Storm Sewer Tabulation

Page 1

Station Line	To Line	Len (ft)	Drng Area Incr (ac)	Drng Area Total (ac)	Rnoff coeff (C)	Area x C Incr	Area x C Total	Tc Inlet (min)	Tc Syst (min)	Rain (I) (in/hr)	Total flow (cfs)	Cap full (cfs)	Vel (ft/s)	Pipe Size (in)	Pipe Slope (%)	Invert Elev Dn (ft)	Invert Elev Up (ft)	HGL Elev Dn (ft)	HGL Elev Up (ft)	Grnd / Rim Elev Dn (ft)	Grnd / Rim Elev Up (ft)	Line ID
1	End	9.000	0.00	0.67	0.00	0.00	0.54	0.0	8.4	3.7	2.02	18.03	5.16	18	2.11	1041.63	1041.82	1041.97	1042.36	1043.47	1049.65	Det-C1
2	1	27.722	0.00	0.30	0.00	0.00	0.26	0.0	8.2	3.8	0.98	3.19	4.24	10	1.52	1044.22	1044.64	1044.54	1045.08	1049.65	1050.05	C1-Tee
3	2	26.039	0.00	0.27	0.00	0.00	0.23	0.0	8.0	3.8	0.88	3.17	3.14	10	1.50	1044.64	1045.03	1045.08	1045.45	1050.05	1050.72	Tee-Tee
4	3	63.629	0.15	0.20	0.82	0.12	0.17	5.0	5.4	4.3	0.72	3.16	2.95	10	1.49	1045.03	1045.98	1045.45	1046.35	1050.72	1050.24	Tee-C2
5	4	53.056	0.00	0.05	0.00	0.00	0.05	0.0	5.0	4.4	0.20	0.25	3.12	4	1.51	1046.65	1047.45	1046.86	1047.70	1050.24	1051.11	C2-Tee
6	5	3.013	0.05	0.05	0.90	0.05	0.05	5.0	5.0	4.4	0.20	0.25	2.81	4	1.33	1047.45	1047.49	1047.70	1047.74	1051.11	1056.50	Tee-Roof Drain 1
7	3	53.059	0.00	0.07	0.00	0.00	0.06	0.0	7.3	3.9	0.25	1.15	3.44	6	3.00	1045.28	1045.87	1045.45	1047.12	1050.72	1051.11	Tee-Tee
8	7	12.907	0.00	0.02	0.00	0.00	0.02	0.0	6.8	4.0	0.07	1.18	1.24	6	3.18	1046.87	1047.28	1047.12	1047.41	1051.11	1151.29	Tee-Tee
9	8	27.164	0.00	0.02	0.00	0.00	0.02	0.0	5.7	4.2	0.08	1.19	1.80	6	3.24	1047.28	1048.16	1047.41	1048.30	1151.29	1151.45	Tee-Tee
10	9	0.857	0.00	0.01	0.00	0.00	0.01	0.0	5.6	4.3	0.04	1.01	1.18	6	2.34	1048.16	1048.18	1048.30	1048.28	1151.45	1151.45	Tee-Tee
11	10	2.828	0.00	0.01	0.00	0.00	0.01	0.0	5.4	4.3	0.04	1.18	1.48	6	3.18	1048.18	1048.27	1048.28	1048.37	1051.45	1151.46	Tee-Bend
12	11	4.329	0.01	0.01	0.90	0.01	0.01	5.0	5.0	4.4	0.04	1.45	1.49	6	4.85	1048.27	1048.48	1048.37	1048.58	1151.46	1065.33	Bend-Roof Drain
13	7	3.042	0.05	0.05	0.90	0.05	0.05	5.0	5.0	4.4	0.20	1.14	2.18	6	2.96	1046.87	1046.96	1047.12	1047.18	1051.11	1066.50	Tee-Roof Drain 3
14	9	2.828	0.00	0.01	0.00	0.00	0.01	0.0	5.4	4.3	0.04	1.18	1.18	6	3.18	1048.16	1048.25	1048.30	1048.35	1151.45	1151.46	Tee-Bend
15	14	4.472	0.01	0.01	0.90	0.01	0.01	5.0	5.0	4.4	0.04	1.44	1.49	6	4.70	1048.25	1048.46	1048.35	1048.56	1151.46	1065.33	Bend-Roof Drain
16	2	53.056	0.00	0.03	0.00	0.00	0.03	0.0	5.0	4.4	0.12	0.45	3.30	4	4.00	1044.97	1047.09	1045.09	1047.28	1050.05	1050.74	Tee-Tee
17	16	3.000	0.03	0.03	0.90	0.03	0.03	5.0	5.0	4.4	0.12	0.45	2.27	4	4.00	1047.09	1047.21	1047.28	1047.40	1050.74	1066.50	Tee-Roof Drain 4
18	1	89.000	0.21	0.21	0.69	0.14	0.14	5.0	5.0	4.4	0.64	4.21	3.33	12	1.00	1044.22	1045.11	1044.45	1045.44	1049.65	1049.47	C1-C3
19	1	13.000	0.16	0.16	0.86	0.14	0.14	5.0	5.0	4.4	0.60	7.29	4.18	12	3.00	1044.22	1044.61	1044.42	1044.93	1049.65	1049.38	C1-C4

Project File: st01.stm — Number of lines: 19 — Run Date: 9/9/2015

NOTES: Intensity = 62.08 / (inlet time + 12.20) ^ 0.87 ; Return period =Yrs. 2 ; c = cir e = ellip b = box

Storm Sewers v10.00

2-YEAR STORM EVENT

Storm Sewer Tabulation

Page 1

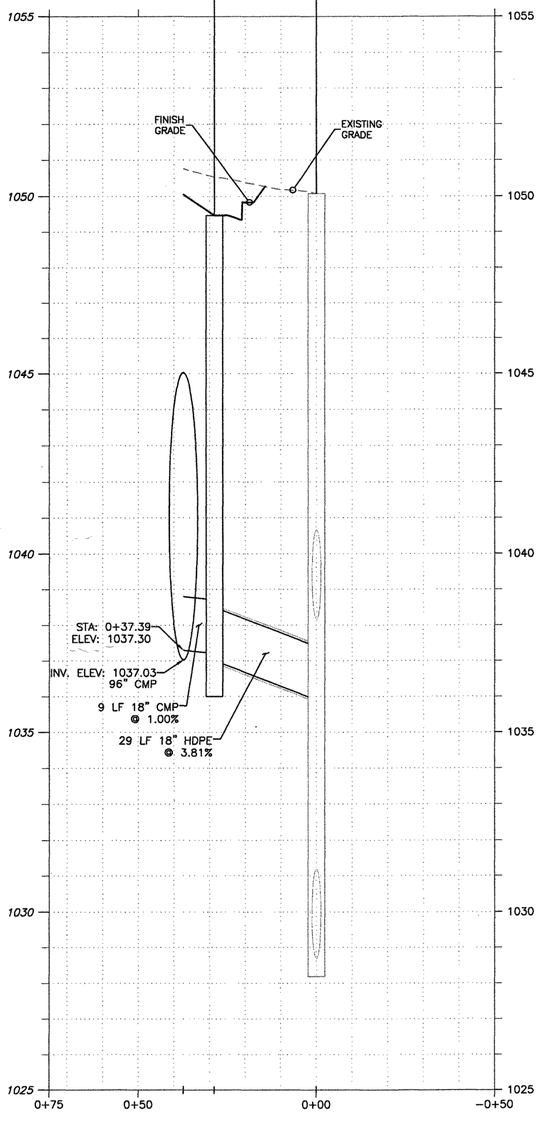
Station Line	To Line	Len (ft)	Drng Area Incr (ac)	Drng Area Total (ac)	Rnoff coeff (C)	Area x C Incr	Area x C Total	Tc Inlet (min)	Tc Syst (min)	Rain (I) (in/hr)	Total flow (cfs)	Cap full (cfs)	Vel (ft/s)	Pipe Size (in)	Pipe Slope (%)	Invert Elev Dn (ft)	Invert Elev Up (ft)	HGL Elev Dn (ft)	HGL Elev Up (ft)	Grnd / Rim Elev Dn (ft)	Grnd / Rim Elev Up (ft)	Line ID
1	End	9.000	0.00	0.67	0.00	0.00	0.54	0.0	7.5	5.4	2.92	18.03	5.74	18	2.11	1041.63	1041.82	1042.04	1042.47	1043.47	1049.65	Det-C1
2	1	27.722	0.00	0.30	0.00	0.00	0.26	0.0	7.3	5.4	1.40	3.19	4.74	10	1.52	1044.22	1044.64	1044.61	1045.17	1049.65	1050.05	C1-Tee
3	2	26.039	0.00	0.27	0.00	0.00	0.23	0.0	7.2	5.5	1.27	3.17	3.57	10	1.50	1044.64	1045.03	1045.17	1045.53	1050.05	1050.72	Tee-Tee
4	3	63.629	0.15	0.20	0.82	0.12	0.17	5.0	5.3	6.0	1.00	3.16	3.15	10	1.49	1045.03	1045.98	1045.53	1046.42	1050.72	1050.24	Tee-C2
5	4	53.056	0.00	0.05	0.00	0.00	0.05	0.0	5.0	6.0	0.27	0.25	3.48	4	1.51	1046.65	1047.45	1046.92	1047.74	1050.24	1051.11	C2-Tee
6	5	3.013	0.05	0.05	0.90	0.05	0.05	5.0	5.0	6.0	0.27	0.25	3.11	4	1.33	1047.45	1047.49	1047.92	1047.96	1051.11	1056.50	Tee-Roof Drain 1
7	3	53.059	0.00	0.07	0.00	0.00	0.06	0.0	6.7	5.6	0.35	1.15	3.20	6	3.00	1045.28	1045.87	1045.53	1047.17	1050.72	1051.11	Tee-Tee
8	7	12.907	0.00	0.02	0.00	0.00	0.02	0.0	6.3	5.7	0.10	1.18	1.38	6	3.18	1046.87	1047.28	1047.17	1047.44	1051.11	1151.29	Tee-Tee
9	8	27.164	0.00	0.02	0.00	0.00	0.02	0.0	5.5	5.9	0.11	1.19	1.97	6	3.24	1047.28	1048.16	1047.44	1048.32	1151.29	1151.45	Tee-Tee
10	9	0.857	0.00	0.01	0.00	0.00	0.01	0.0	5.4	5.9	0.05	1.01	1.29	6	2.34	1048.16	1048.18	1048.32	1048.29	1151.45	1151.45	Tee-Tee
11	10	2.828	0.00	0.01	0.00	0.00	0.01	0.0	5.3	6.0	0.05	1.18	1.61	6	3.18	1048.18	1048.27	1048.29	1048.38	1051.45	1151.46	Tee-Bend
12	11	4.329	0.01	0.01	0.90	0.01	0.01	5.0	5.0	6.0	0.05	1.45	1.62	6	4.85	1048.27	1048.48	1048.38	1048.59	1151.46	1065.33	Bend-Roof Drain
13	7	3.042	0.05	0.05	0.90	0.05	0.05	5.0	5.0	6.0	0.27	1.14	2.40	6	2.96	1046.87	1046.96	1047.17	1047.22	1051.11	1066.50	Tee-Roof Drain 3
14	9	2.828	0.00	0.01	0.00	0.00	0.01	0.0	5.3	6.0	0.05	1.18	1.29	6	3.18	1048.16	1048.25	1048.32	1048.38	1151.45	1151.46	Tee-Bend
15	14	4.472	0.01	0.01	0.90	0.01	0.01	5.0	5.0	6.0	0.05	1.44	1.62	6	4.70	1048.25	1048.46	1048.38	1048.57	1151.46	1065.33	Bend-Roof Drain
16	2	53.056	0.00	0.03	0.00	0.00	0.03	0.0	5.0	6.0	0.16	0.45	2.77	4	4.00	1044.97	1047.09	1045.17	1047.32	1050.05	1050.74	Tee-Tee
17	16	3.000	0.03	0.03	0.90	0.03	0.03	5.0	5.0	6.0	0.16	0.45	2.57	4	4.00	1047.09	1047.21	1047.32	1047.44	1050.74	1066.50	Tee-Roof Drain 4
18	1	89.000	0.21	0.21	0.69	0.14	0.14	5.0	5.0	6.0	0.87	4.21	3.66	12	1.00	1044.22	1045.11	1044.53	1045.50	1049.65	1049.47	C1-C3
19	1	13.000	0.16	0.16	0.86	0.14	0.14	5.0	5.0	6.0	0.83	7.29	4.59	12	3.00	1044.22	1044.61	1044.45	1044.99	1049.65	1049.38	C1-C4

Project File: st01.stm — Number of lines: 19 — Run Date: 9/9/2015

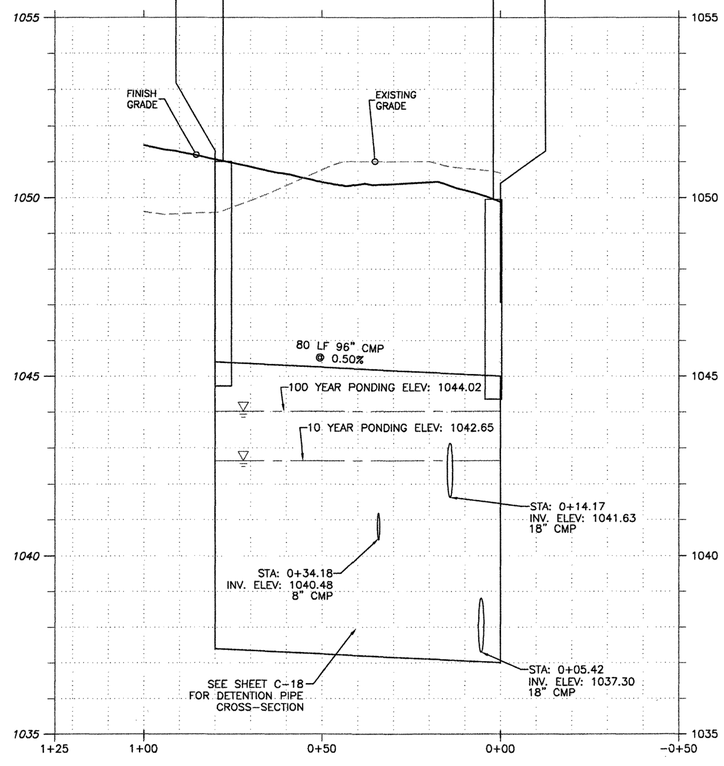
NOTES: Intensity = 46.78 / (inlet time + 10.60) ^ 0.75 ; Return period =Yrs. 10 ; c = cir e = ellip b = box

Storm Sewers v10.00

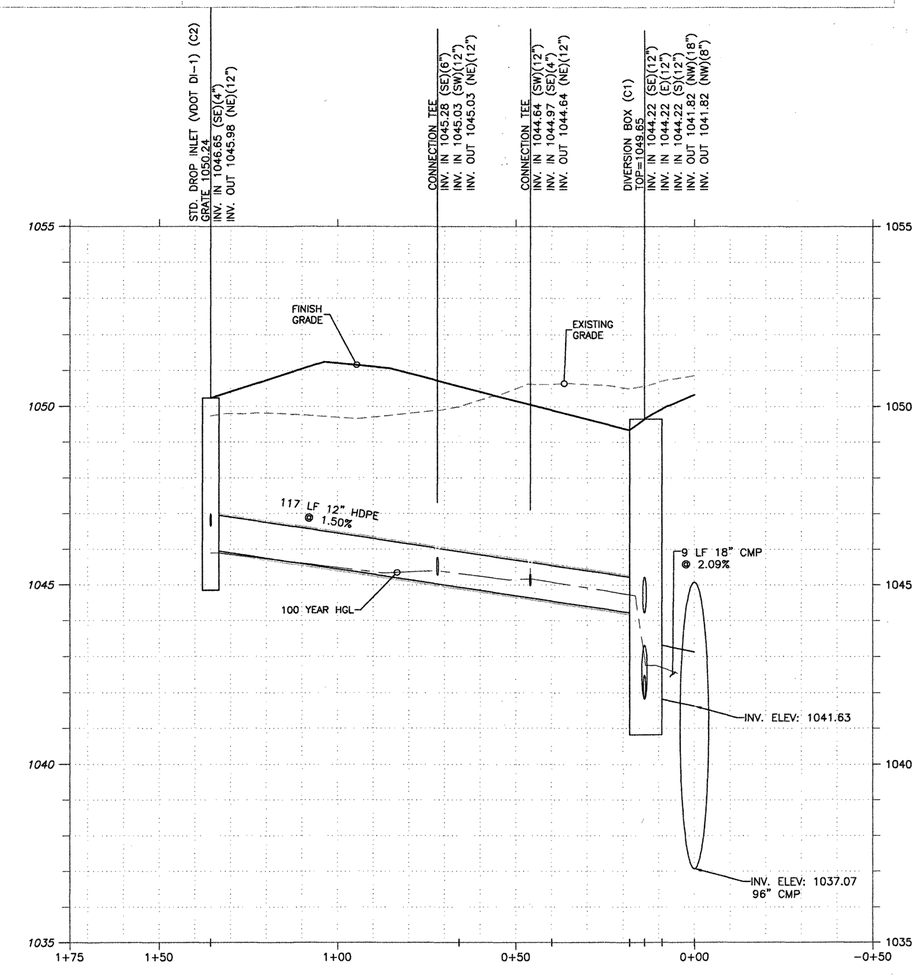
10-YEAR STORM EVENT



STORM SEWER PROFILE A
VERTICAL SCALE: 1"=2'
HORIZONTAL SCALE: 1"=20'



STORM SEWER PROFILE B
VERTICAL SCALE: 1"=2'
HORIZONTAL SCALE: 1"=20'



STORM SEWER PROFILE C1
VERTICAL SCALE: 1"=2'
HORIZONTAL SCALE: 1"=20'

SHEET NO. C-3.2

COMMONWEALTH OF VIRGINIA
JOHN H. NOLAND
Lic. No. 019570
PROFESSIONAL ENGINEER
JAN 11 2016

REV-4	12-07-15	REA	GD	CB	CB
	DATE	PRN	PM	DES	DRW

STORM SEWER PROFILES
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ROANOKE VIRGINIA

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