

q = average daily per capita flow (450 L/cap.d)

i = unit of peak extraneous flow (0.21 L/ha.s)

Where

M = peaking factor

Q(p) = peak population (L/s)

Q(i) = peak extraneous flow (L/s)

Q(d) = peak design flow (L/s)

Residential Density = 3.5 people per SF lot

Multi-family Density = 33 units per hectare

2.4 people per unit

Residential Flow = 0.005 l/s/capita

SANITARY SEWER DESIGN SHEET



$Q(p) = PqM$
86.4

$Q(i) = iA$ where A = area in hectares

$Q(d) = Q(p) + Q(i)$ (L/s)

LOCATION			COM, IND, INST,			RESIDENTIAL		CUMULATIVE		Peaking Factor M	Pop. Flow Q(p) (L/s)	Peak Extraneous Q(i) (L/s)	Peak Design Flow (L/s)	PROPOSED SEWER					
Street	From	To	Type	Flow (L/s/ha)	Area (hectares)	Pop.	Area (ha)	Pop.	Area (ha)					Length (m)	Pipe Size (mm)	Type of Pipe	Grade %	Capacity (L/s) n=0.013	Full Flow Velocity (m/s)
Hilton Head Heights	SANMH8	SANMH7				35	0.73	35	0.73	4.34	0.76	0.15	0.91	87.7	200	PVC	0.74	27.9	0.89
Hilton Head Heights	SANMH7	SANMH6				39	0.76	74	1.49	4.28	1.58	0.31	1.90	111.5	200	PVC	0.54	23.9	0.76
Hilton Head Heights	SANMH6	SANMH4				35	0.71	109	2.20	4.23	2.31	0.46	2.77	102.1	200	PVC	0.49	22.7	0.72
Easement Area D&E	SANMH5	SANMH4				420	6.14	420	6.14	4.01	8.43	1.29	9.71	48.4	200	PVC	0.45	21.8	0.69
Hilton Head Heights	SANMH4	SANMH3				25	0.66	554	9.00	3.95	10.94	1.89	12.83	70	200	PVC	0.50	22.9	0.73
Hilton Head Heights	SANMH3	SANMH2				21	0.47	575	9.47	3.94	11.33	1.99	13.32	67.4	200	PVC	0.50	22.9	0.73
Hilton Head Heights	SANMH2	SANMH1				25	0.49	600	9.96	3.93	11.80	2.09	13.89	67.4	200	PVC	0.50	22.9	0.73
Hilton Head Heights	SANMH1	EX SANMH109				0	0.09	600	10.05	3.93	11.80	2.11	13.91	99.3	200	PVC	0.99	32.3	1.03



DESIGN: T Burnside

2020-07-22

PROJECT: Meaford Townhouses

PROJECT NO.: 02703

SHEET NO.

1 of 1