
APPENDIX L
Preliminary Cost Estimate – Elevated Section

Capital Construction Cost Estimate

Conventional Construction Method

Reinforced Concrete Deck Slab on Steel Girders

**Contract E2-1
F. G. Gardiner Deck Replacement
Bent 125 to Bent 162
Preliminary Cost Estimate**

Item	Description	Unit	Quantity	Unit Bid Price	Total Bid Price	Add #
General						
00001	Field Office TS 1.10 / SS5	LS	1.00	80,000.00	\$80,000.00	
00002	Cellular Phone (Provisional) SS6	PS	1.00	4,500.00	\$4,500.00	
00003	Supply, Install, Maintain and Remove Temporary Security Fence - On Grade SS8	m		15.00	\$0.00	
00004	Supply, Install, Maintain and Remove Hoarding SS9	LS	1.00	30,000.00	\$30,000.00	
00005	Construction Survey and Layout SS10	LS	1.00	50,000.00	\$50,000.00	
				General - Total	\$164,500.00	
Traffic Control						
00006	Traffic Control Persons, Signs, Barricades, etc. TS 1.00 / SS11	LS	1.00	750,000.00	\$750,000.00	
00007	Supply, Install and Maintain TC-12 Arrow Board (Provisional) TS 1.00 / SS12	EA	4.00	2,500.00	\$10,000.00	
00008	Supply, Install and Maintain Portable Variable Message Signs (Provisional) SS13	EA	6.00	5,000.00	\$30,000.00	
00009	Temporary Pavement Marking - Paint TTS 816 / SS14	m	11,000.00	4.00	\$44,000.00	
00010	Pavement Marking Obliteration - By Waterblasting SS15	m	1,500.00	3.50	\$5,250.00	
00011	Pavement Marking Obliteration - Temporary Tape (50%) OPSS 180 / SS16	m	1,500.00	8.00	\$12,000.00	
00012	Permanent Pavement Marking - Thermoplastic SS17	m	12,000.00	5.00	\$60,000.00	
00013	Temporary Pavement Marking - Tape TTS 816 / SS18	m	1,500.00	7.25	\$10,875.00	
00014	Temporary Pavement Marking - Tape (Arrows) TTS 816 / SS18	EA	15.00	160.00	\$2,400.00	
00015	Permanent Pavement Marking - Paint TTS 816 / SS19	m	0.00	4.00	\$0.00	
00016	Permanent Pavement Marking - Thermoplastic (Arrows) TTS 816 / SS19	EA	6.00	320.00	\$1,920.00	
00017	Delineators - "Drum" Type TS 1.00 / SS20	EA	300.00	50.00	\$15,000.00	
00018	"Drum" Type Delineator - Relocation SS22	EA	600.00	40.00	\$24,000.00	
00019	Temporary Concrete Barrier (Precast) SS24	m	2,500.00	65.00	\$162,500.00	
00020	Temporary Concrete Barrier (Precast) - Relocation TS 1.00 / SS25	m	3,500.00	15.00	\$52,500.00	
00021	Energy Attenuator Crash Cushion - Temporary OPSD 923.480 / SS26	EA	4.00	12,000.00	\$48,000.00	
00022	Chain Link Fence on Temporary Concrete Barrier TS 541 / SS24	m	2,500.00	30.00	\$75,000.00	
00023	Chain Link Fence on Temporary Concrete Barrier - Relocation SS25	m	3,600.00	35.00	\$126,000.00	
00024	Energy Attenuator Crash Cushion - Temporary - Relocation	EA	4.00	9,000.00	\$36,000.00	

**Contract E2-1
F. G. Gardiner Deck Replacement
Bent 125 to Bent 162
Preliminary Cost Estimate**

Item	Description	Unit	Quantity	Unit Bid Price	Total Bid Price	Add #
	SS26					
00025	Temporary Transition Rails - All Types SS27	EA	2.00	2,000.00	\$4,000.00	
00026	Temporary Transition Rails - All Types - Relocation SS27	EA	2.00	2,000.00	\$4,000.00	
				Traffic Control - Total	\$1,473,445.00	
Structural Rehabilitation						
00027	Full Depth Asphalt and Waterproofing Removal OPSS 928 / OPSS 928-MT	m ²	21,461.00	5.50	\$118,035.50	
00028	Partial Depth Asphalt Removal (0 - 80mm Depth) TS3.15 / TS 510 / SS28	m ²	1,800.00	6.25	\$11,250.00	
00029	Removal and Disposal of Existing Glare Screen - All Types SS29	m	775.00	12.00	\$9,300.00	
00030	Removal and Salvage Existing Parapet Wall Rails and Deliver to City Yard SS30	m	1,550.00	30.00	\$46,500.00	
00031	Access and Protection SS31	m ²	23,300.00	50.00	\$1,165,000.00	
00032	Removal of Median Barrier	m	775.00	50.00	\$38,750.00	
00033	Removal of Concrete Parapets (length) SS33	m	1,550.00	200.00	\$310,000.00	
00034	Removal of Concrete Deck (area) SS33	m ²	23,300.00	275.00	\$6,407,500.00	
00035	Dowels into Concrete OPSS 904 / OPSS 904-MT / SS34	EA	1,500.00	10.00	\$15,000.00	
00036	Stainless Steel Reinforcing Bars SS35	Tonne	665.00	9,000.00	\$5,985,000.00	
00037	GFRP Reinforcing Bars SS36	m	0.00	0.00	\$0.00	
00038	Structural Steel Repairs SS37	EA	100.00	6,500.00	\$650,000.00	
00039	Supply and Install Expansion Joint Assemblies OPSS 920 / OPSS 920-MT / SS38	m	250.00	3,500.00	\$875,000.00	
00040	Concrete in Barrier Walls and LP Bases SS39	m ³	552.96	1,800.00	\$995,332.50	
00041	Concrete in Deck SS39	m ³	5,245.00	2,200.00	\$11,539,000.00	
00042	Bridge Deck Waterproofing OPSS 914 / OPSS 914-MT / SS40	m ²	21,461.00	45.00	\$965,745.00	
00043	Membrane Reinforcement OPSS 914 / OPSS 914-MT / SS41	m ²	0.00	0.00	\$0.00	
00044	Application of Surface Coating SS43	m ²	1,600.00	10.00	\$16,000.00	
00045	Welder's Hours	Hours	500.00	110.00	\$55,000.00	
00046	Iron Workers Hours	Hours	500.00	110.00	\$55,000.00	
00047	Mechanical Couplers	EA	10,400.00	35.00	\$364,000.00	
00048	Removal of Existing Drainage Hoppers and Pipes Including Steel Brackets SS44	EA	110.00	1,000.00	\$110,000.00	
00049	Supply, Fabricate and Install New FRP 200mm Diameter Drain Pipes	m	2,500.00	400.00	\$1,000,000.00	

**Contract E2-1
F. G. Gardiner Deck Replacement
Bent 125 to Bent 162
Preliminary Cost Estimate**

Item	Description	Unit	Quantity	Unit Bid Price	Total Bid Price	Add #
	SS44					
00050	Drainage Hopper Cleanout SS45	EA	111.00	100.00	\$11,100.00	
00051	Modification of Existing Drainage Hoppers	EA	111.00	2,000.00	\$222,000.00	
00052	Preparation of FRP Pipe and Drainage System Isometric Drawings SS46	LS	1.00	10,000.00	\$10,000.00	
00053	Removal and Disposal of Drainage Recess Cover Plates (Asbestos and Non-Asbestos) SS47	LS	0.00	0.00	\$0.00	
00054	Cover Plates SS49	EA	49.00	1,500.00	\$73,500.00	
00055	New Drains - in Deck OPSS 906 / OPSS 906-MT	EA	111.00	2,500.00	\$277,500.00	
00056	Concrete in Expansion Joint Dams OPSS 904 / OPSS 904-MT	m ³	100.00	1,500.00	\$150,000.00	
00057	Concrete in Median Barrier (slip formed) OPSS 553	m	775.00	200.00	\$155,000.00	
00058	Hot & Cold Weather Concreting	LS	1.00	100,000.00	\$100,000.00	
00059	Jacking of existing girders	EA	1,180.00	500.00	\$590,000.00	
00060	Removal of existing bearings	EA	1,180.00	300.00	\$354,000.00	
00061	Removal of concrete at bearings	m ³	85.00	4,000.00	\$340,000.00	
00062	Installation of dowels (bearings)	EA	10,800.00	10.00	\$108,000.00	
00063	Concrete in bearing pedestal	m ³	339.00	3,500.00	\$1,186,500.00	
00064	New Bearings	EA	1,180.00	700.00	\$826,000.00	
00065	Coating Ends of Girders at Expansion Joints	m ²	2,500.00	300.00	\$750,000.00	
	Structure Rehabilitation - Total				\$35,885,013.00	
Paving						
00066	Asphalt Trial Batches MT 3.00 / SS50	EA	4.00	600.00	\$2,400.00	
00067	HL8 (HS) Binder Course Including AASHTO PGAC 64-28 Performance Graded Liquid Asphalt Cement TS 310 / MT 3.00 / SS51	Mg	2,260.00	170.00	\$384,200.00	
00068	DFC Surface Course Including AASHTO PGAC 64-28 Performance Graded Liquid Asphalt Cement TS 310 / MT 3.00 / SS51	Mg	2,440.00	170.00	\$414,800.00	
00069	Payment Adjustment for Changes in the Cost of Performance Graded Asphalt Cement (Provisional Item) SS52	LS	1.00	50,000.00	\$50,000.00	
00070	Form and Fill Grooves OPSS 914-MT	m	3,800.00	6.50	\$24,700.00	
	Paving - Total				\$876,100.00	
Electrical						
00071	Temporary Light Pole Bases - Supply and Fabricate	EA	19.00	3,000.00	\$57,000.00	

**Contract E2-1
F. G. Gardiner Deck Replacement
Bent 125 to Bent 162
Preliminary Cost Estimate**

Item	Description	Unit	Quantity	Unit Bid Price	Total Bid Price	Add #
00072	Temporary Light Pole Bases - Installation and Removal	EA	38.00	2,000.00	\$76,000.00	
00073	Relocation of CTMS	LS	1.00	50,000.00	\$50,000.00	
00074	Remove, Protect and Reinststate (or Maintain and Protect) Lighting Conduit, Cables, Overhead Wires and Junction Boxes SS54	LS	1.00	50,000.00	\$50,000.00	
00075	Surface Mounted Duct System OPSS 603 / SS55	m	1,550.00	100.00	\$155,000.00	
00076	Supply and Install Low Voltage Cables in Ducts OPSS 604 / SS56	m	4,700.00	10.00	\$47,000.00	
00077	Ground Wires OPSS 609	m	1,550.00	10.00	\$15,500.00	
00078	Removal of Electrical Equipment OPSS 610 / SS57	LS	1.00	65,000.00	\$65,000.00	
00079	Supply and Install New Aluminum Poles Base Mounted OPSS 615 / SS58	EA	74.00	2,200.00	\$162,800.00	
00080	Supply and Install Expressway Lighting, Luminaires and Davit Assemblies OPSS 617 / SS60	EA	74.00	650.00	\$48,100.00	
00081	Supply and Install Low Voltage Cables, Aerial Slack Span (Temporary) OPSS 604 / SS56	m	1,550.00	60.00	\$93,000.00	
00082	Salvage and Install Expressway Lighting, Luminaires and Bracket Assemblies (Temporary) OPSS 617 / SS59	EA	34.00	1,000.00	\$34,000.00	
00083	Installation of New Loop Detector Stations	EA	5.00	6,000.00	\$30,000.00	
00084	Maintenance of Lighting Within Work Zone	LS	1.00	80,000.00	\$80,000.00	
00085	Permanent Precast Concrete Barrier (tallwall)	m		400.00	\$0.00	
	Electrical - Total				\$963,400.00	
Miscellaneous						
00086	Miscellaneous Items (5%)	LS	1.00	2,900,000.00	\$2,900,000.00	
00087	Contingency (20%)	LS	1.00	11,400,000.00	\$11,400,000.00	
	Miscellaneous - Total				\$14,300,000.00	
	TOTAL				\$53,662,458.00	

**Contract E2-2
F. G. Gardiner Deck Replacement
Bent 162 to 182**

Preliminary Cost Estimate

Item	Description	Unit	Quantity	Unit Bid Price	Total Bid Price	Add #
General						
00001	Field Office TS 1.10 / SS5	LS	1.00	80,000.00	80,000.00	
00002	Cellular Phone (Provisional) SS6	PS	1.00	4,500.00	4,500.00	
00003	Supply, Install, Maintain and Remove Temporary Security Fence - On Grade SS8	m	2,400.00	15.00	36,000.00	
00004	Supply, Install, Maintain and Remove Hoarding SS9	LS	1.00	30,000.00	30,000.00	
00005	Construction Survey and Layout SS10	LS	1.00	35,000.00	35,000.00	
				General - Total	\$185,500.00	
Traffic Control						
00006	Traffic Control Persons, Signs, Barricades, etc. TS 1.00 / SS11	LS	1.00	750,000.00	750,000.00	
00007	Supply, Install and Maintain TC-12 Arrow Boarc TS 1.00 / SS12	EA	2.00	2,500.00	5,000.00	
00008	Supply, Install and Maintain Portable Variable Message Signs (Provisional) SS13	EA	6.00	5,000.00	30,000.00	
00009	Temporary Pavement Marking - Paint TTS 816 / SS14	m	8,000.00	4.00	32,000.00	
00010	Pavement Marking Obliteration - By Waterblasting (Provisional) SS15	m	1,500.00	3.50	5,250.00	
00011	Pavement Marking Obliteration - Temporary Tape (50%) OPSS 180 / SS16	m	1,500.00	8.00	12,000.00	
00012	Permanent Pavement Marking - Thermoplastic SS17	m	8,000.00	5.00	40,000.00	
00013	Temporary Pavement Marking - Tape TTS 816 / SS18	m	1,500.00	7.25	10,875.00	
00014	Temporary Pavement Marking - Tape (Arrows) TTS 816 / SS18	EA	12.00	160.00	1,920.00	
00015	Permanent Pavement Marking - Paint TTS 816 / SS19	m	0.00	4.00	\$0.00	
00016	Permanent Pavement Marking - Thermoplastic (Arrows) TTS 816 / SS19	EA	10.00	320.00	3,200.00	
00017	Delineators - "Drum" Type TS 1.00 / SS20	EA	300.00	50.00	15,000.00	
00018	"Drum" Type Delineator - Relocation SS22	EA	600.00	40.00	24,000.00	
00019	Temporary Concrete Barrier (Precast) SS24	m	1,500.00	65.00	97,500.00	
00020	Temporary Concrete Barrier (Precast) - Relocation TS 1.00 / SS25	m	2,400.00	15.00	36,000.00	
00021	Energy Attenuator Crash Cushion - Temporary OPSD 923.480 / SS26	EA	4.00	12,000.00	48,000.00	
00022	Chain Link Fence on Temporary Concrete Barrier TS 541 / SS24	m	1,500.00	30.00	45,000.00	
00023	Chain Link Fence on Temporary Concrete Barrier - Relocation SS25	m	2,400.00	35.00	84,000.00	

**Contract E2-2
F. G. Gardiner Deck Replacement
Bent 162 to 182**

Preliminary Cost Estimate

Item	Description	Unit	Quantity	Unit Bid Price	Total Bid Price	Add #
00024	Energy Attenuator Crash Cushion - Temporary - Relocation SS26	EA	4.00	9,000.00	36,000.00	
00025	Temporary Transition Rails - All Types SS27	EA	2.00	2,000.00	4,000.00	
00026	Temporary Transition Rails - All Types - Relocation SS27	EA	2.00	2,000.00	4,000.00	
				Traffic Control - Total	\$1,283,745.00	
Structural Rehabilitation						
00027	Full Depth Asphalt and Waterproofing Removal OPSS 928 / OPSS 928-MT	m ²	10,950.00	5.50	60,225.00	
00028	Partial Depth Asphalt Removal (0 - 80mm Depth) TS3.15 / TS 510 / SS28	m ²	1,500.00	6.25	9,375.00	
00029	Removal and Disposal of Existing Glare Screen - All Types SS29	m	450.00	12.00	5,400.00	
00030	Removal and Salvage Existing Parapet Wall Rails and Deliver to City Yard SS30	m	800.00	30.00	24,000.00	
00031	Access and Protection SS31	m ²	12,000.00	50.00	600,000.00	
00032	Removal of Median Barrier	m	450.00	50.00	22,500.00	
00033	Removal of Concrete Parapets (length) SS33	m	800.00	200.00	160,000.00	
00034	Removal of Concrete Deck (area) SS33	m ²	11,785.00	275.00	3,240,875.00	
00035	Dowels into Concrete OPSS 904 / OPSS 904-MT / SS34	EA	1,500.00	10.00	15,000.00	
00036	Stainless Steel Reinforcing Bars SS35	Tonne	400.00	9,000.00	3,600,000.00	
00037	GFRP Reinforcing Bars SS36	m	0.00	0.00	\$0.00	
00038	Structural Steel Repairs SS37	Tonne	50.00	6,500.00	325,000.00	
00039	Supply and Install Expansion Joint Assemblies OPSS 920 / OPSS 920-MT / SS38	m	140.00	3,500.00	490,000.00	
00040	Concrete in Barrier Walls and LP Bases SS39	m ³	320.00	1,800.00	576,000.00	
00041	Concrete in Deck SS39	m ³	2,770.00	2,200.00	\$6,094,000.00	
00042	Bridge Deck Waterproofing OPSS 914 / OPSS 914-MT / SS40	m ²	11,500.00	45.00	517,500.00	
00043	Membrane Reinforcement OPSS 914 / OPSS 914-MT / SS41	m ²	0.00	0.00	\$0.00	
00044	Application of Surface Coating SS43	m ²	1,600.00	10.00	16,000.00	
00045	Welder's Hours	Hours	250.00	110.00	27,500.00	
00046	Iron Workers Hours	Hours	250.00	110.00	27,500.00	
00047	Mechanical Couplers	EA	6,000.00	35.00	210,000.00	
00048	Removal of Existing Drainage Hoppers and Pipes Including Steel Brackets SS44	EA	50.00	1,000.00	50,000.00	

**Contract E2-2
F. G. Gardiner Deck Replacement
Bent 162 to 182**

Preliminary Cost Estimate

Item	Description	Unit	Quantity	Unit Bid Price	Total Bid Price	Add #
00049	Supply, Fabricate and Install New FRP 200mm Diameter Drain Pipes SS44	m	2,000.00	400.00	\$800,000.00	
00050	Drainage Hopper Cleanout SS45	EA	50.00	100.00	\$5,000.00	
00051	Modification of Existing Drainage Hoppers	EA	50.00	2,000.00	\$100,000.00	
00052	Preparation of FRP Pipe and Drainage System Isometric Drawings SS46	LS	1.00	10,000.00	\$10,000.00	
00053	Removal and Disposal of Drainage Recess Cover Plates (Asbestos and Non-Asbestos) SS47	LS	0.00	0.00	\$0.00	
00054	Cover Plates SS49	EA	8.00	1,500.00	\$12,000.00	
00055	New Drains - in Deck OPSS 906 / OPSS 906-MT	EA	60.00	2,500.00	\$150,000.00	
00056	Concrete in Expansion Joint Dams OPSS 904 / OPSS 904-MT	m ³	50.00	1,500.00	\$75,000.00	
00057	Concrete in Median Barrier (slip formed) OPSS 553	m	400.00	200.00	\$80,000.00	
00058	Hot & Cold Weather Concreting	LS	1.00	50,000.00	\$50,000.00	
00059	Jacking of existing girders	EA	800.00	500.00	\$400,000.00	
00060	Removal of existing bearings	EA	800.00	300.00	\$240,000.00	
00061	Removal of concrete at bearings	m ³	60.00	4,000.00	\$240,000.00	
00062	Installation of dowels (bearings)	EA	8,000.00	10.00	\$80,000.00	
00063	Concrete in bearing pedestal	m ³	230.00	3,500.00	\$805,000.00	
00064	New Bearings	EA	800.00	700.00	\$560,000.00	
00065	Coating Ends of Girders at Expansion Joints	m ²	1,500.00	300.00	\$450,000.00	
	Structure Rehabilitation - Total				\$20,127,875.00	
Paving						
00066	Asphalt Trial Batches MT 3.00 / SS50	EA	4.00	600.00	\$2,400.00	
00067	HL8 (HS) Binder Course Including AASHTO PGAC 64-28 Performance Graded Liquid Asphalt Cement TS 310 / MT 3.00 / SS51	Mg	1,130.00	170.00	\$192,100.00	
00068	DFC Surface Course Including AASHTO PGAC 64-28 Performance Graded Liquid Asphalt Cement TS 310 / MT 3.00 / SS51	Mg	1,130.00	170.00	\$192,100.00	
00069	Payment Adjustment for Changes in the Cost of Performance Graded Asphalt Cement (Provisional Item) SS52	LS	1.00	50,000.00	\$50,000.00	
00070	Form and Fill Grooves OPSS 914-MT	m	2,500.00	6.50	\$16,250.00	
	Paving - Total				\$452,850.00	

**Contract E2-2
F. G. Gardiner Deck Replacement
Bent 162 to 182**

Preliminary Cost Estimate

Item	Description	Unit	Quantity	Unit Bid Price	Total Bid Price	Add #
Electrical						
00071	Temporary Light Pole Bases - Supply and Fabricate	EA	17.00	3,000.00	\$51,000.00	
00072	Temporary Light Pole Bases - Installation and Removal	EA	34.00	2,000.00	\$68,000.00	
00073	Relocation of CTMS	LS	1.00	50,000.00	\$50,000.00	
00074	Remove, Protect and Reinstall (or Maintain and Protect) Lighting Conduit, Cables, Overhead Wires and Junction Boxes SS54	LS	1.00	50,000.00	\$50,000.00	
00075	Surface Mounted Duct System OPSS 603 / SS55	m	800.00	100.00	\$80,000.00	
00076	Supply and Install Low Voltage Cables in Ducts OPSS 604 / SS56	m	2,400.00	10.00	\$24,000.00	
00077	Ground Wires OPSS 609	m	800.00	10.00	\$8,000.00	
00078	Removal of Electrical Equipment OPSS 610 / SS57	LS	1.00	65,000.00	\$65,000.00	
00079	Supply and Install New Aluminum Poles Base Mounted OPSS 615 / SS58	EA	40.00	2,200.00	\$88,000.00	
00080	Supply and Install Expressway Lighting, Luminaires and Davit Assemblies OPSS 617 / SS60	EA	40.00	650.00	\$26,000.00	
00081	Supply and Install Low Voltage Cables, Aerial Slack Span (Temporary) OPSS 604 / SS56	m	800.00	60.00	\$48,000.00	
00082	Salvage and Install Aluminum Poles, Base Mounted (Temporary) OPSS 615 / SS58	EA	34.00	1,000.00	\$34,000.00	
00083	Installation of New Loop Detector Stations	EA	5.00	6,000.00	\$30,000.00	
00084	Maintenance of Lighting Within Work Zone	LS	1.00	80,000.00	\$80,000.00	
00085	Permanent Precast Concrete Barrier (tallwall)	m	180.00	400.00	\$72,000.00	
	Electrical - Total				\$774,000.00	
Miscellaneous						
00086	Miscellaneous Items (5%)	LS	1.00	1,600,000.00	\$1,600,000.00	
00087	Contingency (20%)	LS	1.00	6,500,000.00	\$6,500,000.00	
	Miscellaneous - Total				\$8,100,000.00	
	TOTAL				\$30,923,970.00	

**Contract E3
F. G. Gardiner Deck Replacement
Bent 91 to Bent 125
Preliminary Cost Estimate**

Item	Description	Unit	Quantity	Unit Bid Price	Total Bid Price	Add #
General						
00001	Field Office TS 1.10 / SS5	LS	1.00	80,000.00	\$80,000.00	
00002	Cellular Phone (Provisional) SS6	PS	1.00	4,500.00	\$4,500.00	
00003	Supply, Install, Maintain and Remove Temporary Security Fence - On Grade SS8	m	3,500.00	15.00	\$52,500.00	
00004	Supply, Install, Maintain and Remove Hoarding SS9	LS	1.00	30,000.00	\$30,000.00	
00005	Construction Survey and Layout SS10	LS	1.00	50,000.00	\$50,000.00	
				General - Total	\$217,000.00	
Traffic Control						
00006	Traffic Control Persons, Signs, Barricades, etc. TS 1.00 / SS11	LS	1.00	750,000.00	\$750,000.00	
00007	Supply, Install and Maintain TC-12 Arrow Board TS 1.00 / SS12	EA	2.00	2,500.00	\$5,000.00	
00008	Supply, Install and Maintain Portable Variable Message Signs (Provisional) SS13	EA	6.00	5,000.00	\$30,000.00	
00009	Temporary Pavement Marking - Paint TTS 816 / SS14	m	11,000.00	4.00	\$44,000.00	
00010	Pavement Marking Obliteration - By Waterblasting (Provisional) SS15	m	1,500.00	3.50	\$5,250.00	
00011	Pavement Marking Obliteration - Temporary Tape (50%) OPSS 180 / SS16	m	1,500.00	8.00	\$12,000.00	
00012	Permanent Pavement Marking - Thermoplastic SS17	m	11,000.00	5.00	\$55,000.00	
00013	Temporary Pavement Marking - Tape TTS 816 / SS18	m	1,500.00	7.25	\$10,875.00	
00014	Temporary Pavement Marking - Tape (Arrows) TTS 816 / SS18	EA	12.00	160.00	\$1,920.00	
00015	Permanent Pavement Marking - Paint TTS 816 / SS19	m	0.00	4.00	\$0.00	
00016	Permanent Pavement Marking - Thermoplastic (Arrows) TTS 816 / SS19	EA	0.00	320.00	\$0.00	
00017	Delineators - "Drum" Type TS 1.00 / SS20	EA	300.00	50.00	\$15,000.00	
00018	"Drum" Type Delineator - Relocation SS22	EA	600.00	40.00	\$24,000.00	
00019	Temporary Concrete Barrier (Precast) SS24	m	2,200.00	65.00	\$143,000.00	
00020	Temporary Concrete Barrier (Precast) - Relocation TS 1.00 / SS25	m	3,300.00	15.00	\$49,500.00	
00021	Energy Attenuator Crash Cushion - Temporary OPSD 923.480 / SS26	EA	4.00	12,000.00	\$48,000.00	
00022	Chain Link Fence on Temporary Concrete Barrier TS 541 / SS24	m	2,200.00	30.00	\$66,000.00	
00023	Chain Link Fence on Temporary Concrete Barrier - Relocation SS25	m	3,300.00	35.00	\$115,500.00	
00024	Energy Attenuator Crash Cushion - Temporary - Relocation	EA	4.00	9,000.00	\$36,000.00	

**Contract E3
F. G. Gardiner Deck Replacement
Bent 91 to Bent 125
Preliminary Cost Estimate**

Item	Description	Unit	Quantity	Unit Bid Price	Total Bid Price	Add #
	SS26					
00025	Temporary Transition Rails - All Types SS27	EA	2.00	2,000.00	\$4,000.00	
00026	Temporary Transition Rails - All Types - Relocation SS27	EA	2.00	2,000.00	\$4,000.00	
				Traffic Control - Total	\$1,419,045.00	
Structural Rehabilitation						
00027	Full Depth Asphalt and Waterproofing Removal OPSS 928 / OPSS 928-MT	m ²	22,786.00	5.50	\$125,323.00	
00028	Partial Depth Asphalt Removal (0 - 80mm Depth) TS3.15 / TS 510 / SS28	m ²	1,800.00	6.25	\$11,250.00	
00029	Removal and Disposal of Existing Glare Screen - All Types SS29	m	735.00	12.00	\$8,820.00	
00030	Removal and Salvage Existing Parapet Wall Rails and Deliver to City Yard SS30	m	1,470.00	30.00	\$44,100.00	
00031	Access and Protection SS31	m ²	24,000.00	50.00	\$1,200,000.00	
00032	Removal of Median Barrier	m	735.00	50.00	\$36,750.00	
00033	Removal of Concrete Parapets (length) SS33	m	1,470.00	200.00	\$294,000.00	
00034	Removal of Concrete Deck (area) SS33	m ²	24,440.00	275.00	\$6,721,000.00	
00035	Dowels into Concrete OPSS 904 / OPSS 904-MT / SS34	EA	1,500.00	10.00	\$15,000.00	
00036	Stainless Steel Reinforcing Bars SS35	Tonne	675.00	9,000.00	\$6,075,000.00	
00037	GFRP Reinforcing Bars SS36	m	0.00	0.00	\$0.00	
00038	Structural Steel Repairs SS37	EA	100.00	6,500.00	\$650,000.00	
00039	Supply and Install Expansion Joint Assemblies OPSS 920 / OPSS 920-MT / SS38	m	280.00	3,500.00	\$980,000.00	
00040	Concrete in Barrier Walls and LP Bases SS39	m ³	524.42	1,800.00	\$943,960.50	
00041	Concrete in Deck SS39	m ³	5,500.00	2,200.00	\$12,100,000.00	
00042	Bridge Deck Waterproofing OPSS 914 / OPSS 914-MT / SS40	m ²	22,786.00	45.00	\$1,025,370.00	
00043	Membrane Reinforcement OPSS 914 / OPSS 914-MT / SS41	m ²	0.00	0.00	\$0.00	
00044	Application of Surface Coating SS43	m ²	1,900.00	10.00	\$19,000.00	
00045	Welder's Hours	Hours	500.00	110.00	\$55,000.00	
00046	Iron Workers Hours	Hours	500.00	110.00	\$55,000.00	
00047	Mechanical Couplers	EA	9,800.00	35.00	\$343,000.00	
00048	Removal of Existing Drainage Hoppers and Pipes Including Steel Brackets SS44	EA	102.00	1,000.00	\$102,000.00	
00049	Supply, Fabricate and Install New FRP 200mm Diameter Drain Pipes	m	2,000.00	400.00	\$800,000.00	

**Contract E3
F. G. Gardiner Deck Replacement
Bent 91 to Bent 125
Preliminary Cost Estimate**

Item	Description	Unit	Quantity	Unit Bid Price	Total Bid Price	Add #
	SS44					
00050	Drainage Hopper Cleanout SS45	EA	102.00	100.00	\$10,200.00	
00051	Modification of Existing Drainage Hoppers	EA	102.00	2,000.00	\$204,000.00	
00052	Preparation of FRP Pipe and Drainage System Isometric Drawings SS46	LS	1.00	10,000.00	\$10,000.00	
00053	Removal and Disposal of Drainage Recess Cover Plates (Asbestos and Non-Asbestos) SS47	LS	0.00	0.00	\$0.00	
00054	Cover Plates SS49	EA	45.00	1,500.00	\$67,500.00	
00055	New Drains - in Deck OPSS 906 / OPSS 906-MT	EA	105.00	2,500.00	\$262,500.00	
00056	Concrete in Expansion Joint Dams OPSS 904 / OPSS 904-MT	m ³	105.00	1,500.00	\$157,500.00	
00057	Concrete in Median Barrier (slip formed) OPSS 553	m	735.00	200.00	\$147,000.00	
00058	Hot & Cold Weather Concreting	LS	1.00	100,000.00	\$100,000.00	
00059	Jacking of existing girders	EA	1,120.00	500.00	\$560,000.00	
00060	Removal of existing bearings	EA	1,120.00	300.00	\$336,000.00	
00061	Removal of concrete at bearings	m ³	80.00	4,000.00	\$320,000.00	
00062	Installation of dowels (bearings)	EA	11,200.00	10.00	\$112,000.00	
00063	Concrete in bearing pedestal	m ³	325.00	3,500.00	\$1,137,500.00	
00064	New Bearings	EA	1,120.00	700.00	\$784,000.00	
00065	Coating Ends of Girders at Expansion Joints	m ²	2,500.00	300.00	\$750,000.00	
	Structure Rehabilitation - Total				\$36,562,773.50	
Paving						
00066	Asphalt Trial Batches MT 3.00 / SS50	EA	4.00	600.00	\$2,400.00	
00067	HL8 (HS) Binder Course Including AASHTO PGAC 64-28 Performance Graded Liquid Asphalt Cement TS 310 / MT 3.00 / SS51	Mg	2,200.00	170.00	\$374,000.00	
00068	DFC Surface Course Including AASHTO PGAC 64-28 Performance Graded Liquid Asphalt Cement TS 310 / MT 3.00 / SS51	Mg	2,400.00	170.00	\$408,000.00	
00069	Payment Adjustment for Changes in the Cost of Performance Graded Asphalt Cement (Provisional Item) SS52	LS	1.00	50,000.00	\$50,000.00	
00070	Form and Fill Grooves OPSS 914-MT	m	3,500.00	6.50	\$22,750.00	
	Paving - Total				\$857,150.00	
Electrical						
00071	Temporary Light Pole Bases - Supply and Fabricate	EA	17.00	3,000.00	\$51,000.00	

**Contract E3
F. G. Gardiner Deck Replacement
Bent 91 to Bent 125
Preliminary Cost Estimate**

Item	Description	Unit	Quantity	Unit Bid Price	Total Bid Price	Add #
00072	Temporary Light Pole Bases - Installation and Removal	EA	34.00	2,000.00	\$68,000.00	
00073	Relocation of CTMS	LS	1.00	50,000.00	\$50,000.00	
00074	Remove, Protect and Reinstale (or Maintain and Protect) Lighting Conduit, Cables, Overhead Wires and Junction Boxes SS54	LS	1.00	50,000.00	\$50,000.00	
00075	Surface Mounted Duct System OPSS 603 / SS55	m	1,470.00	100.00	\$147,000.00	
00076	Supply and Install Low Voltage Cables in Ducts OPSS 604 / SS56	m	4,500.00	10.00	\$45,000.00	
00077	Ground Wires OPSS 609	m	1,470.00	10.00	\$14,700.00	
00078	Removal of Electrical Equipment OPSS 610 / SS57	LS	1.00	65,000.00	\$65,000.00	
00079	Supply and Install New Aluminum Poles Base Mounted OPSS 615 / SS58	EA	70.00	2,200.00	\$154,000.00	
00080	Supply and Install Expressway Lighting, Luminaires and Davit Assemblies OPSS 617 / SS60	EA	70.00	650.00	\$45,500.00	
00081	Supply and Install Low Voltage Cables, Aerial Slack Span (Temporary) OPSS 604 / SS56	m	1,470.00	60.00	\$88,200.00	
00082	Salvage and Install Aluminum Poles, Base Mounted (Temporary) OPSS 615 / SS58	EA	34.00	1,000.00	\$34,000.00	
00083	Installation of New Loop Detector Stations	EA	5.00	6,000.00	\$30,000.00	
00084	Maintenance of Lighting Within Work Zone	LS	1.00	80,000.00	\$80,000.00	
00085	Permanent Precast Concrete Barrier (tallwall)	m	180.00	400.00	\$72,000.00	
	Electrical - Total				\$994,400.00	
Miscellaneous						
00086	Miscellaneous Items (5%)	LS	1.00	2,900,000.00	\$2,900,000.00	
00087	Contingency (20%)	LS	1.00	11,600,000.00	\$11,600,000.00	
	Miscellaneous - Total				\$14,500,000.00	
	TOTAL				\$54,550,368.50	

**Contract E4
F. G. Gardiner Deck Replacement
Bent 313 to Bent 341
Preliminary Cost Estimate**

Item	Description	Unit	Quantity	Unit Bid Price	Total Bid Price	Add #
General						
00001	Field Office TS 1.10 / SS5	LS	1.00	80,000.00	\$80,000.00	
00002	Cellular Phone (Provisional) SS6	PS	1.00	4,500.00	\$4,500.00	
00003	Supply, Install, Maintain and Remove Temporary Security Fence - On Grade SS8	m	2,400.00	15.00	\$36,000.00	
00004	Supply, Install, Maintain and Remove Hoarding SS9	LS	1.00	30,000.00	\$30,000.00	
00005	Construction Survey and Layout SS10	LS	1.00	50,000.00	\$50,000.00	
				General - Total	\$200,500.00	
Traffic Control						
00006	Traffic Control Persons, Signs, Barricades, etc. TS 1.00 / SS11	LS	1.00	750,000.00	\$750,000.00	
00007	Supply, Install and Maintain TC-12 Arrow Board TS 1.00 / SS12	EA	2.00	2,500.00	\$5,000.00	
00008	Supply, Install and Maintain Portable Variable Message Signs (Provisional) SS13	EA	6.00	5,000.00	\$30,000.00	
00009	Temporary Pavement Marking - Paint TTS 816 / SS14	m	11,000.00	4.00	\$44,000.00	
00010	Pavement Marking Obliteration - By Waterblasting (Provisional) SS15	m	1,500.00	3.50	\$5,250.00	
00011	Pavement Marking Obliteration - Temporary Tape (50%) OPSS 180 / SS16	m	1,500.00	8.00	\$12,000.00	
00012	Permanent Pavement Marking - Thermoplastic SS17	m	11,000.00	5.00	\$55,000.00	
00013	Temporary Pavement Marking - Tape TTS 816 / SS18	m	1,500.00	7.25	\$10,875.00	
00014	Temporary Pavement Marking - Tape (Arrows) TTS 816 / SS18	EA	12.00	160.00	\$1,920.00	
00015	Permanent Pavement Marking - Paint TTS 816 / SS19	m	1,100.00	4.00	\$4,400.00	
00016	Permanent Pavement Marking - Thermoplastic (Arrows) TTS 816 / SS19	EA	12.00	500.00	\$6,000.00	
00017	Delineators - "Drum" Type TS 1.00 / SS20	EA	300.00	50.00	\$15,000.00	
00018	"Drum" Type Delineator - Relocation SS22	EA	600.00	40.00	\$24,000.00	
00019	Temporary Concrete Barrier (Precast) SS24	m	1,800.00	65.00	\$117,000.00	
00020	Temporary Concrete Barrier (Precast) - Relocation TS 1.00 / SS25	m	1,800.00	18.00	\$32,400.00	
00021	Energy Attenuator Crash Cushion - Temporary OPSD 923.480 / SS26	EA	4.00	12,000.00	\$48,000.00	
00022	Chain Link Fence on Temporary Concrete Barrier TS 541 / SS24	m	1,800.00	30.00	\$54,000.00	
00023	Chain Link Fence on Temporary Concrete Barrier - Relocation SS25	m	1,800.00	30.00	\$54,000.00	
00024	Energy Attenuator Crash Cushion - Temporary - Relocation	EA	4.00	9,000.00	\$36,000.00	

**Contract E4
F. G. Gardiner Deck Replacement
Bent 313 to Bent 341
Preliminary Cost Estimate**

Item	Description	Unit	Quantity	Unit Bid Price	Total Bid Price	Add #
	SS26					
00025	Temporary Transition Rails - All Types SS27	EA	2.00	2,000.00	\$4,000.00	
00026	Temporary Transition Rails - All Types - Relocation SS27	EA	2.00	2,000.00	\$4,000.00	
				Traffic Control - Total	\$1,312,845.00	
Structural Rehabilitation						
00027	Full Depth Asphalt and Waterproofing Removal OPSS 928 / OPSS 928-MT	m ²	16,400.00	5.50	\$90,200.00	
00028	Partial Depth Asphalt Removal (0 - 80mm Depth) TS3.15 / TS 510 / SS28	m ²	2,400.00	6.25	\$15,000.00	
00029	Removal and Disposal of Existing Glare Screen - All Types SS29	m	600.00	12.00	\$7,200.00	
00030	Removal and Salvage Existing Parapet Wall Rails and Deliver to City Yard SS30	m	2,400.00	30.00	\$72,000.00	
00031	Access and Protection SS31	m ²	18,200.00	50.00	\$910,000.00	
00032	Removal of Median Barrier	m	300.00	50.00	\$15,000.00	
00033	Removal of Concrete Parapets (length) SS33	m	1,500.00	200.00	\$300,000.00	
00034	Removal of Concrete Deck (area) SS33	m ²	18,200.00	275.00	\$5,005,000.00	
00035	Dowels into Concrete OPSS 904 / OPSS 904-MT / SS34	EA	1,500.00	10.00	\$15,000.00	
00036	Stainless Steel Reinforcing Bars SS35	Tonne	535.00	9,000.00	\$4,815,000.00	
00037	GFRP Reinforcing Bars SS36	m	0.00	0.00	\$0.00	
00038	Structural Steel Repairs SS37	EA	100.00	4,500.00	\$450,000.00	
00039	Supply and Install Expansion Joint Assemblies OPSS 920 / OPSS 920-MT / SS38	m	210.00	3,500.00	\$735,000.00	
00040	Concrete in Barrier Walls and LP Bases SS39	m ³	820.00	1,800.00	\$1,476,000.00	
00041	Concrete in Deck SS39	m ³	3,800.00	2,200.00	\$8,360,000.00	
00042	Bridge Deck Waterproofing OPSS 914 / OPSS 914-MT / SS40	m ²	16,400.00	45.00	\$738,000.00	
00043	Membrane Reinforcement OPSS 914 / OPSS 914-MT / SS41	m ²	0.00	0.00	\$0.00	
00044	Application of Surface Coating SS43	m ²	1,800.00	10.00	\$18,000.00	
00045	Welder's Hours	Hours	500.00	130.00	\$65,000.00	
00046	Iron Workers Hours	Hours	500.00	130.00	\$65,000.00	
00047	Mechanical Couplers	EA	8,000.00	35.00	\$280,000.00	
00048	Removal of Existing Drainage Hoppers and Pipes Including Steel Brackets SS44	EA	112.00	1,000.00	\$112,000.00	
00049	Supply, Fabricate and Install New FRP 200mm Diameter Drain Pipes	m	2,500.00	400.00	\$1,000,000.00	

**Contract E4
F. G. Gardiner Deck Replacement
Bent 313 to Bent 341
Preliminary Cost Estimate**

Item	Description	Unit	Quantity	Unit Bid Price	Total Bid Price	Add #
	SS44					
00050	Drainage Hopper Cleanout SS45	EA	112.00	100.00	\$11,200.00	
00051	Modification of Existing Drainage Hoppers	EA	112.00	2,000.00	\$224,000.00	
00052	Preparation of FRP Pipe and Drainage System Isometric Drawings SS46	LS	1.00	10,000.00	\$10,000.00	
00053	Removal and Disposal of Drainage Recess Cover Plates (Asbestos and Non-Asbestos) SS47	LS	1.00	50,000.00	\$50,000.00	
00054	Cover Plates SS49	EA	15.00	1,500.00	\$22,500.00	
00055	Remove and Salvage Cantilever Sign Pole and Sign	EA	2.00	25,000.00	\$50,000.00	
00056	Supply, Fabricate and Installation of New Tri-Chord Sign at Bent 320	EA	1.00	140,000.00	\$140,000.00	
00057	Supply, Fabricate and Erect New Structural Steel for Tri-Chord Sign Foundation	EA	1.00	80,000.00	\$80,000.00	
00058	New Drains - in Deck OPSS 906 / OPSS 906-MT	EA	112.00	2,500.00	\$280,000.00	
00059	Concrete in Expansion Joint Dams OPSS 904 / OPSS 904-MT	m ³	85.00	1,500.00	\$127,500.00	
00060	Concrete in Median Barrier (slip formed) OPSS 553	m	0.00	250.00	\$0.00	
00061	Hot & Cold Weather Concreting	LS	1.00	100,000.00	\$100,000.00	
00062	Jacking of existing girders	EA	928.00	500.00	\$464,000.00	
00063	Removal of existing bearings	EA	928.00	300.00	\$278,400.00	
00064	Removal of concrete at bearings	m ³	70.00	4,000.00	\$280,000.00	
00065	Installation of dowels (bearings)	EA	11,300.00	10.00	\$113,000.00	
00066	Concrete in bearing pedestal	m ³	315.00	3,500.00	\$1,102,500.00	
00067	New Bearings	EA	928.00	700.00	\$649,600.00	
00068	Coating Ends of Girders at Expansion Joints	m ²	1,800.00	300.00	\$540,000.00	
	Structure Rehabilitation - Total				\$29,066,100.00	
Paving						
00069	Asphalt Trial Batches MT 3.00 / SS50	EA	4.00	600.00	\$2,400.00	
00070	HL8 (HS) Binder Course Including AASHTO PGAC 64-28 Performance Graded Liquid Asphalt Cement TS 310 / MT 3.00 / SS51	Mg	1,800.00	170.00	\$306,000.00	
00071	DFC Surface Course Including AASHTO PGAC 64-28 Performance Graded Liquid Asphalt Cement TS 310 / MT 3.00 / SS51	Mg	1,800.00	170.00	\$306,000.00	
00072	Payment Adjustment for Changes in the Cost of Performance Graded Asphalt Cement (Provisional Item) SS52	LS	1.00	50,000.00	\$50,000.00	

**Contract E4
F. G. Gardiner Deck Replacement
Bent 313 to Bent 341
Preliminary Cost Estimate**

Item	Description	Unit	Quantity	Unit Bid Price	Total Bid Price	Add #
00073	Form and Fill Grooves OPSS 914-MT	m	3,000.00	6.50	\$19,500.00	
	Paving - Total				\$683,900.00	
Electrical						
00074	Temporary Light Pole Bases - Supply and Fabricate	EA	14.00	3,000.00	\$42,000.00	
00075	Temporary Light Pole Bases - Installation and Removal	EA	28.00	2,000.00	\$56,000.00	
00076	Relocation of CTMS	LS	1.00	100,000.00	\$100,000.00	
00077	Remove, Protect and Reinstate (or Maintain and Protect) Lighting Conduit, Cables, Overhead Wires and Junction Boxes SS54	LS	1.00	50,000.00	\$50,000.00	
00078	Surface Mounted Duct System OPSS 603 / SS55	m	1,200.00	100.00	\$120,000.00	
00079	Supply and Install Low Voltage Cables in Ducts OPSS 604 / SS56	m	3,600.00	10.00	\$36,000.00	
00080	Ground Wires OPSS 609	m	1,200.00	10.00	\$12,000.00	
00081	Removal of Electrical Equipment OPSS 610 / SS57	LS	1.00	65,000.00	\$65,000.00	
00082	Supply and Install New Aluminum Poles Base Mounted OPSS 615 / SS58	EA	28.00	2,200.00	\$61,600.00	
00083	Supply and Install Expressway Lighting, Luminaires and Davit Assemblies OPSS 617 / SS60	EA	28.00	650.00	\$18,200.00	
00084	Supply and Install Low Voltage Cables, Aerial Slack Span (Temporary) OPSS 604 / SS56	m	1,200.00	60.00	\$72,000.00	
00085	Salvage and Install Aluminum Poles, Base Mounted (Temporary) OPSS 615 / SS58	EA	28.00	1,000.00	\$28,000.00	
00086	Installation of New Loop Detector Stations	EA	5.00	6,000.00	\$30,000.00	
00087	Maintenance of Lighting Within Work Zone	LS	1.00	80,000.00	\$80,000.00	
	Electrical - Total				\$770,800.00	
Miscellaneous						
00088	Miscellaneous (5%)	LS	1.00	2,400,000.00	\$2,400,000.00	
00089	Contingency (20%)	LS	1.00	9,700,000.00	\$9,700,000.00	
	Miscellaneous - Total				\$12,100,000.00	
	TOTAL				\$44,134,145.00	

**Contract E5
F. G. Gardiner Deck Replacement
Bent 285 to Bent 313
Preliminary Cost Estimate**

Item	Description	Unit	Quantity	Unit Bid Price	Total Bid Price	Add #
General						
00001	Field Office TS 1.10 / SS5	LS	1.00	80,000.00	\$80,000.00	
00002	Cellular Phone (Provisional) SS6	PS	1.00	4,500.00	\$4,500.00	
00003	Supply, Install, Maintain and Remove Temporary Security Fence - On Grade SS8	m	2,500.00	15.00	\$37,500.00	
00004	Supply, Install, Maintain and Remove Hoarding SS9	LS	1.00	30,000.00	\$30,000.00	
00005	Construction Survey and Layout SS10	LS	1.00	50,000.00	\$50,000.00	
				General - Total	\$202,000.00	
Traffic Control						
00006	Traffic Control Persons, Signs, Barricades, etc. TS 1.00 / SS11	LS	1.00	750,000.00	\$750,000.00	
00007	Supply, Install and Maintain TC-12 Arrow Boarc TS 1.00 / SS12	EA	4.00	2,500.00	\$10,000.00	
00008	Supply, Install and Maintain Portable Variable Message Signs (Provisional) SS13	EA	6.00	5,000.00	\$30,000.00	
00009	Temporary Pavement Marking - Paint TTS 816 / SS14	m	12,000.00	4.00	\$48,000.00	
00010	Pavement Marking Obliteration - By Waterblasting (Provisional) SS15	m	1,500.00	3.50	\$5,250.00	
00011	Pavement Marking Obliteration - Temporary Tape (50%) OPSS 180 / SS16	m	1,500.00	8.00	\$12,000.00	
00012	Permanent Pavement Marking - Thermoplastic SS17	m	12,000.00	5.00	\$60,000.00	
00013	Temporary Pavement Marking - Tape TTS 816 / SS18	m	1,500.00	7.25	\$10,875.00	
00014	Temporary Pavement Marking - Tape (Arrows) TTS 816 / SS18	EA	16.00	160.00	\$2,560.00	
00015	Permanent Pavement Marking - Paint TTS 816 / SS19	m	0.00	4.00	\$0.00	
00016	Permanent Pavement Marking - Thermoplastic (Arrows) TTS 816 / SS19	EA	16.00	320.00	\$5,120.00	
00017	Delineators - "Drum" Type TS 1.00 / SS20	EA	300.00	50.00	\$15,000.00	
00018	"Drum" Type Delineator - Relocation SS22	EA	600.00	40.00	\$24,000.00	
00019	Temporary Concrete Barrier (Precast) SS24	m	1,900.00	65.00	\$123,500.00	
00020	Temporary Concrete Barrier (Precast) - Relocation TS 1.00 / SS25	m	1,900.00	15.00	\$28,500.00	
00021	Energy Attenuator Crash Cushion - Temporary OPSD 923.480 / SS26	EA	3.00	12,000.00	\$36,000.00	
00022	Chain Link Fence on Temporary Concrete Barrier TS 541 / SS24	m	1,900.00	30.00	\$57,000.00	
00023	Chain Link Fence on Temporary Concrete Barrier - Relocation SS25	m	1,900.00	35.00	\$66,500.00	
00024	Energy Attenuator Crash Cushion - Temporary - Relocation	EA	3.00	9,000.00	\$27,000.00	

**Contract E5
F. G. Gardiner Deck Replacement
Bent 285 to Bent 313
Preliminary Cost Estimate**

Item	Description	Unit	Quantity	Unit Bid Price	Total Bid Price	Add #
	SS26					
00025	Temporary Transition Rails - All Types SS27	EA	2.00	2,000.00	\$4,000.00	
00026	Temporary Transition Rails - All Types - Relocation SS27	EA	2.00	2,000.00	\$4,000.00	
				Traffic Control - Total	\$1,319,305.00	
Structural Rehabilitation						
00027	Full Depth Asphalt and Waterproofing Removal OPSS 928 / OPSS 928-MT	m ²	19,376.00	5.50	\$106,568.00	
00028	Partial Depth Asphalt Removal (0 - 80mm Depth) TS3.15 / TS 510 / SS28	m ²	2,000.00	6.25	\$12,500.00	
00029	Removal and Disposal of Existing Glare Screen - All Types SS29	m	610.00	12.00	\$7,320.00	
00030	Removal and Salvage Existing Parapet Wall Rails and Deliver to City Yard SS30	m	1,220.00	30.00	\$36,600.00	
00031	Access and Protection SS31	m ²	20,700.00	50.00	\$1,035,000.00	
00032	Removal of Median Barrier	m	610.00	50.00	\$30,500.00	
00033	Removal of Concrete Parapets (length) SS33	m	1,220.00	200.00	\$244,000.00	
00034	Removal of Concrete Deck (area) SS33	m ²	20,730.00	275.00	\$5,700,750.00	
00035	Dowels into Concrete OPSS 904 / OPSS 904-MT / SS34	EA	1,500.00	10.00	\$15,000.00	
00036	Stainless Steel Reinforcing Bars SS35	Tonne	580.00	9,000.00	\$5,220,000.00	
00037	GFRP Reinforcing Bars SS36	m	0.00	0.00	\$0.00	
00038	Structural Steel Repairs SS37	EA	100.00	6,500.00	\$650,000.00	
00039	Supply and Install Expansion Joint Assemblies OPSS 920 / OPSS 920-MT / SS38	m	220.00	3,500.00	\$770,000.00	
00040	Concrete in Barrier Walls and LP Bases SS39	m ³	435.24	1,800.00	\$783,423.00	
00041	Concrete in Deck (and Light Pole Bases) SS39	m ³	4,665.00	2,200.00	\$10,263,000.00	
00042	Bridge Deck Waterproofing OPSS 914 / OPSS 914-MT / SS40	m ²	19,376.00	45.00	\$871,920.00	
00043	Membrane Reinforcement OPSS 914 / OPSS 914-MT / SS41	m ²	0.00	0.00	\$0.00	
00044	Application of Surface Coating SS43	m ²	1,220.00	10.00	\$12,200.00	
00045	Welder's Hours	Hours	500.00	110.00	\$55,000.00	
00046	Iron Workers Hours	Hours	500.00	110.00	\$55,000.00	
00047	Mechanical Couplers	EA	8,100.00	35.00	\$283,500.00	
00048	Removal of Existing Drainage Hoppers and Pipes Including Steel Brackets SS44	EA	87.00	1,000.00	\$87,000.00	
00049	Supply, Fabricate and Install New FRP 200mm Diameter Drain Pipes	m	2,500.00	400.00	\$1,000,000.00	

**Contract E5
F. G. Gardiner Deck Replacement
Bent 285 to Bent 313
Preliminary Cost Estimate**

Item	Description	Unit	Quantity	Unit Bid Price	Total Bid Price	Add #
	SS44					
00050	Drainage Hopper Cleanout SS45	EA	87.00	100.00	\$8,700.00	
00051	Modification of Existing Drainage Hoppers	EA	87.00	2,000.00	\$174,000.00	
00052	Preparation of FRP Pipe and Drainage System Isometric Drawings SS46	LS	1.00	10,000.00	\$10,000.00	
00053	Removal and Disposal of Drainage Recess Cover Plates (Asbestos and Non-Asbestos) SS47	LS	1.00	0.00	\$0.00	
00054	Cover Plates SS49	EA	7.00	1,500.00	\$10,500.00	
00055	New Drains - in Deck OPSS 906 / OPSS 906-MT	EA	87.00	2,500.00	\$217,500.00	
00056	Concrete in Expansion Joint Dams OPSS 904 / OPSS 904-MT	m ³	92.00	1,500.00	\$138,000.00	
00057	Concrete in Median Barrier (slip formed) OPSS 553	m	610.00	200.00	\$122,000.00	
00058	Hot & Cold Weather Concreting	LS	1.00	100,000.00	\$100,000.00	
00059	Jacking of existing girders	EA	928.00	500.00	\$464,000.00	
00060	Removal of existing bearings	EA	928.00	300.00	\$278,400.00	
00061	Removal of concrete at bearings	m ³	135.00	4,000.00	\$540,000.00	
00062	Installation of dowels (bearings)	EA	9,300.00	10.00	\$93,000.00	
00063	Concrete in bearing pedestal	m ³	540.00	3,500.00	\$1,890,000.00	
00064	New Bearings	EA	928.00	700.00	\$649,600.00	
00065	Coating Ends of Girders at Expansion Joints	m ²	3,000.00	300.00	\$900,000.00	
	Structure Rehabilitation - Total				\$32,834,981.00	
Paving						
00066	Asphalt Trial Batches MT 3.00 / SS50	EA	4.00	600.00	\$2,400.00	
00067	HL8 (HS) Binder Course Including AASHTO PGAC 64-28 Performance Graded Liquid Asphalt Cement TS 310 / MT 3.00 / SS51	Mg	2,100.00	170.00	\$357,000.00	
00068	DFC Surface Course Including AASHTO PGAC 64-28 Performance Graded Liquid Asphalt Cement TS 310 / MT 3.00 / SS51	Mg	2,100.00	170.00	\$357,000.00	
00069	Payment Adjustment for Changes in the Cost of Performance Graded Asphalt Cement (Provisional Item) SS52	LS	1.00	45,000.00	\$45,000.00	
00070	Form and Fill Grooves OPSS 914-MT	m	2,900.00	6.50	\$18,850.00	
	Paving - Total				\$780,250.00	
Electrical						
00071	Temporary Light Pole Bases - Supply and Fabricate	EA	15.00	3,000.00	\$45,000.00	

**Contract E5
F. G. Gardiner Deck Replacement
Bent 285 to Bent 313
Preliminary Cost Estimate**

Item	Description	Unit	Quantity	Unit Bid Price	Total Bid Price	Add #
00072	Temporary Light Pole Bases - Installation and Removal	EA	30.00	2,000.00	\$60,000.00	
00073	Relocation of CTMS	LS	1.00	50,000.00	\$50,000.00	
00074	Remove, Protect and Reinstale (or Maintain and Protect) Lighting Conduit, Cables, Overhead Wires and Junction Boxes SS54	LS	1.00	50,000.00	\$50,000.00	
00075	Surface Mounted Duct System OPSS 603 / SS55	m	1,220.00	100.00	\$122,000.00	
00076	Supply and Install Low Voltage Cables in Ducts OPSS 604 / SS56	m	3,660.00	10.00	\$36,600.00	
00077	Ground Wires OPSS 609	m	1,220.00	10.00	\$12,200.00	
00078	Removal of Electrical Equipment OPSS 610 / SS57	LS	1.00	65,000.00	\$65,000.00	
00079	Supply and Install New Aluminum Poles Base Mounted OPSS 615 / SS58	EA	58.00	2,200.00	\$127,600.00	
00080	Supply and Install Expressway Lighting, Luminaires and Davit Assemblies OPSS 617 / SS60	EA	58.00	650.00	\$37,700.00	
00081	Supply and Install Low Voltage Cables, Aerial Slack Span (Temporary) OPSS 604 / SS56	m	1,200.00	60.00	\$72,000.00	
00082	Salvage and Install Expressway Lighting, Luminaires and Bracket Assemblies (Temporary) OPSS 617 / SS59	EA	58.00	1,000.00	\$58,000.00	
00083	Installation of New Loop Detector Stations	EA		6,000.00	\$0.00	
00084	Maintenance of Lighting Within Work Zone	LS	1.00	80,000.00	\$80,000.00	
00085	Permanent Precast Concrete Barrier (tallwall)	m	180.00	400.00	\$72,000.00	
	Electrical - Total				\$888,100.00	
Miscellaneous						
00086	Miscellaneous Items (5%)	LS	1.00	2,700,000.00	\$2,700,000.00	
00087	Contingency (20%)	LS	1.00	10,700,000.00	\$10,700,000.00	
	Miscellaneous - Total				\$13,400,000.00	
	TOTAL				\$49,424,636.00	

**Contract E6
F. G. Gardiner Deck Replacement
Bent 252 to Bent 285
Preliminary Cost Estimate**

Item	Description	Unit	Quantity	Unit Bid Price	Total Bid Price	Add #
General						
00001	Field Office TS 1.10 / SS5	LS	1.00	80,000.00	\$80,000.00	
00002	Cellular Phone (Provisional) SS6	PS	1.00	4,500.00	\$4,500.00	
00003	Supply, Install, Maintain and Remove Temporary Security Fence - On Grade SS8	m	4,000.00	15.00	\$60,000.00	
00004	Supply, Install, Maintain and Remove Hoarding SS9	LS	1.00	30,000.00	\$30,000.00	
00005	Construction Survey and Layout SS10	LS	1.00	50,000.00	\$50,000.00	
				General - Total	\$224,500.00	
Traffic Control						
00006	Traffic Control Persons, Signs, Barricades, etc. TS 1.00 / SS11	LS	1.00	750,000.00	\$750,000.00	
00007	Supply, Install and Maintain TC-12 Arrow Boarc TS 1.00 / SS12	EA	4.00	2,500.00	\$10,000.00	
00008	Supply, Install and Maintain Portable Variable Message Signs (Provisional) SS13	EA	6.00	5,000.00	\$30,000.00	
00009	Temporary Pavement Marking - Paint TTS 816 / SS14	m	12,000.00	4.00	\$48,000.00	
00010	Pavement Marking Obliteration - By Waterblasting (Provisional) SS15	m	1,500.00	3.50	\$5,250.00	
00011	Pavement Marking Obliteration - Temporary Tape (50%) OPSS 180 / SS16	m	1,500.00	8.00	\$12,000.00	
00012	Permanent Pavement Marking - Thermoplastic SS17	m	12,000.00	5.00	\$60,000.00	
00013	Temporary Pavement Marking - Tape TTS 816 / SS18	m	1,500.00	7.25	\$10,875.00	
00014	Temporary Pavement Marking - Tape (Arrows) TTS 816 / SS18	EA	16.00	160.00	\$2,560.00	
00015	Permanent Pavement Marking - Paint TTS 816 / SS19	m	0.00	4.00	\$0.00	
00016	Permanent Pavement Marking - Thermoplastic (Arrows) TTS 816 / SS19	EA	16.00	320.00	\$5,120.00	
00017	Delineators - "Drum" Type TS 1.00 / SS20	EA	300.00	50.00	\$15,000.00	
00018	"Drum" Type Delineator - Relocation SS22	EA	600.00	40.00	\$24,000.00	
00019	Temporary Concrete Barrier (Precast) SS24	m	2,400.00	65.00	\$156,000.00	
00020	Temporary Concrete Barrier (Precast) - Relocation TS 1.00 / SS25	m	2,400.00	15.00	\$36,000.00	
00021	Energy Attenuator Crash Cushion - Temporary OPSD 923.480 / SS26	EA	3.00	12,000.00	\$36,000.00	
00022	Chain Link Fence on Temporary Concrete Barrier TS 541 / SS24	m	2,400.00	30.00	\$72,000.00	
00023	Chain Link Fence on Temporary Concrete Barrier - Relocation SS25	m	11,600.00	35.00	\$406,000.00	
00024	Energy Attenuator Crash Cushion - Temporary - Relocation	EA	3.00	9,000.00	\$27,000.00	

**Contract E6
F. G. Gardiner Deck Replacement
Bent 252 to Bent 285
Preliminary Cost Estimate**

Item	Description	Unit	Quantity	Unit Bid Price	Total Bid Price	Add #
	SS26					
00025	Temporary Transition Rails - All Types SS27	EA	2.00	2,000.00	\$4,000.00	
00026	Temporary Transition Rails - All Types - Relocation SS27	EA	2.00	2,000.00	\$4,000.00	
				Traffic Control - Total	\$1,713,805.00	
Structural Rehabilitation						
00027	Full Depth Asphalt and Waterproofing Removal OPSS 928 / OPSS 928-MT	m ²	30,571.00	5.50	\$168,140.50	
00028	Partial Depth Asphalt Removal (0 - 80mm Depth) TS3.15 / TS 510 / SS28	m ²	2,500.00	6.25	\$15,625.00	
00029	Removal and Disposal of Existing Glare Screen - All Types SS29	m	885.00	12.00	\$10,620.00	
00030	Removal and Salvage Existing Parapet Wall Rails and Deliver to City Yard SS30	m	1,770.00	30.00	\$53,100.00	
00031	Access and Protection SS31	m ²	32,600.00	50.00	\$1,630,000.00	
00032	Removal of Median Barrier	m	885.00	50.00	\$44,250.00	
00033	Removal of Concrete Parapets (length) SS33	m	1,770.00	200.00	\$354,000.00	
00034	Removal of Concrete Deck (area) SS33	m ²	32,565.00	275.00	\$8,955,375.00	
00035	Dowels into Concrete OPSS 904 / OPSS 904-MT / SS34	EA	1,500.00	10.00	\$15,000.00	
00036	Stainless Steel Reinforcing Bars SS35	Tonne	905.00	9,000.00	\$8,145,000.00	
00037	GFRP Reinforcing Bars SS36	m	0.00	0.00	\$0.00	
00038	Structural Steel Repairs SS37	EA	100.00	4,500.00	\$450,000.00	
00039	Supply and Install Expansion Joint Assemblies OPSS 920 / OPSS 920-MT / SS38	m	335.00	3,500.00	\$1,172,500.00	
00040	Concrete in Barrier Walls and LP bases SS39	m ³	631.45	1,800.00	\$1,136,605.50	
00041	Concrete in Deck SS39	m ³	7,325.00	2,200.00	\$16,115,000.00	
00042	Bridge Deck Waterproofing OPSS 914 / OPSS 914-MT / SS40	m ²	30,571.00	45.00	\$1,375,695.00	
00043	Membrane Reinforcement OPSS 914 / OPSS 914-MT / SS41	m ²	0.00	0.00	\$0.00	
00044	Application of Surface Coating SS43	m ²	1,770.00	10.00	\$17,700.00	
00045	Welder's Hours	Hours	500.00	110.00	\$55,000.00	
00046	Iron Workers Hours	Hours	500.00	110.00	\$55,000.00	
00047	Mechanical Couplers	EA	12,000.00	35.00	\$420,000.00	
00048	Removal of Existing Drainage Hoppers and Pipes Including Steel Brackets SS44	EA	102.00	1,000.00	\$102,000.00	
00049	Supply, Fabricate and Install New FRP 200mm Diameter Drain Pipes	m	3,000.00	400.00	\$1,200,000.00	

**Contract E6
F. G. Gardiner Deck Replacement
Bent 252 to Bent 285
Preliminary Cost Estimate**

Item	Description	Unit	Quantity	Unit Bid Price	Total Bid Price	Add #
	SS44					
00050	Drainage Hopper Cleanout SS45	EA	102.00	100.00	\$10,200.00	
00051	Modification of Existing Drainage Hoppers	EA	102.00	2,000.00	\$204,000.00	
00052	Preparation of FRP Pipe and Drainage System Isometric Drawings SS46	LS	1.00	10,000.00	\$10,000.00	
00053	Removal and Disposal of Drainage Recess Cover Plates (Asbestos and Non-Asbestos) SS47	LS	0.00	0.00	\$0.00	
00054	Cover Plates SS49	EA	33.00	1,500.00	\$49,500.00	
00055	New Drains - in Deck OPSS 906 / OPSS 906-MT	EA	102.00	2,500.00	\$255,000.00	
00056	Concrete in Expansion Joint Dams OPSS 904 / OPSS 904-MT	m ³	131.00	1,500.00	\$196,500.00	
00057	Concrete in Median Barrier (slip formed) OPSS 553	m	885.00	200.00	\$177,000.00	
00058	Hot & Cold Weather Concreting	LS	1.00	100,000.00	\$100,000.00	
00059	Jacking of existing girders	EA	860.00	500.00	\$430,000.00	
00060	Removal of existing bearings	EA	860.00	300.00	\$258,000.00	
00061	Removal of concrete at bearings	m ³	65.00	4,000.00	\$260,000.00	
00062	Installation of dowels (bearings)	EA	8,600.00	10.00	\$86,000.00	
00063	Concrete in bearing pedestal	m ³	260.00	3,500.00	\$910,000.00	
00064	New Bearings	EA	860.00	700.00	\$602,000.00	
00065	Coating Ends of Girders at Expansion Joints	m ²	3,000.00	300.00	\$900,000.00	
				Structure Rehabilitation - Total	\$45,938,811.00	
Paving						
00066	Asphalt Trial Batches MT 3.00 / SS50	EA	4.00	600.00	\$2,400.00	
00067	HL8 (HS) Binder Course Including AASHTO PGAC 64-28 Performance Graded Liquid Asphalt Cement TS 310 / MT 3.00 / SS51	Mg	3,300.00	170.00	\$561,000.00	
00068	DFC Surface Course Including AASHTO PGAC 64-28 Performance Graded Liquid Asphalt Cement TS 310 / MT 3.00 / SS51	Mg	3,300.00	170.00	\$561,000.00	
00069	Payment Adjustment for Changes in the Cost of Performance Graded Asphalt Cement (Provisional Item) SS52	LS	1.00	60,000.00	\$60,000.00	
00070	Form and Fill Grooves OPSS 914-MT	m	4,200.00	6.50	\$27,300.00	
				Paving - Total	\$1,211,700.00	
Electrical						
00071	Temporary Light Pole Bases - Supply and Fabricate	EA	17.00	3,000.00	\$51,000.00	

**Contract E6
F. G. Gardiner Deck Replacement
Bent 252 to Bent 285
Preliminary Cost Estimate**

Item	Description	Unit	Quantity	Unit Bid Price	Total Bid Price	Add #
00072	Temporary Light Pole Bases - Installation and Removal	EA	34.00	2,000.00	\$68,000.00	
00073	Relocation of CTMS	LS	1.00	50,000.00	\$50,000.00	
00074	Remove, Protect and Reinstall (or Maintain and Protect) Lighting Conduit, Cables, Overhead Wires and Junction Boxes SS54	LS	1.00	50,000.00	\$50,000.00	
00075	Surface Mounted Duct System OPSS 603 / SS55	m	1,770.00	100.00	\$177,000.00	
00076	Supply and Install Low Voltage Cables in Ducts OPSS 604 / SS56	m	5,316.00	10.00	\$53,160.00	
00077	Ground Wires OPSS 609	m	1,770.00	10.00	\$17,700.00	
00078	Removal of Electrical Equipment OPSS 610 / SS57	LS	1.00	65,000.00	\$65,000.00	
00079	Supply and Install New Aluminum Poles Base Mounted OPSS 615 / SS58	EA	66.00	2,200.00	\$145,200.00	
00080	Supply and Install Expressway Lighting, Luminaires and Davit Assemblies OPSS 617 / SS60	EA	66.00	650.00	\$42,900.00	
00081	Supply and Install Low Voltage Cables, Aerial Slack Span (Temporary) OPSS 604 / SS56	m	1,770.00	60.00	\$106,200.00	
00082	Salvage and Install Aluminum Poles, Base Mounted (Temporary) OPSS 615 / SS58	EA	34.00	1,000.00	\$34,000.00	
00083	Installation of New Loop Detector Stations	EA		6,000.00	\$0.00	
00084	Maintenance of Lighting Within Work Zone	LS	1.00	80,000.00	\$80,000.00	
00085	Permanent Precast Concrete Barrier (tallwall)	m	360.00	400.00	\$144,000.00	
				Electrical - Total	\$1,084,160.00	
Miscellaneous						
00086	Miscellaneous Items (5%)	LS	1.00	3,500,000.00	\$3,500,000.00	
00087	Contingency (20%)	LS	1.00	13,900,000.00	\$13,900,000.00	
				Miscellaneous - Total	\$17,400,000.00	
				TOTAL	\$67,572,976.00	

Ramp Deck Replacement

Ramp	Deck Area (m ²)	Cost	Miscellaneous (5%)	Contingency (20%)	Total Cost
As	1700	\$2,953,631	\$200,000	\$790,000	\$3,943,631
Bs	1617	\$2,809,424	\$190,000	\$750,000	\$3,749,424
F, Cs	8080	\$14,038,434	\$940,000	\$3,740,000	\$18,718,434
D, E, & DE	2594	\$4,506,893	\$300,000	\$1,200,000	\$6,006,893
Gs	1382	\$2,401,128	\$160,000	\$640,000	\$3,201,128
Ay	1708	\$2,967,530	\$200,000	\$790,000	\$3,957,530
Aj	2246	\$3,902,268	\$260,000	\$1,040,000	\$5,202,268
Cj	1951	\$3,389,726	\$230,000	\$900,000	\$4,519,726

Cost per Deck Area = \$1,737 /m²

**Interim Repairs
Ramp D - WB FGG to Lakeshore Off Ramp (2017)**

Item of Work	Unit	Estimated Units	Price/Unit	Total Price
Concrete removal (curb)	m ³	5.00	4,500.00	\$22,500.00
Remove parapet	m	30.00	250.00	\$7,500.00
Remove existing railing and posts	m	160.00	50.00	\$8,000.00
Removal of asphalt and patch deck	m ²	80.00	400.00	\$32,000.00
Concrete in new parapet wall	m ³	8.00	2,000.00	\$16,000.00
Install previously salvaged metal railing	m	160.00	100.00	\$16,000.00
Concrete repair curb	m ³	5.00	2,500.00	\$12,500.00
Scaling of loose concrete	m ²	0.00	65.00	\$0.00
Access/protection	LS	1.00		\$0.00
Timber falsework	m ²	50.00	350.00	\$17,500.00
Concrete removal - bents	m ³	0.00	3,500.00	\$0.00
Concrete patches - bents	m ³	0.00	6,500.00	\$0.00
			Subtotal	\$132,000.00

**Interim Repairs
Ramp E - WB FGG to NB Spadina (2017)**

Item of Work	Unit	Estimated Units	Price/Unit	Total Price
Concrete removal (curb)	m ³	6.00	4,500.00	\$27,000.00
Remove parapet	m	0.00	250.00	\$0.00
Remove existing railing and posts	m	160.00	50.00	\$8,000.00
Removal of asphalt and patch deck	m ²	16.00	400.00	\$6,400.00
Concrete in new parapet wall	m ³	0.00	2,000.00	\$0.00
Install previously salvaged metal railing	m	160.00	100.00	\$16,000.00
Concrete repair curb	m ³	6.00	2,500.00	\$15,000.00
Scaling of loose concrete	m ²	0.00	65.00	\$0.00
Access/protection	LS	1.00		\$0.00
Timber falsework	m ²	50.00	350.00	\$17,500.00
Concrete removal - bents	m ³	0.00	3,500.00	\$0.00
Concrete patches - bents	m ³	0.00	6,500.00	\$0.00
			Subtotal	\$89,900.00

**Interim Repairs
Ramp G_s - Rees. Street On ramp to EB FGG**

Item of Work	Unit	Estimated Units	Price/Unit	Total Price
Concrete removal (curb)	m ³	4.00	4,500.00	\$18,000.00
Remove parapet	m	0.00	250.00	\$0.00
Remove existing railing and posts	m	320.00	50.00	\$16,000.00
Removal of asphalt and patch deck	m ²	80.00	400.00	\$32,000.00
Concrete in new parapet wall	m ³	0.00	2,000.00	\$0.00
Install previously salvaged metal railing	m	320.00	100.00	\$32,000.00
Concrete repair curb	m ³	4.00	2,500.00	\$10,000.00
Scaling of loose concrete	m ²	0.00	65.00	\$0.00
Access/protection	LS	1.00		\$0.00
Timber falsework	m ²	50.00	350.00	\$17,500.00
Concrete removal - bents	m ³	0.00	3,500.00	\$0.00
Concrete patches - bents	m ³	0.00	6,500.00	\$0.00
Miscellaneous - Remove/resinstate mesh	LS	1.00	40,000.00	\$40,000.00
			Subtotal	\$165,500.00

**Interim Repairs
Ramp A_y - York Street On Ramp to WB FGG (2017)**

Item of Work	Unit	Estimated Units	Price/Unit	Total Price
Concrete removal (curb)	m ³	8.00	<u>4,500.00</u>	<u>\$36,000.00</u>
Remove parapet	m	0.00	<u>250.00</u>	<u>\$0.00</u>
Remove existing railing and posts	m	360.00	<u>50.00</u>	<u>\$18,000.00</u>
Removal of asphalt and patch deck	m ²	80.00	<u>400.00</u>	<u>\$32,000.00</u>
Concrete in new parapet wall	m ³	0.00	<u>2,000.00</u>	<u>\$0.00</u>
Install previously salvaged metal railing	m	360.00	<u>100.00</u>	<u>\$36,000.00</u>
Concrete repair curb	m ³	8.00	<u>2,500.00</u>	<u>\$20,000.00</u>
Scaling of loose concrete	m ²	200.00	<u>65.00</u>	<u>\$13,000.00</u>
Access/protection	LS	1.00		<u>\$0.00</u>
Timber falsework	m ²	50.00	<u>350.00</u>	<u>\$17,500.00</u>
Concrete removal - bents	m ³	0.00	<u>3,500.00</u>	<u>\$0.00</u>
Concrete patches - bents	m ³	0.00	<u>6,500.00</u>	<u>\$0.00</u>
			Subtotal	\$172,500.00

**Interim Repairs
Ramp A_s - Spadina Off Ramp from EB FGG (2018)**

Item of Work	Unit	Estimated Units	Price/Unit	Total Price
Concrete removal (curb)	m ³	0.00	<u>4,500.00</u>	<u>\$0.00</u>
Remove parapet	m	0.00	<u>250.00</u>	<u>\$0.00</u>
Remove existing railing and posts	m	480.00	<u>50.00</u>	<u>\$24,000.00</u>
Removal of asphalt and patch deck	m ²	80.00	<u>400.00</u>	<u>\$32,000.00</u>
Concrete in new parapet wall	m ³	0.00	<u>2,000.00</u>	<u>\$0.00</u>
Install previously salvaged metal railing	m	480.00	<u>100.00</u>	<u>\$48,000.00</u>
Concrete repair curb	m ³	0.00	<u>2,500.00</u>	<u>\$0.00</u>
Scaling of loose concrete	m ²	0.00	<u>65.00</u>	<u>\$0.00</u>
Access/protection	LS	1.00		<u>\$0.00</u>
Timber falsework	m ²	50.00	<u>350.00</u>	<u>\$17,500.00</u>
Concrete removal - bents	m ³	0.00	<u>3,500.00</u>	<u>\$0.00</u>
Concrete patches - bents	m ³	0.00	<u>6,500.00</u>	<u>\$0.00</u>
			Subtotal	\$121,500.00

**Interim Repairs
Ramp B_s - Spadina On Ramp to WB FGG (2019)**

Item of Work	Unit	Estimated Units	Price/Unit	Total Price
Concrete removal (curb)	m ³	0.00	4,500.00	\$0.00
Remove parapet	m	0.00	250.00	\$0.00
Remove existing railing and posts	m	560.00	50.00	\$28,000.00
Removal of asphalt and patch deck	m ²	80.00	400.00	\$32,000.00
Concrete in new parapet wall	m ³	8.00	2,000.00	\$16,000.00
Install previously salvaged metal railing	m	560.00	100.00	\$56,000.00
Concrete repair curb	m ³	0.00	2,500.00	\$0.00
Scaling of loose concrete	m ²	0.00	65.00	\$0.00
Access/protection	LS	1.00		\$0.00
Timber falsework	m ²	50.00	350.00	\$17,500.00
Concrete removal - bents	m ³	0.00	3,500.00	\$0.00
Concrete patches - bents	m ³	0.00	6,500.00	\$0.00
			Subtotal	\$149,500.00

**Interim Repairs
Ramp P_s / P_n- Ramps To/From Don Valley Parkway (2020, 2021)**

Item of Work	Unit	Estimated Units	Price/Unit	Total Price
Concrete removal (barrier wall)	m ³	10.00	4,500.00	\$45,000.00
Remove parapet	m	20.00	250.00	\$5,000.00
Remove existing railing and posts	m	300.00	50.00	\$15,000.00
Removal of asphalt and patch deck	m ²	80.00	400.00	\$32,000.00
Concrete in barrier wall patches	m ³	10.00	2,000.00	\$20,000.00
Install previously salvaged metal railing	m	300.00	100.00	\$30,000.00
Concrete repair curb	m ³	0.00	2,500.00	\$0.00
Scaling of loose concrete	m ²	0.00	65.00	\$0.00
Access/protection	LS	1.00		\$0.00
Timber falsework	m ²	0.00	350.00	\$0.00
Concrete removal - bents	m ³	0.00	3,500.00	\$0.00
Concrete patches - bents	m ³	0.00	6,500.00	\$0.00
			Subtotal	\$147,000.00

**Interim Repairs
Ramp A_j - Jarvis On Ramp to EB FGG (2024)**

Item of Work	Unit	Estimated Units	Price/Unit	Total Price
Concrete removal (curb)	m ³	0.00	4,500.00	\$0.00
Remove parapet	m	0.00	250.00	\$0.00
Remove existing railing and posts	m	480.00	50.00	\$24,000.00
Removal of asphalt and patch deck	m ²	80.00	400.00	\$32,000.00
Concrete in new parapet wall	m ³	0.00	2,000.00	\$0.00
Install previously salvaged metal railing	m	480.00	100.00	\$48,000.00
Concrete repair curb	m ³	0.00	2,500.00	\$0.00
Scaling of loose concrete	m ²	0.00	65.00	\$0.00
Access/protection	LS	1.00		\$0.00
Timber falsework	m ²	50.00	350.00	\$17,500.00
Concrete removal - bents	m ³	0.00	3,500.00	\$0.00
Concrete patches - bents	m ³	0.00	6,500.00	\$0.00
			Subtotal	\$121,500.00

**Interim Repairs
Ramp C_j - Sherbourne Off Ramp from WB FGG**

Item of Work	Unit	Estimated Units	Price/Unit	Total Price
Concrete removal (curb)	m ³	0.00	4,500.00	\$0.00
Remove parapet	m	0.00	250.00	\$0.00
Remove existing railing and posts	m	400.00	50.00	\$20,000.00
Removal of asphalt and patch deck	m ²	80.00	400.00	\$32,000.00
Concrete in new parapet wall	m ³	0.00	2,000.00	\$0.00
Install previously salvaged metal railing	m	400.00	100.00	\$40,000.00
Concrete repair curb	m ³	0.00	2,500.00	\$0.00
Scaling of loose concrete	m ²	0.00	65.00	\$0.00
Access/protection	LS	1.00		\$0.00
Timber falsework	m ²	50.00	350.00	\$17,500.00
Concrete removal - bents	m ³	0.00	3,500.00	\$0.00
Concrete patches - bents	m ³	0.00	6,500.00	\$0.00
			Subtotal	\$109,500.00

Reinforced Concrete T-beams

Interim Repair Cost Estimate (West Abutment - Bent #35)

No.	Item	Unit	Quantity	Unit Cost	Cost
1	Wearing Surface				
	• Removal and patch	m ²	371	\$400	\$148,400
	Total				\$148,400
2	Barrier Wall				
	• Median barrier wall				
	- Removal	m ³	1.5	\$2,500	\$3,750
	- Patch	m ³	1.5	\$4,000	\$6,000
	• Parapet wall				
	- Removal (Interior)	m ³	11.1	\$2,500	\$27,750
	- Removal (exterior)	m ³	7	\$3,000	\$21,000
	- Patch (Interior)	m ³	11.1	\$4,000	\$44,400
	- Patch (exterior)	m ³	7	\$4,500	\$31,500
	• Curb				
	- Removal	m ³	5.7	\$2,500	\$14,250
	- Patch	m ³	5.7	\$4,000	\$22,800
	• Welded Wire Mesh	m ²	253	\$40	\$10,120
	• Inserts	ea	2811	\$3	\$8,433
	Total				\$190,003
3	Deck soffit				
	• Removal - Soffit	m ³	26	\$5,000	\$130,000
	• Removal - Overhang	m ³	9.7	\$4,000	\$38,800
	• Patch - Soffit	m ³	26	\$7,000	\$182,000
	• Patch - Overhang	m ³	9.7	\$6,000	\$58,200
	• Welded Wire Mesh	m ²	357	\$40	\$14,280
	• Inserts	ea	3967	\$3	\$11,901
	Total				\$435,181
4	Girder				
	• Removal	m ³	10.4	\$4,500	\$46,800
	• Patch	m ³	14.6	\$6,500	\$94,640
	• Temporary Support and Jacking	ea	26	\$20,000	\$520,000
	• Welded Wire Mesh	m ²	104	\$40	\$4,160
	• Inserts	ea	1155	\$3	\$3,465
	Total				\$669,065
5	Traffic Control				\$50,000
6	Access and Protection				\$200,000
7	General (Field office, etc.)				\$200,000
				Total	\$1,892,649
8	Miscellaneous			5%	\$94,632
9	Contingency			20%	\$397,456

Grand Total \$2,384,738

Deck and Girder Replacement (West Abutment - Bent #35)

No.	Item	Unit	Quantity	Unit Cost	Cost
1	General	LS	1	\$250,000	\$250,000
2	Traffic Control	LS	1	\$1,300,000	\$1,300,000
3	Structural				
	• Access and Protection (Demolition)	m ²	17960	\$50	\$898,000
	• Full Depth Asphalt and Waterproofing Removal	m ²	16417	\$6	\$98,502
	• Removal and Disposal of Existing Glare Screen	m	674	\$12	\$8,088
	• Removal and Salvage Existing Parapet Wall Rails	m	1348	\$30	\$40,440
	• Removal of Median Barrier	m	674	\$50	\$33,700
	• Removal of Concrete Parapet Wall	m	1348	\$200	\$269,600
	• Removal of Deck and Girders	m ²	17960	\$600	\$10,776,000
	• Temporary Support (Bent)	ea	35	\$25,000	\$875,000
	• Access and Protection (Bent)	ea	35	\$40,000	\$1,400,000
	• Removal of Deck on Bent Cap	m ³	200	\$3,000	\$600,000
	• Removal of Girder Ends	m ³	50	\$5,000	\$250,000
	• Removal (Top of Abutment and Retaining Wall)	m ³	52	\$2,000	\$104,000
	• Removal of Approach Slab	m ³	40	\$500	\$20,000
	• Bearing Seat Construction (Bent)	m ³	130	\$4,000	\$520,000
	• Patch for Girder Ends	m ³	50	\$7,000	\$350,000
	• Access and Protection (Abut. & Retaining Wall)	ea	1	\$40,000	\$40,000
	• Abut. And Retaining Wall Top Portion Construction	m ³	109	\$2,500	\$272,500
	• SS Rebar (Bent & Abut.)	T	135	\$10,000	\$1,350,000
	• Earth Excavation	m ³	1500	\$40	\$60,000
	• Backfill, Granular Type 'B'	T	6300	\$25	\$157,500
	• Road Protection	LS	1	\$60,000	\$60,000
	• Permanent Anchor (Abutment & Retaining Wall)	LS	1	\$134,400	\$134,400
	• Approach Slab Construction	m ³	40	\$700	\$28,000
	• Bearings (Removal & New Installation)	ea	420	\$2,000	\$840,000
	• Structural Steel Fabrication	T	2700	\$3,500	\$9,450,000
	• Structural Steel Delivery	T	2700	\$500	\$1,350,000
	• Structural Steel Erection	T	2700	\$4,000	\$10,800,000
	• Concrete in Deck	m ³	4041	\$2,200	\$8,890,200
	• Concrete in Barrier Wall	m ³	731	\$2,200	\$1,608,200
	• Concrete in Median Barrier	m	674	\$300	\$202,200
	• SS Rebar (Deck & Barrier Wall)	T	750	\$10,000	\$7,500,000
	• Deck Drain	ea	123	\$2,500	\$307,500
	• Drain Pipes	m	950	\$400	\$380,000
	• Expansion Joint	m	364	\$2,300	\$837,200
	• Waterproofing	m ²	16417	\$30	\$492,510
	• Miscellaneous Structural Items (5%)	LS	1	\$3,000,000	\$3,000,000
				Structural - Total	\$64,003,540
4	Grading (Reconstruction, 6-lane, 0.1km)	LS	1	\$360,000	\$360,000
5	Paving	LS	1	\$600,000	\$600,000
6	Electrical	LS	1	\$750,000	\$750,000
7	Miscellaneous				
	• Miscellaneous Items (5%)	LS	1	\$3,500,000	\$3,500,000
	• Contingency (20%)	LS	1	\$14,000,000	\$14,000,000
				Miscellaneous - Total	\$17,500,000
				Total	\$84,763,540

Precast Concrete Box Girders

Precast Box Replacement (Bent #182 - #233)

No.	Item	Unit	Quantity	Unit Cost	Cost
1	General	LS	1	\$200,000	\$200,000
2	Traffic Control	LS	1	\$1,300,000	\$1,300,000
3	Structural				
	• Access and Protection (Superstructure Removal)	m ²	15235	\$50	\$761,750
	• Full Depth Asphalt and Waterproofing Removal	m ²	13864	\$5.5	\$76,252
	• Removal and Disposal of Existing Glare Screen	m	562	\$12	\$6,744
	• Removal and Salvage Existing Parapet Wall Rails	m	1124	\$30	\$33,720
	• Removal of Median Barrier	m	562	\$50	\$28,100
	• Removal of Concrete Parapet Wall	m	1124	\$200	\$224,800
	• Removal of Existing Drainage Hoppers and Pipes	ea	65	\$1,000	\$65,000
	• Access and Protection (Bent)	ea	28	\$40,000	\$1,120,000
	• Removal of Existing Bearings	ea	1292	\$300	\$387,600
	• Removal of Concrete at Bearing Seat	m ³	60	\$4,000	\$240,000
	• Installation of Dowels	ea	6300	\$10	\$63,000
	• Concrete in Bearing Seat	m ³	240	\$3,500	\$840,000
	• New Bearings	ea	646	\$700	\$452,200
	• Removal of Box Girder with Topping Slab	ea	646	\$20,000	\$12,920,000
	• Structural Steel Fabrication	T	2285	\$3,500	\$7,997,500
	• Studs	ea	77000	\$5	\$385,000
	• Structural Steel Coating	m ²	3500	\$200	\$700,000
	• Structural Steel Delivery	T	2285	\$500	\$1,142,500
	• Structural Steel Erection	T	2285	\$4,000	\$9,140,000
	• Concrete in Deck	m ³	3500	\$2,200	\$7,700,000
	• Concrete in Barrier Walls and LP Bases	m ³	610	\$1,800	\$1,098,000
	• Concrete in Median Barrier	m	562	\$200	\$112,400
	• Concrete in Expansion Joint Dams	m ³	70	\$1,500	\$105,000
	• SS Rebar (Deck & Barrier Wall)	T	650	\$9,000	\$5,850,000
	• Deck Drain	ea	70	\$2,500	\$175,000
	• Drain Pipes	m	2000	\$400	\$800,000
	• Expansion Joint	m	165	\$3,500	\$577,500
	• Waterproofing	m ²	13864	\$45	\$623,880
				Structural - Total	\$53,625,946
4	Paving	LS	1	\$570,000	\$570,000
5	Electrical	LS	1	\$640,000	\$640,000
6	Miscellaneous Items (5%)	LS	1	\$3,800,000	\$3,800,000
7	Contingency (20%)	LS	1	\$15,000,000	\$15,000,000
				Total	\$75,135,946

Contract	Deck Area (m ²)	Cost	Miscellaneous (5%)	Contingency (20%)	Total Cost
E13	12006	\$44,422,200	\$3,000,000	\$11,800,000	\$59,222,200
Cb	1969	\$7,285,300	\$500,000	\$2,000,000	\$9,785,300
Bj	1740	\$6,438,000	\$430,000	\$1,700,000	\$8,568,000
Dj	3109	\$11,503,300	\$760,000	\$3,100,000	\$15,363,300
Ab	2042	\$7,555,400	\$500,000	\$2,000,000	\$10,055,400

Cost per Deck Area = \$3,700 /m²