Military Highway	RESIDENTIAL   SECTION 4F
Partial clover (two opposite quadrants) without connection to IRT access road & keep WB-1264 directional ramp open   \$151.2	8 Y  8 Y  10 N  4 N  0 N  0 N
Partial clover (two opposite quadrants) without connection to IRT access road & keep WB-1264 directional ramp open   \$151.2	8 Y  8 Y  10 N  4 N  0 N  0 N
BH01-03   III.5   directional ramp open   S151.2   Y   1	8 Y 10 N 4 N 0 N 0 N
Partial clover (two opposite quadrants) without connection to LRT access road & keep WB & EB	8 Y 10 N 4 N 0 N 0 N
BH01-04	10 N N N N N N N N N N N N N N N N N N N
BH01-04   III.6   264 directional ramp open   \$152.6   \$152.6   Y   1   1   1   1   1   1   1   1   1	10 N N N N N N N N N N N N N N N N N N N
BH02-05   IV.5   semi-directional   \$390.2   Y   0	4 N 0 N 0 N 0 N
BH02-05   IV.5   semi-directional   \$390.2   Y   0	4 N 0 N 0 N 0 N
Revised D2, D4, D5, D9 & D11 ramps with D7 improvements with braided D4 & D6 ramps & D4 ramp moved to 1-264 EB CD, removal of ramp D6 & shown added auxillary ramp lane on BH02-06   IV.6   IV.6   IV.6   IV.6   EB and I-64 WB   \$383.9   \$383.9   Y   O      I-64 from Curlew Drive to Bridge over Eastern Branch Elizabeth River   BH02A   IV.7   interchange   EB ramp acceleration lane transitions from I-64   \$83.0   \$83.0   Y   O      IV.7   interchange   S83.0   Y   O     IV.7   interchange   S83.0   Y   O     IV.7   interchange   S83.0   Y   O     IV.8   IV.9   interchange   S83.0   Y   O     IV.9   IV.9   interchange   S83.0   Y   O     IV.9   IV.	4 N 0 N 0 N 0 N
D4 ramp moved to I-264 EB CD, removal of ramp D6 & shown added auxillary ramp lane on BH02-06   IV.6   I-64 EB and I-64 WB   \$383.9   \$383.9   Y   0    -64 from Curlew Drive to Bridge over Eastern Branch Elizabeth River   BH02A   IV.7   Interchange   \$83.0   \$83.0   Y   0	0 N 0 N 0 N
Famp D6 & shown added auxillary ramp lane on   Sasa.9	0 N 0 N 0 N
BH02-06	0 N 0 N 0 N
Bridge over Eastern   BH02A   IV.7   EB ramp acceleration lane transitions from I-64   interchange   \$83.0   \$83.0   Y   0	0 N 0 N
Branch Elizabeth River	0 N 0 N
Newtown Road         BH03         V.4         relocated I-264 WB on ramp with D7 improvements         \$203.9         N         4           Newtown Road         BH03-02         V.5         relocated I-264 WB on ramp with split off-ramp         \$229.6         \$229.6         N         4           Witchduck Road         BH04         VI.4         Witchduck & Southern Blvd improvements         \$361.4         \$361.4         N         2	0 N 0 N
Newtown Road         BH03         V.4         improvements         \$203.9         N         4           Newtown Road         BH03-02         V.5         relocated I-264 WB on ramp with split off-ramp         \$229.6         \$229.6         N         4           Witchduck Road         BH04         VI.4         Witchduck & Southern Blvd improvements         \$361.4         \$361.4         N         2	0 N
Newtown Road         BH03-02         V.5         relocated I-264 WB on ramp with split off-ramp         \$229.6         \$229.6         N         4           Witchduck Road         BH04         VI.4         Witchduck & Southern Blvd improvements         \$361.4         \$361.4         N         2	0 N
Witchduck Road BH04 VI.4 Witchduck & Southern Blvd improvements \$361.4 \$361.4 N 2	
Witchduck Road BH04 VI.4 Witchduck & Southern Blvd improvements \$361.4 \$361.4 N 2	
	O N
0	U IN
flyover ramp/ 2 lane I-264EB exit ramp to SB Independence/ Ramp to Bonney Road/ Triple	
Left turns from Bonney Road - FATAL FLAW 10-	
Independence Blvd         BH05-01         VII.4         15-2015         \$444.7         Y         14	0 N
partial clover with dual NB Independence/ I-264	
WB/ EB braided flyover ramp (avoids church	0 N
partial clover with "broken back curve" NB	
Independence/ I-264 WB flyover ramp &	
Bonney Road exit ramp with Baxter Rd. loop	0 N
Independence to improvements included with Independence	
Rosemont         BH05A         VII.7         Blvd alternatives         \$276.8         Y         1	0 N
split interchange with South Plaza and added	
Rosemont Road         BH06         VIII.4         Sentara Way overpass & It turns onto rosemont         \$475.0         N         7	10 N
offset single point urban diamond (SPUI) with	24
BH06-03 VIII.5 Sentara Way overpass \$548.3 N 9 tight diverging diamond with Sentara Way	24 N
BH06-04 VIII.6 overpass \$459.1 \$459.1 N 7	10 N
Rosemont to Lynnhaven BH07 VIII.7 improvements by others at Lynnhaven cost not included N 1	0 N
Lynnhaven Parkway/ Lynnhaven Parkway improvements shown with	
London Bridge Road         BH09         IX.4         existing London Bridge Road         cost not included         Y         4	1 N
Laskin Road     BH10     X.4     existing conditions     \$0.0     NO improvements     0	0 N
Leakin road Dilad A.4 Calating conditions 30.0 NO improvements 0	U N
First Colonial Road BH11-01 XI.4 single point urban interchange (SPUI) \$75.2 \$75.2 N 0	0 N
BH11-02 XI.5 tight diamond \$66.3 N 0	0 N
Birdneck Road BH12 XII.4 exit ramp mods for arena (by others) cost not included y 1	0 Y
22 7 Section model by charge to be seen by the section of t	, i
Parks Avenue   BH13   XII.4   existing conditions   \$0.0   NO improvements   0	0 N

\* ESTIMATES DO NOT INCLUDE COSTS FOR:

2015 Est. Const. Cost\* Total for \$2,4

Corridor

Managed Lane Tolling Design, Construction or Operational Costs

Complete Removal of Existing I-264 thru lanes

Major grade increase over S. Plaza Drive

Inflation / Escalation

- I-264 Mainline Improvements East of Rosemont Ramps
- I-264 Mainline Improvements West of Military Highway Ramps

Extended Repairs or Maintenance

Widening of I-64 Bridge over Eastern Branch of Elizabeth River

- I-64 Mainline Improvements South of Bridge over Eastern Branch of Elizabeth River
- I-64 Mainline Improvements North of I-264 Interchange

Programmed I-264 Interchange improvements (by others)

	Υ	14	0	N
\$465.6	Y	12	0	N
	Y	17	0	N
\$276.8	Y	1	0	N
	N	7	10	N
	N	9	24	N
\$459.1	N	7	10	N
	N	1	0	N
	Y	4	1	N
		0	0	N
	NO improvements		•	.,
	NO improvements			
\$75.2	N	0	0	N N
\$75.2	N N	0	0	N
\$75.2	N	0	0 0	N N Y
\$75.2	N N	0	0	N
	N N Y Y NO improvements	0 0	0	N Y
187,200,000	N N Y Y NO improvements	0 0	0	N Y
	N N Y Y NO improvements	0 0	0	N Y
187,200,000	N N Y Y NO improvements	0 0	0	N Y
187,200,000	N N Y Y NO improvements	0 0	0	N Y
187,200,000	N N Y Y NO improvements	0 0	0	N Y
187,200,000	N N Y Y NO improvements	0 0	0	N Y
187,200,000	N N Y Y NO improvements	0 0	0	N Y
187,200,000	N N Y Y NO improvements	0 0	0	N Y
187,200,000	N N Y Y NO improvements	0 0	0	N Y

## I-264 & Military Hwy Interchange (DGN BH01-01) Fig. No. III.4

### **Site Characteristics**

## **Preliminary - NOT for construction**

Existing Roadway Area SY
Existing Roadway Area To Be Removed 24,151 SY
Proposed New Roadway Construction Area 5,745 SY

Existing Bridge Area 82,190 SF
Existing Bridge Area To Be Removed 82,190 SF
Proposed New Bridge Construction Area 86,936 SF

### **2015 Construction Estimate**

				Item	
Item Description	Quantity	Unit	Unit Cost	Cost	Comments
Daywood Daywood	24454	CV.	¢20	6402.020	Charac
Pavement Removal	24,151	SY	\$20 \$25	\$483,020	Shapes
Asphalt Concrete Overlay	11,516	SY	\$250 \$250	\$287,900	Chance
Full Depth Asphalt Concrete Pavement Curb and Gutter Removal	5,745	SY		\$1,436,250	Shapes
	2,340	LF	\$15	\$35,100	
Curb and Gutter	2,340	LF	\$35	\$81,900	
Retaining Wall	37,320	SF	\$150	\$5,598,000	
Sound Wall	2,173	LF	\$220	\$478,060	
Sidewalk	0	SY	\$65	\$0 \$7.350	
Barrier Wall Removal	290	LF	\$25	\$7,250	
Barrier Wall	1,700	LF	\$80	\$136,000	
Guardrail Removal	6,240	LF	\$10	\$62,400	
Guardrail	3,000	LF	\$35	\$105,000	
Overhead Truss Removal	4	EA	\$20,000	\$80,000	
Overhead Truss	4	EA	\$300,000	\$1,200,000	
Lighting Removal	1	LS	\$300,000	\$300,000	
Lighting	1	LS	\$750,000	\$750,000	
Traffic Signal	2	EA	\$300,000	\$600,000	
ITS/ TMS	1	LS	\$400,000	\$400,000	
Temporary Traffic Control	1	LS	\$1,000,000	\$1,000,000	
Erosion and Sediment Control	1	LS	\$500,000	\$500,000	
Minor Drainage Structures	1	LS	\$500,000	\$500,000	
Major Drainage Structures	1	LS	\$750,000	\$750,000	
Borrow Excavation	9,575	CY	\$30	\$287,250	5 X(5745*9) / 27
Stormwater Management	1	LS	\$500,000	\$500,000	
Signing/ Markings	1	LS	\$750,000	\$750,000	
Bridge Removal	82,190	SF	\$35	\$2,876,650	
Bridge	86,936	SF	\$300	\$26,080,800	
-0-1	,		Subtotal	\$45,285,580	
LIMITE - Palacation	ا، م			¢0 000 000	
Utility Relocation	0.4	Mi	\$20,000,000	\$8,000,000	
RW Acquistion	0.0	Ac	\$5,000,000	\$0	
Geotech Improvements	2,873	SY	\$1,100	\$3,159,750	F0/
Permitting Fees/Wetland Mitigation	1	LS	\$2,264,279.00	\$2,264,279	5%
Design & Surveying	1	LS	\$4,528,558.00	\$4,528,558	10%
Public Involvement	1	LS	\$45,285.58	\$45,286	0.10%
IMR Study Reports	1	LS	\$135,856.74	\$135,857	0.30%
Aesthetic Design Features/Landscaping	1	LS	\$90,571.16	\$90,571	0.20%
MOA Agreements	1	LS	\$452,855.80	\$452,856	1%
Archeaological Mitigation	1	LS	\$181,142.32	\$181,142	0.40%
Hazmat Remediation	1	LS	\$135,856.74	\$135,857	0.30%
Contingency	1	LS	\$18,114,232.00	\$18,114,232	40%

2015 Construction Estimate Total\* \$82,393,967

<sup>\*</sup> ESTIMATE DOES NOT INCLUDE COSTS FOR:

## I-264 & Military Hwy Interchange (DGN BH01-03) Fig. No. III.5

### **Site Characteristics**

# **Preliminary - NOT for construction**

Existing Roadway Area SY
Existing Roadway Area To Be Removed 24,730 SY
Proposed New Roadway Construction Area 28,038 SY

Existing Bridge Area 93,172 SF
Existing Bridge Area To Be Removed 93,172 SF
Proposed New Bridge Construction Area 100,000 SF

### **2015 Construction Estimate**

				Item	
Item Description	Quantity	Unit	Unit Cost	Cost	Comments
Pavement Removal	24,730	SY	\$20	\$494,600	Shapes
Asphalt Concrete Overlay	24,118	SY	\$25	\$602,950	
Full Depth Asphalt Concrete Pavement	28,038	SY	\$250	\$7,009,500	Shapes
Curb and Gutter Removal	4,240	LF	\$15	\$63,600	2L
Curb and Gutter	4,240	LF	\$35	\$148,400	2L
Retaining Wall	37,320	SF	\$150	\$5,598,000	2488 X 15'
Sound Wall	4,104	LF	\$220	\$902,880	
Sidewalk	0	SY	\$65	\$0	
Barrier Wall Removal	290	LF	\$25	\$7,250	
Barrier Wall	290	LF	\$80	\$23,200	
Guardrail Removal	8,000	LF	\$10	\$80,000	
Guardrail	3,000	LF	\$35	\$105,000	
Overhead Truss Removal	4	EA	\$20,000	\$80,000	
Overhead Truss	4	EA	\$300,000	\$1,200,000	
Lighting Removal	1	LS	\$300,000	\$300,000	
Lighting	1	LS	\$750,000	\$750,000	
Traffic Signal	2	EA	\$300,000	\$600,000	
ITS/ TMS	1	LS	\$400,000	\$400,000	
Temporary Traffic Control	1	LS	\$1,000,000	\$1,000,000	
Erosion and Sediment Control	1	LS	\$500,000	\$500,000	
Minor Drainage Structures	1	LS	\$500,000	\$500,000	
Major Drainage Structures	1	LS	\$750,000	\$750,000	
Borrow Excavation	46,730	CY	\$30	\$1,401,900	5 X(28038*9) / 27
Stormwater Management	1	LS	\$500,000	\$500,000	
Signing/ Markings	1	LS	\$750,000	\$750,000	
Bridge Removal	93,172	SF	\$35	\$3,261,020	
Bridge	100,000	SF	\$300	\$30,000,000	
			Subtotal	\$57,028,300	
Utility Relocation	1.2	Mi	\$20,000,000	\$24,000,000	
RW Acquistion	4.4	Ac	\$5,000,000	\$22,000,000	
Geotech Improvements	14,019	SY	\$1,100	\$15,420,900	
Permitting Fees/Wetland Mitigation	1	LS	\$2,851,415.00	\$2,851,415	5%
Design & Surveying	1	LS	\$5,702,830.00	\$5,702,830	10%
Public Involvement	1	LS	\$57,028.30	\$57,028	0.10%
IMR Study Reports	1	LS	\$171,084.90	\$171,085	0.30%
Aesthetic Design Features/Landscaping	1	LS	\$114,056.60	\$114,057	0.20%
MOA Agreements	1	LS	\$570,283.00	\$570,283	1%
Archeaological Mitigation	1	LS	\$228,113.20	\$228,113	0.40%
Hazmat Remediation	1	LS	\$171,084.90	\$171,085	0.30%
Contingency	1	LS	\$22,811,320.00	\$22,811,320	40%

2015 Construction Estimate Total\* \$151,126,416

<sup>\*</sup> ESTIMATE DOES NOT INCLUDE COSTS FOR:

## I-264 & Military Hwy Interchange (DGN BH01-04) Fig. No. III.6

### **Site Characteristics**

# **Preliminary - NOT for construction**

Existing Roadway Area SY
Existing Roadway Area To Be Removed 21,534 SY
Proposed New Roadway Construction Area 29,568 SY

Existing Bridge Area 93,172 SF
Existing Bridge Area To Be Removed 93,172 SF
Proposed New Bridge Construction Area 100,000 SF

### **2015 Construction Estimate**

	Ĵ			Item	
Item Description	Quantity	Unit	Unit Cost	Cost	Comments
Pavement Removal	21,534	SY	\$20	\$430,680	Shapes
Asphalt Concrete Overlay	24,118	SY	\$25	\$602,950	•
Full Depth Asphalt Concrete Pavement	29,568	SY	\$250	\$7,392,000	Shapes
Curb and Gutter Removal	4,240	LF	\$15	\$63,600	2L
Curb and Gutter	4,240	LF	\$35	\$148,400	2L
Retaining Wall	37,320	SF	\$150	\$5,598,000	
Sound Wall	4,104	LF	\$220	\$902,880	
Sidewalk	0	SY	\$65	\$0	
Barrier Wall Removal	290	LF	\$25	\$7,250	
Barrier Wall	290	LF	\$80	\$23,200	
Guardrail Removal	8,000	LF	\$10	\$80,000	
Guardrail	3,000	LF	\$35	\$105,000	
Overhead Truss Removal	4	EA	\$20,000	\$80,000	
Overhead Truss	4	EA	\$300,000	\$1,200,000	
Lighting Removal	1	LS	\$300,000	\$300,000	
Lighting	1	LS	\$750,000	\$750,000	
Traffic Signal	2 1	EA	\$300,000	\$600,000	
ITS/ TMS	1	LS	\$400,000	\$400,000	
Temporary Traffic Control	1	LS	\$1,000,000	\$1,000,000	
Erosion and Sediment Control	1	LS	\$500,000	\$500,000	
Minor Drainage Structures	1	LS	\$500,000	\$500,000	
Major Drainage Structures	1	LS	\$750,000	\$750,000	
Borrow Excavation	49,280	CY	\$30	\$1,478,400	5 X(29568*9) / 27
Stormwater Management	1	LS	\$500,000	\$500,000	
Signing/ Markings	1	LS	\$750,000	\$750,000	
Bridge Removal	93,172	SF	\$35	\$3,261,020	
Bridge	100,000	SF	\$300	\$30,000,000	
			Subtotal	\$57,423,380	
Utility Relocation	1.2	Mi	\$20,000,000	\$24,000,000	
RW Acquistion	4.4	Ac	\$5,000,000	\$22,000,000	
Geotech Improvements	14,784	SY	\$1,100	\$16,262,400	
Permitting Fees/Wetland Mitigation	1	LS	\$2,871,169.00	\$2,871,169	5%
Design & Surveying	1	LS	\$5,742,338.00	\$5,742,338	10%
Public Involvement	1	LS	\$57,423.38	\$57,423	0.10%
IMR Study Reports	1	LS	\$172,270.14	\$172,270	0.30%
Aesthetic Design Features/Landscaping	1	LS	\$114,846.76	\$114,847	0.20%
MOA Agreements	1	LS	\$574,233.80	\$574,234	1%
Archeaological Mitigation	1	LS	\$229,693.52	\$229,694	0.40%
Hazmat Remediation	1	LS	\$172,270.14	\$172,270	0.30%
Contingency	1	LS	\$22,969,352.00	\$22,969,352	40%

2015 Construction Estimate Total\* \$152,589,377

<sup>\*</sup> ESTIMATE DOES NOT INCLUDE COSTS FOR:

## I-264 Interchange at I - 264 and I - 64. (DGN BH02-04) fig. No. IV.4

### **Site Characteristics**

## **Preliminary - NOT for construction**

Existing Roadway Area To Be Removed 34,865 SY Proposed New Roadway Construction Area 99,770 SY

Existing Bridge Area 157,599 SF
Existing Bridge Area To Be Removed 157,599 SF
Proposed New Bridge Construction Area 419,303 SF

Estimate Limits: Approximately 2657' West of the interchange TO approximately 1807' east of the interchange

### **2015 Construction Estimate**

Item Description	Quantity	Unit	Unit Cost	Item Cost	Comments
item bescription	Quantity	Oilit	Omit cost	COST	Comments
Pavement Removal	34,865	SY	\$20	\$697,300	
Asphalt Concrete Overlay	97,475	SY	\$25	\$2,436,875	
Full Depth Asphalt Concrete Pavement	99,770	SY	\$250	\$24,942,500	
Curb and Gutter Removal	0	LF	\$15	\$0	
Curb and Gutter	0	LF	\$35	\$0	
Retaining Wall	54,520	SF	\$150	\$8,178,000	2726' X 20'
Sound Wall	8,457	LF	\$220	\$1,860,540	
Sidewalk	0	SY	\$65	\$0	
Barrier Wall Removal	17,000	LF	\$25	\$425,000	
Barrier Wall	17,000	LF	\$80	\$1,360,000	
Guardrail Removal	3,000	LF	\$10	\$30,000	
Guardrail	3,000	LF	\$35	\$105,000	
Overhead Truss Removal	5	EA	\$20,000	\$100,000	
Overhead Truss	6	EA	\$300,000	\$1,800,000	
Lighting Removal	1	LS	\$600,000	\$600,000	
Lighting	1	LS	\$1,500,000	\$1,500,000	
Traffic Signal	0	EA	\$300,000	\$0	
ITS/ TMS	1	LS	\$800,000	\$800,000	
Temporary Traffic Control	1	LS	\$1,500,000	\$1,500,000	
Erosion and Sediment Control	1	LS	\$1,000,000	\$1,000,000	
Minor Drainage Structures	1	LS	\$1,500,000	\$1,500,000	
Major Drainage Structures	1	LS	\$2,000,000	\$2,000,000	
Borrow Excavation	166,283	CY	\$30	\$4,988,490	5 X (99770X9) / 27
Stormwater Management	1	LS	\$1,500,000	\$1,500,000	
Signing/ Markings	1	LS	\$1,500,000	\$1,500,000	
Bridge Removal	157,599	SF	\$35	\$5,515,965	
Bridge	419,303	SF	\$300	\$125,790,900	
- '		!!	Subtotal	\$190,130,570	
Utility Relocation	2.3	Mi	\$20,000,000	\$46,000,000	
RW Acquistion	10.6	Ac	\$5,000,000	\$53,000,000	
Geotech Improvements	49,885	SY	\$1,100	\$54,873,500	
Permitting Fees/Wetland Mitigation	1	LS	\$9,506,528.50	\$9,506,529	5%
Design & Surveying	1	LS	\$19,013,057.00	\$19,013,057	10%
Public Involvement	1	LS	\$190,130.57	\$190,131	0.10%
IMR Study Reports	1	LS	\$570,391.71	\$570,392	0.30%
Aesthetic Design Features/Landscaping	1	LS	\$380,261.14	\$380,261	0.20%
MOA Agreements	1	LS	\$1,901,305.70	\$1,901,306	1%
Archeaological Mitigation	1	LS	\$760,522.28	\$760,522	0.40%
Hazmat Remediation	1	LS	\$570,391.71	\$570,392	0.30%
Contingency	1	LS	\$76,052,228.00	\$76,052,228	40%

2015 Construction Estimate Total\* \$452,948,887

 $<sup>\</sup>boldsymbol{*}$  ESTIMATE DOES NOT INCLUDE COSTS FOR:

## I-264 Interchange at I - 264 and I - 64. (DGN BH02-05) Fig. No. IV.5

### **Site Characteristics**

## **Preliminary - NOT for construction**

Existing Roadway Area To Be Removed 40,591 SY Proposed New Roadway Construction Area 85,802 SY

Existing Bridge Area 114,201 SF
Existing Bridge Area To Be Removed 114,201 SF
Proposed New Bridge Construction Area 326,608 SF

Estimate Limits: Approximately 2657' West of the interchange TO approximately 1807' east of the interchange

#### **2015 Construction Estimate**

2015 Construction Estimate				Item	
Item Description	Quantity	Unit	Unit Cost	Cost	Comments
Pavement Removal	40,591	SY	\$20	\$811,820	
Asphalt Concrete Overlay	30,000	SY	\$25	\$750,000	
Full Depth Asphalt Concrete Pavement	85,802	SY	\$250	\$21,450,500	
Curb and Gutter Removal	0	LF 	\$15	\$0	
Curb and Gutter	0	LF	\$35	\$0	
Retaining Wall	54,680	SF	\$150	\$8,202,000	2734' X 20'
Sound Wall	7,591	LF	\$220	\$1,670,020	
Sidewalk	0	SY	\$65	\$0	
Barrier Wall Removal	17,000	LF	\$25	\$425,000	
Barrier Wall	17,000	LF	\$80	\$1,360,000	
Guardrail Removal	9,000	LF 	\$10	\$90,000	
Guardrail	9,000	LF	\$35	\$315,000	
Overhead Truss Removal	5	EA	\$20,000	\$100,000	
Overhead Truss	6	EA	\$300,000	\$1,800,000	
Lighting Removal	1	LS	\$600,000	\$600,000	
Lighting	1	LS	\$1,500,000	\$1,500,000	
Traffic Signal	0	EA	\$300,000	\$0	
ITS/ TMS	1	LS	\$800,000	\$800,000	
Temporary Traffic Control	1	LS	\$1,500,000	\$1,500,000	
Erosion and Sediment Control	1	LS	\$1,000,000	\$1,000,000	
Minor Drainage Structures	1	LS	\$1,500,000	\$1,500,000	
Major Drainage Structures	1	LS	\$2,000,000	\$2,000,000	
Borrow Excavation	143,003	CY	\$30	\$4,290,090	5 X (85802*9) / 27
Stormwater Management	1	LS	\$1,500,000	\$1,500,000	
Signing/ Markings	1	LS	\$1,500,000	\$1,500,000	
Bridge Removal	114,201	SF	\$35	\$3,997,035	
Bridge	326,608	SF	\$300	\$97,982,400	
			Subtotal	\$155,143,865	
Utility Relocation	2.3	Mi	\$20,000,000	\$46,000,000	
RW Acquistion	10.6	Ac	\$5,000,000	\$53,000,000	
Geotech Improvements	42,901	SY	\$1,100	\$47,191,100	
Permitting Fees/Wetland Mitigation	1	LS	\$7,757,193.25	\$7,757,193	5%
Design & Surveying	1	LS	\$15,514,386.50	\$15,514,387	10%
Public Involvement	1	LS	\$155,143.87	\$155,144	0.10%
IMR Study Reports	1	LS	\$465,431.60	\$465,432	0.30%
Aesthetic Design Features/Landscaping	1	LS	\$310,287.73	\$310,288	0.20%
MOA Agreements	1	LS	\$1,551,438.65	\$1,551,439	1%
Archeaological Mitigation	1	LS	\$620,575.46	\$620,575	0.40%
Hazmat Remediation	1	LS	\$465,431.60	\$465,432	0.30%
Contingency	1	LS	\$62,057,546.00	\$62,057,546	40%
Contingency	1	LJ .	702,037,340.00	702,037,340	-10/0

2015 Construction Estimate Total\* \_\_\_\_\$390,232,400

<sup>\*</sup> ESTIMATE DOES NOT INCLUDE COSTS FOR:

## I-264 & I-64 Interchange (DGN BH02-06) Fig. No. IV.6

### **Site Characteristics**

### **Preliminary - NOT for construction**

Existing Roadway Area SY
Existing Roadway Area To Be Removed 30,091 SY
Proposed New Roadway Construction Area 86,250 SY

Existing Bridge Area 114,201 SF
Existing Bridge Area To Be Removed 93,215 SF
Proposed New Bridge Construction Area 297,371 SF

Estimate Limits: 4270' West of Independence Interchange to Proposed Sentera Way Overpass (Ramp not Included)

### 2015 Construction Estimate

Item Description	Quantity	Unit	Unit Cost	Item Cost	Comments
Term Description	quantity	0	G COST	0001	Comments
Pavement Removal	30,091	SY	\$20	\$601,820	Shapes
Asphalt Concrete Overlay	114,787	SY	\$25	\$2,869,675	Shapes
Full Depth Asphalt Concrete Pavement	93,030	SY	\$250	\$23,257,500	Shapes
Curb and Gutter Removal	0	LF	\$15	\$0	
Curb and Gutter	0	LF	\$35	\$0	
Retaining Wall	62,960	SF	\$150	\$9,444,000	3148*20'
Sound Wall	6,063	LF	\$220	\$1,333,860	L (outside project not including D7)
Sidewalk	0	SY	\$65	\$0	(**************************************
Barrier Wall Removal	15,000	LF	\$25	\$375,000	4L(WB I-264)+L(EB I-264)
Barrier Wall	15,000	LF	\$80	\$1,200,000	
Guardrail Removal	9,000	LF	\$10	\$90,000	
Guardrail	9,000	LF	\$35	\$315,000	
Overhead Truss Removal	5	EA	\$20,000	\$100,000	
Overhead Truss	6	EA	\$300,000	\$1,800,000	
Lighting Removal	1	LS	\$600,000	\$600,000	
Lighting	1	LS	\$1,500,000	\$1,500,000	
Traffic Signal	0	EA	\$300,000	\$0	
ITS/ TMS	1	LS	\$800,000	\$800,000	
Temporary Traffic Control	1	LS	\$1,500,000	\$1,500,000	
Erosion and Sediment Control	1	LS	\$1,000,000	\$1,000,000	
Minor Drainage Structures	1	LS	\$1,500,000	\$1,500,000	
Major Drainage Structures	1	LS	\$2,000,000	\$2,000,000	
Borrow Excavation	155,050	CY	\$30	\$4,651,500	5 X(93030*9) / 27
Stormwater Management	1	LS	\$1,500,000	\$1,500,000	
Signing/ Markings	1	LS	\$1,500,000	\$1,500,000	
Bridge Removal	93,215	SF	\$35	\$3,262,525	
Bridge	297,371	SF	\$300	\$89,211,300	
			Subtotal	\$150,412,180	
	اء ما				
Utility Relocation	2.3	Mi	\$20,000,000	\$46,800,000	4
RW Acquistion	10.6	Ac	\$5,000,000	\$53,000,000	(2000' x 100')/43560
Geotech Improvements	43,125	SY	\$1,100	\$47,437,500	
Permitting Fees/Wetland Mitigation	1	LS	\$7,520,609	\$7,520,609	5%
Design & Surveying	1	LS	\$15,041,218	\$15,041,218	10%
Public Involvement	1	LS	\$150,412	\$150,412	0.10%
IMR Study Reports	1	LS	\$451,237	\$451,237	0.30%
Aesthetic Design Features/Landscaping	1 1	LS	\$300,824	\$300,824	0.20%
MOA Agreements	1	LS LS	\$1,504,122	\$1,504,122	1%
Archeaological Mitigation			\$601,649	\$601,649	0.40%
Hazmat Remediation	1 1	LS	\$451,237	\$451,237	0.30%
Contingency	1	LS	\$60,164,872	\$60,164,872	40%

2015 Construction Estimate Total\* \$383,835,859

Managed Lane Tolling Design or Const.
Complete Removal of Existing I-264 thru lanes
I-64 Mainline Improvements
Inflation / Escalation

**Preliminary - NOT for construction** 

<sup>\*</sup> ESTIMATE DOES NOT INCLUDE COSTS FOR:

## I-64 EB acceleration ramps (DGN BH02A) Fig. No. IV.7

### **Site Characteristics**

## **Preliminary - NOT for construction**

Existing Roadway Area To Be Removed 4,518 SY
Proposed New Roadway Construction Area 7,538 SY

Existing Bridge Area 0 SF
Existing Bridge Area To Be Removed 0 SF
Proposed New Bridge Construction Area 68,158 SF

Estimate Limits: Approximately 1965' South of the interchange TO approximately 5726' South of the interchange Estimate doesn't include any improvements to the Bridges over Elizabeth River.

### **2015 Construction Estimate**

				Item	
Item Description	Quantity	Unit	Unit Cost	Cost	Comments
Pavement Removal	4,518	SY	\$20	\$90,360	
Asphalt Concrete Overlay	20,267	SY	\$25	\$506,675	4 X12 X 3800 / 9
Full Depth Asphalt Concrete Pavement	7,538	SY	\$250	\$1,884,500	
Curb and Gutter Removal	0	LF	\$15	\$0	
Curb and Gutter	0	LF	\$35	\$0	
Retaining Wall	31,960	SF	\$150	\$4,794,000	1598' X 20'
Sound Wall	3,800	LF	\$220	\$836,000	
Sidewalk	0	SY	\$65	\$0	
Barrier Wall Removal	0	LF	\$25	\$0	
Barrier Wall	0	LF	\$80	\$0	
Guardrail Removal	3,800	LF	\$10	\$38,000	
Guardrail	0	LF	\$35	\$0	
Overhead Truss Removal	1	EA	\$20,000	\$20,000	
Overhead Truss	1	EA	\$300,000	\$300,000	
Lighting Removal	1	LS	\$300,000	\$300,000	
Lighting	1	LS	\$800,000	\$800,000	
Traffic Signal	0	EA	\$300,000	\$0	
ITS/ TMS	1	LS	\$400,000	\$400,000	
Temporary Traffic Control	1	LS	\$800,000	\$800,000	
Erosion and Sediment Control	1	LS	\$800,000	\$800,000	
Minor Drainage Structures	1	LS	\$800,000	\$800,000	
Major Drainage Structures	1	LS	\$1,000,000	\$1,000,000	
Borrow Excavation	12,563	CY	\$30	\$376,890	5 X (7538X9) / 27
Stormwater Management	1	LS	\$800,000	\$800,000	
Signing/ Markings	1	LS	\$800,000	\$800,000	
Bridge Removal	0	SF	\$35	\$0	
Bridge	68,158	SF	\$300	\$20,447,400	
		;	Subtotal	\$35,793,825	
	ا - ه		*** *** ***		
Utility Relocation	0.7	Mi	\$20,000,000	\$14,000,000	
RW Acquistion	1.7	Ac	\$5,000,000	\$8,500,000	
Geotech Improvements	3,769	SY	\$1,100	\$4,145,900	50/
Permitting Fees/Wetland Mitigation	1	LS	\$1,789,691.25	\$1,789,691	5%
Design & Surveying	1	LS	\$3,579,382.50	\$3,579,383	10%
Public Involvement	1	LS	\$35,793.83	\$35,794	0.10%
IMR Study Reports	1	LS	\$107,381.48	\$107,381	0.30%
Aesthetic Design Features/Landscaping	1	LS	\$71,587.65	\$71,588	0.20%
MOA Agreements	1	LS	\$357,938.25	\$357,938	1%
Archeaological Mitigation	1	LS	\$143,175.30	\$143,175	0.40%
Hazmat Remediation	1 1	LS LS	\$107,381.48	\$107,381	0.30%
Contingency	1	LS	\$14,317,530.00	\$14,317,530	40%

2015 Construction Estimate Total\* \$82,949,587

 $<sup>\</sup>boldsymbol{*}$  ESTIMATE DOES NOT INCLUDE COSTS FOR:

## I-64 Widening (North of I-264)

### **Site Characteristics**

## **Preliminary - NOT for construction**

Existing Roadway Area SY
Existing Roadway Area To Be Removed 22,600 SY
Proposed New Roadway Construction Area 65,600 SY

Existing Bridge Area SF
Existing Bridge Area To Be Removed 88,600 SF
Proposed New Bridge Construction Area 99,000 SF

Estimate Limits : I-264 Interchange to Northampton Boulevard Interchange

### 2015 Construction Estimate

Item Description	Quantity	Unit	Unit Cost	Item Cost	Comments
·					
Pavement Removal	22,600	SY	\$20	\$452,000	
Asphalt Concrete Overlay	96,000	SY	\$25	\$2,400,000	
Full Depth Asphalt Concrete Pavement	65,600	SY	\$250	\$16,400,000	
Curb and Gutter Removal	0	LF	\$15	\$0	
Curb and Gutter	0	LF	\$35	\$0	
Retaining Wall	40,000	SF	\$150	\$6,000,000	4000' x 10'
Sound Wall	16,000	LF	\$220	\$3,520,000	
Sidewalk	0	SY	\$65	\$0	
Barrier Wall Removal	9,000	LF	\$25	\$225,000	
Barrier Wall	9,000	LF	\$80	\$720,000	
Guardrail Removal	9,000	LF	\$10	\$90,000	
Guardrail	9,000	LF	\$35	\$315,000	
Overhead Truss Removal	12	EA	\$20,000	\$240,000	
Overhead Truss	12	EA	\$300,000	\$3,600,000	
Lighting Removal	1	LS	\$400,000	\$400,000	
Lighting	1	LS	\$2,250,000	\$2,250,000	
Traffic Signal	0	EA	\$300,000	\$0	
ITS/ TMS	1	LS	\$975,000	\$975,000	
Temporary Traffic Control	1	LS	\$1,800,000	\$1,800,000	
Erosion and Sediment Control	1	LS	\$1,200,000	\$1,200,000	
Minor Drainage Structures	1	LS	\$1,800,000	\$1,800,000	
Major Drainage Structures	1	LS	\$2,400,000	\$2,400,000	
Borrow Excavation	218,667	CY	\$30	\$6,560,010	10 X(65600*9) / 27
Stormwater Management	1	LS	\$1,200,000	\$1,200,000	
Signing/ Markings	1	LS	\$1,200,000	\$1,200,000	
Bridge Removal	88,600	SF	\$35	\$3,101,000	
Bridge	99,000	SF	\$300	\$29,700,000	
			Subtotal	\$86,548,010	
Utility Relocation	1.8	Mi	\$20,000,000	\$36,000,000	
RW Acquistion	27.0	Ac	\$5,000,000	\$135,000,000	
Geotech Improvements	32,800	SY	\$1,100	\$36,080,000	
Permitting Fees/Wetland Mitigation	1	LS	\$4,327,401	\$4,327,401	5%
Design & Surveying	1	LS	\$8,654,801	\$8,654,801	10%
Public Involvement	1	LS	\$86,548	\$86,548	0.10%
IMR Study Reports	1	LS	\$259,644	\$259,644	0.30%
Aesthetic Design Features/Landscaping	1	LS	\$173,096	\$173,096	0.20%
MOA Agreements	1	LS	\$865,480	\$865,480	1%
Archeaological Mitigation	1	LS	\$346,192	\$346,192	0.40%
Hazmat Remediation	1	LS	\$259,644	\$259,644	0.30%
Contingency	1	LS	\$34,619,204	\$34,619,204	40%

2015 Construction Estimate Total\* \$343,220,020

Managed Lane Tolling Design or Const.
Complete Removal of Existing I-64 thru lanes (asphalt overlay)
Inflation / Escalation
Reversible HOV Lane Improvements

 $<sup>\</sup>ensuremath{^{*}}$  ESTIMATE DOES NOT INCLUDE COSTS FOR:

## I-64 Widening (South of I-264)

### **Site Characteristics**

## **Preliminary - NOT for construction**

Existing Roadway Area SY
Existing Roadway Area To Be Removed 55,500 SY
Proposed New Roadway Construction Area 89,000 SY

Existing Bridge Area SF
Existing Bridge Area To Be Removed 126,500 SF
Proposed New Bridge Construction Area 316,000 SF

Estimate Limits: Indian River Road Interchange to I-264 Interchange

### **2015 Construction Estimate**

Item Description	Quantity	Unit	Unit Cost	Item Cost	Comments
item bescription	Qualitity	Oilit	Offic Cost	COST	Comments
Pavement Removal	55,500	SY	\$20	\$1,110,000	
Asphalt Concrete Overlay	224,000	SY	\$20 \$25	\$5,600,000	
Full Depth Asphalt Concrete Pavement	89,000	SY	\$250	\$22,250,000	
Curb and Gutter Removal	05,000	LF	\$230 \$15	\$22,230,000	
Curb and Gutter Removar	0	LF	\$35	\$0 \$0	
Retaining Wall	90,000	SF	\$150	\$13,500,000	9000' x 10'
Sound Wall	37,000	LF	\$220	\$8,140,000	3000 X 10
Sidewalk	0	SY	\$65	\$0,140,000	
Barrier Wall Removal	22,000	LF	\$25	\$550,000	
Barrier Wall	22,000	LF	\$80	\$1,760,000	
Guardrail Removal	22,000	LF	\$10	\$220,000	
Guardrail	22,000	LF	\$35	\$770,000	
Overhead Truss Removal	28	EA	\$20,000	\$560,000	
Overhead Truss	28	EA	\$300,000	\$8,400,000	
Lighting Removal	1	LS	\$8,000,000	\$8,000,000	
Lighting	1	LS	\$5,000,000	\$5,000,000	
Traffic Signal	0	EA	\$300,000	\$0	
ITS/ TMS	1	LS	\$2,275,000	\$2,275,000	
Temporary Traffic Control	1	LS	\$4,200,000	\$4,200,000	
Erosion and Sediment Control	1	LS	\$2,800,000	\$2,800,000	
Minor Drainage Structures	1	LS	\$4,200,000	\$4,200,000	
Major Drainage Structures	1	LS	\$5,600,000	\$5,600,000	
Borrow Excavation	296,667	CY	\$30	\$8,900,010	10 X(89000*9) / 27
Stormwater Management	1	LS	\$4,200,000	\$4,200,000	
Signing/ Markings	1	LS	\$4,200,000	\$4,200,000	
Bridge Removal	126,500	SF	\$35	\$4,427,500	
Bridge	316,000	SF	\$300	\$94,800,000	
			Subtotal	\$211,462,510	
Utility Relocation	3.9	Mi	\$20,000,000	\$78,000,000	
RW Acquistion	38.0	Ac	\$5,000,000	\$190,000,000	
Geotech Improvements	44,500	SY	\$1,100	\$48,950,000	
Permitting Fees/Wetland Mitigation	1	LS	\$10,573,126	\$10,573,126	5%
Design & Surveying	1	LS	\$21,146,251	\$21,146,251	10%
Public Involvement	1	LS	\$211,463	\$211,463	0.10%
IMR Study Reports	1	LS	\$634,388	\$634,388	0.30%
Aesthetic Design Features/Landscaping	1	LS	\$422,925	\$422,925	0.20%
MOA Agreements	1	LS	\$2,114,625	\$2,114,625	1%
Archeaological Mitigation	1	LS	\$845,850	\$845,850	0.40%
Hazmat Remediation	1	LS	\$634,388	\$634,388	0.30%
Contingency	1	LS	\$84,585,004	\$84,585,004	40%

2015 Construction Estimate Total\* \$649,580,528

Managed Lane Tolling Design or Const.
Complete Removal of Existing I-64 thru lanes (asphalt overlay)
Inflation / Escalation
Reversible HOV Lane Improvements

<sup>\*</sup> ESTIMATE DOES NOT INCLUDE COSTS FOR:

## I-264 Interchange at Newtown Rd. (DGN BH03) Fig. No. V.4

### **Site Characteristics**

## **Preliminary - NOT for construction**

Existing Roadway Area To Be Removed 12,174 SY
Proposed New Roadway Construction Area 40,836 SY

Existing Bridge Area 52,790 SF
Existing Bridge Area To Be Removed 52,790 SF
Proposed New Bridge Construction Area 88,644 SF

Estimate Limits: Kempsville Rd. (the bridges are not included) TO approximately 3500' east of Newtown Rd. interchange

### 2015 Construction Estimate

2015 Construction Estimate					
				Item	
Item Description	Quantity	Unit	Unit Cost	Cost	Comments
Pavement Removal	12,174	SY	\$20	\$243,480	
Asphalt Concrete Overlay	135,183	SY	\$20 \$25	\$3,379,575	
Full Depth Asphalt Concrete Pavement	40,836	SY	\$250	\$10,209,000	
Curb and Gutter Removal	5,610	LF	\$15	\$84,150	
Curb and Gutter	5,610	LF	\$35	\$196,350	
Retaining Wall	83,420	SF	\$150	\$12,513,000	3569' X 20' + (604+600) X 10'
Sound Wall	3,770	LF	\$220	\$829,400	5565 X 26 × (66 × 666) X 16
Sidewalk	2,115	SY	\$65	\$45,890	
Barrier Wall Removal	17,941	LF	\$25	\$448,525	
Barrier Wall	32,406	LF	\$80	\$2,592,480	
Guardrail Removal	3,500	LF	\$10	\$35,000	
Guardrail	3,500	LF	\$35	\$122,500	
Overhead Truss Removal	3	EA	\$20,000	\$60,000	
Overhead Truss	3	EA	\$300,000	\$900,000	
Lighting Removal	1	LS	\$300,000	\$300,000	
Lighting	1	LS	\$750,000	\$750,000	
Traffic Signal	1	EA	\$300,000	\$300,000	
ITS/ TMS	1	LS	\$400,000	\$400,000	
Temporary Traffic Control	1	LS	\$1,000,000	\$1,000,000	
Erosion and Sediment Control	1	LS	\$500,000	\$500,000	
Minor Drainage Structures	1	LS	\$500,000	\$500,000	
Major Drainage Structures	1	LS	\$750,000	\$750,000	
Borrow Excavation	68,060	CY	\$30	\$2,041,800	5 X (40836 X 9) / 27
Stormwater Management	1	LS	\$500,000	\$500,000	
Signing/ Markings	1	LS	\$750,000	\$750,000	
Bridge Removal	52,790	SF	\$35	\$1,847,650	
Bridge	88,644	SF	\$300	\$26,593,200	
			Subtotal	\$67,892,000	
Utility Relocation	1.6	Mi	\$21,000,000	\$33,600,000	Overhead Transmission Tower
RW Acquistion	8.2	Ac	\$5,000,000	\$41,000,000	
Geotech Improvements	20,418	SY	\$1,100	\$22,459,800	
Permitting Fees/Wetland Mitigation	1	LS	\$3,394,600	\$3,394,600	5%
Design & Surveying	1	LS	\$6,789,200	\$6,789,200	10%
Public Involvement	1	LS	\$67,892	\$67,892	0.10%
IMR Study Reports	1	LS	\$203,676	\$203,676	0.30%
Aesthetic Design Features/Landscaping	1	LS	\$135,784	\$135,784	0.20%
MOA Agreements	1	LS	\$678,920	\$678,920	1%
Archeaological Mitigation	1	LS	\$271,568	\$271,568	0.40%
Hazmat Remediation	1	LS	\$203,676	\$203,676	0.30%
Contingency	1	LS	\$27,156,800	\$27,156,800	40%

2015 Construction Estimate Total\* \$203,853,916

<sup>\*</sup> ESTIMATE DOES NOT INCLUDE COSTS FOR:

## I-264 Interchange at Newtown Rd. (DGN BH03-02) Fig. No. V.5

### **Site Characteristics**

## **Preliminary - NOT for construction**

Existing Roadway Area To Be Removed 12,174 SY
Proposed New Roadway Construction Area 50,878 SY

Existing Bridge Area 52,790 SF
Existing Bridge Area To Be Removed 52,790 SF
Proposed New Bridge Construction Area 105,420 SF

Estimate Limits: Kempsville Rd. (the bridges are not included) TO approximately 3500' east of Newtown Rd. interchange

### 2015 Construction Estimate

2015 Construction Estimate					
				Item	
Item Description	Quantity	Unit	Unit Cost	Cost	Comments
Pavement Removal	· ' I	SY	\$20	\$243,480	
Asphalt Concrete Overlay		SY	\$25	\$3,379,575	
Full Depth Asphalt Concrete Pavement		SY	\$250	\$12,719,500	
Curb and Gutter Removal	· · ·	LF	\$15	\$84,150	
Curb and Gutter	-,	LF	\$35	\$220,080	
Retaining Wall		SF	\$150	\$12,513,000	3569' X 20' + (604+600) X 10'
Sound Wall	-, -	LF	\$220	\$829,400	
Sidewalk	, -	SY	\$65	\$45,890	
Barrier Wall Removal	17,941	LF	\$25	\$448,525	
Barrier Wall	- ,	LF	\$80	\$2,592,480	
Guardrail Removal	3,500	LF	\$10	\$35,000	
Guardrail	-,	LF	\$35	\$122,500	
Overhead Truss Removal	3	EA	\$20,000	\$60,000	
Overhead Truss	-	EA	\$300,000	\$900,000	
Lighting Removal		LS	\$300,000	\$300,000	
Lighting		LS	\$750,000	\$750,000	
Traffic Signal		EA	\$300,000	\$600,000	
ITS/ TMS	1	LS	\$400,000	\$400,000	
Temporary Traffic Control		LS	\$1,000,000	\$1,000,000	
Erosion and Sediment Control	1	LS	\$500,000	\$500,000	
Minor Drainage Structures	1	LS	\$500,000	\$500,000	
Major Drainage Structures		LS	\$750,000	\$750,000	
Borrow Excavation	84,770	CY	\$30	\$2,543,100	5 X (50878 X 9) / 27
Stormwater Management	1	LS	\$500,000	\$500,000	
Signing/ Markings	1	LS	\$750,000	\$750,000	
Bridge Removal	52,790	SF	\$35	\$1,847,650	
Bridge	105,420	SF	\$300	\$31,626,000	
			Subtotal	\$76,260,330	
Utility Relocation	1.6	Mi	\$21,000,000	\$33,600,000	Overhead Transmission Tower
RW Acquistion	9.6	Ac	\$5,000,000	\$48,000,000	
Geotech Improvements		SY	\$1,100	\$27,982,900	
Permitting Fees/Wetland Mitigation	1	LS	\$3,813,017	\$3,813,017	5%
Design & Surveying	1	LS	\$7,626,033	\$7,626,033	10%
Public Involvement	1	LS	\$76,260	\$76,260	0.10%
IMR Study Reports	1	LS	\$228,781	\$228,781	0.30%
Aesthetic Design Features/Landscaping		LS	\$152,521	\$152,521	0.20%
MOA Agreements	1	LS	\$762,603	\$762,603	1%
Archeaological Mitigation	1	LS	\$305,041	\$305,041	0.40%
Hazmat Remediation	1	LS	\$228,781	\$228,781	0.30%
Contingency	1	LS	\$30,504,132	\$30,504,132	40%

2015 Construction Estimate Total\* \$229,540,399

<sup>\*</sup> ESTIMATE DOES NOT INCLUDE COSTS FOR:

## I-264 Interchange at Witchduck Rd. (DGN BH04) Fig. No. VI.4

### **Site Characteristics**

## **Preliminary - NOT for construction**

Existing Roadway Area To Be Removed 17,073 SY Proposed New Roadway Construction Area 89,939 SY

Existing Bridge Area 30,422 SF
Existing Bridge Area To Be Removed 30,422 SF
Proposed New Bridge Construction Area 101,926 SF

Estimate Limits: Approximately 3550' West of the interchange TO approximately 2350' east of the interchange (Witchduck

Rd. improvements are NOT included in this estimate)

### **2015 Construction Estimate**

2015 Construction Estimate	1		1 1	I	
Ham Bassintian	0	11	Hait Coat	Item	C
Item Description	Quantity	Unit	Unit Cost	Cost	Comments
Pavement Removal	17,073	SY	\$20	\$341,460	
Asphalt Concrete Overlay	85,834	SY	\$25	\$2,145,850	
Full Depth Asphalt Concrete Pavement	89,939	SY	\$250	\$2,143,830	
Curb and Gutter Removal	05,555	LF	\$15	\$0	
Curb and Gutter Removal	0	LF	\$35	\$0 \$0	
Retaining Wall	43,120	SF	\$150	\$6,468,000	2156' X 20'
Sound Wall	11,618	LF	\$220	\$2,555,960	2130 X 20
Sidewalk	0	SY	\$65	\$45,890	
Barrier Wall Removal	17,709	LF	\$25	\$442,725	
Barrier Wall	19,309	LF	\$80	\$1,544,720	
Guardrail Removal	3,200	LF	\$10	\$32,000	
Guardrail	4,300	LF	\$35	\$150,500	
Overhead Truss Removal	4	EA	\$20,000	\$80,000	
Overhead Truss	4	EA	\$300,000	\$1,200,000	
Lighting Removal	1	LS	\$300,000	\$300,000	
Lighting	1	LS	\$750,000	\$750,000	
Traffic Signal	1	EA	\$300,000	\$300,000	
ITS/ TMS	1	LS	\$400,000	\$400,000	
Temporary Traffic Control	1	LS	\$1,000,000	\$1,000,000	
Erosion and Sediment Control	1	LS	\$500,000	\$500,000	
Minor Drainage Structures	1	LS	\$500,000	\$500,000	
Major Drainage Structures	1	LS	\$750,000	\$750,000	
Borrow Excavation	149,898	CY	\$30	\$4,496,940	5 X (89939 X 9) / 27
Stormwater Management	1	LS	\$500,000	\$500,000	, , , , , ,
Signing/ Markings	1	LS	\$750,000	\$750,000	
Bridge Removal	30,422	SF	\$35	\$1,064,770	
Bridge	101,926	SF	\$300	\$30,577,800	
			Subtotal	\$79,381,365	
Utility Relocation	3.1	Mi	\$20,000,000	\$62,000,000	
RW Acquistion	25.0	Ac	\$5,000,000	\$125,000,000	
Geotech Improvements	44,970	SY	\$1,100	\$49,466,450	
Permitting Fees/Wetland Mitigation	1	LS	\$3,969,068	\$3,969,068	5%
Design & Surveying	1	LS	\$7,938,137	\$7,938,137	10%
Public Involvement	1	LS	\$79,381	\$79,381	0.10%
IMR Study Reports	1	LS	\$238,144	\$238,144	0.30%
Aesthetic Design Features/Landscaping	1	LS	\$158,763	\$158,763	0.20%
MOA Agreements	1	LS	\$793,814	\$793,814	1%
Archeaological Mitigation	1	LS	\$317,525	\$317,525	0.40%
Hazmat Remediation	1	LS	\$238,144	\$238,144	0.30%
Contingency	1	LS	\$31,752,546	\$31,752,546	40%

2015 Construction Estimate Total\* \$361,333,337

Managed Lane Tolling Design or Const.
Complete Removal of Existing I-264 thru lanes
Major grade increase over S. Plaza Drive
I-64 Mainline Improvements
Inflation / Escalation

<sup>\*</sup> ESTIMATE DOES NOT INCLUDE COSTS FOR:

## I-264 & Independence Blvd Interchange (DGN BH05-01) Fig. No. VII.4

### **Site Characteristics**

### **Preliminary - NOT for construction**

Existing Roadway Area SY
Existing Roadway Area To Be Removed 44,455 SY
Proposed New Roadway Construction Area 115,836 SY

Existing Bridge Area 27,980 SF
Existing Bridge Area To Be Removed 27,980 SF
Proposed New Bridge Construction Area 126,565 SF

Estimate Limits: Approximately 4270' West of the interchange to approximately 2654' East of the interchange

### 2015 Construction Estimate

Item Description	Quantity	Unit	Unit Cost	Item Cost	Comments
item bescription	Quantity	Oilit	Offit Cost	Cost	Comments
Pavement Removal	44,455	SY	\$20	\$889,100	Shapes
Asphalt Concrete Overlay	138,888	SY	\$25	\$3,472,200	Shapes
Full Depth Asphalt Concrete Pavement	115,836	SY	\$250	\$28,959,000	Shapes
Curb and Gutter Removal	16,955	LF	\$15	\$254,325	2L(Ind.)+4L(Euc.)+1.5L(Bon)
Curb and Gutter	15,605	LF	\$35	\$546,175	2L(Ind.)+4L(Euc.)
Retaining Wall	33,050	SF	\$150	\$4,957,500	22(110.) - 42(200.)
Sound Wall	24,709	LF	\$220	\$5,435,980	
Sidewalk	0	SY	\$65	\$0	
Barrier Wall Removal	38,075	LF	\$25	\$951,875	
Barrier Wall	38,075	LF	\$80	\$3,046,000	
Guardrail Removal	2,000	LF	\$10	\$20,000	
Guardrail	3,000	LF	\$35	\$105,000	
Overhead Truss Removal	4	EA	\$20,000	\$80,000	
Overhead Truss	4	EA	\$300,000	\$1,200,000	
Lighting Removal	1	LS	\$300,000	\$300,000	
Lighting	1	LS	\$750,000	\$750,000	
Traffic Signal	2	EA	\$300,000	\$600,000	
ITS/ TMS	1	LS	\$400,000	\$400,000	
Temporary Traffic Control	1	LS	\$1,000,000	\$1,000,000	
Erosion and Sediment Control	1	LS	\$750,000	\$750,000	
Minor Drainage Structures	1	LS	\$750,000	\$750,000	
Major Drainage Structures	1	LS	\$1,000,000	\$1,000,000	
Borrow Excavation	193,060	CY	\$30	\$5,791,800	5 X(115836*9) / 27
Stormwater Management	1	LS	\$750,000	\$750,000	
Signing/ Markings	1	LS	\$750,000	\$750,000	
Bridge Removal	27,980	SF	\$35	\$979,300	
Bridge	126,565	SF	\$300	\$37,969,500	
			Subtotal	\$101,707,755	
Utility Relocation	4.8	Mi	\$20,000,000	\$96,000,000	
RW Acquistion	25.0	Ac	\$5,000,000	\$125,000,000	
Geotech Improvements	57,918	SY	\$1,100	\$63,709,800	
Permitting Fees/Wetland Mitigation	1	LS	\$5,085,387.75	\$5,085,388	5%
Design & Surveying	1	LS	\$10,170,775.50	\$10,170,776	10%
Public Involvement	1	LS	\$101,707.76	\$101,708	0.10%
IMR Study Reports	1	LS	\$305,123.27	\$305,123	0.30%
Aesthetic Design Features/Landscaping	1	LS	\$203,415.51	\$203,416	0.20%
MOA Agreements	1	LS	\$1,017,077.55	\$1,017,078	1%
Archeaological Mitigation	1	LS	\$406,831.02	\$406,831	0.40%
Hazmat Remediation	1	LS	\$305,123.27	\$305,123	0.30%
Contingency	1	LS	\$40,683,102.00	\$40,683,102	40%

2015 Construction Estimate Total\* \$444,696,099

Managed Lane Tolling Design or Const.
Complete Removal of Existing I-264 thru lanes
Major grade increase over S. Plaza Drive
I-64 Mainline Improvements
Inflation / Escalation

<sup>\*</sup> ESTIMATE DOES NOT INCLUDE COSTS FOR:

## I-264 & Independence Blvd Interchange (DGN BH05-03) Fig. No. VII.5

### **Site Characteristics**

## **Preliminary - NOT for construction**

Existing Roadway Area SY
Existing Roadway Area To Be Removed 43,077 SY
Proposed New Roadway Construction Area 112,217 SY

Existing Bridge Area 27,980 SF
Existing Bridge Area To Be Removed 27,980 SF
Proposed New Bridge Construction Area 167,699 SF

Estimate Limits: 4270' West of Independence Interchange to approximately 2654' East of the interchange

### 2015 Construction Estimate

			1	Item	
Item Description	Quantity	Unit	Unit Cost	Cost	Comments
Pavement Removal	43,077	SY	\$20	\$861,540	Shapes
Asphalt Concrete Overlay	166,304	SY	\$25	\$4,157,600	Shapes
Full Depth Asphalt Concrete Pavement	112,217	SY	\$250	\$28,054,250	Shapes
Curb and Gutter Removal	16,955	LF	\$15	\$254,325	2L(Ind.)+4L(Euc.)+1.5L(Bon)
Curb and Gutter	18,305	LF	\$35	\$640,675	2L(Ind.)+4L(Euc.)
Retaining Wall	33,050	SF	\$150	\$4,957,500	
Sound Wall	24,709	LF	\$220	\$5,435,980	
Sidewalk	0	SY	\$65	\$0	
Barrier Wall Removal	38,075	LF	\$25	\$951,875	
Barrier Wall	38,075	LF	\$80	\$3,046,000	
Guardrail Removal	2,000	LF	\$10	\$20,000	
Guardrail	3,000	LF	\$35	\$105,000	
Overhead Truss Removal	4	EA	\$20,000	\$80,000	
Overhead Truss	4	EA	\$300,000	\$1,200,000	
Lighting Removal	1	LS	\$300,000	\$300,000	
Lighting	1	LS	\$750,000	\$750,000	
Traffic Signal	2	EA	\$300,000	\$600,000	
ITS/ TMS	1	LS	\$400,000	\$400,000	
Temporary Traffic Control	1	LS	\$1,000,000	\$1,000,000	
Erosion and Sediment Control	1	LS	\$750,000	\$750,000	
Minor Drainage Structures	1	LS	\$750,000	\$750,000	
Major Drainage Structures	1	LS	\$1,000,000	\$1,000,000	
Borrow Excavation	187,028	CY	\$30	\$5,610,840	5 X(112217*9) / 27
Stormwater Management	1	LS	\$750,000	\$750,000	, , , , ,
Signing/ Markings	1	LS	\$750,000	\$750,000	
88	_		4.00,000	, · · · · · · ·	
Bridge Removal	27,980	SF	\$35	\$979,300	
Bridge	167,699	SF	\$300	\$50,309,700	
- '			Subtotal	\$113,714,585	
Utility Relocation	4.5	Mi	\$20,000,000	\$90,000,000	
RW Acquistion	27.0	Ac	\$5,000,000	\$135,000,000	
Geotech Improvements	56,109	SY	\$1,100	\$61,719,350	
Permitting Fees/Wetland Mitigation	1	LS	\$5,685,729.25	\$5,685,729	5%
Design & Surveying	1	LS	\$11,371,458.50	\$11,371,459	10%
Public Involvement	1	LS	\$113,714.59	\$113,715	0.10%
IMR Study Reports	1	LS	\$341,143.76	\$341,144	0.30%
Aesthetic Design Features/Landscaping	1	LS	\$227,429.17	\$227,429	0.20%
MOA Agreements	1	LS	\$1,137,145.85	\$1,137,146	1%
Archeaological Mitigation	1	LS	\$454,858.34	\$454,858	0.40%
Hazmat Remediation	1	LS	\$341,143.76	\$341,144	0.30%
Contingency	1	LS	\$45,485,834.00	\$45,485,834	40%

2015 Construction Estimate Total\* \$465,592,392

<sup>\*</sup> ESTIMATE DOES NOT INCLUDE COSTS FOR:

## I-264 & Independence Blvd Interchange (DGN BH05-05) Fig. No. VII.6

### **Site Characteristics**

### **Preliminary - NOT for construction**

Existing Roadway Area SY
Existing Roadway Area To Be Removed 41,272 SY
Proposed New Roadway Construction Area 124,626 SY

Existing Bridge Area 27,980 SF
Existing Bridge Area To Be Removed 27,980 SF
Proposed New Bridge Construction Area 94,622 SF

Estimate Limits: 4270' West of Independence Interchange to approximately 2654' East of the interchange

### 2015 Construction Estimate

Item Description	Quantity	Unit	Unit Cost	ltem Cost	Comments
item bescription	Quantity	Ollit	Offic Cost	Cost	Comments
Pavement Removal	41,272	SY	\$20	\$825,440	Shapes
Asphalt Concrete Overlay	166,304	SY	\$25	\$4,157,600	Shapes
Full Depth Asphalt Concrete Pavement	124,626	SY	\$250	\$31,156,500	Shapes
Curb and Gutter Removal	16,955	LF	\$15	\$254,325	2L(Ind.)+4L(Euc.)+1.5L(Bon)
Curb and Gutter	15,605	LF	\$35	\$546,175	2L(Ind.)+4L(Euc.)
Retaining Wall	33,050	SF	\$150	\$4,957,500	(815'+385')*20'+905'*10'
Sound Wall	24,709	LF	\$220	\$5,435,980	(
Sidewalk	0	SY	\$65	\$0	L*5/9
Barrier Wall Removal	38,075	LF	\$25	\$951,875	3L(I-264)
Barrier Wall	38,075	LF	\$80	\$3,046,000	
Guardrail Removal	2,000	LF	\$10	\$20,000	
Guardrail	2,000	LF	\$35	\$70,000	
Overhead Truss Removal	4	EA	\$20,000	\$80,000	
Overhead Truss	4	EA	\$300,000	\$1,200,000	
Lighting Removal	1	LS	\$300,000	\$300,000	
Lighting	1	LS	\$750,000	\$750,000	
Traffic Signal	2	EA	\$300,000	\$600,000	
ITS/ TMS	1	LS	\$400,000	\$400,000	
Temporary Traffic Control	1	LS	\$1,000,000	\$1,000,000	
Erosion and Sediment Control	1	LS	\$750,000	\$750,000	
Minor Drainage Structures	1	LS	\$750,000	\$750,000	
Major Drainage Structures	1	LS	\$1,000,000	\$1,000,000	
Borrow Excavation	207,710	CY	\$30	\$6,231,300	5 X(124626*9) / 27
Stormwater Management	1	LS	\$750,000	\$750,000	
Signing/ Markings	1	LS	\$750,000	\$750,000	
Bridge Removal	27,980	SF	\$35	\$979,300	
Bridge	94,622	SF	\$300	\$28,386,600	
	·		Subtotal	\$95,348,595	
			l		
Utility Relocation	4.5	Mi	\$20,000,000	\$90,000,000	
RW Acquistion	25.0	Ac	\$5,000,000	\$125,000,000	
Geotech Improvements	62,313	SY	\$1,100	\$68,544,300	5%
Permitting Fees/Wetland Mitigation	1 1	LS LS	\$4,767,429.75 \$0.00	\$4,767,430 \$0	10%
Design & Surveying Public Involvement	1	LS	\$95,348.60	\$95,349	0.10%
IMR Study Reports	1	LS	\$286,045.79	\$286,046	0.30%
Aesthetic Design Features/Landscaping	1	LS	\$190,697.19	\$190,697	0.20%
MOA Agreements	1	LS	\$953,485.95	\$953,486	1%
Archeaological Mitigation	1	LS	\$381,394.38	\$381,394	0.40%
Hazmat Remediation	1	LS	\$286,045.79	\$286,046	0.30%
Contingency	1	LS	\$38,139,438.00	\$38,139,438	40%
contingency	-1		7-3,133, 133.00	, , , , , , , , , , , , , , , , , , ,	:=::=

2015 Construction Estimate Total\* \$423,992,780

<sup>\*</sup> ESTIMATE DOES NOT INCLUDE COSTS FOR:

## I-264 Between Independence and Rosemont (DGN BH05A) Fig. No. VII.7

### **Site Characteristics**

## **Preliminary - NOT for construction**

Existing Roadway Area SY
Existing Roadway Area To Be Removed 20,973 SY
Proposed New Roadway Construction Area 114,778 SY

Existing Bridge Area 0 SF
Existing Bridge Area To Be Removed 0 SF
Proposed New Bridge Construction Area 0 SF

Estimate Limits: 2654' East of Independence Interchange to 3370' West of the Rosemont Interchange

### **2015 Construction Estimate**

Item Description	Quantity	Unit	Unit Cost	Item Cost	Comments
Pavement Removal	20,973	SY	\$20	\$419,460	(2 X 12 X 6295) / 9
Asphalt Concrete Overlay	50,360	SY	\$25	\$1,259,000	(6 X 12 X 6295) / 9
Full Depth Asphalt Concrete Pavement	50,360	SY	\$250	\$12,590,000	(6 X 12 X 6295) / 9
Curb and Gutter Removal	0	LF	\$15	\$0	
Curb and Gutter	1,350	LF	\$35	\$47,250	2L(Ind.)+4L(Euc.)
Retaining Wall	60,000	SF	\$150	\$9,000,000	4000 X15'
Sound Wall	12,650	LF	\$220	\$2,783,000	
Sidewalk	0	SY	\$65	\$0	
Barrier Wall Removal	6,295	LF	\$25	\$157,375	
Barrier Wall	6,295	LF	\$80	\$503,600	
Guardrail Removal	15,730	LF	\$10	\$157,300	
Guardrail	15,730	LF	\$35	\$550,550	
Overhead Truss Removal	2	EA	\$20,000	\$40,000	
Overhead Truss	2	EA	\$300,000	\$600,000	
Lighting Removal	1	LS	\$150,000	\$150,000	
Lighting	1	LS	\$500,000	\$500,000	
Traffic Signal	0	EA	\$300,000	\$0	
ITS/ TMS	1	LS	\$300,000	\$300,000	
Temporary Traffic Control	1	LS	\$750,000	\$750,000	
Erosion and Sediment Control	1	LS	\$500,000	\$500,000	
Minor Drainage Structures	1	LS	\$500,000	\$500,000	
Major Drainage Structures	1	LS	\$750,000	\$750,000	
Borrow Excavation	83,933	CY	\$30	\$2,517,990	5 X(50360*9) / 27
Stormwater Management	1	LS	\$500,000	\$500,000	
Signing/ Markings	1	LS	\$500,000	\$500,000	
			40=		
Bridge Removal	0	SF	\$35	\$0	
Bridge	0	SF	\$300	\$0	
			Subtotal	\$35,075,525	
Utility Relocation	1.5	Mi	\$20,000,000	\$30,000,000	
RW Acquistion	25.7	Ac	\$5,000,000	\$128,500,000	
Geotech Improvements	57,389	SY	\$1,100	\$63,127,900	
Permitting Fees/Wetland Mitigation	1	LS	\$1,753,776.25	\$1,753,776	5%
Design & Surveying	1	LS	\$3,507,552.50	\$3,507,553	10%
Public Involvement	1	LS	\$35,075.53	\$35,076	0.10%
IMR Study Reports	1	LS	\$105,226.58	\$105,227	0.30%
Aesthetic Design Features/Landscaping	1	LS	\$70,151.05	\$70,151	0.20%
MOA Agreements	1	LS	\$350,755.25	\$350,755	1%
Archeaological Mitigation	1	LS	\$140,302.10	\$140,302	0.40%
Hazmat Remediation	1	LS	\$105,226.58	\$105,227	0.30%
Contingency	1	LS	\$14,030,210.00	\$14,030,210	40%
Contingency			Ÿ17,030,210.00	71-7,030,210	

2015 Construction Estimate Total\* \$276,801,701

<sup>\*</sup> ESTIMATE DOES NOT INCLUDE COSTS FOR:

## I-264 Interchange at Rosemont Rd. (DGN BH06) Fig. No. VIII.4

### **Site Characteristics**

## **Preliminary - NOT for construction**

Existing Roadway Area To Be Removed 31,547 SY
Proposed New Roadway Construction Area 99,798 SY

Existing Bridge Area 52,667 SF
Existing Bridge Area To Be Removed 55,438 SF
Proposed New Bridge Construction Area 101,370 SF

Estimate Limits: Approximately 3370' West of the interchange TO approximately 3310' east of the interchange

### **2015 Construction Estimate**

Item Description	Quantity	Unit	Unit Cost	Item Cost	Comments
·	•				
Pavement Removal	31,547	SY	\$20	\$630,940	
Asphalt Concrete Overlay	90,868	SY	\$25	\$2,271,700	
Full Depth Asphalt Concrete Pavement	99,798	SY	\$250	\$24,949,500	
Curb and Gutter Removal	12,020	LF	\$15	\$180,300	
Curb and Gutter	16,494	LF	\$35	\$577,290	
Retaining Wall	44,600	SF	\$150	\$6,690,000	2230' X 20'
Sound Wall	18,688	LF	\$220	\$4,111,360	
Sidewalk	3,995	SY	\$65	\$45,890	
Barrier Wall Removal	8,240	LF	\$25	\$206,000	
Barrier Wall	8,240	LF	\$80	\$659,200	
Guardrail Removal	11,646	LF	\$10	\$116,460	
Guardrail	12,000	LF	\$35	\$420,000	
Overhead Truss Removal	2	EA	\$20,000	\$40,000	
Overhead Truss	3	EA	\$300,000	\$900,000	
Lighting Removal	1	LS	\$300,000	\$300,000	
Lighting	1	LS	\$750,000	\$750,000	
Traffic Signal	3	EA	\$300,000	\$900,000	
ITS/ TMS	1	LS	\$400,000	\$400,000	
Temporary Traffic Control	1	LS	\$1,000,000	\$1,000,000	
Erosion and Sediment Control	1	LS	\$750,000	\$750,000	
Minor Drainage Structures	1	LS	\$750,000	\$750,000	
Major Drainage Structures	1	LS	\$1,000,000	\$1,000,000	
Borrow Excavation	166,330	CY	\$30	\$4,989,900	5 X (99798X9) / 27
Stormwater Management	1	LS	\$750,000	\$750,000	
Signing/ Markings	1	LS	\$750,000	\$750,000	
Bridge Removal	55,438	SF	\$35	\$1,940,330	
Bridge	101,370	SF	\$300	\$30,411,000	
'			Subtotal	\$86,489,870	
Utility Relocation	4.2	Mi	\$20,000,000	\$84,000,000	
RW Acquistion	40.0	Ac	\$5,000,000	\$200,000,000	
Geotech Improvements	49,899	SY	\$1,100	\$54,888,900	
Permitting Fees/Wetland Mitigation	1	LS	\$4,324,493.50	\$4,324,494	5%
Design & Surveying	1	LS	\$8,648,987.00	\$8,648,987	10%
Public Involvement	1	LS	\$86,489.87	\$86,490	0.10%
IMR Study Reports	1	LS	\$259,469.61	\$259,470	0.30%
Aesthetic Design Features/Landscaping	1	LS	\$172,979.74	\$172,980	0.20%
MOA Agreements	1	LS	\$864,898.70	\$864,899	1%
Archeaological Mitigation	1	LS	\$345,959.48	\$345,959	0.40%
Hazmat Remediation	1	LS	\$259,469.61	\$259,470	0.30%
Contingency	1	LS	\$34,595,948.00	\$34,595,948	40%

2015 Construction Estimate Total\* \$474,937,466

Managed Lane Tolling Design or Const.
Complete Removal of Existing I-264 thru lanes
Major grade increase over S. Plaza Drive
Inflation / Escalation

<sup>\*</sup> ESTIMATE DOES NOT INCLUDE COSTS FOR:

## I-264 Interchange at Rosemont Rd. (DGN BH06-03) Fig. No. VIII.5

### **Site Characteristics**

## **Preliminary - NOT for construction**

Existing Roadway Area To Be Removed 40,874 SY Proposed New Roadway Construction Area 133,136 SY

Existing Bridge Area 52,667 SF
Existing Bridge Area To Be Removed 52,667 SF
Proposed New Bridge Construction Area 136,440 SF

Estimate Limits: Approximately 3370' West of the interchange TO approximately 3310' east of the interchange

### **2015 Construction Estimate**

				Item	
Item Description	Quantity	Unit	Unit Cost	Cost	Comments
·					
Pavement Removal	40,874	SY	\$20	\$817,480	
Asphalt Concrete Overlay	90,868	SY	\$25	\$2,271,700	
Full Depth Asphalt Concrete Pavement	133,136	SY	\$250	\$33,284,000	
Curb and Gutter Removal	12,020	LF	\$15	\$180,300	
Curb and Gutter	20,205	LF	\$35	\$707,175	
Retaining Wall	44,600	SF	\$150	\$6,690,000	2230' X 20'
Sound Wall	19,577	LF	\$220	\$4,306,940	
Sidewalk	2,260	SY	\$65	\$45,890	
Barrier Wall Removal	8,240	LF	\$25	\$206,000	
Barrier Wall	8,240	LF	\$80	\$659,200	
Guardrail Removal	11,646	LF	\$10	\$116,460	
Guardrail	12,000	LF	\$35	\$420,000	
Overhead Truss Removal	2	EA	\$20,000	\$40,000	
Overhead Truss	3	EA	\$300,000	\$900,000	
Lighting Removal	1	LS	\$300,000	\$300,000	
Lighting	1	LS	\$750,000	\$750,000	
Traffic Signal	2	EA	\$300,000	\$600,000	
ITS/ TMS	1	LS	\$400,000	\$400,000	
Temporary Traffic Control	1	LS	\$1,000,000	\$1,000,000	
Erosion and Sediment Control	1	LS	\$750,000	\$750,000	
Minor Drainage Structures	1	LS	\$750,000	\$750,000	
Major Drainage Structures	1	LS	\$1,000,000	\$1,000,000	
Borrow Excavation	221,893	CY	\$30	\$6,656,790	5 X (133136X9) / 27
Stormwater Management	1	LS	\$750,000	\$750,000	
Signing/ Markings	1	LS	\$750,000	\$750,000	
Bridge Removal	52,667	SF	\$35	\$1,843,345	
Bridge	136,440	SF	\$300	\$40,932,000	
·			Subtotal	\$107,127,280	
Utility Relocation	4.2	Mi	\$20,000,000	\$84,000,000	
RW Acquistion	44.5	Ac	\$5,000,000	\$222,500,000	
Geotech Improvements	66,568	SY	\$1,100	\$73,224,800	
Permitting Fees/Wetland Mitigation	1	LS	\$5,356,364.00	\$5,356,364	5%
Design & Surveying	1	LS	\$10,712,728.00	\$10,712,728	10%
Public Involvement	1	LS	\$107,127.28	\$107,127	0.10%
IMR Study Reports	1	LS	\$321,381.84	\$321,382	0.30%
Aesthetic Design Features/Landscaping	1	LS	\$214,254.56	\$214,255	0.20%
MOA Agreements	1	LS	\$1,071,272.80	\$1,071,273	1%
Archeaological Mitigation	1	LS	\$428,509.12	\$428,509	0.40%
Hazmat Remediation	1	LS	\$321,381.84	\$321,382	0.30%
Contingency	1	LS	\$42,850,912.00	\$42,850,912	40%

2015 Construction Estimate Total\* \$548,236,011

Managed Lane Tolling Design or Const.
Complete Removal of Existing I-264 thru lanes
Major grade increase over S. Plaza Drive
Inflation / Escalation

<sup>\*</sup> ESTIMATE DOES NOT INCLUDE COSTS FOR:

## I-264 Interchange at Rosemont Rd. (DGN BH06-04) Fig. No. VIII.6

### **Site Characteristics**

## **Preliminary - NOT for construction**

Existing Roadway Area To Be Removed 36,977 SY
Proposed New Roadway Construction Area 97,827 SY

Existing Bridge Area 52,667 SF
Existing Bridge Area To Be Removed 55,438 SF
Proposed New Bridge Construction Area 101,370 SF

Estimate Limits: Approximately 3370' West of the interchange TO approximately 3310' east of the interchange

### **2015 Construction Estimate**

				Item	
Item Description	Quantity	Unit	Unit Cost	Cost	Comments
Pavement Removal	36,977	SY	\$20	\$739,540	
Asphalt Concrete Overlay	90,868	SY	\$25	\$2,271,700	
Full Depth Asphalt Concrete Pavement	81,000	SY	\$250	\$20,250,000	
Curb and Gutter Removal	11,000	LF	\$15	\$165,000	
Curb and Gutter	13,000	LF	\$35	\$455,000	
Retaining Wall	44,600	SF	\$150	\$6,690,000	2230' X 20'
Sound Wall	17,604	LF	\$220	\$3,872,880	
Sidewalk	4,300	SY	\$65	\$45,890	
Barrier Wall Removal	8,240	LF	\$25	\$206,000	
Barrier Wall	8,240	LF	\$80	\$659,200	
Guardrail Removal	11,646	LF	\$10	\$116,460	
Guardrail	12,000	LF	\$35	\$420,000	
Overhead Truss Removal	2	EA	\$20,000	\$40,000	
Overhead Truss	3	EA	\$300,000	\$900,000	
Lighting Removal	1	LS	\$300,000	\$300,000	
Lighting	1	LS	\$750,000	\$750,000	
Traffic Signal	3	EA	\$300,000	\$900,000	
ITS/ TMS	1	LS	\$400,000	\$400,000	
Temporary Traffic Control	1	LS	\$1,000,000	\$1,000,000	
Erosion and Sediment Control	1	LS	\$750,000	\$750,000	
Minor Drainage Structures	1	LS	\$750,000	\$750,000	
Major Drainage Structures	1	LS	\$1,000,000	\$1,000,000	
Borrow Excavation	135,000	CY	\$30	\$4,050,000	5 X (81000 X 9) / 27
Stormwater Management	1	LS	\$750,000	\$750,000	
Signing/ Markings	1	LS	\$750,000	\$750,000	
Bridge Removal	55,438	SF	\$35	\$1,940,330	
Bridge	101,370	SF	\$300	\$30,411,000	
			Subtotal	\$80,583,000	
Utility Relocation	4.3	Mi	\$20,000,000	\$86,000,000	
RW Acquistion	38.5	Ac	\$5,000,000	\$192,500,000	
Geotech Improvements	48,914	SY	\$1,100	\$53,804,850	
Permitting Fees/Wetland Mitigation	1	LS	\$4,029,150.00	\$4,029,150	5%
Design & Surveying	1	LS	\$8,058,300.00	\$8,058,300	10%
Public Involvement	1	LS	\$80,583.00	\$80,583	0.10%
IMR Study Reports	1	LS	\$241,749.00	\$241,749	0.30%
Aesthetic Design Features/Landscaping	1	LS	\$161,166.00	\$161,166	0.20%
MOA Agreements	1	LS	\$805,830.00	\$805,830	1%
Archeaological Mitigation	1	LS	\$322,332.00	\$322,332	0.40%
Hazmat Remediation	1	LS	\$241,749.00	\$241,749	0.30%
Contingency	1	LS	\$32,233,200.00	\$32,233,200	40%

2015 Construction Estimate Total\* \$459,061,909

<sup>\*</sup> ESTIMATE DOES NOT INCLUDE COSTS FOR:

## I-264 & First Colonial Interchange (DGN BH11-01) Fig. No. XI.4

### **Site Characteristics**

## **Preliminary - NOT for construction**

Existing Roadway Area SY
Existing Roadway Area To Be Removed 6,447 SY
Proposed New Roadway Construction Area 15,041 SY

Existing Bridge Area
Existing Bridge Area To Be Removed
Proposed New Bridge Construction Area
49,550 SF

### **2015 Construction Estimate**

!				Item	
Item Description	Quantity	Unit	Unit Cost	Cost	Comments
Pavement Removal	6,447	SY	\$20	\$128,940	Shapes
Asphalt Concrete Overlay	8,284	SY	\$25	\$207,100	635' L X 66' W Area @ the intersectio
Full Depth Asphalt Concrete Pavement	15,041	SY	\$250	\$3,760,250	Shapes
Curb and Gutter Removal	1,270	LF	\$15	\$19,050	
Curb and Gutter	1,270	LF	\$35	\$44,450	
Retaining Wall	0	SF	\$150	\$0	
Sound Wall	2,440	LF	\$220	\$536,800	
Sidewalk	706	SY	\$65	\$45,890	
Barrier Wall Removal	290	LF	\$25	\$7,250	
Barrier Wall	0	LF	\$80	\$0	
Guardrail Removal	2,500	LF	\$10	\$25,000	
Guardrail	2,000	LF	\$35	\$70,000	
Overhead Truss Removal	0	EA	\$20,000	\$0	
Overhead Truss	0	EA	\$300,000	\$0	
Lighting Removal	1	LS	\$150,000	\$150,000	
Lighting	1	LS	\$300,000	\$300,000	
Traffic Signal	1	EA	\$300,000	\$300,000	
ITS/ TMS	1	LS	\$400,000	\$400,000	
Temporary Traffic Control	1	LS	\$750,000	\$750,000	
<b>Erosion and Sediment Control</b>	1	LS	\$500,000	\$500,000	
Minor Drainage Structures	1	LS	\$500,000	\$500,000	
Major Drainage Structures	0	LS	\$750,000	\$0	
Borrow Excavation	25,068	CY	\$30	\$752,040	5 X (15041 X 9) / 27
Stormwater Management	1	LS	\$500,000	\$500,000	
Signing/ Markings	1	LS	\$750,000	\$750,000	
Bridge Removal	35,000	SF	\$35	\$1,225,000	
Bridge	49,550	SF	\$300	\$14,865,000	
			Subtotal	\$25,836,770	
Utility Relocation	0.8	Mi	\$20,000,000	\$16,200,000	
RW Acquistion	2.0	Ac	\$5,000,000	\$10,000,000	
Geotech Improvements	7,521	SY	\$1,100	\$8,272,550	
Permitting Fees/Wetland Mitigation	1	LS	\$1,291,838.50	\$1,291,839	5%
Design & Surveying	1	LS	\$2,583,677.00	\$2,583,677	10%
Public Involvement	1	LS	\$25,836.77	\$25,837	0.10%
IMR Study Reports	1	LS	\$77,510.31	\$77,510	0.30%
Aesthetic Design Features/Landscaping	1	LS	\$51,673.54	\$51,674	0.20%
MOA Agreements	1	LS	\$258,367.70	\$258,368	1%
Archeaological Mitigation	1	LS	\$103,347.08	\$103,347	0.40%
Hazmat Remediation	1	LS	\$77,510.31	\$77,510	0.30%
Contingency	1	LS	\$10,334,708.00	\$10,334,708	40%

2015 Construction Estimate Total\* \$75,113,789

<sup>\*</sup> ESTIMATE DOES NOT INCLUDE COSTS FOR:

## I-264 & First Colonial Interchange (DGN BH11-02) Fig. No. XI.5

### **Site Characteristics**

## **Preliminary - NOT for construction**

Existing Roadway Area SY
Existing Roadway Area To Be Removed 6,447 SY
Proposed New Roadway Construction Area 8,191 SY

Existing Bridge Area
Existing Bridge Area To Be Removed
Proposed New Bridge Construction Area
44,151 SF

### **2015 Construction Estimate**

				Item	
Item Description	Quantity	Unit	Unit Cost	Cost	Comments
Pavement Removal	6,447	SY	\$20	\$128,940	Shapes
Asphalt Concrete Overlay	4,657	SY	\$25	\$116,425	635' L X 66' W Area @ the intersection
Full Depth Asphalt Concrete Pavement	8,191	SY	\$250	\$2,047,750	Shapes
Curb and Gutter Removal	1,270	LF	\$15	\$19,050	
Curb and Gutter	1,270	LF	\$35	\$44,450	
Retaining Wall	0	SF	\$150	\$0	
Sound Wall	19,003	LF	\$220	\$4,180,660	
Sidewalk	706	SY	\$65	\$45,890	
Barrier Wall Removal	290	LF	\$25	\$7,250	
Barrier Wall	0	LF	\$80	\$0	
Guardrail Removal	2,500	LF	\$10	\$25,000	
Guardrail	2,000	LF	\$35	\$70,000	
Overhead Truss Removal	0	EA	\$20,000	\$0	
Overhead Truss	0	EA	\$300,000	\$0	
Lighting Removal	1	LS	\$150,000	\$150,000	
Lighting	1	LS	\$300,000	\$300,000	
Traffic Signal	2	EA	\$300,000	\$600,000	
ITS/ TMS	1	LS	\$400,000	\$400,000	
Temporary Traffic Control	1	LS	\$750,000	\$750,000	
Erosion and Sediment Control	1	LS	\$500,000	\$500,000	
Minor Drainage Structures	1	LS	\$500,000	\$500,000	
Major Drainage Structures	0	LS	\$750,000	\$0	
Borrow Excavation	13,652	CY	\$30,000	\$409,560	5 X (8191 X 9) / 27
Stormwater Management	13,032	LS	\$500,000	\$500,000	3 x (8131 x 3) / 27
_	1	LS	\$750,000	\$750,000	
Signing/ Markings	1	LS	\$750,000	\$750,000	
Bridge Removal	35,000	SF	\$35	\$1,225,000	
Bridge	44,151	SF	\$300	\$13,245,300	
			Subtotal	\$26,015,275	
Utility Relocation	0.5	Mi	\$20,000,000	\$10,800,000	
RW Acquistion	2.0	Ac	\$5,000,000	\$10,000,000	
·					
Geotech Improvements	4,096	SY	\$1,100	\$4,505,050	50/
Permitting Fees/Wetland Mitigation	1	LS	\$1,300,763.75	\$1,300,764	5%
Design & Surveying	1	LS	\$2,601,527.50	\$2,601,528	10%
Public Involvement	1	LS	\$26,015.28	\$26,015	0.10%
IMR Study Reports	1	LS	\$78,045.83	\$78,046	0.30%
Aesthetic Design Features/Landscaping	1	LS	\$52,030.55	\$52,031	0.20%
MOA Agreements	1	LS	\$260,152.75	\$260,153	1%
Archeaological Mitigation	1	LS	\$104,061.10	\$104,061	0.40%
Hazmat Remediation	1	LS	\$78,045.83	\$78,046	0.30%
Contingency	1	LS	\$10,406,110.00	\$10,406,110	40%

2015 Construction Estimate Total\*

\$66,227,078

<sup>\*</sup> ESTIMATE DOES NOT INCLUDE COSTS FOR: