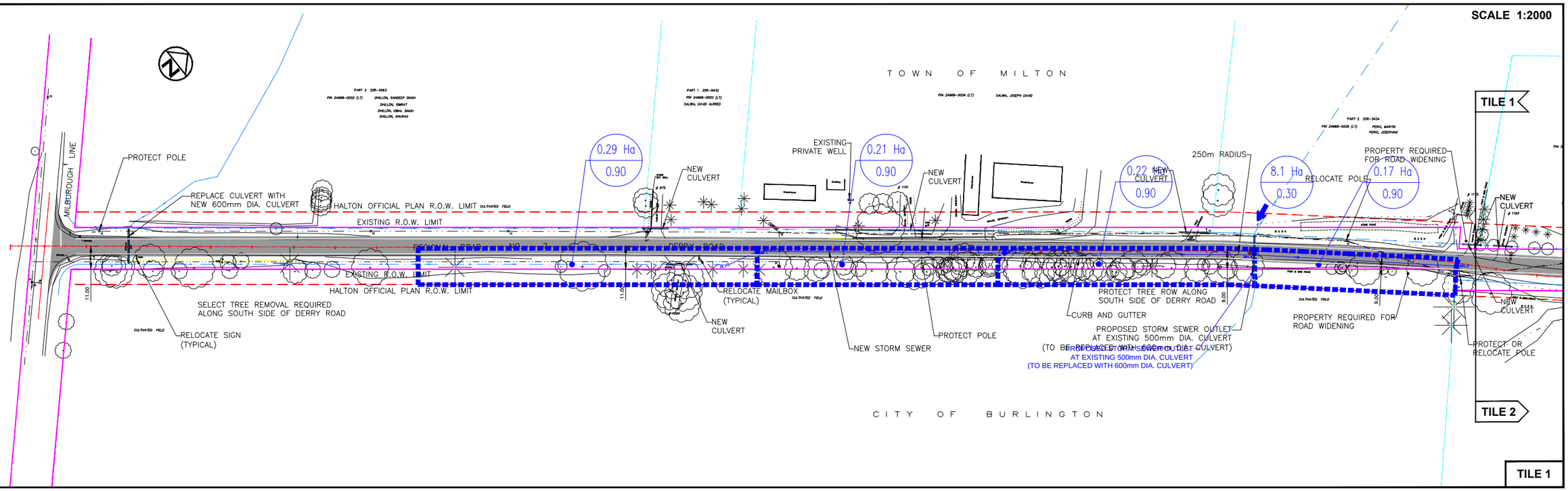
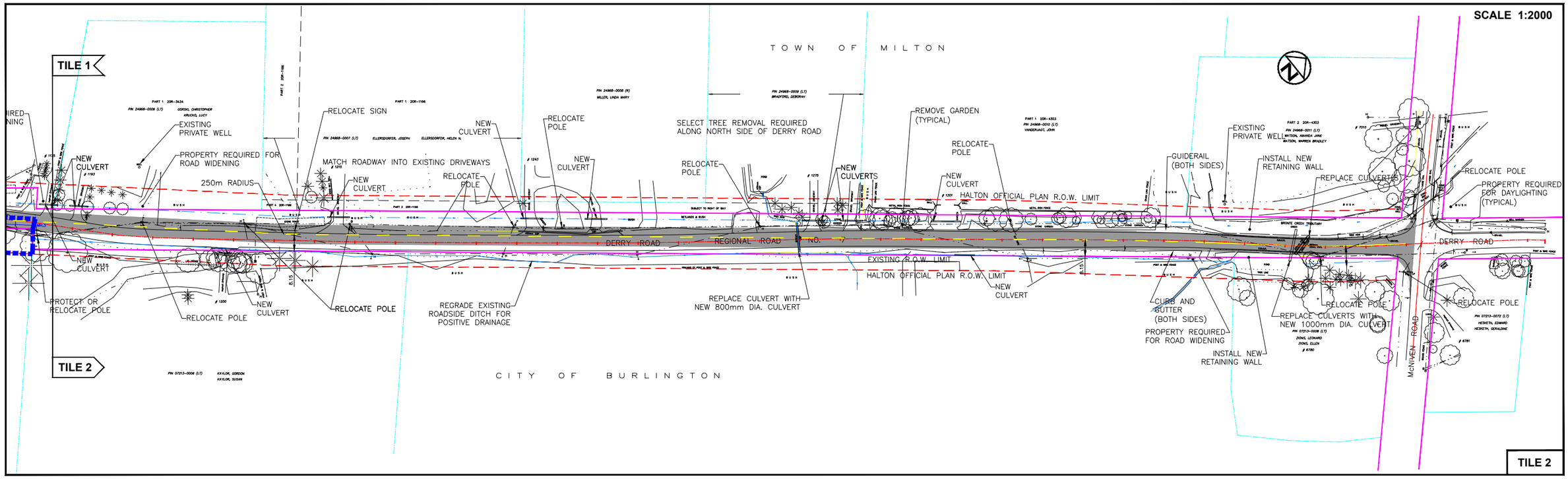
APPENDIX L

Preliminary Storm Sewer Design Sheets

SCALE 1:2000



SCALE 1:2000



PREFERRED ALTERNATIVE DESIGN

Drainage Areas for Proposed Storm Sewers

DERRY ROAD (REGIONAL ROAD 7)
MILBUROUGH LINE (REGIONAL ROAD 24)
TO McNIVEN ROAD
CLASS ENVIRONMENTAL ASSESSMENT
OCTOBER 2010

FIGURE STM-1

TOWN OF MILTON/CITY OF BURLINGTON
STORM SEWER DESIGN SHEET

Sheet No.: 1
Mannings 'n' = 0.013
Max./Min. velocity = 4.50 / 0.75 (m/s)
Storm Frequency = 5

PROJECT / SUBDIVISION: Derry Road EA (RR-09-019)

LOCATION/STREET	FROM MH	TO MH	PIPE LENGTH (m)	TRIBUTARY AREA INCREMENT (ha)	TRIBUTARY AREA TOTAL (ha)	TIME OF FLOW TO UPPER END (min.)	TIME OF FLOW IN SECTION (min.)	RUN-OFF COEFF.	RAINFALL INTENSITY (mm/hr)	RUNOFF (cu.m.sec.)	Capacity (%)	SLOPE (%)	DIAM. (mm)	CAPACITY FULL (cu.m.sec)	VELOCITY FULL (m/sec)
POST-DEVELOPMENT FLOWS															
Lands tributary to Sewer						20.00									
External Area from North	Ext.	MH.4	8	9.09	2.728	20.05	0.050	0.30	69.43	0.526	70.0%	1.50%	600	0.752	2.66
						10.00									
Prop. Sewer	DI.1	MH.1	15	0.29	0.257	10.18	0.183	0.90	101.51	0.073	75.0%	1.00%	300	0.097	1.37
Prop. Sewer	MH.1	MH.2	120	0.20	0.441	11.76	1.578	0.90	100.62	0.123	61.1%	0.50%	450	0.202	1.27
Prop. Sewer	MH.2	MH.4	120	0.22	0.635	12.88	1.116	0.90	93.62	0.165	57.9%	1.00%	450	0.285	1.79
						10.00									
Prop. Sewer	MH.3	MH.4	97	0.17	0.153	11.67	1.671	0.90	101.51	0.043	63.1%	0.50%	300	0.068	0.97
						20.05									
Replaced Culvert	MH.4	Outlet	6	0.00	3.516	20.09	0.038	0.90	69.32	0.677	90.0%	1.50%	600	0.752	2.66
Total Flows to Culvert										**0.677**					

DESIGNED BY: R and R ASSOCIATES INC.
ST. CATHARINES, ON
DATE: 20-May-10 REVISED: 25-Aug-10

NOTES: N = 2.778 GIVEN AREA (ha) AND RAINFALL INTENSITY (mm/hr)
TOWN OF MILTON IDF CURVES:
I5 = 1039.2 / (t + 7.0) ^ 0.821
I100 = 2138 / (t + 9.0) ^ 0.858