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State Cert. Engineers
& Surveyors
date: JAN. 10, 1973

Storm Water Inlet Computations

OWNER L. G. N. Corp.
Subdivision PETERS CREEK TRACT
City County ROANOKE

Description

FACTOR = 0.013

Inlet No.	Type	length	station	length project drained	Drainage area	coef.	C A	E A	I	Runoff Q	carry over Qc	gutter flow Qg	Long gutter slope	spread	Depth of curb	Qa/La	L A	L/La	a/y	Q/Qa	inter. depth	Carry over	h	Q/L	H/h	H	spread at low point	Remarks
		Lin. ft.		ft.	Acres				in/hr.	CFS	CFS	CFS	ft/ft.	ft.	ft.	CFS/ft.	ft.		a = 0.17		CFS	CFS	for 50 g.s.	L = $\frac{Q}{2.49 h^{3/2}} = \frac{Q}{0.63}$	ft.			
A	D1-3B	14'			3.35	0.3	1.00			3.63	—	3.63	1%	8.1	0.35	0.24	15.12	0.93	0.49	0.96	3.48	0.15						
B	D1-3B	6'			0.20	0.3	0.06			0.87	—	0.87	1%	4'	0.22	0.15	5.80	1.00	0.77	1.00	0.87	—						
C	D1-3C	6'			2.47	0.3	0.74			3.00	0.15	3.15	—											3.15	5.0			
D	D1-3A	2.5'			0.26	0.3	0.08			1.17	—	1.17	—											1.17	1.80			
					0.34	0.9	0.31	0.39	3																			
STORM SEWER DESIGN COMPUTATIONS																												
Inlet No.	Type	from	to	Drainage Area	Coef.	inches	accum.	time	inches	inches	accum.	invert elev.	length	shape	diameter	up. pipe	capacity	flow time	n-val.									
	A	B				1.21	1.50	16	4.7	5.69		40.2	39.3	45	2%	15"	7	9										
	B	CUT				0.29	1.50	16	4.7		7.05	39.3	37.5	90	2%	15"	7	9									CONC. PIPE TYPE "A" STONE	
	C	D				1.00		16	4.7	4.70		36.3	35.7	32	2%	15"	7	9									CONC. PIPE TYPE "A" STONE	
	D	CUT				0.39	1.39	16	4.7		6.53	35.7	33.9	90	2%	15"	7	9									CONC. PIPE TYPE "A" STONE	
	E				1.44	0.3	0.43																					
	F				0.21	0.9	0.19	0.62	5	6	3.72		75	5%	18"	8	15										CONC. PIPE 0.021 TYPE "K" EROSION CONTROL	
	E+F				0.75	0.3	0.22																					
					0.08	0.9	0.07	0.29	5	6	1.74																(FOR DITCH)	
											5.46																	