

APPENDIX P

Preliminary Cost Estimate

**Courtneypark Drive East Class Environmental Assessment
Preliminary Cost Estimate: Interim Design**

Item	Description	Unit	Qty	Unit Cost	Total Cost
Part A - Roadway					
A001	Earth Excavation (Grading)	cu.m.	6,000	\$ 25.00	\$ 150,000.00
A002	Stripping	cu.m.	800	\$ 23.00	\$ 18,400.00
A003	Cold In-Place Recycling with Expanded Asphalt (CIREAM)	sq.m.	39,400	\$ 20.00	\$ 788,000.00
A004	HL1 Surface Course - Existing Roadway	tonne	5,030	\$ 90.00	\$ 452,700.00
A005	HDBC Binder Course - Existing Roadway	tonne	10,190	\$ 17.00	\$ 173,230.00
A006	HL1 Surface Course - Roadway Widening	tonne	980	\$ 95.00	\$ 93,100.00
A007	HDBC Binder Course - Roadway Widening	tonne	3,590	\$ 90.00	\$ 323,100.00
A008	Granular A - Roadway Widening	tonne	3,670	\$ 17.00	\$ 62,390.00
A009	Granular B - Roadway Widening	tonne	8,020	\$ 15.00	\$ 120,300.00
A010	Concrete Curb & Gutter	m	3,960	\$ 50.00	\$ 198,000.00
A011	Concrete Median Islands	sq.m.	4,230	\$ 60.00	\$ 253,800.00
A012	Splash Pad, Including Excavation & Granular Base	sq.m.	1,700	\$ 60.00	\$ 102,000.00
A013	Concrete Sidewalk & Transit Pads, Including Excavation and Granular Base	sq.m.	3,670	\$ 60.00	\$ 220,200.00
A014	Asphalt Multi-Use Pathway, Including Excavation & Granular Base	sq.m.	2,130	\$ 20.00	\$ 42,600.00
A015	Pavement Markings, All Types (10cm width equivalent)	m	5,500	\$ 2.00	\$ 11,000.00
A016	Replaceable Cast-in-Place Detectable/Tactile Warning Surfaces	sq.m.	40	\$ 50.00	\$ 2,000.00
TOTAL PART A					\$ 3,010,820.00
Part B - Stormsewer					
B001	Precast Concrete Catchbasin 600mm X 600mm	each	42	\$ 2,000.00	\$ 84,000.00
B002	Precast Concrete Catchbasin 600mm X 1450mm	each	6	\$ 3,000.00	\$ 18,000.00
B003	300mm PVC Storm Sewer, Granular Backfill	m	500	\$ 275.00	\$ 137,500.00
TOTAL PART B					\$ 239,500.00
Part C - Landscaping					
C001	Tree Removal	each	16	\$ 50.00	\$ 800.00
C002	Tree Protection Fencing	each	74	\$ 100.00	\$ 7,400.00
C003	Tree Replacement	each	32	\$ 350.00	\$ 11,200.00
C004	Topsoil & Sod	sq.m.	23,400	\$ 10.00	\$ 234,000.00
TOTAL PART C					\$ 253,400.00
Part D - Signals and Streetlighting					
D001	Streetlights - Light Pole	each	38	\$ 7,500.00	\$ 285,000.00
D002	Streetlights - Hydro / Light Pole	each	5	\$ 2,500.00	\$ 12,500.00
D003	Signalized Intersection, Minor	each	3	\$ 250,000.00	\$ 750,000.00
D004	Signalized Intersection, Major	each	2	\$ 400,000.00	\$ 800,000.00
TOTAL PART D					\$ 1,847,500.00

**Courtneypark Drive East Class Environmental Assessment
Preliminary Cost Estimate: Interim Design**

Item	Description	Unit	Qty	Unit Cost	Total Cost
Part E - Miscellaneous/General					
E001	Mobilization/Demobilization	L.S.	1	\$ 350,000.00	\$ 350,000.00
E002	Construction Staging	L.S.	1	\$ 500,000.00	\$ 500,000.00
E003	Construction Layout	L.S.	1	\$ 150,000.00	\$ 150,000.00
TOTAL PART E					\$ 1,000,000.00
Part F - Full Interchange at Highway 410 and Courtneypark Drive East					
F001	Earth Excavation (Grading)	cu.m.	81,250	\$ 25.00	\$ 2,031,250.00
F002	HL1 Surface Course	tonne	4,050	\$ 95.00	\$ 384,750.00
F003	HDBC Binder Course	tonne	14,930	\$ 90.00	\$ 1,343,700.00
F004	Granular A	tonne	15,250	\$ 17.00	\$ 259,250.00
F005	Granular B	tonne	33,350	\$ 15.00	\$ 500,250.00
F006	High Mast Light Pole	each	9	\$ 135,000.00	\$ 1,215,000.00
F007	Culvert Extension	m	20	\$ 4,500.00	\$ 90,000.00
TOTAL PART G					\$ 5,824,200.00
Subtotal					\$ 12,175,420.00
Contingency Allowance (30%)					\$ 3,652,630.00
Engineering and Contract Administration (12%)					\$ 1,899,370.00
TOTAL (Exclusive of HST)					\$ 17,727,420.00

Note: Excludes utility relocations

**Courtneypark Drive East Class Environmental Assessment
Preliminary Cost Estimate: Ultimate Design**

Item	Description	Unit	Qty	Unit Cost	Total Cost
Part A - Roadway					
A001	Earth Excavation (Grading)	cu.m.	12,400	\$ 25.00	\$ 310,000.00
A002	Stripping	cu.m.	2,500	\$ 23.00	\$ 57,500.00
A003	Cold In-Place Recycling with Expanded Asphalt (CIREAM)	sq.m.	76,500	\$ 20.00	\$ 1,530,000.00
A004	HL1 Surface Course - Existing Roadway	tonne	9,760	\$ 90.00	\$ 878,400.00
A005	HDBC Binder Course - Existing Roadway	tonne	19,780	\$ 17.00	\$ 336,260.00
A006	HL1 Surface Course - Roadway Widening	tonne	2,970	\$ 95.00	\$ 282,150.00
A007	HDBC Binder Course - Roadway Widening	tonne	10,950	\$ 90.00	\$ 985,500.00
A008	Granular A - Roadway Widening	tonne	11,180	\$ 17.00	\$ 190,060.00
A009	Granular B - Roadway Widening	tonne	24,450	\$ 15.00	\$ 366,750.00
A010	Concrete Curb & Gutter	m	7,040	\$ 50.00	\$ 352,000.00
A011	Concrete Median Islands	sq.m.	4,650	\$ 60.00	\$ 279,000.00
A012	Splash Pad, Including Excavation & Granular Base	sq.m.	3,800	\$ 60.00	\$ 228,000.00
A013	Concrete Sidewalk & Transit Pads, Including Excavation and Granular Base	sq.m.	7,080	\$ 60.00	\$ 424,800.00
A014	Asphalt Multi-Use Pathway, Including Excavation & Granular Base	sq.m.	8,240	\$ 20.00	\$ 164,800.00
A015	Pavement Markings, All Types (10cm width equivalent)	m	16,460	\$ 2.00	\$ 32,920.00
A016	Replaceable Cast-in-Place Detectable/Tactile Warning Surfaces	sq.m.	70	\$ 50.00	\$ 3,500.00
TOTAL PART A					\$ 6,421,640.00
Part B - Storm Sewer					
B001	Adjust Existing Manholes, Valves, CB, etc.	each	25	\$ 500.00	\$ 12,500.00
B002	Precast Concrete Catchbasin 600mm X 600mm	each	73	\$ 2,000.00	\$ 146,000.00
B003	Precast Concrete Catchbasin 600mm X 1450mm	each	12	\$ 3,000.00	\$ 36,000.00
B004	300mm PVC Storm Sewer, Granular Backfill	m	800	\$ 275.00	\$ 220,000.00
B005	450mm PVC Storm Sewer, Granular Backfill	m	70	\$ 325.00	\$ 22,750.00
B006	525mm PVC Storm Sewer, Granular Backfill	m	180	\$ 350.00	\$ 63,000.00
B007	600mm PVC Storm Sewer, Granular Backfill	m	90	\$ 375.00	\$ 33,750.00
B008	675mm PVC Storm Sewer, Granular Backfill	m	270	\$ 425.00	\$ 114,750.00
B009	750mm PVC Storm Sewer, Granular Backfill	m	90	\$ 550.00	\$ 49,500.00
B010	850mm PVC Storm Sewer, Granular Backfill	m	110	\$ 750.00	\$ 82,500.00
B011	900mm PVC Storm Sewer, Granular Backfill	m	180	\$ 800.00	\$ 144,000.00
B012	1050mm PVC Storm Sewer, Granular Backfill	m	90	\$ 900.00	\$ 81,000.00
TOTAL PART B					\$ 1,005,750.00
Part C - Landscaping					
C001	Tree Removal	each	187	\$ 50.00	\$ 9,350.00
C002	Tree Protection Fencing	each	73	\$ 100.00	\$ 7,300.00
C003	Tree Replacement	each	374	\$ 350.00	\$ 130,900.00
C004	Topsoil & Sod	sq.m.	18,990	\$ 10.00	\$ 189,900.00
TOTAL PART C					\$ 337,450.00

**Courtneypark Drive East Class Environmental Assessment
Preliminary Cost Estimate: Ultimate Design**

Item	Description	Unit	Qty	Unit Cost	Total Cost
Part D - Signals and Streetlighting					
D001	Streetlights - Light Pole	each	53	\$ 7,500.00	\$ 397,500.00
D002	Streetlights - Hydro / Light Pole	each	21	\$ 2,500.00	\$ 52,500.00
D003	Signalized Intersection, Minor	each	5	\$ 250,000.00	\$ 1,250,000.00
D004	Signalized Intersection, Major	each	3	\$ 400,000.00	\$ 1,200,000.00
TOTAL PART D					\$ 2,900,000.00
Part E - Miscellaneous/General					
E001	Mobilization/Demobilization	L.S.	1	\$ 500,000.00	\$ 500,000.00
E002	Construction Staging	L.S.	1	\$ 1,200,000.00	\$ 1,200,000.00
E003	Construction Layout	L.S.	1	\$ 300,000.00	\$ 300,000.00
TOTAL PART E					\$ 2,000,000.00
Part F - Structural Work					
F001	Earth Excavation (Structural)	cu.m.	1,200	\$ 50.00	\$ 60,000.00
F002	Concrete Removals - Median and Sidewalks	cu.m.	230	\$ 500.00	\$ 115,000.00
F003	RSS Retaining Wall	sq.m.	170	\$ 1,000.00	\$ 170,000.00
F004	Concrete in Footings	cu.m.	250	\$ 1,000.00	\$ 250,000.00
F005	Concrete in Substructures	cu.m.	300	\$ 1,200.00	\$ 360,000.00
F006	Concrete in Deck - Deck	cu.m.	400	\$ 1,500.00	\$ 600,000.00
F007	Concrete in Deck - Sidewalk	cu.m.	160	\$ 1,500.00	\$ 240,000.00
F008	Concrete in Barrier Walls	cu.m.	108	\$ 1,750.00	\$ 189,000.00
F009	Concrete in Approach Slabs	cu.m.	36	\$ 800.00	\$ 28,800.00
F010	Reinforcing Steel Bar	tonne	80	\$ 3,500.00	\$ 280,000.00
F011	Stainless Steel Reinforcing Bar	tonne	38	\$ 10,000.00	\$ 380,000.00
F012	Steel Girders	tonne	190	\$ 6,000.00	\$ 1,140,000.00
F013	Parapet Railing	m	400	\$ 250.00	\$ 100,000.00
F014	Bridge Deck Waterproofing	sq.m.	2,350	\$ 50.00	\$ 117,500.00
F015	Bearings	L.S.	1	\$ 50,000.00	\$ 50,000.00
F016	Miscellaneous	L.S.	1	\$ 816,100.00	\$ 816,100.00
TOTAL PART F					\$ 4,896,400.00
Part G - Full Interchange at Highway 410 and Courtneypark Drive East					
G001	Earth Excavation (Grading)	cu.m.	81,250	\$ 25.00	\$ 2,031,250.00
G002	HL1 Surface Course	tonne	4,050	\$ 95.00	\$ 384,750.00
G003	HDBC Binder Course	tonne	14,930	\$ 90.00	\$ 1,343,700.00
G004	Granular A	tonne	15,250	\$ 17.00	\$ 259,250.00
G005	Granular B	tonne	33,350	\$ 15.00	\$ 500,250.00
G006	High Mast Light Pole	each	9	\$ 135,000.00	\$ 1,215,000.00
G007	Culvert Extension	m	20	\$ 4,500.00	\$ 90,000.00
TOTAL PART G					\$ 5,824,200.00
Subtotal					\$ 23,385,440.00
Contingency Allowance (30%)					\$ 7,015,640.00
Engineering and Contract Administration (12%)					\$ 3,648,130.00
TOTAL (Exclusive of HST)					\$ 34,049,210.00

Note: Excludes utility relocations