

STORM SEWER HYDRAULICS

THE STERLING COMPANY

Ver 1.33

Job Name: Briar Chase  
 Prepared by: R.A. Checked by: D.M.  
 Job No: 3043 Sheet No: 1

Date: 02-28-03  
 Revised: \*\*\*\*\*

Upper Str. Type	Str. Number	Len. In	Area In	P.I.	Q In	Total Q	Pipe Size	Const. Grade	V In	Vh In	Q x Vh	Hyd. Grade	Flow Line Elevation	Top of Structure Elevation	Free Board	Hyd. Grade Line	Frict. Loss	Curve Loss	Junc. Loss	Entr. Loss	Turn Angle	Turn Loss	Capacity	Q/Cap.	Normal Depth			
T	57	41	34.5		0.81	0.81	15	1.50%	0.66	0.01	0.01	0.02%	641.22	640.70	646.02	646.02	4.31	641.71	641.70	0.01		0.01	75	0.09	7.91	0.10	0.26	
T	59	58	34.95		1.65	1.65	15	1.70%	1.34	0.03	0.05	0.07%	630.99	630.40	635.66	635.51	3.99	631.67	631.65	0.02		0.14	0.03	10	0.00	8.41	0.20	0.38
CI	58	36	95.05		1.73	3.38	15	1.70%	2.75	0.12	0.40	0.27%	630.20	628.58	635.51	633.70	3.86	630.75	630.32	0.26		0.86	90	0.08	8.43	0.40	0.55	
T	53.1	53	97.23		0.54	0.54	12	1.00%	0.69	0.01	0.00	0.02%	624.94	623.97	631.14	629.50	4.42	626.72	626.70	0.02		0.01	80	0.17	3.56	0.15	0.26	
T	55	54	174.74		2.94	2.94	12	1.50%	3.74	0.22	0.64	0.68%	627.98	625.36	632.50	630.00	3.83	628.67	627.48	1.19		0.13	0.22	95	0.17	4.36	0.67	0.60
AI	54	53	119.25		1.83	4.77	15	1.00%	3.89	0.29	1.12	0.55%	625.16	623.97	630.00	629.50	2.52	627.35	626.70	0.65		0.19			6.45	0.74	0.79	
AI	53	52	111.34		2.85	7.62	18	1.00%	4.31	0.29	2.20	0.53%	623.77	622.66	629.50	629.94	2.80	626.34	625.75	0.59		0.31			10.49	0.73	0.95	
DCI	52	51	34.5		2.04	9.66	18	1.01%	5.47	0.46	4.48	0.85%	622.46	622.11	629.94	629.94	4.19	625.44	625.15	0.29		0.03			10.53	0.92	1.13	
DCI	51	44	65.12		2.42	12.08	21	1.00%	5.02	0.39	4.73	0.58%	621.91	621.26	629.94	626.77	4.79	624.96	624.58	0.38		0.19			15.83	0.76	1.14	
T	56	46	253.87		2.82	2.82	12	2.50%	3.59	0.20	0.56	0.63%	632.29	625.94	637.50	632.00	4.71	632.79	629.42	1.59		0.20	50	0.31	5.63	0.50	0.50	
T	46.1	46	30		6.85	6.85	15	6.50%	5.58	0.48	3.31	1.12%	627.89	625.94	629.14	632.00	-0.60	629.74	629.40	0.34		0.67	0.48	40	0.31	16.47	0.42	0.55
AI	46	45	141.83		3.09	12.76	18	2.00%	7.22	0.81	10.33	1.48%	625.74	622.90	632.00	629.50	2.60	628.42	626.33	2.09		0.23			14.86	0.86	1.07	
AI	45	44	72.04		0.90	13.66	18	2.00%	7.73	0.93	12.57	1.69%	622.70	621.26	628.50	626.77	2.17	625.78	624.56	1.22		0.19			14.85	0.92	1.13	
CI	44	43	34.5		2.19	27.93	27	1.01%	7.02	0.77	21.40	0.81%	621.06	620.71	626.77	626.77	2.21	623.63	623.35	0.28					31.19	0.90	1.64	
CI	43	35	94.75		3.22	31.15	30	1.00%	6.35	0.63	19.48	0.58%	620.51	619.56	626.77	626.50	3.42	623.35	622.80	0.55					41.07	0.76	1.63	
T	42	41	116.14		2.34	2.34	12	1.00%	2.98	0.14	0.32	0.43%	641.86	640.70	646.00	646.02	3.55	642.45	641.70	0.50		0.16	0.14	80	0.09	3.56	0.66	0.59
CI	41	40	99.05		1.20	4.35	15	1.20%	3.54	0.20	0.85	0.45%	640.50	639.31	646.02	644.45	4.32	641.20	640.56	0.45		0.21			7.08	0.61	0.70	
CI	40	39	34.5		1.17	5.52	15	1.19%	4.50	0.31	1.73	0.73%	639.11	638.70	644.45	644.45	3.89	640.20	639.95	0.25		0.28			7.04	0.78	0.83	
CI	39	38	17.48		1.20	6.72	15	1.20%	5.48	0.47	3.13	1.08%	638.50	638.29	644.45	644.80	4.50	639.73	639.54	0.19					7.08	0.95	0.96	
MH	38	37	125.62		6.78	7.77	15	1.20%	5.48	0.47	3.13	1.08%	638.09	636.58	644.80	641.60	5.26	639.52	638.16	1.36		0.29			7.08	0.95	0.96	
AI	37	36	300.66		1.05	7.77	15	2.60%	6.33	0.62	4.84	1.45%	636.38	628.58	641.60	633.70	3.44	637.18	630.32	4.34		0.86			10.42	0.75	0.80	
AI	36	35	300		3.12	14.27	18	2.94%	8.08	1.01	14.45	1.85%	628.38	619.56	633.70	626.50	3.38	629.39	622.80	5.54		0.44			18.01	0.79	1.01	
AI	35	34	339.98		1.80	47.22	36	0.50%	6.68	0.69	32.72	0.50%	619.36	617.66	626.50	622.60	3.70	622.36	620.66	1.70		0.10	15	0.12	47.16	1.00	2.46	
AI	34	33	91.51		1.75	48.97	36	0.50%	6.68	0.69	36.50	0.54%	617.46	617.00	622.60		1.94	620.49	620.00	0.49					47.29	1.04	2.55	
T	32	31	34.5		1.93	1.93	15	2.70%	1.57	0.04	0.07	0.09%	627.70	626.77	632.31	632.31	4.26	628.05	628.02	0.03		0.11	0.04	25	0.01	10.61	0.18	0.35
CI	31	30	84.3		1.23	3.16	15	2.70%	2.57	0.10	0.33	0.24%	626.57	624.29	632.31	629.84	4.29	627.03	625.54	0.20		0.17			10.62	0.30	0.46	
CI	30	29	34.5		1.25	4.41	15	2.70%	3.59	0.20	0.88	0.47%	624.09	623.16	629.84	629.84	4.30	624.64	624.41	0.16		0.17			10.61	0.42	0.55	
CI	29	28	148.89		0.93	5.34	15	4.00%	4.35	0.29	1.57	0.68%	622.96	617.00	629.84		5.43	623.51	619.55	1.02					12.92	0.41	0.55	
T	18.2	18.1	106		2.37	2.37	15	1.00%	1.93	0.06	0.14	0.13%	610.79	609.73		613.50		611.78	611.64	0.14		0.47	0.06	10	0.27	6.46	0.37	0.51
T	27	26	50		61.71	61.71	36	1.00%	8.73	1.18	73.03	0.86%	611.50	611.00	620.21		5.78	614.43	614.00	0.43					66.70	0.93	2.28	
T	25	19	59.46		1.71	1.71	15	1.00%	1.39	0.03	0.05	0.07%	611.08	610.49	615.14	615.01	2.48	612.66	612.62	0.04		0.03	50	0.30	6.45	0.27	0.44	
T	24	23	128.67		1.00	1.00	12	2.50%	1.27	0.03	0.03	0.08%	620.11	616.89	624.56	622.80	4.17	620.39	617.89	0.10		0.38	0.03	90	0.02	5.64	0.18	0.28
AI	23	22	76.26		2.40	3.40	12	1.50%	4.33	0.29	0.99	0.91%	616.69	615.55	622.80	620.00	4.91	617.35	616.55	0.69		0.15			4.36	0.78	0.66	
AI	22	21	116.82		1.98	5.38	15	1.00%	4.38	0.30	1.61	0.69%	615.35	614.18	620.00	620.73	3.45	616.24	615.43	0.81		0.23			6.46	0.83	0.86	
CI	21	20	35.01		1.02	6.40	15	1.20%	5.22	0.42	2.70	0.98%	613.98	613.56	620.73	620.61	5.30	615.15	614.81	0.34		0.22			7.08	0.90	0.93	
CI	20	19	95.72		0.84	7.24	15	3.00%	5.90	0.54	3.91	1.26%	613.36	610.49	620.61	615.01	5.80	614.09	612.62	1.20		0.16			11.19	0.65	0.73	
CI	19	18.1	55.84		1.19	10.14	18	1.00%	5.74	0.51	5.18	0.93%	610.29	609.73	615.01	613.50	2.39	612.16	611.64	0.52		0.47			10.52	0.96	1.17	
MH	18.1	18	20			12.51	18	1.50%	7.08	0.78	9.74	1.42%	609.53	609.23	613.50		1.86	611.01	610.73	0.28					12.87	0.97	1.19	
T	17	16	132.75		2.09	2.09	12	5.00%	2.66	0.11	0.23	0.34%	615.64	609.00	621.80		5.82	615.98	610.00	0.46		0.11			7.97	0.26	0.34	
T	10	9	100		7.26	7.26	15	3.70%	5.92	0.54	3.95	1.26%	629.70	626.00	630.95	631.00	0.57	630.38	627.67	1.26		0.66	0.54	70	0.33	12.43	0.58	0.68
AI	9	8	95.33		2.16	9.42	15	11.33%	7.68	0.91	8.62	2.13%	625.80	615.00	631.00		3.33	626.38	617.63	2.03					21.74	0.43	0.58	
T	7	6	34.5		1.80	1.80	15	10.00%	1.47	0.03	0.06	0.08%	621.28	617.83	626.22	626.22	4.69	621.53	619.08	0.03		0.17	0.03	25	0.01	20.43	0.09	0.25
CI	6	5	134.89		1.93	3.73	15	1.50%	3.04	0.14	0.54	0.33%	617.63	615.61	626.22	620.00	7.14	618.27	617.82	0.45					7.91	0.47	0.60	
MH	5	4	40.79			3.73																						