEMENT REMOVED	22,300	SY	\$20.00	\$446,000.00	
CULVERT REMOVED	500	FT	\$100.00	\$50,000.00	
EXCAVATION	13,200	CY	\$40.00	\$528,000.00	
EMBANKMENT	31,900	CY	\$45.00	\$1,435,500.00	
GUARDRAIL	2,300	FT	\$22.00	\$50,600.00	
MEDIAN BARRIER	5,800	FT	\$120.00	\$696,000.00	
CURB AND GUTTER	12,600	FT	\$42.00	\$529,200.00	
CONCRETE MEDIAN	1,000	SY	\$100.00	\$100,000.00	
CONCRETE WALK		SF	\$13.00	\$0.00	
Roadway Subtotal \$3,835				\$3,835,300.00	

Erosion Control					
Description	Quantity	Unit	Unit Cost	Total	
EROSION CONTROL	350,000	LUMP	\$1.00	\$350,000.00	
EROSION CONTROL PLAN	1	LUMP	\$60,000.00	\$60,000.00	
BMPs	1	LUMP	\$175,000.00	\$175,000.00	
SEEDING AND MULCHING	58,700	SY	\$2.00	\$117,400.00	
Erosion Control Subtotal				\$702,400.00	

Drainage					
Description	Quantity	Unit	Unit Cost	Total	
CULVERT	500	FT	\$600.00	\$300,000.00	
STORM SEWER SYSTEM	11,800	FT	\$300.00	\$3,540,000.00	
UNDERDRAINS	58,600	FT	\$15.00	\$879,000.00	
Drainage Subtotal				\$4,719,000.00	

Pavement					
Description	Quantity	Unit	Unit Cost	Total	
FULL-DEPTH PAVEMENT (ASPHALT)	98,500	SY	\$100.00	\$9,850,000.00	
FULL-DEPTH PAVEMENT (CONCRETE)		SY	\$150.00	\$0.00	
PAVEMENT PLANING AND RESURFACING	17,000	SY	\$54.00	\$918,000.00	
SHARED USE PATH		SY	\$42.00	\$0.00	

Traffic Control - Signing and Pavement Marking					
Description	Quantity	Unit	Unit Cost	Total	
SIGNING	0.85	MILE	\$250,000.00	\$212,500.00	
PAVEMENT MARKINGS - THERMO		MILE	\$14,000.00	\$0.00	
PAVEMENT MARKINGS - RECESSED	0.85	MILE	\$30,000.00	\$25,500.00	
Traffic Control - Signing and Pavement Marking Subtotal				\$238,000.00	

Traffic Signal and Surveillance				
Description	Quantity	Unit	Unit Cost	Total
STANDARD TRAFFIC SIGNAL		EACH	\$300,000.00	\$0.00
TRAFFIC SIGNAL FOR R-CUT		EACH	\$780,000.00	\$0.00
FIBER OPTIC COMMUNICATION	0.85	MILE	\$170,000.00	\$144,500.00
CCTV	1	EACH	\$123,000.00	\$123,000.00
	Traffic Cont	rol - Traffic	Signal Subtotal	\$267 500 00

Roadway Lighting					
Description	Quantity	Unit	Unit Cost	Total	
FULL INTERCHANGE LIGHTING		EACH	\$500,000.00	\$0.00	$\overline{}$
PARTIAL INTERCHANGE LIGHTING		EACH	\$300,000.00	\$0.00	
CONTINUOUS ROADWAY LIGHTING		FT	\$100.00	\$0.00	
Traffic Control - Traffic Signal Subtotal				\$0.00	

Utility Relocations - Gas, Electric, Water, Wastewater				
Description	Quantity	Unit	Unit Cost	Total
HIGH PRESSURE GAS LINE		FT		\$0.00
WATERLINE 36" OR LARGER		FT		\$0.00
HIGH VOLTAGE TOWER		EACH		\$0.00
SANITARY LINE 36" OR LARGER		FT		\$0.00
DAM MODIFICATION		LUMP		\$0.00
	\$0.00			

Structures		y		
Description	Quantity	Unit	Unit Cost	Total
RETAINING WALL		SF	\$90.00	\$0.00
BRIDGE		SF	\$220.00	\$0.00
		Pave	ement Subtotal	\$0.00

Incidentals				
Description	Quantity	Unit	Unit Cost	Total
CONSTRUCTION LAYOUT STAKES	156000	LUMP	\$1.00	\$156,000.00
MAINTENANCE OF TRAFFIC	49000	LUMP	\$1.00	\$49,000.00
MOBILIZATION	1200000	LUMP	\$1.00	\$1,200,000.00
		Miscellan	eous Subtotal	\$1,405,000.00

Project Summary		Subtotal
Roadway		\$3,835,300
Erosion Control	3	\$702,400
Drainage		\$4,719,000
Pavement		\$10,768,000
Traffic Control - Signing and Pavement Marking		\$238,000
Traffic Signal and Surveillance		\$267,500
Roadway Lighting		\$0
Utility Relocations - Gas, Electric, Water, Wastewater		\$0
Structures	- 4	\$0
Incidentals		\$1,405,000
	Total	\$21,935,000

Contingency (30%)			\$6,581,000
		Subtotal	\$28,516,000
Right-of-Way			\$0
			,
Engineering (18%)			\$5,133,000
<b>Construction Enginee</b>	ring (10%)		\$2,852,000
		Subtotal	\$36,501,000

flation (30%) \$10,950,300



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Roadway				
Description	Quantity	Unit	Unit Cost	Total
PAVEMENT REMOVED	7,200	SY	\$20.00	\$144,000.00
CULVERT REMOVED	500	FT	\$100.00	\$50,000.00
EXCAVATION	1,100	CY	\$40.00	\$44,000.00
EMBANKMENT	18,900	CY	\$45.00	\$850,500.00
GUARDRAIL	1,200	FT	\$22.00	\$26,400.00
MEDIAN BARRIER	2,300	FT	\$120.00	\$276,000.00
CURB AND GUTTER	1,300	FT	\$42.00	\$54,600.00
CONCRETE MEDIAN	5,900	SY	\$100.00	\$590,000.00
CONCRETE WALK		SF	\$13.00	\$0.00
Roadway Subtotal				\$2,035,500.00

Erosion Control				
Description	Quantity	Unit	Unit Cost	Total
EROSION CONTROL	200,000	LUMP	\$1.00	\$200,000.00
EROSION CONTROL PLAN	1	LUMP	\$40,000.00	\$40,000.00
BMPs	1	LUMP	\$100,000.00	\$100,000.00
SEEDING AND MULCHING	20,400	SY	\$2.00	\$40,800.00
Erosion Control Subtotal				\$380,800.00

Drainage				
Description	Quantity	Unit	Unit Cost	Total
CULVERT		FT	\$600.00	\$0.00
STORM SEWER SYSTEM	3,900	FT	\$300.00	\$1,170,000.00
UNDERDRAINS	30,800	FT	\$15.00	\$462,000.00
Drainage Subtotal				\$1.632.000.00

Pavement				
Description	Quantity	Unit	Unit Cost	Total
FULL-DEPTH PAVEMENT (ASPHALT)	79,500	SY	\$100.00	\$7,950,000.00
FULL-DEPTH PAVEMENT (CONCRETE)		SY	\$150.00	\$0.00
PAVEMENT PLANING AND RESURFACING		SY	\$54.00	\$0.00
SHARED USE PATH		SY	\$42.00	\$0.00
		Dave	mont Cubtotal	Ć7 050 000 00

Traffic Control - Signing and Pavement Marking				
Description	Quantity	Unit	Unit Cost	Total
SIGNING	0.83	MILE	\$250,000.00	\$207,500.00
PAVEMENT MARKINGS - THERMO		MILE	\$14,000.00	\$0.00
PAVEMENT MARKINGS - RECESSED	0.83	MILE	\$30,000.00	\$24,900.00
Traffic Control - Signing and Pavement Marking Subtotal				\$232,400.00

Traffic Signal and Surveillance				
Description	Quantity	Unit	Unit Cost	Total
STANDARD TRAFFIC SIGNAL		EACH	\$300,000.00	\$0.00
TRAFFIC SIGNAL FOR R-CUT	1	EACH	\$780,000.00	\$780,000.00
FIBER OPTIC COMMUNICATION	0.83	MILE	\$170,000.00	\$141,100.00
CCTV	3	EACH	\$123,000.00	\$369,000.00
Traffic Control - Traffic Signal Subtotal				\$1,290,100.00

Roadway Lighting				
Description	Quantity	Unit	Unit Cost	Total
FULL INTERCHANGE LIGHTING		EACH	\$500,000.00	\$0.00
PARTIAL INTERCHANGE LIGHTING		EACH	\$300,000.00	\$0.00
CONTINUOUS ROADWAY LIGHTING		FT	\$100.00	\$0.00
Traffic Control - Traffic Signal Subtotal				\$0.00

Utility Relocations - Gas, Electric, Water, Wastewater				
Description	Quantity	Unit	Unit Cost	Total
HIGH PRESSURE GAS LINE		FT		\$0.00
WATERLINE 36" OR LARGER		FT		\$0.00
HIGH VOLTAGE TOWER		EACH		\$0.00
SANITARY LINE 36" OR LARGER		FT		\$0.00
DAM MODIFICATION		LUMP		\$0.00
Water/Wastewater Subtotal				\$0.00

Structures		7		
Description	Quantity	Unit	Unit Cost	Total
RETAINING WALL		SF	\$90.00	\$0.00
BRIDGE		SF	\$220.00	\$0.00
		Pave	ement Subtotal	\$0.00

Incidentals				
Description	Quantity	Unit	Unit Cost	Total
CONSTRUCTION LAYOUT STAKES	115200	LUMP	\$1.00	\$115,200.00
MAINTENANCE OF TRAFFIC	36000	LUMP	\$1.00	\$36,000.00
MOBILIZATION	800000	LUMP	\$1.00	\$800,000.00
		Miscella	neous Subtotal	\$951,200.00

Project Summary	Subtotal
Roadway	\$2,035,500
Erosion Control	\$380,800
Drainage	\$1,632,000
Pavement	\$7,950,000
Traffic Control - Signing and Pavement Marking	\$232,400
Traffic Signal and Surveillance	\$1,290,100
Roadway Lighting	\$0
Utility Relocations - Gas, Electric, Water, Wastewater	\$0
Structures	\$0
Incidentals	\$951,200
Tota	\$14,472,000

Contingency (30%)	\$4,342,000
Subtotal	\$18,814,000
Right-of-Way	\$0
Engineering (18%)	\$3,387,000
Construction Engineering (10%)	\$1,881,000
Subtotal	\$24,082,000
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Roadway					
Description	Quantity	Unit	Unit Cost	Total	
PAVEMENT REMOVED	8,000	SY	\$20.00	\$160,000.00	
CULVERT REMOVED		FT	\$100.00	\$0.00	
EXCAVATION	6,300	CY	\$40.00	\$252,000.00	
EMBANKMENT	20,000	CY	\$45.00	\$900,000.00	
GUARDRAIL	200	FT	\$22.00	\$4,400.00	
MEDIAN BARRIER	2,200	FT	\$120.00	\$264,000.00	
CURB AND GUTTER	3,100	FT	\$42.00	\$130,200.00	
CONCRETE MEDIAN	1,800	SY	\$100.00	\$180,000.00	
CONCRETE WALK		SF	\$13.00	\$0.00	
		Roa	dway Subtotal	\$1,890,600.00	

Erosion Control						
Description	Quantity	Unit	Unit Cost	Total		
EROSION CONTROL	250,000	LUMP	\$1.00	\$250,000.00		
EROSION CONTROL PLAN	1	LUMP	\$50,000.00	\$50,000.00		
BMPs	1	LUMP	\$125,000.00	\$125,000.00		
SEEDING AND MULCHING	31,000	SY	\$2.00	\$62,000.00		
Erosion Control Subtotal				\$487,000.00		

Drainage					
Description	Quantity	Unit	Unit Cost	Total	
CULVERT		FT	\$600.00	\$0.00	
STORM SEWER SYSTEM	5,600	FT	\$300.00	\$1,680,000.00	
UNDERDRAINS	32,100	FT	\$15.00	\$481,500.00	
Drainage Subtotal				\$2,161,500.00	

Pavement					
Description	Quantity	Unit	Unit Cost	Total	
FULL-DEPTH PAVEMENT (ASPHALT)	79,700	SY	\$100.00	\$7,970,000.00	
FULL-DEPTH PAVEMENT (CONCRETE)		SY	\$150.00	\$0.00	
PAVEMENT PLANING AND RESURFACING	3,900	SY	\$54.00	\$210,600.00	
SHARED USE PATH		SY	\$42.00	\$0.00	
Davinment Cristatal				£0.400.600.00	

Traffic Control - Signing and Pavement Marking						
Description	Quantity	Unit	Unit Cost	Total		
SIGNING	0.38	MILE	\$250,000.00	\$95,000.00		
PAVEMENT MARKINGS - THERMO		MILE	\$14,000.00	\$0.00		
PAVEMENT MARKINGS - RECESSED	0.38	MILE	\$30,000.00	\$11,400.00		
Traffic Control - Signing and Pavement Marking Subtotal				\$106,400.00		

Traffic Signal and Surveillance					
Description	Quantity	Unit	Unit Cost	Total	
STANDARD TRAFFIC SIGNAL		EACH	\$300,000.00	\$0.00	
TRAFFIC SIGNAL FOR R-CUT	1	EACH	\$780,000.00	\$780,000.00	
FIBER OPTIC COMMUNICATION	0.38	MILE	\$170,000.00	\$64,600.00	
CCTV	2	EACH	\$123,000.00	\$246,000.00	
	Traffic Control - Traffic Signal Subtotal				

Roadway Lighting						
Description	Quantity	Unit	Unit Cost	Total		
FULL INTERCHANGE LIGHTING		EACH	\$500,000.00	\$0.00		
PARTIAL INTERCHANGE LIGHTING		EACH	\$300,000.00	\$0.00		
CONTINUOUS ROADWAY LIGHTING		FT	\$100.00	\$0.00		
	Traffic Cont	rol - Traffic	Signal Subtotal	\$0.00		

Utility Relocations - Gas, Electric, Water, Wastewater				
Description	Quantity	Unit	Unit Cost	Total
HIGH PRESSURE GAS LINE		FT		\$0.00
WATERLINE 36" OR LARGER		FT		\$0.00
HIGH VOLTAGE TOWER		EACH		\$0.00
SANITARY LINE 36" OR LARGER		FT		\$0.00
DAM MODIFICATION		LUMP		\$0.00
	\$0.00			

Structures		y		
Description	Quantity	Unit	Unit Cost	Total
RETAINING WALL		SF	\$90.00	\$0.00
BRIDGE		SF	\$220.00	\$0.00
		Pave	ement Subtotal	\$0.00

Incidentals				
Description	Quantity	Unit	Unit Cost	Total
CONSTRUCTION LAYOUT STAKES	125500	LUMP	\$1.00	\$125,500.00
MAINTENANCE OF TRAFFIC	39400	LUMP	\$1.00	\$39,400.00
MOBILIZATION	800000	LUMP	\$1.00	\$800,000.00
		Miscella	neous Subtotal	\$964,900.00

Project Summary		Subtotal
Roadway		\$1,890,600
Erosion Control	1	\$487,000
Drainage		\$2,161,500
Pavement		\$8,180,600
Traffic Control - Signing and Pavement Marking		\$106,400
Traffic Signal and Surveillance		\$1,090,600
Roadway Lighting		\$0
Utility Relocations - Gas, Electric, Water, Wastewater		\$0
Structures	- 4	\$0
Incidentals		\$964,900
	Total	\$14,882,000

Contingency (30%)	\$4,465,000
Subtota	\$19,347,000
Right-of-Way	\$0
Engineering (18%)	\$3,482,000
Construction Engineering (10%)	\$1,935,000
Subtota	\$24,764,000



# **SEGMENT 3 CONCEPT A - OVERALL**

SEGMENT 3 CONCEPT A - RANGE 1	Quantity
Construction Subtotal	\$25,972,000
Contingency (30%)	\$7,792,000
Construction Total	\$33,764,000
Right-of-Way	\$0
Engineering (18%)	\$6,078,000
Construction Engineering (10%)	\$3,376,000
Project Subtotal	\$43,218,000
Inflation (30%)	\$12,965,400
Subtotal	\$56,183,000
SEGMENT 3 CONCEPT A - RANGE 2	
Construction Subtotal	\$35,789,000
Contingency (30%)	\$10,737,000
Construction Total	\$46,526,000
Right-of-Way	\$0
Engineering (18%)	\$8,375,000
Construction Engineering (10%)	\$4,653,000
Project Subtotal	\$59,554,000
Inflation (30%)	\$17,866,200
Subtotal	\$77,420,000
SEGMENT 3 CONCEPT A - RANGE 3	
Construction Subtotal	\$24,097,000
Contingency (30%)	\$7,229,000
Construction Total	\$31,326,000
Right-of-Way	\$0
Engineering (18%)	\$5,639,000
Construction Engineering (10%)	\$3,133,000
Project Subtotal	\$40,098,000
Inflation (30%)	\$12,029,400
Subtotal	\$52,127,000

SEGMENT 3 - OVERALL	
SEGMENT 3 CONCEPT A - RANGE 1	\$56,183,000
SEGMENT 3 CONCEPT A - RANGE 2	\$77,420,000
SEGMENT 3 CONCEPT A - RANGE 3	\$52,127,000
Total - Segment 3 - Overall	\$185,730,000

Construction w/ Contingency w/out Inflation \$142,870,000





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Roadway				
Description	Quantity	Unit	Unit Cost	Total
PAVEMENT REMOVED	54,300	SY	\$20.00	\$1,086,000.00
CULVERT REMOVED	1,300	FT	\$100.00	\$130,000.00
EXCAVATION	12,000	CY	\$40.00	\$480,000.00
EMBANKMENT	16,000	CY	\$45.00	\$720,000.00
GUARDRAIL	700	FT	\$22.00	\$15,400.00
MEDIAN BARRIER	4,600	FT	\$120.00	\$552,000.00
CURB AND GUTTER	7,500	FT	\$42.00	\$315,000.00
CONCRETE MEDIAN	2,900	SY	\$100.00	\$290,000.00
CONCRETE WALK		SF	\$13.00	\$0.00
Roadway Subtotal			\$3,588,400.00	

Erosion Control Description	Quantity	Unit	Unit Cost	Total
EROSION CONTROL	305,000	EACH	\$1.00	\$305,000.00
EROSION CONTROL PLAN	1	LUMP	\$50,000.00	\$50,000.00
BMPs	1	LUMP	\$152,500.00	\$152,500.00
SEEDING AND MULCHING	29,200	SY	\$2.00	\$58,400.00
Erosion Control Subtotal			\$565,900.00	

Drainage				
Description	Quantity	Unit	Unit Cost	Total
CULVERT	1,300	FT	\$600.00	\$780,000.00
STORM SEWER SYSTEM	7,700	FT	\$300.00	\$2,310,000.00
UNDERDRAINS	40,000	FT	\$15.00	\$600,000.00
Drainage Subtotal			\$3,690,000.00	

Pavement				
Description	Quantity	Unit	Unit Cost	Total
FULL-DEPTH PAVEMENT (ASPHALT)	71,000	SY	\$145.00	\$10,295,000.00
FULL-DEPTH PAVEMENT (CONCRETE)		SY	\$145.00	\$0.00
PAVEMENT PLANING AND RESURFACING	14,200	SY	\$54.00	\$766,800.00
SHARED USE PATH		SY	\$42.00	\$0.00

Traffic Control - Signing and Pavement Marking							
Description Quantity Unit Unit Cost Total							
SIGNING	1.46	MILE	\$250,000.00	\$365,000.00			
PAVEMENT MARKINGS - THERMO		MILE	\$14,000.00	\$0.00			
PAVEMENT MARKINGS - RECESSED	1.46	MILE	\$30,000.00	\$43,800.00			
Traffic Contro	\$408,800.00						

Traffic Signal and Surveillance				
Description	Quantity	Unit	Unit Cost	Total
STANDARD TRAFFIC SIGNAL		EACH	\$300,000.00	\$0.00
TRAFFIC SIGNAL FOR R-CUT		EACH	\$780,000.00	\$0.00
FIBER OPTIC COMMUNICATION	1	MILE	\$170,000.00	\$188,700.00
CCTV		EACH	\$123,000.00	\$0.00
	\$188,700.00			

Roadway Lighting					
Description	Quantity	Unit	Unit Cost	Total	
FULL INTERCHANGE LIGHTING		EACH	\$500,000.00	\$0.00	
PARTIAL INTERCHANGE LIGHTING		EACH	\$300,000.00	\$0.00	
CONTINUOUS ROADWAY LIGHTING		FT	\$100.00	\$0.00	
Traffic Control - Traffic Signal Subtotal				\$0.00	

Utility Relocations - Gas, Electric, Water, Wastewater			1	
Description	Quantity	Unit	Unit Cost	Total
HIGH PRESSURE GAS LINE		FT		\$0.00
WATERLINE 36" OR LARGER		FT		\$0.00
HIGH VOLTAGE TOWER	2	EACH	\$1,500,000.00	\$3,000,000.00
SANITARY LINE 36" OR LARGER		FT		\$0.00
DAM MODIFICATION		LUMP		\$0.00
	W	ater/Waste	water Subtotal	\$3,000,000.00

Structures		y		
Description	Quantity	Unit	Unit Cost	Total
RETAINING WALL		SF	\$90.00	\$0.00
BRIDGE	5,400	SF	\$220.00	\$1,188,000.00
		Pave	ement Subtotal	\$1,188,000.00

Incidentals				
Description	Quantity	Unit	Unit Cost	Total
CONSTRUCTION LAYOUT STAKES	160000	LUMP	\$1.00	\$160,000.00
MAINTENANCE OF TRAFFIC	920000	LUMP	\$1.00	\$920,000.00
MOBILIZATION	1200000	LUMP	\$1.00	\$1,200,000.00
		Miscella	neous Subtotal	\$2,280,000.00

Project Summary	Subtotal
Roadway	\$3,588,400
Erosion Control	\$565,900
Drainage	\$3,690,000
Pavement	\$11,061,800
Traffic Control - Signing and Pavement Marking	\$408,800
Traffic Signal and Surveillance	\$188,700
Roadway Lighting	\$0
Utility Relocations - Gas, Electric, Water, Wastewater	\$3,000,000
Structures	\$1,188,000
Incidentals	\$2,280,000
Total	\$25,972,000

	TOTAL	QE3,37 E,000
Contingency (30%)		\$7,792,000
	ubtotal	\$33,764,000
Right-of-Way		\$0
Engineering (18%)		\$6,078,000
Construction Engineering (10%)		\$3,376,000
9	Subtotal	\$43,218,000



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Roadway				
Description	Quantity	Unit	Unit Cost	Total
PAVEMENT REMOVED	47,500	SY	\$20.00	\$950,000.00
CULVERT REMOVED	200	FT	\$100.00	\$20,000.00
EXCAVATION	40,000	CY	\$40.00	\$1,600,000.00
EMBANKMENT	190,000	CY	\$45.00	\$8,550,000.00
GUARDRAIL	700	FT	\$22.00	\$15,400.00
MEDIAN BARRIER	4,200	FT	\$120.00	\$504,000.00
CURB AND GUTTER	6,200	FT	\$42.00	\$260,400.00
CONCRETE MEDIAN	2,500	SY	\$100.00	\$250,000.00
CONCRETE WALK		SF	\$13.00	\$0.00
Roadway Subtotal				\$12,149,800.00

Erosion Control				
Description	Quantity	Unit	Unit Cost	Total
EROSION CONTROL	460,000	EACH	\$1.00	\$460,000.00
EROSION CONTROL PLAN	1	LUMP	\$60,000.00	\$60,000.00
BMPs	1	LUMP	\$235,000.00	\$235,000.00
SEEDING AND MULCHING	60,700	SY	\$2.00	\$121,400.00
Erosion Control Subtotal				\$876,400.00

Drainage				
Description	Quantity	Unit	Unit Cost	Total
CULVERT	200	FT	\$600.00	\$120,000.00
STORM SEWER SYSTEM	9,600	FT	\$300.00	\$2,880,000.00
UNDERDRAINS	46,800	FT	\$15.00	\$702,000.00
Drainage Subtotal				\$3,702,000.00

Pavement					
Description	Quantity	Unit	Unit Cost	Total	
FULL-DEPTH PAVEMENT (ASPHALT)	53,100	SY	\$145.00	\$7,699,500.00	
FULL-DEPTH PAVEMENT (CONCRETE)		SY	\$145.00	\$0.00	
PAVEMENT PLANING AND RESURFACING	15,700	SY	\$54.00	\$847,800.00	
SHARED USE PATH		SY	\$42.00	\$0.00	
Payament Subtotal				CO E 47 200 00	

Traffic Control - Signing and Pavement Marking						
Description Quantity Unit Unit Cost Total						
SIGNING	1.82	MILE	\$250,000.00	\$455,000.00		
PAVEMENT MARKINGS - THERMO		MILE	\$14,000.00	\$0.00		
PAVEMENT MARKINGS - RECESSED	1.82	MILE	\$30,000.00	\$54,600.00		
Traffic Control - Signing and Pavement Marking Subtotal						

Traffic Signal and Surveillance				
Description	Quantity	Unit	Unit Cost	Total
STANDARD TRAFFIC SIGNAL		EACH	\$300,000.00	\$0.00
TRAFFIC SIGNAL FOR R-CUT		EACH	\$780,000.00	\$0.00
FIBER OPTIC COMMUNICATION		MILE	\$170,000.00	\$0.00
CCTV	1	EACH	\$123,000.00	\$123,000.00
Traffic Control - Traffic Signal Subtotal				

Roadway Lighting						
Description	Quantity	Unit	Unit Cost	Total		
FULL INTERCHANGE LIGHTING	1	EACH	\$500,000.00	\$500,000.00		
PARTIAL INTERCHANGE LIGHTING		EACH	\$300,000.00	\$0.00		
CONTINUOUS ROADWAY LIGHTING		FT	\$100.00	\$0.00		
Traffic Control - Traffic Signal Subtotal						

Utility Relocations - Gas. Electric, Water, Wastewater				
Description	Quantity	Unit	Unit Cost	Total
HIGH PRESSURE GAS LINE		FT		\$0.00
WATERLINE 36" OR LARGER		FT		\$0.00
HIGH VOLTAGE TOWER		EACH		\$0.00
SANITARY LINE 36" OR LARGER		FT		\$0.00
DAM MODIFICATION		LUMP		\$0.00
Water/Wastewater Subtotal				

Structures		7		
Description	Quantity	Unit	Unit Cost	Total
RETAINING WALL	24,000	SF	\$90.00	\$2,160,000.00
BRIDGE	18,700	SF	\$220.00	\$4,114,000.00
		Pave	ement Subtotal	\$6,274,000.00

Incidentals				
Description	Quantity	Unit	Unit Cost	Total
CONSTRUCTION LAYOUT STAKES	230000	LUMP	\$1.00	\$230,000.00
MAINTENANCE OF TRAFFIC	1400000	LUMP	\$1.00	\$1,400,000.00
MOBILIZATION	1600000	LUMP	\$1.00	\$1,600,000.00
		Miscella	neous Subtotal	\$2 220 000 00

Project Summary		Subtotal
Roadway		\$12,149,800
Erosion Control	1	\$876,400
Drainage		\$3,702,000
Pavement		\$8,547,300
Traffic Control - Signing and Pavement Marking		\$509,600
Traffic Signal and Surveillance		\$0
Roadway Lighting		\$500,000
Utility Relocations - Gas, Electric, Water, Wastewater		\$0
Structures	4	\$6,274,000
Incidentals		\$3,230,000
	Total	\$35,789,000

Contingency (30%)	\$10,737,000
Subtotal	\$46,526,000
Right-of-Way	\$0
Engineering (18%)	\$8,375,000
Construction Engineering (10%)	\$4,653,000
Subtotal	\$59,554,000



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Roadway				
Description	Quantity	Unit	Unit Cost	Total
PAVEMENT REMOVED	45,400	SY	\$20.00	\$908,000.00
CULVERT REMOVED	200	FT	\$100.00	\$20,000.00
EXCAVATION	10,000	CY	\$40.00	\$400,000.00
EMBANKMENT	15,000	CY	\$45.00	\$675,000.00
GUARDRAIL	500	FT	\$22.00	\$11,000.00
MEDIAN BARRIER	3,200	FT	\$120.00	\$384,000.00
CURB AND GUTTER	11,700	FT	\$42.00	\$491,400.00
CONCRETE MEDIAN	2,300	SY	\$100.00	\$230,000.00
CONCRETE WALK		SF	\$13.00	\$0.00
Roadway Subtotal				

Erosion Control				
Description	Quantity	Unit	Unit Cost	Total
EROSION CONTROL	450,000	EACH	\$1.00	\$450,000.00
EROSION CONTROL PLAN	1	LUMP	\$500,000.00	\$500,000.00
BMPs	1	LUMP	\$225,000.00	\$225,000.00
SEEDING AND MULCHING	36,100	SY	\$2.00	\$72,200.00
Erosion Control Subtotal				\$1,247,200.00

Drainage				
Description	Quantity	Unit	Unit Cost	Total
CULVERT	200	FT	\$600.00	\$120,000.00
STORM SEWER SYSTEM	8,600	FT	\$300.00	\$2,580,000.00
UNDERDRAINS	40,800	FT	\$15.00	\$612,000.00
Drainage Subtotal				\$3,312,000.00

Pavement				
Description	Quantity	Unit	Unit Cost	Total
FULL-DEPTH PAVEMENT (ASPHALT)	53,100	SY	\$145.00	\$7,699,500.00
FULL-DEPTH PAVEMENT (CONCRETE)		SY	\$145.00	\$0.00
PAVEMENT PLANING AND RESURFACING	12,800	SY	\$54.00	\$691,200.00
SHARED USE PATH		SY	\$42.00	\$0.00
		Dove	amont Cubtotal	ć0 200 700 00

Traffic Control - Signing and Pavement Marking					
Description Quantity Unit Unit Cost					
SIGNING	1.63	MILE	\$250,000.00	\$407,500.00	
PAVEMENT MARKINGS - THERMO		MILE	\$14,000.00	\$0.00	
PAVEMENT MARKINGS - RECESSED	1.63	MILE	\$30,000.00	\$48,900.00	
Traffic Control - Signing and Pavement Marking Subtotal					

Traffic Signal and Surveillance				
Description	Quantity	Unit	Unit Cost	Total
STANDARD TRAFFIC SIGNAL	1	EACH	\$300,000.00	\$300,000.00
TRAFFIC SIGNAL FOR R-CUT		EACH	\$780,000.00	\$0.00
FIBER OPTIC COMMUNICATION	1.63	MILE	\$170,000.00	\$277,100.00
CCTV	1	EACH	\$123,000.00	\$123,000.00
Traffic Control - Traffic Signal Subtotal				\$700,100.00

Roadway Lighting				
Description	Quantity	Unit	Unit Cost	Total
FULL INTERCHANGE LIGHTING		EACH	\$500,000.00	\$0.00
PARTIAL INTERCHANGE LIGHTING		EACH	\$300,000.00	\$0.00
CONTINUOUS ROADWAY LIGHTING	8600	FT	\$100.00	\$860,000.00
Traffic Control - Traffic Signal Subtotal				\$860,000.00

Utility Relocations - Gas, Electric, Water, Wastewater				
Description	Quantity	Unit	Unit Cost	Total
HIGH PRESSURE GAS LINE		FT		\$0.00
WATERLINE 36" OR LARGER		FT		\$0.00
HIGH VOLTAGE TOWER		EACH		\$0.00
SANITARY LINE 36" OR LARGER		FT		\$0.00
DAM MODIFICATION		LUMP		\$0.00
Water/Wastewater Subtotal				\$0.00

Structures		7		
Description	Quantity	Unit	Unit Cost	Total
RETAINING WALL	4,800	SF	\$90.00	\$432,000.00
BRIDGE	20,900	SF		\$4,598,000.00
		Pave	ement Subtotal	\$5,030,000.00

Incidentals				
Description	Quantity	Unit	Unit Cost	Total
CONSTRUCTION LAYOUT STAKES	140000	LUMP	\$1.00	\$140,000.00
MAINTENANCE OF TRAFFIC	41500	LUMP	\$1.00	\$41,500.00
MOBILIZATION	800000	LUMP	\$1.00	\$800,000.00
		Miscella	neous Subtotal	\$091 E00 00

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	Project Summary	Subtotal
	Roadway	\$3,119,400
	Erosion Control	\$1,247,200
	Drainage	\$3,312,000
۹	Pavement	\$8,390,700
	Traffic Control - Signing and Pavement Marking	\$456,400
	Traffic Signal and Surveillance	\$700,100
	Roadway Lighting	\$860,000
	Utility Relocations - Gas, Electric, Water, Wastewater	\$0
	Structures	\$5,030,000
	Incidentals	\$981,500
	Tota	al \$24,097,000

100	ai 324,037,000
Contingency (30%)	\$7,229,000
Subtot	al \$31,326,000
Right-of-Way	\$0
Engineering (18%)	\$5,639,000
Construction Engineering (10%)	\$3,133,000
Subtot	al \$40,098,000
Inflation (200/)	\$12,020,400

ms consultants, engineers, architects, plan

# SEGMENT 3 CONCEPT B - OVERALL

SEGMENT 3 CONCEPT B - RANGE 1	Quantity
Construction Subtotal	\$25,712,000
Contingency (30%)	\$7,714,000
Construction Total	\$33,426,000
Right-of-Way	\$0
Engineering (18%)	\$6,017,000
Construction Engineering (10%)	\$3,343,000
Project Subtotal	\$42,786,000
Inflation (30%)	\$12,835,800
Subtotal	\$55,622,000
SEGMENT 3 CONCEPT B - RANGE 2	
Construction Subtotal	\$26,723,000
Contingency (30%)	\$8,017,000
Construction Total	\$34,740,000
Right-of-Way	\$0
Engineering (18%)	\$6,253,000
Construction Engineering (10%)	\$3,474,000
Project Subtotal	\$44,467,000
Inflation (30%)	\$13,340,100
Subtotal	\$57,807,000
SEGMENT 3 CONCEPT B - RANGE 3	
Construction Subtotal	\$18,584,000
Contingency (30%)	\$5,575,000
Construction Total	\$24,159,000
Right-of-Way	\$0
Engineering (18%)	\$4,349,000
Construction Engineering (10%)	\$2,416,000
Project Subtotal	\$30,924,000
Inflation (30%)	\$9,277,200
Subtotal	\$40,201,000

SEGMENT 3 - OVERALL	
SEGMENT 3 CONCEPT B - RANGE 1	\$55,622,000
SEGMENT 3 CONCEPT B - RANGE 2	\$57,807,000
SEGMENT 3 CONCEPT B - RANGE 3	\$40,201,000
Total - Segment 3 - Overall	\$153,630,000

Construction w/ Contingency w/out Inflation \$118,177,000





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Roadway					
Description Quantity Unit Unit Cost					
PAVEMENT REMOVED	50,100	SY	\$20.00	\$1,002,000.00	
CULVERT REMOVED	1,300	FT	\$100.00	\$130,000.00	
EXCAVATION	11,000	CY	\$40.00	\$440,000.00	
EMBANKMENT	15,000	CY	\$45.00	\$675,000.00	
GUARDRAIL	500	FT	\$22.00	\$11,000.00	
MEDIAN BARRIER	4,800	FT	\$120.00	\$576,000.00	
CURB AND GUTTER	4,700	FT	\$42.00	\$197,400.00	
CONCRETE MEDIAN	1,400	SY	\$100.00	\$140,000.00	
CONCRETE WALK		SF	\$13.00	\$0.00	
Roadway Subtotal					

Erosion Control				
Description	Quantity	Unit	Unit Cost	Total
EROSION CONTROL	300,000	EACH	\$1.00	\$300,000.00
EROSION CONTROL PLAN	1	LUMP	\$40,000.00	\$40,000.00
BMPs	1	LUMP	\$150,000.00	\$150,000.00
SEEDING AND MULCHING	29,400	SY	\$2.00	\$58,800.00
Erosion Control Subtotal				\$548,800.00

Drainage				
Description	Quantity	Unit	Unit Cost	Total
CULVERT	1,300	FT	\$600.00	\$780,000.00
STORM SEWER SYSTEM	7,200	FT	\$300.00	\$2,160,000.00
UNDERDRAINS	38,400	FT	\$15.00	\$576,000.00
Drainage Subtotal				\$3,516,000.00

Pavement				
Description Quantity Unit Unit Cost To				
FULL-DEPTH PAVEMENT (ASPHALT)	74,700	SY	\$145.00	\$10,831,500.00
FULL-DEPTH PAVEMENT (CONCRETE)		SY	\$145.00	\$0.00
PAVEMENT PLANING AND RESURFACING	11,600	SY	\$54.00	\$626,400.00
SHARED USE PATH		SY	\$42.00	\$0.00

Traffic Control - Signing and Pavement Marking					
Description Quantity Unit Unit Cost					
SIGNING	1.36	MILE	\$250,000.00	\$340,000.00	
PAVEMENT MARKINGS - THERMO		MILE	\$14,000.00	\$0.00	
PAVEMENT MARKINGS - RECESSED	1.36	MILE	\$30,000.00	\$40,800.00	
Traffic Control - Signing and Pavement Marking Subtotal					

Traffic Signal and Surveillance				
Description	Quantity	Unit	Unit Cost	Total
STANDARD TRAFFIC SIGNAL		EACH	\$300,000.00	\$0.00
TRAFFIC SIGNAL FOR R-CUT		EACH	\$780,000.00	\$0.00
FIBER OPTIC COMMUNICATION	1	MILE	\$170,000.00	\$188,700.00
CCTV		EACH	\$123,000.00	\$0.00
Traffic Control - Traffic Signal Subtotal				

Roadway Lighting				
Description	Quantity	Unit	Unit Cost	Total
FULL INTERCHANGE LIGHTING		EACH	\$500,000.00	\$0.00
PARTIAL INTERCHANGE LIGHTING		EACH	\$300,000.00	\$0.00
CONTINUOUS ROADWAY LIGHTING		FT	\$100.00	\$0.00
Traffic Control - Traffic Signal Subtotal				\$0.00

Utility Relocations - Gas, Electric, Water, Wastewater			1	
Description	Quantity	Unit	Unit Cost	Total
HIGH PRESSURE GAS LINE		FT		\$0.00
WATERLINE 36" OR LARGER		FT		\$0.00
HIGH VOLTAGE TOWER	2	EACH	\$1,500,000.00	\$3,000,000.00
SANITARY LINE 36" OR LARGER		FT		\$0.00
DAM MODIFICATION		LUMP		\$0.00
	W	ater/Waste	water Subtotal	\$3,000,000.00

Structures		7		
Description	Quantity	Unit	Unit Cost	Total
RETAINING WALL		SF	\$90.00	\$0.00
BRIDGE	5,400	SF	\$220.00	\$1,188,000.00
		Pave	ement Subtotal	\$1,188,000.00

Incidentals				
Description	Quantity	Unit	Unit Cost	Total
CONSTRUCTION LAYOUT STAKES	160000	LUMP	\$1.00	\$160,000.00
MAINTENANCE OF TRAFFIC	900000	LUMP	\$1.00	\$900,000.00
MOBILIZATION	1200000	LUMP	\$1.00	\$1,200,000.00
		Miccolla	nague Subtotal	¢2 260 000 00

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	Project Summary	Subtotal
	Roadway	\$3,171,400
	Erosion Control	\$548,800
	Drainage	\$3,516,000
۹	Pavement	\$11,457,900
	Traffic Control - Signing and Pavement Marking	\$380,800
	Traffic Signal and Surveillance	\$188,700
	Roadway Lighting	\$0
	Utility Relocations - Gas, Electric, Water, Wastewater	\$3,000,000
	Structures	\$1,188,000
	Incidentals	\$2,260,000
	Total	\$25,712,000

Contingency (30%)	\$7,714,000
Subtotal	\$33,426,000
Right-of-Way	\$0
Engineering (18%)	\$6,017,000
Construction Engineering (10%)	\$3,343,000
Subtotal	\$42,786,000

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Roadway				
Description	Quantity	Unit	Unit Cost	Total
PAVEMENT REMOVED	44,300	SY	\$20.00	\$886,000.00
CULVERT REMOVED	200	FT	\$100.00	\$20,000.00
EXCAVATION	12,000	CY	\$40.00	\$480,000.00
EMBANKMENT	23,000	CY	\$45.00	\$1,035,000.00
GUARDRAIL	700	FT	\$22.00	\$15,400.00
MEDIAN BARRIER	4,200	FT	\$120.00	\$504,000.00
CURB AND GUTTER	8,200	FT	\$42.00	\$344,400.00
CONCRETE MEDIAN	400	SY	\$100.00	\$40,000.00
CONCRETE WALK		SF	\$13.00	\$0.00
Roadway Subtotal				\$3,324,800.00

Erosion Control				
Description	Quantity	Unit	Unit Cost	Total
EROSION CONTROL	350,000	EACH	\$1.00	\$350,000.00
EROSION CONTROL PLAN	1	LUMP	\$50,000.00	\$50,000.00
BMPs	1	LUMP	\$175,000.00	\$175,000.00
SEEDING AND MULCHING	23,400	SY	\$2.00	\$46,800.00
Erosion Control Subtotal				\$621,800.00

Drainage				
Description	Quantity	Unit	Unit Cost	Total
CULVERT	200	FT	\$600.00	\$120,000.00
STORM SEWER SYSTEM	7,700	FT	\$300.00	\$2,310,000.00
UNDERDRAINS	39,200	FT	\$15.00	\$588,000.00
Drainage Subtotal				\$3,018,000.00

Pavement				
Description	Quantity	Unit	Unit Cost	Total
FULL-DEPTH PAVEMENT (ASPHALT)	77,900	SY	\$145.00	\$11,295,500.00
FULL-DEPTH PAVEMENT (CONCRETE)		SY	\$145.00	\$0.00
PAVEMENT PLANING AND RESURFACING	6,500	SY	\$54.00	\$351,000.00
SHARED USE PATH		SY	\$42.00	\$0.00

Traffic Control - Signing and Pavement Marking				
Description Quantity Unit Unit Cost				
SIGNING	1.46	MILE	\$250,000.00	\$365,000.00
PAVEMENT MARKINGS - THERMO		MILE	\$14,000.00	\$0.00
PAVEMENT MARKINGS - RECESSED	1.46	MILE	\$30,000.00	\$43,800.00
Traffic Control - Signing and Pavement Marking Subtotal				\$408,800.00

Traffic Signal and Surveillance				
Description	Quantity	Unit	Unit Cost	Total
STANDARD TRAFFIC SIGNAL	2	EACH	\$300,000.00	\$600,000.00
TRAFFIC SIGNAL FOR R-CUT		EACH	\$780,000.00	\$0.00
FIBER OPTIC COMMUNICATION	1.46	MILE	\$170,000.00	\$248,200.00
CCTV	1	EACH	\$123,000.00	\$123,000.00
Traffic Control - Traffic Signal Subtotal				

Roadway Lighting				
Description	Quantity	Unit	Unit Cost	Total
FULL INTERCHANGE LIGHTING		EACH	\$500,000.00	\$0.00
PARTIAL INTERCHANGE LIGHTING	1	EACH	\$300,000.00	\$300,000.00
CONTINUOUS ROADWAY LIGHTING		FT	\$100.00	\$0.00
Traffic Control - Traffic Signal Subtotal				\$300,000.00

Description	Quantity	Unit	Unit Cost	Total
HIGH PRESSURE GAS LINE		FT		\$0.00
WATERLINE 36" OR LARGER		FT		\$0.00
HIGH VOLTAGE TOWER		EACH		\$0.00
SANITARY LINE 36" OR LARGER		FT		\$0.00
DAM MODIFICATION		LUMP		\$0.00
Water/Wastewater Subtotal				

Structures		7		
Description	Quantity	Unit	Unit Cost	Total
RETAINING WALL		SF	\$90.00	\$0.00
BRIDGE	19,900	SF	\$220.00	\$4,378,000.00
		Pav	ement Subtotal	\$4,378,000.00

Incidentals				
Description	Quantity	Unit	Unit Cost	Total
CONSTRUCTION LAYOUT STAKES	175000	LUMP	\$1.00	\$175,000.00
MAINTENANCE OF TRAFFIC	1050000	LUMP	\$1.00	\$1,050,000.00
MOBILIZATION	1200000	LUMP	\$1.00	\$1,200,000.00
		Miscella	neous Subtotal	\$2 425 000 00

	Project Summary	Subtotal
	Roadway	\$3,324,800
	Erosion Control	\$621,800
	Drainage	\$3,018,000
۹	Pavement	\$11,646,500
	Traffic Control - Signing and Pavement Marking	\$408,800
	Traffic Signal and Surveillance	\$600,000
	Roadway Lighting	\$300,000
	Utility Relocations - Gas, Electric, Water, Wastewater	\$0
	Structures	\$4,378,000
	Incidentals	\$2,425,000
	Total	\$26,723,000

Contingency (30%)	\$8,017,000
Subtota	\$34,740,000
Right-of-Way	\$0
	· ·
Engineering (18%)	\$6,253,000
Construction Engineering (10%)	\$3,474,000
Subtota	\$44,467,000
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Roadway						
Description	Quantity	Unit	Unit Cost	Total		
PAVEMENT REMOVED	36,300	SY	\$20.00	\$726,000.00		
CULVERT REMOVED	200	FT	\$100.00	\$20,000.00		
EXCAVATION	10,000	CY	\$40.00	\$400,000.00		
EMBANKMENT	15,000	CY	\$45.00	\$675,000.00		
GUARDRAIL	700	FT	\$22.00	\$15,400.00		
MEDIAN BARRIER	2,600	FT	\$120.00	\$312,000.00		
CURB AND GUTTER	3,600	FT	\$42.00	\$151,200.00		
CONCRETE MEDIAN	1,400	SY	\$100.00	\$140,000.00		
CONCRETE WALK		SF	\$13.00	\$0.00		
		Roa	adway Subtotal	\$2,439,600.00		

Erosion Control						
Description	Quantity	Unit	Unit Cost	Total		
EROSION CONTROL	240,000	EACH	\$1.00	\$240,000.00		
EROSION CONTROL PLAN	1	LUMP	\$40,000.00	\$40,000.00		
BMPs	1	LUMP	\$120,000.00	\$120,000.00		
SEEDING AND MULCHING	14,600	SY	\$2.00	\$29,200.00		
Erosion Control Subtotal				\$429,200.00		

Drainage						
Description	Quantity	Unit	Unit Cost	Total		
CULVERT	200	FT	\$600.00	\$120,000.00		
STORM SEWER SYSTEM	4,200	FT	\$300.00	\$1,260,000.00		
UNDERDRAINS	22,000	FT	\$15.00	\$330,000.00		
Drainage Subtotal				\$1,710,000.00		

Pavement						
Description	Quantity	Unit	Unit Cost	Total		
FULL-DEPTH PAVEMENT (ASPHALT)	44,900	SY	\$145.00	\$6,510,500.00		
FULL-DEPTH PAVEMENT (CONCRETE)		SY	\$145.00	\$0.00		
PAVEMENT PLANING AND RESURFACING	49,800	SY	\$54.00	\$2,689,200.00		
SHARED USE PATH		SY	\$42.00	\$0.00		
Payament Cultitatal				CO 400 700 00		

Traffic Control - Signing and Pavement Marking					
Description Quantity Unit Unit Cost					
SIGNING	0.80	MILE	\$250,000.00	\$200,000.00	
PAVEMENT MARKINGS - THERMO		MILE	\$14,000.00	\$0.00	
PAVEMENT MARKINGS - RECESSED	0.80	MILE	\$30,000.00	\$24,000.00	
Traffic Control - Signing and Pavement Marking Subtotal				\$224,000.00	

Traffic Signal and Surveillance					
Description	Quantity	Unit	Unit Cost	Total	
STANDARD TRAFFIC SIGNAL		EACH	\$300,000.00	\$0.00	
TRAFFIC SIGNAL FOR R-CUT		EACH	\$780,000.00	\$0.00	
FIBER OPTIC COMMUNICATION		MILE	\$170,000.00	\$0.00	
CCTV		EACH	\$123,000.00	\$0.00	
Traffic Control - Traffic Signal Subtotal				\$0.00	

Roadway Lighting						
Description	Quantity	Unit	Unit Cost	Total		
FULL INTERCHANGE LIGHTING		EACH	\$500,000.00	\$0.00		
PARTIAL INTERCHANGE LIGHTING		EACH	\$300,000.00	\$0.00		
CONTINUOUS ROADWAY LIGHTING	4200	FT	\$100.00	\$420,000.00		
Traffic Control - Traffic Signal Subtotal				\$420,000.00		

Utility Relocations - Gas, Electric, Water, Wastewater					
Description	Quantity	Unit	Unit Cost	Total	
HIGH PRESSURE GAS LINE		FT		\$0.00	
WATERLINE 36" OR LARGER		FT		\$0.00	
HIGH VOLTAGE TOWER		EACH		\$0.00	
SANITARY LINE 36" OR LARGER		FT		\$0.00	
DAM MODIFICATION		LUMP		\$0.00	
Water/Wastewater Subtotal					

Structures		J		
Description	Quantity	Unit	Unit Cost	Total
RETAINING WALL	4,000	SF	\$90.00	\$360,000.00
BRIDGE	9,800	SF	\$220.00	\$2,156,000.00
		Pave	ement Subtotal	\$2,516,000.00

Incidentals				
Description	Quantity	Unit	Unit Cost	Total
CONSTRUCTION LAYOUT STAKES	125000	LUMP	\$1.00	\$125,000.00
MAINTENANCE OF TRAFFIC	720000	LUMP	\$1.00	\$720,000.00
MOBILIZATION	800000	LUMP	\$1.00	\$800,000.00
		Miscella	neous Subtotal	\$1.645.000.00

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	Project Summary	Subtotal
	Roadway	\$2,439,600
	Erosion Control	\$429,200
	Drainage	\$1,710,000
۹	Pavement	\$9,199,700
	Traffic Control - Signing and Pavement Marking	\$224,000
	Traffic Signal and Surveillance	\$0
	Roadway Lighting	\$420,000
	Utility Relocations - Gas, Electric, Water, Wastewater	\$0
	Structures	\$2,516,000
	Incidentals	\$1,645,000
	Total	\$18,584,000

Contingency (30%)	\$5,575,000
Subtotal	\$24,159,000
Right-of-Way	\$0
Engineering (18%)	\$4,349,000
Construction Engineering (10%)	\$2,416,000
Subtotal	\$30,924,000



# SEGMENT 3 CONCEPT D - OVERALL

SEGMENT X CONCEPT C - RANGE 1	Quantity
Construction Subtotal	\$18,401,000
Contingency (30%)	\$5,520,000
Construction Total	\$23,921,000
Right-of-Way	\$0
Engineering (18%)	\$4,306,000
Construction Engineering (10%)	\$2,392,000
Project Subtotal	\$30,619,000
Inflation (30%)	\$9,185,700
Subtotal	\$39,805,000
SEGMENT 3 CONCEPT C - RANGE 2	
Construction Subtotal	\$27,187,000
Contingency (30%)	\$8,156,000
Construction Total	\$35,343,000
Right-of-Way	\$0
Engineering (18%)	\$6,362,000
Construction Engineering (10%)	\$3,534,000
Project Subtotal	\$45,239,000
Inflation (30%)	\$13,571,700
Subtotal	\$58,811,000
SEGMENT 3 CONCEPT C - RANGE 3	
Construction Subtotal	\$12,293,000
Contingency (30%)	\$3,688,000
Construction Total	\$15,981,000
Right-of-Way	\$0
Engineering (18%)	\$2,877,000
Construction Engineering (10%)	\$1,598,000
Project Subtotal	\$20,456,000
Inflation (30%)	\$6,136,800
Subtotal	\$26,593,000

SEGMENT 7 - OVERALL	
SEGMENT X CONCEPT C - RANGE 1	\$39,805,000
SEGMENT 3 CONCEPT C - RANGE 2	\$58,811,000
SEGMENT 3 CONCEPT C - RANGE 3	\$26,593,000
Total - Segment X - Overall	\$125,209,000

Construction w/ Contingency w/out Inflation \$96,314,000





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Roadway					
Description	Quantity	Unit	Unit Cost	Total	
PAVEMENT REMOVED	44,700	SY	\$20.00	\$894,000.00	
CULVERT REMOVED	1,300	FT	\$100.00	\$130,000.00	
EXCAVATION	8,500	CY	\$40.00	\$340,000.00	
EMBANKMENT	12,000	CY	\$45.00	\$540,000.00	
GUARDRAIL	500	FT	\$22.00	\$11,000.00	
MEDIAN BARRIER	2,900	FT	\$120.00	\$348,000.00	
CURB AND GUTTER	3,400	FT	\$42.00	\$142,800.00	
CONCRETE MEDIAN	1,100	SY	\$100.00	\$110,000.00	
CONCRETE WALK		SF	\$13.00	\$0.00	
	\$2,515,800.00				

Erosion Control					
Description	Quantity	Unit	Unit Cost	Total	
EROSION CONTROL	230,000	EACH	\$1.00	\$230,000.00	
EROSION CONTROL PLAN	1	LUMP	\$40,000.00	\$40,000.00	
BMPs	1	LUMP	\$115,000.00	\$115,000.00	
SEEDING AND MULCHING	19,400	SY	\$2.00	\$38,800.00	
Erosion Control Subtotal					

Drainage					
Description	Quantity	Unit	Unit Cost	Total	
CULVERT	1,300	FT	\$600.00	\$780,000.00	
STORM SEWER SYSTEM	5,900	FT	\$300.00	\$1,770,000.00	
UNDERDRAINS	32,600	FT	\$15.00	\$489,000.00	
	\$3.039.000.00				

Pavement					
Description	Quantity	Unit	Unit Cost	Total	
FULL-DEPTH PAVEMENT (ASPHALT)	61,400	SY	\$145.00	\$8,903,000.00	
FULL-DEPTH PAVEMENT (CONCRETE)		SY	\$145.00	\$0.00	
PAVEMENT PLANING AND RESURFACING	9,800	SY	\$54.00	\$529,200.00	
SHARED USE PATH		SY	\$42.00	\$0.00	

Traffic Control - Signing and Pavement Marking					
Description	Quantity	Unit	Unit Cost	Total	
SIGNING	1.12	MILE	\$250,000.00	\$280,000.00	
PAVEMENT MARKINGS - THERMO		MILE	\$14,000.00	\$0.00	
PAVEMENT MARKINGS - RECESSED	1.12	MILE	\$30,000.00	\$33,600.00	
Traffic Contro	\$313,600.00				

Traffic Signal and Surveillance				
Description	Quantity	Unit	Unit Cost	Total
STANDARD TRAFFIC SIGNAL		EACH	\$300,000.00	\$0.00
TRAFFIC SIGNAL FOR R-CUT	1	EACH	\$780,000.00	\$780,000.00
FIBER OPTIC COMMUNICATION	1	MILE	\$170,000.00	\$188,700.00
CCTV	1	EACH	\$123,000.00	\$123,000.00
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Roadway Lighting				
Description	Quantity	Unit	Unit Cost	Total
FULL INTERCHANGE LIGHTING		EACH	\$500,000.00	\$0.00
PARTIAL INTERCHANGE LIGHTING		EACH	\$300,000.00	\$0.00
CONTINUOUS ROADWAY LIGHTING	0	FT	\$100.00	\$0.00
	\$0.00			

Utility Relocations - Gas, Electric, Water, Wastewater			_	
Description	Quantity	Unit	Unit Cost	Total
HIGH PRESSURE GAS LINE		FT		\$0.00
WATERLINE 36" OR LARGER		FT		\$0.00
HIGH VOLTAGE TOWER		EACH	\$1,500,000.00	\$0.00
SANITARY LINE 36" OR LARGER		FT		\$0.00
DAM MODIFICATION		LUMP		\$0.00
	W	ater/Waste	water Subtotal	\$0.00

Structures		y		
Description	Quantity	Unit	Unit Cost	Total
RETAINING WALL		SF	\$90.00	\$0.00
BRIDGE		SF	\$220.00	\$0.00
		Pave	ement Subtotal	\$0.00

Incidentals				
Description	Quantity	Unit	Unit Cost	Total
CONSTRUCTION LAYOUT STAKES	115000	LUMP	\$1.00	\$115,000.00
MAINTENANCE OF TRAFFIC	670000	LUMP	\$1.00	\$670,000.00
MOBILIZATION	800000	LUMP	\$1.00	\$800,000.00
		Miscella	neous Subtotal	\$1 585 000 00

	Project Summary		Subtotal
	Roadway	$\mathbf{A}$	\$2,515,800
	Erosion Control	- 1	\$423,800
	Drainage		\$3,039,000
٧	Pavement		\$9,432,200
	Traffic Control - Signing and Pavement Marking		\$313,600
	Traffic Signal and Surveillance		\$1,091,700
	Roadway Lighting		\$0
	Utility Relocations - Gas, Electric, Water, Wastewater	ı	\$0
	Structures	-4	\$0
	Incidentals	4	\$1,585,000
	Tot	tal	\$18,401,000

Contingency (30%)	\$5,520,000
Subtotal	\$23,921,000
Right-of-Way	\$0
Engineering (18%)	\$4,306,000
Construction Engineering (10%)	\$2,392,000
Subtotal	\$30,619,000



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Roadway				
Description	Quantity	Unit	Unit Cost	Total
PAVEMENT REMOVED	44,600	SY	\$20.00	\$892,000.00
CULVERT REMOVED	200	FT	\$100.00	\$20,000.00
EXCAVATION	11,000	CY	\$40.00	\$440,000.00
EMBANKMENT	20,000	CY	\$45.00	\$900,000.00
GUARDRAIL	700	FT	\$22.00	\$15,400.00
MEDIAN BARRIER	4,200	FT	\$120.00	\$504,000.00
CURB AND GUTTER	8,100	FT	\$42.00	\$340,200.00
CONCRETE MEDIAN	700	SY	\$100.00	\$70,000.00
CONCRETE WALK		SF	\$13.00	\$0.00
Roadway Subtotal				

Erosion Control				
Description	Quantity	Unit	Unit Cost	Total
EROSION CONTROL	340,000	EACH	\$1.00	\$340,000.00
EROSION CONTROL PLAN	1	LUMP	\$50,000.00	\$50,000.00
BMPs	1	LUMP	\$170,000.00	\$170,000.00
SEEDING AND MULCHING	25,600	SY	\$2.00	\$51,200.00
Erosion Control Subtotal				

Drainage				
Description	Quantity	Unit	Unit Cost	Total
CULVERT	200	FT	\$600.00	\$120,000.00
STORM SEWER SYSTEM	7,700	FT	\$300.00	\$2,310,000.00
UNDERDRAINS	39,200	FT	\$15.00	\$588,000.00
Drainage Subtotal				

Pavement				
Description	Quantity	Unit	Unit Cost	Total
FULL-DEPTH PAVEMENT (ASPHALT)	66,000	SY	\$145.00	\$9,570,000.00
FULL-DEPTH PAVEMENT (CONCRETE)		SY	\$145.00	\$0.00
PAVEMENT PLANING AND RESURFACING	18,800	SY	\$54.00	\$1,015,200.00
SHARED USE PATH		SY	\$42.00	\$0.00
Payament Cultotal				C40 F0F 300 00

Traffic Control - Signing and Pavement Marking				
Description	Quantity	Unit	Unit Cost	Total
SIGNING	1.46	MILE	\$250,000.00	\$365,000.00
PAVEMENT MARKINGS - THERMO		MILE	\$14,000.00	\$0.00
PAVEMENT MARKINGS - RECESSED	1.46	MILE	\$30,000.00	\$43,800.00
Traffic Control - Signing and Pavement Marking Subtotal				

Traffic Signal and Surveillance				
Description	Quantity	Unit	Unit Cost	Total
STANDARD TRAFFIC SIGNAL	2	EACH	\$300,000.00	\$600,000.00
TRAFFIC SIGNAL FOR R-CUT		EACH	\$780,000.00	\$0.00
FIBER OPTIC COMMUNICATION	1.46	MILE	\$170,000.00	\$248,200.00
CCTV	1	EACH	\$123,000.00	\$123,000.00
Traffic Control - Traffic Signal Subtotal				

Roadway Lighting				
Description	Quantity	Unit	Unit Cost	Total
FULL INTERCHANGE LIGHTING		EACH	\$500,000.00	\$0.00
PARTIAL INTERCHANGE LIGHTING	1	EACH	\$300,000.00	\$300,000.00
CONTINUOUS ROADWAY LIGHTING		FT	\$100.00	\$0.00
Traffic Control - Traffic Signal Subtotal				

Description	Quantity	Unit	Unit Cost	Total
HIGH PRESSURE GAS LINE		FT		\$0.00
WATERLINE 36" OR LARGER		FT		\$0.00
HIGH VOLTAGE TOWER		EACH		\$0.00
SANITARY LINE 36" OR LARGER		FT		\$0.00
DAM MODIFICATION		LUMP		\$0.00
Water/Wastewater Subtotal				

Structures		7		
Description	Quantity	Unit	Unit Cost	Total
RETAINING WALL		SF	\$90.00	\$0.00
BRIDGE	23,800	SF	\$220.00	\$5,236,000.00
		Pave	ement Subtotal	\$5,236,000.00

Incidentals				
Description	Quantity	Unit	Unit Cost	Total
CONSTRUCTION LAYOUT STAKES	175000	LUMP	\$1.00	\$175,000.00
MAINTENANCE OF TRAFFIC	1500000	LUMP	\$1.00	\$1,500,000.00
MOBILIZATION	1200000	LUMP	\$1.00	\$1,200,000.00
		Miscella	neous Subtotal	\$2 875 000 00

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	Project Summary	Subtotal
	Roadway	\$3,181,600
	Erosion Control	\$611,200
	Drainage	\$3,018,000
۹	Pavement	\$10,585,200
	Traffic Control - Signing and Pavement Marking	\$408,800
	Traffic Signal and Surveillance	\$971,200
	Roadway Lighting	\$300,000
	Utility Relocations - Gas, Electric, Water, Wastewater	\$0
	Structures	\$5,236,000
	Incidentals	\$2,875,000
	Total	\$27,187,000

Contingency (30%)		\$8,156,000
	Subtotal	\$35,343,000
Right-of-Way		\$0
Engineering (18%)		\$6,362,000
Construction Engineering (10%)		\$3,534,000
	Subtotal	\$45,239,000



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Roadway					
Description	Quantity	Unit	Unit Cost	Total	
PAVEMENT REMOVED	29,300	SY	\$20.00	\$586,000.00	
CULVERT REMOVED	200	FT	\$100.00	\$20,000.00	
EXCAVATION	6,500	CY	\$40.00	\$260,000.00	
EMBANKMENT	8,500	CY	\$45.00	\$382,500.00	
GUARDRAIL	500	FT	\$22.00	\$11,000.00	
MEDIAN BARRIER	1,500	FT	\$120.00	\$180,000.00	
CURB AND GUTTER	4,700	FT	\$42.00	\$197,400.00	
CONCRETE MEDIAN	1,700	SY	\$100.00	\$170,000.00	
CONCRETE WALK		SF	\$13.00	\$0.00	
Roadway Subtotal					

Erosion Control				
Description	Quantity	Unit	Unit Cost	Total
EROSION CONTROL	160,000	EACH	\$1.00	\$160,000.00
EROSION CONTROL PLAN	1	LUMP	\$30,000.00	\$30,000.00
BMPs	1	LUMP	\$80,000.00	\$80,000.00
SEEDING AND MULCHING	16,000	SY	\$2.00	\$32,000.00
Erosion Control Subtotal				\$302,000.00

Drainage				
Description	Quantity	Unit	Unit Cost	Total
CULVERT	200	FT	\$600.00	\$120,000.00
STORM SEWER SYSTEM	4,800	FT	\$300.00	\$1,440,000.00
UNDERDRAINS	24,400	FT	\$15.00	\$366,000.00
Drainage Subtotal				

Pavement				
Description	Quantity	Unit	Unit Cost	Total
FULL-DEPTH PAVEMENT (ASPHALT)	38,400	SY	\$145.00	\$5,568,000.00
FULL-DEPTH PAVEMENT (CONCRETE)		SY	\$145.00	\$0.00
PAVEMENT PLANING AND RESURFACING	11,300	SY	\$54.00	\$610,200.00
SHARED USE PATH		SY	\$42.00	\$0.00
Payament Subtotal				¢¢ 170 200 00

Traffic Control - Signing and Pavement Marking						
Description Quantity Unit Unit Cost						
SIGNING	0.91	MILE	\$250,000.00	\$227,500.00		
PAVEMENT MARKINGS - THERMO		MILE	\$14,000.00	\$0.00		
PAVEMENT MARKINGS - RECESSED	0.91	MILE	\$30,000.00	\$27,300.00		
Traffic Control - Signing and Pavement Marking Subtotal						

Traffic Signal and Surveillance				
Description	Quantity	Unit	Unit Cost	Total
STANDARD TRAFFIC SIGNAL		EACH	\$300,000.00	\$0.00
TRAFFIC SIGNAL FOR R-CUT		EACH	\$780,000.00	\$0.00
FIBER OPTIC COMMUNICATION		MILE	\$170,000.00	\$0.00
ссти		EACH	\$123,000.00	\$0.00
Traffic Control - Traffic Signal Subtotal				\$0.00

Roadway Lighting					
Description	Quantity	Unit	Unit Cost	Total	
FULL INTERCHANGE LIGHTING		EACH	\$500,000.00	\$0.00	
PARTIAL INTERCHANGE LIGHTING		EACH	\$300,000.00	\$0.00	
CONTINUOUS ROADWAY LIGHTING	4800	FT	\$100.00	\$480,000.00	
Traffic Control - Traffic Signal Subtotal				\$480,000.00	

Utility Relocations - Gas, Electric, Water, Wastewater					
Description	Quantity	Unit	Unit Cost	Total	
HIGH PRESSURE GAS LINE		FT		\$0.00	
WATERLINE 36" OR LARGER		FT		\$0.00	
HIGH VOLTAGE TOWER		EACH		\$0.00	
SANITARY LINE 36" OR LARGER		FT		\$0.00	
DAM MODIFICATION		LUMP		\$0.00	
Water/Wastewater Subtotal				\$0.00	

Structures		y		
Description	Quantity	Unit	Unit Cost	Total
RETAINING WALL		SF	\$90.00	\$0.00
BRIDGE		SF	\$220.00	\$0.00
		Pave	ement Subtotal	\$0.00

Incidentals				
Description	Quantity	Unit	Unit Cost	Total
CONSTRUCTION LAYOUT STAKES	80000	LUMP	\$1.00	\$80,000.00
MAINTENANCE OF TRAFFIC	465000	LUMP	\$1.00	\$465,000.00
MOBILIZATION	800000	LUMP	\$1.00	\$800,000.00
		Miccolla	nague Subtotal	\$1.24E 000.00

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	Project Summary	Subtotal
	Roadway	\$1,806,900
	Erosion Control	\$302,000
	Drainage	\$1,926,000
۹	Pavement	\$6,178,200
	Traffic Control - Signing and Pavement Marking	\$254,800
	Traffic Signal and Surveillance	\$0
	Roadway Lighting	\$480,000
	Utility Relocations - Gas, Electric, Water, Wastewater	\$0
	Structures	\$0
	Incidentals	\$1,345,000
	Total	\$12,293,000

Contingency (30%)	4	\$3,688,000
	Subtotal	\$15,981,000
Right-of-Way		\$0
Engineering (18%)		\$2,877,000
Construction Engineering (10%)		\$1,598,000
	Subtotal	\$20,456,000



# SEGMENT 3 CONCEPT D - OVERALL

SEGMENT 3 CONCEPT D - RANGE 1	Quantity
Construction Subtotal	\$15,845,000
Contingency (30%)	\$4,754,000
Construction Total	\$20,599,000
Right-of-Way	\$0
Engineering (18%)	\$3,708,000
Construction Engineering (10%)	\$2,060,000
Project Subtotal	\$26,367,000
Inflation (30%)	\$7,910,100
Subtotal	\$34,277,000
SEGMENT 3 CONCEPT D - RANGE 2	
Construction Subtotal	\$20,486,000
Contingency (30%)	\$6,146,000
Construction Total	\$26,632,000
Right-of-Way	\$0
Engineering (18%)	\$4,794,000
Construction Engineering (10%)	\$2,663,000
Project Subtotal	\$34,089,000
Inflation (30%)	\$10,226,700
Subtotal	\$44,316,000
SEGMENT 3 CONCEPT D - RANGE 3	
Construction Subtotal	\$12,347,000
Contingency (30%)	\$3,704,000
Construction Total	\$16,051,000
Right-of-Way	\$0
Engineering (18%)	\$2,889,000
Construction Engineering (10%)	\$1,605,000
Project Subtotal	\$20,545,000
Inflation (30%)	\$6,163,500
Subtotal	\$26,709,000

SEGMENT 3 - OVERALL	
SEGMENT 3 CONCEPT D - RANGE 1	\$34,277,000
SEGMENT 3 CONCEPT D - RANGE 2	\$44,316,000
SEGMENT 3 CONCEPT D - RANGE 3	\$26,709,000
Total - Segment 3 - Overall	\$105,302,000

Construction w/ Contingency w/out Inflation \$81,001,000





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Roadway					
Description	Quantity	Unit	Unit Cost	Total	
PAVEMENT REMOVED	39,100	SY	\$20.00	\$782,000.00	
CULVERT REMOVED	1,300	FT	\$100.00	\$130,000.00	
EXCAVATION	8,000	CY	\$40.00	\$320,000.00	
EMBANKMENT	11,000	CY	\$45.00	\$495,000.00	
GUARDRAIL	500	FT	\$22.00	\$11,000.00	
MEDIAN BARRIER	3,200	FT	\$120.00	\$384,000.00	
CURB AND GUTTER	5,200	FT	\$42.00	\$218,400.00	
CONCRETE MEDIAN	1,300	SY	\$100.00	\$130,000.00	
CONCRETE WALK		SF	\$13.00	\$0.00	
Roadway Subtotal					

Erosion Control					
Description	Quantity	Unit	Unit Cost	Total	
EROSION CONTROL	210,000	EACH	\$1.00	\$210,000.00	
EROSION CONTROL PLAN	1	LUMP	\$40,000.00	\$40,000.00	
BMPs	1	LUMP	\$105,000.00	\$105,000.00	
SEEDING AND MULCHING	22,600	SY	\$2.00	\$45,200.00	
Erosion Control Subtotal				\$400,200.00	

Drainage				
Description	Quantity	Unit	Unit Cost	Total
CULVERT	1,300	FT	\$600.00	\$780,000.00
STORM SEWER SYSTEM	5,900	FT	\$300.00	\$1,770,000.00
UNDERDRAINS	31,000	FT	\$15.00	\$465,000.00
Drainage Subtotal				\$3,015,000.00

Pavement					
Description	Quantity	Unit	Unit Cost	Total	
FULL-DEPTH PAVEMENT (ASPHALT)	51,000	SY	\$145.00	\$7,395,000.00	
FULL-DEPTH PAVEMENT (CONCRETE)		SY	\$145.00	\$0.00	
PAVEMENT PLANING AND RESURFACING	12,100	SY	\$54.00	\$653,400.00	
SHARED USE PATH		SY	\$42.00	\$0.00	
Payament Subtotal				¢0 040 400 00	

Traffic Control - Signing and Pavement Marking					
Description Quantity Unit Unit Cost Total					
SIGNING	1.11	MILE	\$250,000.00	\$277,500.00	
PAVEMENT MARKINGS - THERMO		MILE	\$14,000.00	\$0.00	
PAVEMENT MARKINGS - RECESSED	1.11	MILE	\$30,000.00	\$33,300.00	
Traffic Control - Signing and Pavement Marking Subtotal			\$310,800.00		

Traffic Signal and Surveillance					
Description Quantity Unit Unit Cost					
STANDARD TRAFFIC SIGNAL	1	EACH	\$300,000.00	\$300,000.00	
TRAFFIC SIGNAL FOR R-CUT		EACH	\$780,000.00	\$0.00	
FIBER OPTIC COMMUNICATION	1.11	MILE	\$170,000.00	\$188,700.00	
CCTV	1	EACH	\$123,000.00	\$123,000.00	
Traffic Control - Traffic Signal Subtotal			\$611,700.00		

Roadway Lighting				
Description	Quantity	Unit	Unit Cost	Total
FULL INTERCHANGE LIGHTING		EACH	\$500,000.00	\$0.00
PARTIAL INTERCHANGE LIGHTING		EACH	\$300,000.00	\$0.00
CONTINUOUS ROADWAY LIGHTING		FT	\$100.00	\$0.00
Traffic Control - Traffic Signal Subtotal			\$0.00	

Utility Relocations - Gas, Electric, Water, Wastewater				
Description	Quantity	Unit	Unit Cost	Total
HIGH PRESSURE GAS LINE		FT		\$0.00
WATERLINE 36" OR LARGER		FT		\$0.00
HIGH VOLTAGE TOWER		EACH		\$0.00
SANITARY LINE 36" OR LARGER		FT		\$0.00
DAM MODIFICATION		LUMP		\$0.00
Water/Wastewater Subtotal			\$0.00	

Structures		y		
Description	Quantity	Unit	Unit Cost	Total
RETAINING WALL		SF	\$90.00	\$0.00
BRIDGE		SF	\$220.00	\$0.00
		Pave	ement Subtotal	\$0.00

Incidentals				
Description	Quantity	Unit	Unit Cost	Total
CONSTRUCTION LAYOUT STAKES	1	LUMP	\$83,500.00	\$83,500.00
MAINTENANCE OF TRAFFIC	1	LUMP	\$105,000.00	\$105,000.00
MOBILIZATION	1	LUMP	\$800,000.00	\$800,000.00
		Miscella	neous Subtotal	\$988,500.00

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	Project Summary	Subtotal
	Roadway	\$2,470,400
	Erosion Control	\$400,200
	Drainage	\$3,015,000
۹	Pavement	\$8,048,400
	Traffic Control - Signing and Pavement Marking	\$310,800
	Traffic Signal and Surveillance	\$611,700
	Roadway Lighting	\$0
	Utility Relocations - Gas, Electric, Water, Wastewater	\$0
	Structures	\$0
	Incidentals	\$988,500
	Total	\$15,845,000

Contingency (30%)	\$4,754,000
Si	ubtotal \$20,599,000
Right-of-Way	\$0
Engineering (18%)	\$3,708,000
Construction Engineering (10%)	\$2,060,000
Su	ubtotal \$26,367,000



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Roadway					
Description	Quantity	Unit	Unit Cost	Total	
PAVEMENT REMOVED	48,200	SY	\$20.00	\$964,000.00	
CULVERT REMOVED	200	FT	\$100.00	\$20,000.00	
EXCAVATION	7,500	CY	\$40.00	\$300,000.00	
EMBANKMENT	10,500	CY	\$45.00	\$472,500.00	
GUARDRAIL	700	FT	\$22.00	\$15,400.00	
MEDIAN BARRIER	1,400	FT	\$120.00	\$168,000.00	
CURB AND GUTTER	6,600	FT	\$42.00	\$277,200.00	
CONCRETE MEDIAN	28,700	SY	\$100.00	\$2,870,000.00	
CONCRETE WALK		SF	\$13.00	\$0.00	
		Roa	adway Subtotal	\$5,087,100.00	

Erosion Control				
Description	Quantity	Unit	Unit Cost	Total
EROSION CONTROL	275,000	EACH	\$1.00	\$275,000.00
EROSION CONTROL PLAN	1	LUMP	\$40,000.00	\$40,000.00
BMPs	1	LUMP	\$137,500.00	\$137,500.00
SEEDING AND MULCHING	22,600	SY	\$2.00	\$45,200.00
Erosion Control Subtotal				\$497,700.00

Drainage				
Description	Quantity	Unit	Unit Cost	Total
CULVERT	200	FT	\$600.00	\$120,000.00
STORM SEWER SYSTEM	5,700	FT	\$300.00	\$1,710,000.00
UNDERDRAINS	31,200	FT	\$15.00	\$468,000.00
Drainage Subtotal				\$2,298,000.00

Pavement				
Description	Quantity	Unit	Unit Cost	Total
FULL-DEPTH PAVEMENT (ASPHALT)	59,300	SY	\$145.00	\$8,598,500.00
FULL-DEPTH PAVEMENT (CONCRETE)		SY	\$145.00	\$0.00
PAVEMENT PLANING AND RESURFACING	8,900	SY	\$54.00	\$480,600.00
SHARED USE PATH		SY	\$42.00	\$0.00

Traffic Control - Signing and Pavement Marking					
Description Quantity Unit Unit Cost					
SIGNING	1.08	MILE	\$250,000.00	\$270,000.00	
PAVEMENT MARKINGS - THERMO		MILE	\$14,000.00	\$0.00	
PAVEMENT MARKINGS - RECESSED	1.08	MILE	\$30,000.00	\$32,400.00	
Traffic Control - Signing and Pavement Marking Subtotal					

Traffic Signal and Surveillance					
Description	Quantity	Unit	Unit Cost	Total	
STANDARD TRAFFIC SIGNAL		EACH	\$300,000.00	\$0.00	
TRAFFIC SIGNAL FOR R-CUT	1	EACH	\$780,000.00	\$780,000.00	
FIBER OPTIC COMMUNICATION	1.08	MILE	\$170,000.00	\$183,600.00	
CCTV	1	EACH	\$123,000.00	\$123,000.00	
Traffic Control - Traffic Signal Subtotal					

Roadway Lighting				
Description	Quantity	Unit	Unit Cost	Total
FULL INTERCHANGE LIGHTING		EACH	\$500,000.00	\$0.00
PARTIAL INTERCHANGE LIGHTING		EACH	\$300,000.00	\$0.00
CONTINUOUS ROADWAY LIGHTING		FT	\$100.00	\$0.00
Traffic Control - Traffic Signal Subtotal				

Utility Relocations - Gas, Electric, Water, Wastewater					
Description	Quantity	Unit	Unit Cost	Total	
HIGH PRESSURE GAS LINE		FT		\$0.00	
WATERLINE 36" OR LARGER		FT		\$0.00	
HIGH VOLTAGE TOWER		EACH		\$0.00	
SANITARY LINE 36" OR LARGER		FT		\$0.00	
DAM MODIFICATION		LUMP		\$0.00	
Water/Wastewater Subtotal					

Structures		y		
Description	Quantity	Unit	Unit Cost	Total
RETAINING WALL		SF	\$90.00	\$0.00
BRIDGE		SF	\$220.00	\$0.00
		Pave	ement Subtotal	\$0.00

Incidentals				
Description	Quantity	Unit	Unit Cost	Total
CONSTRUCTION LAYOUT STAKES	1	LUMP	\$135,000.00	\$135,000.00
MAINTENANCE OF TRAFFIC	1	LUMP	\$800,000.00	\$800,000.00
MOBILIZATION	1	LUMP	\$1,200,000.00	\$1,200,000.00
		Miscella	neous Subtotal	\$2,135,000.00

Project Summary		Subtotal
Roadway		\$5,087,100
Erosion Control	1	\$497,700
Drainage		\$2,298,000
Pavement		\$9,079,100
Traffic Control - Signing and Pavement Marking		\$302,400
Traffic Signal and Surveillance		\$1,086,600
Roadway Lighting		\$0
Utility Relocations - Gas, Electric, Water, Wastewater		\$0
Structures	4	\$0
Incidentals		\$2,135,000
	Total	\$20,486,000
	TOTAL	Q20,400,000

Contingency (30%)			\$6,146,000
		Subtotal	\$26,632,000
Right-of-Way			\$0
Engineering (18%)			\$4,794,000
Construction Enginee	ering (10%)		\$2,663,000
		Subtotal	\$34,089,000
Engineering (18%)	ering (10%)		\$4,794,000



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AAAA TO AAAA							
Roadway	Roadway						
Description Quantity Unit Unit Cost To							
PAVEMENT REMOVED	33,000	SY	\$20.00	\$660,000.00			
CULVERT REMOVED	200	FT	\$100.00	\$20,000.00			
EXCAVATION	6,500	CY	\$40.00	\$260,000.00			
EMBANKMENT	9,000	CY	\$45.00	\$405,000.00			
GUARDRAIL	500	FT	\$22.00	\$11,000.00			
MEDIAN BARRIER	1,900	FT	\$120.00	\$228,000.00			
CURB AND GUTTER	1,800	FT	\$42.00	\$75,600.00			
CONCRETE MEDIAN		SY	\$100.00	\$0.00			
CONCRETE WALK		SF	\$13.00	\$0.00			
Roadway Subtotal							

Erosion Control				
Description	Quantity	Unit	Unit Cost	Total
EROSION CONTROL	155,000	EACH	\$1.00	\$155,000.00
EROSION CONTROL PLAN	1	LUMP	\$30,000.00	\$30,000.00
BMPs	1	LUMP	\$77,500.00	\$77,500.00
SEEDING AND MULCHING	12,700	SY	\$2.00	\$25,400.00
Erosion Control Subtotal				\$287,900.00

Drainage				
Description	Quantity	Unit	Unit Cost	Total
CULVERT	200	FT	\$600.00	\$120,000.00
STORM SEWER SYSTEM	3,300	FT	\$300.00	\$990,000.00
UNDERDRAINS	19,200	FT	\$15.00	\$288,000.00
Drainage Subtotal				\$1,398,000.00

Pavement				
Description Quantity Unit Unit Cost				
FULL-DEPTH PAVEMENT (ASPHALT)	41,200	SY	\$145.00	\$5,974,000.00
FULL-DEPTH PAVEMENT (CONCRETE)		SY	\$145.00	\$0.00
PAVEMENT PLANING AND RESURFACING	10,700	SY	\$54.00	\$577,800.00
SHARED USE PATH		SY	\$42.00	\$0.00

Traffic Control - Signing and Pavement Marking						
Description Quantity Unit Unit Cost Total						
SIGNING	0.63	MILE	\$250,000.00	\$157,500.00		
PAVEMENT MARKINGS - THERMO		MILE	\$14,000.00	\$0.00		
PAVEMENT MARKINGS - RECESSED	0.63	MILE	\$30,000.00	\$18,900.00		
Traffic Control - Signing and Pavement Marking Subtotal				\$176,400.00		

Traffic Signal and Surveillance					
Description Quantity Unit Unit Cost					
STANDARD TRAFFIC SIGNAL	2	EACH	\$300,000.00	\$600,000.00	
TRAFFIC SIGNAL FOR R-CUT		EACH	\$780,000.00	\$0.00	
FIBER OPTIC COMMUNICATION	0.63	MILE	\$170,000.00	\$107,100.00	
CCTV	2	EACH	\$123,000.00	\$246,000.00	
Traffic Control - Traffic Signal Subtotal				\$953,100.00	

Roadway Lighting				
Description	Quantity	Unit	Unit Cost	Total
FULL INTERCHANGE LIGHTING		EACH	\$500,000.00	\$0.00
PARTIAL INTERCHANGE LIGHTING		EACH	\$300,000.00	\$0.00
CONTINUOUS ROADWAY LIGHTING		FT	\$100.00	\$0.00
Traffic Control - Traffic Signal Subtotal				\$0.00

Utility Relocations - Gas, Electric, Water, Wastewater				
Description	Quantity	Unit	Unit Cost	Total
HIGH PRESSURE GAS LINE		FT		\$0.00
WATERLINE 36" OR LARGER		FT		\$0.00
HIGH VOLTAGE TOWER		EACH		\$0.00
SANITARY LINE 36" OR LARGER		FT		\$0.00
DAM MODIFICATION		LUMP		\$0.00
	w	ater/Waste	water Subtotal	\$0.00

Structures		y		
Description	Quantity	Unit	Unit Cost	Total
RETAINING WALL		SF	\$90.00	\$0.00
BRIDGE		SF	\$220.00	\$0.00
		Pave	ement Subtotal	\$0.00

Incidentals				
Description	Quantity	Unit	Unit Cost	Total
CONSTRUCTION LAYOUT STAKES	1	LUMP	\$75,000.00	\$75,000.00
MAINTENANCE OF TRAFFIC	1	LUMP	\$445,000.00	\$445,000.00
MOBILIZATION	1	LUMP	\$800,000.00	\$800,000.00
		Miscella	neous Subtotal	\$1 220 000 00

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	Project Summary	Subtotal
	Roadway	\$1,659,600
	Erosion Control	\$287,900
	Drainage	\$1,398,000
۹	Pavement	\$6,551,800
	Traffic Control - Signing and Pavement Marking	\$176,400
	Traffic Signal and Surveillance	\$953,100
	Roadway Lighting	\$0
	Utility Relocations - Gas, Electric, Water, Wastewater	\$0
	Structures	\$0
	Incidentals	\$1,320,000
	Total	\$12,347,000

10101	Q12)547,000
Contingency (30%)	\$3,704,000
Subtotal	\$16,051,000
Right-of-Way	\$0
Engineering (18%)	\$2,889,000
Construction Engineering (10%)	\$1,605,000
Subtotal	\$20,545,000
Inflation (200/)	¢¢ 162 F00



# SEGMENT 4 CONCEPT A - OVERALL

SEGMENT 4 CONCEPT A - RANGE 1	Quantity
Construction Subtotal	\$55,828,000
Contingency (30%)	\$16,748,000
Construction Total	\$72,576,000
Right-of-Way	\$0
Engineering (18%)	\$13,064,000
Construction Engineering (10%)	\$7,258,000
Project Subtotal	\$92,898,000
Inflation (30%)	\$27,869,400
Subtotal	\$120,767,000
SEGMENT 4 CONCEPT A - RANGE 2	
Construction Subtotal	\$30,970,000
Contingency (30%)	\$9,291,000
Construction Total	\$40,261,000
Right-of-Way	\$0
Engineering (18%)	\$7,247,000
Construction Engineering (10%)	\$4,026,000
Project Subtotal	\$51,534,000
Inflation (30%)	\$15,460,200
Subtotal	\$66,994,000
SEGMENT 4 CONCEPT A - RANGE 3	
Construction Subtotal	\$18,930,000
Contingency (30%)	\$5,679,000
Construction Total	\$24,609,000
Right-of-Way	\$0
Engineering (18%)	\$4,430,000
Construction Engineering (10%)	\$2,461,000
Project Subtotal	\$31,500,000
Inflation (30%)	\$9,450,000
Subtotal	\$40,950,000
SEGMENT 4 CONCEPT A - RANGE 4	
Construction Subtotal	\$14,682,000
Contingency (30%)	\$4,405,000
Construction Total	\$19,087,000
Right-of-Way	\$0
Engineering (18%)	\$3,436,000
Construction Engineering (10%)	\$1,909,000
Project Subtotal	\$24,432,000
Inflation (30%)	\$7,329,600
Subtotal	\$31,762,000

SEGMENT 4 - OVERALL	
SEGMENT 4 CONCEPT A - RANGE 1	\$120,767,000
SEGMENT 4 CONCEPT A - RANGE 2	\$66,994,000
SEGMENT 4 CONCEPT A - RANGE 3	\$40,950,000
SEGMENT 4 CONCEPT A - RANGE 4	\$31,762,000
Total - Segment 4 - Overall	\$260,473,000

Construction w/ Contingency w/out Inflation \$200,364,000



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Roadway				
Description	Quantity	Unit	Unit Cost	Total
PAVEMENT REMOVED	15,970	SY	\$20.00	\$319,404.36
CULVERT REMOVED	250	FT	\$100.00	\$25,000.00
EXCAVATION	36,395	CY	\$40.00	\$1,455,816.05
EMBANKMENT	238,958	CY	\$45.00	\$10,753,101.22
GUARDRAIL	4,250	FT	\$22.00	\$93,500.00
MEDIAN BARRIER	0	FT	\$120.00	\$0.00
CURB AND GUTTER	12,064	FT	\$42.00	\$506,696.99
CONCRETE MEDIAN	286	SY	\$100.00	\$28,587.04
CONCRETE WALK	0	SF	\$13.00	\$0.00
Roadway Subtotal				\$13,182,105.67

Erosion Control				
Description	Quantity	Unit	Unit Cost	Total
EROSION CONTROL	407,750	EACH	\$1.00	\$407,750.00
EROSION CONTROL PLAN	50,000	LUMP	\$1.00	\$50,000.00
BMPs	268,000	LUMP	\$1.00	\$268,000.00
SEEDING AND MULCHING	71,962	SY	\$2.00	\$143,924.21
Erosion Control Subtotal			\$869,674.21	

Drainage				
Description	Quantity	Unit	Unit Cost	Total
CULVERT	1,000	FT	\$600.00	\$600,000.00
STORM SEWER SYSTEM	12,064	FT	\$300.00	\$3,619,264.20
UNDERDRAINS	31,984	FT	\$15.00	\$479,767.20
Drainage Subtotal				\$4,699,031,40

Pavement				
Description	Quantity	Unit	Unit Cost	Total
FULL DEPTH PAVEMENT, ASPHALT	36,122	SY	\$100.00	\$3,612,248.17
FULL DEPTH PAVEMENT, CONCRETE	16,323	SY	\$150.00	\$2,448,453.35
PAVEMENT PLANING AND RESURFACING	45,214	SY	\$54.00	\$2,441,568.05
SHARED USE PATH	0	SY	\$42.00	\$0.00
Pavement Subtotal				\$9 E02 260 E6

Traffic Control - Signing and Pavement Marking				
Description	Quantity	Unit	Unit Cost	Total
SIGNING	4	MILE	\$250,000.00	\$1,025,378.79
PAVEMENT MARKINGS - THERMO	2	MILE	\$14,000.00	\$25,605.68
PAVEMENT MARKINGS - RECESSED	2	MILE	\$30,000.00	\$68,176.14
Traffic Control - Signing and Pavement Marking Subtotal			\$1,119,160.61	

Traffic Signal and Surveillance				
Description	Quantity	Unit	Unit Cost	Total
STANDARD TRAFFIC SIGNAL	1	EACH	\$300,000.00	\$300,000.00
TRAFFIC SIGNAL FOR R-CUT	0	EACH	\$780,000.00	\$0.00
FIBER OPTIC COMMUNICATION	1	MILE	\$170,000.00	\$180,303.03
CCTV	1	EACH	\$123,000.00	\$123,000.00
Traffic Control - Traffic Signal Subtotal				¢602 202 02

Roadway Lighting				
Description	Quantity	Unit	Unit Cost	Total
FULL INTERCHANGE LIGHTING	1	EACH	\$500,000.00	\$500,000.00
PARTIAL INTERCHANGE LIGHTING	0	EACH	\$300,000.00	\$0.00
CONTINUOUS ROADWAY LIGHTING	0	FT	\$100.00	\$0.00
Traffic Control - Traffic Signal Subtotal				\$500,000.00

Utility Relocations - Gas, Electric, Water, Wastewater				
Description	Quantity	Unit	Unit Cost	Total
HIGH PRESSURE GAS LINE	775	FT	\$200.00	\$155,000.00
WATERLINE 36" OR LARGER		FT		\$0.00
HIGH VOLTAGE TOWER	8	EACH	\$1,500,000.00	\$12,000,000.00
SANITARY LINE 36" OR LARGER		FT		\$0.00
DAM MODIFICATION	0	LUMP		\$0.00
Water/Wastewater Subtotal				\$12,155,000.00

Structures				
Description	Quantity	Unit	Unit Cost	Total
RETAINING WALL	9,512	SF	\$90.00	\$856,123.56
BRIDGE	48,572	SF	\$220.00	\$10,685,941.42
		Pave	ement Subtotal	\$11,542,064.98

Incidentals				
Description	Quantity	Unit	Unit Cost	Total
CONSTRUCTION LAYOUT STAKES	1	LUMP	\$208,000.00	\$208,000.00
MAINTENANCE OF TRAFFIC	1	LUMP	\$1,247,000.00	\$1,247,000.00
MOBILIZATION	1	LUMP	\$1,200,000.00	\$1,200,000.00
		Miscella	neous Subtotal	\$2,655,000,00

Project Summary	Subtotal
Roadway	\$13,182,106
Erosion Control	\$869,674
Drainage	\$4,699,031
Pavement	\$8,502,270
Traffic Control - Signing and Pavement Marking	\$1,119,161
Traffic Signal and Surveillance	\$603,303
Roadway Lighting	\$500,000
Utility Relocations - Gas, Electric, Water, Wastewater	\$12,155,000
Structures	\$11,542,065
Incidentals	\$2,655,000
Total	\$55,828,000

Contingency (30%)	\$16,748,000
Subtotal	\$72,576,000
Right-of-Way	\$0
Engineering (18%)	\$13,064,000
Construction Engineering (10%)	\$7,258,000
Subtotal	\$92,898,000
-	
Inflation (30%)	\$27.869.400



160+50.00	TO	210+00.00
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Roadway				
Description	Quantity	Unit	Unit Cost	Total
PAVEMENT REMOVED	14,264	SY	\$20.00	\$285,274.36
CULVERT REMOVED	0	FT	\$100.00	\$0.00
EXCAVATION	30,896	CY	\$40.00	\$1,235,831.35
EMBANKMENT	248,409	CY	\$45.00	\$11,178,399.50
GUARDRAIL	4,100	FT	\$22.00	\$90,200.00
MEDIAN BARRIER	0	FT	\$120.00	\$0.00
CURB AND GUTTER	4,654	FT	\$42.00	\$195,450.99
CONCRETE MEDIAN	8,559	SY	\$100.00	\$855,914.40
CONCRETE WALK	0	SF	\$13.00	\$0.00
Roadway Subtotal				

Erosion Control						
Description	Quantity	Unit	Unit Cost	Total		
EROSION CONTROL	664,750	EACH	\$1.00	\$664,750.00		
EROSION CONTROL PLAN	1	LUMP	\$50,000.00	\$50,000.00		
BMPs	1	LUMP	\$422,000.00	\$422,000.00		
SEEDING AND MULCHING	126,606	SY	\$2.00	\$253,212.60		
Erosion Control Subtotal				\$1,389,962.60		

Drainage					
Description	Quantity	Unit	Unit Cost	Total	
CULVERT	0	FT	\$600.00	\$0.00	
STORM SEWER SYSTEM	4,654	FT	\$300.00	\$1,396,078.50	
UNDERDRAINS	29,061	FT	\$15.00	\$435,915.00	
	\$1,831,993,50				

Pavement				
Description	Quantity	Unit	Unit Cost	Total
FULL DEPTH PAVEMENT, ASPHALT	25,358	SY	\$100.00	\$2,535,791.28
FULL DEPTH PAVEMENT, CONCRETE	17,612	SY	\$150.00	\$2,641,850.45
PAVEMENT PLANING AND RESURFACING	39,905	SY	\$54.00	\$2,154,843.99
SHARED USE PATH	693	SY	\$42.00	\$29,106.00
		0		A

Traffic Control - Signing and Pavement Marking						
Description	Quantity	Unit	Unit Cost	Total		
SIGNING	4	MILE	\$250,000.00	\$881,912.88		
PAVEMENT MARKINGS - THERMO	1	MILE	\$14,000.00	\$14,938.64		
PAVEMENT MARKINGS - RECESSED	2	MILE	\$30,000.00	\$73,818.18		
Traffic Control - Signing and Pavement Marking Subtotal						

Traffic Signal and Surveillance					
Description	Quantity	Unit	Unit Cost	Total	
STANDARD TRAFFIC SIGNAL	2	EACH	\$300,000.00	\$600,000.00	
TRAFFIC SIGNAL FOR R-CUT	0	EACH	\$780,000.00	\$0.00	
FIBER OPTIC COMMUNICATION	1	MILE	\$170,000.00	\$159,375.00	
CCTV	2	EACH	\$123,000.00	\$246,000.00	
Traffic Control - Traffic Signal Subtotal					

Roadway Lighting						
Description Quantity Unit Unit Cost						
FULL INTERCHANGE LIGHTING	1	EACH	\$500,000.00	\$500,000.00		
PARTIAL INTERCHANGE LIGHTING	0	EACH	\$300,000.00	\$0.00		
CONTINUOUS ROADWAY LIGHTING	0	FT	\$100.00	\$0.00		
Traffic Control - Traffic Signal Subtotal				\$500,000.00		

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Utility Relocations - Gas, Electric, Water, Wastewater						
Description		Quantity	Unit	Unit C	Cost	Total
HIGH PRESSURE GAS LINE	4	900	FT	\$200	.00	\$180,000.00
WATERLINE 36" OR LARGER	П		FT			\$0.00
HIGH VOLTAGE TOWER		0	EACH			\$0.00
SANITARY LINE 36" OR LARGER			FT			\$0.00
DAM MODIFICATION		0	LUMP			\$0.00
			. /2		40	

Structures				
Description	Quantity	Unit	Unit Cost	Total
RETAINING WALL	1,007	SF	\$90.00	\$90,606.24
BRIDGE	8,942	SF	\$220.00	\$1,967,236.92
		Pave	ement Subtotal	\$2,057,843.16

Incidentals				
Description	Quantity	Unit	Unit Cost	Total
CONSTRUCTION LAYOUT STAKES	1	LUMP	\$147,000.00	\$147,000.00
MAINTENANCE OF TRAFFIC	1	LUMP	\$884,000.00	\$884,000.00
MOBILIZATION	1	LUMP	\$800,000.00	\$800,000.00
		Miscella	neous Subtotal	\$1.831.000.00

	1	
Project Summary		Subtotal
Roadway		\$13,841,071
Erosion Control	1	\$1,389,963
Drainage		\$1,831,994
Pavement		\$7,361,592
Traffic Control - Signing and Pavement Marking		\$970,670
Traffic Signal and Surveillance		\$1,005,375
Roadway Lighting		\$500,000
Utility Relocations - Gas, Electric, Water, Wastewater		\$180,000
Structures	4	\$2,057,843
Incidentals		\$1,831,000
	Total	\$30,970,000

Contingency (30%)		4	\$9,291,000
		Subtotal	\$40,261,000
Right-of-Way			\$0
Engineering (18%)			\$7,247,000
Construction Engineering (10	0%)		\$4,026,000
		Subtotal	\$51,534,000



210+00.00	TO	250+50.00
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Roadway				
Description	Quantity	Unit	Unit Cost	Total
PAVEMENT REMOVED	5,784	SY	\$20.00	\$115,681.28
CULVERT REMOVED	0	FT	\$100.00	\$0.00
EXCAVATION	77,904	CY	\$40.00	\$3,116,178.38
EMBANKMENT	74,269	CY	\$45.00	\$3,342,100.34
GUARDRAIL	2,250	FT	\$22.00	\$49,500.00
MEDIAN BARRIER	0	FT	\$120.00	\$0.00
CURB AND GUTTER	4,798	FT	\$42.00	\$201,503.65
CONCRETE MEDIAN	250	SY	\$100.00	\$25,045.17
CONCRETE WALK	0	SF	\$13.00	\$0.00
Roadway Subtotal				\$6,850,008.82

Erosion Control				
Description	Quantity	Unit	Unit Cost	Total
EROSION CONTROL	278,000	EACH	1	\$278,000.00
EROSION CONTROL PLAN	1	LUMP	\$50,000.00	\$50,000.00
BMPs	1	LUMP	\$200,000.00	\$200,000.00
SEEDING AND MULCHING	50,065	SY	\$2.00	\$100,129.13
Erosion Control Subtotal				\$628,129.13

Drainage				
Description	Quantity	Unit	Unit Cost	Total
CULVERT	0	FT	\$600.00	\$0.00
STORM SEWER SYSTEM	4,798	FT	\$300.00	\$1,439,311.80
UNDERDRAINS	15,950	FT	\$15.00	\$239,250.00
Drainage Subtotal				\$1,678,561,80

Pavement				
Description	Quantity	Unit	Unit Cost	Total
FULL DEPTH PAVEMENT, ASPHALT	22,126	SY	\$100.00	\$2,212,582.31
FULL DEPTH PAVEMENT, CONCRETE	10,220	SY	\$150.00	\$1,533,019.53
PAVEMENT PLANING AND RESURFACING	32,171	SY	\$54.00	\$1,737,260.98
SHARED USE PATH	0	SY	\$42.00	\$0.00
Pavement Subtotal				

Traffic Control - Signing and Pavement Marking				
Description	Quantity	Unit	Unit Cost	Total
SIGNING	2	MILE	\$250,000.00	\$503,077.65
PAVEMENT MARKINGS - THERMO	1	MILE	\$14,000.00	\$17,433.71
PAVEMENT MARKINGS - RECESSED	1	MILE	\$30,000.00	\$23,011.36
Traffic Control - Signing and Pavement Marking Subtotal				\$543,522.73

Traffic Signal and Surveillance				
Description	Quantity	Unit	Unit Cost	Total
STANDARD TRAFFIC SIGNAL	1	EACH	\$300,000.00	\$300,000.00
TRAFFIC SIGNAL FOR R-CUT	0	EACH	\$780,000.00	\$0.00
FIBER OPTIC COMMUNICATION	1	MILE	\$170,000.00	\$130,397.73
CCTV	1	EACH	\$123,000.00	\$123,000.00
Traffic Control - Traffic Signal Subtotal				

Roadway Lighting					
Description	Quantity	Unit	Unit Cost	Total	
FULL INTERCHANGE LIGHTING	0	EACH	\$500,000.00	\$0.00	
PARTIAL INTERCHANGE LIGHTING	1	EACH	\$300,000.00	\$300,000.00	
CONTINUOUS ROADWAY LIGHTING	0	FT	\$100.00	\$0.00	
Traffic Control - Traffic Signal Subtotal					

Utility Relocations - Gas, Electric, Water, Wastewater					
Description		Quantity	Unit	Unit Cost	Total
HIGH PRESSURE GAS LINE	4	725	FT	\$200.00	\$145,000.00
WATERLINE 36" OR LARGER	4		FT		\$0.00
HIGH VOLTAGE TOWER		0	EACH		\$0.00
SANITARY LINE 36" OR LARGER			FT		\$0.00
DAM MODIFICATION		0	LUMP		\$0.00
Water/Wastewater Subtotal					\$145,000.00

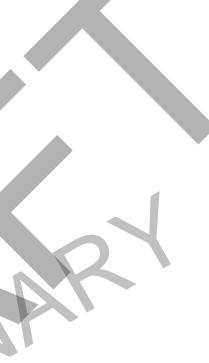
Structures				
Description	Quantity	Unit	Unit Cost	Total
RETAINING WALL	2,923	SF	\$90.00	\$263,096.46
BRIDGE	7,393	SF	\$220.00	\$1,626,474.96
		Pave	ement Subtotal	\$1,889,571.42

Incidentals				
Description	Quantity	Unit	Unit Cost	Total
CONSTRUCTION LAYOUT STAKES	1	LUMP	\$92,000.00	\$92,000.00
MAINTENANCE OF TRAFFIC	1	LUMP	\$367,000.00	\$367,000.00
MOBILIZATION	1	LUMP	\$400,000.00	\$400,000.00
		Miscella	neous Subtotal	\$859,000,00

Project Summary		Subtotal
Roadway		\$6,850,009
Erosion Control	7	\$628,129
Drainage	- 1	\$1,678,562
Pavement		\$5,482,863
Traffic Control - Signing and Pavement Marking	- 1	\$543,523
Traffic Signal and Surveillance		\$553,398
Roadway Lighting	- 1	\$300,000
Utility Relocations - Gas, Electric, Water, Wastewater	L	\$145,000
Structures	- 4	\$1,889,571
Incidentals		\$859,000
	Total	\$18,930,000

Contingency (30%)	\$5,679,000
Subtotal	\$24,609,000
Right-of-Way	\$0
Engineering (18%)	\$4,430,000
Construction Engineering (10%)	\$2,461,000
Subtotal	\$31,500,000
Inflation (30%)	\$9,450,000





250+50.00	TO	294+33.41
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Roadway				
Description	Quantity	Unit	Unit Cost	Total
PAVEMENT REMOVED	556	SY	\$20.00	\$11,129.40
CULVERT REMOVED	0	FT	\$100.00	\$0.00
EXCAVATION	15,502	CY	\$40.00	\$620,067.11
EMBANKMENT	130,277	CY	\$45.00	\$5,862,442.61
GUARDRAIL	0	FT	\$22.00	\$0.00
MEDIAN BARRIER	0	FT	\$120.00	\$0.00
CURB AND GUTTER	9,462	FT	\$42.00	\$397,399.55
CONCRETE MEDIAN	0	SY	\$100.00	\$0.00
CONCRETE WALK	0	SF	\$13.00	\$0.00
Roadway Subtotal				

Erosion Control					
Description	Quantity	Unit	Unit Cost	Total	
EROSION CONTROL	205,000	EACH	\$1.00	\$205,000.00	
EROSION CONTROL PLAN	1	LUMP	\$25,000.00	\$25,000.00	
BMPs	1	LUMP	\$152,000.00	\$152,000.00	
SEEDING AND MULCHING	35,394	SY	\$2.00	\$70,788.25	
Erosion Control Subtotal				\$452,788.25	

Drainage				
Description	Quantity	Unit	Unit Cost	Total
CULVERT	0	FT	\$600.00	\$0.00
STORM SEWER SYSTEM	9,462	FT	\$300.00	\$2,838,568.20
UNDERDRAINS	8,558	FT	\$15.00	\$128,370.00
Drainage Subtotal 6				

Pavement					
Description	Quantity	Unit	Unit Cost	Total	
FULL DEPTH PAVEMENT, ASPHALT	12,236	SY	\$100.00	\$1,223,637.87	
PAVEMENT PLANING AND RESURFACING	34,527	SY	\$54.00	\$1,864,452.29	
SHARED USE PATH	0	SY	\$42.00	\$0.00	
Pavement Subtotal					

Traffic Control - Signing and Pavement Marking					
Description	Quantity	Unit	Unit Cost	Total	
SIGNING	2	MILE	\$250,000.00	\$410,085.23	
PAVEMENT MARKINGS - THERMO	1	MILE	\$14,000.00	\$11,343.18	
PAVEMENT MARKINGS - RECESSED	1	MILE	\$30,000.00	\$24,903.41	
Traffic Control - Signing and Pavement Marking Subtotal					

Traffic Signal and Surveillance					
Description	Quantity	Unit	Unit Cost	Total	
STANDARD TRAFFIC SIGNAL	0	EACH	\$300,000.00	\$0.00	
TRAFFIC SIGNAL FOR R-CUT	0	EACH	\$780,000.00	\$0.00	
FIBER OPTIC COMMUNICATION	1	MILE	\$170,000.00	\$141,119.32	
CCTV	0	EACH	\$123,000.00	\$0.00	
Traffic Control - Traffic Signal Subtotal					

Roadway Lighting					
Description	Quantity	Unit	Unit Cost	Total	
FULL INTERCHANGE LIGHTING	0	EACH	\$500,000.00	\$0.00	
PARTIAL INTERCHANGE LIGHTING	0	EACH	\$300,000.00	\$0.00	
CONTINUOUS ROADWAY LIGHTING	0	FT	\$100.00	\$0.00	
Traffic Control - Traffic Signal Subtotal					

Utility Relocations - Gas, Electric, Water, Wastewater					
Description	Quantity	Unit	Unit Cost	Total	
HIGH PRESSURE GAS LINE	400	FT	\$200.00	\$80,000.00	
WATERLINE 36" OR LARGER		FT		\$0.00	
HIGH VOLTAGE TOWER	0	EACH		\$0.00	
SANITARY LINE 36" OR LARGER		FT		\$0.00	
DAM MODIFICATION	0	LUMP		\$0.00	
	W	ater/Waste	water Subtotal	con non no	

Structures				
Description	Quantity	Unit	Unit Cost	Total
RETAINING WALL	0	SF	\$90.00	\$0.00
BRIDGE	0	SF	\$220.00	\$0.00
		Pave	ement Subtotal	\$0.00

Incidentals			4		
Description		Quantity	Unit	Unit Cost	Total
CONSTRUCTION LAYOUT STAKES		1	LUMP	\$72,000.00	\$72,000.00
MAINTENANCE OF TRAFFIC		1	LUMP	\$144,000.00	\$144,000.00
MOBILIZATION		1	LUMP	\$400,000.00	\$400,000.00
	Miscellaneous Subtotal				\$616,000.00

Project Summary		Subtotal
Roadway		\$6,891,039
Erosion Control	- 70	\$452,788
Drainage	- 1	\$2,966,938
Pavement		\$3,088,090
Traffic Control - Signing and Pavement Marking		\$446,332
Traffic Signal and Surveillance		\$141,119
Roadway Lighting		\$0
Utility Relocations - Gas, Electric, Water, Wastewater		\$80,000
Structures		\$0
Incidentals	-4	\$616,000
T	otal	\$14,682,000

Contingency (30%)				\$4,405,000	
					_
		_	Subtotal	\$19,087,000	Ī
					_
Right-of-Way				\$0	Ī
					_
Engineering (18%)				\$3,436,000	_
					_
Construction Engineer	oring (100/)			¢1 000 000	ī

	 += .,,
Inflation (30%)	¢7 220 600
Inflation (30%)	\$7,329,600

Project Total (2030 Dollars) \$31,762,000

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# SEGMENT 4 CONCEPT B - OVERALL

SEGMENT 4 CONCEPT B - RANGE 1	Quantity
Construction Subtotal	\$26,025,000
Contingency (30%)	\$7,808,000
Construction Total	\$33,833,000
Right-of-Way	\$0
Engineering (18%)	\$6,090,000
Construction Engineering (10%)	\$3,383,000
Project Subtotal	\$43,306,000
Inflation (30%)	\$12,991,800
Subtotal	\$56,298,000
SEGMENT 4 CONCEPT B - RANGE 2	
Construction Subtotal	\$16,676,000
Contingency (30%)	\$5,003,000
Construction Total	\$21,679,000
Right-of-Way	\$0
Engineering (18%)	\$3,902,000
Construction Engineering (10%)	\$2,168,000
Project Subtotal	\$27,749,000
Inflation (30%)	\$8,324,700
Subtotal	\$36,074,000
SEGMENT 4 CONCEPT B - RANGE 3	
Construction Subtotal	\$16,102,000
Contingency (30%)	\$4,831,000
Construction Total	\$20,933,000
Right-of-Way	\$0
Engineering (18%)	\$3,768,000
Construction Engineering (10%)	\$2,093,000
Project Subtotal	\$26,794,000
Inflation (30%)	\$8,038,200
Subtotal	\$34,832,000
SEGMENT 4 CONCEPT B - RANGE 4	
Construction Subtotal	\$11,627,000
Contingency (30%)	\$3,488,000
Construction Total	\$15,115,000
Right-of-Way	\$0
Engineering (18%)	\$2,721,000
Construction Engineering (10%)	\$1,512,000
Project Subtotal	\$19,348,000
Inflation (30%)	\$5,804,400
Subtotal	\$25,152,000

SEGMENT 4 - OVERALL	
SEGMENT 4 CONCEPT B - RANGE 1	\$56,298,000
SEGMENT 4 CONCEPT B - RANGE 2	\$36,074,000
SEGMENT 4 CONCEPT B - RANGE 3	\$34,832,000
SEGMENT 4 CONCEPT B - RANGE 4	\$25,152,000
Total - Segment 4 - Overall	\$152,356,000

Construction w/ Contingency w/out Inflation \$117,197,000



104+50.00 TO	160+50.00
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Roadway							
Description	Quantity	Unit	Unit Cost	Total			
PAVEMENT REMOVED	23,723	SY	\$20.00	\$474,462.01			
CULVERT REMOVED	250	FT	\$100.00	\$25,000.00			
EXCAVATION	28,058	CY	\$40.00	\$1,122,315.78			
EMBANKMENT	74,645	CY	\$45.00	\$3,359,041.09			
GUARDRAIL	1,400	FT	\$22.00	\$30,800.00			
MEDIAN BARRIER	0	FT	\$120.00	\$0.00			
CURB AND GUTTER	415	FT	\$42.00	\$17,430.00			
CONCRETE MEDIAN	305	SY	\$100.00	\$30,469.36			
CONCRETE WALK	0	SF	\$13.00	\$0.00			
		Roa	Roadway Subtotal				

Erosion Control				
Description	Quantity	Unit	Unit Cost	Total
EROSION CONTROL	250,000	EACH	\$1.00	\$250,000.00
EROSION CONTROL PLAN	1	LUMP	\$50,000.00	\$50,000.00
BMPs	1	LUMP	\$148,000.00	\$148,000.00
SEEDING AND MULCHING	34,342	SY	\$2.00	\$68,683.76
Erosion Control Subtotal			\$516,683.76	

Drainage					
Description	Quantity	Unit	Unit Cost	Total	
CULVERT	350	FT	\$600.00	\$210,000.00	
STORM SEWER SYSTEM	415	FT	\$300.00	\$124,500.00	
UNDERDRAINS	30,376	FT	\$15.00	\$455,640.00	
Drainage Subtotal			\$790,140,00		

Pavement					
Description	Quantity	Unit	Unit Cost	Total	
FULL DEPTH PAVEMENT, ASPHALT	32,352	SY	\$100.00	\$3,235,236.06	
FULL DEPTH PAVEMENT, CONCRETE	6,622	SY	\$150.00	\$993,358.10	
PAVEMENT PLANING AND RESURFACING	32,346	SY	\$54.00	\$1,746,691.76	
SHARED USE PATH	0	SY	\$42.00	\$0.00	
Pavement Subtotal				\$5 075 295 02	

Traffic Control - Signing and Pavement Marking						
Description	Quantity Unit Unit Cost					
SIGNING	2	MILE	\$250,000.00	\$464,015.15		
PAVEMENT MARKINGS - THERMO	1	MILE	\$14,000.00	\$11,136.36		
PAVEMENT MARKINGS - RECESSED	1	MILE	\$30,000.00	\$31,818.18		
Traffic Control - Signing and Pavement Marking Subtotal				\$506,969.70		

Traffic Signal and Surveillance						
Description	ption Quantity Unit Unit Cost					
STANDARD TRAFFIC SIGNAL	2	EACH	\$300,000.00	\$600,000.00		
TRAFFIC SIGNAL FOR R-CUT	0	EACH	\$780,000.00	\$0.00		
FIBER OPTIC COMMUNICATION	1	MILE	\$170,000.00	\$180,303.03		
CCTV	2	EACH	\$123,000.00	\$246,000.00		
Traffic Control - Traffic Signal Subtotal			\$1,026,303.03			

Roadway Lighting				
Description	Quantity	Unit	Unit Cost	Total
FULL INTERCHANGE LIGHTING	0	EACH	\$500,000.00	\$0.00
PARTIAL INTERCHANGE LIGHTING	1	EACH	\$300,000.00	\$300,000.00
CONTINUOUS ROADWAY LIGHTING	0	FT	\$100.00	\$0.00
Traffic Control - Traffic Signal Subtotal				\$300,000.00

Utility Relocations - Gas, Electric, Water, Wastewater				
Description	Quantity	Unit	Unit Cost	Total
HIGH PRESSURE GAS LINE	1350	FT	\$200.00	\$270,000.00
WATERLINE 36" OR LARGER		FT		\$0.00
HIGH VOLTAGE TOWER	6	EACH	\$1,500,000.00	\$9,000,000.00
SANITARY LINE 36" OR LARGER		FT		\$0.00
DAM MODIFICATION	0	LUMP	\$0.00	\$0.00
Water/Marteurstay Subtestal				

Structures				
Description	Quantity	Unit	Unit Cost	Total
RETAINING WALL	430	SF	\$90.00	\$38,700.00
BRIDGE	7,134	SF	\$220.00	\$1,569,397.50
		Pave	ement Subtotal	\$1,608,097.50

Incidentals	7				
Description		Quantity	Unit	Unit Cost	Total
CONSTRUCTION LAYOUT STAKES		1	LUMP	\$82,000.00	\$82,000.00
MAINTENANCE OF TRAFFIC		1	LUMP	\$490,000.00	\$490,000.00
MOBILIZATION		1	LUMP	\$400,000.00	\$400,000.00
			Miscella	neous Subtotal	\$972,000,00

Project Summary	Subtotal
Roadway	\$5,059,518
Erosion Control	\$516,684
Drainage	\$790,140
Pavement	\$5,975,286
Traffic Control - Signing and Pavement Marking	\$506,970
Traffic Signal and Surveillance	\$1,026,303
Roadway Lighting	\$300,000
Utility Relocations - Gas, Electric, Water, Wastewater	\$9,270,000
Structures	\$1,608,098
Incidentals	\$972,000
Tota	\$26,025,000

Contingency (30%)	\$7,808,000
Subtotal	\$33,833,000
Right-of-Way	\$0
Engineering (18%)	\$6,090,000
Construction Engineering (10%)	\$3,383,000
Subtotal	\$43,306,000
Inflation (30%)	\$12,991,800



160+50.00	TO	210+00.00	
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Roadway				
Description	Quantity	Unit	Unit Cost	Total
PAVEMENT REMOVED	25,630	SY	\$20.00	\$512,606.70
CULVERT REMOVED	0	FT	\$100.00	\$0.00
EXCAVATION	46,607	CY	\$40.00	\$1,864,280.98
EMBANKMENT	40,435	CY	\$45.00	\$1,819,585.22
GUARDRAIL	2,500	FT	\$22.00	\$55,000.00
MEDIAN BARRIER	0	FT	\$120.00	\$0.00
CURB AND GUTTER	1,250	FT	\$42.00	\$52,500.00
CONCRETE MEDIAN	433	SY	\$100.00	\$43,280.57
CONCRETE WALK	0	SF	\$13.00	\$0.00
Roadway Subtotal				\$4,347,253.46

Erosion Control				
Description	Quantity	Unit	Unit Cost	Total
EROSION CONTROL	298,000	EACH	\$1.00	\$298,000.00
EROSION CONTROL PLAN	1	LUMP	\$50,000.00	\$50,000.00
BMPs	1	LUMP	\$181,000.00	\$181,000.00
SEEDING AND MULCHING	43,955	SY	\$2.00	\$87,910.68
Erosion Control Subtotal			\$616,910.68	

Drainage				
Description	Quantity	Unit	Unit Cost	Total
CULVERT	0	FT	\$600.00	\$0.00
STORM SEWER SYSTEM	1,250	FT	\$300.00	\$375,000.00
UNDERDRAINS	30,922	FT	\$15.00	\$463,830.00
Drainage Subtotal			\$838,830.00	

Pavement				
Description	Quantity	Unit	Unit Cost	Total
FULL DEPTH PAVEMENT, ASPHALT	33,714	SY	\$100.00	\$3,371,434.30
FULL DEPTH PAVEMENT, CONCRETE	8,904	SY	\$150.00	\$1,335,634.37
PAVEMENT PLANING AND RESURFACING	29,545	SY	\$54.00	\$1,595,428.86
SHARED USE PATH	693	SY	\$42.00	\$29,097.11
Pavement Subtotal				\$6 221 504 64

Traffic Control - Signing and Pavement Marking				
Description	Quantity	Unit	Unit Cost	Total
SIGNING	2	MILE	\$250,000.00	\$491,193.18
PAVEMENT MARKINGS - THERMO	1	MILE	\$14,000.00	\$14,381.82
PAVEMENT MARKINGS - RECESSED	1	MILE	\$30,000.00	\$28,125.00
Traffic Control - Signing and Pavement Marking Subtotal				\$533,700.00

Traffic Signal and Surveillance				
Description	Quantity	Unit	Unit Cost	Total
STANDARD TRAFFIC SIGNAL	2	EACH	\$300,000.00	\$600,000.00
TRAFFIC SIGNAL FOR R-CUT	0	EACH	\$780,000.00	\$0.00
FIBER OPTIC COMMUNICATION	1	MILE	\$170,000.00	\$159,375.00
CCTV	2	EACH	\$123,000.00	\$246,000.00
Traffic Control - Traffic Signal Subtotal				\$1,005,375,00

Roadway Lighting				
Description	Quantity	Unit	Unit Cost	Total
FULL INTERCHANGE LIGHTING	0	EACH	\$500,000.00	\$0.00
PARTIAL INTERCHANGE LIGHTING 1 EACH \$300,000.00				
CONTINUOUS ROADWAY LIGHTING	0	FT	\$100.00	\$0.00
Traffic Control - Traffic Signal Subtotal			\$300,000.00	

Utility Relocations - Gas, Electric, Water, Wastewater				
Description	Quantity	Unit	Unit Cost	Total
HIGH PRESSURE GAS LINE	900	FT	\$200.00	\$180,000.00
WATERLINE 36" OR LARGER		FT		\$0.00
HIGH VOLTAGE TOWER	0	EACH		\$0.00
SANITARY LINE 36" OR LARGER		FT		\$0.00
DAM MODIFICATION	0	LUMP	\$0.00	\$0.00
		. 6		

Structures				
Description	Quantity	Unit	Unit Cost	Total
RETAINING WALL	0	SF	\$90.00	\$0.00
BRIDGE	7,097	SF	\$220.00	\$1,561,407.10
		Pave	ement Subtotal	\$1,561,407.10

Incidentals				
Description	Quantity	Unit	Unit Cost	Total
CONSTRUCTION LAYOUT STAKES	1	LUMP	\$80,000.00	\$80,000.00
MAINTENANCE OF TRAFFIC	1	LUMP	\$481,000.00	\$481,000.00
MOBILIZATION	1	LUMP	\$400,000.00	\$400,000.00
		Miscella	neous Subtotal	\$961,000,00

Project Summary	Subtotal
Roadway	\$4,347,253
Erosion Control	\$616,911
Drainage	\$838,830
Pavement	\$6,331,595
Traffic Control - Signing and Pavement Marking	\$533,700
Traffic Signal and Surveillance	\$1,005,375
Roadway Lighting	\$300,000
Utility Relocations - Gas, Electric, Water, Wastewater	\$180,000
Structures	\$1,561,407
Incidentals	\$961,000
Total	\$16,676,000

Contingency (30%)	\$5,003,000
Subtotal	\$21,679,000
Right-of-Way	\$0
Engineering (18%)	\$3,902,000
Construction Engineering (10%)	\$2,168,000
Subtotal	\$27,749,000
Inflation (30%)	\$8,324,700



210+00.00	TO	250+50.00
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Roadway				
Description	Quantity	Unit	Unit Cost	Total
PAVEMENT REMOVED	12,510	SY	\$20.00	\$250,199.95
CULVERT REMOVED	0	FT	\$100.00	\$0.00
EXCAVATION	10,570	CY	\$40.00	\$422,809.93
EMBANKMENT	81,211	CY	\$45.00	\$3,654,495.17
GUARDRAIL	1,600	FT	\$22.00	\$35,200.00
MEDIAN BARRIER	0	FT	\$120.00	\$0.00
CURB AND GUTTER	5,200	FT	\$42.00	\$218,400.00
CONCRETE MEDIAN	215	SY	\$100.00	\$21,454.17
CONCRETE WALK	0	SF	\$13.00	\$0.00
Roadway Subtotal				\$4,602,559.21

Erosion Control				
Description	Quantity	Unit	Unit Cost	Total
EROSION CONTROL	188,000	EACH	\$1.00	\$188,000.00
EROSION CONTROL PLAN	1	LUMP	\$50,000.00	\$50,000.00
BMPs	1	LUMP	\$119,000.00	\$119,000.00
SEEDING AND MULCHING	26,056	SY	\$2.00	\$52,111.01
Erosion Control Subtotal			\$409,111.01	

Drainage				
Description Quantity Unit Unit Cost				
CULVERT	0	FT	\$600.00	\$0.00
STORM SEWER SYSTEM	5,200	FT	\$300.00	\$1,560,000.00
UNDERDRAINS	21,550	FT	\$15.00	\$323,250.00
Drainage Subtotal				\$1.883.250.00

Pavement				
Description Quantity Unit Unit Cost				
FULL DEPTH PAVEMENT, ASPHALT	16,714	SY	\$100.00	\$1,671,439.57
FULL DEPTH PAVEMENT, CONCRETE	12,169	SY	\$150.00	\$1,825,307.77
PAVEMENT PLANING AND RESURFACING	24,276	SY	\$54.00	\$1,310,923.34
SHARED USE PATH	0	SY	\$42.00	\$0.00
Payement Subtotal				\$4 907 670 67

Traffic Control - Signing and Pavement Marking				
Description Quantity Unit Unit Cost Total				
SIGNING	1	MILE	\$250,000.00	\$319,602.27
PAVEMENT MARKINGS - THERMO	1	MILE	\$14,000.00	\$7,159.09
PAVEMENT MARKINGS - RECESSED	1	MILE	\$30,000.00	\$23,011.36
Traffic Control - Signing and Pavement Marking Subtotal				

Traffic Signal and Surveillance				
Description Quantity Unit Unit Cost				
STANDARD TRAFFIC SIGNAL	2	EACH	\$300,000.00	\$600,000.00
TRAFFIC SIGNAL FOR R-CUT	0	EACH	\$780,000.00	\$0.00
FIBER OPTIC COMMUNICATION	1	MILE	\$170,000.00	\$130,397.73
CCTV	2	EACH	\$123,000.00	\$246,000.00
Traffic Control - Traffic Signal Subtotal				

Roadway Lighting				
Description Quantity Unit Unit Cost				
FULL INTERCHANGE LIGHTING	0	EACH	\$500,000.00	\$0.00
PARTIAL INTERCHANGE LIGHTING	1	EACH	\$300,000.00	\$300,000.00
CONTINUOUS ROADWAY LIGHTING	0	FT	\$100.00	\$0.00
Traffic Control - Traffic Signal Subtotal				\$300,000.00

Utility Relocations - Gas, Electric, Water, Wastewater					
Description		Quantity	Unit	Unit Cost	Total
HIGH PRESSURE GAS LINE		750	FT	\$200.00	\$150,000.00
WATERLINE 36" OR LARGER			FT		\$0.00
HIGH VOLTAGE TOWER		0	EACH		\$0.00
SANITARY LINE 36" OR LARGER			FT		\$0.00
DAM MODIFICATION		0	LUMP	\$0.00	\$0.00
Water/Wastewater Subtotal				\$150,000.00	

Structures				
Description	Quantity	Unit	Unit Cost	Total
RETAINING WALL	1,170	SF	\$90.00	\$105,300.00
BRIDGE	7,859	SF	\$220.00	\$1,729,051.06
		Pave	ement Subtotal	\$1,834,351.06

Incidentals				
Description	Quantity	Unit	Unit Cost	Total
CONSTRUCTION LAYOUT STAKES	1	LUMP	\$78,000.00	\$78,000.00
MAINTENANCE OF TRAFFIC	1	LUMP	\$311,000.00	\$311,000.00
MOBILIZATION	1	LUMP	\$400,000.00	\$400,000.00
		Miscella	neous Subtotal	\$789,000,00

Project Summary	Subtotal
Roadway	\$4,602,559
Erosion Control	\$409,111
Drainage	\$1,883,250
Pavement	\$4,807,671
Traffic Control - Signing and Pavement Marking	\$349,773
Traffic Signal and Surveillance	\$976,398
Roadway Lighting	\$300,000
Utility Relocations - Gas, Electric, Water, Wastewater	\$150,000
Structures	\$1,834,351
Incidentals	\$789,000
То	tal \$16,102,000

Contingency (30%)	\$4,831,000
Subtotal	\$20,933,000
Right-of-Way	\$0
Engineering (18%)	\$3,768,000
Construction Engineering (10%)	\$2,093,000
Subtotal	\$26,794,000
Inflation (30%)	\$8,038,200



#### SEGMENT 4 CONCEPT B - RANGE 4 250+50.00 TO 294+33.41

Roadway					
Description	Quantity	Unit	Unit Cost	Total	
PAVEMENT REMOVED	6,466	SY	\$20.00	\$129,320.62	
CULVERT REMOVED	0	FT	\$100.00	\$0.00	
EXCAVATION	53,264	CY	\$40.00	\$2,130,552.06	
EMBANKMENT	16,889	CY	\$45.00	\$759,990.45	
GUARDRAIL	0	FT	\$22.00	\$0.00	
MEDIAN BARRIER	0	FT	\$120.00	\$0.00	
CURB AND GUTTER	8,500	FT	\$42.00	\$357,000.00	
CONCRETE MEDIAN	73	SY	\$100.00	\$7,276.87	
CONCRETE WALK	0	SF	\$13.00	\$0.00	
Roadway Subtotal				\$3,384,140.00	

Erosion Control				
Description	Quantity	Unit	Unit Cost	Total
EROSION CONTROL	167,000	EACH	\$1.00	\$167,000.00
EROSION CONTROL PLAN	1	LUMP	\$25,000.00	\$25,000.00
BMPs	1	LUMP	\$122,000.00	\$122,000.00
SEEDING AND MULCHING	26,918	SY	\$2.00	\$53,836.07
Erosion Control Subtotal				\$367,836.07

Drainage				
Description	Quantity	Unit	Unit Cost	Total
CULVERT	0	FT	\$600.00	\$0.00
STORM SEWER SYSTEM	8,500	FT	\$300.00	\$2,550,000.00
UNDERDRAINS	17,550	FT	\$15.00	\$263,250.00
Drainage Subtotal				\$2,813,250.00

Pavement					
Description Quantity Unit Unit Cost					
FULL DEPTH PAVEMENT, ASPHALT	21,341	SY	\$100.00	\$2,134,052.68	
PAVEMENT PLANING AND RESURFACING	27,695	SY	\$54.00	\$1,495,508.18	
SHARED USE PATH	0	SY	\$42.00	\$0.00	
Pavement Subtotal					

Traffic Control - Signing and Pavement Marking						
Description Quantity Unit Unit Cost						
SIGNING	2	MILE	\$250,000.00	\$504,261.36		
PAVEMENT MARKINGS - THERMO 1 MILE \$14,000.00						
PAVEMENT MARKINGS - RECESSED 1 MILE \$30,000.00						
Traffic Control - Signing and Pavement Marking Subtotal						

Traffic Signal and Surveillance						
Description Quantity Unit Unit Cost						
STANDARD TRAFFIC SIGNAL	0	EACH	\$300,000.00	\$0.00		
TRAFFIC SIGNAL FOR R-CUT	0	EACH	\$780,000.00	\$0.00		
FIBER OPTIC COMMUNICATION	1	MILE	\$170,000.00	\$141,119.32		
CCTV	0	EACH	\$123,000.00	\$0.00		
Traffic Control - Traffic Signal Subtotal						

Roadway Lighting					
Description Quantity Unit Unit Cost					
FULL INTERCHANGE LIGHTING	0	EACH	\$500,000.00	\$0.00	
PARTIAL INTERCHANGE LIGHTING	0	EACH	\$300,000.00	\$0.00	
CONTINUOUS ROADWAY LIGHTING	0	FT	\$100.00	\$0.00	
Traffic Control - Traffic Signal Subtotal					

Utility Relocations - Gas, Electric, Water, Wastewater				
Description	Quantity	Unit	Unit Cost	Total
HIGH PRESSURE GAS LINE	875	FT	\$200.00	\$175,000.00
WATERLINE 36" OR LARGER		FT		\$0.00
HIGH VOLTAGE TOWER	0	EACH		\$0.00
SANITARY LINE 36" OR LARGER		FT		\$0.00
DAM MODIFICATION	0	LUMP	\$0.00	\$0.00
Water/Wastewater Subtotal				

Structures				
Description	Quantity	Unit	Unit Cost	Total
RETAINING WALL	0	SF	\$90.00	\$0.00
BRIDGE	0	SF	\$220.00	\$0.00
		Pave	ement Subtotal	\$0.00

Incidentals			4		
Description		Quantity	Unit	Unit Cost	Total
CONSTRUCTION LAYOUT STAKES		\$1.00	LUMP	\$57,000.00	\$57,000.00
MAINTENANCE OF TRAFFIC		\$1.00	LUMP	\$113,000.00	\$113,000.00
MOBILIZATION		\$1.00	LUMP	\$400,000.00	\$400,000.00
Miscellaneous Subtotal				\$570,000.00	

Project Summary		Subtotal
Roadway		\$3,384,140
Erosion Control	1.1	\$367,836
Drainage	1	\$2,813,250
Pavement		\$3,629,561
Traffic Control - Signing and Pavement Marking		\$545,782
Traffic Signal and Surveillance		\$141,119
Roadway Lighting		\$0
Utility Relocations - Gas, Electric, Water, Wastewater		\$175,000
Structures		\$0
Incidentals	- 4	\$570,000
	Total	\$11,627,000

Contingency (30%)			\$3,488,000
		Subtotal	\$15,115,000
Right-of-Way			\$0
Engineering (18%)			\$2,721,000
Construction Enginee	ering (10%)		\$1,512,000

	Subtotal	\$19,348,000
Inflation (30%)		\$5.804.400

Project Total (2030 Dollars) \$25,152,000





# SEGMENT 4 CONCEPT C - OVERALL

SEGMENT 4 CONCEPT C - RANGE 1	Quantity
Construction Subtotal	\$16,282,000
Contingency (30%)	\$4,885,000
Construction Total	\$21,167,000
Right-of-Way	\$0
Engineering (18%)	\$3,810,000
Construction Engineering (10%)	\$2,117,000
Project Subtotal	\$27,094,000
Inflation (30%)	\$8,128,200
Subtotal	\$35,222,000
SEGMENT 4 CONCEPT B - RANGE 2	
Construction Subtotal	\$19,616,000
Contingency (30%)	\$5,885,000
Construction Total	\$25,501,000
Right-of-Way	\$0
Engineering (18%)	\$4,590,000
Construction Engineering (10%)	\$2,550,000
Project Subtotal	\$32,641,000
Inflation (30%)	\$9,792,300
Subtotal	\$42,433,000
SEGMENT 4 CONCEPT B - RANGE 3	
Construction Subtotal	\$12,719,000
Contingency (30%)	\$3,816,000
Construction Total	\$16,535,000
Right-of-Way	\$0
Engineering (18%)	\$2,976,000
Construction Engineering (10%)	\$1,654,000
Project Subtotal	\$21,165,000
Inflation (30%)	\$6,349,500
Subtotal	\$27,515,000
SEGMENT 4 CONCEPT B - RANGE 4	
Construction Subtotal	\$10,096,000
Contingency (30%)	\$3,029,000
Construction Total	\$13,125,000
Right-of-Way	\$0
Engineering (18%)	\$2,363,000
Construction Engineering (10%)	\$1,313,000
Project Subtotal	\$16,801,000
Inflation (30%)	\$5,040,300
Subtotal	\$21,841,000

SEGMENT 4 - OVERALL	
SEGMENT 4 CONCEPT C - RANGE 1	\$35,222,000
SEGMENT 4 CONCEPT B - RANGE 2	\$42,433,000
SEGMENT 4 CONCEPT B - RANGE 3	\$27,515,000
SEGMENT 4 CONCEPT B - RANGE 4	\$21,841,000
Total - Segment 4 - Overall	\$127,011,000

Construction w/ Contingency w/out Inflation \$97,701,000



#### SEGMENT 4 CONCEPT C - RANGE 1 104+50.00 TO 160+50.00

104750:00 10 160750:00					
Roadway					
Description	Quantity	Unit	Unit Cost	Total	
PAVEMENT REMOVED	20,386	SY	\$20.00	\$407,713.46	
CULVERT REMOVED	250	FT	\$100.00	\$25,000.00	
EXCAVATION	32,317	CY	\$40.00	\$1,292,677.56	
EMBANKMENT	11,677	CY	\$45.00	\$525,452.09	
GUARDRAIL	1,000	FT	\$22.00	\$22,000.00	
MEDIAN BARRIER	775	FT	\$120.00	\$93,000.00	
CURB AND GUTTER	425	FT	\$42.00	\$17,850.00	
CONCRETE MEDIAN	146	SY	\$100.00	\$14,553.74	
CONCRETE WALK	0	SF	\$13.00	\$0.00	

Erosion Control						
Description	Quantity	Unit	Unit Cost	Total		
EROSION CONTROL	198,000	LUMP	\$1.00	\$198,000.00		
EROSION CONTROL PLAN	1	LUMP	\$25,000.00	\$25,000.00		
BMPs	1	LUMP	\$128,000.00	\$128,000.00		
SEEDING AND MULCHING	28,573	SY	\$2.00	\$57,145.55		
Erosion Control Subtotal				\$408,145.55		

Drainage				
Description	Quantity	Unit	Unit Cost	Total
CULVERT	400	FT	\$600.00	\$240,000.00
STORM SEWER SYSTEM	1,200	FT	\$300.00	\$360,000.00
UNDERDRAINS	25,200	FT	\$15.00	\$378,000.00
Drainage Subtotal				\$978,000,00

Pavement					
Description	Quantity	Unit	Unit Cost	Total	
FULL DEPTH PAVEMENT, ASPHALT	47,775	SY	\$100.00	\$4,777,478.00	
PAVEMENT PLANING AND RESURFACING	33,394	SY	\$54.00	\$1,803,301.00	
SHARED USE PATH	0	SY	\$42.00	\$0.00	
Pavement Subtotal				\$6 580 779 00	

Traffic Control - Signing and Pavement Marking						
Description	Quantity	Unit	Unit Cost	Total		
SIGNING	1	MILE	\$250,000.00	\$333,806.82		
PAVEMENT MARKINGS - THERMO	0	MILE	\$14,000.00	\$3,314.39		
PAVEMENT MARKINGS - RECESSED	1	MILE	\$30,000.00	\$32,954.55		
Traffic Control - Signing and Pavement Marking Subtotal				\$370,075.76		

Traffic Signal and Surveillance						
Description	Quantity	Unit	Unit Cost	Total		
STANDARD TRAFFIC SIGNAL	0	EACH	\$300,000.00	\$0.00		
TRAFFIC SIGNAL FOR R-CUT	1	EACH	\$780,000.00	\$780,000.00		
FIBER OPTIC COMMUNICATION	1	MILE	\$170,000.00	\$180,303.03		
CCTV	1	EACH	\$123,000.00	\$123,000.00		
Traffic Control - Traffic Signal Subtotal						

Roadway Lighting						
Description	Quantity	Unit	Unit Cost	Total		
FULL INTERCHANGE LIGHTING	0	EACH	\$500,000.00	\$0.00		
PARTIAL INTERCHANGE LIGHTING	0	EACH	\$300,000.00	\$0.00		
CONTINUOUS ROADWAY LIGHTING	0	FT	\$100.00	\$0.00		
Traffic Control - Traffic Signal Subtotal						

Utility Relocations - Gas, Electric, Water, Wastewater					
Description		Quantity	Unit	Unit Cost	Total
HIGH PRESSURE GAS LINE		3150	FT	\$200.00	\$630,000.00
WATERLINE 36" OR LARGER			FT		\$0.00
HIGH VOLTAGE TOWER	4	2	EACH	\$1,500,000.00	\$3,000,000.00
SANITARY LINE 36" OR LARGER			FT		\$0.00
DAM MODIFICATION		0	LUMP		\$0.00
Water/Wastewater Subtotal				\$3,630,000,00	

Structures				
Description	Quantity	Unit	Unit Cost	Total
RETAINING WALL	0	SF	\$90.00	\$0.00
BRIDGE	0	SF	\$220.00	\$0.00
		Pave	ement Subtotal	\$0.00

Incidentals				
Description	Quantity	Unit	Unit Cost	Total
CONSTRUCTION LAYOUT STAKES	1	LUMP	\$62,000.00	\$62,000.00
MAINTENANCE OF TRAFFIC	1	LUMP	\$371,000.00	\$371,000.00
MOBILIZATION	1	LUMP	\$400,000.00	\$400,000.00
		Miscella	neous Subtotal	\$833,000.00

Project Summary	Subtotal
Roadway	\$2,398,247
Erosion Control	\$408,146
Drainage	\$978,000
Pavement	\$6,580,779
Traffic Control - Signing and Pavement Marking	\$370,076
Traffic Signal and Surveillance	\$1,083,303
Roadway Lighting	\$0
Utility Relocations - Gas, Electric, Water, Wastewater	\$3,630,000
Structures	\$0
Incidentals	\$833,000
To	tal \$16,282,000

Contingency (30%)			\$4,885,000
	_	Subtotal	\$21,167,000
Right-of-Way			\$0
Engineering (18%)			\$3,810,000

Construction Engineering (10%)	\$2,117,000

Inflation (30%) \$8,128,200

Project Total (2030 Dollars) \$35,222,000





160+50.00	TO	210+00.00
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Roadway						
Description	Quantity	Unit	Unit Cost	Total		
PAVEMENT REMOVED	26,209	SY	\$20.00	\$524,182.54		
CULVERT REMOVED	0	FT	\$100.00	\$0.00		
EXCAVATION	74,929	CY	\$40.00	\$2,997,158.25		
EMBANKMENT	35,057	CY	\$45.00	\$1,577,580.26		
GUARDRAIL	1,600	FT	\$22.00	\$35,200.00		
MEDIAN BARRIER	0	FT	\$120.00	\$0.00		
CURB AND GUTTER	2,200	FT	\$42.00	\$92,400.00		
CONCRETE MEDIAN	433	SY	\$100.00	\$43,275.22		
CONCRETE WALK	0	SF	\$13.00	\$0.00		
Roadway Subtotal						

Erosion Control				
Description	Quantity	Unit	Unit Cost	Total
EROSION CONTROL	340,000	EACH	\$1.00	\$340,000.00
EROSION CONTROL PLAN	1	LUMP	\$50,000.00	\$50,000.00
BMPs	1	LUMP	\$234,000.00	\$234,000.00
SEEDING AND MULCHING	60,698	SY	\$2.00	\$121,396.34
Erosion Control Subtotal				

Drainage				
Description	Quantity	Unit	Unit Cost	Total
CULVERT	0	FT	\$600.00	\$0.00
STORM SEWER SYSTEM	2,200	FT	\$300.00	\$660,000.00
UNDERDRAINS	31,622	FT	\$15.00	\$474,330.00
Drainage Subtotal				

Pavement				
Description	Quantity	Unit	Unit Cost	Total
FULL DEPTH PAVEMENT, ASPHALT	45,826	SY	\$100.00	\$4,582,629.42
FULL DEPTH PAVEMENT, CONCRETE	10,003	SY	\$150.00	\$1,500,507.63
PAVEMENT PLANING AND RESURFACING	29,337	SY	\$54.00	\$1,584,199.67
SHARED USE PATH	693	SY	\$42.00	\$29,097.11
		D	Cba-a-l	4

Traffic Control - Signing and Pavement Marking						
Description	Quantity	Unit	Unit Cost	Total		
SIGNING	2	MILE	\$250,000.00	\$484,090.91		
PAVEMENT MARKINGS - THERMO	1	MILE	\$14,000.00	\$13,984.09		
PAVEMENT MARKINGS - RECESSED	1	MILE	\$30,000.00	\$28,125.00		
Traffic Control - Signing and Pavement Marking Subtotal						

Traffic Signal and Surveillance					
Description	Quantity	Unit	Unit Cost	Total	
STANDARD TRAFFIC SIGNAL	2	EACH	\$300,000.00	\$600,000.00	
TRAFFIC SIGNAL FOR R-CUT	0	EACH	\$780,000.00	\$0.00	
FIBER OPTIC COMMUNICATION	1	MILE	\$170,000.00	\$159,375.00	
CCTV	2	EACH	\$123,000.00	\$246,000.00	
Traffic Control - Traffic Signal Subtotal					

Roadway Lighting					
Description	Quantity	Unit	Unit Cost	Total	
FULL INTERCHANGE LIGHTING	0	EACH	\$500,000.00	\$0.00	
PARTIAL INTERCHANGE LIGHTING	1	EACH	\$300,000.00	\$300,000.00	
CONTINUOUS ROADWAY LIGHTING	0	FT	\$100.00	\$0.00	
Traffic Control - Traffic Signal Subtotal					

Utility Relocations - Gas, Electric, Water, Wastewater						
Description		Quantity	Unit	Unit (	Cost	Total
HIGH PRESSURE GAS LINE	4	2950	FT	\$200	0.00	\$590,000.00
WATERLINE 36" OR LARGER			FT	-		\$0.00
HIGH VOLTAGE TOWER		0	EACH			\$0.00
SANITARY LINE 36" OR LARGER			FT			\$0.00
DAM MODIFICATION		0	LUMP			\$0.00
			. /		40	

Structures				
Description	Quantity	Unit	Unit Cost	Total
RETAINING WALL	0	SF	\$90.00	\$0.00
BRIDGE	5,920	SF	\$220.00	\$1,302,400.00
		Pave	ement Subtotal	\$1,302,400.00

Incidentals				
Description	Quantity	Unit	Unit Cost	Total
CONSTRUCTION LAYOUT STAKES	1	LUMP	\$92,000.00	\$92,000.00
MAINTENANCE OF TRAFFIC	1	LUMP	\$554,000.00	\$554,000.00
MOBILIZATION	1	LUMP	\$400,000.00	\$400,000.00
		Miscella	neous Subtotal	\$1.046.000.00

Project Summary	Subtotal
Roadway	\$5,269,796
Erosion Control	\$745,396
Drainage	\$1,134,330
Pavement	\$7,696,434
Traffic Control - Signing and Pavement Marking	\$526,200
Traffic Signal and Surveillance	\$1,005,375
Roadway Lighting	\$300,000
Utility Relocations - Gas, Electric, Water, Wastewater	\$590,000
Structures	\$1,302,400
Incidentals	\$1,046,000
Total	\$19,616,000

Contingency (30%)	\$5,885,000
Subtotal	\$25,501,000
Right-of-Way	\$0
Engineering (18%)	\$4,590,000
Construction Engineering (10%)	\$2,550,000
Subtotal	\$32,641,000
Inflation (30%)	\$9,792,300



210+00.00	TO	250+50.00	
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Roadway				
Description	Quantity	Unit	Unit Cost	Total
PAVEMENT REMOVED	14,914	SY	\$20.00	\$298,278.17
CULVERT REMOVED	0	FT	\$100.00	\$0.00
EXCAVATION	39,496	CY	\$40.00	\$1,579,825.23
EMBANKMENT	13,580	CY	\$45.00	\$611,085.56
GUARDRAIL	500	FT	\$22.00	\$11,000.00
MEDIAN BARRIER	2,300	FT	\$120.00	\$276,000.00
CURB AND GUTTER	3,250	FT	\$42.00	\$136,500.00
CONCRETE MEDIAN	433	SY	\$100.00	\$43,275.22
CONCRETE WALK	0	SF	\$13.00	\$0.00
Roadway Subtotal				

Erosion Control					
Description	Quantity	Unit	Unit Cost	Total	
EROSION CONTROL	215,000	EACH	\$1.00	\$215,000.00	
EROSION CONTROL PLAN	1	LUMP	\$25,000.00	\$25,000.00	
BMPs	1	LUMP	\$155,000.00	\$155,000.00	
SEEDING AND MULCHING	36,233	SY	\$2.00	\$72,466.45	
Erosion Control Subtotal					

Drainage					
Description	Quantity	Unit	Unit Cost	Total	
CULVERT	0	FT	\$600.00	\$0.00	
STORM SEWER SYSTEM	5,550	FT	\$300.00	\$1,665,000.00	
UNDERDRAINS	20,742	FT	\$15.00	\$311,130.00	
Drainage Subtotal					

Pavement				
Description	Quantity	Unit	Unit Cost	Total
FULL DEPTH PAVEMENT, ASPHALT	36,625	SY	\$100.00	\$3,662,525.92
PAVEMENT PLANING AND RESURFACING	25,865	SY	\$54.00	\$1,396,732.73
SHARED USE PATH	0	SY	\$42.00	\$0.00
Pavement Subtotal				

Traffic Control - Signing and Pavement Marking					
Description	Quantity	Unit	Unit Cost	Total	
SIGNING	1	MILE	\$250,000.00	\$310,227.27	
PAVEMENT MARKINGS - THERMO	0	MILE	\$14,000.00	\$6,103.79	
PAVEMENT MARKINGS - RECESSED	1	MILE	\$30,000.00	\$24,147.73	
Traffic Control - Signing and Pavement Marking Subtotal					

Traffic Signal and Surveillance							
Description Quantity Unit Unit Cost							
STANDARD TRAFFIC SIGNAL	0	EACH	\$300,000.00	\$0.00			
TRAFFIC SIGNAL FOR R-CUT	1	EACH	\$780,000.00	\$780,000.00			
FIBER OPTIC COMMUNICATION	1	MILE	\$170,000.00	\$130,397.73			
CCTV	1	EACH	\$123,000.00	\$123,000.00			
Traffic Control - Traffic Signal Subtotal							

Roadway Lighting						
Description	Quantity	Unit	Unit Cost	Total		
FULL INTERCHANGE LIGHTING	0	EACH	\$500,000.00	\$0.00		
PARTIAL INTERCHANGE LIGHTING	0	EACH	\$300,000.00	\$0.00		
CONTINUOUS ROADWAY LIGHTING	0	FT	\$100.00	\$0.00		
Traffic Control - Traffic Signal Subtotal						

Utility Relocations - Gas, Electric, Water, Wastewater						
Description	Quantity	Unit	Unit Cost	Total		
HIGH PRESSURE GAS LINE	900	FT	\$200.00	\$180,000.00		
WATERLINE 36" OR LARGER		FT		\$0.00		
HIGH VOLTAGE TOWER	0	EACH		\$0.00		
SANITARY LINE 36" OR LARGER		FT		\$0.00		
DAM MODIFICATION	0	LUMP		\$0.00		
	W	ater/Waste	water Subtotal	\$190,000,00		

Structures				
Description	Quantity	Unit	Unit Cost	Total
RETAINING WALL	0	SF	\$90.00	\$0.00
BRIDGE	0	SF	\$220.00	\$0.00
		Pave	ement Subtotal	\$0.00

Incidentals				
Description	Quantity	Unit	Unit Cost	Total
CONSTRUCTION LAYOUT STAKES	1	LUMP	\$61,000.00	\$61,000.00
MAINTENANCE OF TRAFFIC	1	LUMP	\$245,000.00	\$245,000.00
MOBILIZATION	1	LUMP	\$400,000.00	\$400,000.00
		Miscellar	neous Subtotal	\$706,000.00

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Project Summary	Subtotal
Roadway	\$2,955,964
Erosion Control	\$467,466
Drainage	\$1,976,130
Pavement	\$5,059,259
Traffic Control - Signing and Pavement Marking	\$340,479
Traffic Signal and Surveillance	\$1,033,398
Roadway Lighting	\$0
Utility Relocations - Gas, Electric, Water, Wastewater	\$180,000
Structures	\$0
Incidentals	\$706,000
Tota	\$12,719,000

Contingency (30%)			\$3,816,000
	_	Subtotal	\$16,535,000
Right-of-Way			\$0
Engineering (18%)			\$2,976,000

\$21,165,000

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Roadway						
Description	Quantity	Unit	Unit Cost	Total		
PAVEMENT REMOVED	10,446	SY	\$20.00	\$208,914.23		
CULVERT REMOVED	0	FT	\$100.00	\$0.00		
EXCAVATION	21,490	CY	\$40.00	\$859,585.76		
EMBANKMENT	23,693	CY	\$45.00	\$1,066,178.93		
GUARDRAIL	3,000	FT	\$22.00	\$66,000.00		
MEDIAN BARRIER	4,400	FT	\$120.00	\$528,000.00		
CURB AND GUTTER	0	FT	\$42.00	\$0.00		
CONCRETE MEDIAN	38	SY	\$100.00	\$3,753.73		
CONCRETE WALK	0	SF	\$13.00	\$0.00		
Roadway Subtotal						

Erosion Control						
Description	Quantity	Unit	Unit Cost	Total		
EROSION CONTROL	178,000	EACH	\$1.00	\$178,000.00		
EROSION CONTROL PLAN	1	LUMP	\$25,000.00	\$25,000.00		
BMPs	1	LUMP	\$131,000.00	\$131,000.00		
SEEDING AND MULCHING	29,339	SY	\$2.00	\$58,677.22		
Erosion Control Subtotal				\$392,677.22		

Drainage						
Description	Quantity	Unit	Unit Cost	Total		
CULVERT	0	FT	\$600.00	\$0.00		
STORM SEWER SYSTEM	4,400	FT	\$300.00	\$1,320,000.00		
UNDERDRAINS	17,532	FT	\$15.00	\$262,980.00		
Drainage Subtotal						

Pavement					
Description	Quantity	Unit	Unit Cost	Total	
FULL DEPTH PAVEMENT, ASPHALT	24,248	SY	\$100.00	\$2,424,753.58	
PAVEMENT PLANING AND RESURFACING	34,110	SY	\$54.00	\$1,841,937.17	
SHARED USE PATH	0	SY	\$42.00	\$0.00	
Pavement Subtotal				\$4 266 690 75	

Traffic Control - Signing and Pavement Marking					
Description	Quantity	Unit	Unit Cost	Total	
SIGNING	1	MILE	\$250,000.00	\$216,998.11	
PAVEMENT MARKINGS - THERMO	0	MILE	\$14,000.00	\$530.30	
PAVEMENT MARKINGS - RECESSED	1	MILE	\$30,000.00	\$24,903.41	
Traffic Control - Signing and Pavement Marking Subtotal \$242,431,82					

Traffic Signal and Surveillance					
Description	Quantity	Unit	Unit Cost	Total	
STANDARD TRAFFIC SIGNAL	0	EACH	\$300,000.00	\$0.00	
TRAFFIC SIGNAL FOR R-CUT	0	EACH	\$780,000.00	\$0.00	
FIBER OPTIC COMMUNICATION	1	MILE	\$170,000.00	\$141,119.32	
CCTV	0	EACH	\$123,000.00	\$0.00	
Traffic Control - Traffic Signal Subtotal					

Roadway Lighting					
Description	Quantity	Unit	Unit Cost	Total	
FULL INTERCHANGE LIGHTING	0	EACH	\$500,000.00	\$0.00	
PARTIAL INTERCHANGE LIGHTING	0	EACH	\$300,000.00	\$0.00	
CONTINUOUS ROADWAY LIGHTING	0	FT	\$100.00	\$0.00	
Traffic Control - Traffic Signal Subtotal					

Utility Relocations - Gas, Electric, Water, Wastewater					
Description	Quantity	Unit	Unit Cost	Total	
HIGH PRESSURE GAS LINE	450	FT	\$200.00	\$90,000.00	
WATERLINE 36" OR LARGER		FT		\$0.00	
HIGH VOLTAGE TOWER	0	EACH		\$0.00	
SANITARY LINE 36" OR LARGER		FT		\$0.00	
DAM MODIFICATION	1	LUMP	\$100,000.00	\$100,000.00	
	W	ater/Waste	water Subtotal	\$190,000,00	

Structures				
Description	Quantity	Unit	Unit Cost	Total
RETAINING WALL	0	SF	\$90.00	\$0.00
BRIDGE	0	SF	\$220.00	\$0.00
		Pave	ement Subtotal	\$0.00

Incidentals				
Description	Quantity	Unit	Unit Cost	Total
CONSTRUCTION LAYOUT STAKES	 1	LUMP	\$49,000.00	\$49,000.00
MAINTENANCE OF TRAFFIC	1	LUMP	\$99,000.00	\$99,000.00
MOBILIZATION	1	LUMP	\$400,000.00	\$400,000.00
		Miscella	neous Subtotal	\$548,000.00

Project Summary		Subtotal
Roadway		\$2,732,433
Erosion Control	1.1	\$392,677
Drainage	3	\$1,582,980
Pavement		\$4,266,691
Traffic Control - Signing and Pavement Marking		\$242,432
Traffic Signal and Surveillance		\$141,119
Roadway Lighting		\$0
Utility Relocations - Gas, Electric, Water, Wastewater		\$190,000
Structures		\$0
Incidentals	- 4	\$548,000
	Total	\$10,096,000

Contingency (30%)			\$3,029,000
	_	Subtotal	\$13,125,000
Right-of-Way			\$0
Engineering (18%)			\$2,363,000

Construction Engineering (10%)	\$1,313,000
	Subtotal \$16.801.000

35,040,300





# SEGMENT 4 CONCEPT D - OVERALL

SEGMENT 4 CONCEPT D - RANGE 1	Quantity
Construction Subtotal	\$12,293,000
Contingency (30%)	\$3,688,000
Construction Total	\$15,981,000
Right-of-Way	\$0
Engineering (18%)	\$2,877,000
Construction Engineering (10%)	\$1,598,000
Project Subtotal	\$20,456,000
Inflation (30%)	\$6,136,800
Subtotal	\$26,593,000
SEGMENT 4 CONCEPT D - RANGE 2	
Construction Subtotal	\$12,858,000
Contingency (30%)	\$3,857,000
Construction Total	\$16,715,000
Right-of-Way	\$0
Engineering (18%)	\$3,009,000
Construction Engineering (10%)	\$1,672,000
Project Subtotal	\$21,396,000
Inflation (30%)	\$6,418,800
Subtotal	\$27,815,000
SEGMENT 4 CONCEPT D - RANGE 3	
Construction Subtotal	\$9,187,000
Contingency (30%)	\$2,756,000
Construction Total	\$11,943,000
Right-of-Way	\$0
Engineering (18%)	\$2,150,000
Construction Engineering (10%)	\$1,194,000
Project Subtotal	\$15,287,000
Inflation (30%)	\$4,586,100
Subtotal	\$19,873,000
SEGMENT 4 CONCEPT D - RANGE 4	
Construction Subtotal	\$9,765,000
Contingency (30%)	\$2,930,000
Construction Total	\$12,695,000
Right-of-Way	\$0
Engineering (18%)	\$2,285,000
Construction Engineering (10%)	\$1,270,000
Project Subtotal	\$16,250,000
	4.000
Inflation (30%)	\$4,875,000

SEGMENT 4 - OVERALL	
SEGMENT 4 CONCEPT D - RANGE 1	\$26,593,000
SEGMENT 4 CONCEPT D - RANGE 2	\$27,815,000
SEGMENT 4 CONCEPT D - RANGE 3	\$19,873,000
SEGMENT 4 CONCEPT D - RANGE 4	\$21,125,000
Total - Segment 4 - Overall	\$95,406,000

Construction w/ Contingency w/out Inflation \$73,389,000



104+50		

Roadway				
Description	Quantity	Unit	Unit Cost	Total
PAVEMENT REMOVED	14,834	SY	\$20.00	\$296,676.99
CULVERT REMOVED	250	FT	\$100.00	\$25,000.00
EXCAVATION	29,449	CY	\$40.00	\$1,177,949.51
EMBANKMENT	10,359	CY	\$45.00	\$466,132.92
GUARDRAIL	750	FT	\$22.00	\$16,500.00
MEDIAN BARRIER	1,350	FT	\$120.00	\$162,000.00
CURB AND GUTTER	425	FT	\$42.00	\$17,850.00
CONCRETE MEDIAN	146	SY	\$100.00	\$14,553.74
CONCRETE WALK	0	SF	\$13.00	\$0.00
Roadway Subtotal				\$2,176,663.16

Erosion Control				
Description	Quantity	Unit	Unit Cost	Total
EROSION CONTROL	187,061	EACH	\$1.00	\$187,061.00
EROSION CONTROL PLAN	1	LUMP	\$25,000.00	\$25,000.00
BMPs	1	LUMP	\$128,000.00	\$128,000.00
SEEDING AND MULCHING	28,657	SY	\$2.00	\$57,314.86
Erosion Control Subtotal				\$397,375.86

Drainage				
Description	Quantity	Unit	Unit Cost	Total
CULVERT	400	FT	\$600.00	\$240,000.00
STORM SEWER SYSTEM	1,775	FT	\$300.00	\$532,500.00
UNDERDRAINS	22,400	FT	\$15.00	\$336,000.00
Drainage Subtotal				\$1,108,500.00

Pavement				
Description	Quantity	Unit	Unit Cost	Total
FULL DEPTH PAVEMENT, ASPHALT	37,846	SY	\$100.00	\$3,784,563.98
PAVEMENT PLANING AND RESURFACING	35,008	SY	\$54.00	\$1,890,427.13
SHARED USE PATH	0	SY	\$42.00	\$0.00
Pavement Subtotal				\$5 674 991 11

Traffic Control - Signing and Pavement Marking					
Description					
SIGNING	1	MILE	\$250,000.00	\$280,686.65	
PAVEMENT MARKINGS - THERMO	0	MILE	\$14,000.00	\$869.97	
PAVEMENT MARKINGS - RECESSED	1	MILE	\$30,000.00	\$31,818.18	
Traffic Control - Signing and Pavement Marking Subtotal				\$313,374.80	

Traffic Signal and Surveillance				
Description	Quantity	Unit	Unit Cost	Total
STANDARD TRAFFIC SIGNAL	1	EACH	\$300,000.00	\$300,000.00
TRAFFIC SIGNAL FOR R-CUT	1	EACH	\$780,000.00	\$780,000.00
FIBER OPTIC COMMUNICATION	1	MILE	\$170,000.00	\$180,303.03
CCTV	2	EACH	\$123,000.00	\$246,000.00
Traffic Control - Traffic Signal Subtotal				\$1,506,303.03

Roadway Lighting				
Description	Quantity	Unit	Unit Cost	Total
FULL INTERCHANGE LIGHTING	0	EACH	\$500,000.00	\$0.00
PARTIAL INTERCHANGE LIGHTING	0	EACH	\$300,000.00	\$0.00
CONTINUOUS ROADWAY LIGHTING	0	FT	\$100.00	\$0.00
Traffic Control - Traffic Signal Subtotal				\$0.00

Utility Relocations - Gas, Electric, Water, Wastewater				
Description	Quantity	Unit	Unit Cost	Total
HIGH PRESSURE GAS LINE	2700	FT	\$200.00	\$540,000.00
WATERLINE 36" OR LARGER		FT		\$0.00
HIGH VOLTAGE TOWER	0	EACH		\$0.00
SANITARY LINE 36" OR LARGER		FT		\$0.00
DAM MODIFICATION	0	LUMP		\$0.00
	W	ater/Waste	water Subtotal	\$540,000,00

Structures				
Description	Quantity	Unit	Unit Cost	Total
RETAINING WALL	0	SF	\$90.00	\$0.00
BRIDGE	0	SF	\$220.00	\$0.00
		Pave	ement Subtotal	\$0.00

Incidentals		4		
Description	Quantity	Unit	Unit Cost	Total
CONSTRUCTION LAYOUT STAKES	1	LUMP	\$59,000.00	\$59,000.00
MAINTENANCE OF TRAFFIC	1	LUMP	\$117,000.00	\$117,000.00
MOBILIZATION	1	LUMP	\$400,000.00	\$400,000.00
		Miscella	neous Subtotal	\$576,000.00

Project Summary	Subtotal
Roadway	\$2,176,663
Erosion Control	\$397,376
Drainage	\$1,108,500
Pavement	\$5,674,991
Traffic Control - Signing and Pavement Marking	\$313,375
Traffic Signal and Surveillance	\$1,506,303
Roadway Lighting	\$0
Utility Relocations - Gas, Electric, Water, Wastewater	\$540,000
Structures	\$0
Incidentals	\$576,000
Total	\$12,293,000

Contingency (30%)	\$3,688,000
Subtotal	\$15,981,000
Right-of-Way	\$0
Engineering (18%)	\$2,877,000
Construction Engineering (10%)	\$1,598,000
Subtotal	\$20,456,000
Inflation (30%)	\$6,136,800



160+50.00	TO	210+00.00
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Roadway				
Description	Quantity	Unit	Unit Cost	Total
PAVEMENT REMOVED	26,160	SY	\$20.00	\$523,209.76
CULVERT REMOVED	0	FT	\$100.00	\$0.00
EXCAVATION	28,105	CY	\$40.00	\$1,124,201.85
EMBANKMENT	8,623	CY	\$45.00	\$388,014.20
GUARDRAIL	1,250	FT	\$22.00	\$27,500.00
MEDIAN BARRIER	660	FT	\$120.00	\$79,200.00
CURB AND GUTTER	2,755	FT	\$42.00	\$115,710.00
CONCRETE MEDIAN	1,293	SY	\$100.00	\$129,328.91
CONCRETE WALK	0	SF	\$13.00	\$0.00
Roadway Subtotal				\$2,387,164.73

Erosion Control				
Description	Quantity	Unit	Unit Cost	Total
EROSION CONTROL	204,022	EACH	\$1.00	\$204,022.00
EROSION CONTROL PLAN	1	LUMP	\$25,000.00	\$25,000.00
BMPs	1	LUMP	\$147,000.00	\$147,000.00
SEEDING AND MULCHING	33,925	SY	\$2.00	\$67,849.97
Erosion Control Subtotal				\$443,871.97

Drainage				
Description	Quantity	Unit	Unit Cost	Total
CULVERT	0	FT	\$600.00	\$0.00
STORM SEWER SYSTEM	3,415	FT	\$300.00	\$1,024,500.00
UNDERDRAINS	19,800	FT	\$15.00	\$297,000.00
Drainage Subtotal				\$1,321,500.00

Pavement				
Description	Quantity	Unit	Unit Cost	Total
FULL DEPTH PAVEMENT, ASPHALT	48,675	SY	\$100.00	\$4,867,500.42
PAVEMENT PLANING AND RESURFACING	29,340	SY	\$54.00	\$1,584,351.13
SHARED USE PATH	693	SY	\$42.00	\$29,106.00
Pavement Subtotal				\$6,480,957.55

Traffic Control - Signing and Pavement Marking				
Description	Quantity	Unit	Unit Cost	Total
SIGNING	2	MILE	\$250,000.00	\$423,495.08
PAVEMENT MARKINGS - THERMO	1	MILE	\$14,000.00	\$10,590.72
PAVEMENT MARKINGS - RECESSED	1	MILE	\$30,000.00	\$28,125.00
Traffic Control - Signing and Pavement Marking Subtotal				\$462,210,80

Traffic Signal and Surveillance				
Description	Quantity	Unit	Unit Cost	Total
STANDARD TRAFFIC SIGNAL	1	EACH	\$300,000.00	\$300,000.00
TRAFFIC SIGNAL FOR R-CUT	0	EACH	\$780,000.00	\$0.00
FIBER OPTIC COMMUNICATION	1	MILE	\$170,000.00	\$159,375.00
CCTV	1	EACH	\$123,000.00	\$123,000.00
Traffic Control - Traffic Signal Subtotal				\$582,375.00

Roadway Lighting				
Description	Quantity	Unit	Unit Cost	Total
FULL INTERCHANGE LIGHTING	0	EACH	\$500,000.00	\$0.00
PARTIAL INTERCHANGE LIGHTING	0	EACH	\$300,000.00	\$0.00
CONTINUOUS ROADWAY LIGHTING	0	FT	\$100.00	\$0.00
Traffic Control - Traffic Signal Subtotal				\$0.00

Utility Relocations - Gas, Electric, Water, Wastewater				
Description	Quantity	Unit	Unit Cost	Total
HIGH PRESSURE GAS LINE	2850	FT	\$200.00	\$570,000.00
WATERLINE 36" OR LARGER		FT		\$0.00
HIGH VOLTAGE TOWER	0	EACH		\$0.00
SANITARY LINE 36" OR LARGER		FT		\$0.00
DAM MODIFICATION		LUMP		\$0.00
	W	ater/Waste	water Subtotal	\$570,000,00

Structures				
Description	Quantity	Unit	Unit Cost	Total
RETAINING WALL	300	SF	\$90.00	\$27,000.00
BRIDGE	0	SF	\$220.00	\$0.00
		Pave	ement Subtotal	\$27,000.00

Incidentals			_		
Description		Quantity	Unit	Unit Cost	Total
CONSTRUCTION LAYOUT STAKES		1	LUMP	\$61,000.00	\$61,000.00
MAINTENANCE OF TRAFFIC		1	LUMP	\$122,000.00	\$122,000.00
MOBILIZATION	/	1	LUMP	\$400,000.00	\$400,000.00
			Miscella	neous Subtotal	\$583,000.00

Project Summary	Subtotal
Roadway	\$2,387,165
Erosion Control	\$443,872
Drainage	\$1,321,500
Pavement	\$6,480,958
Traffic Control - Signing and Pavement Marking	\$462,211
Traffic Signal and Surveillance	\$582,375
Roadway Lighting	\$0
Utility Relocations - Gas, Electric, Water, Wastewater	\$570,000
Structures	\$27,000
Incidentals	\$583,000
Total	\$12,858,000

Contingency (30%)	\$3,857,000
Subtotal	\$16,715,000
Right-of-Way	\$0
Engineering (18%)	\$3,009,000
Construction Engineering (10%)	\$1,672,000
Subtotal	\$21,396,000



210+00.00	TO	250+50.00	
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Roadway					
Description	Quantity	Unit	Unit Cost	Total	
PAVEMENT REMOVED	14,686	SY	\$20.00	\$293,723.48	
CULVERT REMOVED	0	FT	\$100.00	\$0.00	
EXCAVATION	15,938	CY	\$40.00	\$637,510.85	
EMBANKMENT	7,626	CY	\$45.00	\$343,160.99	
GUARDRAIL	1,600	FT	\$22.00	\$35,200.00	
MEDIAN BARRIER	2,110	FT	\$120.00	\$253,200.00	
CURB AND GUTTER	2,670	FT	\$42.00	\$112,140.00	
CONCRETE MEDIAN	0	SY	\$100.00	\$0.00	
CONCRETE WALK	0	SF	\$13.00	\$0.00	
Roadway Subtotal				\$1,674,935.32	

Erosion Control					
Description	Quantity	Unit	Unit Cost	Total	
EROSION CONTROL	124,030	EACH	\$1.00	\$124,030.00	
EROSION CONTROL PLAN	1	LUMP	\$25,000.00	\$25,000.00	
BMPs	1	LUMP	\$90,000.00	\$90,000.00	
SEEDING AND MULCHING	18,224	SY	\$2.00	\$36,447.55	
Erosion Control Subtotal				\$275,477.55	

Drainage					
Description	Quantity	Unit	Unit Cost	Total	
CULVERT	0	FT	\$600.00	\$0.00	
STORM SEWER SYSTEM	4,780	FT	\$300.00	\$1,434,000.00	
UNDERDRAINS	16,200	FT	\$15.00	\$243,000.00	
Drainage Subtotal				\$1,677,000.00	

Pavement					
Description	Quantity	Unit	Unit Cost	Total	
FULL DEPTH PAVEMENT, ASPHALT	28,478	SY	\$100.00	\$2,847,765.33	
PAVEMENT PLANING AND RESURFACING	26,387	SY	\$54.00	\$1,424,871.26	
SHARED USE PATH	0	SY	\$42.00	\$0.00	
Pavement Subtotal				\$4,272,636.60	

Traffic Control - Signing and Pavement Marking					
Description	Quantity	Unit	Unit Cost	Total	
SIGNING	1	MILE	\$250,000.00	\$272,892.99	
PAVEMENT MARKINGS - THERMO	0	MILE	\$14,000.00	\$4,543.37	
PAVEMENT MARKINGS - RECESSED	1	MILE	\$30,000.00	\$23,011.36	
Traffic Control - Signing and Pavement Marking Subtotal				\$300,447,73	

Traffic Signal and Surveillance					
Description	Quantity	Unit	Unit Cost	Total	
STANDARD TRAFFIC SIGNAL	1	EACH	\$300,000.00	\$300,000.00	
TRAFFIC SIGNAL FOR R-CUT	0	EACH	\$780,000.00	\$0.00	
FIBER OPTIC COMMUNICATION	1	MILE	\$170,000.00	\$130,397.73	
CCTV	1	EACH	\$123,000.00	\$123,000.00	
Traffic Control - Traffic Signal Subtotal				\$553,397.73	

Roadway Lighting						
Description	Quantity	Unit	Unit Cost	Total		
FULL INTERCHANGE LIGHTING	0	EACH	\$500,000.00	\$0.00		
PARTIAL INTERCHANGE LIGHTING	0	EACH	\$300,000.00	\$0.00		
CONTINUOUS ROADWAY LIGHTING	0	FT	\$100.00	\$0.00		
Traffic Control - Traffic Signal Subtotal						

Utility Relocations - Gas, Electric, Water, Wastewater					
Description	Quantity	Unit	Unit Cost	Total	
HIGH PRESSURE GAS LINE	475	FT	\$200.00	\$95,000.00	
WATERLINE 36" OR LARGER		FT		\$0.00	
HIGH VOLTAGE TOWER	0	EACH		\$0.00	
SANITARY LINE 36" OR LARGER		FT		\$0.00	
DAM MODIFICATION	0	LUMP		\$0.00	
	W	ater/Waste	water Subtotal	\$95,000,00	

Structures				
Description	Quantity	Unit	Unit Cost	Total
RETAINING WALL	0	SF	\$90.00	\$0.00
BRIDGE	0	SF	\$220.00	\$0.00
		Pave	ement Subtotal	\$0.00

Incidentals				
Description	Quantity	Unit	Unit Cost	Total
CONSTRUCTION LAYOUT STAKES	1	LUMP	\$46,000.00	\$46,000.00
MAINTENANCE OF TRAFFIC	1	LUMP	\$92,000.00	\$92,000.00
MOBILIZATION	1	LUMP	\$200,000.00	\$200,000.00
		Miscella	neous Subtotal	\$338,000.00

Project Summary	Subtotal
Roadway	\$1,674,935
Erosion Control	\$275,478
Drainage	\$1,677,000
Pavement	\$4,272,637
Traffic Control - Signing and Pavement Marking	\$300,448
Traffic Signal and Surveillance	\$553,398
Roadway Lighting	\$0
Utility Relocations - Gas, Electric, Water, Wastewater	\$95,000
Structures	\$0
Incidentals	\$338,000
Total	\$9,187,000

Contingency (30%)	\$2,756,000
Subtotal	\$11,943,000
Right-of-Way	\$0
Engineering (18%)	\$2,150,000
Construction Engineering (10%)	\$1,194,000
Subtotal	\$15,287,000



	294+33.41

Roadway					
Description	Quantity	Unit	Unit Cost	Total	
PAVEMENT REMOVED	10,106	SY	\$20.00	\$202,129.17	
CULVERT REMOVED	0	FT	\$100.00	\$0.00	
EXCAVATION	19,825	CY	\$40.00	\$793,018.98	
EMBANKMENT	23,503	CY	\$45.00	\$1,057,648.05	
GUARDRAIL	4,100	FT	\$22.00	\$90,200.00	
MEDIAN BARRIER	4,235	FT	\$120.00	\$508,211.16	
CURB AND GUTTER	0	FT	\$42.00	\$0.00	
CONCRETE MEDIAN	30	SY	\$100.00	\$2,950.62	
CONCRETE WALK	0	SF	\$13.00	\$0.00	
		Roa	adway Subtotal	\$2,654,157.98	

Erosion Control				
Description	Quantity	Unit	Unit Cost	Total
EROSION CONTROL	165,900	EACH	1	\$165,900.00
EROSION CONTROL PLAN	1	LUMP	\$25,000.00	\$25,000.00
BMPs	1	LUMP	\$122,000.00	\$122,000.00
SEEDING AND MULCHING	26,756	SY	\$2.00	\$53,512.58
Erosion Control Subtotal				\$366,412.58

Drainage					
Description	Quantity	Unit	Unit Cost	Total	
CULVERT	0	FT	\$600.00	\$0.00	
STORM SEWER SYSTEM	4,235	FT	\$300.00	\$1,270,527.90	
UNDERDRAINS	17,536	FT	\$15.00	\$263,040.00	
Drainage Subtotal				\$1,533,567,90	

Pavement					
Description	Quantity	Unit	Unit Cost	Total	
FULL DEPTH PAVEMENT, ASPHALT	24,815	SY	\$100.00	\$2,481,460.56	
PAVEMENT PLANING AND RESURFACING	33,601	SY	\$54.00	\$1,814,467.13	
SHARED USE PATH	0	SY	\$42.00	\$0.00	
Pavement Subtotal				\$4,295,927,69	

Traffic Control - Signing and Pavement Marking						
Description	Quantity	Unit	Unit Cost	Total		
SIGNING	1	MILE	\$250,000.00	\$216,791.62		
PAVEMENT MARKINGS - THERMO	0	MILE	\$14,000.00	\$517.65		
PAVEMENT MARKINGS - RECESSED	1	MILE	\$30,000.00	\$24,905.74		
Traffic Control - Signing and Pavement Marking Subtotal				\$242,215.01		

Traffic Signal and Surveillance					
Description	Quantity	Unit	Unit Cost	Total	
STANDARD TRAFFIC SIGNAL	0	EACH	\$300,000.00	\$0.00	
TRAFFIC SIGNAL FOR R-CUT	0	EACH	\$780,000.00	\$0.00	
FIBER OPTIC COMMUNICATION	1	MILE	\$170,000.00	\$141,119.32	
CCTV	0	EACH	\$123,000.00	\$0.00	
Traffic Control - Traffic Signal Subtotal				\$141,119.32	

Roadway Lighting					
Description	Quantity	Unit	Unit Cost	Total	
FULL INTERCHANGE LIGHTING	0	EACH	\$500,000.00	\$0.00	
PARTIAL INTERCHANGE LIGHTING	0	EACH	\$300,000.00	\$0.00	
CONTINUOUS ROADWAY LIGHTING	0	FT	\$100.00	\$0.00	
Traffic Control - Traffic Signal Subtotal				\$0.00	

Utility Relocations - Gas, Electric, Water, Wastewater					
Description	Quantity	Unit	Unit Cost	Total	
HIGH PRESSURE GAS LINE	425	FT	\$200.00	\$85,000.00	
WATERLINE 36" OR LARGER		FT		\$0.00	
HIGH VOLTAGE TOWER	0	EACH		\$0.00	
SANITARY LINE 36" OR LARGER		FT		\$0.00	
DAM MODIFICATION	1	LUMP	\$100,000.00	\$100,000.00	
		Nater/Waste	water Subtotal	\$195,000,00	

Structures				
Description	Quantity	Unit	Unit Cost	Total
RETAINING WALL	0	SF	\$90.00	\$0.00
BRIDGE	0	SF	\$220.00	\$0.00
		Pave	ement Subtotal	\$0.00

Incidentals		4		
Description	Quantity	Unit	Unit Cost	Total
CONSTRUCTION LAYOUT STAKES	1	LUMP	\$49,000.00	\$49,000.00
MAINTENANCE OF TRAFFIC	1	LUMP	\$98,000.00	\$98,000.00
MOBILIZATION	1	LUMP	\$200,000.00	\$200,000.00
		Miscella	neous Subtotal	\$347,000.00

Project Summary	
roject Janimary	Subtotal
Roadway	\$2,654,158
Erosion Control	\$366,413
Drainage	\$1,533,568
Pavement	\$4,295,928
Traffic Control - Signing and Pavement Marking	\$242,215
Traffic Signal and Surveillance	\$141,119
Roadway Lighting	\$0
Utility Relocations - Gas, Electric, Water, Wastewater	\$185,000
Structures	\$0
Incidentals	\$347,000
Total	\$9,765,000

Contingency (30%)	\$2,930,000
Subtotal	\$12,695,000
Right-of-Way	\$0
Engineering (18%)	\$2,285,000
Construction Engineering (10%)	\$1,270,000
Subtotal	\$16,250,000

# SEGMENT 5 CONCEPT A - OVERALL

SEGMENT 5 CONCEPT A - RANGE 1	Quantity
Construction Subtotal	\$48,998,000
Contingency (30%)	\$14,699,000
Construction Total	\$63,697,000
Right-of-Way	\$0
Engineering (18%)	\$11,465,000
Construction Engineering (10%)	\$6,370,000
Project Subtotal	\$81,532,000
Inflation (30%)	\$24,459,600
Subtotal	\$105,992,000
SEGMENT 5 CONCEPT A - RANGE 2	
Construction Subtotal	\$9,785,000
Contingency (30%)	\$2,936,000
Construction Total	\$12,721,000
Right-of-Way	\$0
Engineering (18%)	\$2,290,000
Construction Engineering (10%)	\$1,272,000
Project Subtotal	\$16,283,000
Inflation (30%)	\$4,884,900
Subtotal	\$21,168,000
SEGMENT 5 CONCEPT A - RANGE 3	
Construction Subtotal	\$15,068,000
Contingency (30%)	\$4,520,000
Construction Total	\$19,588,000
Right-of-Way	\$0
Engineering (18%)	\$3,526,000
Construction Engineering (10%)	\$1,959,000
Project Subtotal	\$25,073,000
Inflation (30%)	\$7,521,900
Subtotal	\$32,595,000
SEGMENT 5 CONCEPT A - RANGE 4	
Construction Subtotal	\$42,867,000
Contingency (30%)	\$12,860,000
Construction Total	\$55,727,000
Right-of-Way	\$0
Engineering (18%)	\$10,031,000
Construction Engineering (10%)	\$5,573,000
Project Subtotal	\$71,331,000
Inflation (30%)	\$21,399,300

SEGMENT 7 - OVERALL	
SEGMENT 5 CONCEPT A - RANGE 1	\$105,992,000
SEGMENT 5 CONCEPT A - RANGE 2	\$21,168,000
SEGMENT 5 CONCEPT A - RANGE 3	\$32,595,000
SEGMENT 5 CONCEPT A - RANGE 4	\$92,730,000
Total - Segment 5 - Overall	\$252,485,000

Construction w/ Contingency w/out Inflation \$194,219,000



#### SEGMENT 5 CONCEPT A - RANGE 1 452 + 65.00 to 500 + 00.00

Roadway					
Description	Quantity	Unit	Unit Cost	Total	
PAVEMENT REMOVED	38,862	SY	\$20.00	\$777,240.00	
CULVERT REMOVED	80	FT	\$100.00	\$8,000.00	
EXCAVATION	47,498	CY	\$40.00	\$1,899,925.04	
EMBANKMENT	252,483	CY	\$45.00	\$11,361,726.09	
GUARDRAIL	4,100	FT	\$22.00	\$90,200.00	
MEDIAN BARRIER	0	FT	\$120.00	\$0.00	
CURB AND GUTTER	3,969	FT	\$42.00	\$166,698.00	
CONCRETE MEDIAN	3,782	SY	\$100.00	\$378,200.00	
CONCRETE WALK	0	SF	\$13.00	\$0.00	
			Roadway Subtotal	\$14.681.989.13	

Erosion Control					
Description	Quantity	Unit	Unit Cost	Total	
EROSION CONTROL	570,000	EACH	1	\$570,000.00	
EROSION CONTROL PLAN	1	LUMP	\$75,000.00	\$75,000.00	
BMPs	1	LUMP	\$380,000.00	\$380,000.00	
SEEDING AND MULCHING	114,873	SY	\$2.00	\$229,745.11	
Erosion Control Subtotal				\$1,254,745.11	

Drainage				
Description	Quantity	Unit	Unit Cost	Total
CULVERT	80	FT	\$600.00	\$48,000.00
STORM SEWER SYSTEM	12,100	FT	\$300.00	\$3,630,000.00
UNDERDRAINS	12,100	FT	\$15.00	\$181,500.00
			Duning and Cooks and	40 000 000 00

Pavement				
Description	Quantity	Unit	Unit Cost	Total
FULL DEPTH PAVEMENT, ASPHALT	48,917	SY	\$100.00	\$4,891,722.49
FULL DEPTH PAVEMENT, CONCRETE	16,083	SY	\$150.00	\$2,412,416.27
PAVEMENT PLANING AND RESURFACING	16,112	SY	\$54.00	\$870,048.00
SHARED USE PATH	0	SY	\$42.00	\$0.00
Pavement Subtotal				

Traffic Control - Signing and Pavement Marking				
Description	Quantity	Unit	Unit Cost	Total
SIGNING	4	MILE	\$250,000.00	\$1,000,000.00
PAVEMENT MARKINGS - THERMO	3.0	MILE	\$14,000.00	\$42,000.00
PAVEMENT MARKINGS - RECESSED	1.0	MILE	\$30,000.00	\$30,000.00
Traffic Control - Signing and Pavement Marking Subtotal				\$1.072.000.00

Traffic Signal and Surveillance						
Description			Quantity	Unit	Unit Cost	Total
STANDARD TRAFFIC SIGNAL			2	EACH	\$300,000.00	\$600,000.00
TRAFFIC SIGNAL FOR R-CUT			0	EACH	\$780,000.00	\$0.00
FIBER OPTIC COMMUNICATION			2.5	MILE	\$170,000.00	\$425,000.00
CCTV			2	EACH	\$123,000.00	\$246,000.00
Traffic Control - Traffic Signal Subtotal					\$1,271,000.00	

Roadway Lighting			<u> </u>		
Description		Quantity	Unit	Unit Cost	Total
FULL INTERCHANGE LIGHTING		1	EACH	\$500,000.00	\$500,000.00
PARTIAL INTERCHANGE LIGHTING		 0	EACH	\$300,000.00	\$0.00
CONTINUOUS ROADWAY LIGHTING		6500	FT.	\$100.00	\$650,000.00
		\$1,150,000.00			

			_		
Utility Relocations - Gas, Electric, Water, Wastewater					
Description		Quantity	Unit	Unit Cost	Total
HIGH PRESSURE GAS LINE		2800	FT	\$200.00	\$560,000.00
WATERLINE 36" OR LARGER		0	FT		\$0.00
HIGH VOLTAGE TOWER		2	EACH	\$1,500,000.00	\$3,000,000.00
SANITARY LINE 36" OR LARGER		0	FT		\$0.00
DAM MODIFICATION	M	1	LUMP	\$10,000,000.00	\$10,000,000.00
			Water/Was	tewater Subtotal	\$13,560,000,00

Structures								
Description				Quantity	Unit	Unit Cost	Total	
RETAINING WALL				0	SF	\$90.00	\$0.00	
BRIDGE				10,589	SF	\$220.00	\$2,329,580.00	
Pavement Subtotal						\$2,329,580.00		

Incidentals								
Description	Quantity	Unit	Unit Cost	Total				
CONSTRUCTION LAYOUT STAKES	1	LUMP	\$169,000.00	\$169,000.00				
MAINTENANCE OF TRAFFIC	1	LUMP	\$676,000.00	\$676,000.00				
MOBILIZATION	1	LUMP	\$800,000.00	\$800,000.00				
Miscellaneous Subtotal								

Project Summary	Subtotal
Roadway	\$14,681,989
Erosion Control	\$1,254,745
Drainage	\$3,859,500
Pavement	\$8,174,187
Traffic Control - Signing and Pavement Marking	\$1,072,000
Traffic Signal and Surveillance	\$1,271,000
Roadway Lighting	\$1,150,000
Utility Relocations - Gas, Electric, Water, Wastewater	\$13,560,000
Structures	\$2,329,580
Incidentals	\$1,645,000
Т	otal \$48,998,000

Contingency (30%)	\$14,699,000
Subtotal	\$63,697,000
Right-of-Way	\$0
Engineering (18%)	\$11,465,000
Construction Engineering (10%)	\$6,370,000
Subtotal	\$81,532,000
Inflation (30%)	\$24,459,600

Project Total (2030 Dollars) \$105,992,000

Estimate completed by:

ms consultants, inc.
engineers, architects, planners

#### SEGMENT 5 CONCEPT A - RANGE 2 500 + 00.00 TO 515 + 00.00

Roadway	Roadway					
Description	Quantity	Unit	Unit Cost	Total		
PAVEMENT REMOVED	17,500	SY	\$20.00	\$350,000.00		
CULVERT REMOVED	40	FT	\$100.00	\$4,000.00		
EXCAVATION	23,210	CY	\$40.00	\$928,408.68		
EMBANKMENT	32,967	CY	\$45.00	\$1,483,493.27		
GUARDRAIL	625	FT	\$22.00	\$13,750.00		
MEDIAN BARRIER	0	FT	\$120.00	\$0.00		
CURB AND GUTTER	5,200	FT	\$42.00	\$218,400.00		
CONCRETE MEDIAN	0	SY	\$100.00	\$0.00		
CONCRETE WALK	0	SF	\$13.00	\$0.00		
	Roadway Subtotal					

Erosion Control					
Description	Quantity	Unit	Unit Cost	Total	
EROSION CONTROL	150,000	LUMP	1	\$150,000.00	
EROSION CONTROL PLAN	1	LUMP	\$25,000.00	\$25,000.00	
BMPs	1	LUMP	\$125,000.00	\$125,000.00	
SEEDING AND MULCHING	29,462	SY	\$2.00	\$58,923.30	
	Erosion Control Subtotal \$				

Drainage					
Description		Quantity	Unit	Unit Cost	Total
CULVERT		40	FT	\$600.00	\$24,000.00
STORM SEWER SYSTEM		6,200	FT	\$300.00	\$1,860,000.00
UNDERDRAINS		6,200	FT	\$15.00	\$93,000.00
Drainage Subtotal					\$1,977,000,00

Pavement				
Description	Quantity	Unit	Unit Cost	Total
FULL DEPTH PAVEMENT, ASPHALT	16,200	SY	\$100.00	\$1,620,000.00
PAVEMENT PLANING AND RESURFACING	14,467	SY	\$54.00	\$781,218.00
SHARED USE PATH	0	SY	\$42.00	\$0.00
		Pav	ement Subtotal	\$2 401 219 00

Traffic Control - Signing and Pavement Marking				
Description	Quantity	Unit	Unit Cost	Total
SIGNING	1	MILE	\$250,000.00	\$312,500.00
PAVEMENT MARKINGS - THERMO	0.3	MILE	\$14,000.00	\$3,920.00
PAVEMENT MARKINGS - RECESSED	1.0	MILE	\$30,000.00	\$29,100.00
Traffic Cont	rol - Signing and F	Pavement M	arking Subtotal	\$345,520.00

Traffic Signal and Surveillance					
Description		Quantity	Unit	Unit Cost	Total
STANDARD TRAFFIC SIGNAL		0	EACH	\$300,000.00	\$0.00
TRAFFIC SIGNAL FOR R-CUT		0	EACH	\$780,000.00	\$0.00
FIBER OPTIC COMMUNICATION		1	MILE	\$170,000.00	\$204,000.00
CCTV		0	EACH	\$123,000.00	\$0.00
Traffic Control - Traffic Signal Subtotal					\$204,000.00

Roadway Lighting			,		
Description		Quantity	Unit	Unit Cost	Total
FULL INTERCHANGE LIGHTING		0	EACH	\$500,000.00	\$0.00
PARTIAL INTERCHANGE LIGHTING		0	EACH	\$300,000.00	\$0.00
CONTINUOUS ROADWAY LIGHTING		4500	FT	\$100.00	\$450,000.00
	7	Traffic Con	trol - Traffic	Signal Subtotal	\$450,000.00

4	Utility Relocations - Gas, Electric, Water, Wastewater				
	Description	Quantity	Unit	Unit Cost	Total
	HIGH PRESSURE GAS LINE	867	FT	\$200.00	\$173,400.00
P	WATERLINE 36" OR LARGER	0	FT		\$0.00
	HIGH VOLTAGE TOWER	0	EACH		\$0.00
	SANITARY LINE 36" OR LARGER	0	FT		\$0.00
	DAM MODIFICATION	0	LUMP		\$0.00
	Water/Wastewater Subtotal				

Structures					
Description		Quantity	Unit	Unit Cost	Total
RETAINING WALL		0	SF	\$90.00	\$0.00
BRIDGE		2,030	SF	\$220.00	\$446,600.00
		Pavement Subtotal \$446,600.00			

Incidentals				
Description	Quantity	Unit	Unit Cost	Total
CONSTRUCTION LAYOUT STAKES	1	LUMP	\$46,000.00	\$46,000.00
MAINTENANCE OF TRAFFIC	1	LUMP	\$184,000.00	\$184,000.00
MOBILIZATION	1	LUMP	\$200,000.00	\$200,000.00
Miscellaneous Subtotal				\$430,000,00

Project Summary	Subtotal
Roadway	\$2,998,052
Erosion Control	\$358,923
Drainage	\$1,977,000
Pavement	\$2,401,218
Traffic Control - Signing and Pavement Marking	\$345,520
Traffic Signal and Surveillance	\$204,000
Roadway Lighting	\$450,000
Utility Relocations - Gas, Electric, Water, Wastewater	\$173,400
Structures	\$446,600
Incidentals	\$430,000
Total	\$9,785,000

	\$2,936,000
Subtotal	\$12,721,000
	\$0
	\$2,290,000
	\$1,272,000
Subtotal	\$16,283,000

(30%) \$4,884,900 ms cc



#### SEGMENT 5 CONCEPT A - RANGE 3 515 + 00.00 TO 535 + 00.00

Roadway				
Description	Quantity	Unit	Unit Cost	Total
PAVEMENT REMOVED	22,500	SY	\$20.00	\$450,000.00
CULVERT REMOVED	40	FT	\$100.00	\$4,000.00
EXCAVATION	106,017	CY	\$40.00	\$4,240,696.59
EMBANKMENT	17,953	CY	\$45.00	\$807,889.72
GUARDRAIL	750	FT	\$22.00	\$16,500.00
MEDIAN BARRIER	0	FT	\$120.00	\$0.00
CURB AND GUTTER	6,300	FT	\$42.00	\$264,600.00
CONCRETE MEDIAN	0	SY	\$100.00	\$0.00
CONCRETE WALK	0	SF	\$13.00	\$0.00
	Roadway Subtotal			

Erosion Control					
Description	Quantity	Unit	Unit Cost	Total	
EROSION CONTROL	725,000	EACH	1	\$725,000.00	
EROSION CONTROL PLAN	1	LUMP	\$25,000.00	\$25,000.00	
BMPs	1	LUMP	\$485,000.00	\$485,000.00	
SEEDING AND MULCHING	159,797	SY	\$2.00	\$319,593.63	
Erosion Control Subtotal					

Drainage				
Description	Quantity	Unit	Unit Cost	Total
CULVERT	40	FT	\$600.00	\$24,000.00
STORM SEWER SYSTEM	5,800	FT	\$300.00	\$1,740,000.00
UNDERDRAINS	5,800	FT	\$15.00	\$87,000.00
Drainage Subtotal				

Pavement				
Description	Quantity	Unit	Unit Cost	Total
FULL DEPTH PAVEMENT, ASPHALT	17,800	SY	\$100.00	\$1,780,000.00
PAVEMENT PLANING AND RESURFACING	12,520	SY	\$54.00	\$676,080.00
SHARED USE PATH	0	SY	\$42.00	\$0.00
		Pav	ement Subtotal	\$2,456,080,00

Traffic Control - Signing and Pavement Marking				
Description	Quantity	Unit	Unit Cost	Total
SIGNING	1.6	MILE	\$250,000.00	\$405,000.00
PAVEMENT MARKINGS - THERMO	0.4	MILE	\$14,000.00	\$5,600.00
PAVEMENT MARKINGS - RECESSED	1.2	MILE	\$30,000.00	\$36,600.00
Traffic Control - Signing and Pavement Marking Subtotal				

Traffic Signal and Surveillance					
Description		Quantity	Unit	Unit Cost	Total
STANDARD TRAFFIC SIGNAL		0	EACH	\$300,000.00	\$0.00
TRAFFIC SIGNAL FOR R-CUT		0	EACH	\$780,000.00	\$0.00
FIBER OPTIC COMMUNICATION		1	MILE	\$170,000.00	\$204,000.00
CCTV		0	EACH	\$123,000.00	\$0.00
Traffic Control - Traffic Signal Subtotal					\$204,000.00

Roadway Lighting				
Description	Quantity	Unit	Unit Cost	Total
FULL INTERCHANGE LIGHTING	0	EACH	\$500,000.00	\$0.00
PARTIAL INTERCHANGE LIGHTING	0	EACH	\$300,000.00	\$0.00
CONTINUOUS ROADWAY LIGHTING	6500	FT	\$100.00	\$650,000.00
	Traffic Con	trol - Traffic	Signal Subtotal	\$650,000.00

Utility Relocations - Gas, Electric, Water, Wastewater							
Description		Quantity	Unit	Unit Cost	Total		
HIGH PRESSURE GAS LINE		420	FT	\$200.00	\$84,000.00		
WATERLINE 36" OR LARGER		0	FT		\$0.00		
HIGH VOLTAGE TOWER		0	EACH		\$0.00		
SANITARY LINE 36" OR LARGER		0	FT		\$0.00		
DAM MODIFICATION		0	LUMP		\$0.00		
	Water/Wastewater Subtotal						

Structures							
Description		Quantity	Unit	Unit Cost	Total		
RETAINING WALL		0	SF	\$90.00	\$0.00		
BRIDGE		5,824	SF	\$220.00	\$1,281,280.00		
		Pavement Subtotal					

Incidentals					
Description	Quantity	Unit	Unit Cost	Total	
CONSTRUCTION LAYOUT STAKES	1	LUMP	\$71,000.00	\$71,000.00	
MAINTENANCE OF TRAFFIC	1	LUMP	\$285,000.00	\$285,000.00	
MOBILIZATION	1	LUMP	\$400,000.00	\$400,000.00	
Miscellaneous Subtotal					

Project Summary	Subtotal
Roadway	\$5,783,686
Erosion Control	\$1,554,594
Drainage	\$1,851,000
Pavement	\$2,456,080
Traffic Control - Signing and Pavement Marking	\$447,200
Traffic Signal and Surveillance	\$204,000
Roadway Lighting	\$650,000
Utility Relocations - Gas, Electric, Water, Wastewater	\$84,000
Structures	\$1,281,280
Incidentals	\$756,000
To	+-1 \$15 069 000

Contingency (30%)		\$4,520,000
	Subtotal	\$19,588,000
Right-of-Way		\$0
Engineering (18%)		\$3,526,000
Construction Engineering (10%)		\$1,959,000
	Subtotal	\$25,073,000
Inflation (200/)		¢7 E21 000

Project Total (2030 Dollars) \$32,595,000

ms consultants, inc engineers, architects, planner

#### SEGMENT 5 CONCEPT A - RANGE 4 535 + 00.00 TO 573 + 68.00

Roadway				
Description	Quantity	Unit	Unit Cost	Total
PAVEMENT REMOVED	27,520	SY	\$20.00	\$550,400.00
CULVERT REMOVED	80	FT	\$100.00	\$8,000.00
EXCAVATION	365,067	CY	\$40.00	\$14,602,680.00
EMBANKMENT	156,703	CY	\$45.00	\$7,051,635.00
GUARDRAIL	3,600	FT	\$22.00	\$79,200.00
MEDIAN BARRIER	0	FT	\$120.00	\$0.00
CURB AND GUTTER	6,520	FT	\$42.00	\$273,840.00
CONCRETE MEDIAN	0	SY	\$100.00	\$0.00
CONCRETE WALK	0	SF	\$13.00	\$0.00
Roadway Subtotal				

Erosion Control						
Description	Quantity	Unit	Unit Cost	Total		
EROSION CONTROL	550,000	EACH	1	\$550,000.00		
EROSION CONTROL PLAN	1	LUMP	\$75,000.00	\$75,000.00		
BMPs	1	LUMP	\$355,000.00	\$355,000.00		
SEEDING AND MULCHING	118,236	SY	\$2.00	\$236,472.00		
Erosion Control Subtotal						

Drainage					
Description	Quar	itity	Unit	Unit Cost	Total
CULVERT	80	)	FT	\$600.00	\$48,000.00
STORM SEWER SYSTEM	6,0	00	FT	\$300.00	\$1,800,000.00
UNDERDRAINS	6,0	00	FT	\$15.00	\$90,000.00
Drainage Subtotal					\$1,938,000,00

Pavement				
Description	Quantity	Unit	Unit Cost	Total
FULL DEPTH PAVEMENT, ASPHALT	32,000	SY	\$100.00	\$3,200,000.00
FULL DEPTH PAVEMENT, CONCRETE	37,088	SY	\$150.00	\$5,563,141.77
PAVEMENT PLANING AND RESURFACING	12,480	SY	\$54.00	\$673,920.00
SHARED USE PATH	0	SY	\$42.00	\$0.00
Pavement Subtotal				

Traffic Control - Signing and Pavement Marking					
Description	Quantity	Unit	Unit Cost	Total	
SIGNING	2.4	MILE	\$250,000.00	\$600,000.00	
PAVEMENT MARKINGS - THERMO	1.2	MILE	\$14,000.00	\$16,800.00	
PAVEMENT MARKINGS - RECESSED	1.2	MILE	\$30,000.00	\$36,000.00	
Traffic Control - Signing and Pavement Marking Subtotal					

Traffic Signal and Surveillance						
Description			Quantity	Unit	Unit Cost	Total
STANDARD TRAFFIC SIGNAL			2	EACH	\$300,000.00	\$600,000.00
TRAFFIC SIGNAL FOR R-CUT			0	EACH	\$780,000.00	\$0.00
FIBER OPTIC COMMUNICATION			2	MILE	\$170,000.00	\$380,800.00
CCTV	_		2	EACH	\$123,000.00	\$246,000.00
		Traffic Control - Traffic Signal Subtotal				

Roadway Lighting					
Description	/	Quantity	Unit	Unit Cost	Total
FULL INTERCHANGE LIGHTING		1	EACH	\$500,000.00	\$500,000.00
PARTIAL INTERCHANGE LIGHTING		0	EACH	\$300,000.00	\$0.00
CONTINUOUS ROADWAY LIGHTING		3500	FT	\$100.00	\$350,000.00
	Traffic Control - Traffic Signal Subtotal				\$850,000.00

Utility Relocations - Gas, Electric, Water, Wastewater						
Description		Quant	ity	Unit	Unit Cost	Total
HIGH PRESSURE GAS LINE		220		FT	\$200.00	\$44,000.00
WATERLINE 36" OR LARGER		0		FT		\$0.00
HIGH VOLTAGE TOWER		0		EACH		\$0.00
SANITARY LINE 36" OR LARGER		0		FT		\$0.00
DAM MODIFICATION		1		LUMP		\$0.00
Water/Wastewater Subtotal					\$44,000.00	

Structures							
Description				Quantity	Unit	Unit Cost	Total
RETAINING WALL				0	SF	\$90.00	\$0.00
BRIDGE				12,350	SF	\$220.00	\$2,717,000.00
	Pavement Subtotal				\$2,717,000.00		

Incidentals				
Description	Quantity	Unit	Unit Cost	Total
CONSTRUCTION LAYOUT STAKES	\$1.00	LUMP	\$204,000.00	\$204,000.00
MAINTENANCE OF TRAFFIC	\$1.00	LUMP	\$815,000.00	\$815,000.00
MOBILIZATION	\$1.00	LUMP	\$1,200,000.00	\$1,200,000.00
Miscellaneous Subtotal				

Project Summary	Subtotal
Roadway	\$22,565,755
Erosion Control	\$1,216,472
Drainage	\$1,938,000
Pavement	\$9,437,062
Traffic Control - Signing and Pavement Marking	\$652,800
Traffic Signal and Surveillance	\$1,226,800
Roadway Lighting	\$850,000
Utility Relocations - Gas, Electric, Water, Wastewater	\$44,000
Structures	\$2,717,000
Incidentals	\$2,219,000
Total	\$42,867,000

Contingency (30%)	\$12,860,000
Subtotal	\$55,727,000
Right-of-Way	\$0
Engineering (18%)	\$10,031,000
Construction Engineering (10%)	\$5,573,000
Subtotal	\$71,331,000
Inflation (30%)	\$21,399,300
Project Total (2030 Dollars)	

Estimate completed by:

ms consultants, inc
engineers, architects, planner

# **SEGMENT 5 CONCEPT B - OVERALL**

SEGMENT 5 CONCEPT B - RANGE 1	Quantity
Construction Subtotal	\$19,449,000
Contingency (30%)	\$5,835,000
Construction Total	\$25,284,000
Right-of-Way	\$0
Engineering (18%)	\$4,551,000
Construction Engineering (10%)	\$2,528,000
Project Subtotal	\$32,363,000
Inflation (30%)	\$9,708,900
Subtotal	\$42,072,000
SEGMENT 5 CONCEPT B - RANGE 2	
Construction Subtotal	\$9,483,000
Contingency (30%)	\$2,845,000
Construction Total	\$12,328,000
Right-of-Way	\$0
Engineering (18%)	\$2,219,000
Construction Engineering (10%)	\$1,233,000
Project Subtotal	\$15,780,000
Inflation (30%)	\$4,734,000
Subtotal	\$20,514,000
SEGMENT 5 CONCEPT B - RANGE 3	
Construction Subtotal	\$18,234,000
Contingency (30%)	\$5,470,000
Construction Total	\$23,704,000
Right-of-Way	\$0
Engineering (18%)	\$4,267,000
Construction Engineering (10%)	\$2,370,000
Project Subtotal	\$30,341,000
Inflation (30%)	\$9,102,300
Subtotal	\$39,443,000
SEGMENT 5 CONCEPT B - RANGE 4	
Construction Subtotal	\$43,015,000
Contingency (30%)	\$12,905,000
Construction Total	\$55,920,000
Right-of-Way	\$0
Engineering (18%)	\$10,066,000
Construction Engineering (10%)	\$5,592,000
Project Subtotal	\$71,578,000
Inflation (30%)	\$21,473,400
Subtotal	\$93,051,000

 SEGMENT 7 - OVERALL

 SEGMENT 5 CONCEPT B - RANGE 1
 \$42,072,000

 SEGMENT 5 CONCEPT B - RANGE 2
 \$20,514,000

 SEGMENT 5 CONCEPT B - RANGE 3
 \$39,443,000

 SEGMENT 5 CONCEPT B - RANGE 4
 \$93,051,000

 Total - Segment X - Overall
 \$195,080,000

Current Year
Construction w/ Contingency w/out Inflation
\$150,062,000
for use in B/C calc



#### SEGMENT 5 CONCEPT B - RANGE 1 452 + 65.00 to 500 + 00.00

Roadway				
Description	Quantity	Unit	Unit Cost	Total
PAVEMENT REMOVED	32,520	SY	\$20.00	\$650,400.00
CULVERT REMOVED	40	FT	\$100.00	\$4,000.00
EXCAVATION	17,196	CY	\$40.00	\$687,839.17
EMBANKMENT	61,142	CY	\$45.00	\$2,751,381.76
GUARDRAIL	1,750	FT	\$22.00	\$38,500.00
MEDIAN BARRIER	0	FT	\$120.00	\$0.00
CURB AND GUTTER	4,250	FT	\$42.00	\$178,500.00
CONCRETE MEDIAN	4,280	SY	\$100.00	\$428,000.00
CONCRETE WALK	0	SF	\$13.00	\$0.00
Roadway Subtotal				

Erosion Control				
Description	Quantity	Unit	Unit Cost	Total
EROSION CONTROL	190,000	EACH	\$1.00	\$190,000.00
EROSION CONTROL PLAN	1	LUMP	\$50,000.00	\$50,000.00
BMPs	1	LUMP	\$137,000.00	\$137,000.00
SEEDING AND MULCHING	31,161	SY	\$2.00	\$62,322.37
Erosion Control Subtotal				\$439,322.37

Drainage				
Description	Quantity	Unit	Unit Cost	Total
CULVERT	40	FT	\$600.00	\$24,000.00
STORM SEWER SYSTEM	9,200	FT	\$300.00	\$2,760,000.00
UNDERDRAINS	9,200	FT	\$15.00	\$138,000.00
Drainage Subtotal				

Pavement				
Description	Quantity	Unit	Unit Cost	Total
FULL DEPTH PAVEMENT, ASPHALT	56,000	SY	\$100.00	\$5,600,000.00
PAVEMENT PLANING AND RESURFACING	14,520	SY	\$54.00	\$784,080.00
SHARED USE PATH	0	SY	\$42.00	\$0.00
		Pav	ement Subtotal	\$6.384.080.00

Traffic Control - Signing and Pavement Marking				
Description	Quantity	Unit	Unit Cost	Total
SIGNING	4	MILE	\$250,000.00	\$1,000,000.00
PAVEMENT MARKINGS - THERMO	2.0	MILE	\$14,000.00	\$28,000.00
PAVEMENT MARKINGS - RECESSED	2.0	MILE	\$30,000.00	\$60,000.00
Traffic Control - Signing and Pavement Marking Subtotal				

Traffic Signal and Surveillance				
Description	Quantity	Unit	Unit Cost	Total
STANDARD TRAFFIC SIGNAL	1	EACH	\$300,000.00	\$300,000.00
TRAFFIC SIGNAL FOR R-CUT	0	EACH	\$780,000.00	\$0.00
FIBER OPTIC COMMUNICATION	2.5	MILE	\$170,000.00	\$425,000.00
CCTV	1	EACH	\$123,000.00	\$123,000.00
	Traffic Conf	trol - Traffic	Signal Subtotal	\$848,000.00

Roadway Lighting					
Description		Quantity	Unit	Unit Cost	Total
FULL INTERCHANGE LIGHTING		0	EACH	\$500,000.00	\$0.00
PARTIAL INTERCHANGE LIGHTING		0	EACH	\$300,000.00	\$0.00
CONTINUOUS ROADWAY LIGHTING		4735	FT	\$100.00	\$473,500.00
		Traffic Con	trol - Traffic	Signal Subtotal	\$473,500.00

Utility Relocations - Gas, Electric, Water, Wastewater				
Description	Quantity	Unit	Unit Cost	Total
HIGH PRESSURE GAS LINE	2800	FT	\$200.00	\$560,000.00
WATERLINE 36" OR LARGER	0	FT		\$0.00
HIGH VOLTAGE TOWER	0	EACH		\$0.00
SANITARY LINE 36" OR LARGER	0	FT		\$0.00
DAM MODIFICATION	0	LUMP		\$0.00
		Vator /Mact	nuntar Cubtotal	A=50.000.00

Structures					
Description		Quantity	Unit	Unit Cost	Total
RETAINING WALL		0	SF	\$90.00	\$0.00
BRIDGE		5,200	SF	\$220.00	\$1,144,000.00
		Pavement Subtotal			

Incidentals				
Description	Quantity	Unit	Unit Cost	Total
CONSTRUCTION LAYOUT STAKES	1	LUMP	\$90,000.00	\$90,000.00
MAINTENANCE OF TRAFFIC	1	LUMP	\$361,000.00	\$361,000.00
MOBILIZATION	1	LUMP	\$400,000.00	\$400,000.00
Miscellaneous Subtotal				

Project Summary	Subtotal
Roadway	\$4,738,621
Erosion Control	\$439,322
Drainage	\$2,922,000
Pavement	\$6,384,080
Traffic Control - Signing and Pavement Marking	\$1,088,000
Traffic Signal and Surveillance	\$848,000
Roadway Lighting	\$473,500
Utility Relocations - Gas, Electric, Water, Wastewater	\$560,000
Structures	\$1,144,000
Incidentals	\$851,000
Total	\$19,449,000

Contingency (30%)		\$5,835,000
	Subtotal	\$25,284,000
Right-of-Way		\$0
Engineering (18%)		\$4,551,000
Construction Engineering (10%)		\$2,528,000
	Subtotal	\$32,363,000
Inflation (30%)		\$9,708,900



#### SEGMENT 5 CONCEPT B - RANGE 2 500 + 00.00 TO 515 + 00.00

Roadway				
Description	Quantity	Unit	Unit Cost	Total
PAVEMENT REMOVED	14,000	SY	\$20.00	\$280,000.00
CULVERT REMOVED	40	FT	\$100.00	\$4,000.00
EXCAVATION	17,402	CY	\$40.00	\$696,081.72
EMBANKMENT	33,572	CY	\$45.00	\$1,510,719.17
GUARDRAIL	625	FT	\$22.00	\$13,750.00
MEDIAN BARRIER	0	FT	\$120.00	\$0.00
CURB AND GUTTER	6,000	FT	\$42.00	\$252,000.00
CONCRETE MEDIAN	0	SY	\$100.00	\$0.00
CONCRETE WALK	0	SF	\$13.00	\$0.00
		Ro	adway Subtotal	\$2,756,550.89

Erosion Control				
Description	Quantity	Unit	Unit Cost	Total
EROSION CONTROL	100,000	EACH	1	\$100,000.00
EROSION CONTROL PLAN	1	LUMP	\$25,000.00	\$25,000.00
BMPs	1	LUMP	\$91,000.00	\$91,000.00
SEEDING AND MULCHING	18,649	SY	\$2.00	\$37,297.77
Erosion Control Subtotal S				\$253,297.77

Drainage					
Description	Quan	tity	Unit	Unit Cost	Total
CULVERT	40	1	FT	\$600.00	\$24,000.00
STORM SEWER SYSTEM	6,00	00	FT	\$300.00	\$1,800,000.00
UNDERDRAINS	6,00	00	FT	\$15.00	\$90,000.00
Drainage Subtotal					\$1,017,000,00

Pavement				
Description	Quantity	Unit	Unit Cost	Total
FULL DEPTH PAVEMENT, ASPHALT	18,500	SY	\$100.00	\$1,850,000.00
PAVEMENT PLANING AND RESURFACING	12,365	SY	\$54.00	\$667,710.00
SHARED USE PATH	0	SY	\$42.00	\$0.00
		Pav	ement Subtotal	\$2 517 710 00

Traffic Control - Signing and Pavement Marking				
Description	Quantity	Unit	Unit Cost	Total
SIGNING	1	MILE	\$250,000.00	\$312,500.00
PAVEMENT MARKINGS - THERMO	0.3	MILE	\$14,000.00	\$3,920.00
PAVEMENT MARKINGS - RECESSED	1.0	MILE	\$30,000.00	\$29,100.00
Traffic Cont	rol - Signing and F	Pavement M	arking Subtotal	\$345,520.00

Traffic Signal and Surveillance					
Description		Quantity	Unit	Unit Cost	Total
STANDARD TRAFFIC SIGNAL		0	EACH	\$300,000.00	\$0.00
TRAFFIC SIGNAL FOR R-CUT		0	EACH	\$780,000.00	\$0.00
FIBER OPTIC COMMUNICATION		1	MILE	\$170,000.00	\$204,000.00
CCTV		0	EACH	\$123,000.00	\$0.00
		Traffic Control - Traffic Signal Subtota			

Roadway Lighting			,		
Description		Quantity	Unit	Unit Cost	Total
FULL INTERCHANGE LIGHTING		0	EACH	\$500,000.00	\$0.00
PARTIAL INTERCHANGE LIGHTING		0	EACH	\$300,000.00	\$0.00
CONTINUOUS ROADWAY LIGHTING		4500	FT	\$100.00	\$450,000.00
	Traffic Control - Traffic Signal Subtotal			\$450,000.00	

4	Utility Relocations - Gas, Electric, Water, Wastewater				
	Description	Quantity	Unit	Unit Cost	Total
	HIGH PRESSURE GAS LINE	867	FT	\$200.00	\$173,400.00
P	WATERLINE 36" OR LARGER	0	FT		\$0.00
	HIGH VOLTAGE TOWER	0	EACH		\$0.00
	SANITARY LINE 36" OR LARGER	0	FT		\$0.00
	DAM MODIFICATION	0	LUMP		\$0.00
	Water/Wastewater Subtotal				\$173,400.00

Structures				
Description	Quantity	Unit	Unit Cost	Total
RETAINING WALL	0	SF	\$90.00	\$0.00
BRIDGE	2,030	SF	\$220.00	\$446,600.00
	Pavement Subtotal			\$446,600.00

Incidentals				
Description	Quantity	Unit	Unit Cost	Total
CONSTRUCTION LAYOUT STAKES	1	LUMP	\$44,000.00	\$44,000.00
MAINTENANCE OF TRAFFIC	1	LUMP	\$178,000.00	\$178,000.00
MOBILIZATION	1	LUMP	\$200,000.00	\$200,000.00
Miscellaneous Subtotal			\$422,000,00	

Desirat Comment	Subtotal
Project Summary	Subtotal
Roadway	\$2,756,551
Erosion Control	\$253,298
Drainage	\$1,914,000
Pavement	\$2,517,710
Traffic Control - Signing and Pavement Marking	\$345,520
Traffic Signal and Surveillance	\$204,000
Roadway Lighting	\$450,000
Utility Relocations - Gas, Electric, Water, Wastewater	\$173,400
Structures	\$446,600
Incidentals	\$422,000
Total	\$9,483,000

Contingency (30%)	\$2,845,000
S	ubtotal \$12,328,000
Right-of-Way	\$0
Engineering (18%)	\$2,219,000
Construction Engineering (10%)	\$1,233,000
S	ubtotal \$15,780,000

flation (30%) \$4,734,000

Project Total (2030 Dollars) \$20,514,000



# SEGMENT 5 CONCEPT B - RANGE 3 515 + 00.00 TO 535 + 00.00

Roadway				
Description	Quantity	Unit	Unit Cost	Total
PAVEMENT REMOVED	26,250	SY	\$20.00	\$525,000.00
CULVERT REMOVED	40	FT	\$100.00	\$4,000.00
EXCAVATION	137,347	CY	\$40.00	\$5,493,894.96
EMBANKMENT	13,278	CY	\$45.00	\$597,501.45
GUARDRAIL	750	FT	\$22.00	\$16,500.00
MEDIAN BARRIER	0	FT	\$120.00	\$0.00
CURB AND GUTTER	6,300	FT	\$42.00	\$264,600.00
CONCRETE MEDIAN	0	SY	\$100.00	\$0.00
CONCRETE WALK	0	SF	\$13.00	\$0.00
Roadway Subtotal				

Erosion Control					
Description	Quantity	Unit	Unit Cost	Total	
EROSION CONTROL	195,000	EACH	1	\$195,000.00	
EROSION CONTROL PLAN	1	LUMP	\$25,000.00	\$25,000.00	
BMPs	1	LUMP	\$162,000.00	\$162,000.00	
SEEDING AND MULCHING	38,505	SY	\$2.00	\$77,010.59	
Erosion Control Subtotal					

Drainage				
Description	Quantity	Unit	Unit Cost	Total
CULVERT	40	FT	\$600.00	\$24,000.00
STORM SEWER SYSTEM	5,800	FT	\$300.00	\$1,740,000.00
UNDERDRAINS	5,800	FT	\$15.00	\$87,000.00
Drainage Subtotal				

Pavement				
Description	Quantity	Unit	Unit Cost	Total
FULL DEPTH PAVEMENT, ASPHALT	19,200	SY	\$100.00	\$1,920,000.00
PAVEMENT PLANING AND RESURFACING	12,520	SY	\$54.00	\$676,080.00
SHARED USE PATH	0	SY	\$42.00	\$0.00
Pavement Subtotal			\$2,596,080.00	

Traffic Control - Signing and Pavement Marking				
Description	Quantity	Unit	Unit Cost	Total
SIGNING	1.6	MILE	\$250,000.00	\$405,000.00
PAVEMENT MARKINGS - THERMO	0.4	MILE	\$14,000.00	\$5,600.00
PAVEMENT MARKINGS - RECESSED	1.2	MILE	\$30,000.00	\$36,600.00
Traffic Control - Signing and Pavement Marking Subtotal				

Traffic Signal and Surveillance					
Description		Quantity	Unit	Unit Cost	Total
STANDARD TRAFFIC SIGNAL		0	EACH	\$300,000.00	\$0.00
TRAFFIC SIGNAL FOR R-CUT		0	EACH	\$780,000.00	\$0.00
FIBER OPTIC COMMUNICATION		1	MILE	\$170,000.00	\$204,000.00
CCTV		0	EACH	\$123,000.00	\$0.00
Traffic Control - Traffic Signal Subtotal					

Roadway Lighting					
Description		Quantity	Unit	Unit Cost	Total
FULL INTERCHANGE LIGHTING		0	EACH	\$500,000.00	\$0.00
PARTIAL INTERCHANGE LIGHTING		0	EACH	\$300,000.00	\$0.00
CONTINUOUS ROADWAY LIGHTING		6500	FT	\$100.00	\$650,000.00
	V	Traffic Cor	trol - Traffic	Signal Subtotal	\$650,000.00

4	Utility Relocations - Gas, Electric, Water, Wastewater					
	Description		Quantity	Unit	Unit Cost	Total
	HIGH PRESSURE GAS LINE		420	FT	\$200.00	\$84,000.00
	WATERLINE 36" OR LARGER		0	FT		\$0.00
	HIGH VOLTAGE TOWER		2	EACH	\$1,500,000.00	\$3,000,000.00
	SANITARY LINE 36" OR LARGER		0	FT		\$0.00
	DAM MODIFICATION		0	LUMP		\$0.00
	Water/Wastewater Subtotal					

Structures						
Description		Quantity	Unit	Unit Cost	Total	
RETAINING WALL		0	SF	\$90.00	\$0.00	
BRIDGE		5,824	SF	\$220.00	\$1,281,280.00	
		Pavement Subtotal				

Incidentals					
Description	Quantity	Unit	Unit Cost	Total	
CONSTRUCTION LAYOUT STAKES	1	LUMP	\$72,000.00	\$72,000.00	
MAINTENANCE OF TRAFFIC	1	LUMP	\$288,000.00	\$288,000.00	
MOBILIZATION	1	LUMP	\$400,000.00	\$400,000.00	
Miscellaneous Subtotal					

Project Summary	Subtotal
Roadway	\$6,901,496
Erosion Control	\$459,011
Drainage	\$1,851,000
Pavement	\$2,596,080
Traffic Control - Signing and Pavement Marking	\$447,200
Traffic Signal and Surveillance	\$204,000
Roadway Lighting	\$650,000
Utility Relocations - Gas, Electric, Water, Wastewater	\$3,084,000
Structures	\$1,281,280
Incidentals	\$760,000
Tot	tal \$18,234,000

	\$5,470,000
Subtotal	\$23,704,000
	\$0
	\$4,267,000
	\$2,370,000
Subtotal	\$30,341,000
	Subtotal



#### SEGMENT 5 CONCEPT B - RANGE 4 535 + 00.00 TO 573 + 68.00

Roadway					
Description	Quanti	ty l	Unit	Unit Cost	Total
PAVEMENT REMOVED	27,52	0	SY	\$20.00	\$550,400.00
CULVERT REMOVED	80		FT	\$100.00	\$8,000.00
EXCAVATION	365,60	17	CY	\$40.00	\$14,624,266.88
EMBANKMENT	156,70	13	CY	\$45.00	\$7,051,622.73
GUARDRAIL	3,600	)	FT	\$22.00	\$79,200.00
MEDIAN BARRIER	0		FT	\$120.00	\$0.00
CURB AND GUTTER	6,520	)	FT	\$42.00	\$273,840.00
CONCRETE MEDIAN	0		SY	\$100.00	\$0.00
CONCRETE WALK	0		SF	\$13.00	\$0.00
Roadway Subtotal   5					

Erosion Control						
Description	Quai	ntity	Unit	Unit Cost	Total	
EROSION CONTROL	500,	000	EACH	1	\$500,000.00	
EROSION CONTROL PLAN	1		LUMP	\$75,000.00	\$75,000.00	
BMPs	1		LUMP	\$355,000.00	\$355,000.00	
SEEDING AND MULCHING	102,	814	SY	\$2.00	\$205,628.37	
Erosion Control Subtotal					\$1,135,628.37	

Drainage					
Description		Quantity	Unit	Unit Cost	Total
CULVERT		80	FT	\$600.00	\$48,000.00
STORM SEWER SYSTEM		6,000	FT	\$300.00	\$1,800,000.00
UNDERDRAINS		6,000	FT	\$15.00	\$90,000.00
Drainage Subtotal					\$1,029,000,00

Pavement				
Description	Quantity	Unit	Unit Cost	Total
FULL DEPTH PAVEMENT, ASPHALT	32,000	SY	\$100.00	\$3,200,000.00
FULL DEPTH PAVEMENT, CONCRETE	38,473	SY	\$150.00	\$5,770,971.05
PAVEMENT PLANING AND RESURFACING	12,480	SY	\$54.00	\$673,920.00
SHARED USE PATH	0	SY	\$42.00	\$0.00
Pavement Subtotal				

Traffic Control - Signing and Pavement Marking				
Description	Quantity	Unit	Unit Cost	Total
SIGNING	2.4	MILE	\$250,000.00	\$600,000.00
PAVEMENT MARKINGS - THERMO	1.2	MILE	\$14,000.00	\$16,800.00
PAVEMENT MARKINGS - RECESSED	1.2	MILE	\$30,000.00	\$36,000.00
Traffic Control - Signing and Pavement Marking Subtotal				

Traffic Signal and Surveillance						
Description		Quantity	Unit	Unit Cost	Total	
STANDARD TRAFFIC SIGNAL		2	EACH	\$300,000.00	\$600,000.00	
TRAFFIC SIGNAL FOR R-CUT		0	EACH	\$780,000.00	\$0.00	
FIBER OPTIC COMMUNICATION		2	MILE	\$170,000.00	\$380,800.00	
CCTV		2	EACH	\$123,000.00	\$246,000.00	
		Traffic Control - Traffic Signal Subtotal				

Roadway Lighting				
Description	Quantity	Unit	Unit Cost	Total
FULL INTERCHANGE LIGHTING	1	EACH	\$500,000.00	\$500,000.00
PARTIAL INTERCHANGE LIGHTING	0	EACH	\$300,000.00	\$0.00
CONTINUOUS ROADWAY LIGHTING	3500	FT	\$100.00	\$350,000.00
	Traffic Control - Traffic Signal Subtotal			

Utility Relocations - Gas, Electric, Water, Wastewater						
Description	Quantity	Unit	Unit Cost	Total		
HIGH PRESSURE GAS LINE	220	FT	\$200.00	\$44,000.00		
WATERLINE 36" OR LARGER	0	FT		\$0.00		
HIGH VOLTAGE TOWER	0	EACH		\$0.00		
SANITARY LINE 36" OR LARGER	0	FT		\$0.00		
DAM MODIFICATION	0	LUMP		\$0.00		
		Water/Waste	ewater Subtotal	\$44,000.00		

Structures							
Description				Quantity	Unit	Unit Cost	Total
RETAINING WALL				0	SF	\$90.00	\$0.00
BRIDGE				12,350	SF	\$220.00	\$2,717,000.00
Pavement Subtotal					\$2,717,000.00		

Incidentals					
Description	Quantity	Unit	Unit Cost	Total	
CONSTRUCTION LAYOUT STAKES	1	LUMP	\$204,000.00	\$204,000.00	
MAINTENANCE OF TRAFFIC	1	LUMP	\$815,000.00	\$815,000.00	
MOBILIZATION	1	LUMP	\$1,200,000.00	\$1,200,000.00	
Miscellaneous Subtotal					

Project Summary	Subtotal
Roadway	\$22,587,330
Erosion Control	\$1,135,628
Drainage	\$1,938,000
Pavement	\$9,644,891
Traffic Control - Signing and Pavement Marking	\$652,800
Traffic Signal and Surveillance	\$1,226,800
Roadway Lighting	\$850,000
Utility Relocations - Gas, Electric, Water, Wastewater	\$44,000
Structures	\$2,717,000
Incidentals	\$2,219,000
Total	\$43,015,000

Contingency (30%)		\$12,905,000
Sub	total	\$55,920,000
Right-of-Way		\$0
Engineering (18%)		\$10,066,000
Construction Engineering (10%)		\$5,592,000
Sub	total	\$71,578,000
Inflation (30%)		\$21,473,400

Project Total (2030 Dollars) \$93,051,000

ms consultants, inc

# SEGMENT X CONCEPT A - OVERALL

SEGMENT 5 CONCEPT C - RANGE 1	Quantity
Construction Subtotal	\$29,889,000
Contingency (30%)	\$8,967,000
Construction Total	\$38,856,000
Right-of-Way	\$0
Engineering (18%)	\$6,994,000
Construction Engineering (10%)	\$3,886,000
Project Subtotal	\$49,736,000
Inflation (30%)	\$14,920,800
Subtotal	\$64,657,000
SEGMENT 5 CONCEPT C - RANGE 2	
Construction Subtotal	\$10,231,000
Contingency (30%)	\$3,069,000
Construction Total	\$13,300,000
Right-of-Way	\$0
Engineering (18%)	\$2,394,000
Construction Engineering (10%)	\$1,330,000
Project Subtotal	\$17,024,000
Inflation (30%)	\$5,107,200
Subtotal	\$22,131,000
SEGMENT 5 CONCEPT C - RANGE 3	
Construction Subtotal	\$10,950,000
Contingency (30%)	\$3,285,000
Construction Total	\$14,235,000
Right-of-Way	\$0
Engineering (18%)	\$2,562,000
Construction Engineering (10%)	\$1,424,000
Project Subtotal	\$18,221,000
Inflation (30%)	\$5,466,300
Subtotal	\$23,687,000
SEGMENT 5 CONCEPT C - RANGE 4	
Construction Subtotal	\$29,394,000
Contingency (30%)	\$8,818,000
Construction Total	\$38,212,000
Right-of-Way	\$0
Engineering (18%)	\$6,878,000
Construction Engineering (10%)	\$3,821,000
Project Subtotal	\$48,911,000
Inflation (30%)	\$14,673,300
Subtotal	\$63,584,000

SEGMENT 5 - OVERALL	
SEGMENT 5 CONCEPT C - RANGE 1	\$64,657,000
SEGMENT 5 CONCEPT C - RANGE 2	\$22,131,000
SEGMENT 5 CONCEPT C - RANGE 3	\$23,687,000
SEGMENT 5 CONCEPT C - RANGE 4	\$63,584,000
Total Sagment F Overall	\$174 DEG 000

Current Year
Construction w/out Inflation
\$133,892,000
for use in B/C calcs



#### SEGMENT 5 CONCEPT C - RANGE 1 452 + 65.00 to 500 + 00.00

Roadway					
Description	Quantity	Unit	Unit Cost	Total	
PAVEMENT REMOVED	29,560	SY	\$20.00	\$591,200.00	
CULVERT REMOVED	40	FT	\$100.00	\$4,000.00	
EXCAVATION	27,600	CY	\$40.00	\$1,103,984.12	
EMBANKMENT	134,983	CY	\$45.00	\$6,074,246.84	
GUARDRAIL	2,200	FT	\$22.00	\$48,400.00	
MEDIAN BARRIER	0	FT	\$120.00	\$0.00	
CURB AND GUTTER	4,250	FT	\$42.00	\$178,500.00	
CONCRETE MEDIAN	4,280	SY	\$100.00	\$428,000.00	
CONCRETE WALK	0	SF	\$13.00	\$0.00	
Roadway Subtotal					

Erosion Control					
Description		Quantity	Unit	Unit Cost	Total
EROSION CONTROL		308,000	EACH	1	\$308,000.00
EROSION CONTROL PLAN		1	LUMP	\$50,000.00	\$50,000.00
BMPs		1	LUMP	\$223,000.00	\$223,000.00
SEEDING AND MULCHING		57,399	SY	\$2.00	\$114,798.64
Erosion Control Subtotal					

Drainage					
Description	Quant	ity	Unit	Unit Cost	Total
CULVERT	40		FT	\$600.00	\$24,000.00
STORM SEWER SYSTEM	9,20	0	FT	\$300.00	\$2,760,000.00
UNDERDRAINS	9,20	0	FT	\$15.00	\$138,000.00
Drainage Subtotal					\$2,922,000,00

Pavement				
Description	Quantity	Unit	Unit Cost	Total
FULL DEPTH PAVEMENT, ASPHALT	58,000	SY	\$100.00	\$5,800,000.00
FULL DEPTH PAVEMENT, CONCRETE	4,187	SY	\$150.00	\$628,115.45
PAVEMENT PLANING AND RESURFACING	14,250	SY	\$54.00	\$769,500.00
SHARED USE PATH	0	SY	\$42.00	\$0.00
Pavement Subtotal				

Traffic Control - Signing and Pavement Marking						
Description	Quantity	Unit	Unit Cost	Total		
SIGNING	3	MILE	\$250,000.00	\$800,000.00		
PAVEMENT MARKINGS - THERMO	2.0	MILE	\$14,000.00	\$28,000.00		
PAVEMENT MARKINGS - RECESSED	1.2	MILE	\$30,000.00	\$36,000.00		
Traffic Con	Traffic Control - Signing and Pavement Marking Subtotal					

Traffic Signal and Surveillance						
Description			Quantity	Unit	Unit Cost	Total
STANDARD TRAFFIC SIGNAL			1	EACH	\$300,000.00	\$300,000.00
TRAFFIC SIGNAL FOR R-CUT			1	EACH	\$780,000.00	\$780,000.00
FIBER OPTIC COMMUNICATION			2.5	MILE	\$170,000.00	\$425,000.00
CCTV	_		2	EACH	\$123,000.00	\$246,000.00
	7		\$1,751,000.00			

Roadway Lighting					
Description	Quantity	Unit	Unit Cost	Total	
FULL INTERCHANGE LIGHTING	0	EACH	\$500,000.00	\$0.00	
PARTIAL INTERCHANGE LIGHTING	1	EACH	\$300,000.00	\$300,000.00	
CONTINUOUS ROADWAY LIGHTING	4735	FT	\$100.00	\$473,500.00	
	Traffic Control - Traffic Signal Subtotal				

Utility Relocations - Gas, Electric, Water, Wastewater						
Description	Quantity	Unit	Unit Cost	Total		
HIGH PRESSURE GAS LINE	2800	FT	\$200.00	\$560,000.00		
WATERLINE 36" OR LARGER	0	FT		\$0.00		
HIGH VOLTAGE TOWER	0	EACH		\$0.00		
SANITARY LINE 36" OR LARGER	0	FT		\$0.00		
DAM MODIFICATION	0	LUMP		\$0.00		
		Water/Waste	ewater Subtotal	\$560,000,00		

Structures						
Description			Quantity	Unit	Unit Cost	Total
RETAINING WALL			0	SF	\$90.00	\$0.00
BRIDGE			24,100	SF	\$220.00	\$5,302,000.00
		Pavement Subtotal \$5,302,0				\$5,302,000.00

Incidentals					
Description	Quantity	Unit	Unit Cost	Total	
CONSTRUCTION LAYOUT STAKES	\$1.00	LUMP	\$119,000.00	\$119,000.00	
MAINTENANCE OF TRAFFIC	\$1.00	LUMP	\$476,000.00	\$476,000.00	
MOBILIZATION	\$1.00	LUMP	\$800,000.00	\$800,000.00	
	Miscellaneous Subtotal S				

Project Summary	Subtotal
Roadway	\$8,428,331
Erosion Control	\$695,799
Drainage	\$2,922,000
Pavement	\$7,197,615
Traffic Control - Signing and Pavement Marking	\$864,000
Traffic Signal and Surveillance	\$1,751,000
Roadway Lighting	\$773,500
Utility Relocations - Gas, Electric, Water, Wastewater	\$560,000
Structures	\$5,302,000
Incidentals	\$1,395,000
Tota	\$29,889,000

Contingency (30%)	\$8,967,000
Subtotal	\$38,856,000
Right-of-Way	\$0
Engineering (18%)	\$6,994,000
Construction Engineering (10%)	\$3,886,000
Subtotal	\$49,736,000
Inflation (30%)	\$14,920,800
Project Total (2030 Dollars)	\$64,657,000



# SEGMENT 5 CONCEPT C - RANGE 2 500 + 00.00 TO 515 + 00.00

Roadway				
Description	Quantity	Unit	Unit Cost	Total
PAVEMENT REMOVED	14,000	SY	\$20.00	\$280,000.00
CULVERT REMOVED	40	FT	\$100.00	\$4,000.00
EXCAVATION	27,579	CY	\$40.00	\$1,103,152.28
EMBANKMENT	35,136	CY	\$45.00	\$1,581,127.70
GUARDRAIL	1,000	FT	\$22.00	\$22,000.00
MEDIAN BARRIER	0	FT	\$120.00	\$0.00
CURB AND GUTTER	6,000	FT	\$42.00	\$252,000.00
CONCRETE MEDIAN	0	SY	\$100.00	\$0.00
CONCRETE WALK	0	SF	\$13.00	\$0.00
		Ro	adway Subtotal	\$3,242,279.98

Erosion Control				
Description	Quantity	Unit	Unit Cost	Total
EROSION CONTROL	125,000	EACH	1	\$125,000.00
EROSION CONTROL PLAN	1	LUMP	\$25,000.00	\$25,000.00
BMPs	1	LUMP	\$112,000.00	\$112,000.00
SEEDING AND MULCHING	24,189	SY	\$2.00	\$48,377.29
		Erosion C	Control Subtotal	\$310.377.29

Drainage				
Description	Quantity	Unit	Unit Cost	Total
CULVERT	40	FT	\$600.00	\$24,000.00
STORM SEWER SYSTEM	6,000	FT	\$300.00	\$1,800,000.00
UNDERDRAINS	6,000	FT	\$15.00	\$90,000.00
Drainage Subtotal				

Pavement				
Description	Quantity	Unit	Unit Cost	Total
FULL DEPTH PAVEMENT, ASPHALT	18,500	SY	\$100.00	\$1,850,000.00
PAVEMENT PLANING AND RESURFACING	10,065	SY	\$54.00	\$543,510.00
SHARED USE PATH	0	SY	\$42.00	\$0.00
Pavement Subtotal				\$2,393,510.00

Traffic Control - Signing and Pavement Marking				
Description	Quantity	Unit	Unit Cost	Total
SIGNING	1	MILE	\$250,000.00	\$312,500.00
PAVEMENT MARKINGS - THERMO	0.3	MILE	\$14,000.00	\$3,920.00
PAVEMENT MARKINGS - RECESSED	1.0	MILE	\$30,000.00	\$29,100.00
Traffic Control - Signing and Pavement Marking Subtotal				

Traffic Signal and Surveillance					
Description		Quantity	Unit	Unit Cost	Total
STANDARD TRAFFIC SIGNAL		0	EACH	\$300,000.00	\$0.00
TRAFFIC SIGNAL FOR R-CUT		0	EACH	\$780,000.00	\$0.00
FIBER OPTIC COMMUNICATION		1	MILE	\$170,000.00	\$204,000.00
CCTV		0	EACH	\$123,000.00	\$0.00
	Traffic Control - Traffic Signal Subtotal				

Roadway Lighting			•		
Description		Quantity	Unit	Unit Cost	Total
FULL INTERCHANGE LIGHTING		0	EACH	\$500,000.00	\$0.00
PARTIAL INTERCHANGE LIGHTING		0	EACH	\$300,000.00	\$0.00
CONTINUOUS ROADWAY LIGHTING		4500	FT.	\$100.00	\$450,000.00
		Traffic Con	trol - Traffic	Signal Subtotal	\$450,000.00

Utility Relocations - Gas, Electric, Water, Wastewater					
	Description	Quantity	Unit	Unit Cost	Total
	HIGH PRESSURE GAS LINE	867	FT	\$200.00	\$173,400.00
P	WATERLINE 36" OR LARGER	0	FT		\$0.00
	HIGH VOLTAGE TOWER	0	EACH		\$0.00
	SANITARY LINE 36" OR LARGER	0	FT		\$0.00
	DAM MODIFICATION	0	LUMP		\$0.00
		V	Vater/Waste	water Subtotal	\$173,400.00

Structures					
Description		Quantity	Unit	Unit Cost	Total
RETAINING WALL		0	SF	\$90.00	\$0.00
BRIDGE		4,425	SF	\$220.00	\$973,500.00
		Pavement Subtotal   5			\$973,500.00

Incidentals				
Description	Quantity	Unit	Unit Cost	Total
CONSTRUCTION LAYOUT STAKES	1	LUMP	\$46,000.00	\$46,000.00
MAINTENANCE OF TRAFFIC	1	LUMP	\$182,000.00	\$182,000.00
MOBILIZATION	1	LUMP	\$200,000.00	\$200,000.00
		Miscella	neous Subtotal	\$428 000 00

Project Summary	Subtotal
Roadway	\$3,242,280
Erosion Control	\$310,377
Drainage	\$1,914,000
Pavement	\$2,393,510
Traffic Control - Signing and Pavement Marking	\$345,520
Traffic Signal and Surveillance	\$0
Roadway Lighting	\$450,000
Utility Relocations - Gas, Electric, Water, Wastewater	\$173,400
Structures	\$973,500
Incidentals	\$428,000
Total	\$10,231,000

Contingency (30%)		\$3,069,000
	Subtotal	\$13,300,000
Right-of-Way		\$0
Engineering (18%)		\$2,394,000
Construction Engineering (10%)		\$1,330,000
	Subtotal	\$17,024,000



#### SEGMENT 5 CONCEPT C - RANGE 3 515 + 00.00 TO 535 + 00.00

Roadway				
Description	Quantity	Unit	Unit Cost	Total
PAVEMENT REMOVED	26,250	SY	\$20.00	\$525,000.00
CULVERT REMOVED	0	FT	\$100.00	\$0.00
EXCAVATION	66,722	CY	\$40.00	\$2,668,880.64
EMBANKMENT	5,768	CY	\$45.00	\$259,547.18
GUARDRAIL	250	FT	\$22.00	\$5,500.00
MEDIAN BARRIER	0	FT	\$120.00	\$0.00
CURB AND GUTTER	6,300	FT	\$42.00	\$264,600.00
CONCRETE MEDIAN	0	SY	\$100.00	\$0.00
CONCRETE WALK	0	SF	\$13.00	\$0.00
		Ro	adway Subtotal	\$3,723,527.82

Erosion Control				
Description	Quantity	Unit	Unit Cost	Total
EROSION CONTROL	140,000	EACH	1	\$140,000.00
EROSION CONTROL PLAN	1	LUMP	\$25,000.00	\$25,000.00
BMPs	1	LUMP	\$120,000.00	\$120,000.00
SEEDING AND MULCHING	26,318	SY	\$2.00	\$52,636.48
Erosion Control Subtotal				\$337,636.48

Drainage	Drainage			
Description	Quantity	Unit	Unit Cost	Total
CULVERT	0	FT	\$600.00	\$0.00
STORM SEWER SYSTEM	5,800	FT	\$300.00	\$1,740,000.00
UNDERDRAINS	5,800	FT	\$15.00	\$87,000.00
Drainage Subtotal				\$1,827,000,00

Pavement				
Description	Quantity	Unit	Unit Cost	Total
FULL DEPTH PAVEMENT, ASPHALT	16,520	SY	\$100.00	\$1,652,000.00
PAVEMENT PLANING AND RESURFACING	9,520	SY	\$54.00	\$514,080.00
SHARED USE PATH	0	SY	\$42.00	\$0.00
Pavement Subtotal				

	_			_	
Traffic Control - Signing and Pavement Marking					
Description	Quantity	Unit	Unit Cost	Total	
SIGNING	1.6	MILE	\$250,000.00	\$405,000.00	
PAVEMENT MARKINGS - THERMO	0.4	MILE	\$14,000.00	\$5,600.00	
PAVEMENT MARKINGS - RECESSED	1.2	MILE	\$30,000.00	\$36,600.00	
Traffic Control - Signing and Pavement Marking Subtotal					

Traffic Signal and Surveillance					
Description		Quantity	Unit	Unit Cost	Total
STANDARD TRAFFIC SIGNAL		0	EACH	\$300,000.00	\$0.00
TRAFFIC SIGNAL FOR R-CUT		1	EACH	\$780,000.00	\$780,000.00
FIBER OPTIC COMMUNICATION		1	MILE	\$170,000.00	\$204,000.00
CCTV		1	EACH	\$123,000.00	\$123,000.00
Traffic Control - Traffic Signal Subtotal					\$1,107,000.00

Roadway Lighting					
Description		Quantity	Unit	Unit Cost	Total
FULL INTERCHANGE LIGHTING		0	EACH	\$500,000.00	\$0.00
PARTIAL INTERCHANGE LIGHTING		0	EACH	\$300,000.00	\$0.00
CONTINUOUS ROADWAY LIGHTING		6500	FT	\$100.00	\$650,000.00
	V	Traffic Cor	trol - Traffic	Signal Subtotal	\$650,000.00

4	Utility Relocations - Gas, Electric, Water, Wastewater					
	Description		Quantity	Unit	Unit Cost	Total
	HIGH PRESSURE GAS LINE		180	FT	\$200.00	\$36,000.00
	WATERLINE 36" OR LARGER	- 4	0	FT		\$0.00
"	HIGH VOLTAGE TOWER		0	EACH		\$0.00
	SANITARY LINE 36" OR LARGER		0	FT		\$0.00
	DAM MODIFICATION		0	LUMP		\$0.00
				Mater/Mact	water Subtetal	£26 000 00

Structures						
Description		Quantity	Unit	Unit Cost	Total	
RETAINING WALL		0	SF	\$90.00	\$0.00	
BRIDGE		0	SF	\$220.00	\$0.00	
		Pavement Subtota				

Incidentals					
Description	Quantity	Unit	Unit Cost	Total	
CONSTRUCTION LAYOUT STAKES	1	LUMP	\$51,000.00	\$51,000.00	
MAINTENANCE OF TRAFFIC	1	LUMP	\$205,000.00	\$205,000.00	
MOBILIZATION	1	LUMP	\$400,000.00	\$400,000.00	
Miscellaneous Subtotal					

Project Summary		Subtotal
Roadway		\$3,723,528
Erosion Control		\$337,636
Drainage		\$1,827,000
Pavement		\$2,166,080
Traffic Control - Signing and Pavement Marking		\$447,200
Traffic Signal and Surveillance		\$1,107,000
Roadway Lighting		\$650,000
Utility Relocations - Gas, Electric, Water, Wastewater		\$36,000
Structures		\$0
Incidentals		\$656,000
	Total	\$10.950.000

Contingency (30%)		\$3,285,000
	Subtotal	\$14,235,000
		. , ,,,,,,,,,
Right-of-Way		\$0
Engineering (18%)		\$2,562,000
		44 404 000
Construction Engineering (10%)		\$1,424,000
	Subtotal	\$18,221,000
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Project Total (2030 Dollars) \$23,687,000



#### SEGMENT 5 CONCEPT C - RANGE 4 535 + 00.00 TO 573 + 68.00

Roadway					
Description	Quantity	Unit	Unit Cost	Total	
PAVEMENT REMOVED	22,000	SY	\$20.00	\$440,000.00	
CULVERT REMOVED	80	FT	\$100.00	\$8,000.00	
EXCAVATION	15,012	CY	\$40.00	\$600,494.80	
EMBANKMENT	247,414	CY	\$45.00	\$11,133,641.66	
GUARDRAIL	7,650	FT	\$22.00	\$168,300.00	
MEDIAN BARRIER	0	FT	\$120.00	\$0.00	
CURB AND GUTTER	8,280	FT	\$42.00	\$347,760.00	
CONCRETE MEDIAN	0	SY	\$100.00	\$0.00	
CONCRETE WALK	0	SF	\$13.00	\$0.00	
Roadway Subtotal					

Erosion Control					
Description	Quantity	Unit	Unit Cost	Total	
EROSION CONTROL	290,000	EACH	1	\$290,000.00	
EROSION CONTROL PLAN	1	LUMP	\$75,000.00	\$75,000.00	
BMPs	1	LUMP	\$218,000.00	\$218,000.00	
SEEDING AND MULCHING	55,547	SY	\$2.00	\$111,093.58	
Erosion Control Subtotal					

Drainage				
Description	Quantit	y Unit	Unit Cost	Total
CULVERT	80	FT	\$600.00	\$48,000.00
STORM SEWER SYSTEM	6,800	FT	\$300.00	\$2,040,000.00
UNDERDRAINS	6,800	FT	\$15.00	\$102,000.00
Drainage Subtotal				

Pavement				
Description	Quantity	Unit	Unit Cost	Total
FULL DEPTH PAVEMENT, ASPHALT	14,400	SY	\$100.00	\$1,440,000.00
FULL DEPTH PAVEMENT, CONCRETE	32,919	SY	\$150.00	\$4,937,857.88
PAVEMENT PLANING AND RESURFACING	9,500	SY	\$54.00	\$513,000.00
SHARED USE PATH	0	SY	\$42.00	\$0.00
Pavement Subtotal				

Traffic Control - Signing and Pavement Marking					
Description	Quantity	Unit	Unit Cost	Total	
SIGNING	2.4	MILE	\$250,000.00	\$600,000.00	
PAVEMENT MARKINGS - THERMO	1.2	MILE	\$14,000.00	\$16,800.00	
PAVEMENT MARKINGS - RECESSED	1.2	MILE	\$30,000.00	\$36,000.00	
Traffic Cont	Traffic Control - Signing and Pavement Marking Subtotal				

Traffic Signal and Surveillance					
Description		Quantity	Unit	Unit Cost	Total
STANDARD TRAFFIC SIGNAL		2	EACH	\$300,000.00	\$600,000.00
TRAFFIC SIGNAL FOR R-CUT		0	EACH	\$780,000.00	\$0.00
FIBER OPTIC COMMUNICATION		2	MILE	\$170,000.00	\$380,800.00
CCTV		2	EACH	\$123,000.00	\$246,000.00
		Traffic Cont	trol - Traffic	Signal Subtotal	\$1,226,800.00

Roadway Lighting				
Description	Quantity	Unit	Unit Cost	Total
FULL INTERCHANGE LIGHTING	0	EACH	\$500,000.00	\$0.00
PARTIAL INTERCHANGE LIGHTING	1	EACH	\$300,000.00	\$300,000.00
CONTINUOUS ROADWAY LIGHTING	3500	FT	\$100.00	\$350,000.00
	Traffic Con	trol - Traffic	Signal Subtotal	\$650,000.00

Utility Relocations - Gas, Electric, Water, Wastewater						
Description	Quantity	Unit	Unit Cost	Total		
HIGH PRESSURE GAS LINE	220	FT	\$200.00	\$44,000.00		
WATERLINE 36" OR LARGER	0	FT		\$0.00		
HIGH VOLTAGE TOWER	0	EACH		\$0.00		
SANITARY LINE 36" OR LARGER	0	FT		\$0.00		
DAM MODIFICATION	0	LUMP		\$0.00		
Water/Wastewater Subtotal						

Structures							
Description				Quantity	Unit	Unit Cost	Total
RETAINING WALL				0	SF	\$90.00	\$0.00
BRIDGE				13,150	SF	\$220.00	\$2,893,000.00
Pavement Subtotal					\$2,893,000.00		

Incidentals				
Description	Quantity	Unit	Unit Cost	Total
CONSTRUCTION LAYOUT STAKES	1	LUMP	\$131,000.00	\$131,000.00
MAINTENANCE OF TRAFFIC	1	LUMP	\$523,000.00	\$523,000.00
MOBILIZATION	1	LUMP	\$800,000.00	\$800,000.00
		Miscella	neous Subtotal	\$1,454,000,00

Project Summary	Subtotal
Roadway	\$12,698,196
Erosion Control	\$694,094
Drainage	\$2,190,000
Pavement	\$6,890,858
Traffic Control - Signing and Pavement Marking	\$652,800
Traffic Signal and Surveillance	\$1,226,800
Roadway Lighting	\$650,000
Utility Relocations - Gas, Electric, Water, Wastewater	\$44,000
Structures	\$2,893,000
Incidentals	\$1,454,000
To	tal \$29,394,000

Contingency (30%)		\$8,818,000
	Subtotal	\$38,212,000
Right-of-Way		\$0
Engineering (18%)		\$6,878,000
Construction Engineering (10%)		\$3,821,000
	Subtotal	\$48,911,000
Inflation (30%)		\$14,673,300
illiation (30%)		
	Project Total (2030 Dollars)	\$63,584,000

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# SEGMENT 5 CONCEPT D - OVERALL

SEGMENT 5 CONCEPT D - RANGE 1	Quantity
Construction Subtotal	\$15,698,000
Contingency (30%)	\$4,709,000
Construction Total	\$20,407,000
Right-of-Way	\$0
Engineering (18%)	\$3,673,000
Construction Engineering (10%)	\$2,041,000
Project Subtotal	\$26,121,000
Inflation (30%)	\$7,836,300
Subtotal	\$33,957,000
SEGMENT 5 CONCEPT D - RANGE 2	
Construction Subtotal	\$7,966,000
Contingency (30%)	\$2,390,000
Construction Total	\$10,356,000
Right-of-Way	\$0
Engineering (18%)	\$1,864,000
Construction Engineering (10%)	\$1,036,000
Project Subtotal	\$13,256,000
Inflation (30%)	\$3,976,800
Subtotal	\$17,233,000
SEGMENT 5 CONCEPT D - RANGE 3	
Construction Subtotal	\$7,610,000
Contingency (30%)	\$2,283,000
Construction Total	\$9,893,000
Right-of-Way	\$0
Engineering (18%)	\$1,781,000
Construction Engineering (10%)	\$989,000
Project Subtotal	\$12,663,000
Inflation (30%)	\$3,798,900
Subtotal	\$16,462,000
SEGMENT 5 CONCEPT D - RANGE 4	
Construction Subtotal	\$29,264,000
Contingency (30%)	\$8,779,000
Construction Total	\$38,043,000
Right-of-Way	\$0
Engineering (18%)	\$6,848,000
Construction Engineering (10%)	\$3,804,000
Project Subtotal	\$48,695,000
Inflation (30%)	\$14,608,500
Subtotal	\$63,304,000

SEGMENT 5 - OVERALL	
SEGMENT 5 CONCEPT D - RANGE 1	\$33,957,000
SEGMENT 5 CONCEPT D - RANGE 2	\$17,233,000
SEGMENT 5 CONCEPT D - RANGE 3	\$16,462,000
SEGMENT 5 CONCEPT D - RANGE 4	\$63,304,000
Total - Segment 5 - Overall	\$130,956,000

Construction w/ Contingency w/out Inflation \$100,735,000



# SEGMENT 5 CONCEPT D - RANGE 1 452 + 65.00 to 500 + 00.00

Roadway				
Description	Quantity	Unit	Unit Cost	Total
PAVEMENT REMOVED	19,520	SY	\$20.00	\$390,400.00
CULVERT REMOVED	0	FT	\$100.00	\$0.00
EXCAVATION	22,024	CY	\$40.00	\$880,962.00
EMBANKMENT	7,916	CY	\$45.00	\$356,220.00
GUARDRAIL	625	FT	\$22.00	\$13,750.00
MEDIAN BARRIER	0	FT	\$120.00	\$0.00
CURB AND GUTTER	4,250	FT	\$42.00	\$178,500.00
CONCRETE MEDIAN	4,280	SY	\$100.00	\$428,000.00
CONCRETE WALK	0	SF	\$13.00	\$0.00
		Roa	dway Subtotal	\$2,247,832,00

Erosion Control				
Description	Quantity	Unit	Unit Cost	Total
EROSION CONTROL	131,000	EACH	1	\$131,000.00
EROSION CONTROL PLAN	1	LUMP	\$25,000.00	\$25,000.00
BMPs	1	LUMP	\$89,000.00	\$89,000.00
SEEDING AND MULCHING	18,156	SY	\$2.00	\$36,311.75
Frosion Control Subtotal				

Drainage				
Description	Quantity	Unit	Unit Cost	Total
CULVERT	0	FT	\$600.00	\$0.00
STORM SEWER SYSTEM	8,500	FT	\$300.00	\$2,550,000.00
UNDERDRAINS	8,500	FT	\$15.00	\$127,500.00
Drainage Subtotal				

Pavement				
Description	Quantity	Unit	Unit Cost	Total
FULL DEPTH PAVEMENT, ASPHALT	50,140	SY	\$100.00	\$5,014,000.00
PAVEMENT PLANING AND RESURFACING	6,400	SY	\$54.00	\$345,600.00
SHARED USE PATH	0	SY	\$42.00	\$0.00
Pavement Subtotal				

Traffic Control - Signing and Pavement Marking		_		
Description	Quantity	Unit	Unit Cost	Total
SIGNING	3	MILE	\$250,000.00	\$800,000.00
PAVEMENT MARKINGS - THERMO	2.0	MILE	\$14,000.00	\$28,000.00
PAVEMENT MARKINGS - RECESSED	1.2	MILE	\$30,000.00	\$36,000.00
Traffic Control - Signing and Pavement Marking Subtotal				

Traffic Signal and Surveillance						
Description			Quantity	Unit	Unit Cost	Total
STANDARD TRAFFIC SIGNAL			2	EACH	\$300,000.00	\$600,000.00
TRAFFIC SIGNAL FOR R-CUT			1	EACH	\$780,000.00	\$780,000.00
FIBER OPTIC COMMUNICATION			2.5	MILE	\$170,000.00	\$425,000.00
CCTV			3	EACH	\$123,000.00	\$369,000.00
Traffic Control - Traffic Signal Subtotal						

Roadway Lighting						
Description			Quantity	Unit	Unit Cost	Total
FULL INTERCHANGE LIGHTING			0	EACH	\$500,000.00	\$0.00
PARTIAL INTERCHANGE LIGHTING			1	EACH	\$300,000.00	\$300,000.00
CONTINUOUS ROADWAY LIGHTING			4735	FT	\$100.00	\$473,500.00
	Traffic Control - Traffic Signal Subtotal				\$773,500.00	

Utility Relocations - Gas, Electric, Water, Wastewater						
Description	Quantity	Unit	Unit Cost	Total		
HIGH PRESSURE GAS LINE	2800	FT	\$200.00	\$560,000.00		
WATERLINE 36" OR LARGER	0	FT		\$0.00		
HIGH VOLTAGE TOWER	0	EACH		\$0.00		
SANITARY LINE 36" OR LARGER	0	FT		\$0.00		
DAM MODIFICATION	0	LUMP		\$0.00		
	W	ater/Waste	water Subtotal	\$560,000.00		

Str	uctures					
De	scription		Quantity	Unit	Unit Cost	Total
RE	TAINING WALL		0	SF	\$90.00	\$0.00
BRI	IDGE		0	SF	\$220.00	\$0.00
	Pavement Subtotal					

Incidentals				
Description	Quantity	Unit	Unit Cost	Total
CONSTRUCTION LAYOUT STAKES	1	LUMP	\$72,000.00	\$72,000.00
MAINTENANCE OF TRAFFIC	1	LUMP	\$288,000.00	\$288,000.00
MOBILIZATION	1	LUMP	\$400,000.00	\$400,000.00
Miscellaneous Suhtotal				

Project Summary		Subtotal
Roadway		\$2,247,832
Erosion Control		\$281,312
Drainage		\$2,677,500
Pavement		\$5,359,600
Traffic Control - Signing and Pavement Marking		\$864,000
Traffic Signal and Surveillance		\$2,174,000
Roadway Lighting		\$773,500
Utility Relocations - Gas, Electric, Water, Wastewater		\$560,000
Structures		\$0
Incidentals		\$760,000
	Total	\$15,698,000

Contingency (30%)	\$4,709,000
c boot	620 407 000
Subtotal	\$20,407,000
Right-of-Way	\$0
Facinessian (400/)	\$3,673,000
Engineering (18%)	\$3,673,000
Construction Engineering (10%)	\$2,041,000
6 14 14 1	£35.434.000
Subtotal	\$26,121,000
Inflation (30%)	\$7,836,300
Project Total (2030 Dollars)	\$33,957,000



# SEGMENT 5 CONCEPT D - RANGE 2 500 + 00.00 TO 515 + 00.00

Roadway				
Description	Quantity	Unit	Unit Cost	Total
PAVEMENT REMOVED	9,240	SY	\$20.00	\$184,800.00
CULVERT REMOVED	0	FT	\$100.00	\$0.00
EXCAVATION	25,161	CY	\$40.00	\$1,006,423.20
EMBANKMENT	3,297	CY	\$45.00	\$148,355.55
GUARDRAIL	500	FT	\$22.00	\$11,000.00
MEDIAN BARRIER	0	FT	\$120.00	\$0.00
CURB AND GUTTER	4,800	FT	\$42.00	\$201,600.00
CONCRETE MEDIAN	0	SY	\$100.00	\$0.00
CONCRETE WALK	0	SF	\$13.00	\$0.00
Roadway Subtotal				

Erosion Control				
Description	Quantity	Unit	Unit Cost	Total
EROSION CONTROL	71,000	EACH	1	\$71,000.00
EROSION CONTROL PLAN	1	LUMP	\$25,000.00	\$25,000.00
BMPs	1	LUMP	\$65,000.00	\$65,000.00
SEEDING AND MULCHING	12,274	SY	\$2.00	\$24,547.08
		Erosion C	ontrol Subtotal	\$185 547 08

Drainage				
Description	Quantity	Unit	Unit Cost	Total
CULVERT	40	FT	\$600.00	\$24,000.00
STORM SEWER SYSTEM	7,000	FT	\$300.00	\$2,100,000.00
UNDERDRAINS	7,000	FT	\$15.00	\$105,000.00
Drainage Subtotal				\$2,229,000,00

Pavement				
Description	Quantity	Unit	Unit Cost	Total
FULL DEPTH PAVEMENT, ASPHALT	15,800	SY	\$100.00	\$1,580,000.00
PAVEMENT PLANING AND RESURFACING	9,250	SY	\$54.00	\$499,500.00
SHARED USE PATH	0	SY	\$42.00	\$0.00
Pavement Subtotal			\$2,079,500.00	

Traffic Control - Signing and Pavement Marking				
Description	Quantity	Unit	Unit Cost	Total
SIGNING	1	MILE	\$250,000.00	\$257,500.00
PAVEMENT MARKINGS - THERMO	0.3	MILE	\$14,000.00	\$3,920.00
PAVEMENT MARKINGS - RECESSED	0.8	MILE	\$30,000.00	\$22,500.00
Traffic Conti	ol - Signing and Pa	avement M	arking Subtotal	\$283,920,00

Traffic Signal and Surveillance					
Description	7	Quantity	Unit	Unit Cost	Total
STANDARD TRAFFIC SIGNAL		1	EACH	\$300,000.00	\$300,000.00
TRAFFIC SIGNAL FOR R-CUT		0	EACH	\$780,000.00	\$0.00
FIBER OPTIC COMMUNICATION		1	MILE	\$170,000.00	\$204,000.00
CCTV		1	EACH	\$123,000.00	\$123,000.00
Traffic Control - Traffic Signal Subtotal				\$627,000.00	

Roadway Lighting					
Description		Quantity	Unit	Unit Cost	Total
FULL INTERCHANGE LIGHTING		0	EACH	\$500,000.00	\$0.00
PARTIAL INTERCHANGE LIGHTING		0	EACH	\$300,000.00	\$0.00
CONTINUOUS ROADWAY LIGHTING		4500	FT	\$100.00	\$450,000.00
	Traffic Control - Traffic Signal Subtotal				\$450,000.00

Utility Relocations - Gas, Electric, Water, Wastewater					
Description	Quantity	Unit	Unit Cost	Total	
HIGH PRESSURE GAS LINE	867	FT	\$200.00	\$173,400.00	
WATERLINE 36" OR LARGER	0	FT		\$0.00	
HIGH VOLTAGE TOWER	0	EACH		\$0.00	
SANITARY LINE 36" OR LARGER	0	FT		\$0.00	
DAM MODIFICATION	0	LUMP		\$0.00	
Water/Wastewater Subtotal				\$173,400.00	

Structures					
Description		Quantity	Unit	Unit Cost	Total
RETAINING WALL		0	SF	\$90.00	\$0.00
BRIDGE		0	SF	\$220.00	\$0.00
Pavement Subtotal				\$0.00	

Incidentals				
Description	Quantity	Unit	Unit Cost	Total
CONSTRUCTION LAYOUT STAKES	1	LUMP	\$37,000.00	\$37,000.00
MAINTENANCE OF TRAFFIC	1	LUMP	\$148,000.00	\$148,000.00
MOBILIZATION	1	LUMP	\$200,000.00	\$200,000.00
		Miscella	neous Subtotal	¢305 000 00

Project Summary	Subtotal
Roadway	\$1,552,179
Erosion Control	\$185,547
Drainage	\$2,229,000
Pavement	\$2,079,500
Traffic Control - Signing and Pavement Marking	\$283,920
Traffic Signal and Surveillance	\$627,000
Roadway Lighting	\$450,000
Utility Relocations - Gas, Electric, Water, Wastewater	\$173,400
Structures	\$0
Incidentals	\$385,000
Tot	al \$7,966,000

Total	37,300,000
Contingency (30%)	\$2,390,000
Subtotal	\$10,356,000
Right-of-Way	\$0
Engineering (18%)	\$1,864,000
Construction Engineering (10%)	\$1,036,000
Subtotal	\$13,256,000
<u> </u>	

Project Total (2030 Dollars) \$17,233,000

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# SEGMENT 5 CONCEPT D - RANGE 3 515 + 00.00 TO 535 + 00.00

Roadway				
Description	Quantity	Unit	Unit Cost	Total
PAVEMENT REMOVED	26,250	SY	\$20.00	\$525,000.00
CULVERT REMOVED	0	FT	\$100.00	\$0.00
EXCAVATION	13,502	CY	\$40.00	\$540,088.80
EMBANKMENT	4,178	CY	\$45.00	\$188,021.70
GUARDRAIL	525	FT	\$22.00	\$11,550.00
MEDIAN BARRIER	0	FT	\$120.00	\$0.00
CURB AND GUTTER	6,300	FT	\$42.00	\$264,600.00
CONCRETE MEDIAN	0	SY	\$100.00	\$0.00
CONCRETE WALK	0	SF	\$13.00	\$0.00
		Roa	dway Subtotal	\$1,529,260,50

Erosion Control				
Description	Quantity	Unit	Unit Cost	Total
EROSION CONTROL	70,000	EACH	1	\$70,000.00
EROSION CONTROL PLAN	1	LUMP	\$25,000.00	\$25,000.00
BMPs	1	LUMP	\$59,000.00	\$59,000.00
SEEDING AND MULCHING	10,725	SY	\$2.00	\$21,449.12
Frosion Control Subtotal				\$175 ///0 12

Drainage				
Description	Quantity	Unit	Unit Cost	Total
CULVERT	0	FT	\$600.00	\$0.00
STORM SEWER SYSTEM	5,800	FT	\$300.00	\$1,740,000.00
UNDERDRAINS	5,800	FT	\$15.00	\$87,000.00
Drainage Subtotal				

Pavement				
Description	Quantity	Unit	Unit Cost	Total
FULL DEPTH PAVEMENT, ASPHALT	14,520	SY	\$100.00	\$1,452,000.00
PAVEMENT PLANING AND RESURFACING	9,000	SY	\$54.00	\$486,000.00
SHARED USE PATH	0	SY	\$42.00	\$0.00
Pavement Subtotal				

Traffic Control - Signing and Pavement Marking					
Description	Quantity	Unit	Unit Cost	Total	
SIGNING	1.6	MILE	\$250,000.00	\$405,000.00	
PAVEMENT MARKINGS - THERMO	0.4	MILE	\$14,000.00	\$5,600.00	
PAVEMENT MARKINGS - RECESSED	1.2	MILE	\$30,000.00	\$36,600.00	
Traffic Control - Signing and Pavement Marking Subtotal					

Traffic Signal and Surveillance						
Description			Quantity	Unit	Unit Cost	Total
STANDARD TRAFFIC SIGNAL			1	EACH	\$300,000.00	\$300,000.00
TRAFFIC SIGNAL FOR R-CUT			0	EACH	\$780,000.00	\$0.00
FIBER OPTIC COMMUNICATION			1	MILE	\$170,000.00	\$204,000.00
CCTV			1	EACH	\$123,000.00	\$123,000.00
Traffic Control - Traffic Signal Subtotal						\$627,000.00

Roadway Lighting						
Description			Quantity	Unit	Unit Cost	Total
FULL INTERCHANGE LIGHTING			0	EACH	\$500,000.00	\$0.00
PARTIAL INTERCHANGE LIGHTING	$\overline{}$		0	EACH	\$300,000.00	\$0.00
CONTINUOUS ROADWAY LIGHTING			6500	FT	\$100.00	\$650,000.00
	_	Traffic Control - Traffic Signal Subtotal				\$650,000.00

Utility Relocations - Gas, Electric, Water, Wastewater						
Description	Quantity	Unit	Unit Cost	Total		
HIGH PRESSURE GAS LINE	180	FT	\$200.00	\$36,000.00		
WATERLINE 36" OR LARGER	0	FT		\$0.00		
HIGH VOLTAGE TOWER	0	EACH		\$0.00		
SANITARY LINE 36" OR LARGER	0	FT		\$0.00		
DAM MODIFICATION	0	LUMP		\$0.00		
	W	ater/Waste	water Subtotal	\$36,000.00		

Structures					
Description		Quantity	Unit	Unit Cost	Total
RETAINING WALL		0	SF	\$90.00	\$0.00
BRIDGE		0	SF	\$220.00	\$0.00
Pavement Subtotal					

Incidentals				
Description	Quantity	Unit	Unit Cost	Total
CONSTRUCTION LAYOUT STAKES	1	LUMP	\$36,000.00	\$36,000.00
MAINTENANCE OF TRAFFIC	1	LUMP	\$144,000.00	\$144,000.00
MOBILIZATION	1	LUMP	\$200,000.00	\$200,000.00
		Miscella	neous Subtotal	¢200 000 00

Project Summary	Subtotal
Roadway	\$1,529,261
Erosion Control	\$175,449
Drainage	\$1,827,000
Pavement	\$1,938,000
Traffic Control - Signing and Pavement Marking	\$447,200
Traffic Signal and Surveillance	\$627,000
Roadway Lighting	\$650,000
Utility Relocations - Gas, Electric, Water, Wastewater	\$36,000
Structures	\$0
Incidentals	\$380,000
Tota	\$7,610,000

Contingency (30%)	\$2,283,000
	Subtotal \$9,893,000
	3ubtotai 35,853,000
Right-of-Way	\$0
Engineering (18%)	\$1,781,000
Construction Engineering (10%)	\$989,000
	Subtotal \$12,663,000
Inflation (30%)	\$3,798,900
Project To	tal (2030 Dollars) \$16,462,000



# SEGMENT 5 CONCEPT D - RANGE 4 535 + 00.00 TO 573 + 68.00

Roadway				
Description	Quantity	Unit	Unit Cost	Total
PAVEMENT REMOVED	22,000	SY	\$20.00	\$440,000.00
CULVERT REMOVED	80	FT	\$100.00	\$8,000.00
EXCAVATION	14,844	CY	\$40.00	\$593,751.53
EMBANKMENT	244,645	CY	\$45.00	\$11,009,025.00
GUARDRAIL	7,650	FT	\$22.00	\$168,300.00
MEDIAN BARRIER	0	FT	\$120.00	\$0.00
CURB AND GUTTER	8,280	FT	\$42.00	\$347,760.00
CONCRETE MEDIAN	0	SY	\$100.00	\$0.00
CONCRETE WALK	0	SF	\$13.00	\$0.00
		Roa	dway Subtotal	\$12,566,836,53

Erosion Control				
Description	Quantity	Unit	Unit Cost	Total
EROSION CONTROL	291,000	EACH	1	\$291,000.00
EROSION CONTROL PLAN	1	LUMP	\$75,000.00	\$75,000.00
BMPs	1	LUMP	\$218,000.00	\$218,000.00
SEEDING AND MULCHING	55,693	SY	\$2.00	\$111,386.55
		Erosion C	ontrol Subtotal	\$695,386,55

Drainage				
Description	Quantity	Unit	Unit Cost	Total
CULVERT	80	FT	\$600.00	\$48,000.00
STORM SEWER SYSTEM	6,800	FT	\$300.00	\$2,040,000.00
UNDERDRAINS	6,800	FT	\$15.00	\$102,000.00
Drainage Subtotal				

Pavement				
Description	Quantity	Unit	Unit Cost	Total
FULL DEPTH PAVEMENT, ASPHALT	14,400	SY	\$100.00	\$1,440,000.00
FULL DEPTH PAVEMENT, CONCRETE	32,919	SY	\$150.00	\$4,937,857.88
PAVEMENT PLANING AND RESURFACING	9,500	SY	\$54.00	\$513,000.00
SHARED USE PATH	0	SY	\$42.00	\$0.00
Pavement Subtotal				

Traffic Control - Signing and Pavement Marking					
Description	Quantity	Unit	Unit Cost	Total	
SIGNING	2.4	MILE	\$250,000.00	\$600,000.00	
PAVEMENT MARKINGS - THERMO	1.2	MILE	\$14,000.00	\$16,800.00	
PAVEMENT MARKINGS - RECESSED	1.2	MILE	\$30,000.00	\$36,000.00	
Traffic Control - Signing and Payement Marking Subtotal					

Traffic Signal and Surveillance							
Description				Quantity	Unit	Unit Cost	Total
STANDARD TRAFFIC SIGNAL				2	EACH	\$300,000.00	\$600,000.00
TRAFFIC SIGNAL FOR R-CUT				0	EACH	\$780,000.00	\$0.00
FIBER OPTIC COMMUNICATION	7	\		2	MILE	\$170,000.00	\$380,800.00
CCTV				2	EACH	\$123,000.00	\$246,000.00
		Traffic Control - Traffic Signal Subtotal				\$1,226,800.00	

Roadway Lighting	_				
Description	, ,	Quantity	Unit	Unit Cost	Total
FULL INTERCHANGE LIGHTING		0	EACH	\$500,000.00	\$0.00
PARTIAL INTERCHANGE LIGHTING		1	EACH	\$300,000.00	\$300,000.00
CONTINUOUS ROADWAY LIGHTING		3500	FT	\$100.00	\$350,000.00
Traffic Control - Traffic Signal Subtotal					\$650,000.00

Utility Relocations - Gas, Electric, Water, Wastewater					
Description	Quantity	Unit	Unit Cost	Total	
HIGH PRESSURE GAS LINE	220	FT	\$200.00	\$44,000.00	
WATERLINE 36" OR LARGER	0	FT		\$0.00	
HIGH VOLTAGE TOWER	0	EACH		\$0.00	
SANITARY LINE 36" OR LARGER	0	FT		\$0.00	
DAM MODIFICATION	0	LUMP		\$0.00	
Water/Wastewater Subtotal					

Structures				
Description	Quantity	Unit	Unit Cost	Total
RETAINING WALL	0	SF	\$90.00	\$0.00
BRIDGE	13,150	SF	\$220.00	\$2,893,000.00
Pavement Subtotal				

Incidentals				
Description	Quantity	Unit	Unit Cost	Total
CONSTRUCTION LAYOUT STAKES	1	LUMP	\$131,000.00	\$131,000.00
MAINTENANCE OF TRAFFIC	1	LUMP	\$523,000.00	\$523,000.00
MOBILIZATION	1	LUMP	\$800,000.00	\$800,000.00
		Miccolla	nague Subtotal	¢1 4F4 000 00

Project Summary	Subtotal
Roadway	\$12,566,837
Erosion Control	\$695,387
Drainage	\$2,190,000
Pavement	\$6,890,858
Traffic Control - Signing and Pavement Marking	\$652,800
Traffic Signal and Surveillance	\$1,226,800
Roadway Lighting	\$650,000
Utility Relocations - Gas, Electric, Water, Wastewater	\$44,000
Structures	\$2,893,000
Incidentals	\$1,454,000
	Total \$29,264,000

Contingency (30%)	\$8,779,000
Subtota	\$38,043,000
Right-of-Way	\$0
Engineering (18%)	\$6,848,000
Construction Engineering (10%)	\$3,804,000
Subtota	\$48,695,000

# SEGMENT 5 CONCEPT E - OVERALL

Construction Subtotal         \$16,027,000           Contingency (30%)         \$4,808,000           Construction Total         \$20,835,000           Right-of-Way         \$0           Engineering (18%)         \$3,750,000           Construction Engineering (10%)         \$2,084,000           Project Subtotal         \$26,669,000           Inflation (30%)         \$8,000,700           Subtotal         \$34,670,000           SeGMENT 5 CONCEPT E - RANGE 2         Construction Subtotal           Construction Subtotal         \$8,951,000           Contingency (30%)         \$2,685,000           Construction Total         \$11,636,000           Right-of-Way         \$0           Engineering (18%)         \$2,094,000           Construction Engineering (10%)         \$1,164,000           Project Subtotal         \$14,894,000           Inflation (30%)         \$4,468,200           Subtotal         \$19,362,000           SEGMENT 5 CONCEPT E - RANGE 3         Construction Subtotal           Construction Total         \$9,855,000           Right-of-Way         \$0           Engineering (18%)         \$1,774,000           Construction Engineering (10%)         \$986,000           Project Subtotal<	SEGMENT 5 CONCEPT E - RANGE 1	Quantity
Construction Total         \$20,835,000           Right-of-Way         \$0           Engineering (18%)         \$3,750,000           Construction Engineering (10%)         \$2,084,000           Project Subtotal         \$26,669,000           Inflation (30%)         \$8,000,700           Subtotal         \$34,670,000           SEGMENT 5 CONCEPT E - RANGE 2         Construction Subtotal           Contingency (30%)         \$2,685,000           Construction Total         \$11,636,000           Right-of-Way         \$0           Engineering (18%)         \$2,094,000           Construction Engineering (10%)         \$1,164,000           Project Subtotal         \$14,894,000           Inflation (30%)         \$4,468,200           Subtotal         \$19,362,000           SEGMENT 5 CONCEPT E - RANGE 3         Construction Subtotal           Construction Total         \$9,855,000           Right-of-Way         \$0           Engineering (18%)         \$1,774,000           Construction Engineering (10%)         \$986,000           Project Subtotal         \$12,615,000           Inflation (30%)         \$3,784,500           Subtotal         \$11,195,000           Construction Total	Construction Subtotal	\$16,027,000
Right-of-Way         \$0           Engineering (18%)         \$3,750,000           Construction Engineering (10%)         \$2,084,000           Project Subtotal         \$26,669,000           Inflation (30%)         \$8,000,700           Subtotal         \$34,670,000           SEGMENT 5 CONCEPT E - RANGE 2         Sconstruction Subtotal         \$8,951,000           Contingency (30%)         \$2,685,000           Construction Total         \$11,636,000           Right-of-Way         \$0           Engineering (18%)         \$2,094,000           Construction Engineering (10%)         \$1,164,000           Project Subtotal         \$14,894,000           Inflation (30%)         \$4,468,200           Subtotal         \$19,362,000           SEGMENT 5 CONCEPT E - RANGE 3         Sconstruction Subtotal         \$7,581,000           Construction Total         \$9,855,000           Right-of-Way         \$0         \$9,855,000           Engineering (18%)         \$1,774,000           Construction Engineering (10%)         \$986,000           Project Subtotal         \$11,195,000           Inflation (30%)         \$3,784,500           Subtotal         \$11,195,000           Subtotal         \$14,455,	Contingency (30%)	\$4,808,000
Engineering (18%) \$3,750,000  Construction Engineering (10%) \$2,084,000  Project Subtotal \$26,669,000  Inflation (30%) \$8,000,700  Subtotal \$34,670,000  SEGMENT 5 CONCEPT E - RANGE 2  Construction Subtotal \$11,636,000  Right-of-Way \$0  Engineering (18%) \$2,094,000  Construction Engineering (10%) \$1,164,000  Project Subtotal \$1,484,000  Inflation (30%) \$4,468,200  Subtotal \$19,362,000  SEGMENT 5 CONCEPT E - RANGE 3  Construction Subtotal \$7,581,000  Construction Total \$1,7581,000  Construction Subtotal \$7,581,000  Construction Subtotal \$7,581,000  Construction Total \$9,855,000  Right-of-Way \$0  Engineering (18%) \$1,774,000  Construction Engineering (10%) \$986,000  Project Subtotal \$1,2615,000  Inflation (30%) \$3,784,500  Subtotal \$11,195,000  Construction Subtotal \$11,195,000  Construction Subtotal \$11,195,000  Construction Subtotal \$11,195,000  Construction Total \$1,455,000  Right-of-Way \$0  Engineering (18%) \$2,200,000  Construction Total \$1,455,000  Right-of-Way \$0  Engineering (18%) \$2,620,000  Construction Engineering (10%) \$2,455,000  Project Subtotal \$11,455,000  Project Subtotal \$14,555,000  Project Subtotal \$14,555,000  Project Subtotal \$1,455,000  Project Subtotal \$1,455,000	Construction Total	\$20,835,000
Construction Engineering (10%) \$2,084,000 Project Subtotal \$26,669,000 Inflation (30%) \$8,000,700 Subtotal \$34,670,000 SEGMENT 5 CONCEPT E - RANGE 2 Construction Subtotal \$8,951,000 Contingency (30%) \$2,685,000 Construction Total \$11,636,000 Right-of-Way \$0 Engineering (18%) \$2,094,000 Construction Engineering (10%) \$1,164,000 Project Subtotal \$14,894,000 Inflation (30%) \$4,468,200 Subtotal \$19,362,000 SEGMENT 5 CONCEPT E - RANGE 3 Construction Subtotal \$7,581,000 Contingency (30%) \$2,274,000 Construction Total \$9,855,000 Right-of-Way \$0 Engineering (18%) \$1,774,000 Construction Engineering (10%) \$986,000 Project Subtotal \$12,615,000 Inflation (30%) \$3,784,500 Subtotal \$11,195,000 Construction Subtotal \$11,195,000 Construction Total \$16,400,000 SEGMENT 5 CONCEPT E - RANGE 4 Construction Subtotal \$11,195,000 Construction Engineering (18%) \$3,359,000 Construction Total \$14,554,000 Right-of-Way \$0 Engineering (18%) \$2,620,000 Construction Engineering (10%) \$2,620,000 Construction Engineering (10%) \$2,620,000 Construction Engineering (10%) \$2,620,000 Construction Engineering (10%) \$1,455,000 Project Subtotal \$11,620,000 Figlation (30%) \$1,455,000 Project Subtotal \$18,629,000 Inflation (30%) \$5,588,700	Right-of-Way	\$0
Project Subtotal         \$26,669,000           Inflation (30%)         \$8,000,700           Subtotal         \$34,670,000           SEGMENT 5 CONCEPT E - RANGE 2         \$8,951,000           Construction Subtotal         \$1,685,000           Construction Total         \$11,636,000           Right-of-Way         \$0           Engineering (18%)         \$2,094,000           Construction Engineering (10%)         \$1,164,000           Project Subtotal         \$14,894,000           Inflation (30%)         \$4,468,200           Subtotal         \$19,362,000           SEGMENT 5 CONCEPT E - RANGE 3         \$7,581,000           Construction Subtotal         \$7,581,000           Construction Total         \$9,855,000           Right-of-Way         \$0           Engineering (18%)         \$1,774,000           Construction Engineering (10%)         \$986,000           Project Subtotal         \$12,615,000           Inflation (30%)         \$3,784,500           Subtotal         \$16,400,000           SEGMENT 5 CONCEPT E - RANGE 4         \$1,195,000           Construction Subtotal         \$16,400,000           SEGMENT 5 CONCEPT E - RANGE 4         \$1,455,4000           Construction Total <td>Engineering (18%)</td> <td>\$3,750,000</td>	Engineering (18%)	\$3,750,000
Inflation (30%)	Construction Engineering (10%)	\$2,084,000
Subtotal         \$34,670,000           SEGMENT 5 CONCEPT E - RANGE 2         \$8,951,000           Construction Subtotal         \$8,951,000           Contingency (30%)         \$2,685,000           Construction Total         \$11,636,000           Right-of-Way         \$0           Engineering (18%)         \$2,094,000           Construction Engineering (10%)         \$1,164,000           Project Subtotal         \$14,894,000           Inflation (30%)         \$4,468,200           Subtotal         \$19,362,000           SEGMENT 5 CONCEPT E - RANGE 3         \$19,362,000           Construction Subtotal         \$7,581,000           Construction Total         \$9,855,000           Right-of-Way         \$0           Engineering (18%)         \$1,774,000           Construction Engineering (10%)         \$986,000           Project Subtotal         \$12,615,000           Inflation (30%)         \$3,784,500           Subtotal         \$11,195,000           Construction Subtotal         \$11,195,000           Construction Total         \$14,554,000           Right-of-Way         \$0           Engineering (18%)         \$2,260,000           Construction Engineering (10%)         \$3,455,	Project Subtotal	\$26,669,000
SEGMENT 5 CONCEPT E - RANGE 2           Construction Subtotal         \$8,951,000           Contingency (30%)         \$2,685,000           Construction Total         \$11,636,000           Right-of-Way         \$0           Engineering (18%)         \$2,094,000           Construction Engineering (10%)         \$1,164,000           Project Subtotal         \$14,894,000           Inflation (30%)         \$4,468,200           Subtotal         \$19,362,000           SEGMENT 5 CONCEPT E - RANGE 3         Construction Subtotal           Construction Subtotal         \$7,581,000           Construction Total         \$9,855,000           Right-of-Way         \$0           Engineering (18%)         \$1,774,000           Construction Engineering (10%)         \$986,000           Project Subtotal         \$12,615,000           Inflation (30%)         \$3,784,500           Subtotal         \$16,400,000           SEGMENT 5 CONCEPT E - RANGE 4         Construction Subtotal         \$11,195,000           Construction Total         \$14,554,000           Right-of-Way         \$0         \$2,20,000           Construction Total         \$14,554,000           Right-of-Way         \$0         \$2,620,000     <	Inflation (30%)	\$8,000,700
Construction Subtotal \$8,951,000 Contingency (30%) \$2,685,000 Construction Total \$11,636,000 Right-of-Way \$0 Engineering (18%) \$2,094,000 Construction Engineering (10%) \$1,164,000 Project Subtotal \$14,894,000 Inflation (30%) \$4,468,200 Subtotal \$19,362,000 SEGMENT 5 CONCEPT E - RANGE 3 Construction Subtotal \$7,581,000 Construction Total \$9,855,000 Right-of-Way \$0 Engineering (18%) \$1,774,000 Construction Engineering (10%) \$986,000 Project Subtotal \$12,615,000 Inflation (30%) \$3,784,500 Subtotal \$11,195,000 Construction Subtotal \$11,195,000 Construction Total \$1,000 SEGMENT 5 CONCEPT E - RANGE 4 Construction Engineering (10%) \$2,274,000 Construction Engineering (10%) \$3,359,000 Construction Subtotal \$11,195,000 Construction Total \$14,554,000 Right-of-Way \$0 Engineering (18%) \$2,620,000 Construction Engineering (10%) \$2,620,000 Construction Engineering (10%) \$1,455,000 Project Subtotal \$11,636,000 Project Subtotal \$14,554,000 Right-of-Way \$0 Engineering (18%) \$2,620,000 Construction Engineering (10%) \$1,455,000 Project Subtotal \$18,629,000 Inflation (30%) \$5,588,700	Subtotal	\$34,670,000
Contingency (30%) \$2,685,000 Construction Total \$11,636,000 Right-of-Way \$0 Engineering (18%) \$2,094,000 Construction Engineering (10%) \$1,164,000 Project Subtotal \$14,894,000 Inflation (30%) \$4,468,200 Subtotal \$19,362,000 SEGMENT 5 CONCEPT E - RANGE 3 Construction Subtotal \$7,581,000 Construction Total \$9,855,000 Right-of-Way \$0 Engineering (18%) \$1,774,000 Construction Engineering (10%) \$986,000 Project Subtotal \$12,615,000 Inflation (30%) \$3,784,500 Subtotal \$16,400,000 SEGMENT 5 CONCEPT E - RANGE 4 Construction Total \$12,615,000 Inflation (30%) \$3,784,500 Subtotal \$11,195,000 Construction Subtotal \$11,195,000 Construction Total \$14,554,000 Right-of-Way \$0 Engineering (18%) \$2,20,000 Construction Total \$14,554,000 Right-of-Way \$0 Engineering (18%) \$2,620,000 Construction Engineering (10%) \$1,455,000 Project Subtotal \$18,629,000 Inflation (30%) \$1,455,000 Project Subtotal \$18,629,000 Inflation (30%) \$5,588,700	SEGMENT 5 CONCEPT E - RANGE 2	
Construction Total         \$11,636,000           Right-of-Way         \$0           Engineering (18%)         \$2,094,000           Construction Engineering (10%)         \$1,164,000           Project Subtotal         \$14,894,000           Inflation (30%)         \$4,468,200           Subtotal         \$19,362,000           SEGMENT 5 CONCEPT E - RANGE 3         Construction Subtotal           Construction Subtotal         \$7,581,000           Construction Total         \$9,855,000           Right-of-Way         \$0           Engineering (18%)         \$1,774,000           Construction Engineering (10%)         \$986,000           Project Subtotal         \$12,615,000           Inflation (30%)         \$3,784,500           Subtotal         \$16,400,000           SEGMENT 5 CONCEPT E - RANGE 4         Construction Subtotal         \$11,195,000           Construction Total         \$14,554,000           Right-of-Way         \$0           Engineering (18%)         \$2,620,000           Construction Engineering (10%)         \$1,455,000           Project Subtotal         \$18,629,000           Inflation (30%)         \$5,588,700	Construction Subtotal	\$8,951,000
Right-of-Way         \$0           Engineering (18%)         \$2,094,000           Construction Engineering (10%)         \$1,164,000           Project Subtotal         \$14,894,000           Inflation (30%)         \$4,468,200           Subtotal         \$19,362,000           SEGMENT 5 CONCEPT E - RANGE 3         Construction Subtotal         \$7,581,000           Contingency (30%)         \$2,274,000           Construction Total         \$9,855,000           Right-of-Way         \$0           Engineering (18%)         \$1,774,000           Construction Engineering (10%)         \$986,000           Project Subtotal         \$12,615,000           Inflation (30%)         \$3,784,500           Subtotal         \$16,400,000           SEGMENT 5 CONCEPT E - RANGE 4         Construction Subtotal         \$11,195,000           Contingency (30%)         \$3,359,000           Construction Total         \$14,554,000           Right-of-Way         \$0           Engineering (18%)         \$2,620,000           Construction Engineering (10%)         \$1,455,000           Project Subtotal         \$18,629,000           Inflation (30%)         \$5,588,700	Contingency (30%)	\$2,685,000
Engineering (18%) \$2,094,000 Construction Engineering (10%) \$1,164,000 Project Subtotal \$14,894,000 Inflation (30%) \$4,468,200 Subtotal \$19,362,000 SEGMENT 5 CONCEPT E - RANGE 3 Construction Subtotal \$7,581,000 Contingency (30%) \$2,274,000 Construction Total \$9,855,000 Right-of-Way \$0 Engineering (18%) \$1,774,000 Construction Engineering (10%) \$986,000 Project Subtotal \$12,615,000 Inflation (30%) \$3,784,500 Subtotal \$16,400,000 SEGMENT 5 CONCEPT E - RANGE 4 Construction Subtotal \$11,195,000 Construction Subtotal \$11,195,000 Construction Subtotal \$11,195,000 Construction Subtotal \$11,195,000 Construction Total \$14,554,000 Right-of-Way \$0 Engineering (18%) \$2,620,000 Construction Engineering (10%) \$1,455,000 Project Subtotal \$11,629,000	Construction Total	\$11,636,000
Construction Engineering (10%) \$1,164,000 Project Subtotal \$14,894,000 Inflation (30%) \$4,468,200 Subtotal \$19,362,000 SEGMENT 5 CONCEPT E - RANGE 3 Construction Subtotal \$7,581,000 Contingency (30%) \$2,274,000 Construction Total \$9,855,000 Right-of-Way \$0 Engineering (18%) \$1,774,000 Construction Engineering (10%) \$986,000 Project Subtotal \$12,615,000 Inflation (30%) \$3,784,500 Subtotal \$16,400,000 SEGMENT 5 CONCEPT E - RANGE 4 Construction Subtotal \$11,195,000 Contingency (30%) \$3,359,000 Construction Total \$14,554,000 Right-of-Way \$0 Engineering (18%) \$2,620,000 Construction Engineering (10%) \$2,620,000 Construction Engineering (10%) \$1,455,000 Project Subtotal \$12,615,000 Segment 5 CONCEPT E - RANGE 4 Construction Subtotal \$11,195,000 Construction Total \$14,554,000 Right-of-Way \$0 Engineering (18%) \$2,620,000 Construction Engineering (10%) \$1,455,000 Project Subtotal \$18,629,000 Inflation (30%) \$5,588,700	Right-of-Way	\$0
Project Subtotal         \$14,894,000           Inflation (30%)         \$4,468,200           Subtotal         \$19,362,000           SEGMENT 5 CONCEPT E - RANGE 3         \$7,581,000           Construction Subtotal         \$7,581,000           Construction Total         \$9,855,000           Right-of-Way         \$0           Engineering (18%)         \$1,774,000           Construction Engineering (10%)         \$986,000           Project Subtotal         \$12,615,000           Inflation (30%)         \$3,784,500           Subtotal         \$16,400,000           SEGMENT 5 CONCEPT E - RANGE 4         \$11,195,000           Construction Subtotal         \$11,195,000           Construction Total         \$14,554,000           Right-of-Way         \$0           Engineering (18%)         \$2,620,000           Construction Engineering (10%)         \$1,455,000           Project Subtotal         \$18,629,000           Inflation (30%)         \$5,588,700	Engineering (18%)	\$2,094,000
Inflation (30%)         \$4,468,200           Subtotal         \$19,362,000           SEGMENT 5 CONCEPT E - RANGE 3         \$7,581,000           Construction Subtotal         \$7,581,000           Construction Total         \$9,855,000           Right-of-Way         \$0           Engineering (18%)         \$1,774,000           Construction Engineering (10%)         \$986,000           Project Subtotal         \$12,615,000           Inflation (30%)         \$3,784,500           Subtotal         \$16,400,000           SEGMENT 5 CONCEPT E - RANGE 4         \$11,195,000           Construction Subtotal         \$11,195,000           Construction Total         \$14,554,000           Right-of-Way         \$0           Engineering (18%)         \$2,620,000           Construction Engineering (10%)         \$1,455,000           Project Subtotal         \$18,629,000           Inflation (30%)         \$5,588,700	Construction Engineering (10%)	\$1,164,000
Subtotal         \$19,362,000           SEGMENT 5 CONCEPT E - RANGE 3         \$7,581,000           Construction Subtotal         \$7,581,000           Contingency (30%)         \$2,274,000           Construction Total         \$9,855,000           Right-of-Way         \$0           Engineering (18%)         \$1,774,000           Construction Engineering (10%)         \$986,000           Project Subtotal         \$12,615,000           Inflation (30%)         \$3,784,500           Subtotal         \$16,400,000           SEGMENT 5 CONCEPT E - RANGE 4         \$11,195,000           Construction Subtotal         \$11,195,000           Construction Total         \$14,554,000           Right-of-Way         \$0           Engineering (18%)         \$2,2620,000           Construction Engineering (10%)         \$1,455,000           Project Subtotal         \$18,629,000           Inflation (30%)         \$5,588,700	Project Subtotal	\$14,894,000
SEGMENT 5 CONCEPT E - RANGE 3           Construction Subtotal         \$7,581,000           Contingency (30%)         \$2,274,000           Construction Total         \$9,855,000           Right-of-Way         \$0           Engineering (18%)         \$1,774,000           Construction Engineering (10%)         \$986,000           Project Subtotal         \$12,615,000           Inflation (30%)         \$3,784,500           Subtotal         \$16,400,000           SEGMENT 5 CONCEPT E - RANGE 4         Construction Subtotal           Contingency (30%)         \$3,359,000           Construction Total         \$14,554,000           Right-of-Way         \$0           Engineering (18%)         \$2,620,000           Construction Engineering (10%)         \$1,455,000           Project Subtotal         \$18,629,000           Inflation (30%)         \$5,588,700	Inflation (30%)	\$4,468,200
Construction Subtotal         \$7,581,000           Contingency (30%)         \$2,274,000           Construction Total         \$9,855,000           Right-of-Way         \$0           Engineering (18%)         \$1,774,000           Construction Engineering (10%)         \$986,000           Project Subtotal         \$12,615,000           Inflation (30%)         \$3,784,500           Subtotal         \$16,400,000           SEGMENT 5 CONCEPT E - RANGE 4         Construction Subtotal           Construction Subtotal         \$11,195,000           Construction Total         \$14,554,000           Right-of-Way         \$0           Engineering (18%)         \$2,620,000           Construction Engineering (10%)         \$1,455,000           Project Subtotal         \$18,629,000           Inflation (30%)         \$5,588,700	Subtotal	\$19,362,000
Contingency (30%) \$2,274,000 Construction Total \$9,855,000 Right-of-Way \$0 Engineering (18%) \$1,774,000 Construction Engineering (10%) \$986,000 Project Subtotal \$12,615,000 Inflation (30%) \$3,784,500 Subtotal \$16,400,000 SEGMENT 5 CONCEPT E - RANGE 4 Construction Subtotal \$11,195,000 Contingency (30%) \$3,359,000 Construction Total \$14,554,000 Right-of-Way \$0 Engineering (18%) \$2,620,000 Construction Engineering (10%) \$1,455,000 Project Subtotal \$18,629,000 Inflation (30%) \$5,588,700	SEGMENT 5 CONCEPT E - RANGE 3	
Construction Total         \$9,855,000           Right-of-Way         \$0           Engineering (18%)         \$1,774,000           Construction Engineering (10%)         \$986,000           Project Subtotal         \$12,615,000           Inflation (30%)         \$3,784,500           Subtotal         \$16,400,000           SEGMENT 5 CONCEPT E - RANGE 4         \$11,195,000           Construction Subtotal         \$11,195,000           Contingency (30%)         \$3,359,000           Construction Total         \$14,554,000           Right-of-Way         \$0           Engineering (18%)         \$2,620,000           Construction Engineering (10%)         \$1,455,000           Project Subtotal         \$18,629,000           Inflation (30%)         \$5,588,700	Construction Subtotal	\$7,581,000
Right-of-Way         \$0           Engineering (18%)         \$1,774,000           Construction Engineering (10%)         \$986,000           Project Subtotal         \$12,615,000           Inflation (30%)         \$3,784,500           Subtotal         \$16,400,000           SEGMENT 5 CONCEPT E - RANGE 4         \$11,195,000           Construction Subtotal         \$11,195,000           Contingency (30%)         \$3,359,000           Construction Total         \$14,554,000           Right-of-Way         \$0           Engineering (18%)         \$2,620,000           Construction Engineering (10%)         \$1,455,000           Project Subtotal         \$18,629,000           Inflation (30%)         \$5,588,700	Contingency (30%)	\$2,274,000
Engineering (18%) \$1,774,000 Construction Engineering (10%) \$986,000 Project Subtotal \$12,615,000 Inflation (30%) \$3,784,500 Subtotal \$16,400,000 SEGMENT 5 CONCEPT E - RANGE 4 Construction Subtotal \$11,195,000 Contingency (30%) \$3,359,000 Construction Total \$14,554,000 Right-of-Way \$0 Engineering (18%) \$2,620,000 Construction Engineering (10%) \$1,455,000 Project Subtotal \$18,629,000 Inflation (30%) \$5,588,700	Construction Total	\$9,855,000
Construction Engineering (10%)         \$986,000           Project Subtotal         \$12,615,000           Inflation (30%)         \$3,784,500           Subtotal         \$16,400,000           SEGMENT 5 CONCEPT E - RANGE 4         \$11,195,000           Construction Subtotal         \$11,195,000           Contingency (30%)         \$3,359,000           Construction Total         \$14,554,000           Right-of-Way         \$0           Engineering (18%)         \$2,620,000           Construction Engineering (10%)         \$1,455,000           Project Subtotal         \$18,629,000           Inflation (30%)         \$5,588,700	Right-of-Way	\$0
Project Subtotal         \$12,615,000           Inflation (30%)         \$3,784,500           Subtotal         \$16,400,000           SEGMENT 5 CONCEPT E - RANGE 4         \$11,195,000           Construction Subtotal         \$11,195,000           Construction Total         \$14,554,000           Right-of-Way         \$0           Engineering (18%)         \$2,620,000           Construction Engineering (10%)         \$1,455,000           Project Subtotal         \$18,629,000           Inflation (30%)         \$5,588,700	Engineering (18%)	\$1,774,000
Inflation (30%)       \$3,784,500         Subtotal       \$16,400,000         SEGMENT 5 CONCEPT E - RANGE 4       \$11,195,000         Construction Subtotal       \$11,195,000         Construction Total       \$14,554,000         Right-of-Way       \$0         Engineering (18%)       \$2,620,000         Construction Engineering (10%)       \$1,455,000         Project Subtotal       \$18,629,000         Inflation (30%)       \$5,588,700	Construction Engineering (10%)	\$986,000
Subtotal         \$16,400,000           SEGMENT 5 CONCEPT E - RANGE 4         \$11,195,000           Construction Subtotal         \$11,195,000           Contingency (30%)         \$3,359,000           Construction Total         \$14,554,000           Right-of-Way         \$0           Engineering (18%)         \$2,620,000           Construction Engineering (10%)         \$1,455,000           Project Subtotal         \$18,629,000           Inflation (30%)         \$5,588,700	Project Subtotal	\$12,615,000
SEGMENT 5 CONCEPT E - RANGE 4           Construction Subtotal         \$11,195,000           Contingency (30%)         \$3,359,000           Construction Total         \$14,554,000           Right-of-Way         \$0           Engineering (18%)         \$2,620,000           Construction Engineering (10%)         \$1,455,000           Project Subtotal         \$18,629,000           Inflation (30%)         \$5,588,700	Inflation (30%)	\$3,784,500
Construction Subtotal         \$11,195,000           Contingency (30%)         \$3,359,000           Construction Total         \$14,554,000           Right-of-Way         \$0           Engineering (18%)         \$2,620,000           Construction Engineering (10%)         \$1,455,000           Project Subtotal         \$18,629,000           Inflation (30%)         \$5,588,700	Subtotal	\$16,400,000
Contingency (30%)       \$3,359,000         Construction Total       \$14,554,000         Right-of-Way       \$0         Engineering (18%)       \$2,620,000         Construction Engineering (10%)       \$1,455,000         Project Subtotal       \$18,629,000         Inflation (30%)       \$5,588,700	SEGMENT 5 CONCEPT E - RANGE 4	
Construction Total         \$14,554,000           Right-of-Way         \$0           Engineering (18%)         \$2,620,000           Construction Engineering (10%)         \$1,455,000           Project Subtotal         \$18,629,000           Inflation (30%)         \$5,588,700	Construction Subtotal	\$11,195,000
Right-of-Way       \$0         Engineering (18%)       \$2,620,000         Construction Engineering (10%)       \$1,455,000         Project Subtotal       \$18,629,000         Inflation (30%)       \$5,588,700	Contingency (30%)	\$3,359,000
Engineering (18%) \$2,620,000 Construction Engineering (10%) \$1,455,000 Project Subtotal \$18,629,000 Inflation (30%) \$5,588,700	Construction Total	\$14,554,000
Construction Engineering (10%)         \$1,455,000           Project Subtotal         \$18,629,000           Inflation (30%)         \$5,588,700	Right-of-Way	\$0
Project Subtotal         \$18,629,000           Inflation (30%)         \$5,588,700	Engineering (18%)	\$2,620,000
Inflation (30%) \$5,588,700	Construction Engineering (10%)	\$1,455,000
` '	Project Subtotal	\$18,629,000
Subtotal \$24,218,000	Inflation (30%)	\$5,588,700
	Subtotal	\$24,218,000

SEGMENT 5E - OVERALL	
SEGMENT 5 CONCEPT E - RANGE 1	\$34,670,000
SEGMENT 5 CONCEPT E - RANGE 2	\$19,362,000
SEGMENT 5 CONCEPT E - RANGE 3	\$16,400,000
SEGMENT 5 CONCEPT E - RANGE 4	\$24,218,000
Total Comment II Overall	CO4 CEO 000

Construction w/ Contingency w/out Inflation \$72,807,000



#### SEGMENT 5 CONCEPT E - RANGE 1 452 + 65.00 to 500 + 00.00

Roadway					
Description		Quantity	Unit	Unit Cost	Total
PAVEMENT REMOVED		19,520	SY	\$20.00	\$390,400.00
CULVERT REMOVED		0	FT	\$100.00	\$0.00
EXCAVATION		20,344	CY	\$40.00	\$813,765.20
EMBANKMENT		9,350	CY	\$45.00	\$420,770.70
GUARDRAIL		625	FT	\$22.00	\$13,750.00
MEDIAN BARRIER		0	FT	\$120.00	\$0.00
CURB AND GUTTER		4,250	FT	\$42.00	\$178,500.00
CONCRETE MEDIAN		4,280	SY	\$100.00	\$428,000.00
CONCRETE WALK		0	SF	\$13.00	\$0.00
Roadway Subtotal \$2.245.185.90					\$2,245,185,90

Erosion Control					
Description	C	Quantity	Unit	Unit Cost	Total
EROSION CONTROL		136,000	EACH	\$1.00	\$136,000.00
EROSION CONTROL PLAN		1	LUMP	\$25,000.00	\$25,000.00
BMPs		1	LUMP	\$94,000.00	\$94,000.00
SEEDING AND MULCHING		19,283	SY	\$2.00	\$38,566.19
Erosion Control Subtotal				\$293,566.19	

Drainage				
Description	Quantity	Unit	Unit Cost	Total
CULVERT	0	FT	\$600.00	\$0.00
STORM SEWER SYSTEM	8,200	FT	\$300.00	\$2,460,000.00
UNDERDRAINS	8,200	FT	\$15.00	\$123,000.00
Drainage Subtotal				\$2,583,000,00

Pavement				
Description	Quantity	Unit	Unit Cost	Total
FULL DEPTH PAVEMENT, ASPHALT	50,140	SY	\$100.00	\$5,014,000.00
PAVEMENT PLANING AND RESURFACING	6,400	SY	\$54.00	\$345,600.00
SHARED USE PATH	0	SY	\$42.00	\$0.00
		Pav	ement Subtotal	\$5.350 600 00

Traffic Control - Signing and Pavement Marking				
Description	Quantity	Unit	Unit Cost	Total
SIGNING	3	MILE	\$250,000.00	\$800,000.00
PAVEMENT MARKINGS - THERMO	2.0	MILE	\$14,000.00	\$28,000.00
PAVEMENT MARKINGS - RECESSED	1.2	MILE	\$30,000.00	\$36,000.00
Traffic Control - Signing and Pavement Marking Subtotal				

Traffic Signal and Surveillance					
Description		Quantity	Unit	Unit Cost	Total
STANDARD TRAFFIC SIGNAL		2	EACH	\$300,000.00	\$600,000.00
TRAFFIC SIGNAL FOR R-CUT		0	EACH	\$780,000.00	\$0.00
FIBER OPTIC COMMUNICATION		2.5	MILE	\$170,000.00	\$425,000.00
CCTV		2	EACH	\$123,000.00	\$246,000.00
Traffic Control - Traffic Signal Subtotal					\$1,271,000.00

Roadway Lighting					
Description		Quantity	Unit	Unit Cost	Total
FULL INTERCHANGE LIGHTING		0	EACH	\$500,000.00	\$0.00
PARTIAL INTERCHANGE LIGHTING		0	EACH	\$300,000.00	\$0.00
CONTINUOUS ROADWAY LIGHTING		4735	FT	\$100.00	\$473,500.00
		Traffic Con	trol - Traffic	Signal Subtotal	\$473,500.00

	A			
Utility Relocations - Gas, Electric, Water, Wastewater				
Description	Quantity	Unit	Unit Cost	Total
HIGH PRESSURE GAS LINE	2800	FT	\$200.00	\$560,000.00
WATERLINE 36" OR LARGER	0	FT		\$0.00
HIGH VOLTAGE TOWER	0	EACH		\$0.00
SANITARY LINE 36" OR LARGER	0	FT		\$0.00
DAM MODIFICATION	0	LUMP		\$0.00
		later Mact	unator Cubtotal	A=50.000.00

Structures					
Description		Quantity	Unit	Unit Cost	Total
RETAINING WALL		0	SF	\$90.00	\$0.00
BRIDGE		7,500	SF	\$220.00	\$1,650,000.00
Pavement Subtotal				\$1,650,000.00	

Incidentals				
Description	Quantity	Unit	Unit Cost	Total
CONSTRUCTION LAYOUT STAKES	1	LUMP	\$65,000.00	\$65,000.00
MAINTENANCE OF TRAFFIC	1	LUMP	\$262,000.00	\$262,000.00
MOBILIZATION	1	LUMP	\$400,000.00	\$400,000.00
		Miscella	neous Subtotal	\$727 000 00

Project Summary	Subtotal
Roadway	\$2,245,186
Erosion Control	\$293,566
Drainage	\$2,583,000
Pavement	\$5,359,600
Traffic Control - Signing and Pavement Marking	\$864,000
Traffic Signal and Surveillance	\$1,271,000
Roadway Lighting	\$473,500
Utility Relocations - Gas, Electric, Water, Wastewater	\$560,000
Structures	\$1,650,000
Incidentals	\$727,000
Tota	\$16,027,000

Contingency (30%)	\$4,808,000
Subtotal	\$20,835,000
Right-of-Way	\$0
Engineering (18%)	\$3,750,000
Construction Engineering (10%)	\$2,084,000
Subtotal	\$26,669,000
Inflation (30%)	\$8,000,700
Project Total (2030 Dollars)	\$34,670,000

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#### SEGMENT 5 CONCEPT E - RANGE 2 500 + 00.00 TO 515 + 00.00

Roadway				
Description	Quantity	Unit	Unit Cost	Total
PAVEMENT REMOVED	9,240	SY	\$20.00	\$184,800.00
CULVERT REMOVED	0	FT	\$100.00	\$0.00
EXCAVATION	25,953	CY	\$40.00	\$1,038,100.80
EMBANKMENT	4,232	CY	\$45.00	\$190,451.25
GUARDRAIL	500	FT	\$22.00	\$11,000.00
MEDIAN BARRIER	0	FT	\$120.00	\$0.00
CURB AND GUTTER	4,800	FT	\$42.00	\$201,600.00
CONCRETE MEDIAN	0	SY	\$100.00	\$0.00
CONCRETE WALK	0	SF	\$13.00	\$0.00
		Ro	adway Subtotal	\$1,625,952.05

Erosion Control				
Description	Quantity	Unit	Unit Cost	Total
EROSION CONTROL	75,000	EACH	\$1.00	\$75,000.00
EROSION CONTROL PLAN	1	LUMP	\$25,000.00	\$25,000.00
BMPs	1	LUMP	\$68,000.00	\$68,000.00
SEEDING AND MULCHING	13,006	SY	\$2.00	\$26,012.19
Erosion Control Subtotal				\$194,012.19

Drainage				
Description	Quantity	Unit	Unit Cost	Total
CULVERT	0	FT	\$600.00	\$0.00
STORM SEWER SYSTEM	7,000	FT	\$300.00	\$2,100,000.00
UNDERDRAINS	7,000	FT	\$15.00	\$105,000.00
Drainage Subtotal				

Pavement				
Description	Quantity	Unit	Unit Cost	Total
FULL DEPTH PAVEMENT, ASPHALT	15,800	SY	\$100.00	\$1,580,000.00
PAVEMENT PLANING AND RESURFACING	9,250	SY	\$54.00	\$499,500.00
SHARED USE PATH	0	SY	\$42.00	\$0.00
Payement Subtotal				\$2.079.500.00

Traffic Control - Signing and Pavement Marking				
Description	Quantity	Unit	Unit Cost	Total
SIGNING	1	MILE	\$250,000.00	\$257,500.00
PAVEMENT MARKINGS - THERMO	0.3	MILE	\$14,000.00	\$3,920.00
PAVEMENT MARKINGS - RECESSED	0.8	MILE	\$30,000.00	\$22,500.00
Traffic Control - Signing and Pavement Marking Subtotal				

Traffic Signal and Surveillance					
Description		Quantity	Unit	Unit Cost	Total
STANDARD TRAFFIC SIGNAL		1	EACH	\$300,000.00	\$300,000.00
TRAFFIC SIGNAL FOR R-CUT		1	EACH	\$780,000.00	\$780,000.00
FIBER OPTIC COMMUNICATION		1	MILE	\$170,000.00	\$204,000.00
CCTV		2	EACH	\$123,000.00	\$246,000.00
	Traffic Control - Traffic Signal Subtotal \$1,530,0				\$1,530,000.00

Roadway Lighting			,		
Description		Quantity	Unit	Unit Cost	Total
FULL INTERCHANGE LIGHTING		0	EACH	\$500,000.00	\$0.00
PARTIAL INTERCHANGE LIGHTING		0	EACH	\$300,000.00	\$0.00
CONTINUOUS ROADWAY LIGHTING		4500	FT	\$100.00	\$450,000.00
	7	Traffic Con	trol - Traffic	Signal Subtotal	\$450,000.00

Utility Relocations - Gas, Electric, Water, Waste	water				
Description		Quantity	Unit	Unit Cost	Total
HIGH PRESSURE GAS LINE		867	FT	\$200.00	\$173,400.00
WATERLINE 36" OR LARGER	4	0	FT		\$0.00
HIGH VOLTAGE TOWER		0	EACH		\$0.00
SANITARY LINE 36" OR LARGER		0	FT		\$0.00
DAM MODIFICATION		0	LUMP		\$0.00
		10	later/Maste	water Subtetal	Ć472 400 00

Structures					
Description		Quantity	Unit	Unit Cost	Total
RETAINING WALL		0	SF	\$90.00	\$0.00
BRIDGE		0	SF	\$220.00	\$0.00
Pavement Subtotal				\$0.00	

Incidentals				
Description	Quantity	Unit	Unit Cost	Total
CONSTRUCTION LAYOUT STAKES	\$1.00	LUMP	\$42,000.00	\$42,000.00
MAINTENANCE OF TRAFFIC	\$1.00	LUMP	\$167,000.00	\$167,000.00
MOBILIZATION	\$1.00	LUMP	\$200,000.00	\$200,000.00
Miscellaneous Subtotal				\$409 000 00

Project Summary	Subtotal
Roadway	\$1,625,952
Erosion Control	\$194,012
Drainage	\$2,205,000
Pavement	\$2,079,500
Traffic Control - Signing and Pavement Marking	\$283,920
Traffic Signal and Surveillance	\$1,530,000
Roadway Lighting	\$450,000
Utility Relocations - Gas, Electric, Water, Wastewater	\$173,400
Structures	\$0
Incidentals	\$409,000
Total	\$8,951,000

	\$2,685,000
Subtotal	\$11,636,000
	\$0
	\$2,094,000
	\$1,164,000
Subtotal	\$14,894,000
	\$4,468,200

Project Total (2030 Dollars) \$19,362,000

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#### SEGMENT 5 CONCEPT E - RANGE 3 515 + 00.00 TO 535 + 00.00

Roadway				
Description	Quantity	Unit	Unit Cost	Total
PAVEMENT REMOVED	26,250	SY	\$20.00	\$525,000.00
CULVERT REMOVED	0	FT	\$100.00	\$0.00
EXCAVATION	13,886	CY	\$40.00	\$555,429.60
EMBANKMENT	3,340	CY	\$45.00	\$150,317.10
GUARDRAIL	500	FT	\$22.00	\$11,000.00
MEDIAN BARRIER	0	FT	\$120.00	\$0.00
CURB AND GUTTER	6,300	FT	\$42.00	\$264,600.00
CONCRETE MEDIAN	0	SY	\$100.00	\$0.00
CONCRETE WALK	0	SF	\$13.00	\$0.00
Roadway Subtotal				

Erosion Control				
Description	Quantity	Unit	Unit Cost	Total
EROSION CONTROL	68,000	EACH	\$1.00	\$68,000.00
EROSION CONTROL PLAN	1	LUMP	\$25,000.00	\$25,000.00
BMPs	1	LUMP	\$57,000.00	\$57,000.00
SEEDING AND MULCHING	10,306	SY	\$2.00	\$20,611.82
Erosion Control Subtotal				\$170,611.82

Drainage				
Description	Quantity	Unit	Unit Cost	Total
CULVERT	0	FT	\$600.00	\$0.00
STORM SEWER SYSTEM	5,800	FT	\$300.00	\$1,740,000.00
UNDERDRAINS	5,800	FT	\$15.00	\$87,000.00
Drainage Subtotal				

Pavement				
Description	Quantity	Unit	Unit Cost	Total
FULL DEPTH PAVEMENT, ASPHALT	14,520	SY	\$100.00	\$1,452,000.00
PAVEMENT PLANING AND RESURFACING	9,000	SY	\$54.00	\$486,000.00
SHARED USE PATH	0	SY	\$42.00	\$0.00
		Pav	ement Subtotal	\$1,029,000,00

Traffic Control - Signing and Pavement Marking				
Description	Quantity	Unit	Unit Cost	Total
SIGNING	1.6	MILE	\$250,000.00	\$405,000.00
PAVEMENT MARKINGS - THERMO	0.4	MILE	\$14,000.00	\$5,600.00
PAVEMENT MARKINGS - RECESSED	1.2	MILE	\$30,000.00	\$36,600.00
Traffic Control - Signing and Pavement Marking Subtotal				

Traffic Signal and Surveillance					
Description		Quantity	Unit	Unit Cost	Total
STANDARD TRAFFIC SIGNAL		1	EACH	\$300,000.00	\$300,000.00
TRAFFIC SIGNAL FOR R-CUT		0	EACH	\$780,000.00	\$0.00
FIBER OPTIC COMMUNICATION		1	MILE	\$170,000.00	\$204,000.00
CCTV		1	EACH	\$123,000.00	\$123,000.00
Traffic Control - Traffic Signal Subtotal					\$627,000.00

Roadway Lighting					
Description		Quantity	Unit	Unit Cost	Total
FULL INTERCHANGE LIGHTING		0	EACH	\$500,000.00	\$0.00
PARTIAL INTERCHANGE LIGHTING		0	EACH	\$300,000.00	\$0.00
CONTINUOUS ROADWAY LIGHTING		6500	FT	\$100.00	\$650,000.00
		Traffic Cor	trol - Traffic	Signal Subtotal	\$650,000.00

Utility Relocations - Gas, Electric, Water, Wastewater				
Description	Quantity	Unit	Unit Cost	Total
HIGH PRESSURE GAS LINE	180	FT	\$200.00	\$36,000.00
WATERLINE 36" OR LARGER	0	FT		\$0.00
HIGH VOLTAGE TOWER	0	EACH		\$0.00
SANITARY LINE 36" OR LARGER	0	FT		\$0.00
DAM MODIFICATION	0	LUMP		\$0.00
	IA.	lator/Mact	water Subtetal	£26 000 00

Structures					
Description		Quantity	Unit	Unit Cost	Total
RETAINING WALL		0	SF	\$90.00	\$0.00
BRIDGE		0	SF	\$220.00	\$0.00
Pavement Subtotal				\$0.00	

Incidentals				
Description	Quantity	Unit	Unit Cost	Total
CONSTRUCTION LAYOUT STAKES	1	LUMP	\$36,000.00	\$36,000.00
MAINTENANCE OF TRAFFIC	1	LUMP	\$143,000.00	\$143,000.00
MOBILIZATION	1	LUMP	\$200,000.00	\$200,000.00
		Miscella	neous Subtotal	\$379 000 00

Project Summary	Subtotal
Roadway	\$1,506,347
Erosion Control	\$170,612
Drainage	\$1,827,000
Pavement	\$1,938,000
Traffic Control - Signing and Pavement Marking	\$447,200
Traffic Signal and Surveillance	\$627,000
Roadway Lighting	\$650,000
Utility Relocations - Gas, Electric, Water, Wastewater	\$36,000
Structures	\$0
Incidentals	\$379,000
Total	\$7,581,000

Contingency (30%)	\$2,274,000
Subtotal	\$9,855,000
Right-of-Way	\$0
Engineering (18%)	\$1,774,000
Construction Engineering (10%)	\$986,000
Subtotal	\$12,615,000
Inflation (30%)	\$3,784,500
Project Total (2030 Dollars)	\$16,400,000

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#### SEGMENT 5 CONCEPT E - RANGE 4 535 + 00.00 TO 573 + 68.00

Roadway				
Description	Quantity	Unit	Unit Cost	Total
PAVEMENT REMOVED	18,900	SY	\$20.00	\$378,000.00
CULVERT REMOVED	40	FT	\$100.00	\$4,000.00
EXCAVATION	28,258	CY	\$40.00	\$1,130,312.80
EMBANKMENT	16,896	CY	\$45.00	\$760,305.60
GUARDRAIL	1,000	FT	\$22.00	\$22,000.00
MEDIAN BARRIER	0	FT	\$120.00	\$0.00
CURB AND GUTTER	6,200	FT	\$42.00	\$260,400.00
CONCRETE MEDIAN	0	SY	\$100.00	\$0.00
CONCRETE WALK	0	SF	\$13.00	\$0.00
Roadway Subtotal				\$2,555,018.40

Erosion Control				
Description	Quantity	y Unit	Unit Cost	Total
EROSION CONTROL	162,000	EACH	\$1.00	\$162,000.00
EROSION CONTROL PLAN	1	LUMP	\$25,000.00	\$25,000.00
BMPs	1	LUMP	\$122,000.00	\$122,000.00
SEEDING AND MULCHING	27,065	SY	\$2.00	\$54,129.65
	,	Frosion	Control Subtotal	\$262 120 65

Drainage				
Description	Quantity	Unit	Unit Cost	Total
CULVERT	40	FT	\$600.00	\$24,000.00
STORM SEWER SYSTEM	6,800	FT	\$300.00	\$2,040,000.00
UNDERDRAINS	6,800	FT	\$15.00	\$102,000.00
Drainage Subtotal				\$2,166,000,00

Pavement			<b>7</b> 4	
Description	Quantity	Unit	Unit Cost	Total
FULL DEPTH PAVEMENT, ASPHALT	25,400	SY	\$100.00	\$2,540,000.00
PAVEMENT PLANING AND RESURFACING	11,250	SY	\$54.00	\$607,500.00
SHARED USE PATH	0	SY	\$42.00	\$0.00
		Pav	ement Subtotal	\$3 147 500 00

Traffic Control - Signing and Pavement Marking				
Description	Quantity	Unit	Unit Cost	Total
SIGNING	2.4	MILE	\$250,000.00	\$600,000.00
PAVEMENT MARKINGS - THERMO	1.2	MILE	\$14,000.00	\$16,800.00
PAVEMENT MARKINGS - RECESSED	1.2	MILE	\$30,000.00	\$36,000.00
Traffic Cont	rol - Signing and I	Pavement M	arking Subtotal	\$652,800.00

Traffic Signal and Surveillance					
Description		Quantity	Unit	Unit Cost	Total
STANDARD TRAFFIC SIGNAL		2	EACH	\$300,000.00	\$600,000.00
TRAFFIC SIGNAL FOR R-CUT		0	EACH	\$780,000.00	\$0.00
FIBER OPTIC COMMUNICATION		2	MILE	\$170,000.00	\$380,800.00
CCTV		2	EACH	\$123,000.00	\$246,000.00
Traffic Control - Traffic Signal Subtotal					

Roadway Lighting			•		
Description		Quantity	Unit	Unit Cost	Total
FULL INTERCHANGE LIGHTING		0	EACH	\$500,000.00	\$0.00
PARTIAL INTERCHANGE LIGHTING		0	EACH	\$300,000.00	\$0.00
CONTINUOUS ROADWAY LIGHTING		3500	FT	\$100.00	\$350,000.00
		Traffic Con	trol - Traffic	Signal Subtotal	\$350,000.00

Utility Relocations - Gas, Electric, Water, Wastewater				
Description	Quantity	Unit	Unit Cost	Total
HIGH PRESSURE GAS LINE	220	FT	\$200.00	\$44,000.00
WATERLINE 36" OR LARGER	0	FT		\$0.00
HIGH VOLTAGE TOWER	0	EACH		\$0.00
SANITARY LINE 36" OR LARGER	0	FT		\$0.00
DAM MODIFICATION	0	LUMP		\$0.00
	V	Vater/Waste	ewater Subtotal	\$44,000.00

Structures					
Description		Quantity	Unit	Unit Cost	Total
RETAINING WALL		0	SF	\$90.00	\$0.00
BRIDGE		0	SF	\$220.00	\$0.00
Pavement Subtotal				\$0.00	

Incidentals				
Description	Quantity	Unit	Unit Cost	Total
CONSTRUCTION LAYOUT STAKES	1	LUMP	\$58,000.00	\$58,000.00
MAINTENANCE OF TRAFFIC	1	LUMP	\$232,000.00	\$232,000.00
MOBILIZATION	1	LUMP	\$400,000.00	\$400,000.00
Miscellaneous Subtotal				\$690,000,00

Project Summary	Subtotal
Roadway	\$2,555,018
Erosion Control	\$363,130
Drainage	\$2,166,000
Pavement	\$3,147,500
Traffic Control - Signing and Pavement Marking	\$652,800
Traffic Signal and Surveillance	\$1,226,800
Roadway Lighting	\$350,000
Utility Relocations - Gas, Electric, Water, Wastewater	\$44,000
Structures	\$0
Incidentals	\$690,000
Total	\$11,195,000

Contingency (30%)		\$3,359,000
	Subtotal	\$14,554,000
Right-of-Way		\$0
Engineering (18%)		\$2,620,000
Construction Engineering (10%)		\$1,455,000
	Subtotal	\$18,629,000
Inflation (30%)		\$5,588,700

Project Total (2030 Dollars) \$24,218,000

Estimate completed by:

ms consultants, in engineers, architects, planne

# SEGMENT 6 CONCEPT A - OVERALL

SEGMENT 6 CONCEPT A - RANGE 1	Quantity
Construction Subtotal	\$27,223,000
Contingency (30%)	\$8,167,000
Construction Total	\$35,390,000
Right-of-Way	\$0
Engineering (18%)	\$6,370,000
Construction Engineering (10%)	\$3,539,000
Project Subtotal	\$45,299,000
Inflation (30%)	\$13,589,700
Subtotal	\$58,889,000
SEGMENT 6 CONCEPT A - RANGE 2	
Construction Subtotal	\$43,401,000
Contingency (30%)	\$13,020,000
Construction Total	\$56,421,000
Right-of-Way	\$0
Engineering (18%)	\$10,156,000
Construction Engineering (10%)	\$5,642,000
Project Subtotal	\$72,219,000
Inflation (30%)	\$21,665,700
Subtotal	\$93,885,000
SEGMENT 6 CONCEPT A - RANGE 3	
Construction Subtotal	\$48,613,000
Contingency (30%)	\$14,584,000
Construction Total	\$63,197,000
Right-of-Way	\$0
Engineering (18%)	\$11,375,000
Construction Engineering (10%)	\$6,320,000
Project Subtotal	\$80,892,000
Inflation (30%)	\$24,267,600
Subtotal	\$105,160,000
SEGMENT 6 CONCEPT A - RANGE 4	
Construction Subtotal	\$30,137,000
Contingency (30%)	\$9,041,000
Construction Total	\$39,178,000
Right-of-Way	\$0
Engineering (18%)	\$7,052,000
Construction Engineering (10%)	\$3,918,000
Project Subtotal	\$50,148,000
Inflation (30%)	\$15,044,400
milation (50%)	\$65,192,000

SEGMENT 6 CONCEPT A - OVERALL	
SEGMENT 6 CONCEPT A - RANGE 1	\$58,889,000
SEGMENT 6 CONCEPT A - RANGE 2	\$93,885,000
SEGMENT 6 CONCEPT A - RANGE 3	\$105,160,000
SEGMENT 6 CONCEPT A - RANGE 4	\$65,192,000
Total - Segment 6 Concept A - Overall	\$323,126,000

Construction w/ Contingency w/out Inflation \$248,558,000



# SEGMENT 6 CONCEPT A - RANGE 1 S of Pennsylvania Ave to N of Pennsylvania Ave

Roadway					
Description	Quantity	Unit	Unit Cost	Total	
PAVEMENT REMOVED	11,607	SY	\$20.00	\$232,140.00	
CULVERT REMOVED	208	FT	\$100.00	\$20,800.00	
EXCAVATION	62,282	CY	\$40.00	\$2,491,280.00	
EMBANKMENT	97,125	CY	\$45.00	\$4,370,625.00	
GUARDRAIL	1,508	FT	\$22.00	\$33,176.00	
MEDIAN BARRIER	4,075	FT	\$120.00	\$489,000.00	
CURB AND GUTTER	4,451	FT	\$42.00	\$186,942.00	
CONCRETE MEDIAN		SY	\$100.00	\$0.00	
CONCRETE WALK		SF	\$13.00	\$0.00	
Roadway Subtotal					

Erosion Control				
Description	Quantity	Unit	Unit Cost	Total
EROSION CONTROL	550,000	EACH	\$1.00	\$550,000.00
EROSION CONTROL PLAN	1	LUMP	\$142,000.00	\$142,000.00
BMPs	1	LUMP	\$500,000.00	\$500,000.00
SEEDING AND MULCHING	71,415	SY	\$2.00	\$142,830.00
Erosion Control Subtotal				\$1.334.830.00

Drainage					
Description	Quantity	Unit	Unit Cost	Total	
CULVERT	208	FT	\$600.00	\$124,800.00	
STORM SEWER SYSTEM	12,454	FT	\$300.00	\$3,736,200.00	
UNDERDRAINS	20,833	FT	\$15.00	\$312,495.00	
	Drainage Subtotal   \$				

Pavement				
Description	Quantity	Unit	Unit Cost	Total
FULL-DEPTH PAVEMENT - ASPHALT	17,933	SY	\$100.00	\$1,793,300.00
FULL-DEPTH PAVEMENT - CONCRETE	15,586	SY	\$150,00	\$2,337,900.00
PAVEMENT PLANING AND RESURFACING	32,304	SY	\$54.00	\$1,744,416.00
SHARED USE PATH		SY	\$42.00	\$0.00
		Pav	ement Subtotal	\$5 975 616 NO

Traffic Control - Signing and Pavement Marking						
Description	Quantity	Unit	Unit Cost	Total		
SIGNING	2.36	MILE	\$250,000.00	\$589,678.03		
PAVEMENT MARKINGS - THERMO	2.36	MILE	\$14,000.00	\$33,021.97		
PAVEMENT MARKINGS - RECESSED		MILE	\$30,000.00	\$0.00		
Traffic Control - Signing and Payement Marking Subtotal						

Traffic Signal and Surveillance						
Description		Quantity	Unit	Unit Cost	Total	
STANDARD TRAFFIC SIGNAL		1	EACH	\$300,000.00	\$300,000.00	
TRAFFIC SIGNAL FOR R-CUT			EACH	\$780,000.00	\$0.00	
FIBER OPTIC COMMUNICATION			MILE	\$170,000.00	\$0.00	
CCTV		1	EACH	\$123,000.00	\$123,000.00	
Traffic Control - Traffic Signal Subtotal						

Roadway Lighting			_		
Description	,	Quantity	Unit	Unit Cost	Total
FULL INTERCHANGE LIGHTING		1	EACH	\$500,000.00	\$500,000.00
PARTIAL INTERCHANGE LIGHTING			EACH	\$300,000.00	\$0.00
CONTINUOUS ROADWAY LIGHTING		12,454	FT	\$100.00	\$1,245,400.00
Traffic Control - Traffic Signal Subtotal \$1,745,40					\$1,745,400.00

Utility Relocations - Gas, Electric, W	ater, Was	tewater				
Description	/		Quantity	Unit	Unit Cost	Total
HIGH PRESSURE GAS LINE			_	FT		\$0.00
WATERLINE 36" OR LARGER				FT		\$0.00
HIGH VOLTAGE TOWER		7		EACH		\$0.00
SANITARY LINE 36" OR LARGER				FT		\$0.00
DAM MODIFICATION				LUMP		\$0.00
	Water/Wastewater Subtotal					\$0.00

Structures					
Description		Quantity	Únit	Unit Cost	Total
RETAINING WALL		18,960	SF	\$90.00	\$1,706,400.00
BRIDGE		8,672	SF	\$220.00	\$1,907,840.00
			Pave	ement Subtotal	\$3,614,240.00

Incidentals				
Description	Quantity	Unit	Unit Cost	Total
CONSTRUCTION LAYOUT STAKES	1	LUMP	\$133,000.00	\$133,000.00
MAINTENANCE OF TRAFFIC	1	LUMP	\$800,000.00	\$800,000.00
MOBILIZATION	1	LUMP	\$800,000.00	\$800,000.00
		Miscella	neous Subtotal	¢1 722 000 00

Project Summary	Subtotal
Roadway	\$7,823,963
Erosion Control	\$1,334,830
Drainage	\$4,173,495
Pavement	\$5,875,616
Traffic Control - Signing and Pavement Marking	\$622,700
Traffic Signal and Surveillance	\$300,000
Roadway Lighting	\$1,745,400
Utility Relocations - Gas, Electric, Water, Wastewater	\$0
Structures	\$3,614,240
Incidentals	\$1,733,000
Total	\$27,223,000

Contingency (30%)		\$8,167,000
Subto	tal	\$35,390,000
Right-of-Way		\$0
Engineering (18%)		\$6,370,000
Construction Engineering (10%)		\$3,539,000
·		

	Subtotal	\$45,299,000
Inflation (30%)		\$13,589,700
	Project Total (2030 Dollars)	\$58.889.000

#### SEGMENT 6 CONCEPT A - RANGE 2 S of Pinecrest Dr to N of Radnor Rd

Roadway				
Description	Quantity	Unit	Unit Cost	Total
PAVEMENT REMOVED	27,152	SY	\$20.00	\$543,044.44
CULVERT REMOVED	301	FT	\$100.00	\$30,100.00
EXCAVATION	20,090	CY	\$40.00	\$803,600.00
EMBANKMENT	169,837	CY	\$45.00	\$7,642,665.00
GUARDRAIL	3,960	FT	\$22.00	\$87,120.00
MEDIAN BARRIER	4,200	FT	\$120.00	\$504,000.00
CURB AND GUTTER		FT	\$42.00	\$0.00
CONCRETE MEDIAN		SY	\$100.00	\$0.00
CONCRETE WALK	2,115	SF	\$13.00	\$27,495.00
Roadway Subtotal				

Erosion Control				
Description	Quantity	Unit	Unit Cost	Total
EROSION CONTROL	845,000	EACH	\$1.00	\$845,000.00
EROSION CONTROL PLAN	1	LUMP	\$400,000.00	\$400,000.00
BMPs	1	LUMP	\$760,000.00	\$760,000.00
SEEDING AND MULCHING	227,000	SY	\$2.00	\$454,000.00
Erosion Control Subtotal				

Drainage				
Description	Quantity	Unit	Unit Cost	Total
CULVERT		FT	\$600.00	\$0.00
STORM SEWER SYSTEM	13,146	FT	\$300.00	\$3,943,800.00
UNDERDRAINS	26,292	FT	\$15.00	\$394,380.00
		Di	ainage Subtotal	\$4,338,180,00

Pavement				
Description	Quantity	Unit	Unit Cost	Total
FULL-DEPTH PAVEMENT - ASPHALT	30,356	SY	\$100.00	\$3,035,555.56
FULL-DEPTH PAVEMENT - CONCRETE	33,348	SY	\$150.00	\$5,002,200.00
PAVEMENT PLANING AND RESURFACING	12,666	SY	\$54.00	\$683,988.00
SHARED USE PATH		SY	\$42.00	\$0.00
		Pav	ement Subtotal	\$8,721,743.56

Traffic Control - Signing and Pavement Marking					
Description	Quantity	Unit	Unit Cost	Total	
SIGNING	2.49	MILE	\$250,000.00	\$622,443.18	
PAVEMENT MARKINGS - THERMO	2.49	MILE	\$14,000.00	\$34,856.82	
PAVEMENT MARKINGS - RECESSED		MILE	\$30,000.00	\$0.00	
Traffic Control - Signing and Pavement Marking Subtotal					

Traffic Signal and Surveillance					_
Description		Quantity	Unit	Unit Cost	Total
STANDARD TRAFFIC SIGNAL		2	EACH	\$300,000.00	\$600,000.00
TRAFFIC SIGNAL FOR R-CUT			EACH	\$780,000.00	\$0.00
FIBER OPTIC COMMUNICATION			MILE	\$170,000.00	\$0.00
CCTV		2	EACH	\$123,000.00	\$246,000.00
	Traffic Control - Traffic Signal Subtotal				

Roadway Lighting				
Description	Quantity	Unit	Unit Cost	Total
FULL INTERCHANGE LIGHTING	1	EACH	\$500,000.00	\$500,000.00
PARTIAL INTERCHANGE LIGHTING		EACH	\$300,000.00	\$0.00
CONTINUOUS ROADWAY LIGHTING	13,146	FT	\$100.00	\$1,314,600.00
	Traffic Con	trol - Traffic	Signal Subtotal	\$1,814,600.00

Utility Relocations - Gas, Electric, Water, Wastewater					
Description		Quantity	Unit	Unit Cost	Total
HIGH PRESSURE GAS LINE			FT		\$0.00
WATERLINE 36" OR LARGER			FT		\$0.00
HIGH VOLTAGE TOWER			EACH		\$0.00
SANITARY LINE 36" OR LARGER			FT		\$0.00
DAM MODIFICATION			LUMP		\$0.00
Water/Wastewater Subtotal					\$0.00

Structures					
Description		Quantity	Unit	Unit Cost	Total
RETAINING WALL			SF	\$90.00	\$0.00
BRIDGE		56,656	SF	\$220.00	\$12,464,320.00
			Pav	ement Subtotal	\$12,464,320,00

Incidentals				
Description	Quantity	Unit	Unit Cost	Total
CONSTRUCTION LAYOUT STAKES	1	LUMP	\$208,000.00	\$208,000.00
MAINTENANCE OF TRAFFIC	1	LUMP	\$1,300,000.00	\$1,300,000.00
MOBILIZATION	1	LUMP	\$1,200,000.00	\$1,200,000.00
Miscellaneous Subtotal				\$2.709.000.00

Project Summary	Subtotal
Roadway	\$9,638,024
Erosion Control	\$2,459,000
Drainage	\$4,338,180
Pavement	\$8,721,744
Traffic Control - Signing and Pavement Marking	\$657,300
Traffic Signal and Surveillance	\$600,000
Roadway Lighting	\$1,814,600
Utility Relocations - Gas, Electric, Water, Wastewater	\$0
Structures	\$12,464,320
Incidentals	\$2,708,000
Total	\$43,401,000

Contingency (30%)	\$13,020,000
Subtotal	\$56,421,000
Right-of-Way	\$0
Engineering (18%)	\$10,156,000
Construction Engineering (10%)	\$5,642,000
Subtotal	\$72,219,000
Inflation (30%)	\$21,665,700
Project Total (2030 Dollars)	\$93,885,000



# SEGMENT 6 CONCEPT A - RANGE 3 N of Merrick Mkwy to N of Hills-Miller Rd

Roadway				
Description	Quantity	Unit	Unit Cost	Total
PAVEMENT REMOVED	4,367	SY	\$20.00	\$87,340.00
CULVERT REMOVED		FT	\$100.00	\$0.00
EXCAVATION	158,269	CY	\$40.00	\$6,330,760.00
EMBANKMENT	212,864	CY	\$45.00	\$9,578,880.00
GUARDRAIL	300	FT	\$22.00	\$6,600.00
MEDIAN BARRIER	4,075	FT	\$120.00	\$489,000.00
CURB AND GUTTER	3,556	FT	\$42.00	\$149,352.00
CONCRETE MEDIAN	460	SY	\$100.00	\$46,000.00
CONCRETE WALK	153	SF	\$13.00	\$1,982.50
Roadway Subtotal				\$16,689,914.50

Erosion Control  Description Quantity Unit Unit Cost To				
Description	Quantity	Unit	Unit Cost	Total
EROSION CONTROL	985,000	EACH	\$1.00	\$985,000.00
EROSION CONTROL PLAN	1	LUMP	\$85,000.00	\$85,000.00
BMPs	1	LUMP	\$890,000.00	\$890,000.00
SEEDING AND MULCHING	85,398	SY	\$2.00	\$170,796.00
Erosion Control Subtotal				\$2,130,796.00

Drainage				
Description	Quantity	Unit	Unit Cost	Total
CULVERT		FT	\$600.00	\$0.00
STORM SEWER SYSTEM	24,480	FT	\$300.00	\$7,344,000.00
UNDERDRAINS	48,960	FT	\$15.00	\$734,400.00
		Dr	ainage Subtotal	\$8,078,400,00

Pavement				
Description	Quantity	Unit	Unit Cost	Total
FULL-DEPTH PAVEMENT - ASPHALT	81,223	SY	\$100.00	\$8,122,300.00
FULL-DEPTH PAVEMENT - CONCRETE		SY	\$150.00	
PAVEMENT PLANING AND RESURFACING	25,469	SY	\$54.00	\$1,375,326.00
SHARED USE PATH		SY	\$42.00	\$0.00
Pavement Subtotal				\$9,497,626.00

Traffic Control - Signing and Pavement Marking					
Description	Quantity	Unit	Unit Cost	Total	
SIGNING	4.64	MILE	\$250,000.00	\$1,159,090.91	
PAVEMENT MARKINGS - THERMO	4.64	MILE	\$14,000.00	\$64,909.09	
PAVEMENT MARKINGS - RECESSED		MILE	\$30,000.00	\$0.00	
Traffic Control - Signing and Pavement Marking Subtotal					

Traffic Signal and Surveillance					
Description		Quantity	Unit	Unit Cost	Total
STANDARD TRAFFIC SIGNAL		2	EACH	\$300,000.00	\$600,000.00
TRAFFIC SIGNAL FOR R-CUT			EACH	\$780,000.00	\$0.00
FIBER OPTIC COMMUNICATION			MILE	\$170,000.00	\$0.00
CCTV			EACH	\$123,000.00	\$0.00
Traffic Control - Traffic Signal Subtotal					\$600,000.00

Roadway Lighting				
Description	Quantity	Unit	Unit Cost	Total
FULL INTERCHANGE LIGHTING	1	EACH	\$500,000.00	\$500,000.00
PARTIAL INTERCHANGE LIGHTING		EACH	\$300,000.00	\$0.00
CONTINUOUS ROADWAY LIGHTING	24,480	FT	\$100.00	\$2,448,000.00
	Traffic Con	trol - Traffic	Signal Subtotal	\$2,948,000.00

Utility Relocations - Gas, Electric, Water, Wastewater						
Description	1		Quantity	Unit	Unit Cost	Total
HIGH PRESSURE GAS LINE				FT		\$0.00
WATERLINE 36" OR LARGER				FT		\$0.00
HIGH VOLTAGE TOWER				EACH		\$0.00
SANITARY LINE 36" OR LARGER				FT		\$0.00
DAM MODIFICATION				LUMP		\$0.00
Water/Wastewater Subtotal					\$0.00	

Structures					
Description		Quantity	Unit	Unit Cost	Total
RETAINING WALL			SF	\$90.00	\$0.00
BRIDGE		20,800	SF	\$220.00	\$4,576,000.00
		Pavement Subtotal \$4,576.0			

Incidentals					
Description	Quantity	Unit	Unit Cost	Total	
CONSTRUCTION LAYOUT STAKES	1	LUMP	\$237,000.00	\$237,000.00	
MAINTENANCE OF TRAFFIC	1	LUMP	\$1,431,300.00	\$1,431,300.00	
MOBILIZATION	1	LUMP	\$1,200,000.00	\$1,200,000.00	
	Miscellaneous Subtotal				

Project Summary	Subtotal
Roadway	\$16,689,915
Erosion Control	\$2,130,796
Drainage	\$8,078,400
Pavement	\$9,497,626
Traffic Control - Signing and Pavement Marking	\$1,224,000
Traffic Signal and Surveillance	\$600,000
Roadway Lighting	\$2,948,000
Utility Relocations - Gas, Electric, Water, Wastewater	\$0
Structures	\$4,576,000
Incidentals	\$2,868,300
Total	\$48,613,000

Contingency (30%)	\$:	14,584,000
Commission (Corre		, ,
	Subtotal \$	3,197,000
Right-of-Way		\$0
(4000)	1 4	
Engineering (18%)	\$	11,375,000
Construction Engineering (10%)	\$	6,320,000
	Subtotal \$8	0,892,000
Inflation (30%)	\$	24,267,600
Project To	tal (2030 Dollars) \$1	05,160,000



# SEGMENT 6 CONCEPT A - RANGE 4 S of Coover Rd to N of Coover Rd

Roadway				
Description	Quantity	Unit	Unit Cost	Total
PAVEMENT REMOVED	4,777	SY	\$20.00	\$95,533.33
CULVERT REMOVED		FT	\$100.00	\$0.00
EXCAVATION	73,614	CY	\$40.00	\$2,944,560.00
EMBANKMENT	148,704	CY	\$45.00	\$6,691,680.00
GUARDRAIL	300	FT	\$22.00	\$6,600.00
MEDIAN BARRIER	3,921	FT	\$120.00	\$470,520.00
CURB AND GUTTER	3,394	FT	\$42.00	\$142,548.00
CONCRETE MEDIAN	400	SY	\$100.00	\$40,000.00
CONCRETE WALK	162	SF	\$13.00	\$2,101.67
Roadway Subtotal				

Erosion Control				
Description	Quantity	Unit	Unit Cost	Total
EROSION CONTROL	625,000	EACH	\$1.00	\$625,000.00
EROSION CONTROL PLAN	1	LUMP	\$80,000.00	\$80,000.00
BMPs	1	LUMP	\$560,000.00	\$560,000.00
SEEDING AND MULCHING	79,170	SY	\$2.00	\$158,340.00
Erosion Control Subtotal				\$1,423,340.00

Drainage						
Description	Quantity	Unit	Unit Cost	Total		
CULVERT		FT	\$600.00	\$0.00		
STORM SEWER SYSTEM	14,212	FT	\$300.00	\$4,263,600.00		
UNDERDRAINS	28,424	FT	\$15.00	\$426,360.00		
	Drainage Subtotal S					

Pavement				
Description	Quantity	Unit	Unit Cost	Total
FULL-DEPTH PAVEMENT - ASPHALT	45,890	SY	\$100.00	\$4,588,966.67
FULL-DEPTH PAVEMENT - CONCRETE		SY	\$150.00	\$0.00
PAVEMENT PLANING AND RESURFACING	23,811	SY	\$54.00	\$1,285,812.00
SHARED USE PATH	126	SY	\$42.00	\$5,292.00
Pavement Subtotal				

Traffic Control - Signing and Pavement Marking	Traffic Control - Signing and Pavement Marking			
Description	Quantity	Unit	Unit Cost	Total
SIGNING	2.69	MILE	\$250,000.00	\$672,916.67
PAVEMENT MARKINGS - THERMO	2.69	MILE	\$14,000.00	\$37,683.33
PAVEMENT MARKINGS - RECESSED		MILE	\$30,000.00	\$0.00
Traffic Control - Signing and Pavement Marking Subtotal				

Traffic Signal and Surveillance					
Description		Quantity	Unit	Unit Cost	Total
STANDARD TRAFFIC SIGNAL		2	EACH	\$300,000.00	\$600,000.00
TRAFFIC SIGNAL FOR R-CUT			EACH	\$780,000.00	\$0.00
FIBER OPTIC COMMUNICATION			MILE	\$170,000.00	\$0.00
CCTV			EACH	\$123,000.00	\$0.00
Traffic Control - Traffic Signal Subtotal					\$600,000.00

Roadway Lighting				. 4	1	
Description	Quant	ity	Unit	Unit Cost	Total	
FULL INTERCHANGE LIGHTING			EACH	\$500,000.00	\$0.00	V
PARTIAL INTERCHANGE LIGHTING	1		EACH	\$300,000.00	\$300,000	0.00
CONTINUOUS ROADWAY LIGHTING	24,48	0	FT	\$100.00	\$2,448,00	0.00
	Traff	ic Con	trol - Traffic	Signal Subtotal	\$2,748,00	0.00

Utility Relocations - Gas, Electric, Water, Wastewater					
Description		Quantity	Unit	Unit Cost	Total
HIGH PRESSURE GAS LINE			FT		\$0.00
WATERLINE 36" OR LARGER			FT		\$0.00
HIGH VOLTAGE TOWER			EACH		\$0.00
SANITARY LINE 36" OR LARGER			FT		\$0.00
DAM MODIFICATION			LUMP		\$0.00
	Water/Wastewater Subtotal				

Structures				
Description	Quantity	Unit	Unit Cost	Total
RETAINING WALL		SF	\$90.00	\$0.00
BRIDGE	8,320	SF	\$220.00	\$1,830,400.00
		Pav	ement Subtotal	\$1.830,400,00

Incidentals								
Description	Quantity	Unit	Unit Cost	Total				
CONSTRUCTION LAYOUT STAKES	1	LUMP	\$151,000.00	\$151,000.00				
MAINTENANCE OF TRAFFIC	1	LUMP	\$910,000.00	\$910,000.00				
MOBILIZATION	1	LUMP	\$800,000.00	\$800,000.00				
		Miccolla	manus Subtotal	£1 0C1 000 00				

Project Summary	Subtotal
Roadway	\$10,393,543
Erosion Control	\$1,423,340
Drainage	\$4,689,960
Pavement	\$5,880,071
Traffic Control - Signing and Pavement Marking	\$710,600
Traffic Signal and Surveillance	\$600,000
Roadway Lighting	\$2,748,000
Utility Relocations - Gas, Electric, Water, Wastewater	\$0
Structures	\$1,830,400
Incidentals	\$1,861,000
Total	\$30,137,000

Contingency (30%)		\$9,041,000
	Subtotal	\$39,178,000
Right-of-Way		\$0
Engineering (18%)		\$7,052,000
Construction Engineering (10%)		\$3,918,000
	Subtotal	\$50,148,000
Inflation (30%)		\$15,044,400
	Project Total (2020 Dollars)	¢65 102 000



# SEGMENT 6 CONCEPT B - OVERALL

SEGMENT 6 CONCEPT B - RANGE 1	Quantity
Construction Subtotal	\$26,907,000
Contingency (30%)	\$8,072,000
Construction Total	\$34,979,000
Right-of-Way	\$0
Engineering (18%)	\$6,296,000
Construction Engineering (10%)	\$3,498,000
Project Subtotal	\$44,773,000
Inflation (30%)	\$13,431,900
Subtotal	\$58,205,000
SEGMENT 6 CONCEPT B - RANGE 2	
Construction Subtotal	\$28,324,000
Contingency (30%)	\$8,497,000
Construction Total	\$36,821,000
Right-of-Way	\$0
Engineering (18%)	\$6,628,000
Construction Engineering (10%)	\$3,682,000
Project Subtotal	\$47,131,000
Inflation (30%)	\$14,139,300
Subtotal	\$61,270,000
SEGMENT 6 CONCEPT B - RANGE 3	
Construction Subtotal	\$27,468,000
Contingency (30%)	\$8,240,000
Construction Total	\$35,708,000
Right-of-Way	\$0
Engineering (18%)	\$6,427,000
Construction Engineering (10%)	\$3,571,000
Project Subtotal	\$45,706,000
Inflation (30%)	\$13,711,800
Subtotal	\$59,418,000
SEGMENT 6 CONCEPT B - RANGE 4	
Construction Subtotal	\$16,637,000
Contingency (30%)	\$4,991,000
Construction Total	\$21,628,000
Right-of-Way	\$0
Engineering (18%)	\$3,893,000
Construction Engineering (10%)	\$2,163,000
Project Subtotal	\$27,684,000
Inflation (30%)	\$8,305,200
Subtotal	

SEGMENT 6 CONCEPT B - OVERALL	
SEGMENT 6 CONCEPT B - RANGE 1	\$58,205,000
SEGMENT 6 CONCEPT B - RANGE 2	\$61,270,000
SEGMENT 6 CONCEPT B - RANGE 3	\$59,418,000
SEGMENT 6 CONCEPT B - RANGE 4	\$35,989,000
Total - Segment 6 Concept B - Overall	\$214,882,000

Construction w/ Contingency w/out Inflation \$165,294,000



# SEGMENT 6 CONCEPT B - RANGE 1 S of Pennsylvania Ave to N of Pennsylvania Ave

Roadway				
Description	Quantity	Unit	Unit Cost	Total
PAVEMENT REMOVED	12,511	SY	\$20.00	\$250,220.00
CULVERT REMOVED	208	FT	\$100.00	\$20,800.00
EXCAVATION	62,282	CY	\$40.00	\$2,491,280.00
EMBANKMENT	97,125	CY	\$45.00	\$4,370,625.00
GUARDRAIL	1,508	FT	\$22.00	\$33,176.00
MEDIAN BARRIER	4,075	FT	\$120.00	\$489,000.00
CURB AND GUTTER	4,451	FT	\$42.00	\$186,942.00
CONCRETE MEDIAN		SY	\$100.00	\$0.00
CONCRETE WALK		SF	\$13.00	\$0.00
Roadway Subtotal				\$7,842,043.00

Erosion Control					
Description		Quantity	Unit	Unit Cost	Total
EROSION CONTROL		550,000	EACH	\$1.00	\$550,000.00
EROSION CONTROL PLAN		1	LUMP	\$142,000.00	\$142,000.00
BMPs		1	LUMP	\$500,000.00	\$500,000.00
SEEDING AND MULCHING		71,415	SY	\$2.00	\$142,830.00
Erosion Control Subtotal				\$1,334,830.0	

Drainage	Drainage				
Description	Quantity	Unit	Unit Cost	Total	
CULVERT	208	FT	\$600.00	\$124,800.00	
STORM SEWER SYSTEM	12,454	FT	\$300.00	\$3,736,200.00	
UNDERDRAINS	20,833	FT	\$15.00	\$312,495.00	
			-i Cuba-a-l	44 4 70 405 00	

Pavement				
Description	Quantity	Unit	Unit Cost	Total
FULL-DEPTH PAVEMENT - ASPHALT	16,992	SY	\$100.00	\$1,699,200.00
FULL-DEPTH PAVEMENT - CONCRETE	15,586	SY	\$150.00	\$2,337,900.00
PAVEMENT PLANING AND RESURFACING	33,245	SY	\$54.00	\$1,795,230.00
SHARED USE PATH		SY	\$42.00	\$0.00
		Pav	ement Subtotal	\$5,832,330.00

Traffic Control - Signing and Pavement Marking				
Description	Quantity	Unit	Unit Cost	Total
SIGNING	2.36	MILE	\$250,000.00	\$589,678.03
PAVEMENT MARKINGS - THERMO	1.77	MILE	\$14,000.00	\$24,780.00
PAVEMENT MARKINGS - RECESSED	0.59	MILE	\$30,000.00	\$17,700.00
	Traffic Control - Signing and Pavement Marking Subtotal			

Traffic Signal and Surveillance					
Description	_	Quantity	Unit	Unit Cost	Total
STANDARD TRAFFIC SIGNAL			EACH	\$300,000.00	\$0.00
TRAFFIC SIGNAL FOR R-CUT			EACH	\$780,000.00	\$0.00
FIBER OPTIC COMMUNICATION			MILE	\$170,000.00	\$0.00
CCTV			EACH	\$123,000.00	\$0.00
		Traffic Cont	rol - Traffic	Signal Subtotal	\$0.00

Roadway Lighting	, ,				
Description		Quantity	Unit	Unit Cost	Total
FULL INTERCHANGE LIGHTING		1	EACH	\$500,000.00	\$500,000.00
PARTIAL INTERCHANGE LIGHTING			EACH	\$300,000.00	\$0.00
CONTINUOUS ROADWAY LIGHTING		12,454	FT	\$100.00	\$1,245,400.00
		Traffic Cor	trol - Traffic	Signal Subtotal	\$1,745,400.00

Utility Relocations - Gas, Electric, Water, Wastewater					
Description		Quantity	Unit	Unit Cost	Total
HIGH PRESSURE GAS LINE			FT		\$0.00
WATERLINE 36" OR LARGER			FT		\$0.00
HIGH VOLTAGE TOWER			EACH		\$0.00
SANITARY LINE 36" OR LARGER			FT		\$0.00
DAM MODIFICATION			LUMP		\$0.00
Water/Wastewater Subtotal					\$0.00

Structures					
Description		Quantity	Unit	Unit Cost	Total
RETAINING WALL		18,960	SF	\$90.00	\$1,706,400.00
BRIDGE		8,672	SF	\$220.00	\$1,907,840.00
		Pavement Subtotal \$3,614,240.0			\$3,614,240,00

Incidentals					
Description	Quantity	Unit	Unit Cost	Total	
CONSTRUCTION LAYOUT STAKES	1	LUMP	\$133,000.00	\$133,000.00	
MAINTENANCE OF TRAFFIC	1	LUMP	\$800,000.00	\$800,000.00	
MOBILIZATION	1	LUMP	\$800,000.00	\$800,000.00	
		0.0111-	manus Cubbabal	44 300 000 00	

Project Summary	Subtotal
Roadway	\$7,842,043
Erosion Control	\$1,334,830
Drainage	\$4,173,495
Pavement	\$5,832,330
Traffic Control - Signing and Pavement Marking	\$632,158
Traffic Signal and Surveillance	\$0
Roadway Lighting	\$1,745,400
Utility Relocations - Gas, Electric, Water, Wastewater	\$0
Structures	\$3,614,240
Incidentals	\$1,733,000
Tota	al \$26,907,000

Contingency (30%)	\$8,072,000
Subtotal	\$34,979,000
p.	
Right-of-Way	\$0
Engineering (18%)	\$6,296,000
Construction Engineering (10%)	\$3,498,000
Subtotal	\$44,773,000
Inflation (30%)	\$13,431,900
Project Total (2030 Dollars)	\$58,205,000



#### SEGMENT 6 CONCEPT B - RANGE 2 S of Pinecrest Dr to N of Radnor Rd

Roadway							
Description	Quantity	Unit	Unit Cost	Total			
PAVEMENT REMOVED	26,500	SY	\$20.00	\$530,000.00			
CULVERT REMOVED	301	FT	\$100.00	\$30,100.00			
EXCAVATION	104,192	CY	\$40.00	\$4,167,680.00			
EMBANKMENT	145,716	CY	\$45.00	\$6,557,220.00			
GUARDRAIL		FT	\$22.00	\$0.00			
MEDIAN BARRIER	4,200	FT	\$120.00	\$504,000.00			
CURB AND GUTTER	3,100	FT	\$42.00	\$130,200.00			
CONCRETE MEDIAN		SY	\$100.00	\$0.00			
CONCRETE WALK	940	SF	\$13.00	\$12,215.67			
Roadway Subtotal							

Erosion Control					
Description	Quantity	Unit	Unit Cost	Total	
EROSION CONTROL	720,000	EACH	\$1.00	\$720,000.00	
EROSION CONTROL PLAN	1	LUMP	\$70,000.00	\$70,000.00	
BMPs	1	LUMP	\$650,000.00	\$650,000.00	
SEEDING AND MULCHING	69,623	SY	\$2.00	\$139,246.00	
Erosion Control Subtotal					

Drainage						
Description	Quantity	Unit	Unit Cost	Total		
CULVERT	301	FT	\$600.00	\$180,600.00		
STORM SEWER SYSTEM	9,385	FT	\$300.00	\$2,815,500.00		
UNDERDRAINS	18,770	FT	\$15.00	\$281,550.00		
Drainage Subtotal						

Pavement						
Description	Quantity	Unit	Unit Cost	Total		
FULL-DEPTH PAVEMENT - ASPHALT	13,180	SY	\$100.00	\$1,318,000.00		
FULL-DEPTH PAVEMENT - CONCRETE		SY	\$150.00	\$0.00		
PAVEMENT PLANING AND RESURFACING	44,067	SY	\$54.00	\$2,379,618.00		
SHARED USE PATH		SY	\$42.00	\$0.00		
Pavement Subtotal						

Traffic Control - Signing and Pavement Marking							
Description	Quantity	Unit	Unit Cost	Total			
SIGNING	1.78	MILE	\$250,000.00	\$444,365.53			
PAVEMENT MARKINGS - THERMO	1.78	MILE	\$14,000.00	\$24,884.47			
PAVEMENT MARKINGS - RECESSED		MILE	\$30,000.00	\$0.00			
Traffic Control - Signing and Payement Marking Subtotal							

Traffic Signal and Surveillance							
Description		Quantity	Unit	Unit Cost	Total		
STANDARD TRAFFIC SIGNAL		1	EACH	\$300,000.00	\$300,000.00		
TRAFFIC SIGNAL FOR R-CUT			EACH	\$780,000.00	\$0.00		
FIBER OPTIC COMMUNICATION			MILE	\$170,000.00	\$0.00		
CCTV		1	EACH	\$123,000.00	\$123,000.00		
Traffic Control - Traffic Signal Subtotal \$423,000.00							

Roadway Lighting					
Description	0	Quantity	Unit	Unit Cost	Total
FULL INTERCHANGE LIGHTING			EACH	\$500,000.00	\$0.00
PARTIAL INTERCHANGE LIGHTING		1	EACH	\$300,000.00	\$300,000.00
CONTINUOUS ROADWAY LIGHTING		9,385	FT	\$100.00	\$938,500.00
		Traffic Con	trol - Traffic	Signal Subtotal	\$1,238,500.00

	Utility Relocations - Gas, Electric, Water, Wastewater						
	Description			Quantity	Unit	Unit Cost	Total
	HIGH PRESSURE GAS LINE				FT		\$0.00
Ä	WATERLINE 36" OR LARGER				FT	I	\$0.00
	HIGH VOLTAGE TOWER				EACH		\$0.00
	SANITARY LINE 36" OR LARGER				FT		\$0.00
ij	DAM MODIFICATION				LUMP		\$0.00
				V	/ater/Waste	water Subtotal	\$0.00

Structures	/ /						
Description				Quantity	Unit	Unit Cost	Total
RETAINING WALL	$\overline{}$				SF	\$90.00	\$0.00
BRIDGE	_			16,729	SF	\$220.00	\$3,680,463.60
		Pavement Subtotal \$					\$3,680,463,60

Incidentals				
Description	Quantity	Unit	Unit Cost	Total
CONSTRUCTION LAYOUT STAKES	1	LUMP	\$174,500.00	\$174,500.00
MAINTENANCE OF TRAFFIC	1	LUMP	\$1,052,000.00	\$1,052,000.00
MOBILIZATION	1	LUMP	\$800,000.00	\$800,000.00
		Miscella	neous Subtotal	\$2 026 500 00

Project Summary	Subtotal
Roadway	\$11,931,416
Erosion Control	\$1,579,246
Drainage	\$3,277,650
Pavement	\$3,697,618
Traffic Control - Signing and Pavement Marking	\$469,250
Traffic Signal and Surveillance	\$423,000
Roadway Lighting	\$1,238,500
Utility Relocations - Gas, Electric, Water, Wastewater	\$0
Structures	\$3,680,464
Incidentals	\$2,026,500
To	otal \$28.324.000

Contingency (30%)		\$8,497,000
Subt	total	\$36,821,000
Right-of-Way		\$0
Engineering (18%)		\$6,628,000
-		
Construction Engineering (10%)		\$3,682,000
-		
Subt	total	\$47,131,000
-		
Inflation (30%)		\$14,139,300

Project Total (2030 Dollars) \$61,270,000

ms consultants, inc.
engineers, architects, planners

#### SEGMENT 6 CONCEPT B - RANGE 3 N of Merrick Mkwy to N of Hills-Miller Rd

Roadway					
Description	Quantity	Unit	Unit Cost	Total	
PAVEMENT REMOVED	2,460	SY	\$20.00	\$49,200.00	
CULVERT REMOVED		FT	\$100.00	\$0.00	
EXCAVATION	73,291	CY	\$40.00	\$2,931,640.00	
EMBANKMENT	74,482	CY	\$45.00	\$3,351,690.00	
GUARDRAIL	675	FT	\$22.00	\$14,850.00	
MEDIAN BARRIER	4,075	FT	\$120.00	\$489,000.00	
CURB AND GUTTER	3,556	FT	\$42.00	\$149,352.00	
CONCRETE MEDIAN	460	SY	\$100.00	\$46,000.00	
CONCRETE WALK	153	SF	\$13.00	\$1,982.50	
Roadway Subtotal					

Erosion Control					
Description		Quantity	Unit	Unit Cost	Total
EROSION CONTROL		555,000	EACH	\$1.00	\$555,000.00
EROSION CONTROL PLAN		1	LUMP	\$90,000.00	\$90,000.00
BMPs		1	LUMP	\$500,000.00	\$500,000.00
SEEDING AND MULCHING		88,680	SY	\$2.00	\$177,360.00
Erosion Control Subtotal					\$1,322,360.00

Drainage					
Description	Q	uantity	Unit	Unit Cost	Total
CULVERT			FT	\$600.00	\$0.00
STORM SEWER SYSTEM	1	13,258	FT	\$300.00	\$3,977,400.00
UNDERDRAINS	1	26,516	FT	\$15.00	\$397,740.00
			Dr	ainage Subtotal	\$4 375 140 0

Pavement				
Description	Quantity	Unit	Unit Cost	Total
FULL-DEPTH PAVEMENT - ASPHALT	34,766	SY	\$100.00	\$3,476,600.00
FULL-DEPTH PAVEMENT - CONCRETE		SY	\$150.00	\$0.00
PAVEMENT PLANING AND RESURFACING	29,744	SY	\$54.00	\$1,606,176.00
SHARED USE PATH		SY	\$42.00	\$0.00
		Pav	ement Subtotal	\$5,082,776.00

Traffic Control - Signing and Pavement Marking					
Description	Quantity	Unit	Unit Cost	Total	
SIGNING	2.51	MILE	\$250,000.00	\$627,746.21	
PAVEMENT MARKINGS - THERMO	2.51	MILE	\$14,000.00	\$35,153.79	
PAVEMENT MARKINGS - RECESSED		MILE	\$30,000.00	\$0.00	
Traffic Control - Signing and Pavement Marking Subtotal					

Traffic Signal and Surveillance					
Description		Quantity	Unit	Unit Cost	Total
STANDARD TRAFFIC SIGNAL		2	EACH	\$300,000.00	\$600,000.00
TRAFFIC SIGNAL FOR R-CUT			EACH	\$780,000.00	\$0.00
FIBER OPTIC COMMUNICATION			MILE	\$170,000.00	\$0.00
CCTV		2	EACH	\$123,000.00	\$246,000.00
Traffic Control - Traffic Signal Subtotal					\$846,000.00

Roadway Lighting	\				Ź
Description		Quantity	Unit	Unit Cost	Total
FULL INTERCHANGE LIGHTING		1	EACH	\$500,000.00	\$500,000.00
PARTIAL INTERCHANGE LIGHTING			EACH	\$300,000.00	\$0.00
CONTINUOUS ROADWAY LIGHTING		13,258	FT	\$100.00	\$1,325,800.00
		Traffic Con	trol - Traffic	Signal Subtotal	\$1,825,800.00

Utility Relocations - Gas, Electric, Water, Wastewater					
Description		Quantity	Unit	Unit Cost	Total
HIGH PRESSURE GAS LINE			FT		\$0.00
WATERLINE 36" OR LARGER			FT		\$0.00
HIGH VOLTAGE TOWER			EACH		\$0.00
SANITARY LINE 36" OR LARGER			FT		\$0.00
DAM MODIFICATION			LUMP		\$0.00
Water/Wastewater Subtotal					\$0.00

Structures					
Description		Quantity	Unit	Unit Cost	Total
RETAINING WALL			SF	\$90.00	\$0.00
BRIDGE		20,800	SF	\$220.00	\$4,576,000.00
Pavement Subtotal					\$4,576,000.00

Incidentals				
Description	Quantity	Unit	Unit Cost	Total
CONSTRUCTION LAYOUT STAKES	1	LUMP	\$134,000.00	\$134,000.00
MAINTENANCE OF TRAFFIC	1	LUMP	\$809,000.00	\$809,000.00
MOBILIZATION	1	LUMP	\$800,000.00	\$800,000.00
		0.0111-	Culphantal	A4 240 000 00

Project Summary		Subtotal
Roadway		\$7,033,715
Erosion Control		\$1,322,360
Drainage		\$4,375,140
Pavement		\$5,082,776
Traffic Control - Signing and Pavement Marking		\$662,900
Traffic Signal and Surveillance		\$846,000
Roadway Lighting		\$1,825,800
Utility Relocations - Gas, Electric, Water, Wastewater		\$0
Structures		\$4,576,000
Incidentals		\$1,743,000
	Total	\$27.468.000

Contingency (30%)	\$8,240,000
Subtotal	\$35,708,000
Right-of-Way	\$0
Engineering (18%)	\$6,427,000
Construction Engineering (10%)	\$3,571,000
Subtotal	\$45,706,000
Inflation (30%)	\$13,711,800
Project Total (2020 Pollars)	¢E0 419 000

ms consultants, inc.

#### SEGMENT 6 CONCEPT B - RANGE 4 S of Coover Rd to N of Coover Rd

Roadway				
Description	Quantity	Unit	Unit Cost	Total
PAVEMENT REMOVED	8,544	SY	\$20.00	\$170,880.00
CULVERT REMOVED		FT	\$100.00	\$0.00
EXCAVATION	35,746	CY	\$40.00	\$1,429,840.00
EMBANKMENT	52,536	CY	\$45.00	\$2,364,120.00
GUARDRAIL	300	FT	\$22.00	\$6,600.00
MEDIAN BARRIER	3,921	FT	\$120.00	\$470,520.00
CURB AND GUTTER	3,394	FT	\$42.00	\$142,548.00
CONCRETE MEDIAN	400	SY	\$100.00	\$40,000.00
CONCRETE WALK	162	SF	\$13.00	\$2,101.67
		Ro	adway Subtotal	\$4,626,609.67

370,000	EACH	\$1.00	\$370,000.00
1			
1 1	LUMP	\$85,000.00	\$85,000.00
1	LUMP	\$330,000.00	\$330,000.00
85,551	SY	\$2.00	\$171,102.00
	1 85,551	85,551 SY	

Drainage				
Description	Quantity	Unit	Unit Cost	Total
CULVERT		FT	\$600.00	\$0.00
STORM SEWER SYSTEM	8,173	FT	\$300.00	\$2,451,900.00
UNDERDRAINS	16,346	FT	\$15.00	\$245,190.00
UNDERDRAINS	16,346		\$15.00	Ĺ

Pavement				
Description	Quantity	Unit	Unit Cost	Total
FULL-DEPTH PAVEMENT - ASPHALT	11,281	SY	\$100.00	\$1,128,100.00
FULL-DEPTH PAVEMENT - CONCRETE		SY	\$150.00	\$0.00
PAVEMENT PLANING AND RESURFACING	36,948	SY	\$54.00	\$1,995,192.00
SHARED USE PATH	126	SY	\$42.00	\$5,311.09
Pavement Subtotal				\$3,128,603.09

Traffic Control - Signing and Pavement Marking				
Description	Quantity	Unit	Unit Cost	Total
SIGNING	1.55	MILE	\$250,000.00	\$386,979.17
PAVEMENT MARKINGS - THERMO	1.55	MILE	\$14,000.00	\$21,670.83
PAVEMENT MARKINGS - RECESSED		MILE	\$30,000.00	\$0.00
Traffic Co	ntrol - Signing and	Pavement N	1arking Subtotal	\$408,650,00

Traffic Signal and Surveillance  Description		Quantity	Unit	Unit Cost	Total
		Quantity			
STANDARD TRAFFIC SIGNAL		2	EACH	\$300,000.00	\$600,000.00
TRAFFIC SIGNAL FOR R-CUT			EACH	\$780,000.00	\$0.00
FIBER OPTIC COMMUNICATION			MILE	\$170,000.00	\$0.00
CCTV		2	EACH	\$123,000.00	\$246,000.00
Traffic Control - Traffic Signal Subtotal					\$846,000.00

Roadway Lighting		<b>/</b>		
Description	Quantity	Unit	Unit Cost	Total
FULL INTERCHANGE LIGHTING		EACH	\$500,000.00	\$0.00
PARTIAL INTERCHANGE LIGHTING	1	EACH	\$300,000.00	\$300,000.00
CONTINUOUS ROADWAY LIGHTING	8,173	FT	\$100.00	\$817,300.00
	Traffic Con	trol - Traffic	Signal Subtotal	\$1,117,300.00

Utility Relocations - Gas, Electric, Water, Wastewater				
Description	Quantity	Unit	Unit Cost	Total
HIGH PRESSURE GAS LINE		FT		\$0.00
WATERLINE 36" OR LARGER		FT		\$0.00
HIGH VOLTAGE TOWER		EACH		\$0.00
SANITARY LINE 36" OR LARGER		FT		\$0.00
DAM MODIFICATION		LUMP		\$0.00
	Water/Wastewater Subtota			

Structures				
Description	Quantity	Unit	Unit Cost	Total
RETAINING WALL		SF	\$90.00	\$0.00
BRIDGE	8,320	SF	\$220.00	\$1,830,400.00
		Pav	ement Subtotal	\$1,830,400.00

Incidentals				
Description	Quantity	Unit	Unit Cost	Total
CONSTRUCTION LAYOUT STAKES	1	LUMP	\$89,000.00	\$89,000.00
MAINTENANCE OF TRAFFIC	1	LUMP	\$537,000.00	\$537,000.00
MOBILIZATION	1	LUMP	\$400,000.00	\$400,000.00
		Missolls	manus Subtotal	£1 03C 000 00

Project Summary	Subtotal
Roadway	\$4,626,610
Erosion Control	\$956,102
Drainage	\$2,697,090
Pavement	\$3,128,603
Traffic Control - Signing and Pavement Marking	\$408,650
Traffic Signal and Surveillance	\$846,000
Roadway Lighting	\$1,117,300
Utility Relocations - Gas, Electric, Water, Wastewater	\$0
Structures	\$1,830,400
Incidentals	\$1,026,000
Total	\$16,637,000

Contingency (30%)	\$4,991,000
Subtotal	\$21,628,000
Right-of-Way	\$0
Engineering (18%)	\$3,893,000
Construction Engineering (10%)	\$2,163,000
Subtotal	\$27,684,000
Inflation (30%)	\$8,305,200
Project Total (2030 Dollars)	\$35,989,000



### SEGMENT 6 CONCEPT C - OVERALL

SEGMENT 6 CONCEPT C - RANGE 1	Quantity
Construction Subtotal	\$9,616,000
Contingency (30%)	\$2,885,000
Construction Total	\$12,501,000
Right-of-Way	\$0
Engineering (18%)	\$2,250,000
Construction Engineering (10%)	\$1,250,000
Project Subtotal	\$16,001,000
Inflation (30%)	\$4,800,300
Subtotal	\$20,801,000
SEGMENT 6 CONCEPT C - RANGE 2	
Construction Subtotal	\$3,768,000
Contingency (30%)	\$1,130,000
Construction Total	\$4,898,000
Right-of-Way	\$0
Engineering (18%)	\$882,000
Construction Engineering (10%)	\$490,000
Project Subtotal	\$6,270,000
Inflation (30%)	\$1,881,000
Subtotal	\$8,151,000
SEGMENT 6 CONCEPT C - RANGE 3	
Construction Subtotal	\$18,925,000
Contingency (30%)	\$5,678,000
Construction Total	\$24,603,000
Right-of-Way	\$0
Engineering (18%)	\$4,429,000
Construction Engineering (10%)	\$2,460,000
Project Subtotal	\$31,492,000
Inflation (30%)	\$9,447,600
Subtotal	\$40,940,000
SEGMENT 6 CONCEPT C - RANGE 4	
Construction Subtotal	\$2,549,000
Contingency (30%)	\$765,000
Construction Total	\$3,314,000
Right-of-Way	\$0
Engineering (18%)	\$597,000
Construction Engineering (10%)	\$331,000
Project Subtotal	\$4,242,000
	, , , , , , , , , , ,
Inflation (30%)	\$1,272,600

SEGMENT 6 CONCEPT C - OVERALL	
SEGMENT 6 CONCEPT C - RANGE 1	\$20,801,000
SEGMENT 6 CONCEPT C - RANGE 2	\$8,151,000
SEGMENT 6 CONCEPT C - RANGE 3	\$40,940,000
SEGMENT 6 CONCEPT C - RANGE 4	\$5,515,000
Total - Segment 6 Concept C - Overall	\$75,407,000

Construction w/ Contingency w/out Inflation \$58,005,000

Estimate completed by:



#### SEGMENT 6 CONCEPT C - RANGE 1 S of Pennsylvania Ave to N of Pennsylvania Ave

Roadway				
Description	Quantity	Unit	Unit Cost	Total
PAVEMENT REMOVED	2,120	SY	\$20.00	\$42,402.22
CULVERT REMOVED		FT	\$100.00	\$0.00
EXCAVATION	2,538	CY	\$40.00	\$101,520.00
EMBANKMENT	71,012	CY	\$45.00	\$3,195,540.00
GUARDRAIL	900	FT	\$22.00	\$19,800.00
MEDIAN BARRIER		FT	\$120.00	\$0.00
CURB AND GUTTER		FT	\$42.00	\$0.00
CONCRETE MEDIAN	1,669	SY	\$100.00	\$166,911.11
CONCRETE WALK		SF	\$13.00	\$0.00
Roadway Subtotal				\$3,526,173.33

Erosion Control				
Description	Quantity	Unit	Unit Cost	Total
EROSION CONTROL	170,000	LUMP	\$1.00	\$170,000.00
EROSION CONTROL PLAN	1	LUMP	\$40,000.00	\$40,000.00
BMPs	1	LUMP	\$150,000.00	\$150,000.00
SEEDING AND MULCHING	21,643	SY	\$2.00	\$43,285.97
Erosion Control Subtotal				\$403,285,97

Drainage				
Description	Quantity	Unit	Unit Cost	Total
CULVERT		FT	\$600.00	\$0.00
STORM SEWER SYSTEM	3,930	FT	\$300.00	\$1,179,000.00
UNDERDRAINS	11,616	FT	\$15.00	\$174,232.50
		Dr	ainage Subtotal	\$1 252 222 50

Pavement				
Description	Quantity	Unit	Unit Cost	Total
FULL DEPTH PAVEMENT, ASPHALT	1,753	SY	\$100.00	\$175,277.78
FULL DEPTH PAVEMENT, CONCRETE	3,699	SY	\$150.00	\$554,916.67
PAVEMENT PLANING AND RESURFACING		SY	\$54.00	\$0.00
SHARED USE PATH		SY	\$42.00	\$0.00
Pavement Subtotal				\$730,194.44

Traffic Control - Signing and Pavement Marking		_						
Description	Quantity	Unit	Unit Cost	Total				
SIGNING	0.744	MILE	\$250,000.00	\$186,079.55				
PAVEMENT MARKINGS - THERMO	0.388	MILE	\$14,000.00	\$5,435.61				
PAVEMENT MARKINGS - RECESSED	0.356	MILE	\$30,000.00	\$10,681.82				
Traffic Co	ntrol - Signing and I	Pavement M	Traffic Control - Signing and Pavement Marking Subtotal					

Traffic Signal and Surveillance					
Description		Quantity	Unit	Unit Cost	Total
STANDARD TRAFFIC SIGNAL			EACH	\$300,000.00	\$0.00
TRAFFIC SIGNAL FOR R-CUT			EACH	\$780,000.00	\$0.00
FIBER OPTIC COMMUNICATION		0.356	MILE	\$170,000.00	\$60,530.30
CCTV			EACH	\$123,000.00	\$0.00
		\$60,530.30			

Roadway Lighting					
Description	Quantity	Unit	Unit Cost	Total	
FULL INTERCHANGE LIGHTING		EACH	\$500,000.00	\$0.00	
PARTIAL INTERCHANGE LIGHTING	1	EACH	\$300,000.00	\$300,000.00	
CONTINUOUS ROADWAY LIGHTING	3930	FT	\$100.00	\$393,000.00	
	Traffic Control - Traffic Signal Subtota				

Utility Relocations - Gas, Electric, Water, Wastewater					
Description		Quantity	Unit	Unit Cost	Total
HIGH PRESSURE GAS LINE			FT		\$0.00
WATERLINE 36" OR LARGER			FT		\$0.00
HIGH VOLTAGE TOWER			EACH		\$0.00
SANITARY LINE 36" OR LARGER			FT		\$0.00
DAM MODIFICATION			LUMP		\$0.00
		V	/ater/Waste	water Subtotal	\$0.00

Structures						
Description			Quantity	Unit	Unit Cost	Total
RETAINING WALL				SF	\$90.00	\$0.00
BRIDGE			8,672	SF	\$220.00	\$1,907,840.00
	Pavement Subtotal					\$1,907,840.00

Incidentals				
Description	Quantity	Unit	Unit Cost	Total
CONSTRUCTION LAYOUT STAKES	85000	LUMP	\$1.00	\$85,000.00
MAINTENANCE OF TRAFFIC	255000	LUMP	\$1.00	\$255,000.00
MOBILIZATION	400000	LUMP	\$1.00	\$400,000.00
Miscellaneous Subtotal				

Project Summary	Subtotal
Roadway	\$3,526,173
Erosion Control	\$403,286
Drainage	\$1,353,233
Pavement	\$730,194
Traffic Control - Signing and Pavement Marking	\$202,197
Traffic Signal and Surveillance	\$60,530
Roadway Lighting	\$693,000
Utility Relocations - Gas, Electric, Water, Wastewater	\$0
Structures	\$1,907,840
Incidentals	\$740,000
Total	\$9,616,000

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Project Total (2030 Dollars) \$20,801,000



#### SEGMENT 6 CONCEPT C - RANGE 2 S of Pinecrest Dr to N of Radnor Rd

Roadway					
Description	Quantity	Unit	Unit Cost	Total	
PAVEMENT REMOVED		SY	\$20.00	\$0.00	
CULVERT REMOVED		FT	\$100.00	\$0.00	
EXCAVATION	5,472	CY	\$40.00	\$218,880.00	
EMBANKMENT	2,830	CY	\$45.00	\$127,350.00	
GUARDRAIL		FT	\$22.00	\$0.00	
MEDIAN BARRIER		FT	\$120.00	\$0.00	
CURB AND GUTTER		FT	\$42.00	\$0.00	
CONCRETE MEDIAN	3,836	SY	\$100.00	\$383,641.11	
CONCRETE WALK		SF	\$13.00	\$0.00	
Roadway Subtotal				\$729,871.11	

Erosion Control				
Description	Quantity	Unit	Unit Cost	Total
EROSION CONTROL	70,000	LUMP	\$1.00	\$70,000.00
EROSION CONTROL PLAN	1	LUMP	\$20,000.00	\$20,000.00
BMPs	1	LUMP	\$60,000.00	\$60,000.00
SEEDING AND MULCHING	10,633	SY	\$2.00	\$21,265.78
Erosion Control Subtotal				\$171,265.78

Drainage				
Description	Quantity	Unit	Unit Cost	Total
CULVERT	40	FT	\$600.00	\$24,000.00
STORM SEWER SYSTEM	4,221	FT	\$300.00	\$1,266,300.00
UNDERDRAINS	8,442	FT	\$15.00	\$126,630.00
		Dr	ainage Subtetal	¢1 416 020 00

Pavement				
Description	Quantity	Unit	Unit Cost	Total
FULL DEPTH PAVEMENT, ASPHALT	3,633	SY	\$100.00	\$363,300.00
FULL DEPTH PAVEMENT, CONCRETE		SY	\$150.00	\$0.00
PAVEMENT PLANING AND RESURFACING		SY	\$54.00	\$0.00
SHARED USE PATH		SY	\$42.00	\$0.00
Pavement Subtotal				

Traffic Control - Signing and Pavement Marking				
Description	Quantity	Unit	Unit Cost	Total
SIGNING	0.799	MILE	\$250,000.00	\$199,857.95
PAVEMENT MARKINGS - THERMO	0.000	MILE	\$14,000.00	\$0.00
PAVEMENT MARKINGS - RECESSED	0.799	MILE	\$30,000.00	\$23,982.95
Traff	ic Control - Signing and I	Pavement M	arking Subtotal	\$223 840 91

Traffic Signal and Surveillance					
Description		Quantity	Unit	Unit Cost	Total
STANDARD TRAFFIC SIGNAL			EACH	\$300,000.00	\$0.00
TRAFFIC SIGNAL FOR R-CUT			EACH	\$780,000.00	\$0.00
FIBER OPTIC COMMUNICATION		0.799	MILE	\$170,000.00	\$135,903.41
CCTV			EACH	\$123,000.00	\$0.00
		\$135,903.41			

Roadway Lighting						
Description			Quantity	Unit	Unit Cost	Total
FULL INTERCHANGE LIGHTING				EACH	\$500,000.00	\$0.00
PARTIAL INTERCHANGE LIGHTING				EACH	\$300,000.00	\$0.00
CONTINUOUS ROADWAY LIGHTING			4221	FT	\$100.00	\$422,100.00
	Traffic Control - Traffic Signal Subtota					\$422,100.00

Utility, Relocations - Gas, Electric, Water, Wastewater						
Description	Quantity	Unit	Unit Cost	Total		
HIGH PRESSURE GAS LINE		FT		\$0.00		
WATERLINE 36" OR LARGER		FT		\$0.00		
HIGH VOLTAGE TOWER		EACH		\$0.00		
SANITARY LINE 36" OR LARGER		FT		\$0.00		
DAM MODIFICATION		LUMP		\$0.00		
	V	Vater/Waste	ewater Subtotal	\$0.00		

Structures					
Description		Quantity	Unit	Unit Cost	Total
RETAINING WALL			SF	\$90.00	\$0.00
BRIDGE		0	SF	\$220.00	\$0.00
Pavement Subtotal					\$0.00

Incidentals				
Description	Quantity	Unit	Unit Cost	Total
CONSTRUCTION LAYOUT STAKES	35000	LUMP	\$1.00	\$35,000.00
MAINTENANCE OF TRAFFIC	70000	LUMP	\$1.00	\$70,000.00
MOBILIZATION	200000	LUMP	\$1.00	\$200,000.00
Miscellaneous Subtotal				\$305,000,00

Project Summary	Subtotal
Roadway	\$729,871
Erosion Control	\$171,266
Drainage	\$1,416,930
Pavement	\$363,300
Traffic Control - Signing and Pavement Marking	\$223,841
Traffic Signal and Surveillance	\$135,903
Roadway Lighting	\$422,100
Utility Relocations - Gas, Electric, Water, Wastewater	\$0
Structures	\$0
Incidentals	\$305,000
Total	\$3,768,000

Contingency (30%)	\$1,130,000
Subtotal	\$4,898,000
Right-of-Way	\$0
Engineering (18%)	\$882,000
Construction Engineering (10%)	\$490,000
Subtotal	
Inflation (30%)	\$1,881,000
Project Total (2030 Dollars)	\$8,151,000



#### SEGMENT 6 CONCEPT C - RANGE 3 N of Merrick Mkwy to N of Hills-Miller Rd

Roadway						
Description	Quantity	Unit	Unit Cost	Total		
PAVEMENT REMOVED		SY	\$20.00	\$0.00		
CULVERT REMOVED		FT	\$100.00	\$0.00		
EXCAVATION	5,236	CY	\$40.00	\$209,440.00		
EMBANKMENT	192,599	CY	\$45.00	\$8,666,955.00		
GUARDRAIL	3,200	FT	\$22.00	\$70,400.00		
MEDIAN BARRIER		FT	\$120.00	\$0.00		
CURB AND GUTTER		FT	\$42.00	\$0.00		
CONCRETE MEDIAN	1,583	SY	\$100.00	\$158,300.00		
CONCRETE WALK		SF	\$13.00	\$0.00		
		Ro	adway Subtotal	\$9,105,095.00		

Erosion Control					
Description		Quantity	Unit	Unit Cost	Total
EROSION CONTROL		350,000	LUMP	\$1.00	\$350,000.00
EROSION CONTROL PLAN		1	LUMP	\$110,000.00	\$110,000.00
BMPs		1	LUMP	\$315,000.00	\$315,000.00
SEEDING AND MULCHING		56,934	SY	\$2.00	\$113,868.00
Erosion Control Subtotal					\$888,868.00

Drainage					
Description		Quantity	Unit	Unit Cost	Total
CULVERT		40	FT	\$600.00	\$24,000.00
STORM SEWER SYSTEM		7,595	FT	\$300.00	\$2,278,455.00
UNDERDRAINS		15,190	FT	\$15.00	\$227,845.50
Drainage Subtotal					\$2 530 300 50

Pavement				
Description	Quantity	Unit	Unit Cost	Total
FULL DEPTH PAVEMENT, ASPHALT	17,970	SY	\$100.00	\$1,796,988.89
FULL DEPTH PAVEMENT, CONCRETE		SY	\$150.00	\$0.00
PAVEMENT PLANING AND RESURFACING		SY	\$54.00	\$0.00
SHARED USE PATH		SY	\$42.00	\$0.00
Pavement Subtotal				

Traffic Control - Signing and Pavement Marking					
Description	Quantity	Unit	Unit Cost	Total	
SIGNING	1.438	MILE	\$250,000.00	\$359,604.64	
PAVEMENT MARKINGS - THERMO	0.829	MILE	\$14,000.00	\$11,599.98	
PAVEMENT MARKINGS - RECESSED	0.610	MILE	\$30,000.00	\$18,295.45	
Traffic Control - Signing and Pavement Marking Subtotal					

Traffic Signal and Surveillance					
Description		Quantity	Unit	Unit Cost	Total
STANDARD TRAFFIC SIGNAL		2	EACH	\$300,000.00	\$600,000.00
TRAFFIC SIGNAL FOR R-CUT			EACH	\$780,000.00	\$0.00
FIBER OPTIC COMMUNICATION		0.610	MILE	\$170,000.00	\$103,674.24
CCTV			EACH	\$123,000.00	\$0.00
	Traffic Control - Traffic Signal Subtotal				

Roadway Lighting			· .		
Description		Quantity	Unit	Unit Cost	Total
FULL INTERCHANGE LIGHTING		1	EACH	\$500,000.00	\$500,000.00
PARTIAL INTERCHANGE LIGHTING			EACH	\$300,000.00	\$0.00
CONTINUOUS ROADWAY LIGHTING		7594.85	FT	\$100.00	\$759,485.00
		Traffic Cor	trol - Traffi	Signal Subtotal	\$1,259,485.00

Utility Relocations - Gas, Electric, Water, Wastewater					
Description		Quantity	Unit	Unit Cost	Total
HIGH PRESSURE GAS LINE			FT		\$0.00
WATERLINE 36" OR LARGER			FT		\$0.00
HIGH VOLTAGE TOWER			EACH		\$0.00
SANITARY LINE 36" OR LARGER			FT		\$0.00
DAM MODIFICATION			LUMP		\$0.00
Water/Wastewater Subtotal					\$0.00

Structures				
Description	Quantity	Unit	Unit Cost	Total
RETAINING WALL		SF	\$90.00	\$0.00
BRIDGE	2,505	SF	\$220.00	\$551,100.00
	Pavement Subtotal			

Incidentals				
Description	Quantity	Unit	Unit Cost	Total
CONSTRUCTION LAYOUT STAKES	180000	LUMP	\$1.00	\$180,000.00
MAINTENANCE OF TRAFFIC	720000	LUMP	\$1.00	\$720,000.00
MOBILIZATION	800000	LUMP	\$1.00	\$800,000.00
Miscellaneous Subtotal			\$1 700 000 00	

Project Summary	Subtotal
Roadway	\$9,105,095
Erosion Control	\$888,868
Drainage	\$2,530,301
Pavement	\$1,796,989
Traffic Control - Signing and Pavement Marking	\$389,500
Traffic Signal and Surveillance	\$703,674
Roadway Lighting	\$1,259,485
Utility Relocations - Gas, Electric, Water, Wastewater	\$0
Structures	\$551,100
Incidentals	\$1,700,000
Total	\$18,925,000

Contingency (30%)	\$5,678,000
Subtotal	\$24,603,000
Right-of-Way	\$0
Engineering (18%)	\$4,429,000
Construction Engineering (10%)	\$2,460,000
Subtotal	\$31,492,000
Inflation (30%)	\$9,447,600
Project Total (2030 Dollars)	\$40,940,000

ms consultants, inc engineers, architects, planner

#### SEGMENT 6 CONCEPT C - RANGE 4 S of Coover Rd to N of Coover Rd

Roadway						
Description	Quantity	Unit	Unit Cost	Total		
PAVEMENT REMOVED		SY	\$20.00	\$0.00		
CULVERT REMOVED		FT	\$100.00	\$0.00		
EXCAVATION	997	CY	\$40.00	\$39,880.00		
EMBANKMENT	1,993	CY	\$45.00	\$89,685.00		
GUARDRAIL		FT	\$22.00	\$0.00		
MEDIAN BARRIER		FT	\$120.00	\$0.00		
CURB AND GUTTER		FT	\$42.00	\$0.00		
CONCRETE MEDIAN	0	SY	\$100.00	\$0.00		
CONCRETE WALK		SF	\$13.00	\$0.00		
Roadway Subtotal						

Erosion Control							
Description	Quantity	Unit	Unit Cost	Total			
EROSION CONTROL	50,000	LUMP	\$1.00	\$50,000.00			
EROSION CONTROL PLAN	1	LUMP	\$5,000.00	\$5,000.00			
BMPs	1	LUMP	\$45,000.00	\$45,000.00			
SEEDING AND MULCHING	2,492	SY	\$2.00	\$4,984.00			
Erosion Control Subtotal							

Drainage				
Description	Quantity	Unit	Unit Cost	Total
CULVERT		FT	\$600.00	\$0.00
STORM SEWER SYSTEM	1,578	FT	\$300.00	\$473,400.00
UNDERDRAINS	3,156	FT	\$15.00	\$47,340.00
Drainage Subtotal				

Pavement					
Description	Quantity	Unit	Unit Cost	Total	
FULL DEPTH PAVEMENT, ASPHALT	2,735	SY	\$100.00	\$273,511.11	
FULL DEPTH PAVEMENT, CONCRETE		SY	\$150.00	\$0.00	
PAVEMENT PLANING AND RESURFACING		SY	\$54.00	\$0.00	
SHARED USE PATH		SY	\$42.00	\$0.00	
Pavement Subtotal					

Traffic Control - Signing and Pavement Marking						
Description	Quantity	Unit	Unit Cost	Total		
SIGNING	1.106	MILE	\$250,000.00	\$276,420.45		
PAVEMENT MARKINGS - THERMO	0.195	MILE	\$14,000.00	\$2,725.76		
PAVEMENT MARKINGS - RECESSED	0.911	MILE	\$30,000.00	\$27,329.55		
Traffic Co	Traffic Control - Signing and Pavement Marking Subtotal					

Traffic Signal and Surveillance						
Description			Quantity	Unit	Unit Cost	Total
STANDARD TRAFFIC SIGNAL			1	EACH	\$300,000.00	\$300,000.00
TRAFFIC SIGNAL FOR R-CUT				EACH	\$780,000.00	\$0.00
FIBER OPTIC COMMUNICATION			0.911	MILE	\$170,000.00	\$154,867.42
CCTV				EACH	\$123,000.00	\$0.00
Traffic Control - Traffic Signal Subtotal						\$454,867.42

Roadway Lighting				· .		
Description			Quantity	Unit	Unit Cost	Total
FULL INTERCHANGE LIGHTING				EACH	\$500,000.00	\$0.00
PARTIAL INTERCHANGE LIGHTING				EACH	\$300,000.00	\$0.00
CONTINUOUS ROADWAY LIGHTING			5838	FT	\$100.00	\$583,800.00
	Traffic Control - Traffic Signal Subtotal					\$583,800.00

Utility Relocations - Gas, Electric, Water, Wastewater							
Description		Quantity	Unit	Unit Cost	Total		
HIGH PRESSURE GAS LINE			FT		\$0.00		
WATERLINE 36" OR LARGER			FT		\$0.00		
HIGH VOLTAGE TOWER			EACH		\$0.00		
SANITARY LINE 36" OR LARGER			FT		\$0.00		
DAM MODIFICATION			LUMP		\$0.00		
		1	Water/Waste	ewater Subtotal	\$0.00		

Structures							
Description		•		Quantity	Unit	Unit Cost	Total
RETAINING WALL					SF	\$90.00	\$0.00
BRIDGE				0	SF	\$220.00	\$0.00
	Pavement Subtotal \$0.00				\$0.00		

Incidentals				
Description	Quantity	Unit	Unit Cost	Total
CONSTRUCTION LAYOUT STAKES	25000	LUMP	\$1.00	\$25,000.00
MAINTENANCE OF TRAFFIC	50000	LUMP	\$1.00	\$50,000.00
MOBILIZATION	100000	LUMP	\$1.00	\$100,000.00
Miscellaneous Subtotal				

Project Summary	Subtotal
Roadway	\$129,565
Erosion Control	\$104,984
Drainage	\$520,740
Pavement	\$273,511
Traffic Control - Signing and Pavement Marking	\$306,476
Traffic Signal and Surveillance	\$454,867
Roadway Lighting	\$583,800
Utility Relocations - Gas, Electric, Water, Wastewater	\$0
Structures	\$0
Incidentals	\$175,000
Total	\$2,549,000

Contingency (30%)	\$765,000
Subtotal	\$3,314,000
Right-of-Way	\$0
Engineering (18%)	\$597,000
Construction Engineering (10%)	\$331,000
Subtotal	
Inflation (30%)	\$1,272,600
Project Total (2030 Dollars)	\$5,515,000



# SEGMENT 6 CONCEPT D - OVERALL

SEGMENT 6 CONCEPT D - RANGE 1	
Construction Subtotal	\$9,701,000
Contingency (30%)	\$2,910,000
Construction Total	\$12,611,000
Right-of-Way	\$0
Engineering (18%)	\$2,270,000
Construction Engineering (10%)	\$1,261,000
Project Subtotal	\$16,142,000
Inflation (30%)	\$4,842,600
Subtotal	\$20,985,000
SEGMENT 6 CONCEPT D - RANGE 2	
Construction Subtotal	\$9,015,000
Contingency (30%)	\$2,705,000
Construction Total	\$11,720,000
Right-of-Way	\$0
Engineering (18%)	\$2,110,000
Construction Engineering (10%)	\$1,172,000
Project Subtotal	\$15,002,000
Inflation (30%)	\$4,500,600
Subtotal	\$19,503,000
SEGMENT 6 CONCEPT D - RANGE 3	
Construction Subtotal	\$6,157,000
Contingency (30%)	\$1,847,000
Construction Total	\$8,004,000
Right-of-Way	\$0
Engineering (18%)	\$1,441,000
Construction Engineering (10%)	\$800,000
Project Subtotal	\$10,245,000
Inflation (30%)	\$3,073,500
Subtotal	\$13,319,000
SEGMENT 6 CONCEPT D - RANGE 4	
Construction Subtotal	\$2,549,000
Contingency (30%)	\$765,000
Construction Total	\$3,314,000
Right-of-Way	\$0
Engineering (18%)	\$597,000
Construction Engineering (10%)	\$331,000
Project Subtotal	\$4,242,000
Inflation (30%)	\$1,272,600
Subtotal	\$5,515,000
SEGMENT 6 CONCEPT D - OVERALL	

SEGMENT 6 CONCEPT D - OVERALL	
SEGMENT 6 CONCEPT D - RANGE 1	\$20,985,000
SEGMENT 6 CONCEPT D - RANGE 2	\$19,503,000
SEGMENT 6 CONCEPT D - RANGE 3	\$13,319,000
SEGMENT 6 CONCEPT D - RANGE 4	\$5,515,000
Total Compant Compant D. Chavall	¢E0 222 000

Construction w/ Contingency w/out Inflation \$45,631,000

Estimate completed by:



#### SEGMENT 6 CONCEPT D - RANGE 1 S of Pennsylvania Ave to N of Pennsylvania Ave

Roadway						
Description	Quantity	Unit	Unit Cost	Total		
PAVEMENT REMOVED	2,120	SY	\$20.00	\$42,402.22		
CULVERT REMOVED		FT	\$100.00	\$0.00		
EXCAVATION	2,538	CY	\$40.00	\$101,520.00		
EMBANKMENT	71,012	CY	\$45.00	\$3,195,540.00		
GUARDRAIL	900	FT	\$22.00	\$19,800.00		
MEDIAN BARRIER		FT	\$120.00	\$0.00		
CURB AND GUTTER		FT	\$42.00	\$0.00		
CONCRETE MEDIAN	1,669	SY	\$100.00	\$166,911.11		
CONCRETE WALK		SF	\$13.00	\$0.00		
Roadway Subtotal						

Erosion Control						
Description	Quantity	Unit	Unit Cost	Total		
EROSION CONTROL	170,000	LUMP	\$1.00	\$170,000.00		
EROSION CONTROL PLAN	1	LUMP	\$40,000.00	\$40,000.00		
BMPs	1	LUMP	\$150,000.00	\$150,000.00		
SEEDING AND MULCHING	21,643	SY	\$2.00	\$43,285.97		
Erosion Control Subtotal				\$403,285,97		

Drainage					
Description	Quantity	Unit	Unit Cost	Total	
CULVERT		FT	\$600.00	\$0.00	
STORM SEWER SYSTEM	3,930	FT	\$300.00	\$1,179,000.00	
UNDERDRAINS	11,616	FT	\$15.00	\$174,240.00	
	Drainage Subtotal				

Pavement					
Description	Quantity	Unit	Unit Cost	Total	
FULL DEPTH PAVEMENT, ASPHALT	1,753	SY	\$100.00	\$175,277.78	
FULL DEPTH PAVEMENT, CONCRETE	3,699	SY	\$150.00	\$554,916.67	
PAVEMENT PLANING AND RESURFACING		SY	\$54.00	\$0.00	
SHARED USE PATH		SY	\$42.00	\$0.00	
Pavement Subtotal					

Traffic Control - Signing and Pavement Marking				
Description	Quantity	Unit	Unit Cost	Total
SIGNING	0.744	MILE	\$250,000.00	\$186,079.55
PAVEMENT MARKINGS - THERMO	0.388	MILE	\$14,000.00	\$5,435.61
PAVEMENT MARKINGS - RECESSED	0.356	MILE	\$30,000.00	\$10,681.82
Traffic Co	ntrol - Signing and I	Pavement N	larking Subtotal	\$202,196,97

Traffic Signal and Surveillance						
Description			Quantity	Unit	Unit Cost	Total
STANDARD TRAFFIC SIGNAL			0	EACH	\$300,000.00	\$0.00
TRAFFIC SIGNAL FOR R-CUT				EACH	\$780,000.00	\$0.00
FIBER OPTIC COMMUNICATION			0.356	MILE	\$170,000.00	\$60,530.30
CCTV		_		EACH	\$123,000.00	\$0.00
Traffic Control - Traffic Signal Subtotal						\$60,530.30

Roadway Lighting					
Description		Quantity	Unit	Unit Cost	Total
FULL INTERCHANGE LIGHTING			EACH	\$500,000.00	\$0.00
PARTIAL INTERCHANGE LIGHTING		1	EACH	\$300,000.00	\$300,000.00
CONTINUOUS ROADWAY LIGHTING		3930	FT	\$100.00	\$393,000.00
	Traffic Control - Traffic Signal Subtotal				\$693,000.00

Utility Relocations - Gas, Electric, Water, Wastewater						
Description		Quantity	Unit	Unit Cost	Total	
HIGH PRESSURE GAS LINE			FT		\$0.00	
WATERLINE 36" OR LARGER			FT		\$0.00	
HIGH VOLTAGE TOWER			EACH		\$0.00	
SANITARY LINE 36" OR LARGER			FT		\$0.00	
DAM MODIFICATION			LUMP		\$0.00	
Water/Wastewater Subtotal					\$0.00	

Structures					
Description		Quantity	Unit	Unit Cost	Total
RETAINING WALL			SF	\$90.00	\$0.00
BRIDGE		8,672	SF	\$220.00	\$1,907,840.00
	Pavement Subtota				

Incidentals				
Description	Quantity	Unit	Unit Cost	Total
CONSTRUCTION LAYOUT STAKES	85000	LUMP	\$1.00	\$85,000.00
MAINTENANCE OF TRAFFIC	340000	LUMP	\$1.00	\$340,000.00
MOBILIZATION	400000	LUMP	\$1.00	\$400,000.00
	340000 LUMP \$1.00			\$825,000,00

Project Summary	Subtotal
Roadway	\$3,526,173
Erosion Control	\$403,286
Drainage	\$1,353,240
Pavement	\$730,194
Traffic Control - Signing and Pavement Marking	\$202,197
Traffic Signal and Surveillance	\$60,530
Roadway Lighting	\$693,000
Utility Relocations - Gas, Electric, Water, Wastewater	\$0
Structures	\$1,907,840
Incidentals	\$825,000
Total	\$9,701,000

Contingency (30%)		\$2,910,000
S	Subtotal	\$12,611,000
Right-of-Way		\$0
Engineering (18%)		\$2,270,000
Construction Engineering (10%)		\$1,261,000
S	Subtotal	\$16,142,000
Inflation (30%)		\$4,842,600

Project Total (2030 Dollars) \$20,985,000



#### SEGMENT 6 CONCEPT D - RANGE 2 S of Pinecrest Dr to N of Radnor Rd

Roadway				
Description	Quantity	Unit	Unit Cost	Total
PAVEMENT REMOVED		SY	\$20.00	\$0.00
CULVERT REMOVED		FT	\$100.00	\$0.00
EXCAVATION	13,120	CY	\$40.00	\$524,800.00
EMBANKMENT	21,810	CY	\$45.00	\$981,450.00
GUARDRAIL		FT	\$22.00	\$0.00
MEDIAN BARRIER		FT	\$120.00	\$0.00
CURB AND GUTTER	5,200	FT	\$42.00	\$218,400.00
CONCRETE MEDIAN		SY	\$100.00	\$0.00
CONCRETE WALK		SF	\$13.00	\$0.00
CONCRETE MEDIAN SY \$100.00				

Erosion Control				
Description	Quantity	Unit	Unit Cost	Total
EROSION CONTROL	130,000	LUMP	\$1.00	\$130,000.00
EROSION CONTROL PLAN	1	LUMP	\$22,000.00	\$22,000.00
BMPs	1	LUMP	\$120,000.00	\$120,000.00
SEEDING AND MULCHING	11,323	SY	\$2.00	\$22,646.00
		Erosion (	Control Subtotal	\$294,646.00

Drainage					
Description		Quantity	Unit	Unit Cost	Total
CULVERT		40	FT	\$600.00	\$24,000.00
STORM SEWER SYSTEM		5,979	FT	\$300.00	\$1,793,700.00
UNDERDRAINS		11,958	FT	\$15.00	\$179,370.00
UNDERDRAINS 11,958 FT \$15.00 \$  Drainage Subtotal \$1				\$1,997,070,00	

Pavement					
Description	Quantity	Unit	Unit Cost	Total	
FULL DEPTH PAVEMENT, ASPHALT	22,749	SY	\$100.00	\$2,274,933.33	
FULL DEPTH PAVEMENT, CONCRETE		SY	\$150.00	\$0.00	
PAVEMENT PLANING AND RESURFACING	2,745	SY	\$54.00	\$148,236.00	
SHARED USE PATH		SY	\$42.00	\$0.00	
	Pavement Subtotal				

Traffic Control - Signing and Pavement Marking		_		
Description	Quantity	Unit	Unit Cost	Total
SIGNING	1.132	MILE	\$250,000.00	\$283,096.59
PAVEMENT MARKINGS - THERMO	0.333	MILE	\$14,000.00	\$4,661.36
PAVEMENT MARKINGS - RECESSED	0.799	MILE	\$30,000.00	\$23,982.95
Traffic	Control - Signing and I	Pavement M	larking Subtotal	\$311,740,91

Traffic Signal and Surveillance						
Description			Quantity	Unit	Unit Cost	Total
STANDARD TRAFFIC SIGNAL			0	EACH	\$300,000.00	\$0.00
TRAFFIC SIGNAL FOR R-CUT			1	EACH	\$780,000.00	\$780,000.00
FIBER OPTIC COMMUNICATION			0.799	MILE	\$170,000.00	\$135,903.41
CCTV		_		EACH	\$123,000.00	\$0.00
Traffic Control - Traffic Signal Subtotal						

Roadway Lighting	7					
Description			Quantity	Unit	Unit Cost	Total
FULL INTERCHANGE LIGHTING				EACH	\$500,000.00	\$0.00
PARTIAL INTERCHANGE LIGHTING			7	EACH	\$300,000.00	\$0.00
CONTINUOUS ROADWAY LIGHTING			5979	FT	\$100.00	\$597,900.00
		Traffic Control - Traffic Signal Subtotal				\$597,900.00

Utility Relocations - Gas, Electric, Water, Wastewater						
Description	Quantity	Unit	Unit Cost	Total		
HIGH PRESSURE GAS LINE		FT		\$0.00		
WATERLINE 36" OR LARGER		FT		\$0.00		
HIGH VOLTAGE TOWER		EACH		\$0.00		
SANITARY LINE 36" OR LARGER		FT		\$0.00		
DAM MODIFICATION		LUMP		\$0.00		
	V	Vater/Waste	ewater Subtotal	\$0.00		

Structures					
Description	Quantity	Unit	Unit Cost	Total	
RETAINING WALL		SF	\$90.00	\$0.00	
BRIDGE		SF	\$220.00	\$0.00	
	Pavement Subtotal				

Incidentals				
Description	Quantity	Unit	Unit Cost	Total
CONSTRUCTION LAYOUT STAKES	70000	LUMP	\$1.00	\$70,000.00
MAINTENANCE OF TRAFFIC	280000	LUMP	\$1.00	\$280,000.00
MOBILIZATION	400000	LUMP	\$1.00	\$400,000.00
		Miscella	neous Subtotal	\$750,000,00

Project Summary	Subtotal
Roadway	\$1,724,650
Erosion Control	\$294,646
Drainage	\$1,997,070
Pavement	\$2,423,169
Traffic Control - Signing and Pavement Marking	\$311,741
Traffic Signal and Surveillance	\$915,903
Roadway Lighting	\$597,900
Utility Relocations - Gas, Electric, Water, Wastewater	\$0
Structures	\$0
Incidentals	\$750,000
Total	\$9,015,000

Contingency (30%)		\$2,705,000
Sut	ototal	\$11,720,000
Right-of-Way		\$0
Engineering (18%)		\$2,110,000
Construction Engineering (10%)		\$1,172,000
Sut	ototal	\$15,002,000
Inflation (30%)		\$4,500,600

Project Total (2030 Dollars) \$19,503,000

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#### SEGMENT 6 CONCEPT D - RANGE 3 N of Merrick Mkwy to N of Hills-Miller Rd

Roadway				
Description	Quantity	Unit	Unit Cost	Total
PAVEMENT REMOVED		SY	\$20.00	\$0.00
CULVERT REMOVED		FT	\$100.00	\$0.00
EXCAVATION	7,123	CY	\$40.00	\$284,920.00
EMBANKMENT	18,832	CY	\$45.00	\$847,440.00
GUARDRAIL	2,000	FT	\$22.00	\$44,000.00
MEDIAN BARRIER		FT	\$120.00	\$0.00
CURB AND GUTTER	3,500	FT	\$42.00	\$147,000.00
CONCRETE MEDIAN		SY	\$100.00	\$0.00
CONCRETE WALK		SF	\$13.00	\$0.00
		Ro	adway Subtotal	\$1,323,360.00

Erosion Control				
Description	Quantity	Unit	Unit Cost	Total
EROSION CONTROL	87,000	LUMP	\$1.00	\$87,000.00
EROSION CONTROL PLAN	1	LUMP	\$22,000.00	\$22,000.00
BMPs	1	LUMP	\$80,000.00	\$80,000.00
SEEDING AND MULCHING	11,010	SY	\$2.00	\$22,020.00
Erosion Control Subtotal \$				

Drainage					
Description		Quantity	Unit	Unit Cost	Total
CULVERT		80	FT	\$600.00	\$48,000.00
STORM SEWER SYSTEM		3,806	FT	\$300.00	\$1,141,800.00
UNDERDRAINS		14,680	FT	\$15.00	\$220,200.00
Drainage Subtotal					\$1,410,000,00

Pavement				
Description	Quantity	Unit	Unit Cost	Total
FULL DEPTH PAVEMENT, ASPHALT	12,635	SY	\$100.00	\$1,263,500.00
FULL DEPTH PAVEMENT, CONCRETE		SY	\$150.00	\$0.00
PAVEMENT PLANING AND RESURFACING	2,777	SY	\$54.00	\$149,952.00
SHARED USE PATH		SY	\$42.00	\$0.00
Pavement Subtotal				

Traffic Control - Signing and Pavement Marking		_					
Description	Quantity	Unit	Unit Cost	Total			
SIGNING	0.721	MILE	\$250,000.00	\$180,208.33			
PAVEMENT MARKINGS - THERMO	0.111	MILE	\$14,000.00	\$1,553.79			
PAVEMENT MARKINGS - RECESSED	0.610	MILE	\$30,000.00	\$18,295.45			
Traffic	Traffic Control - Signing and Pavement Marking Subtotal						

Traffic Signal and Surveillance						
Description			Quantity	Unit	Unit Cost	Total
STANDARD TRAFFIC SIGNAL			0	EACH	\$300,000.00	\$0.00
TRAFFIC SIGNAL FOR R-CUT			1	EACH	\$780,000.00	\$780,000.00
FIBER OPTIC COMMUNICATION			0.610	MILE	\$170,000.00	\$103,674.24
CCTV				EACH	\$123,000.00	\$0.00
Traffic Control - Traffic Signal Subtotal						

Roadway Lighting	7					
Description			Quantity	Unit	Unit Cost	Total
FULL INTERCHANGE LIGHTING				EACH	\$500,000.00	\$0.00
PARTIAL INTERCHANGE LIGHTING			7	EACH	\$300,000.00	\$0.00
CONTINUOUS ROADWAY LIGHTING			3806	FT	\$100.00	\$380,600.00
	Traffic Control - Traffic Signal Subtotal					\$380,600.00

Utility Relocations - Gas, Electric, Water, Wastewater						
Description	Quantity	Unit	Unit Cost	Total		
HIGH PRESSURE GAS LINE		FT		\$0.00		
WATERLINE 36" OR LARGER		FT		\$0.00		
HIGH VOLTAGE TOWER		EACH		\$0.00		
SANITARY LINE 36" OR LARGER		FT		\$0.00		
DAM MODIFICATION		LUMP		\$0.00		
	V	Vater/Waste	ewater Subtotal	\$0.00		

Structures						
Description			Quantity	Unit	Unit Cost	Total
RETAINING WALL				SF	\$90.00	\$0.00
BRIDGE				SF	\$220.00	\$0.00
		Pavement Subtota				\$0.00

Incidentals				
Description	Quantity	Unit	Unit Cost	Total
CONSTRUCTION LAYOUT STAKES	45000	LUMP	\$1.00	\$45,000.00
MAINTENANCE OF TRAFFIC	90000	LUMP	\$1.00	\$90,000.00
MOBILIZATION	200000	LUMP	\$1.00	\$200,000.00
	Miscellaneous Subtotal \$3			

Project Summary	Subtotal
Roadway	\$1,323,360
Erosion Control	\$211,020
Drainage	\$1,410,000
Pavement	\$1,413,452
Traffic Control - Signing and Pavement Marking	\$200,058
Traffic Signal and Surveillance	\$883,674
Roadway Lighting	\$380,600
Utility Relocations - Gas, Electric, Water, Wastewater	\$0
Structures	\$0
Incidentals	\$335,000
Total	\$6,157,000

Contingency (30%)	\$1,847,000
Subtot	\$8,004,000
Right-of-Way	\$0
Engineering (18%)	\$1,441,000
Construction Engineering (10%)	\$800,000
Subtot	\$10,245,000
Inflation (30%)	\$3,073,500

Project Total (2030 Dollars) \$13,319,000

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#### SEGMENT 6 CONCEPT D - RANGE 4 S of Coover Rd to N of Coover Rd

Roadway				
Description	Quantity	Unit	Unit Cost	Total
PAVEMENT REMOVED		SY	\$20.00	\$0.00
CULVERT REMOVED		FT	\$100.00	\$0.00
EXCAVATION	997	CY	\$40.00	\$39,880.00
EMBANKMENT	1,993	CY	\$45.00	\$89,685.00
GUARDRAIL		FT	\$22.00	\$0.00
MEDIAN BARRIER		FT	\$120.00	\$0.00
CURB AND GUTTER		FT	\$42.00	\$0.00
CONCRETE MEDIAN	0	SY	\$100.00	\$0.00
CONCRETE WALK		SF	\$13.00	\$0.00
		Ro	adway Subtotal	\$129,565.00

Erosion Control				
Description	Quantity	Unit	Unit Cost	Total
EROSION CONTROL	50,000	LUMP	\$1.00	\$50,000.00
EROSION CONTROL PLAN	1	LUMP	\$5,000.00	\$5,000.00
BMPs	1	LUMP	\$45,000.00	\$45,000.00
SEEDING AND MULCHING	2,492	SY	\$2.00	\$4,984.00
Erosion Control Subtotal				\$104.984.00

Drainage				
Description	Quantity	Unit	Unit Cost	Total
CULVERT		FT	\$600.00	\$0.00
STORM SEWER SYSTEM	1,578	FT	\$300.00	\$473,400.00
UNDERDRAINS	3,156	FT	\$15.00	\$47,340.00
		Dr	ainage Subtotal	\$520,740,00

Pavement				
Description	Quantity	Unit	Unit Cost	Total
FULL DEPTH PAVEMENT, ASPHALT	2,735	SY	\$100.00	\$273,511.11
FULL DEPTH PAVEMENT, CONCRETE		SY	\$150.00	\$0.00
PAVEMENT PLANING AND RESURFACING		SY	\$54.00	\$0.00
SHARED USE PATH		SY	\$42.00	\$0.00
Pavement Subtotal				\$273,511.11

Traffic Control - Signing and Pavement Marking		_		
Description	Quantity	Unit	Unit Cost	Total
SIGNING	1.106	MILE	\$250,000.00	\$276,420.45
PAVEMENT MARKINGS - THERMO	0.195	MILE	\$14,000.00	\$2,725.76
PAVEMENT MARKINGS - RECESSED	0.911	MILE	\$30,000.00	\$27,329.55
Traffic Control - Signing and Payement Marking Subtotal				

Traffic Signal and Surveillance						
Description			Quantity	Unit	Unit Cost	Total
STANDARD TRAFFIC SIGNAL			1	EACH	\$300,000.00	\$300,000.00
TRAFFIC SIGNAL FOR R-CUT				EACH	\$780,000.00	\$0.00
FIBER OPTIC COMMUNICATION			0.911	MILE	\$170,000.00	\$154,867.42
CCTV				EACH	\$123,000.00	\$0.00
	Traffic Control - Traffic Signal Subtotal					

Roadway Lighting					
Description		Quantity	Unit	Unit Cost	Total
FULL INTERCHANGE LIGHTING			EACH	\$500,000.00	\$0.00
PARTIAL INTERCHANGE LIGHTING		9	EACH	\$300,000.00	\$0.00
CONTINUOUS ROADWAY LIGHTING		5838	FT	\$100.00	\$583,800.00
	Traffic Control - Traffic Signal Subtotal			\$583,800.00	

Utility Relocations - Gas, Electric, Water, Wastewater						
Description		Quantity	Unit	Unit Cost	Total	
HIGH PRESSURE GAS LINE			FT		\$0.00	
WATERLINE 36" OR LARGER			FT		\$0.00	
HIGH VOLTAGE TOWER			EACH		\$0.00	
SANITARY LINE 36" OR LARGER			FT		\$0.00	
DAM MODIFICATION			LUMP		\$0.00	
		V	/ater/Waste	water Subtotal	\$0.00	

Structures					
Description		Quantity	Unit	Unit Cost	Total
RETAINING WALL			SF	\$90.00	\$0.00
BRIDGE		0	SF	\$220.00	\$0.00
Pavement Subtotal					\$0.00

Incidentals				
Description	Quantity	Unit	Unit Cost	Total
CONSTRUCTION LAYOUT STAKES	25000	LUMP	\$1.00	\$25,000.00
MAINTENANCE OF TRAFFIC	50000	LUMP	\$1.00	\$50,000.00
MOBILIZATION	100000	LUMP	\$1.00	\$100,000.00
Miscellaneous Subtotal				\$175,000,00

Project Summary	Subtotal
Roadway	\$129,565
Erosion Control	\$104,984
Drainage	\$520,740
Pavement	\$273,511
Traffic Control - Signing and Pavement Marking	\$306,476
Traffic Signal and Surveillance	\$454,867
Roadway Lighting	\$583,800
Utility Relocations - Gas, Electric, Water, Wastewater	\$0
Structures	\$0
Incidentals	\$175,000
Total	\$2,549,000

\$765,000
\$3,314,000
\$0
\$597,000
\$331,000
\$4,242,000
\$1,272,600
\$5,515,000

stimate completed by:

## SEGMENT 7 CONCEPT A - OVERALL

SEGMENT 7 CONCEPT A - RANGE 1	
Construction Subtotal	\$4,756,000
Contingency (30%)	\$1,427,000
Construction Total	\$6,183,000
Right-of-Way	\$0
Engineering (18%)	\$1,113,000
Construction Engineering (10%)	\$618,000
Project Subtotal	\$7,914,000
Inflation (30%)	\$2,374,200
Subtotal	\$10,288,000
SEGMENT 7 CONCEPT A - RANGE 2	
Construction Subtotal	\$19,394,000
Contingency (30%)	\$5,818,000
Construction Total	\$25,212,000
Right-of-Way	\$0
Engineering (18%)	\$4,538,000
Construction Engineering (10%)	\$2,521,000
Project Subtotal	\$32,271,000
Inflation (30%)	\$9,681,300
Subtotal	\$41,952,000
SEGMENT 7 CONCEPT A - RANGE 3	
Construction Subtotal	\$31,194,000
Contingency (30%)	\$9,358,000
Construction Total	\$40,552,000
Right-of-Way	\$0
Engineering (18%)	\$7,299,000
Construction Engineering (10%)	\$4,055,000
Project Subtotal	\$51,906,000
Inflation (30%)	\$15,571,800
Subtotal	\$67,478,000

SEGMENT 7 CONCEPT A - OVERALL	
SEGMENT 7 CONCEPT A - RANGE 1	\$10,288,000
SEGMENT 7 CONCEPT A - RANGE 2	\$41,952,000
SEGMENT 7 CONCEPT A - RANGE 3	\$67,478,000
Total - Segment 7 Concept A - Overall	\$119,718,000

Construction w/ Contingency w/out Inflation \$92,091,000





# SEGMENT 7 CONCEPT A - RANGE 1 S of Main Rd to N of Troutman Rd

Roadway						
Description	Quantity	Unit	Unit Cost	Total		
PAVEMENT REMOVED	1,142	SY	\$20.00	\$22,846.67		
CULVERT REMOVED		FT	\$100.00	\$0.00		
EXCAVATION	6,776	CY	\$40.00	\$271,040.00		
EMBANKMENT	3,388	CY	\$45.00	\$152,460.00		
GUARDRAIL		FT	\$22.00	\$0.00		
MEDIAN BARRIER		FT	\$120.00	\$0.00		
CURB AND GUTTER		FT	\$42.00	\$0.00		
CONCRETE MEDIAN	1,917	SY	\$100.00	\$191,722.22		
CONCRETE WALK		SF	\$13.00	\$0.00		
Roadway Subtotal				\$638,068,89		

Erosion Control				
Description	Quantity	Unit	Unit Cost	Total
EROSION CONTROL	100,000	LUMP	\$1.00	\$100,000.00
EROSION CONTROL PLAN	1	LUMP	\$15,000.00	\$15,000.00
BMPs	1	LUMP	\$90,000.00	\$90,000.00
SEEDING AND MULCHING	8,471	SY	\$2.00	\$16,942.00
Erosion Control Subtotal				

Drainage				
Description	Quantity	Unit	Unit Cost	Total
CULVERT		FT	\$600.00	\$0.00
STORM SEWER SYSTEM	2,824	FT	\$300.00	\$847,050.00
UNDERDRAINS	11,294	FT	\$15.00	\$169,410.00
Drainage Subtotal				\$1,016,460.00

Pavement				
Description	Quantity	Unit	Unit Cost	Total
FULL DEPTH PAVEMENT, ASPHALT	11,491	SY	\$100.00	\$1,149,122.22
FULL DEPTH PAVEMENT, CONCRETE	0	SY	\$150.00	\$0.00
PAVEMENT PLANING AND RESURFACING	14,700	SY	\$54.00	\$793,800.00
SHARED USE PATH		SY	\$42.00	\$0.00
		Pave	ement Subtotal	\$1 0/12 022 22

Traffic Control - Signing and Pavement Marking				
Description	Quantity	Unit	Unit Cost	Total
SIGNING	2.04	MILE	\$250,000.00	\$510,558.71
PAVEMENT MARKINGS - THERMO	0.00	MILE	\$14,000.00	\$0.00
PAVEMENT MARKINGS - RECESSED	2.04	MILE	\$30,000.00	\$61,267.05
Traffic Control - Signing and Payement Marking Subtotal				

Traffic Signal and Surveillance						
Description			Quantity	Unit	Unit Cost	Total
STANDARD TRAFFIC SIGNAL				EACH	\$300,000.00	\$0.00
TRAFFIC SIGNAL FOR R-CUT				EACH	\$780,000.00	\$0.00
FIBER OPTIC COMMUNICATION			0.00	MILE	\$170,000.00	\$0.00
CCTV				EACH	\$123,000.00	\$0.00
Traffic Control - Traffic Signal Subtotal					\$0.00	

Roadway Lighting		<b>_</b>		
Description	Quantity	Unit	Unit Cost	Total
FULL INTERCHANGE LIGHTING	0	EACH	\$500,000.00	\$0.00
PARTIAL INTERCHANGE LIGHTING	0	EACH	\$300,000.00	\$0.00
CONTINUOUS ROADWAY LIGHTING	0	FT.	\$100.00	\$0.00
	Traffic Con	trol - Traffic	Signal Subtotal	\$0.00

Utility Relocations - Gas, Electric, Water, Wastewater					
Description	Quantity	Unit	Unit Cost	Total	
HIGH PRESSURE GAS LINE		FT		\$0.00	
WATERLINE 36" OR LARGER		FT		\$0.00	
HIGH VOLTAGE TOWER		EACH		\$0.00	
SANITARY LINE 36" OR LARGER		FT		\$0.00	
DAM MODIFICATION		LUMP		\$0.00	
	Water/Wastewater Subtotal				

	Structures				
1	Description	Quantity	Unit	Unit Cost	Total
	RETAINING WALL		SF	\$90.00	\$0.00
k	BRIDGE		SF	\$220.00	\$0.00
			Pave	ement Subtotal	\$0.00

Incidentals					
Description	Quantity	Unit	Unit Cost	Total	
CONSTRUCTION LAYOUT STAKES	55000	LUMP	\$1.00	\$55,000.00	
MAINTENANCE OF TRAFFIC	110000	LUMP	\$1.00	\$110,000.00	
MOBILIZATION	200000	LUMP	\$1.00	\$200,000.00	
Miscellaneous Subtotal					

Project Summary	Subtotal
Roadway	\$638,069
Erosion Control	\$221,942
Drainage	\$1,016,460
Pavement	\$1,942,922
Traffic Control - Signing and Pavement Marking	\$571,826
Traffic Signal and Surveillance	\$0
Roadway Lighting	\$0
Utility Relocations - Gas, Electric, Water, Wastewater	\$0
Structures	\$0
Incidentals	\$365,000
Total	\$4,756,000

Contingency (30%)	\$1,427,000
Subtotal	\$6,183,000
Right-of-Way	\$0
Engineering (18%)	\$1,113,000
Construction Engineering (10%)	\$618,000
Subtotal	\$7,914,000
Inflation (30%)	\$2,374,200

Estimate completed by:

#### SEGMENT 7 CONCEPT A - RANGE 2

N of Troutman	DM	to	M of	Padnor Pd

Roadway				
Description	Quantity	Unit	Unit Cost	Total
PAVEMENT REMOVED	10,337	SY	\$20.00	\$206,744.44
CULVERT REMOVED		FT	\$100.00	\$0.00
EXCAVATION	13,917	CY	\$40.00	\$556,664.00
EMBANKMENT	51,634	CY	\$45.00	\$2,323,521.00
GUARDRAIL		FT	\$22.00	\$0.00
MEDIAN BARRIER		FT	\$120.00	\$0.00
CURB AND GUTTER		FT	\$42.00	\$0.00
CONCRETE MEDIAN	0	SY	\$100.00	\$0.00
CONCRETE WALK		SF	\$13.00	\$0.00
Roadway Subtotal				

Erosion Control					
Description	Quantity	Unit	Unit Cost	Total	
EROSION CONTROL	395,000	LUMP	\$1.00	\$395,000.00	
EROSION CONTROL PLAN	1	LUMP	\$45,000.00	\$45,000.00	
BMPs	1	LUMP	\$350,000.00	\$350,000.00	
SEEDING AND MULCHING	22,960	SY	\$2.00	\$45,919.56	
Erosion Control Subtotal					

Drainage				
Description	Quantity	Unit	Unit Cost	Total
CULVERT		FT	\$600.00	\$0.00
STORM SEWER SYSTEM	4,199	FT	\$300.00	\$1,259,700.00
UNDERDRAINS	8,970	FT	\$15.00	\$134,550.00
Drainage Subtotal				

Pavement				
Description	Quantity	Unit	Unit Cost	Total
FULL DEPTH PAVEMENT, ASPHALT	30,784	SY	\$100.00	\$3,078,400.00
FULL DEPTH PAVEMENT, CONCRETE	0	SY	\$150.00	\$0.00
PAVEMENT PLANING AND RESURFACING	116,370	SY	\$54.00	\$6,283,992.00
SHARED USE PATH		SY	\$42.00	\$0.00
Pavement Subtotal				

Traffic Control - Signing and Pavement Marking				
Description	Quantity	Unit	Unit Cost	Total
SIGNING	2.31	MILE	\$250,000.00	\$577,130.68
PAVEMENT MARKINGS - THERMO	0.80	MILE	\$14,000.00	\$11,133.71
PAVEMENT MARKINGS - RECESSED	1.51	MILE	\$30,000.00	\$45,397.73
Traffic Control - Signing and Pavement Marking Subtotal				

Traffic Signal and Surveillance					1	
Description			Quantity	Unit	Unit Cost	Total
STANDARD TRAFFIC SIGNAL			0	EACH	\$300,000.00	\$0.00
TRAFFIC SIGNAL FOR R-CUT			0	EACH	\$780,000.00	\$0.00
FIBER OPTIC COMMUNICATION				MILE	\$170,000.00	\$0.00
CCTV				EACH	\$123,000.00	\$0.00
	Traffic Control - Traffic Signal Subtotal				\$0.00	

Roadway Lighting		<b>_</b>			
Description	Quantity	Unit	Unit Cost	Total	7
FULL INTERCHANGE LIGHTING	0	EACH	\$500,000.00	\$0.00	
PARTIAL INTERCHANGE LIGHTING	0	EACH	\$300,000.00	\$0.00	
CONTINUOUS ROADWAY LIGHTING	.0	FT.	\$100.00	\$0.00	
	Traffic Control - Traffic Signal Subtotal				
		_	$\overline{}$		

Utility Relocations - Gas, Electric, Water, Wastewater						
Description	Quantity	Unit	Unit Cost	Total		
HIGH PRESSURE GAS LINE		FT		\$0.00		
WATERLINE 36" OR LARGER		FT		\$0.00		
HIGH VOLTAGE TOWER		EACH		\$0.00		
SANITARY LINE 36" OR LARGER		FT		\$0.00		
DAM MODIFICATION		LUMP		\$0.00		
	Water/Wastewater Subtotal					

	Structures				
1	Description	Quantity	Unit	Unit Cost	Total
	RETAINING WALL		SF	\$90.00	\$0.00
Ĺ	BRIDGE	10,254	SF	\$220.00	\$2,255,880.00
k			Pave	ement Subtotal	\$2,255,880.00

Incidentals				
Description	Quantity	Unit	Unit Cost	Total
CONSTRUCTION LAYOUT STAKES	205000	LUMP	\$1.00	\$205,000.00
MAINTENANCE OF TRAFFIC	820000	LUMP	\$1.00	\$820,000.00
MOBILIZATION	800000	LUMP	\$1.00	\$800,000.00
		Miscella	neous Subtotal	\$1 925 000 00

Project Summary	Subtotal
Roadway	\$3,086,929
Erosion Control	\$835,920
Drainage	\$1,394,250
Pavement	\$9,362,392
Traffic Control - Signing and Pavement Marking	\$633,662
Traffic Signal and Surveillance	\$0
Roadway Lighting	\$0
Utility Relocations - Gas, Electric, Water, Wastewater	\$0
Structures	\$2,255,880
Incidentals	\$1,825,000
Tot	tal \$10.204.000

Contingency (30%)	\$5,818,000
	£35 343 000
Subtotal	\$25,212,000
Right-of-Way	\$0
Fundamental (400)	£4 F30 000
Engineering (18%)	\$4,538,000
Construction Engineering (10%)	\$2,521,000
Subtotal	\$32,271,000
Inflation (30%)	\$9,681,300
Project Total (2030 Dollars)	\$41,952,000



#### SEGMENT 7 CONCEPT A - RANGE 3

N of Radnor	Rd to	N of	Norton Rd
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Roadway				
Description	Quantity	Unit	Unit Cost	Total
PAVEMENT REMOVED	7,440	SY	\$20.00	\$148,793.33
CULVERT REMOVED		FT	\$100.00	\$0.00
EXCAVATION	24,703	CY	\$40.00	\$988,120.00
EMBANKMENT	173,858	CY	\$45.00	\$7,823,610.00
GUARDRAIL		FT	\$22.00	\$0.00
MEDIAN BARRIER		FT	\$120.00	\$0.00
CURB AND GUTTER		FT	\$42.00	\$0.00
CONCRETE MEDIAN	2,290	SY	\$100.00	\$229,000.00
CONCRETE WALK		SF	\$13.00	\$0.00
Roadway Subtotal				\$9,189,523.33

Erosion Control				
Description	Quantity	Unit	Unit Cost	Total
EROSION CONTROL	620,000	LUMP	\$1.00	\$620,000.00
EROSION CONTROL PLAN	1	LUMP	\$100,000.00	\$100,000.00
BMPs	1	LUMP	\$550,000.00	\$550,000.00
SEEDING AND MULCHING	57,238	SY	\$2.00	\$114,475.78
Erosion Control Subtotal				\$1,384,475,78

Drainage				
Description	Quantity	Unit	Unit Cost	Total
CULVERT		FT	\$600.00	\$0.00
STORM SEWER SYSTEM	11,565	FT	\$300.00	\$3,469,500.00
UNDERDRAINS	28,896	FT	\$15.00	\$433,440.00
Drainage Subtotal			\$3,902,940.00	

Pavement				
Description	Quantity	Unit	Unit Cost	Total
FULL DEPTH PAVEMENT, ASPHALT	38,796	SY	\$100.00	\$3,879,600.00
FULL DEPTH PAVEMENT, CONCRETE	14,122	SY	\$150.00	\$2,118,333.33
PAVEMENT PLANING AND RESURFACING	65,297	SY	\$54.00	\$3,526,044.00
SHARED USE PATH		SY	\$42.00	\$0.00
Pavement Subtotal				\$9 523 977 33

Traffic Control - Signing and Pavement Marking				
Description	Quantity	Unit	Unit Cost	Total
SIGNING	2.54	MILE	\$250,000.00	\$635,416.67
PAVEMENT MARKINGS - THERMO	0	MILE	\$14,000.00	\$0.00
PAVEMENT MARKINGS - RECESSED	2.54	MILE	\$30,000.00	\$76,250.00
Traffic Contro	ol - Signing and Pa	vement M	arking Subtotal	\$711,666.67

Traffic Signal and Surveillance						
Description			Quantity	Unit	Unit Cost	Total
STANDARD TRAFFIC SIGNAL			0	EACH	\$300,000.00	\$0.00
TRAFFIC SIGNAL FOR R-CUT			0	EACH	\$780,000.00	\$0.00
FIBER OPTIC COMMUNICATION				MILE	\$170,000.00	\$0.00
CCTV			1	EACH	\$123,000.00	\$123,000.00
	Traffic Control - Traffic Signal Subtotal					\$123,000.00

Roadway Lighting		<u> </u>		
Description	Quantity	Unit	Unit Cost	Total
FULL INTERCHANGE LIGHTING	1	EACH	\$500,000.00	\$500,000.00
PARTIAL INTERCHANGE LIGHTING	0	EACH	\$300,000.00	\$0.00
CONTINUOUS ROADWAY LIGHTING	.0	FT.	\$100.00	\$0.00
	Traffic Con	trol - Traffic	Signal Subtotal	\$500,000.00

Utility Relocations - Gas, Electric, Water, Wastewater						
Description	Quantity	Unit	Unit Cost	Total		
HIGH PRESSURE GAS LINE		FT		\$0.00		
WATERLINE 36" OR LARGER		ET		\$0.00		
HIGH VOLTAGE TOWER		EACH		\$0.00		
SANITARY LINE 36" OR LARGER		FT		\$0.00		
DAM MODIFICATION		LUMP		\$0.00		
	W	ater/Waste	water Subtotal	\$0.00		

Structures						
Description		Quantity	Unit	Unit Cost	Total	
RETAINING WALL			SF	\$90.00	\$0.00	
BRIDGE		13,788	SF	\$220.00	\$3,033,360.00	
			Pave	ement Subtotal	\$3,033,360.00	

Incidentals				
Description	Quantity	Unit	Unit Cost	Total
CONSTRUCTION LAYOUT STAKES	325000	LUMP	\$1.00	\$325,000.00
MAINTENANCE OF TRAFFIC	1300000	LUMP	\$1.00	\$1,300,000.00
MOBILIZATION	1200000	LUMP	\$1.00	\$1,200,000.00
		Miscella	neous Subtotal	\$2.925.000.00

Project Summary	Subtotal
Roadway	\$9,189,523
Erosion Control	\$1,384,476
Drainage	\$3,902,940
Pavement	\$9,523,977
Traffic Control - Signing and Pavement Marking	\$711,667
Traffic Signal and Surveillance	\$123,000
Roadway Lighting	\$500,000
Utility Relocations - Gas, Electric, Water, Wastewater	\$0
Structures	\$3,033,360
Incidentals	\$2,825,000
To	stal \$31 194 000

Contingency (30%)	\$9,358,000
Subtotal	\$40,552,000
Right-of-Way	\$0
Engineering (18%)	\$7,299,000
Construction Engineering (10%)	\$4,055,000
Subtotal	\$51,906,000
Inflation (30%)	\$15,571,800
Project Total (2030 Dollars)	\$67,478,000



### SEGMENT 7 CONCEPT B - OVERALL

SEGMENT 7 CONCEPT B - RANGE 1	
Construction Subtotal	\$4,703,000
Contingency (30%)	\$1,411,000
Construction Total	\$6,114,000
Right-of-Way	\$0
Engineering (18%)	\$1,101,000
Construction Engineering (10%)	\$611,000
Project Subtotal	\$7,826,000
Inflation (30%)	\$2,347,800
Subtotal	\$10,174,000
SEGMENT 7 CONCEPT B - RANGE 2	
Construction Subtotal	\$10,499,000
Contingency (30%)	\$3,150,000
Construction Total	\$13,649,000
Right-of-Way	\$0
Engineering (18%)	\$2,457,000
Construction Engineering (10%)	\$1,365,000
Project Subtotal	\$17,471,000
Inflation (30%)	\$5,241,300
Subtotal	\$22,712,000
SEGMENT 7 CONCEPT B - RANGE 3	
Construction Subtotal	\$20,406,000
Contingency (30%)	\$6,122,000
Construction Total	\$26,528,000
Right-of-Way	\$0
Engineering (18%)	\$4,775,000
Construction Engineering (10%)	\$2,653,000
Project Subtotal	\$33,956,000
Inflation (30%)	\$10,186,800
Subtotal	\$44,143,000

SEGMENT 7 CONCEPT B - OVERALL	
SEGMENT 7 CONCEPT B - RANGE 1	\$10,174,000
SEGMENT 7 CONCEPT B - RANGE 2	\$22,712,000
SEGMENT 7 CONCEPT B - RANGE 3	\$44,143,000
Total - Segment 7 Concept B - Overall	\$77,029,000

Construction w/ Contingency w/out Inflation \$59,253,000

Estimate completed by:



#### SEGMENT 7 CONCEPT B - RANGE 1 S of Main Rd to N of Troutman Rd

Roadway				
Description	Quantity	Unit	Unit Cost	Total
PAVEMENT REMOVED	1,142	SY	\$20.00	\$22,846.67
CULVERT REMOVED		FT	\$100.00	\$0.00
EXCAVATION	6,112	CY	\$40.00	\$244,480.00
EMBANKMENT	3,056	CY	\$45.00	\$137,520.00
GUARDRAIL		FT	\$22.00	\$0.00
MEDIAN BARRIER		FT	\$120.00	\$0.00
CURB AND GUTTER		FT	\$42.00	\$0.00
CONCRETE MEDIAN	1,149	SY	\$100.00	\$114,866.67
CONCRETE WALK		SF	\$13.00	\$0.00
Roadway Subtotal				\$519,713.33

Erosion Control				
Description	Quantity	Unit	Unit Cost	Total
EROSION CONTROL	100,000	LUMP	\$1.00	\$100,000.00
EROSION CONTROL PLAN	1	LUMP	\$15,000.00	\$15,000.00
BMPs	1	LUMP	\$90,000.00	\$90,000.00
SEEDING AND MULCHING	7,640	SY	\$2.00	\$15,280.00
		Erosion C	Control Subtotal	\$220,280,00

Drainage				
Description	Quantity	Unit	Unit Cost	Total
CULVERT		FT	\$600.00	\$0.00
STORM SEWER SYSTEM	2,547	FT	\$300.00	\$763,950.00
UNDERDRAINS	10,186	FT	\$15.00	\$152,790.00
		Dr	ainage Subtotal	\$916 740 00

Pavement				
Description	Quantity	Unit	Unit Cost	Total
FULL DEPTH PAVEMENT, ASPHALT	13,153	SY	\$100.00	\$1,315,344.44
FULL DEPTH PAVEMENT, CONCRETE	0	SY	\$150.00	\$0.00
PAVEMENT PLANING AND RESURFACING	14,700	SY	\$54.00	\$793,800.00
SHARED USE PATH		SY	\$42.00	\$0.00
Pavement Subtotal				\$2,109,144.44

Traffic Control - Signing and Pavement Marking		_		
Description	Quantity	Unit	Unit Cost	Total
SIGNING	2.04	MILE	\$250,000.00	\$510,558.71
PAVEMENT MARKINGS - THERMO	0.00	MILE	\$14,000.00	\$0.00
PAVEMENT MARKINGS - RECESSED	2.04	MILE	\$30,000.00	\$61,267.05
Traffic	Control - Signing and I	Pavement M	larking Subtotal	\$571 825 76

Traffic Signal and Surveillance					
Description		Quantity	Unit	Unit Cost	Total
STANDARD TRAFFIC SIGNAL		0	EACH	\$300,000.00	\$0.00
TRAFFIC SIGNAL FOR R-CUT		0	EACH	\$780,000.00	\$0.00
FIBER OPTIC COMMUNICATION		0.00	MILE	\$170,000.00	\$0.00
CCTV			EACH	\$123,000.00	\$0.00
Traffic Control - Traffic Signal Subtotal					\$0.00

Roadway Lighting					
Description		Quantity	Unit	Unit Cost	Total
FULL INTERCHANGE LIGHTING		0	EACH	\$500,000.00	\$0.00
PARTIAL INTERCHANGE LIGHTING		0	EACH	\$300,000.00	\$0.00
CONTINUOUS ROADWAY LIGHTING		0	FT	\$100.00	\$0.00
	Traffic Control - Traffic Signal Subtota				\$0.00

Utility Relocations - Gas, Electric, Water, Wastewater					
Description		Quantity	Unit	Unit Cost	Total
HIGH PRESSURE GAS LINE			FT		\$0.00
WATERLINE 36" OR LARGER			FT		\$0.00
HIGH VOLTAGE TOWER			EACH		\$0.00
SANITARY LINE 36" OR LARGER			FT		\$0.00
DAM MODIFICATION			LUMP		\$0.00
		V	/ater/Waste	water Subtotal	\$0.00

Structures					
Description		Quantity	Unit	Unit Cost	Total
RETAINING WALL			SF	\$90.00	\$0.00
BRIDGE			SF	\$220.00	\$0.00
	Pavement Subtotal				\$0.00

Incidentals				
Description	Quantity	Unit	Unit Cost	Total
CONSTRUCTION LAYOUT STAKES	55000	LUMP	\$1.00	\$55,000.00
MAINTENANCE OF TRAFFIC	110000	LUMP	\$1.00	\$110,000.00
MOBILIZATION	200000	LUMP	\$1.00	\$200,000.00
		Miscella	neous Subtotal	\$365,000,00

Project Summary	Subtotal
Roadway	\$519,713
Erosion Control	\$220,280
Drainage	\$916,740
Pavement	\$2,109,144
Traffic Control - Signing and Pavement Marking	\$571,826
Traffic Signal and Surveillance	\$0
Roadway Lighting	\$0
Utility Relocations - Gas, Electric, Water, Wastewater	\$0
Structures	\$0
Incidentals	\$365,000
Total	\$4,703,000

Contingency (30%)	\$1,411,000
Subtotal	\$6,114,000
Right-of-Way	\$0
Engineering (18%)	\$1,101,000
Construction Engineering (10%)	\$611,000
Subtotal	
Inflation (30%)	\$2,347,800
Project Total (2030 Dollars)	\$10,174,000



#### SEGMENT 7 CONCEPT B - RANGE 2 N of Troutman Rd to N of Radnor Rd

Roadway				
Description	Quantity	Unit	Unit Cost	Total
PAVEMENT REMOVED	13,209	SY	\$20.00	\$264,177.78
CULVERT REMOVED		FT	\$100.00	\$0.00
EXCAVATION	4,566	CY	\$40.00	\$182,640.00
EMBANKMENT	2,283	CY	\$45.00	\$102,735.00
GUARDRAIL		FT	\$22.00	\$0.00
MEDIAN BARRIER		FT	\$120.00	\$0.00
CURB AND GUTTER		FT	\$42.00	\$0.00
CONCRETE MEDIAN	1,092	SY	\$100.00	\$109,200.00
CONCRETE WALK		SF	\$13.00	\$0.00
	Roadway Subtotal			

Erosion Control				
Description	Quantity	Unit	Unit Cost	Total
EROSION CONTROL	95,000	LUMP	\$1.00	\$95,000.00
EROSION CONTROL PLAN	1	LUMP	\$10,000.00	\$10,000.00
BMPs	1	LUMP	\$85,000.00	\$85,000.00
SEEDING AND MULCHING	5,708	SY	\$2.00	\$11,415.00
Frosion Control Subtotal				\$201 415 00

Drainage				
Description	Quantity	Unit	Unit Cost	Total
CULVERT		FT	\$600.00	\$0.00
STORM SEWER SYSTEM	3,805	FT	\$300.00	\$1,141,500.00
UNDERDRAINS	7,610	FT	\$15.00	\$114,150.00
Drainage Subtotal				

Pavement				
Description	Quantity	Unit	Unit Cost	Total
FULL DEPTH PAVEMENT, ASPHALT	10,181	SY	\$100.00	\$1,018,066.67
FULL DEPTH PAVEMENT, CONCRETE	0	SY	\$150.00	\$0.00
PAVEMENT PLANING AND RESURFACING	116,370	SY	\$54.00	\$6,283,980.00
SHARED USE PATH		SY	\$42.00	\$0.00
Pavement Subtotal				

Traffic Control - Signing and Pavement Marking					
Description	Quantity	Unit	Unit Cost	Total	
SIGNING	1.51	MILE	\$250,000.00	\$378,314.39	
PAVEMENT MARKINGS - THERMO	0.00	MILE	\$14,000.00	\$0.00	
PAVEMENT MARKINGS - RECESSED	1.51	MILE	\$30,000.00	\$45,397.73	
Traffic Control - Signing and Pavement Marking Subtotal					

Traffic Signal and Surveillance						
Description			Quantity	Unit	Unit Cost	Total
STANDARD TRAFFIC SIGNAL			0	EACH	\$300,000.00	\$0.00
TRAFFIC SIGNAL FOR R-CUT			0	EACH	\$780,000.00	\$0.00
FIBER OPTIC COMMUNICATION			1.51	MILE	\$170,000.00	\$257,253.79
CCTV	1			EACH	\$123,000.00	\$0.00
Traffic Control - Traffic Signal Subtotal						\$257,253.79

Roadway Lighting						
Description			Quantity	Unit	Unit Cost	Total
FULL INTERCHANGE LIGHTING			0	EACH	\$500,000.00	\$0.00
PARTIAL INTERCHANGE LIGHTING			0	EACH	\$300,000.00	\$0.00
CONTINUOUS ROADWAY LIGHTING			0	FT	\$100.00	\$0.00
	Traffic Control - Traffic Signal Subtotal					\$0.00

Utility Relocations - Gas, Electric, Water, Wastewater							
Description	Quantity	Unit	Unit Cost	Total			
HIGH PRESSURE GAS LINE		FT		\$0.00			
WATERLINE 36" OR LARGER		FT		\$0.00			
HIGH VOLTAGE TOWER		EACH		\$0.00			
SANITARY LINE 36" OR LARGER		FT		\$0.00			
DAM MODIFICATION		LUMP		\$0.00			
	V	Vater/Waste	ewater Subtotal	\$0.00			

Structures							
Description				Quantity	Unit	Unit Cost	Total
RETAINING WALL					SF	\$90.00	\$0.00
BRIDGE					SF	\$220.00	\$0.00
Pavement Subtotal					\$0.00		

Incidentals				
Description	Quantity	Unit	Unit Cost	Total
CONSTRUCTION LAYOUT STAKES	50000	LUMP	\$1.00	\$50,000.00
MAINTENANCE OF TRAFFIC	150000	LUMP	\$1.00	\$150,000.00
MOBILIZATION	200000	LUMP	\$1.00	\$200,000.00
Miscellaneous Subtotal				\$400,000,00

Project Summary		Subtotal
Roadway		\$658,753
Erosion Control		\$201,415
Drainage		\$1,255,650
Pavement		\$7,302,047
Traffic Control - Signing and Pavement Marking		\$423,712
Traffic Signal and Surveillance		\$257,254
Roadway Lighting		\$0
Utility Relocations - Gas, Electric, Water, Wastewater		\$0
Structures		\$0
Incidentals		\$400,000
	Total	\$10,499,000

Contingency (30%)	\$3,150,000
Sub	ototal \$13,649,000
Right-of-Way	\$0
Engineering (18%)	\$2,457,000
Construction Engineering (10%)	\$1,365,000
Sub	\$17,471,000
Inflation (30%)	\$5,241,300

Project Total (2030 Dollars) \$22,712,000

ms consultants,

#### SEGMENT 7 CONCEPT B - RANGE 3 N of Radnor Rd to N of Norton Rd

Roadway	Roadway						
Description	Quantity	Unit	Unit Cost	Total			
PAVEMENT REMOVED	20,254	SY	\$20.00	\$405,075.56			
CULVERT REMOVED		FT	\$100.00	\$0.00			
EXCAVATION	17,433	CY	\$40.00	\$697,320.00			
EMBANKMENT	88,985	CY	\$45.00	\$4,004,325.00			
GUARDRAIL		FT	\$22.00	\$0.00			
MEDIAN BARRIER		FT	\$120.00	\$0.00			
CURB AND GUTTER		FT	\$42.00	\$0.00			
CONCRETE MEDIAN	0	SY	\$100.00	\$0.00			
CONCRETE WALK		SF	\$13.00	\$0.00			
Roadway Subtotal							

Erosion Control				
Description	Quantity	Unit	Unit Cost	Total
EROSION CONTROL	375,000	LUMP	\$1.00	\$375,000.00
EROSION CONTROL PLAN	1	LUMP	\$100,000.00	\$100,000.00
BMPs	1	LUMP	\$340,000.00	\$340,000.00
SEEDING AND MULCHING	49,707	SY	\$2.00	\$99,413.11
Erosion Control Subtotal				

Drainage				
Description	Quantity	Unit	Unit Cost	Total
CULVERT		FT	\$600.00	\$0.00
STORM SEWER SYSTEM	10,342	FT	\$300.00	\$3,102,600.00
UNDERDRAINS	20,684	FT	\$15.00	\$310,260.00
		Di	rainage Subtotal	\$2 412 860 00

Pavement				
Description	Quantity	Unit	Unit Cost	Total
FULL DEPTH PAVEMENT, ASPHALT	17,135	SY	\$100.00	\$1,713,533.33
FULL DEPTH PAVEMENT, CONCRETE	8,964	SY	\$150.00	\$1,344,633.33
PAVEMENT PLANING AND RESURFACING	65,297	SY	\$54.00	\$3,526,038.00
SHARED USE PATH		SY	\$42.00	\$0.00
Pavement Subtotal				

Traffic Control - Signing and Pavement Marking				
Description	Quantity	Unit	Unit Cost	Total
SIGNING	3.55	MILE	\$250,000.00	\$888,494.32
PAVEMENT MARKINGS - THERMO	1.01	MILE	\$14,000.00	\$14,129.92
PAVEMENT MARKINGS - RECESSED	2.54	MILE	\$30,000.00	\$76,340.91
Traffic	Control - Signing and I	Pavement M	larking Subtotal	\$978 965 15

Traffic Signal and Surveillance						
Description			Quantity	Unit	Unit Cost	Total
STANDARD TRAFFIC SIGNAL			0	EACH	\$300,000.00	\$0.00
TRAFFIC SIGNAL FOR R-CUT			0	EACH	\$780,000.00	\$0.00
FIBER OPTIC COMMUNICATION			0.00	MILE	\$170,000.00	\$0.00
CCTV	1		1	EACH	\$123,000.00	\$123,000.00
			\$123,000.00			

Roadway Lighting					
Description		Quantity	Unit	Unit Cost	Total
FULL INTERCHANGE LIGHTING		0	EACH	\$500,000.00	\$0.00
PARTIAL INTERCHANGE LIGHTING		0	EACH	\$300,000.00	\$0.00
CONTINUOUS ROADWAY LIGHTING		0	FT	\$100.00	\$0.00
		Traffic Cont	trol - Traffic	Signal Subtotal	\$0.00

Utility Relocations - Gas, Electric, Water, Wastewater						
Description	Quan	tity Unit	Unit Cost	Total		
HIGH PRESSURE GAS LINE		FT		\$0.00		
WATERLINE 36" OR LARGER		FT		\$0.00		
HIGH VOLTAGE TOWER		EACH		\$0.00		
SANITARY LINE 36" OR LARGER		FT		\$0.00		
DAM MODIFICATION		LUMP		\$0.00		
Water/Wastewater Subtotal						

Structures						
Description			Quantity	Unit	Unit Cost	Total
RETAINING WALL				SF	\$90.00	\$0.00
BRIDGE			6,753	SF	\$220.00	\$1,485,660.00
Pavement Subtotal				\$1,485,660.00		

Incidentals				
Description	Quantity	Unit	Unit Cost	Total
CONSTRUCTION LAYOUT STAKES	200000	LUMP	\$1.00	\$200,000.00
MAINTENANCE OF TRAFFIC	800000	LUMP	\$1.00	\$800,000.00
MOBILIZATION	800000	LUMP	\$1.00	\$800,000.00
		Miscella	neous Subtotal	\$1,800,000,00

Project Summary	Subtotal
Roadway	\$5,106,721
Erosion Control	\$914,413
Drainage	\$3,412,860
Pavement	\$6,584,205
Traffic Control - Signing and Pavement Marking	\$978,965
Traffic Signal and Surveillance	\$123,000
Roadway Lighting	\$0
Utility Relocations - Gas, Electric, Water, Wastewater	\$0
Structures	\$1,485,660
Incidentals	\$1,800,000
Total	\$20,406,000

Contingency (30%)	\$6,122,000
Subtotal	\$26,528,000
Right-of-Way	\$0
Engineering (18%)	\$4,775,000
Construction Engineering (10%)	\$2,653,000
Subtotal	\$33,956,000
Inflation (30%)	\$10,186,800
Project Total (2030 Dollars)	\$44,143,000



### SEGMENT 7 CONCEPT C - OVERALL

SEGMENT 7 CONCEPT C - RANGE 1	
Construction Subtotal	\$3,899,000
Contingency (30%)	\$1,170,000
Construction Total	\$5,069,000
Right-of-Way	\$0
Engineering (18%)	\$912,000
Construction Engineering (10%)	\$507,000
Project Subtotal	\$6,488,000
Inflation (30%)	\$1,946,400
Subtotal	\$8,434,000
SEGMENT 7 CONCEPT C - RANGE 2	
Construction Subtotal	\$3,839,000
Contingency (30%)	\$1,152,000
Construction Total	\$4,991,000
Right-of-Way	\$0
Engineering (18%)	\$898,000
Construction Engineering (10%)	\$499,000
Project Subtotal	\$6,388,000
Inflation (30%)	\$1,916,400
Subtotal	\$8,304,000
SEGMENT 7 CONCEPT C - RANGE 3	
Construction Subtotal	\$19,113,000
Contingency (30%)	\$5,734,000
Construction Total	\$24,847,000
Right-of-Way	\$0
Engineering (18%)	\$4,472,000
Construction Engineering (10%)	\$2,485,000
Project Subtotal	\$31,804,000
Inflation (30%)	\$9,541,200
Subtotal	\$41,345,000

SEGMENT 7 CONCEPT C - OVERALL	
SEGMENT 7 CONCEPT C - RANGE 1	\$8,434,000
SEGMENT 7 CONCEPT C - RANGE 2	\$8,304,000
SEGMENT 7 CONCEPT C - RANGE 3	\$41,345,000
Total - Segment 7 Concept C - Overall	\$58,083,000

Construction w/ Contingency w/out Inflation \$44,680,000

Estimate completed by:



#### SEGMENT 7 CONCEPT C - RANGE 1 S of Main Rd to N of Troutman Rd

Roadway						
Description	Quantity	Unit	Unit Cost	Total		
PAVEMENT REMOVED	2,665	SY	\$20.00	\$53,302.22		
CULVERT REMOVED		FT	\$100.00	\$0.00		
EXCAVATION	4,484	CY	\$40.00	\$179,360.00		
EMBANKMENT	2,242	CY	\$45.00	\$100,890.00		
GUARDRAIL		FT	\$22.00	\$0.00		
MEDIAN BARRIER		FT	\$120.00	\$0.00		
CURB AND GUTTER		FT	\$42.00	\$0.00		
CONCRETE MEDIAN	449	SY	\$100.00	\$44,933.33		
CONCRETE WALK		SF	\$13.00	\$0.00		
		Roadway Subtotal				

Erosion Control				
Description	Quantity	Unit	Unit Cost	Total
EROSION CONTROL	90,000	LUMP	\$1.00	\$90,000.00
EROSION CONTROL PLAN	1	LUMP	\$11,000.00	\$11,000.00
BMPs	1	LUMP	\$80,000.00	\$80,000.00
SEEDING AND MULCHING	5,606	SY	\$2.00	\$11,212.00
Erosion Control Subtotal				\$192,212.00

Drainage				
Description	Quantity	Unit	Unit Cost	Total
CULVERT		FT	\$600.00	\$0.00
STORM SEWER SYSTEM	1,869	FT	\$300.00	\$560,550.00
UNDERDRAINS	7,474	FT	\$15.00	\$112,110.00
Drainage Subtotal				\$672,660,00

Pavement				
Description	Quantity	Unit	Unit Cost	Total
FULL DEPTH PAVEMENT, ASPHALT	10,918	SY	\$100.00	\$1,091,766.67
FULL DEPTH PAVEMENT, CONCRETE	0	SY	\$150.00	\$0.00
PAVEMENT PLANING AND RESURFACING	10,500	SY	\$54.00	\$567,000.00
SHARED USE PATH		SY	\$42.00	\$0.00
Pavement Subtotal				

Traffic Control - Signing and Pavement Marking		_		
Description	Quantity	Unit	Unit Cost	Total
SIGNING	2.04	MILE	\$250,000.00	\$510,558.71
PAVEMENT MARKINGS - THERMO	0.00	MILE	\$14,000.00	\$0.00
PAVEMENT MARKINGS - RECESSED	2.04	MILE	\$30,000.00	\$61,267.05
Traffic	Control - Signing and I	Pavement M	larking Subtotal	\$571 825 76

Traffic Signal and Surveillance					
Description		Quantity	Unit	Unit Cost	Total
STANDARD TRAFFIC SIGNAL		0	EACH	\$300,000.00	\$0.00
TRAFFIC SIGNAL FOR R-CUT		0	EACH	\$780,000.00	\$0.00
FIBER OPTIC COMMUNICATION		0.00	MILE	\$170,000.00	\$0.00
CCTV			EACH	\$123,000.00	\$0.00
Traffic Control - Traffic Signal Subtotal					\$0.00

Roadway Lighting					
Description		Quantity	Unit	Unit Cost	Total
FULL INTERCHANGE LIGHTING		0	EACH	\$500,000.00	\$0.00
PARTIAL INTERCHANGE LIGHTING		0	EACH	\$300,000.00	\$0.00
CONTINUOUS ROADWAY LIGHTING		0	FT	\$100.00	\$0.00
		Traffic Cont	trol - Traffic	Signal Subtotal	\$0.00

Utility Relocations - Gas, Electric, Water, Wastewater						
Description		Quantity	Unit	Unit Cost	Total	
HIGH PRESSURE GAS LINE			FT		\$0.00	
WATERLINE 36" OR LARGER			FT		\$0.00	
HIGH VOLTAGE TOWER			EACH		\$0.00	
SANITARY LINE 36" OR LARGER			FT		\$0.00	
DAM MODIFICATION			LUMP		\$0.00	
Water/Wastewater Subtota						

Description		Quantity	Unit	Unit Cost	Total
RETAINING WALL			SF	\$90.00	\$0.00
BRIDGE			SF	\$220.00	\$0.00
	Pavement Subtotal				\$0.00

Incidentals					
Description	Quantity	Unit	Unit Cost	Total	
CONSTRUCTION LAYOUT STAKES	45000	LUMP	\$1.00	\$45,000.00	
MAINTENANCE OF TRAFFIC	180000	LUMP	\$1.00	\$180,000.00	
MOBILIZATION	200000	LUMP	\$1.00	\$200,000.00	
Miscellaneous Subtotal				\$425,000,00	

Project Summary	Subtotal
Roadway	\$378,486
Erosion Control	\$192,212
Drainage	\$672,660
Pavement	\$1,658,767
Traffic Control - Signing and Pavement Marking	\$571,826
Traffic Signal and Surveillance	\$0
Roadway Lighting	\$0
Utility Relocations - Gas, Electric, Water, Wastewater	\$0
Structures	\$0
Incidentals	\$425,000
Total	\$3,899,000

Contingency (30%)	\$1,170,000
Subtotal	\$5,069,000
Right-of-Way	\$0
Engineering (18%)	\$912,000
Construction Engineering (10%)	\$507,000
Subtotal	\$6,488,000
Inflation (30%)	\$1,946,400
Project Total (2030 Dollars)	\$8,434,000



#### SEGMENT 7 CONCEPT C - RANGE 2 N of Troutman Rd to N of Radnor Rd

Roadway	Roadway					
Description	Quantity	Unit	Unit Cost	Total		
PAVEMENT REMOVED	44,762	SY	\$20.00	\$895,248.89		
CULVERT REMOVED		FT	\$100.00	\$0.00		
EXCAVATION	2,296	CY	\$40.00	\$91,824.00		
EMBANKMENT	1,148	CY	\$45.00	\$51,651.00		
GUARDRAIL		FT	\$22.00	\$0.00		
MEDIAN BARRIER		FT	\$120.00	\$0.00		
CURB AND GUTTER		FT	\$42.00	\$0.00		
CONCRETE MEDIAN	171	SY	\$100.00	\$17,077.78		
CONCRETE WALK		SF	\$13.00	\$0.00		
	Roadway Subtotal					

Erosion Control  Description	Quantity	Unit	Unit Cost	Total
Description		Unit		
EROSION CONTROL	90,000	LUMP	\$1.00	\$90,000.00
EROSION CONTROL PLAN	1	LUMP	\$5,000.00	\$5,000.00
BMPs	1	LUMP	\$80,000.00	\$80,000.00
SEEDING AND MULCHING	2,870	SY	\$2.00	\$5,739.00
Erosion Control Subtotal				\$180,739.00

Drainage				
Description	Quantity	Unit	Unit Cost	Total
CULVERT		FT	\$600.00	\$0.00
STORM SEWER SYSTEM	1,913	FT	\$300.00	\$573,900.00
UNDERDRAINS	3,826	FT	\$15.00	\$57,390.00
Drainage Subtotal				

Pavement				
Description	Quantity	Unit	Unit Cost	Total
FULL DEPTH PAVEMENT, ASPHALT	10,978	SY	\$100.00	\$1,097,822.22
FULL DEPTH PAVEMENT, CONCRETE	0	SY	\$150.00	\$0.00
PAVEMENT PLANING AND RESURFACING	0	SY	\$54.00	\$0.00
SHARED USE PATH		SY	\$42.00	\$0.00
Pavement Subtotal				

Traffic Control - Signing and Pavement Marking		_		
Description	Quantity	Unit	Unit Cost	Total
SIGNING	1.51	MILE	\$250,000.00	\$378,314.39
PAVEMENT MARKINGS - THERMO	0.00	MILE	\$14,000.00	\$0.00
PAVEMENT MARKINGS - RECESSED	1.51	MILE	\$30,000.00	\$45,397.73
Traffic Cont	rol - Signing and F	avement M	arking Subtotal	\$423,712,12

Traffic Signal and Surveillance						
Description			Quantity	Unit	Unit Cost	Total
STANDARD TRAFFIC SIGNAL			0	EACH	\$300,000.00	\$0.00
TRAFFIC SIGNAL FOR R-CUT			0	EACH	\$780,000.00	\$0.00
FIBER OPTIC COMMUNICATION			0.00	MILE	\$170,000.00	\$0.00
CCTV	7			EACH	\$123,000.00	\$0.00
Traffic Control - Traffic Signal Subtotal					\$0.00	

Roadway Lighting						
Description			Quantity	Unit	Unit Cost	Total
FULL INTERCHANGE LIGHTING			0	EACH	\$500,000.00	\$0.00
PARTIAL INTERCHANGE LIGHTING			0	EACH	\$300,000.00	\$0.00
CONTINUOUS ROADWAY LIGHTING			0	FT	\$100.00	\$0.00
Traffic Control - Traffic Signal Subtotal					\$0.00	

Utility Relocations - Gas, Electric, Water, Wastewater						
Description	Quantity	Unit	Unit Cost	Total		
HIGH PRESSURE GAS LINE		FT		\$0.00		
WATERLINE 36" OR LARGER		FT		\$0.00		
HIGH VOLTAGE TOWER		EACH		\$0.00		
SANITARY LINE 36" OR LARGER		FT		\$0.00		
DAM MODIFICATION		LUMP		\$0.00		
	ewater Subtotal	\$0.00				

Structures					
Description		Quantity	Unit	Unit Cost	Total
RETAINING WALL			SF	\$90.00	\$0.00
BRIDGE		0	SF	\$220.00	\$0.00
			Pav	ement Subtotal	\$0.00

Incidentals					
Description	Quantity	Unit	Unit Cost	Total	
CONSTRUCTION LAYOUT STAKES	50000	LUMP	\$1.00	\$50,000.00	
MAINTENANCE OF TRAFFIC	200000	LUMP	\$1.00	\$200,000.00	
MOBILIZATION	200000	LUMP	\$1.00	\$200,000.00	
Miscellaneous Subtotal					

Project Summary	Subtotal
Roadway	\$1,055,802
Erosion Control	\$180,739
Drainage	\$631,290
Pavement	\$1,097,822
Traffic Control - Signing and Pavement Marking	\$423,712
Traffic Signal and Surveillance	\$0
Roadway Lighting	\$0
Utility Relocations - Gas, Electric, Water, Wastewater	\$0
Structures	\$0
Incidentals	\$450,000
Total	\$3,839,000

Contingency (30%)	\$1,152,000
Subtotal	\$4,991,000
Right-of-Way	\$0
Engineering (18%)	\$898,000
Construction Engineering (10%)	\$499,000
Subtotal	\$6,388,000
Inflation (30%)	\$1,916,400
Project Total (2030 Dollars)	\$8,304,000

ms consultants, inc

#### SEGMENT 7 CONCEPT C - RANGE 3 N of Radnor Rd to N of Norton Rd

Roadway				
Description	Quantity	Unit	Unit Cost	Total
PAVEMENT REMOVED	78,361	SY	\$20.00	\$1,567,224.44
CULVERT REMOVED		FT	\$100.00	\$0.00
EXCAVATION	17,433	CY	\$40.00	\$697,320.00
EMBANKMENT	88,985	CY	\$45.00	\$4,004,325.00
GUARDRAIL		FT	\$22.00	\$0.00
MEDIAN BARRIER		FT	\$120.00	\$0.00
CURB AND GUTTER		FT	\$42.00	\$0.00
CONCRETE MEDIAN	0	SY	\$100.00	\$0.00
CONCRETE WALK		SF	\$13.00	\$0.00
Roadway Subtotal				\$6,268,869.44

Erosion Control					
Description	Quantity	Unit	Unit Cost	Total	
EROSION CONTROL	410,000	LUMP	\$1.00	\$410,000.00	
EROSION CONTROL PLAN	1	LUMP	\$50,000.00	\$50,000.00	
BMPs	1	LUMP	\$360,000.00	\$360,000.00	
SEEDING AND MULCHING	49,707	SY	\$2.00	\$99,413.11	
Erosion Control Subtotal					

Drainage				
Description	Quantity	Unit	Unit Cost	Total
CULVERT		FT	\$600.00	\$0.00
STORM SEWER SYSTEM	10,342	FT	\$300.00	\$3,102,600.00
UNDERDRAINS	21,403	FT	\$15.00	\$321,045.00
Drainage Subteta				

Pavement				
Description	Quantity	Unit	Unit Cost	Total
FULL DEPTH PAVEMENT, ASPHALT	24,024	SY	\$100.00	\$2,402,411.11
FULL DEPTH PAVEMENT, CONCRETE	8,964	SY	\$150.00	\$1,344,633.33
PAVEMENT PLANING AND RESURFACING	5,400	SY	\$54.00	\$291,600.00
SHARED USE PATH		SY	\$42.00	\$0.00
Pavement Subtotal				

Traffic Control - Signing and Pavement Marking				
Description	Quantity	Unit	Unit Cost	Total
SIGNING	3.55	MILE	\$250,000.00	\$888,494.32
PAVEMENT MARKINGS - THERMO	1.01	MILE	\$14,000.00	\$14,129.92
PAVEMENT MARKINGS - RECESSED	2.54	MILE	\$30,000.00	\$76,340.91
Traffic Control - Signing and Pavement Marking Subtotal				

Traffic Signal and Surveillance						
Description			Quantity	Unit	Unit Cost	Total
STANDARD TRAFFIC SIGNAL			0	EACH	\$300,000.00	\$0.00
TRAFFIC SIGNAL FOR R-CUT			0	EACH	\$780,000.00	\$0.00
FIBER OPTIC COMMUNICATION			0.00	MILE	\$170,000.00	\$0.00
CCTV			1	EACH	\$123,000.00	\$123,000.00
Traffic Control - Traffic Signal Subtotal					\$123,000.00	

Roadway Lighting			· .		
Description		Quantity	Unit	Unit Cost	Total
FULL INTERCHANGE LIGHTING		0	EACH	\$500,000.00	\$0.00
PARTIAL INTERCHANGE LIGHTING		0	EACH	\$300,000.00	\$0.00
CONTINUOUS ROADWAY LIGHTING		0	FT.	\$100.00	\$0.00
		Traffic Con	trol - Traffic	Signal Subtotal	\$0.00

Utility Relocations - Gas, Electric, Water, Wastewater					
Description		Quantity	Unit	Unit Cost	Total
HIGH PRESSURE GAS LINE			FT		\$0.00
WATERLINE 36" OR LARGER			FT		\$0.00
HIGH VOLTAGE TOWER			EACH		\$0.00
SANITARY LINE 36" OR LARGER			FT		\$0.00
DAM MODIFICATION			LUMP		\$0.00
Water/Wastewater Subtotal				ewater Subtotal	\$0.00

Structures						
Description			Quantity	Unit	Unit Cost	Total
RETAINING WALL				SF	\$90.00	\$0.00
BRIDGE			6,753	SF	\$220.00	\$1,485,660.00
Pavement Subtotal				\$1,485,660,00		

Incidentals						
Description	Quantity	Unit	Unit Cost	Total		
CONSTRUCTION LAYOUT STAKES	215000	LUMP	\$1.00	\$215,000.00		
MAINTENANCE OF TRAFFIC	860000	LUMP	\$1.00	\$860,000.00		
MOBILIZATION	800000	LUMP	\$1.00	\$800,000.00		
Miscellaneous Subtotal						

Project Summary	Subtotal
Roadway	\$6,268,869
Erosion Control	\$919,413
Drainage	\$3,423,645
Pavement	\$4,038,644
Traffic Control - Signing and Pavement Marking	\$978,965
Traffic Signal and Surveillance	\$123,000
Roadway Lighting	\$0
Utility Relocations - Gas, Electric, Water, Wastewater	\$0
Structures	\$1,485,660
Incidentals	\$1,875,000
Tot	al \$19,113,000

Contingency (30%)	\$5,734,000
Subtotal	\$24,847,000
Right-of-Way	\$0
Engineering (18%)	\$4,472,000
Construction Engineering (10%)	\$2,485,000
Subtotal	\$31,804,000
Inflation (30%)	\$9,541,200
Project Total (2030 Dollars)	



## SEGMENT 7 CONCEPT D - OVERALL

SEGMENT 7 CONCEPT D - RANGE 1	
Construction Subtotal	\$3,853,000
Contingency (30%)	\$1,156,000
Construction Total	\$5,009,000
Right-of-Way	\$0
Engineering (18%)	\$902,000
Construction Engineering (10%)	\$501,000
Subtotal	\$6,412,000
Inflation (30%)	\$1,923,600
Subtotal	\$8,336,000
SEGMENT 7 CONCEPT D - RANGE 2	
Construction Subtotal	\$1,630,000
Contingency (30%)	\$489,000
Construction Total	\$2,119,000
Right-of-Way	\$0
Engineering (18%)	\$381,000
Construction Engineering (10%)	\$212,000
Subtotal	\$2,712,000
Inflation (30%)	\$813,600
Subtotal	\$3,526,000
SEGMENT 7 CONCEPT D - RANGE 2	
Construction Subtotal	\$5,735,000
Contingency (30%)	\$1,721,000
Construction Total	\$7,456,000
Right-of-Way	\$0
Engineering (18%)	\$1,342,000
Construction Engineering (10%)	\$746,000
Subtotal	\$9,544,000
Inflation (30%)	\$2,863,200
Subtotal	\$12,407,000

SEGMENT 7 CONCEPT D - OVERALL	
SEGMENT 7 CONCEPT D - RANGE 1	\$8,336,000
SEGMENT 7 CONCEPT D - RANGE 2	\$3,526,000
SEGMENT 7 CONCEPT D - RANGE 2	\$12,407,000
Total - Segment 7 Concept D - Overall	\$24,269,000

Construction w/ Contingency w/out Inflation \$18,668,000





#### SEGMENT 7 CONCEPT D - RANGE 1 S of Main Rd to N of Troutman Rd

Roadway						
Description	Quantity	Unit	Unit Cost	Total		
PAVEMENT REMOVED	2,665	SY	\$20.00	\$53,302.22		
CULVERT REMOVED		FT	\$100.00	\$0.00		
EXCAVATION	4,484	CY	\$40.00	\$179,360.00		
EMBANKMENT	2,242	CY	\$45.00	\$100,890.00		
GUARDRAIL		FT	\$22.00	\$0.00		
MEDIAN BARRIER		FT	\$120.00	\$0.00		
CURB AND GUTTER		FT	\$42.00	\$0.00		
CONCRETE MEDIAN	449	SY	\$100.00	\$44,933.33		
CONCRETE WALK		SF	\$13.00	\$0.00		
		Ro	adway Subtotal	\$378,485.56		

Erosion Control				
Description	Quantity	Unit	Unit Cost	Total
EROSION CONTROL	90,000	LUMP	\$1.00	\$90,000.00
EROSION CONTROL PLAN	1	LUMP	\$10,000.00	\$10,000.00
BMPs	1	LUMP	\$80,000.00	\$80,000.00
SEEDING AND MULCHING	5,606	SY	\$2.00	\$11,212.00
	CHING 5,606 SY \$2.00 \$		\$191,212.00	

Drainage					
Description	Quantity	Unit	Unit Cost	Total	
CULVERT		FT	\$600.00	\$0.00	
STORM SEWER SYSTEM	1,869	FT	\$300.00	\$560,550.00	
UNDERDRAINS	7,474	FT	\$15.00	\$112,110.00	
		Dr	ainage Subtotal	\$672 660 00	

Pavement				
Description	Quantity	Unit	Unit Cost	Total
FULL DEPTH PAVEMENT, ASPHALT	10,918	SY	\$100.00	\$1,091,766.67
FULL DEPTH PAVEMENT, CONCRETE	0	SY	\$150.00	\$0.00
PAVEMENT PLANING AND RESURFACING	10,500	SY	\$54.00	\$567,000.00
SHARED USE PATH		SY	\$42.00	\$0.00
		Pav	ement Subtotal	\$1,658,766.67

Traffic Control - Signing and Pavement Marking		_		
Description	Quantity	Unit	Unit Cost	Total
SIGNING	2.042	MILE	\$250,000.00	\$510,558.71
PAVEMENT MARKINGS - THERMO	0.000	MILE	\$14,000.00	\$0.00
PAVEMENT MARKINGS - RECESSED	2.042	MILE	\$30,000.00	\$61,267.05
Traffic	Control - Signing and F	Pavement M	larking Subtotal	\$571 825 76

Traffic Signal and Surveillance	Traffic Signal and Surveillance							
Description			Quantity	Unit	Unit Cost	Total		
STANDARD TRAFFIC SIGNAL			0	EACH	\$300,000.00	\$0.00		
TRAFFIC SIGNAL FOR R-CUT			0	EACH	\$780,000.00	\$0.00		
FIBER OPTIC COMMUNICATION			0.000	MILE	\$170,000.00	\$0.00		
CCTV		_		EACH	\$123,000.00	\$0.00		
		Traffic Control - Traffic Signal Subtota						

Roadway Lighting						
Description			Quantity	Unit	Unit Cost	Total
FULL INTERCHANGE LIGHTING			0	EACH	\$500,000.00	\$0.00
PARTIAL INTERCHANGE LIGHTING			0	EACH	\$300,000.00	\$0.00
CONTINUOUS ROADWAY LIGHTING			0	FT	\$100.00	\$0.00
	Traffic Control - Traffic Signal Subtota				Signal Subtotal	\$0.00

Utility Relocations - Gas, Electric, Water, Wastewater						
Description		Quantity	Unit	Unit Cost	Total	
HIGH PRESSURE GAS LINE			FT		\$0.00	
WATERLINE 36" OR LARGER			FT		\$0.00	
HIGH VOLTAGE TOWER			EACH		\$0.00	
SANITARY LINE 36" OR LARGER			FT		\$0.00	
DAM MODIFICATION			LUMP		\$0.00	
		V	/ater/Waste	water Subtotal	\$0.00	

RETAINING WALL         SF         \$90.00         \$0.00           BRIDGE         0         SF         \$220.00         \$0.00	Structures					
BRIDGE 0 SF \$220.00 \$0.00	Description		Quantity	Unit	Unit Cost	Total
	RETAINING WALL			SF	\$90.00	\$0.00
	BRIDGE		0	SF	\$220.00	\$0.00
Pavement Subtotal \$0.00		Pavement Subtota				\$0.00

Incidentals					
Description	Quantity	Unit	Unit Cost	Total	
CONSTRUCTION LAYOUT STAKES	45000	LUMP	\$1.00	\$45,000.00	
MAINTENANCE OF TRAFFIC	135000	LUMP	\$1.00	\$135,000.00	
MOBILIZATION	200000	LUMP	\$1.00	\$200,000.00	
	Miscellaneous Subtota				

Project Summary	Subtotal
Roadway	\$378,486
Erosion Control	\$191,212
Drainage	\$672,660
Pavement	\$1,658,767
Traffic Control - Signing and Pavement Marking	\$571,826
Traffic Signal and Surveillance	\$0
Roadway Lighting	\$0
Utility Relocations - Gas, Electric, Water, Wastewater	\$0
Structures	\$0
Incidentals	\$380,000
Tota	\$3,853,000

Contingency (30%)	\$1,156,000
Subtotal	\$5,009,000
Right-of-Way	\$0
Engineering (18%)	\$902,000
Construction Engineering (10%)	\$501,000
Subtotal	\$6,412,000
Inflation (30%)	\$1,923,600
Project Total (2030 Dollars)	\$8,336,000



#### SEGMENT 7 CONCEPT D - RANGE 2 N of Troutman Rd to N of Radnor Rd

Roadway				
Description	Quantity	Unit	Unit Cost	Total
PAVEMENT REMOVED	751	SY	\$20.00	\$15,013.33
CULVERT REMOVED		FT	\$100.00	\$0.00
EXCAVATION	1,952	CY	\$40.00	\$78,096.00
EMBANKMENT	976	CY	\$45.00	\$43,929.00
GUARDRAIL		FT	\$22.00	\$0.00
MEDIAN BARRIER		FT	\$120.00	\$0.00
CURB AND GUTTER		FT	\$42.00	\$0.00
CONCRETE MEDIAN	171	SY	\$100.00	\$17,077.78
CONCRETE WALK		SF	\$13.00	\$0.00
		Ro	adway Subtotal	\$154,116.11

Erosion Control				
Description	Quantity	Unit	Unit Cost	Total
EROSION CONTROL	50,000	LUMP	\$1.00	\$50,000.00
EROSION CONTROL PLAN	1	LUMP	\$5,000.00	\$5,000.00
BMPs	1	LUMP	\$40,000.00	\$40,000.00
SEEDING AND MULCHING	2,441	SY	\$2.00	\$4,881.00
	Frosion Control Subtotal			

Drainage					
Description	Description Quantity Unit Unit Cost				
CULVERT		FT	\$600.00	\$0.00	
STORM SEWER SYSTEM	1,627	FT	\$300.00	\$488,100.00	
UNDERDRAINS	3,254	FT	\$15.00	\$48,810.00	
Prainage Subtotal					

Pavement				
Description Quantity Unit Unit Cost				
FULL DEPTH PAVEMENT, ASPHALT 2,401 SY \$100.00				
FULL DEPTH PAVEMENT, CONCRETE 0 SY \$150.00				
PAVEMENT PLANING AND RESURFACING	0	SY	\$54.00	\$0.00
SHARED USE PATH		SY	\$42.00	\$0.00
Pavement Subtotal				\$240,133.33

Traffic Control - Signing and Pavement Marking	raffic Control - Signing and Pavement Marking				
Description	Quantity	Unit	Unit Cost	Total	
SIGNING	1.513	MILE	\$250,000.00	\$378,314.39	
PAVEMENT MARKINGS - THERMO	0.000	MILE	\$14,000.00	\$0.00	
PAVEMENT MARKINGS - RECESSED	1.513	MILE	\$30,000.00	\$45,397.73	
Traffic Control - Signing and Pavement Marking Subtotal					

Traffic Signal and Surveillance						
Description		Quantity	Unit	Unit Cost	Total	
STANDARD TRAFFIC SIGNAL		0	EACH	\$300,000.00	\$0.00	
TRAFFIC SIGNAL FOR R-CUT		0	EACH	\$780,000.00	\$0.00	
FIBER OPTIC COMMUNICATION		0.00	MILE	\$170,000.00	\$0.00	
CCTV			EACH	\$123,000.00	\$0.00	
		Traffic Control - Traffic Signal Subtota				

Roadway Lighting					
Description		Quantity	Unit	Unit Cost	Total
FULL INTERCHANGE LIGHTING		0	EACH	\$500,000.00	\$0.00
PARTIAL INTERCHANGE LIGHTING		0	EACH	\$300,000.00	\$0.00
CONTINUOUS ROADWAY LIGHTING		0	FT	\$100.00	\$0.00
	Traffic Control - Traffic Signal Subtota				\$0.00

Utility Relocations - Gas, Electric, Water, Wastewater					
Description		Quantity	Unit	Unit Cost	Total
HIGH PRESSURE GAS LINE			FT		\$0.00
WATERLINE 36" OR LARGER			FT		\$0.00
HIGH VOLTAGE TOWER			EACH		\$0.00
SANITARY LINE 36" OR LARGER			FT		\$0.00
DAM MODIFICATION			LUMP		\$0.00
		V	/ater/Waste	water Subtotal	\$0.00

RETAINING WALL         SF         \$90.00         \$0.00           BRIDGE         0         SF         \$220.00         \$0.00	Structures					
BRIDGE 0 SF \$220.00 \$0.00	Description		Quantity	Unit	Unit Cost	Total
	RETAINING WALL			SF	\$90.00	\$0.00
	BRIDGE		0	SF	\$220.00	\$0.00
Pavement Subtotal \$0.00		Pavement Subtota				\$0.00

Incidentals				
Description	Quantity	Unit	Unit Cost	Total
CONSTRUCTION LAYOUT STAKES	25000	LUMP	\$1.00	\$25,000.00
MAINTENANCE OF TRAFFIC	50000	LUMP	\$1.00	\$50,000.00
MOBILIZATION	100000	LUMP	\$1.00	\$100,000.00
Miscellaneous Subtotal				\$175,000,00

Project Summary	Subtotal
Roadway	\$154,116
Erosion Control	\$99,881
Drainage	\$536,910
Pavement	\$240,133
Traffic Control - Signing and Pavement Marking	\$423,712
Traffic Signal and Surveillance	\$0
Roadway Lighting	\$0
Utility Relocations - Gas, Electric, Water, Wastewater	\$0
Structures	\$0
Incidentals	\$175,000
To	otal \$1,630,000

Contingency (30%)	\$489,000
Subtotal	\$2,119,000
Right-of-Way	\$0
Engineering (18%)	\$381,000
Construction Engineering (10%)	\$212,000
Subtotal	\$2,712,000
Inflation (30%)	\$813,600
Project Total (2030 Dollars)	\$3,526,000



#### SEGMENT 7 CONCEPT D - RANGE 3 N of Radnor Rd to N of Norton Rd

Roadway	Roadway				
Description	Quantity	Unit	Unit Cost	Total	
PAVEMENT REMOVED	3,131	SY	\$20.00	\$62,628.89	
CULVERT REMOVED		FT	\$100.00	\$0.00	
EXCAVATION	2,597	CY	\$40.00	\$103,872.00	
EMBANKMENT	1,298	CY	\$45.00	\$58,428.00	
GUARDRAIL		FT	\$22.00	\$0.00	
MEDIAN BARRIER		FT	\$120.00	\$0.00	
CURB AND GUTTER		FT	\$42.00	\$0.00	
CONCRETE MEDIAN	85	SY	\$100.00	\$8,533.33	
CONCRETE WALK		SF	\$13.00	\$0.00	
		Ro	adway Subtotal	\$233,462.22	

Erosion Control				
Description	Quantity	Unit	Unit Cost	Total
EROSION CONTROL	140,000	LUMP	\$1.00	\$140,000.00
EROSION CONTROL PLAN	1	LUMP	\$7,000.00	\$7,000.00
BMPs	1	LUMP	\$120,000.00	\$120,000.00
SEEDING AND MULCHING	3,246	SY	\$2.00	\$6,492.00
		Erosion (	Control Subtotal	\$273 492 00

Drainage				
Description	Quantity	Unit	Unit Cost	Total
CULVERT		FT	\$600.00	\$0.00
STORM SEWER SYSTEM	2,164	FT	\$300.00	\$649,200.00
UNDERDRAINS	4,328	FT	\$15.00	\$64,920.00
		Di	ainage Subtotal	\$714 120 00

Pavement				
Description	Quantity	Unit	Unit Cost	Total
FULL DEPTH PAVEMENT, ASPHALT	7,030	SY	\$100.00	\$703,044.44
FULL DEPTH PAVEMENT, CONCRETE	0	SY	\$150.00	\$0.00
PAVEMENT PLANING AND RESURFACING	27,150	SY	\$54.00	\$1,466,094.00
SHARED USE PATH		SY	\$42.00	\$0.00
	Pavement Subtotal			

Traffic Control - Signing and Pavement Marking		_		
Description	Quantity	Unit	Unit Cost	Total
SIGNING	2.66	MILE	\$250,000.00	\$664,346.59
PAVEMENT MARKINGS - THERMO	0.11	MILE	\$14,000.00	\$1,577.65
PAVEMENT MARKINGS - RECESSED	2.54	MILE	\$30,000.00	\$76,340.91
Traf	ffic Control - Signing and F	Pavement M	larking Subtotal	\$742 265 15

Traffic Signal and Surveillance				
Description	Quantity	Unit	Unit Cost	Total
STANDARD TRAFFIC SIGNAL	0	EACH	\$300,000.00	\$0.00
TRAFFIC SIGNAL FOR R-CUT	1	EACH	\$780,000.00	\$780,000.00
FIBER OPTIC COMMUNICATION	0.00	MILE	\$170,000.00	\$0.00
CCTV	1	EACH	\$123,000.00	\$123,000.00
	Traffic Control - Traffic Signal Subtotal			

Roadway Lighting						
Description			Quantity	Unit	Unit Cost	Total
FULL INTERCHANGE LIGHTING			0	EACH	\$500,000.00	\$0.00
PARTIAL INTERCHANGE LIGHTING			0	EACH	\$300,000.00	\$0.00
CONTINUOUS ROADWAY LIGHTING			0	FT	\$100.00	\$0.00
	Traffic Control - Traffic Signal Subtotal				\$0.00	

Utility Relocations - Gas, Electric, Water, Wastewater					
Description	Quantity	Unit	Unit Cost	Total	
HIGH PRESSURE GAS LINE		FT		\$0.00	
WATERLINE 36" OR LARGER		FT		\$0.00	
HIGH VOLTAGE TOWER		EACH		\$0.00	
SANITARY LINE 36" OR LARGER		FT		\$0.00	
DAM MODIFICATION		LUMP		\$0.00	
		Water/Waste	ewater Subtotal	\$0.00	

Structures					
Description		Quantit	y Unit	Unit Cost	Total
RETAINING WALL			SF	\$90.00	\$0.00
BRIDGE		0	SF	\$220.00	\$0.00
	Pavement Subtotal				\$0.00

Incidentals				
Description	Quantity	Unit	Unit Cost	Total
CONSTRUCTION LAYOUT STAKES	75000	LUMP	\$1.00	\$75,000.00
MAINTENANCE OF TRAFFIC	225000	LUMP	\$1.00	\$225,000.00
MOBILIZATION	400000	LUMP	\$1.00	\$400,000.00
Miscellaneous Subtotal				\$700,000.00

Project Summary	Subtotal
Roadway	\$233,462
Erosion Control	\$273,492
Drainage	\$714,120
Pavement	\$2,169,138
Traffic Control - Signing and Pavement Marking	\$742,265
Traffic Signal and Surveillance	\$903,000
Roadway Lighting	\$0
Utility Relocations - Gas, Electric, Water, Wastewater	\$0
Structures	\$0
Incidentals	\$700,000
Total	\$5,735,000

()	44 704 000
Contingency (30%)	\$1,721,000
Subtotal	\$7,456,000
Right-of-Way	\$0
Right-or-way	30
Engineering (18%)	\$1,342,000
	An 15 000
Construction Engineering (10%)	\$746,000
Subtotal	\$9,544,000
Inflation (30%)	\$2,863,200
Project Total (2030 Dollars)	\$12,407,000



# Segment 1S - Right-of-Way Estimating

General Parcel Data										
	Concept A	Concept B								
# of Parcel Impacted	45	18								
Total Acres of Parcels	319.69	267.81								
Acres Impacted	17.47	10.58								
Agriculural Acres	0.00	0.00								
Residential Acres	6.87	3.52								
Commercial Acres	193.51	144.98								
Exempt Acres	119.31	119.31								
Total Acres	319.69	267.81								
Impacted Agricultural Acres	0.00	0.00								
Impacted Residential Acres	1.67	1.37								
Impacted Commercial Acres	9.24	4.11								
Impacted Exempt Acres	6.56	5.10								
Total Acres	17.47	10.58								
	# of Parcel Impacted Total Acres of Parcels Acres Impacted Agriculural Acres Residential Acres Commercial Acres Exempt Acres Impacted Agricultural Acres Impacted Residential Acres Impacted Commercial Acres Impacted Commercial Acres Impacted Commercial Acres Impacted Commercial Acres Impacted Exempt Acres	Concept A   Concept A   # of Parcel Impacted   45   319.69   Acres of Parcels   17.47   Agriculural Acres   0.00   Residential Acres   6.87   Commercial Acres   193.51   Exempt Acres   119.31   Total Acres   319.69   Impacted Agricultural Acres   0.00   Impacted Residential Acres   1.67   Impacted Commercial Acres   1.67   Impacted Commercial Acres   9.24   Impacted Exempt Acres   9.24   Impacted Exempt Acres   6.56								

	Edit		
Parcel Classification	Impact % for Displacement	Displacement Multiper	Impacted (Partial) Multiplier
Agricultural	50	3.0	1.0
Residential	-50	3.0	1.3
Commercial	5	3.0	1.5
Exempt	50	3.0	1.0

	Total POW											
	Total NOW	Acreage and Cost Breakdown										
	_1		Parcels D	aced		Parcels I	:ed					
		C	oncept A		Concept B		Concept A		Concept B			
<b>a</b> #0	of Agricultural Parcels		0		0		0		0			
t (t	of Residential Parcels		3		3		5		2			
<b>5</b> # 0	of Commercial Parcels		24		4		12		3			
<u> </u>	of Exempt Parcels		1		1		5		5			
Parcel Counts (#)	otal # Parcels		28		8	\	22		10			
e Pa	arcels impacted by Concept		Concept A:		50	M	Concept B:		18			
NA.	larket Price of Agricultural Parcels	\$		\$		\$		\$				
	larket Price of Residential Parcels	\$	1,239,100	\$	1,239,100	\$	123,519	¢	33,368			
ket Price arcels (\$)	larket Price of Residential Parcels	\$	58,838,100	\$	1,343,800	\$	808,121	Ś	71,961			
re et	larket Price of of Exempt Parcels	\$	1,500	\$	1,343,800	\$	631,835	\$	484,745			
	ntal Market Price	Ś	60,078,700	Ś	2.582.900	\$	1,563,475	\$	590.074			
	larket Price by Concept	3	Concept A:		61,642,175.17	7	Concept B:	_	3,172,973.99			
IVI	larket Frice by Concept		Concept A.	7	01,042,173.17		Concept B.	3	3,172,973.99			
ta M	larket Price w/ multiplier of Agricultural Parcels	\$	7	\$		\$	-	\$	-			
S T SM	larket Price w/ multiplier of Residential Parcels	\$	3,717,300	\$	3,717,300	\$	160,575	\$	43,378			
rice of rcels(	larket Price w/ multiplier of Commercial Parcels	\$	176,514,300	\$	4,031,400	\$	1,212,182	\$	107,941			
Price of arcels(\$	larket Price w/ multiplier of of Exempt Parcels	\$	4,500	\$		\$	631,835	\$	484,745			
Factored Market Price of Parcels(\$)	otal Market Price w/ multipliers	\$	180,236,100	\$	7,748,700	\$	2,004,592	\$	636,065			
™ To	otal Cost of ROW by Concept		Concept A:	\$	182,240,692		Concept B:	\$	8,384,765			
Δο	creage of Agricultural Parcels		0.00	$\rightarrow$	0.00		0.00		0.00			
98 40	creage of Residential Parcels		1.29		1.29		0.39		0.09			
ss)	creage of Commercial Parcels		38.49		9.54		1.79		1.45			
acres)	creage of Exempt Parcels		0.08		0.08		6.48		5.04			
	otal Acres		39.86		10.91		8.67		6.58			
E 10	otal Taken Acres by Concept		Concept A:		48.53		Concept B:		17.49			

# Segment 1N - Right-of-Way Estimating

General Parcel Data										
		Concept A	Concept B	Concept C	Concept D					
ral	# of Parcel Impacted	100	30	31	27					
General	Total Acres of Parcels	1497.91	1459.88	1509.22	1417.33					
ő	Acres Impacted	77.09	51.55	41.75	32.42					
=	Agriculural Acres	107.51	107.51	107.51	51.84					
Parcel Classification	Residential Acres	9.79	7.46	26.27	26.27					
Parcel sificat	Commercial Acres	882.89	850.85	881.39	845.17					
assi	Exempt Acres	497.72	494.06	494.06	494.06					
Ü	Total Acres	1497.91	1459.88	1509.22	1417.33					
	Impacted Agricultural Acres	9.43	9.43	5.84	2.37					
S ed	Impacted Residential Acres	3.91	1.72	1.68	0.94					
mpacted Acres	Impacted Commercial Acres	54.92	33.26	26.29	21.63					
ĒĀ	Impacted Exempt Acres	8.83	7.13	7.95	7.47					
_	Total Acres	77.09	51.55	41.75	32.42					

	Edit	table	
	Factors/N	/ultipliers	
Parcel Classification	Impact % for Displacement	Displacement Multiper	Impacted (Partial) Multiplier
Agricultural	50	3.0	1.0
Residential	50	3.0	1.3
Commercial	25	3.0	1.5
Exempt	-50	3.0	1.0
			•

								_1									
					Total ROW	Acr	rege and Cost Bro	eak	down					7			_
			(gr	eatly	Parcels I impacted parcel		aced ull parcel purchace	ed)			(minor	rly in	Parcels I pacted parcels -		cted parcel NOT purch	naced	,
		С	oncept A		Concept B		Concept C		Concept D		Concept A		Concept B		Concept C		Concept D
#	# of Agricultural Parcels		0		0		0		0		3		3		3		2
	# of Residential Parcels		24		3		1	V	1		11		4		5		5
Counts	# of Commercial Parcels		25		13		11		8		30		36		40		39
	# of Exempt Parcels		0		0		0		0		7		5		5		5
Parcel	Total # Parcels		49		16		12		9		51	7	48		53		51
Pa Ba	Parcels impacted by Concept		Concept A:		100		Concept B:		64		Concept C:		65		Concept D:		60
	Market Price of Agricultural Parcels	Š		\$		Ś		Ś		Ś	575,268	¢	575,268	Ś	339,424	Ś	176.467
9 <del>(</del> S	Market Price of Residential Parcels	\$	4.678.500		471,900	Ś	2.800	Ś	2,800	Ś 4	155.326	Ś	,	Ś	56.148		17.835
Pri S	Market Price of Commercial Parcels	Š	68,208,300	Ś	25,037,800		19,970,000	Ś	12,479,700	Ś	9,265,126	Ś		Ś	10,420,269	Ś	9,267,395
i e	Market Price of of Exempt Parcels	\$	-	Ś	-	Ś	-	Ś		Ś	-	Ś	,,	\$4	-	Ś	-
Market Price of Parcels (\$)	Total Market Price	s	72.886.800	Ś	25,509,700	Ś	19,972,800	Ś	12,482,500	Ś	9,995,721	Ś	12.636.957	Ś	10.815.841	Ś	9.461.697
2 0	Market Price by Concept		Concept A:	\$	82,882,520.54	Ė	Concept B:	Ś	38,146,657.06		Concept C:	ŝ	30,788,640.86		Concept D:	\$ 2	1,944,196.80
														_			
ē	Market Price w/ multiplier of Agricultural Parcels	\$		\$	-	\$		\$		\$	575,268	_	575,268		339,424		176,467
و مراقا	Market Price w/ multiplier of Residential Parcels	\$	14,035,500	_	1,415,700	\$	8,400	\$	8,400	\$	201,924	\$		\$	72,992		23,186
ed N	Market Price w/ multiplier of Commercial Parcels	\$	204,624,900		75,113,400	\$	59,910,000	\$	37,439,100	\$	13,897,690	\$	18,073,672	\$	15,630,404	\$	13,901,092
ctored Market Price of	Market Price w/ multiplier of of Exempt Parcels	\$		\$	<del></del>	\$		\$		\$		\$		\$		\$	
o de	Total Market Price w/ multipliers	\$	218,660,400	_	76,529,100	ş	59,918,400	\$	,,	\$	14,674,882	\$	18,665,287	ş	16,042,820	_	14,100,745
<u>u</u>	Total Cost of ROW by Concept		Concept A:	\$	233,335,282		Concept B:	\$	95,194,387		Concept C:	\$	75,961,220		Concept D:	Ş	51,548,245
-	Acreage of Agricultural Parcels		0.00		0.00		0.00		0.00		9.43		9.43		5.84		2.37
creage es)	Acreage of Residential Parcels		3.82		0.83		0.26		0.26		1.00		0.93		1.42		0.69
cre es)	Acreage of Commercial Parcels		67.93		39.80		23.26		16.86		13.86		15.84		18.41		16.55
< -	Acreage of Exempt Parcels		0.00		0.00		0.00		0.00		8.83		7.13		7.95		7.47
Parcel (ac	Total Acres		71.74		40.63		23.52		17.12		33.13		33.33		33.61		27.08
<u>a</u>	Total Taken Acres by Concept		Concept A:		104.87		Concept B:		73.97		Concept C:		57.13		Concept D:		44.20

# Segment 2 - Right-of-Way Estimating

General Parcel Data										
		Concept A	Concept B	Concept C	Concept D					
ral	# of Parcel Impacted	128	140	127	104					
General	Total Acres of Parcels	951.00	984.42	1097.38	928.04					
g	Acres Impacted	82.78	81.50	63.79	53.34					
5	Agriculural Acres	11.39	0.00	119.02	51.84					
Parcel Classification	Residential Acres	69.25	73.25	75.57	46.51					
Parcel sificat	Commercial Acres	870.36	911.18	902.78	829.69					
ass	Exempt Acres	0.00	0.00	0.00	0.00					
Ü	Total Acres	951.00	984.42	1097.38	928.04					
_	Impacted Agricultural Acres	2.24	0.00	1.40	1.43					
s te	Impacted Residential Acres	13.75	18.95	16.37	7.14					
Impacted Acres	Impacted Commercial Acres	66.78	62.55	46.01	44.76					
Ĕ	Impacted Exempt Acres	0.00	0.00	0.00	0.00					
	Total Acres	82.78	81.50	63.79	53.34					

		table	
	Factors/I	Multipliers	
Parcel Classification	Impact % for Displacement	Displacement Multiper	Impacted (Partial) Multiplier
Agricultural	50	3.0	1.0
Residential	50	3.0	1.3
Commercial	35	3.0	1.5
Exempt	50	3.0	1.0

## ## ## ## ## ## ## ## ## ## ## ## ##											h				٠,			
Greatly impacted parcels - full parcel purchaced   Concept B   Concept C   C						Total ROW	Acr	ege and Cost Br	eak	down					7			
# of Agricultural Parcels # of Commercial Parcels # of C																	/	
######################################	1			(gr	eatly	impacted parcel	s - fu	III parcel purchace	ed)				rly im				naced	)
## ## ## ## ## ## ## ## ## ## ## ## ##			(	Concept A		Concept B	_	Concept C		Concept D		Concept A		Concept B		Concept C		Concept D
### ### ### ### ### ### ### ### ### ##	#			-		0		0		0		2		-		_		2
Total # Parcels   20   12   7   108   120   115   97	± s			_		-	1	6		1								
Total # Parcels   20   12   7   108   120   115   97	l ā			18		14		6	<u></u>	6		82		102		94		81
Market Price of Agricultural Parcels \$ 404,300 \$ 1,115,500 \$ 1,115,500 \$ 1,113,691 \$ 1,137,018 \$ 1,015,936 \$ 56  Market Price of Residential Parcels \$ 23,696,000 \$ 1,115,500 \$ 5,919,400 \$ 6,299,500 \$ 20,547,777 \$ 23,164,300 \$ 22,029,837 \$ 21,300  Market Price of of Exempt Parcels \$ 23,696,000 \$ 18,233,100 \$ 5,919,400 \$ 6,299,500 \$ 20,547,777 \$ 23,164,300 \$ 22,029,837 \$ 21,300  Market Price of of Exempt Parcels \$ 24,100,300 \$ 1,348,600 \$ 7,034,900 \$ 6,323,500 \$ 21,788,477 \$ 24,301,317 \$ 23,106,934 \$ 21,300  Market Price of Of Exempt Parcels \$ 5 24,100,300 \$ 5,3346,500 \$ 7,034,900 \$ 6,323,500 \$ 21,788,477 \$ 24,301,317 \$ 23,106,934 \$ 23,006,934 \$ 21,006,934 \$ 20,000  Market Price of Of Exempt Parcels \$ 5 45,888,777.30 Concept 8: \$ 43,649,937.45 Concept C: \$ 30,140,934.28 Concept C: \$ 28,309,650  Market Price of Market Pri	2							0		0								
Market Price of Agricultural Parcels \$ 404,300 \$ 1,115,500 \$ 1,115,500 \$ 1,113,691 \$ 1,137,018 \$ 1,015,936 \$ 56  Market Price of Residential Parcels \$ 23,696,000 \$ 1,115,500 \$ 5,919,400 \$ 6,299,500 \$ 20,547,777 \$ 23,164,300 \$ 22,029,837 \$ 21,300  Market Price of of Exempt Parcels \$ 23,696,000 \$ 18,233,100 \$ 5,919,400 \$ 6,299,500 \$ 20,547,777 \$ 23,164,300 \$ 22,029,837 \$ 21,300  Market Price of of Exempt Parcels \$ 24,100,300 \$ 1,348,600 \$ 7,034,900 \$ 6,323,500 \$ 21,788,477 \$ 24,301,317 \$ 23,106,934 \$ 21,300  Market Price of Of Exempt Parcels \$ 5 24,100,300 \$ 5,3346,500 \$ 7,034,900 \$ 6,323,500 \$ 21,788,477 \$ 24,301,317 \$ 23,106,934 \$ 23,006,934 \$ 21,006,934 \$ 20,000  Market Price of Of Exempt Parcels \$ 5 45,888,777.30 Concept 8: \$ 43,649,937.45 Concept C: \$ 30,140,934.28 Concept C: \$ 28,309,650  Market Price of Market Pri	🖺		Щ.		_\				\_									
Market Price of Residential Parcels  \$ 40,300 \$ 1,115,500 \$ 1,115,500 \$ 24,000 \$ 1,143,691 \$ 1,137,018 \$ 1,015,936 \$ 56  Market Price of Commercial Parcels  \$ 23,696,000 \$ 1,8233,100 \$ 5,919,400 \$ 6,299,500 \$ 20,549,777 \$ 23,164,300 \$ 22,029,837 \$ 21,30  Total Market Price of Exemply Parcels  \$ 24,100,300 \$ 19,348,600 \$ 7,034,900 \$ 6,299,500 \$ 21,788,477 \$ 24,301,317 \$ 23,106,034 \$ 21,38  Market Price by Concept  Concept A: \$ 45,888,777,10 Concept B: \$ 43,649,917,45 Concept C: \$ 30,140,934,28 Concept D: \$ 28,309,65  Market Price by Market Price by Concept  Warket Price by Market Price by Concept  Total Market Price by Multiplier of Agricultural Parcels  \$ 1,127,900 \$ 3,346,500 \$ 7,000,000 \$ 1,486,799 \$ 1,478,123 \$ 1,320,415 \$ 1,	<u>~~</u>	Parcels impacted by Concept		Concept A:		128		Concept B:		140		Concept C:	_	127		Concept D:		104
Market Price of of Exempt Parcels		Market Price of Agricultural Parcels	Ś		Ś		Ś		Ś		Ś	97.009	Ś		Ś	60,262	Ś	107.065
Warket Price of of Exempt Parcels 5 24,100,300 \$ 19,348,600 \$ 7,034,900 \$ 5 6,323,500 \$ 21,788,477 \$ 24,301,317 \$ 23,106,034 \$ 21,388   Market Price by Concept Concept Concept A 5,858,777.10 Concept B 5 43,649,917.45 Concept C 5 30,140,934,28 Concept D 5 28,309,65    Warket Price by Concept Concept C 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	.e €	Market Price of Residential Parcels	Ś	404,300	Š.	1.115.500	Ś	1.115.500	Ś	24.000	Ś	1.143.691	Ś	1.137.018	Ś	1.015.936	Ś	569,260
Market Price by Concept   Concept A: \$ 45,888,777.10   Concept B: \$ 33,649,917.45   Concept C: \$ 30,140,934.28   Concept C: \$ 28,309,655	F P	Market Price of Commercial Parcels	\$		\$	18,233,100	\$		\$		\$	20,547,777	\$		\$			21,309,825
Market Price by Concept   Concept A: \$ 45,888,777.10   Concept B: \$ 33,649,917.45   Concept C: \$ 30,140,934.28   Concept C: \$ 28,309,655	a ke	Market Price of of Exempt Parceis	\$	-	\$		\$	-	\$		\$		\$		\$		\$	
Market Price by Concept   Concept A: \$ 45,888,777.10   Concept B: \$ 33,649,917.45   Concept C: \$ 30,140,934.28   Concept C: \$ 28,309,655	F 4	Total Market Price	\$	24,100,300	\$	19,348,600	\$	7,034,900	\$	6,323,500	\$	21,788,477	\$	24,301,317	\$	23,106,034	\$	21,986,151
Market Price w/ multiplier of Residential Parcels   5   1,212,900   5   3,346,500   5   72,000   5   1,886,799   5   1,478,123   5   1,320,716   5   74	- "	Market Price by Concept		Concept A:	\$	45,888,777.10		Concept B:	\$	43,649,917.45		Concept C:	\$ 3	0,140,934.28		Concept D:	\$ 2	8,309,650.59
Market Price w/ multiplier of Residential Parcels   5   1,212,900   5   3,346,500   5   72,000   5   1,886,799   5   1,478,123   5   1,320,716   5   74	-	Market Price w/ multiplier of Agricultural Parcels	5		5		Ś		(		Ś	97.009	Ś		Ś	60.262	¢	107.065
Total Market Price w/ multipliers \$ 72,300,900 \$ 58,045,800 \$ 21,104,700 \$ 18,970,500 \$ 32,405,473 \$ 36,224,573 \$ 34,425,733 \$ 32,81  Total Cost of ROW by Concept Concept A: \$ 104,706,373 Concept B: \$ 94,270,373 Concept C: \$ 55,530,433 Concept D: \$ 51,782  Acreage of Agricultural Parcels 0.00 0.00 0.00 0.00 2.24 0.00 1.40 1.43  Acreage of Religibilitural Parcels 0.10 0.10 0.00 0.00 0.00 0.00 0.00 0.0	ş ,			1 212 900	Ġ	3 346 500		3 346 500		72 000	Ġ			1 478 123	Š			740.038
Total Market Price w/ multipliers \$ 72,300,900 \$ 58,045,800 \$ 21,104,700 \$ 18,970,500 \$ 32,405,473 \$ 36,224,573 \$ 34,425,733 \$ 32,81  Total Cost of ROW by Concept Concept A: \$ 104,706,373 Concept B: \$ 94,270,373 Concept C: \$ 55,530,433 Concept D: \$ 51,782  Acreage of Agricultural Parcels 0.00 0.00 0.00 0.00 2.24 0.00 1.40 1.43  Acreage of Religibilitural Parcels 0.10 0.10 0.00 0.00 0.00 0.00 0.00 0.0	P of		-		-		_		Ś		Ś				Ś	,. , .		31,964,738
Total Market Price w multipliers \$ 72,300,900 \$ 58,045,800 \$ 21,104,700 \$ 18,970,500 \$ 32,405,473 \$ 36,224,573 \$ 34,425,733 \$ 32,81 Total Cost of ROW by Concept	B 5 8		S	-	Ś	,,	Ś		Ś		Ś		S		Ś	-	Ś	-
Acreage of Agricultural Parcels 0.00 0.00 0.00 0.00 2.24 0.00 1.40 1.43 1.441 1.00 10.79 8.19 5.61 6.56	to to	Total Market Price w/ multipliers	\$	72,300,900	\$	58,045,800	\$	21,104,700	\$	18,970,500	\$	32,405,473	\$	36,224,573	\$	34,425,733	\$	32,811,841
Arreage of Agricultural Parcels 0.00 0.00 0.00 0.00 2.24 0.00 1.40 1.43	Fac	Total Cost of ROW by Concept		Concept A:	\$	104,706,373		Concept B:	\$	94,270,373		Concept C:	\$	55,530,433		Concept D:	\$	51,782,341
Accesse of Residential Parcels 4.60 11.41 1.00 10.29 8.19 5.61 6.56		August of Angleshand Speeds		0.00		0.00				0.00		224		0.00		4.40		4.42
6.56 Acreage of Residential Parcels 4.60 11.41 1.00 10.29 8.19 5.61 6.56	ag		-															
8 2 Acreage of Commercial Parcels 39.46 32.31 19.91 10.62 42.72 44.41 34.85 40.47	ea 🚓		-				$\overline{}$											
	Ac Cre													$\overline{}$				
Acreage of Exempt Parcels 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.	Cel		-											-				
	Par	Total Taken Acres by Concept		Concept A:		99.31		Concept B:		96.32		Concept C:		73.18		Concept D:		60.08

Segment 3 - Right-of-Way Estimating

	General Parcel Data											
		Concept A	Concept B	Concept C	Concept D							
<u> </u>	# of Parcel Impacted	110	91	86	80							
General	Total Acres of Parcels	519.50	448.62	492.09	401.86							
ගී	Acres Impacted	55.21	39.64	35.85	23.59							
5	Agriculural Acres	0.00	0.00	0.00	0.00							
- <del>1</del>	Residential Acres	182.40	133.98	132.07	124.66							
Parcel	Commercial Acres	337.10	314.65	360.01	277.20							
Parcel Classification	Exempt Acres	0.00	0.00	0.00	0.00							
ū	Total Acres	519.50	448.62	492.09	401.86							
_	Impacted Agricultural Acres	0.00	0.00	0.00	0.00							
ted s	Impacted Residential Acres	8.68	2.16	1.74	2.40							
mpacte Acres	Impacted Commercial Acres	46.53	37.47	34.11	21.18							
<u> </u>	Impacted Exempt Acres	0.00	0.00	0.00	0.00							
	Total Acres	55.21	39.64	35.85	23.59							

		able	
	Factors/N	<b>Aultipliers</b>	
Parcel Classification	Impact % for Displacement	Displacement Multiper	Impacted (Partial) Multiplier
Agricultural	50	3.0	1.0
Residential	50	3.0	1.3
Commercial	25	3.0	1.5
Exempt	50	3.0	1.0

Counts (#)						Total POW												
rts (#)						TOTALINOW	Acre	ege and Cost Br	eako	down	7						_	
rts (#)						Parcels D								Parcels I				
rts (#)					_		s - fu	II parcel purchac	ed)		/		rly im	pacted parcels -	_			
its (#)			Ci	oncept A		Concept B	1	Concept C		Concept D		Concept A		Concept B		Concept C		Concept D
₹ £		# of Agricultural Parcels		0		0	17	0		0		0		0		0		0
	3	# of Residential Parcels		0		0		0		0		20		10		10		6
l ä	5	# of Commercial Parcels		5		5		2		3		85		76		74		71
2	:	# of Exempt Parcels		0		0	١.	0		0		0		0		0		0
Parcel	.	Total # Parcels		5		5		2		3		105		86		84		77
ä	:	Parcels impacted by Concept		Concept A:		110	<u> </u>	Concept B:		91	_	Concept C:	4	86		Concept D:		80
		Market Price of Agricultural Parcels	s		S		Š		s		s	-	S		s	-	s	
8 :	(\$)	Market Price of Residential Parcels	Š		S		Ś		Ś		Ś	545,894	Ś	181.957	Ś	141.285	Ś	109,357
Œ.	sis	Market Price of Commercial Parcels	s	2,606,400	S	1,469,100	Ś	423,500	Ś	705,600	Ś	11,087,373	Ś	5,614,532	Ś	9,042,190	Ś	7,648,623
e e	ž	Market Price of of Exempt Parcels	s		5		Ś		s	-	s .		s	-	s		s	-
Market Price	Ę.	Total Market Price	\$	2,606,400	\$	1,469,100	\$	423,500	\$	705,600	\$	11,633,267	\$	5,796,489	\$	9,183,475	\$	7,757,980
_	°	Market Price by Concept	\ \ \	Concept A:	\$ 1	4,239,667.24		Concept B:	Ś	7.265.588.94		Concept C:	Ś	9.606.974.97	- 4	Concept D:	Ś	8.463.579.93
						,,.				7 11,111				.,,				,,
ŧ		Market Price w/ multiplier of Agricultural Parcels	\$	-	\$	- /	\$	-	\$	-	\$		\$		\$		\$	-
声	\$	Market Price w/ multiplier of Residential Parcels	\$	-	\$		Ş	-	\$	-	\$	709,662	\$	236,544	\$	183,671	\$	142,164
ored Ma	rcels(\$)	Market Price w/ multiplier of Commercial Parcels	\$	7,819,200	\$	4,407,300	\$	1,270,500	\$	2,116,800	\$	16,631,060	\$	8,421,798	\$	13,563,285	\$	11,472,934
Pri-		Market Price w/ multiplier of of Exempt Parcels	\$	-	\$	-	\$	-	\$		\$	•	\$	-	\$		\$	
Factored Market	, <u>a</u>	Total Market Price w/ multipliers	\$	7,819,200	_	4,407,300	\$	1,270,500	_	-,,	\$	17,340,722	\$	8,658,342	ş	13,746,955	ş	11,615,098
iii.	ш	Total Cost of ROW by Concept		Concept A:	\$	25,159,922		Concept B:	\$	13,065,642		Concept C:	\$	15,017,455		Concept D:	Ş	13,731,898
OV.		Acreage of Agricultural Parcels		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00
age		Acreage of Residential Parcels		0.00		0.00		0.00		0.00		8.68		2.16		1.74		2.40
Acreage	es)	Acreage of Commercial Parcels		17.71		25.72		10.92		3.37		35.05		23.12		24.41		20.14
	acr	Acreage of Exempt Parcels		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00
Parcel	۳	Total Acres		17.71		25.72		10.92		3.37		43.72		25.28		26.15		22.54
20		Total Taken Acres by Concept		Concept A:		61.43	V	Concept B:		51.00		Concept C:		37.07		Concept D:		25.91

# Segment 4 - Right-of-Way Estimating

		General Parcel Data			
		Concept A	Concept B	Concept C	Concept D
ral	# of Parcel Impacted	97	92	95	82
General	Total Acres of Parcels	1018.83	1099.54	1071.41	1034.02
Ğ	Acres Impacted	111.31	84.95	75.84	58.65
<u> </u>	Agriculural Acres	161.69	161.69	161.85	161.69
Parcel Classification	Residential Acres	231.92	312.95	283.42	249.52
Paro	Commercial Acres	620.55	620.23	621.45	618.13
ass	Exempt Acres	4.68	4.68	4.68	4.68
ū	Total Acres	1018.83	1099.54	1071.41	1034.02
	Impacted Agricultural Acres	10.20	7.81	9.57	7.78
, e					
es s	Impacted Residential Acres	23.82	16.09	15.58	11.25
impacte Acres	Impacted Commercial Acres	74.52	58.16	47.57	36.62
₹ ~	Impacted Exempt Acres	2.78	2.88	3.11	3.01
	Total Acres	111.31	84.95	75.84	58.65

	Edit	able	
	Factors/N	/lultipliers	
Parcel Classification	Impact % for Displacement	Displacement Multiper	Impacted (Partial) Multiplier
Agricultural	50	3.0	1.0
Residential	50	3.0	1.3
Commercial	25	3.0	1.5
Exempt	50	3.0	1.0

									_						4			
						Total ROW	Acr	rege and Cost Br	eak	down								
				(gr	eatly	Parcels E impacted parcel		laced ull parcel purchac	ed)			(mino	rly in	Parcels I npacted parcels -			hacer	1)
				Concept A	-	Concept B		Concept C		Concept D		Concept A		Concept B	1	Concept C		Concept D
Г	#	# of Agricultural Parcels		0		0		1		0		4		4		4		4
	Counts (#)	# of Residential Parcels		5		3		1		1		38		35		38		26
	ĕ	# of Commercial Parcels		19		17		14		13		29		31		35		36
		# of Exempt Parcels		2		2		2		2		0		0		0		0
	Parcel	Total # Parcels		26		22		18		16		71		70		77		66
	Ä	Parcels impacted by Concept		Concept A:		97	1	Concept B:		92		Concept C:	4	95		Concept D:		82
		Market Price of Agricultural Parcels	Ś		ė		c		Ś		e/	698,395	ć	575,451	ć	627.709	ć	553,648
	(\$)	Market Price of Residential Parcels	Ś	432.000	5	338,300	Ś	157.600	Ś	157.600	S	1,321,226	Ś	, -	Ś.	1,013,412	-	765,647
	Pris Is	Market Price of Commercial Parcels	Ś	11.247.500	5	8,890,100	Ś	5.266.100		3,437,400	Ġ	7,104,242	Ś	,	Ś	7,004,741		6,057,819
	rce te	Market Price of of Exempt Parcels	Ś	30,200	Ś	.,,	Ś	30.200	_	30,200	Ś		Ś	- ,034,232	Ś	-	Ś	-
	Market Price of Parcels (\$)	Total Market Price	Ś	11,709,700	Ś	9,258,600	Ś	5,453,900	Ś	3.625.200	Ś	9,123,863	Ś	8,558,885	Ś	8.645.862	Ś	7.377.114
		Market Price by Concept	Ť	Concept A:	_	20,833,563.30	Ė		_	17,817,484.62		Concept C:	_	14,099,762.05		Concept D:	ŝ	11,002,314.45
	_/					.,,				, , , , ,								
ļ	(\$) et	Market Price w/ multiplier of Agricultural Parcels	\$		\$		\$	-	\$	-	\$	698,395	\$	575,451		627,709	-	553,648
	Market rcels(\$)	Market Price w/ multiplier of Residential Parcels	\$	1,296,000		1,014,900	\$	,	\$	,	\$	1,717,594	\$	1,207,964		1,317,435	-	995,342
4	a Z	Market Price w/ multiplier of Commercial Parcels	\$	33,742,500		26,670,300	\$	-,,	\$	10,312,200	\$	10,656,363	\$	10,581,346	\$	10,507,112		9,086,728
	of	Market Price w/ multiplier of of Exempt Parcels	\$	90,600	-	,	\$	90,600	-	,	\$		\$	· ·	\$	-	\$	-
	Factored Market Price of Parcels(\$)	Total Market Price w/ multipliers	\$	35,129,100	_	27,775,800	\$	16,361,700	_	10,875,600	\$	13,072,352		12,364,761	\$	12,452,256	_	10,635,718
Н	<u> </u>	Total Cost of ROW by Concept		Concept A:	Ş	48,201,452	_	Concept B:	Ş	40,140,561		Concept C:	\$	28,813,956		Concept D:	\$	21,511,318
Į.		Acreage of Agricultural Parcels		0.00		0.00		0.17		0.00		10.20		7.81		9.40		7.78
	age	Acreage of Residential Parcels		4.88		6.52		1.21		1.21		19.88		12.40		14.74		10.50
	es)	Acreage of Commercial Parcels		85.68		34.70		28.28		21.05		36.39		42.92		35.66		28.40
	el A	Acreage of Exempt Parcels		4.68		4.68		4.68		4.68		0.00		0.00		0.00		0.00
T)	Parcel Acreage (acres)	Total Acres		95.24		45.90	7	34.34		26.94		66.47		63.13		59.81		46.67
T	_	Total Taken Acres by Concept		Concept A:		161.70		Concept B:		109.03		Concept C:		94.15		Concept D:		73.62

# Segment 5 - Right-of-Way Estimating

		General Pa	rcel Data			
		Concept A	Concept B	Concept C	Concept D	Concept E
ral	# of Parcel Impacted	155	128	114	68	64
aue	Total Acres of Parcels	658.28	540.44	568.51	418.80	397.66
ge Ge	Acres Impacted	65.60	46.90	50.81	28.91	22.89
5	Agriculural Acres	11.32	11.32	11.32	11.32	11.32
ati.	Residential Acres	184.64	152.56	130.79	82.25	85.49
Parce l ssification	Commercial Acres	461.12	376.55	425.20	325.22	300.85
Pa	Exempt Acres	1.20	0.00	1.20	0.00	0.00
כו	Total Acres	658.28	540.44	568.51	418.80	397.66
		2.31	1.99	2.22	2.26	2.12
-	Impacted Agricultural Acres					
es es	Impacted Residential Acres	19.37	13.94	13.81	6.22	1.83
impacted Acres	Impacted Commercial Acres	43.33	30.98	34.27	20.43	18.93
Ē	Impacted Exempt Acres	0.60	0.00	0.51	0.00	0.00
	Total Acres	65.60	46.90	50.81	28.91	22.89
	Ĭ					

			ubic	
		Factors/N	/lultipliers	``
1	Parcel Classification	Impact % for Displacement	Displacement Multiper	Impacted (Partial) Multiplier
	Agricultural	50	3.0	1.0
	Residential	50	3.0	1.3
П	Commercial	30	3.0	1.5
	Exempt	50	3.0	1.0

							Total POW	Ace	ege and Cost Br	aakde	OWO.	-		_							
					(greatly impa		cels Displaced	1		eakut	JWII			7	parcels		cels Impacted	chaci	ed)		
			Concept A		Concept B		Concept C		Concept D		Concept E		Concept A		Concept B		Concept C		Concept D		Concept E
	# of Agricultural Parcels		0		0		0		0		0		1		1		1		1		1
= \$1	# of Residential Parcels		7		7		9		7		1		73		54		39		14		16
ತ	# of Commercial Parcels		23		19		18		9		6		50		47		46		37		40
8	# of Exempt Parcels		0		0		0		0		0		1		0		1		0		0
ar	Total # Parcels		30		26		27	_ \	16		7	- 4	125		102		87		52		57
	Parcels Impacted by Concept		Concept A:		155		Concept B:		128		Concept C:	/	114		Concept D:		68	<u> </u>	Concept E:		64
	Market Price of Agricultural Parcels	S 1		Ś		S		Ś		Ś		Ś	55,649	Ś	47.965	Ś	53,537	Ś	54,466	Ś	51,207
;ce	Market Price of Residential Parcels	Ś	834,600	Ś	686,900	s	851.800	Ś	862,400	Ś	124,100	s	4.020.868	Ś	1.978.437	Ś	1.036.010	Ś	178,405	Ś	121,267
도함	Market Price of Commercial Parcels	s	15,727,700	Ś	11.808.100	Ś	8,296,500	Ś	2,051,800	s	1,366,200	Ś	9,465,576	Ś	9,458,486	Ś	11,184,945	Ś	8,599,823	s	8.843.567
ket	Market Price of of Exempt Parcels	\$	-	\$		\$	-	\$		\$	-	\$	-	\$		\$	-	\$	-	\$	-
of Br	Total Market Price	\$	16,562,300	\$	12,495,000	\$	9,148,300	\$	2,914,200	\$	1,490,300	\$	13,542,093	\$	11,484,888	\$	12,274,492	\$	8,832,693	\$	9,016,041
_ 0	Market Price by Concept		Concept A:	\$	30,104,392.73		Concept B:	\$	23,979,887.59		Concept C:	\$ 2	21,422,791.74		Concept D:	\$ :	11,746,893.14		Concept E:	\$ 1	10,506,341.11
44	Market Price w/ multiplier of Agricultural Parcels	\$		S		c		<del>,</del>		c		S	55,649	c	47,965	•	53.537	•	54,466		51,207
arket f S)	Market Price w/ multiplier of Residential Parcels	\$	2.503.800	Ś	2.060.700	¢	2.555.400	ć	2,587,200	2	372,300	٠	5,227,128				1,346,813		231,926		157,647
of of	Market Price w/ multiplier of Commercial Parcels	\$	47.183.100	Ś	35.424.300		24.889.500	ċ	6,155,400	-	4,098,600	٠	14,198,363	c	14,187,728		16,777,418	Ś	12.899.734		13,265,350
ed I	Market Price w/ multiplier of of Exempt Parcels	5		Ś	, ,	S	24,889,300	Ś	0,133,400	9	4,038,000	Ġ	14,150,303	5	14,107,720	S	10,777,410	Ś	12,033,734	Ś	13,203,330
	Total Market Price w/ multipliers	S	49,686,900	Ś	37,485,000	S	27,444,900	Ś	8,742,600	s	4,470,900	S	19,481,141	S	16,807,662	-	18,177,767	S	13,186,126	S	13,474,205
Fac	Total Cost of ROW by Concept	Ť	Concept A:	Ś	69,168,041	Ť	Concept B:	Ś	54,292,662	_	Concept C:	Ś	45,622,667	Ť	Concept D:		21,928,726	Ť		\$ :	17,945,104.73
				Ė				Ė													
92	Acreage of Agricultural Parcels		0.00		0.00		0.00		0.00		0.00		2.31		1.99		2.22		2.26		2.12
Acrea gres)	Acreage of Residential Parcels		4.84		6.03		7.77		5.37		0.11		16.09		8.56		8.15		2.00		1.75
Act	Acreage of Commercial Parcels		32.35		25.07		21.87		5.90		4.25		24.67		18.13		23.56		16.03		15.78
e e	Acreage of Exempt Parcels	<u> </u>	0.00		0.00	1	0.00		0.00		0.00		0.60		0.00	_	0.51	-	0.00	_	0.00
Par	Total Acres		37.19		31.11		29.63		11.27		4.37		43.66		28.67	_	34.44		20.28	_	19.65
	Total Taken Acres by Concept		Concept A:		80.85		Concept B:		59.78		Concept C:		64.07		Concept D:		31.55		Concept E:		24.02

# Segment 6 - Right-of-Way Estimating

		General Parcel Data			
		Concept A	Concept B	Concept C	Concept D
ral	# of Parcel Impacted	144	141	77	66
General	Total Acres of Parcels	1234.14	987.33	591.71	518.09
ğ	Acres Impacted	145.10	91.29	29.85	22.27
5	Agriculural Acres	549.82	293.93	268.84	236.02
ati =	Residential Acres	277.49	287.69	121.83	115.76
Parce I sificat	Commercial Acres	406.83	405.72	201.04	166.31
Parcel Classification	Exempt Acres	0.00	0.00	0.00	0.00
ฮ	Total Acres	1234.14	987.33	591.71	518.09
	Impacted Agricultural Acres	28.01	7.10	7.06	2.25
s ed	Impacted Residential Acres	65.85	45.10	9.99	10.13
Impacted Acres	Impacted Commercial Acres	51.23	39.09	12.79	9.90
Ē	Impacted Exempt Acres	0.00	0.00	0.00	0.00
	Total Acres	145.10	91.29	29.85	22.27

	Edit	able	
	Factors/N	Aultipliers	
Parcel Classification	Impact % for Displacement	Displacement Multiper	Impacted (Partial) Multiplier
Agricultural	50	3.0	1.0
Residential	50	3.0	1.3
Commercial	25	3.0	1.5
Exempt	50	3.0	1.0

						Total ROW	Acr	eage and Cost Bi	real	kdown							,	/
				(gr	eatly	Parcels D impacted parcel		aced ull parcel purchac	ed)			(mino	rly ir	Parcels I npacted parcels -			nace	3)
				Concept A		Concept B		Concept C		Concept D		Concept A		Concept B		Concept C		Concept D
	(#)	# of Agricultural Parcels		0		0		0		0		8		5	A	4		3
	12	# of Residential Parcels		13		8		2		2		66		73		33		30
	Counts	# of Commercial Parcels		24		17		3		2		33		38		35		29
1	2	# of Exempt Parcels		0		0		0		0		0		0		0		0
	Parcel	Total # Parcels		37		25		5		4		107		116		72		62
1	2	Parcels impacted by Concept		Concept A:		144		Concept B:		141		Concept C:		77		Concept D:		66
		Market Price of Agricultural Parcels		$\overline{}$	Ś		Š		ć		Ś	227,532	À	66.157	^	66.533	4	19.201
۰	æ	0	,		>	· · · · ·	3		>		>							-, -
∺	(\$) slao.	Market Price of Residential Parcels	\$	6,653,100	5	5,023,200	2	1,472,500	\$	3,858,200	5	2,701,633	\$	2,930,550		815,987		608,094
1 =	-S	Market Price of Commercial Parcels	\$	8,826,800	5	5,587,500	\$	1,397,700	\$	401,000	5	1,799,155	\$	2,277,172		358,546	\$	895,446
Market	Par	Market Price of of Exempt Parcels	\$		>	-	\$		\$		\$		\$		\$		\$	
ĮΣ̈́	ð	Total Market Price	\$	15,479,900	\$	10,610,700	\$	2,870,200	<u> </u>	4,259,200	\$	4,728,320	\$	5,273,879	\$	1,241,065	\$	1,522,741
		Market Price by Concept		Concept A:	Ş.	20,208,219.78		Concept B:	\$	15,884,579.11		Concept C:	Ş	4,111,265.07		Concept D:	\$	5,781,941.33
+		Market Price w/ multiplier of Agricultural Parcels	\$		\$	-	\$		\$		\$	227,532	\$	66,157	\$	66,533	\$	19,201
[홑.		Market Price w/ multiplier of Residential Parcels	\$	19,959,300	\$	15,069,600	\$	4,417,500	\$	11,574,600	\$	3,512,123	\$	3,809,715	\$	1,060,783	\$	790,523
Σ̈́	10 s	Market Price w/ multiplier of Commercial Parcels	\$	26,480,400	\$	16,762,500	\$	4,193,100	\$	1,203,000	\$	2,698,732	\$	3,415,758	\$	537,819	\$	1,343,168
tored Market	arcels(\$	Market Price w/ multiplier of Agricultural Parcels Market Price w/ multiplier of Commercial Parcels Market Price w/ multiplier of Commercial Parcels Market Price w/ multiplier of of Exempt Parcels	\$	-	\$	- ·	\$		\$		\$		\$		\$		\$	-
ַ בַּן		Total Market Price w/ multipliers	\$	46,439,700	\$	31,832,100	\$	8,610,600	\$	12,777,600	\$	6,438,387	\$	7,291,630	\$	1,665,134	\$	2,152,892
Fac		Total Cost of ROW by Concept		Concept A:	\$	52,878,087		Concept B:	\$	39,123,730		Concept C:	\$	10,275,734		Concept D:	\$	14,930,492
-		Acreage of Agricultural Parcels		0.00		0.00		0.00		0.00		28.01		7.10		7.06		2.25
age	7	Acreage of Residential Parcels		37.47		11.92		4.42		1.37		36.66		35.54		6.26		9.15
cre	es)	Acreage of Commercial Parcels		74.02		41.44		20.52		1.65		17.03		22.39		4.52		9.10
\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \	acr	Acreage of Exempt Parcels		0.00		0.00		0.00		0.00		0.00		0.00		0.00		0.00
Parcel Acreage	_	Total Acres		111.49		53.36		24.94		3.03		81.69		65.03		17.84		20.49
20		Total Taken Acres by Concept		Concept A:		193.19		Concept B:		118.39		Concept C:		42.78		Concept D:		23.52

# Segment 7 Right-of-Way Estimating

		General Parcel Data			
		Concept A	Concept B	Concept C	Concept D
ral	# of Parcel Impacted	40	27	25	9
General	Total Acres of Parcels	2262.09	3101.08	3204.24	1849.81
ge	Acres Impacted	23.27	17.19	16.19	4.05
			001.00	****	
- E	Agriculural Acres	562.03	321.05	406.35	56.07
ati a	Residential Acres	85.09	42.65	14.49	0.00
Parcel sificat	Commercial Acres	25.24	1121.97	1137.61	1.13
Parcel Classification	Exempt Acres	1589.74	1615.41	1645.79	1792.61
ฮ	Total Acres	2262.09	3101.08	3204.24	1849.81
	Impacted Agricultural Acres	13.71	3.70	3.78	0.21
s ed	Impacted Residential Acres	4.53	5.95	5.25	0.00
impacted Acres	Impacted Commercial Acres	0.88	0.94	0.45	0.02
Ē	Impacted Exempt Acres	4.15	6.60	6.70	3.83
	Total Acres	23.27	17.19	16.19	4.05

Factors/Multipliers												
Parcel Classification	Take %	Take Multiper	"Partial Take" Multiplier									
Agricultural	50	3.0	1.0									
Residential	50	3.0	1.3									
Commercial	25	3.0	1.5									
Exempt	50	3.0	1.0									

						Total ROW	Acr	rege and Cost Bro	eak	down					7		_	/
			Parcels "Taken" (greatly impacted parcels - full parcel purchaced)					Parcels "Partfally Taken" (minorly impacted parcels - full parcel NOT purchaced)										
				Concept A		Concept B		Concept C	$\overline{}$	Concept D		Concept A		Concept B	- 4	Concept C		Concept D
	#	# of Agricultural Parcels		0		0		0		0		10		6	A	6		2
		# of Residential Parcels		3		2		2		0		19		11		7		0
	Counts	# of Commercial Parcels		0		1		0		0		5		4		7		1
	<u>o</u>	# of Exempt Parcels		0		1		1		0		3		2		2		6
	arcel	Total # Parcels		3		4		3		0		37	<u> </u>	23		22		9
	Pa	Parcels impacted by Concept		Concept A:		40	Λ	Concept B:		27		Concept C:		25		Concept D:		9
		Market Price of Agricultural Parcels	Ś		Ś		ς		¢		Ś	147,111	\$	26,740	Ś	32,404	Ś	1,329
1 :	(S)	Market Price of Residential Parcels	Š	122,700	Š	101.800	Š	101.800	Ġ		Ś	116.353	Ś		Ś	84.811		2,525
1 3	<u>s</u>	Market Price of Commercial Parcels	Ś	112,700	5	11.800	Ś	101,000	Ġ		9	53,975	Ś		Ś	16,464	Ġ	2,855
1 3	, E	Market Price of of Exempt Parcels	Ś	-	\$		Ś		Ś		Ś	4	Ś	-,	5.4	-	Ś	-,
13	of Parcels (\$)	Total Market Price + acquisition	5	152,700	Ś	153,600	Ś	131.800	Ś		Ś	687,439	Ś	370,383	Ś	353,679	Ś	94.184
'		Market Price by Concept		Concept A:	\$	840,138.99	Ė	Concept B:	\$	523,983.03	Ė	Concept C:	\$	485,479.50		Concept D:	\$	94,184.01
							_		Ť									
ē		Market Price w/ multiplier of Agricultural Parcels	\$		\$		\$		\$	-	Ş	147,111		26,740	_	32,404		1,329
호	₽ ®	Market Price w/ multiplier of Residential Parcels	\$	368,100	\$	305,400	\$	305,400	\$	-	\$	151,259	\$	139,291		110,255	_	-
F	e s	Market Price w/ multiplier of Commercial Parcels  Market Price w/ multiplier of of Exempt Parcels	\$		\$	35,400	\$	-	\$	-	\$	80,962	\$	9,744	\$	24,696	\$	4,283
ctored Market	Pri	Total Market Price w/ multiplier of of Exempt Parcels  Total Market Price w/ multipliers & acquisition	\$	398,100	\$	380.800	Ś	335,400	\$		\$	749,332	\$	405.775	\$	387,355	7	95,612
act		Total Cost of ROW by Concept	,	Concept A:	\$	1.147.432.34	•	Concept B:	\$	786.575.01	>	Concept C:	>	722,754,98	>	Concept D:	_	95,611,54
		Total cost of NOW by Concept		Concept A.	7	1,147,432.34		Concept B.	7	780,575.01		Concept C.	7	122,734.38		Concept D.	•	55,611.54
Γ,		Acreage of Agricultural Parcels		0.00		0.00		0.00		0.00		13.71		3.70		3.78		0.21
	80	Acreage of Residential Parcels		2.97		5.26		5.26		0.00		1.88		2.21		1.51		0.00
	Acreage cres)	Acreage of Commercial Parcels		0.00		0.68		0.00		0.00		0.88		0.26		0.45		0.02
	(ac.	Acreage of Exempt Parcels		0.00		10.35		10.35		0.00		4.15		0.44		0.58		3.83
Parcel	2 2	Total Acres		2.97		16.29		15.61		0.00		20.63		6.60		6.33		4.05
	•	Total Taken Acres by Concept		Concept A:		23.59	Z	Concept B:		22.89		Concept C:		21.94		Concept D:		4.05