



APPENDIX L

Construction Cost Estimate

ROAD NAME:	Guelph Line (Reg. Rd. 1)	Imp. Type:	Preferred Alternative-Rural & Urban
From:	1km north of Derry Road	To:	Conservation Road (Steeles Avenue)
Road Length (m):	2420	ROW Width (m):	
Number of Lanes:	2	Lane Width (m):	
Flush Median Width (m):		Raised Median Width (m):	

CROSS-SECTION FOR LEFT SIDE:		CROSS-SECTION FOR RIGHT SIDE:	
Cross-Section (Rural/Urban):	Rural	Cross-Section (Rural/Urban):	Rural
Paved Road Width (m):	3.65	Paved Road Width (m):	3.65
Paved Shoulder Width (m):	1.0	Paved Shoulder Width (m):	1.0
Granular Shoulder Width (m):	1.5	Granular Shoulder Width (m):	1.5
Sidewalk Width (m):	0	Sidewalk Width (m):	0
Bike Path Width (m):	0	Bike Path Width (m):	0
Street Lighting (Y/N):	No	Street Lighting (Y/N):	No

1230

1190

No.	Item	Unit	Estimated Quantity	Unit Price	Total	Southern Section (Sta. 1+000 to 2+230)	Northern Section (Sta. 2+230 to 3+420)
A ROADWORKS & DRAINAGE						50.8%	49.2%
1	Clearing and Grubbing	ha.	0.968	\$10,660.00	\$10,660.00	\$5,418.10	\$5,241.90
2	Remove Ex. Asphalt (Full Depth)	m ²	4000	\$6.93	\$27,716.00	\$27,716.00	
3	Remove Ex. Asphalt (Partial Depth)	m ²	0	\$5.86	\$0.00		
4	Earth Excavation	m ³	2500	\$15.99	\$39,975.00	\$39,975.00	
5	Earth Borrow	m ³	0	\$8.53	\$0.00		
6	Granular A (150 mm depth)	tonnes	3993.00	\$23.45	\$93,643.84	\$47,595.83	\$46,048.00
7	Granular B (600 mm depth)	tonnes	15972.00	\$20.25	\$323,496.89	\$164,421.97	\$159,074.92
8	Granular A below Asphalt Splash Pad (150 mm depth)	m ²	0	\$15.99	\$0.00		
9	Surface Course Asphalt (50 mm depth)	tonnes	2475.66	\$95.94	\$237,514.82	\$120,720.34	\$116,794.48
10	Base Course Asphalt (100 mm depth)	tonnes	2129.6	\$86.35	\$183,882.44	\$93,460.91	\$90,421.53
11	Asphalt Splash Pad (0.5 m width, 50 mm depth)	m ²	0	\$53.30	\$0.00		
12	Concrete Curb and Gutter (All types)	m	2000	\$58.63	\$117,260.00		\$117,260.00
13	Sod c/w 100 mm Topsoil	m ²	21780	\$6.93	\$150,913.62	\$76,704.03	\$74,209.59
14	Seeding c/w 100 mm Topsoil	m ²	19360	\$5.33	\$103,188.80	\$52,447.20	\$50,741.60
15	Single Steel Beam Guide Rail	m	550	\$106.60	\$58,630.00		\$58,630.00
16	End Treatment for Steel Beam Guide Rail	ea.	6	\$5,330.00	\$31,980.00		\$31,980.00
17	300 mm Storm Sewer Laterals	m	73	\$266.50	\$19,454.50		\$19,454.50
18	375 - 600 mm Storm Sewer	m	915	\$399.75	\$365,771.25		\$365,771.25
19	675 - 900 mm Storm Sewer	m	0	\$373.10	\$0.00		
20	975 - 1200 mm Storm Sewer	m	0	\$533.00	\$0.00		
21	150 mm Subdrain	m	2000	\$27.72	\$55,432.00		\$55,432.00
22	Single Catchbasins	ea.	32	\$2,132.00	\$68,224.00		\$68,224.00
23	Double Catchbasins	ea.	2	\$3,198.00	\$6,396.00		\$6,396.00
24	Storm Maintenance Holes/MHCs	ea.	13	\$5,010.20	\$65,132.60		\$65,132.60
25	300 mm CSP Culvert	m	0	\$133.25	\$0.00		
26	375 - 600 mm CSP Culvert	m	0	\$213.20	\$0.00		
27	675 - 1200 mm CSP Culvert	m	48	\$373.10	\$17,908.80	\$11,939.20	\$5,969.60
28	1350 - 1800 mm CSP Culvert	m	0	\$533.00	\$0.00		
29	Precast Concrete Box Culvert	m	0	\$2,132.00	\$0.00		
30	Oil/Grit Separator	ea.	0	\$63,960.00	\$0.00		
31	Stormwater Outfall Structure (Headwall)	ea.	2	\$15,990.00	\$31,980.00		\$31,980.00
32	Storm Water Management Pond	ea.	0	\$26,650.00	\$0.00		
33	Upgrade/Modify Intersections (incl. turn lanes)	ea.	0	\$319,800.00	\$0.00		
34	Additional turn lanes	ea.	0	\$26,650.00	\$0.00		
35	Entrance Modifications/Regrading	L.S.	2	\$26,650.00	\$53,300.00	\$26,650.00	\$26,650.00
36	Major Fill - Structure Approaches (Assumed 3% of structure cost)	L.S.	0	3.0%	\$0.00		
37	Minor Roadworks & Drainage Items (10% of major roadworks items) (incl. clearing & grubbing, ditching, topsoil stripping, minor earth borrow, breaking into ex. pipe/structure, pavement markings, signage, proof rolling, tack coat, silt fence, tree protect			10.0%	\$206,246.06	\$104,827.54	\$101,418.51
Subtotal A					\$2,268,706.61	\$771,876.13	\$1,496,830.48
38	Reconstruction Costs (incl. sawcutting, pulverizing, asphalt removal, MH/CB/WV/VCH adjustments, culvert removal, CB removal, curb removal, traffic control, etc.)			3.75%	\$85,076.50	\$43,241.36	\$41,835.14
Subtotal Roadworks & Drainage					\$2,353,783.11	\$815,117.49	\$1,538,665.62
B STRUCTURES							
39	Structure Removal/Demolition	ea.	0	\$95,940.00	\$0.00		
40	Grade Separation Overpass (road over rail)	m ²	0	\$3,411.20	\$0.00		
41	Grade Separation Underpass (road under rail)	m ²	0	\$4,264.00	\$0.00		
42	Grade Separation Retaining Walls	m ²	0	\$1,279.20	\$0.00		
43	Railway Detour	ea.	0	\$2,665,000.00	\$0.00		
44	Bridge over Watercourse Crossing	m ²	0	\$3,411.20	\$0.00		
45	Bridge over other roadway	m ²	0	\$3,411.20	\$0.00		
46	Bridge Retaining Walls	m ²	177	\$1,172.60	\$207,550.20		\$207,550.20
Subtotal Structures					\$207,550.20	\$0.00	\$207,550.20
C LANDSCAPING/MITIGATION							
47	Deciduous Trees (30 m spacing)	ea.	0	\$533.00	\$0.00		
48	Mitigation and Compensation for Watercourse Crossings	m	50	\$1,066.00	\$53,300.00	\$27,090.50	\$26,209.50
Subtotal Landscaping/Mitigation					\$53,300.00	\$27,090.50	\$26,209.50
D ELECTRICAL							
49	Traffic Signalization (per intersection)	ea.	0	\$213,200.00	\$0.00		
50	Modifications to Ex. Traffic Signalization (per intersection)	ea.	0	\$127,920.00	\$0.00		
51	Street Lighting (per pole)	ea.	0	\$5,330.00	\$0.00		
Subtotal Electrical					\$0.00	\$0.00	\$0.00
E UTILITIES & SERVICES							
52	Bell	L.S.	1	\$50,000.00	\$50,000.00	\$25,413.22	\$24,586.78
53	Hydro	L.S.	1	\$50,000.00	\$50,000.00	\$25,413.22	\$24,586.78
54	Gas	L.S.	1	\$50,000.00	\$50,000.00	\$25,413.22	\$24,586.78
55	Cable	L.S.	0		\$0.00		
56	Oil Pipelines	L.S.	0		\$0.00		
57	Hydro One	L.S.	0		\$0.00		
Subtotal Utilities					\$200,416.67	\$101,864.67	\$98,552.00
SUBTOTAL ALL ITEMS (1)					\$2,815,049.98	\$944,072.65	\$1,870,977.32
20% Contingency					\$563,010.00	\$188,814.53	\$374,195.46
SUBTOTAL (2)					\$3,378,059.97	\$1,132,887.19	\$2,245,172.79
15% Engineering					\$506,709.00	\$169,933.08	\$336,775.92
SUBTOTAL ALL ITEMS					\$3,884,768.97	\$1,302,820.26	\$2,581,948.70
F PROPERTY							
58	Existing Urban Residential/Commercial Lands (Non-vacant)	acre	0.7173	\$799,500.00	\$573,506.37	\$473,740.37	\$99,766.01
59	Vacant Urban Lands (Residential, Commercial, etc)	acre	0	\$639,600.00	\$0.00		
60	Storm Water Management Ponds	acre	0	\$639,601.07	\$0.00		
61	Flood Plain Lands	acre	0	\$10,660.00	\$0.00		
62	Rural Lands	acre	0	\$133,250.00	\$0.00		
Subtotal Property					\$573,506.37	\$473,740.37	\$99,766.01
TOTAL ESTIMATED PROJECT COST (excl. GST)					\$4,458,275.34	\$1,776,560.63	\$2,681,714.71
LOCAL MUNICIPALITY ITEMS							
63	Asphalt Path	m ²	0	\$56.50	\$0.00		
64	Concrete Sidewalk	m ²	0	\$63.96	\$0.00		
TOTAL ESTIMATED LOCAL MUNICIPALITY ITEMS (excl. GST)					\$0.00	\$0.00	\$0.00
Rounded Estimate					\$4,500,000	\$1,800,000	\$2,700,000