

**CONDITION ASSESSMENT & LOAD EVALUATION
9TH STREET BRIDGE OVER SYDENHAM RIVER
CITY OF OWEN SOUND**

**APPENDIX "F"
COST ESTIMATES**

Option 1: REPLACE ENTIRE STRUCTURE
COST ESTIMATE
9TH STREET BRIDGE
OVER THE SYDENHAM RIVER
CITY OF OWEN SOUND

Our File: B-1097

October 25, 2007

Item No.	Description	Qty.	Unit	Unit Price	Total Price
1	Traffic Control and signage	1	LS	10,000.00	10,000
2	Mobilization/Demobilization	1	LS	10,000.00	10,000
3	Dewatering	1	LS	35,000.00	35,000
4	Removal of existing structure	1	LS	100,000.00	100,000
5	Removal of existing asphalt	1	LS	5,000.00	5,000
6	Removal and replace utilities below bridge	1	LS	100,000.00	100,000
7	Excavation and restoration of approaches	1	LS	20,000.00	20,000
8	Concrete pile caps	20	cu m	600.00	12,000
9	Concrete ballast walls	76	cu m	1,200.00	91,200
10	Concrete piers	32	cu m	1,200.00	38,400
11	Supply and place precast concrete girders	5	each	125,000.00	625,000
12	Concrete in deck	85	cu m	1,200.00	102,000
13	Concrete in sidewalks and railings	30	cu m	900.00	27,000
14	Supply and place reinforcing steel	100	tonne	3,000.00	300,000
15	Supply and install handrail	50	m	500.00	25,000
16	Supply and install deck drains	6	each	250.00	1,500
17	Supply and install rip-rap	280	each	35.00	9,800
18	Water proofing for deck	280	each	35.00	9,800
19	Asphalt deck	50	tonne	150.00	7,500
SUBTOTAL					1,529,200
Contingencies @ 10%					152,920
TOTAL CONSTRUCTION COST					1,682,120
Environmental Assessment and Approvals					25,000
Engineering Design, Drawings, Contract Admin. @ 10%					168,212
TOTAL PROJECT COST					1,875,332

260,000

1,269,200

172,240

109,100

84,100

Option 2: REMOVE DELAMINATED CONCRETE AND PATCH**COST ESTIMATE
9TH STREET BRIDGE
OVER THE SYDENHAM RIVER
CITY OF OWEN SOUND**

Our File: B-1097

October 25, 2007

Item No.	Description	Qty.	Unit	Unit Price	Total Price
1	Traffic control and signage	1	LS	5,000.00	5,000
2	Mobilization/demobilization	1	LS	5,000.00	5,000
3	Removal of existing asphalt	1	LS	5,000.00	5,000
4	Deck repair	13	sq m	1,000.00	13,000
5	Soffit repair	21	sq m	2,000.00	42,000
6	Exterior beams and piers repair	5.3	sq m	2,000.00	10,600
7	Interior beams and piers repair	4.3	sq m	2,000.00	8,600
8	Asphalt deck	50	tonne	150.00	7,500
	SUBTOTAL				96,700
	Contingencies @ 10%				9,670
	TOTAL CONSTRUCTION COST				106,370
	Approvals				5,000
	Engineering Design, Drawings, Contract Admin. @ 15%				15,956
	TOTAL PROJECT COST				127,326

**Option 3: DECK OVERLAY WITH ELECTROCHEMICAL TREATMENT ON DECK,
SOFFIT, PIERS AND BEAMS**
COST ESTIMATE
9TH STREET BRIDGE
OVER THE SYDENHAM RIVER
CITY OF OWEN SOUND

Our File: B-1097

October 25, 2007

Item No.	Description	Qty.	Unit	Unit Price	Total Price
1	Traffic control and signage	1	LS	5,000.00	5,000
2	Mobilization/demobilization	1	LS	5,000.00	5,000
3	Removal of existing asphalt	1	LS	5,000.00	5,000
4	Deck repair	13	sq m	1,000.00	13,000
5	Deck overlay	22	cu m	600.00	13,200
6	DAS anodes on deck	22	sq m	205.00	4,510
7	Soffit repair	21	sq m	2,000.00	42,000
8	Exterior beam and pier repair	5.3	sq m	2,000.00	10,600
9	Interior beam and pier repair	4.3	sq m	2,000.00	8,600
10	ASZ+ anodes on soffit	244	sq m	172.00	41,899
11	ASZ+ anodes on exterior girders	151	sq m	172.00	25,938
12	XP+ anodes on interior girders	5.3	sq m	108.00	572
13	Asphalt deck	50	tonne	150.00	7,500
SUBTOTAL					182,819
Contingencies @ 10%					18,282
TOTAL CONSTRUCTION COST					201,101
Approvals					5,000
Engineering Design, Drawings, Contract Admin. @ 15%					30,165
TOTAL PROJECT COST					236,266

**Option 4: PATCH DECK AND TREAT WITH ELECTROCHEMICAL CHLORIDE
EXTRACTION, WATERPROOFING MEMBRANE, AND ELECTROCHEMICAL
TREATMENT ON SOFFIT, PIERS AND BEAMS**

**COST ESTIMATE
9TH STREET BRIDGE
OVER THE SYDENHAM RIVER
CITY OF OWEN SOUND**

Our File: B-1097

October 25, 2007

Item No.	Description	Qty.	Unit	Unit Price	Total Price
1	Traffic control and signage	1	LS	5,000.00	5,000
2	Mobilization/demobilization	1	LS	5,000.00	5,000
3	Removal of existing asphalt	1	LS	5,000.00	5,000
4	Deck repair	13	sq m	1,000.00	13,000
5	Soffit repair	21	sq m	2,000.00	42,000
6	Exterior beams and piers repair	5.3	sq m	2,000.00	10,600
7	Interior beams and piers repair	4.3	sq m	2,000.00	8,600
8	Electrochemical chloride extraction - deck	4.3	sq m	2,000.00	8,600
9	ASZ+ anodes on soffit	244	sq m	172.00	41,899
10	ASZ+ anodes on exterior girders	151	sq m	172.00	25,938
11	XP+ anodes on interior girders	5.3	sq m	108.00	572
12	Waterproofing membrane	294	sq m	15.00	4,410
13	Asphalt deck	50	tonne	150.00	7,500
	SUBTOTAL				178,119
	Contingencies @ 10%				17,812
	TOTAL CONSTRUCTION COST				195,931
	Approvals				5,000
	Engineering Design, Drawings, Contract Admin. @ 15%				29,390
	TOTAL PROJECT COST				230,321

Option 5: REPLACE TWO OUTER BEAMS AND ENTIRE DECK**COST ESTIMATE
9TH STREET BRIDGE
OVER THE SYDENHAM RIVER
CITY OF OWEN SOUND**

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October 25, 2007

Item No.	Description	Qty.	Unit	Unit Price	Total Price
1	Traffic control and signage	1	LS	10,000.00	10,000
2	Mobilization/demobilization	1	LS	10,000.00	10,000
3	Removal of existing deck, outer beams, railings and sidewalks	1	LS	80,000.00	80,000
4	Removal of existing asphalt	1	LS	5,000.00	5,000
5	Removal and replacement of utilities below bridge	1	LS	100,000.00	100,000
6	Excavation and restoration of approaches	1	LS	15,000.00	15,000
7	Retrofit abutments for precast	1	LS	40,000.00	40,000
8	Interior beams and piers repair	4.3	sq m	2,000.00	8,600
9	XP+ anodes on interior girders	5.3	sq m	108.00	572
10	Supply and place precast concrete girders	2	each	140,000.00	280,000
11	Concrete in deck	85	cu m	1,200.00	102,000
12	Concrete in sidewalks and railings	30	cu m	900.00	27,000
13	Supply and place reinforcing steel for deck and railings	52	tonne	3,000.00	156,000
14	Supply and install handrail	50	m	500.00	25,000
15	Supply and install deck drains	6	each	250.00	1,500
	SUBTOTAL				860,672
	Contingencies @ 10%				86,067
	TOTAL CONSTRUCTION COST				946,740
	Environmental Assessment and Approvals				25,000
	Engineering Design, Drawings, Contract Admin. @ 15%				142,011
	TOTAL PROJECT COST				1,113,751