

**Table 1: Revised roughness values: comparison of future conditions 100 year event**

								W.S.Elev difference		
		Existing		Future		Future (rev.)		A	B	A-B
Location	Station	W.S. Elev (m)	Q peak (m3/s)	W.S. Elev (m)	Q peak (m3/s)	W.S. Elev (m)	Q peak (m3/s)	Future - Existing (m)	Future(rev) - Existing (m)	Future(rev) - Future
d/s of Glen Cairn SWM pond	44953	94.97	13.58	94.94	13.47	94.81	13.47	-0.03	-0.16	-0.13
u/s Hazeldean Road	44325	94.92	17.06	94.91	18.97	94.76	19.99	-0.01	-0.16	-0.15
d/s Hazeldean Road	44302	94.54	17.06	94.70	18.98	94.71	19.86	0.16	0.17	0.01
u/s Maple Grove Road	43375	94.44	18.18	94.68	25.38	94.67	25.14	0.24	0.23	-0.01
d/s Maple Grove Road	43364	94.43	18.18	94.63	25.44	94.64	25.19	0.20	0.21	0.01
	42890	94.36	34.57	94.63		94.62		0.27	0.26	-0.01
u/s Palladium Drive	42889			94.61	47.53	94.59	46.86			
d/s Palladium Drive	42855	94.34	34.56	94.32	45.70	94.50	46.80	-0.02	0.16	0.18
u/s Hwy 417 South	42182	94.18	34.86	94.11	46.29	94.29	46.98	-0.07	0.11	0.18
d/s Hwy 417 South	42154	94.13	34.86	93.94	46.30	94.20	46.98	-0.19	0.07	0.26
u/s Hwy 417 North	42124	94.08	34.87	93.90	46.29	94.14	46.94	-0.18	0.06	0.24
d/s Hwy 417 North	42097	94.00	34.88	93.73	46.29	94.02	46.94	-0.27	0.02	0.29
u/s Future Transitway	41743	93.97	35.40	93.76	48.22	94.02	48.62	-0.21	0.05	0.26
d/s Future Transitway	41 725.5			93.74	48.22	94.02	48.61			
	41671	93.95		93.75		94.02		-0.20	0.07	0.27
u/s Future Campeau Drive	41608			93.72	58.15	93.99	58.34			
d/s Future Campeau Drive	41572			93.67	58.17	93.97	58.33			
				93.63		93.92				
	40092	93.49	37.51	93.59		93.87		0.10	0.38	0.28
u/s Richardson Side Road	40071.5			93.53	48.26	93.76	41.60			
d/s Richardson Side Road	40050	93.45	38.18	93.53	48.26	93.51	41.60	0.08	0.06	-0.02
	39892	93.45		93.53		93.51		0.08	0.06	-0.02
	38236	93.38		93.50		93.48		0.12	0.10	-0.02

**Notes:**

- Digital copies of modeling received from City of Ottawa in November 2009.
- Existing = existing condition TPR model of record (modified as per Fernbank existing conditions).
- Future = future condition TPR model of record modified to include Fernbank in a developed condition (high 'n' values at bridges and lowered 'n' values for channel and approx. 50% of overbanks).
- Future (rev.) = 3. with all 'n' values revised to match existing condition 'n' values.
- Qpeak refers to the maximum flow during the event (not the flow at maximum water level)
- A-B = underestimation of flood level (or overestimation if negative)