

APPENDIX 6

Sewer Design Sheets

Township of King Design Criteria and Standard Detail Drawings

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TOWNSHIP OF KING REGIONAL MUNICIPALITY OF YORK SANITARY SEWER DESIGN SHEET

Design Parameters

2.9 cap/unit

Residential Density (Single+Semis) = 3.5 cap/unit Residential Density (Town Houses) =

Residential Density (Apartments) = 2.0 cap/unit

Manning 'n' = 0.013

Extran. Flow= 0.21 L/s/ha

Proje	ect / Subdivision : $_$			
Con	sulting Engineer :			Prepared by:
	Project No.:			Checked by:
rs			Design Equations	Last Revised:
Residential =	370 L/cap/day	1+ 14		
Industrial (Light) =	35 m³/ha/day	$M(r) = \frac{1}{4 + (P)^{1/2}}$	$Q(i) = i \times e_r A$	
Industrial (Heavy)=	55 m ³ /ha/day	4 ' (F)		
Institutional =	65 m3/ha/day	M(ind) = 6.6604 X A -0	$Q(r) = \frac{P + q + M}{86400}$	NOTE: The pipe capacity is limited to maximum values
Commercial =	65 m ³ /ha/day	1	$Q(r) = {86400}$	according to Table E-1 of the Design Manual.

Notes/Comments:																																			
L	ocation						In	dividual	Values							Cum	ulative	Values	;			I			Flow Da	ata						Sewer	Data		
Street	From	Te	0	Industrial Light Area	Industrial Heavy Area	Commercial Area	Institutional Area	Residential Area	Residential Units (Single+Semis)	Residential Units (Town Houses)	Residential Units (Apartments)	Residential Population	Light Industrial P.F.	Heavy Industrial P.F.	Industrial Light Area	Industrial Heavy Area	Commercial Area	Institutional Area	Residential P.F.	Residential Area	Residential Population	Light Industrial Peak Flow (나s)	Heavy Industrial Peak Flow (L/s)	Commercial Peak Flow (L/s)	Institutional Peak Flow (L/s)	Population Peak Flow (Us)	Peak Extraneous Flow (L/s)	Total Design Flow (Us)	Length	Pipe Size	Type of Pipe	Grade	Full Flow Capacity	Full Flow Velocity	Actual Velocity
	MH# Inv	MH#	Inv	(ha)	(ha)	(ha)	(ha)	(ha)	#	#	#	cap.	M(ind-L)	M(ind-H)	A(ind-L	A(ind-H)	A(c)	A(ins)	M(r)	A(r)	Р	Q(I-ind)	Q(h-ind)	Q(c)	Q(ins)	Q(r)	Q(i)	Q(d)	(m)	(mm)		(%)	(L/s)	(m/s)	(m/s)
Example	2A S	3A	N	2.00	1.00	0.60	1.00	5.00	30	2	3	117	4.00	4.00	2.00	1.00	0.60	1.00	4.00	5.00	117.0	3.24	2.55	0.45	0.75	2.00	1.68	10.67	66.8	200	PVC	0.50	24.19	0.75	0.72

TOWNSHIP OF KING REGIONAL MUNICIPALITY OF YORK STORM SEWER DESIGN SHEET



Design Parameters	(5 Year Storm)
A = drainage area (ha)	T _{init} (min)= 10
C = runoff coefficient	A= 980.848
T _c = time of concentration	B= 6.013
	C= 0.806

 Design Parameters (100 Year Storm)

 A = drainage area (ha)
 T_{init}(min)= 10

 C = runoff coefficient
 A= 1443.947

 T_c= time of concentration
 B= 5.273

C= 0.776

System to be Designed for: 5 Year Storm

Project / S	Subdivision :		
		Prepared by:	
Consultin	g Engineer :		
	Project No.:	Checked by:	
	Design Equations	Last Revised:	
	$I = \frac{A}{(t+B)^C}$		
	Q= 2.78 x A x C x I		NOTE: The pipe capacity is limited to maximum values according to Table C-5 of the Design Manual.

es/Comments:																					
Lo	cation		Dra	inage Area	Characteristics			Rainfall / Ru	unoff		Sewer Data										
Street	From	To	Area	С	AC	Accum.	T _c	15	Q	Diameter	Length	Slope	Qmax	% Full	V (Full)	V (Actual)	Sect.	Accum.			
	MH.	MH.	(ha)			AC	(min)	(mm/hr)	m³/sec	(mm)	(m)	(%)	(m3/s)		(m/s)	(m/s)	Time	Time			
	T i		` ′							ì				İ	` '						
mple Avenue	MH15	MH13	0.18	0.75	0.14	0.14	10.00	104.91	0.039	300	66.8	1.00	0.101	39.0%	1.38	1.23	0.90	10.90			
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