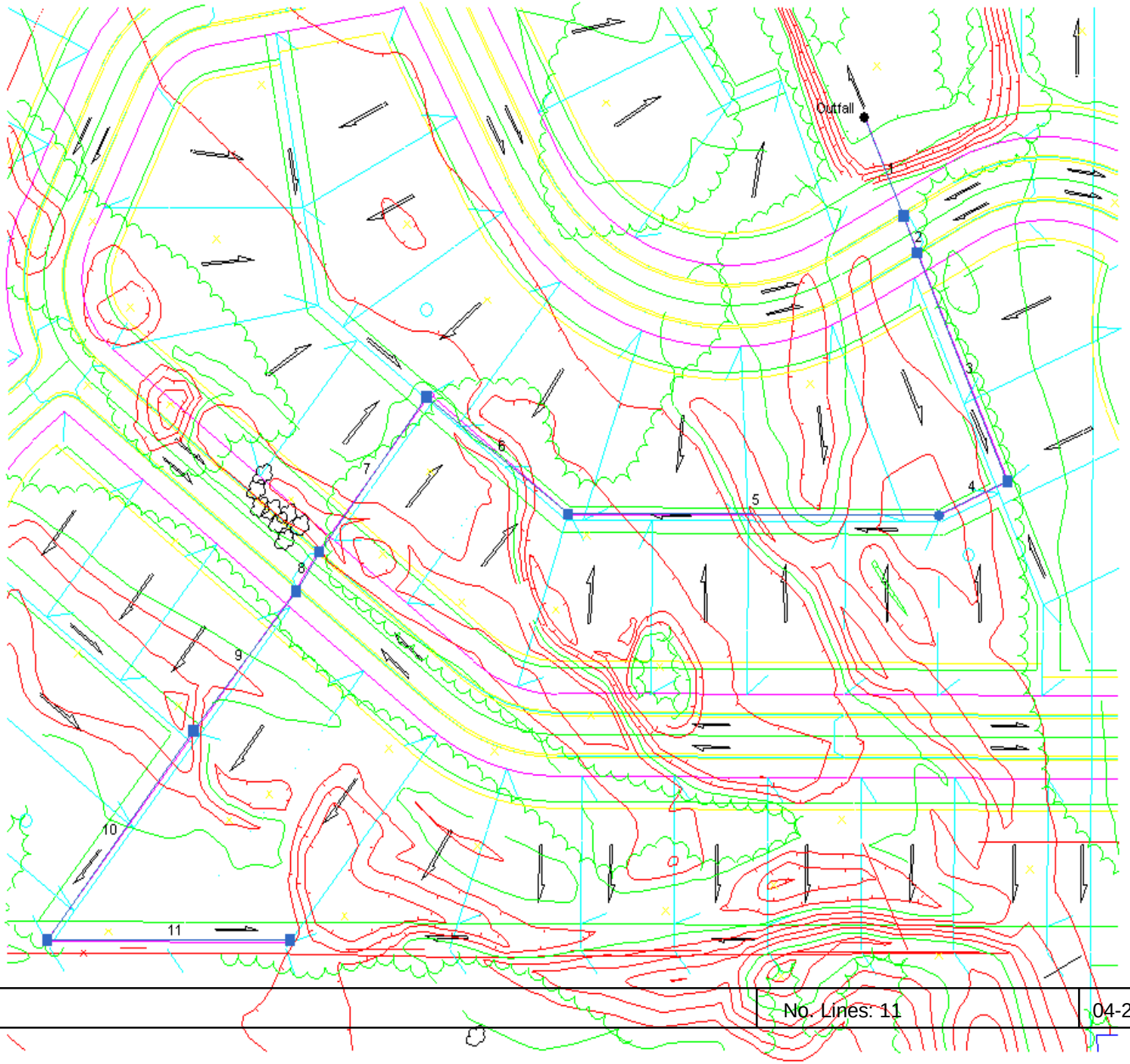
Hydraflow Plan View



sws5_RW

No. Lines: 11

04-23-2007

Storm Sewer Summary Report

Line No.	Line ID	Flow rate (cfs)	Line size (in)	Line length (ft)	Invert EL Dn (ft)	Invert EL Up (ft)	Line slope (%)	HGL down (ft)	HGL up (ft)	Minor loss (ft)	HGL Junct (ft)	Dns line No.
1		27.30	48 c	83.5	1249.00	1249.07	0.084	1252.22	1252.25	0.05	1252.30	End
2		25.40	48 c	30.5	1249.07	1249.09	0.066	1252.31	1252.32	0.04	1252.36	1
3		23.50	48 c	194.2	1249.09	1249.25	0.082	1252.36	1252.41	0.11	1252.52	2
4		22.10	42 c	64.2	1249.75	1249.83	0.125	1252.52	1252.55	0.06	1252.60	3
5		22.10	42 c	318.0	1249.83	1250.21	0.120	1252.60	1252.76	0.13	1252.89	4
6		19.70	42 c	151.8	1250.21	1250.39	0.119	1252.91	1252.97	0.16	1253.13	5
7		17.10	36 c	151.6	1250.89	1251.07	0.119	1253.13	1253.25	0.08	1253.32	6
8		11.35	36 c	36.3	1251.07	1251.14	0.193	1253.41	1253.41	0.03	1253.44	7
9		5.60	24 c	140.0	1252.14	1252.56	0.300	1253.46	1253.60	0.09	1253.69	8
10		4.00	18 c	205.2	1253.06	1253.84	0.380	1253.91	1254.69	n/a	1254.87 i	9
11		2.10	15 c	208.2	1254.09	1254.88	0.380	1254.87	1255.49	n/a	1255.70 i	10

sws5_RW | Number of lines: 11 | Run Date: 04-23-2007

NOTES: c = cir; e = ellip; b = box; Return period = 2 Yrs. ; i - Inlet control.

Inlet Report

Line No	Inlet ID	Q = CIA (cfs)	Q carry (cfs)	Q capt (cfs)	Q byp (cfs)	Junc type	Curb Inlet		Grate Inlet			Gutter							Inlet			Byp line No
							Ht (in)	L (ft)	area (sqft)	L (ft)	W (ft)	So (ft/ft)	W (ft)	Sw (ft/ft)	Sx (ft/ft)	n	Depth (ft)	Spread (ft)	Depth (ft)	Spread (ft)	Depr (in)	
1		1.90*	0.00	1.90	0.00	Curb	6.0	10.00	0.00	0.00	0.00	Sag	2.00	0.080	0.030	0.000	0.25	5.10	0.32	5.10	2.00	Off
2		1.90*	0.00	1.90	0.00	Curb	6.0	10.00	0.00	0.00	0.00	Sag	2.00	0.080	0.030	0.000	0.25	5.10	0.32	5.10	2.00	Off
3		1.40*	0.00	1.40	0.00	DrGrt	0.0	0.00	8.00	4.00	2.00	Sag	2.00	0.020	0.020	0.000	0.11	13.47	0.11	13.47	0.00	Off
4		0.00	0.00	0.00	0.00	MH	0.0	0.00	0.00	0.00	0.00	Sag	0.00	0.000	0.000	0.000	0.00	0.00	0.00	0.00	0.00	Off
5		2.40*	0.00	2.40	0.00	DrGrt	0.0	0.00	8.00	4.00	2.00	Sag	2.00	0.020	0.020	0.000	0.16	18.43	0.16	18.43	0.00	Off
6		2.60*	0.00	2.60	0.00	DrGrt	0.0	0.00	8.00	4.00	2.00	Sag	2.00	0.020	0.020	0.000	0.17	19.33	0.17	19.33	0.00	Off
7		5.75*	0.00	5.75	0.00	Curb	6.0	10.00	0.00	0.00	0.00	Sag	2.00	0.080	0.030	0.000	0.42	10.72	0.49	10.72	2.00	Off
8		5.75*	0.00	5.75	0.00	Curb	6.0	10.00	0.00	0.00	0.00	Sag	2.00	0.080	0.030	0.000	0.42	10.72	0.49	10.72	2.00	Off
9		1.60*	0.00	1.60	0.00	DrGrt	0.0	0.00	8.00	4.00	2.00	Sag	2.00	0.020	0.020	0.000	0.13	14.53	0.13	14.53	0.00	Off
10		1.90*	0.00	1.90	0.00	DrGrt	0.0	0.00	8.00	4.00	2.00	Sag	2.00	0.020	0.020	0.000	0.14	16.06	0.14	16.06	0.00	Off
11		2.10*	0.00	2.10	0.00	DrGrt	0.0	0.00	8.00	4.00	2.00	Sag	2.00	0.020	0.020	0.000	0.15	17.03	0.15	17.03	0.00	Off

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NOTES: Inlet N-Values = 0.016 ; Intensity = 69.87 / (Inlet time + 13.10) ^ 0.87; Return period = 2 Yrs. ; * Indicates Known Q added

Hydraulic Grade Line Computations

Line	Size	Q	Downstream								Len	Upstream								Check		JL coeff	Minor loss
			Invert elev	HGL elev	Depth	Area	Vel	Vel head	EGL elev	Sf		Invert elev	HGL elev	Depth	Area	Vel	Vel head	EGL elev	Sf	Ave Sf	Enrgy loss		
	(in)	(cfs)	(ft)	(ft)	(ft)	(sqft)	(ft/s)	(ft)	(ft)	(%)	(ft)	(ft)	(ft)	(ft)	(sqft)	(ft/s)	(ft)	(ft)	(%)	(%)	(ft)	(K)	(ft)
1	48	27.30	1249.00	1252.22	3.22	10.84	2.52	0.10	1252.32	0.037	83.5	1249.07	1252.25	3.18	10.71	2.55	0.10	1252.35	0.038	0.038	0.032	0.50	0.05
2	48	25.40	1249.07	1252.31	3.24	10.91	2.33	0.08	1252.40	0.032	30.5	1249.09	1252.32	3.23	10.87	2.34	0.08	1252.41	0.032	0.032	0.010	0.50	0.04
3	48	23.50	1249.09	1252.36	3.27	11.01	2.14	0.07	1252.43	0.027	194	1249.25	1252.41	3.16	10.64	2.21	0.08	1252.49	0.029	0.028	0.054	1.50	0.11
4	42	22.10	1249.75	1252.52	2.77	8.17	2.70	0.11	1252.64	0.052	64.2	1249.83	1252.55	2.72	8.02	2.76	0.12	1252.67	0.054	0.053	0.034	0.47	0.06
5	42	22.10	1249.83	1252.60	2.77	8.18	2.70	0.11	1252.72	0.051	318	1250.21	1252.76	2.55	7.52	2.94	0.13	1252.90	0.062	0.057	0.180	0.97	0.13
6	42	19.70	1250.21	1252.91	2.70	7.96	2.47	0.10	1253.00	0.043	152	1250.39	1252.97	2.58	7.61	2.59	0.10	1253.08	0.048	0.046	0.069	1.50	0.16
7	36	17.10	1250.89	1253.13	2.24	5.65	3.02	0.14	1253.27	0.080	152	1251.07	1253.25	2.18	5.49	3.11	0.15	1253.40	0.086	0.083	0.126	0.50	0.08
8	36	11.35	1251.07	1253.41	2.34	5.91	1.92	0.06	1253.47	0.032	36.3	1251.14	1253.41	2.27	5.75	1.97	0.06	1253.47	0.034	0.033	0.012	0.50	0.03
9	24	5.60	1252.14	1253.46	1.32	2.19	2.56	0.10	1253.56	0.104	140	1252.56	1253.60	1.04	1.66	3.38	0.18	1253.78	0.213	0.158	0.222	0.50	0.09
10	18	4.00	1253.06	1253.91	0.85*	1.04	3.85	0.23	1254.14	n/a	205	1253.84	1254.69	0.85	1.04	3.85	0.23	1254.92i	n/a	n/a	0.549	1.50	n/a
11	15	2.10	1254.09	1254.87	0.78	0.80	2.62	0.11	1254.97	n/a	208	1254.88	1255.49	0.60	0.59	3.57	0.20	1255.68i	n/a	n/a	0.511	1.00	n/a

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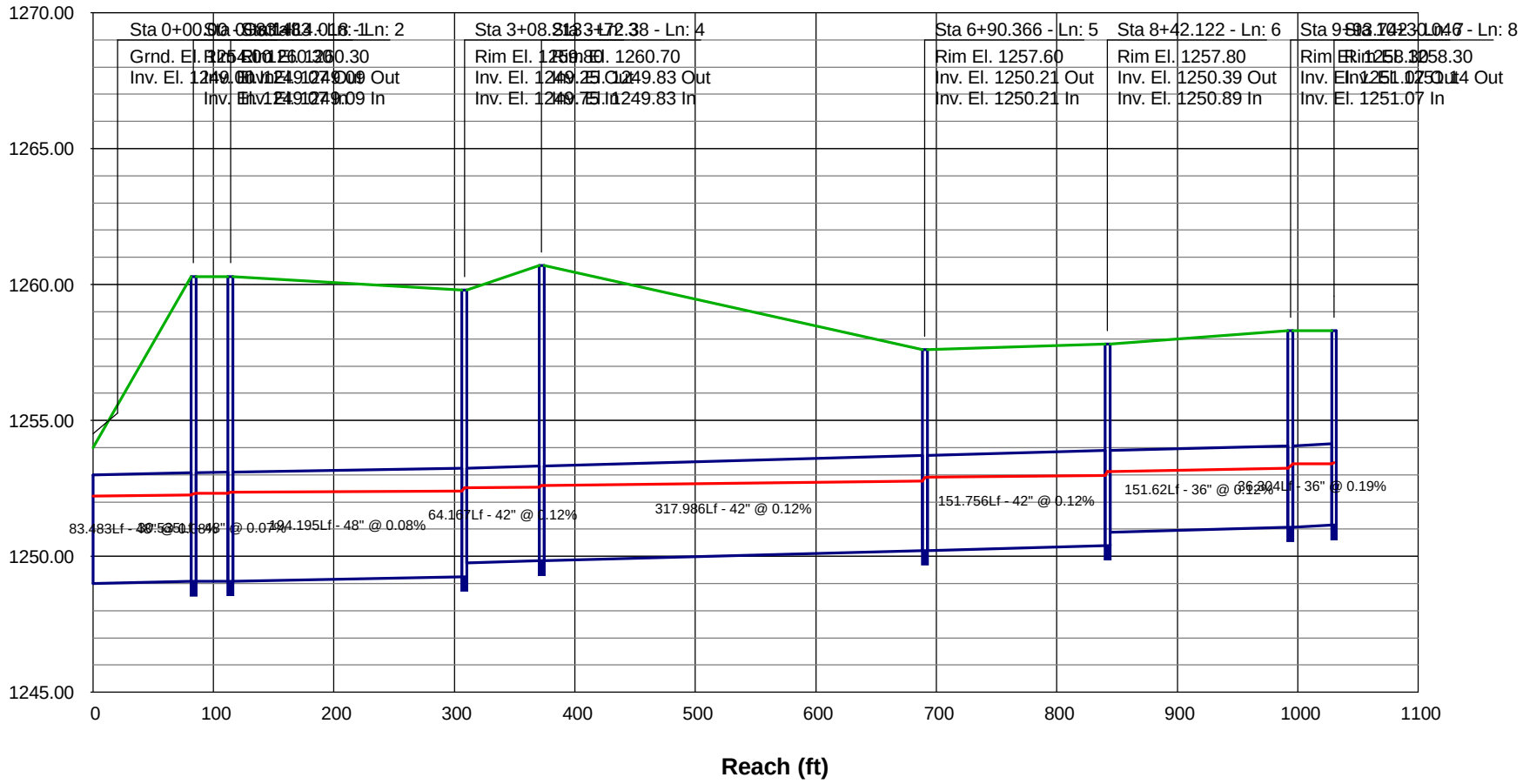
Notes: * Normal depth assumed.

Storm Sewer Profile

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