

PROJECT DETAILS	
Title1:	STORM SEWER DESIGN SHEET
Title2:	100YR Capture/Constant Flow Calculations
Project Name:	DERRY BRITANNIA DEVELOPMENTS LIMITED
Municipality:	CITY OF MISSISSAUGA
Project No:	20-652
Date:	14-Apr-23
Designed by:	TL
Checked by:	SR

IDF Parameters for Mississauga			
I=A/(T+b) ^c		10-yr	100-yr
	A	1010	1450
	B	4.6	4.9
	C	0.78	0.78

ID	MH	A ha	R (10-Yr)	R (100-Yr) <i>R(10-Yr) x 1.25</i>	AR (10-Yr)	AR (100-Yr)	L m	Tc min	I10 mm/hr	I100 mm/hr	Q10 m3/s	Q100 m3/s	Q100-Q10 m3/s	Const. flow m3/s
100YR-1	MH1	0.61	0.65	0.81	0.40	0.50	138	16.15	94.85	134.66	0.104	0.185	0.081	0.081
100YR-2	CTRL MH 2	3.09	0.65	0.81	2.01	2.51	260	17.17	91.38	129.79	0.510	0.905	0.395	0.395
100YR-3	MH9_1	1.78	0.90	1.00	1.60	1.78	170	16.42	93.91	133.34	0.418	0.659	0.241	0.241
100YR-4	CTRL MH 7	0.82	0.65	0.81	0.53	0.67	124	16.03	95.27	135.24	0.141	0.250	0.109	0.109
100YR-5	CTRL MH 12	2.10	0.65	0.81	1.37	1.71	212	16.77	92.7	131.7	0.352	0.624	0.272	0.272
100YR-6	CTRL MH 13	2.58	0.65	0.81	1.68	2.10	245	17.04	91.79	130.37	0.428	0.759	0.332	0.332
100YR-7	CTRL MH 14	0.27	0.65	0.81	0.18	0.22	37	15.31	98.0	139.0	0.048	0.085	0.037	0.037
100YR-8	MH 24	0.14	0.90	1.00	0.13	0.14	22	15.18	98.45	139.69	0.034	0.054	0.020	0.020

Tc calcs where $T_c = \text{starting } T_c + \text{length/velocity}$
Starting T_c (min) = 15
Velocity (m/s) = 2

P:\Projects\20-652 - Derry-Britannia Developments Ltd\Reports\Functional Servicing Report\Calculations & Models\Storm Sewer Design Sheet\[20-652 FSR STM (Constant Flow).xls]100yr capture calcs