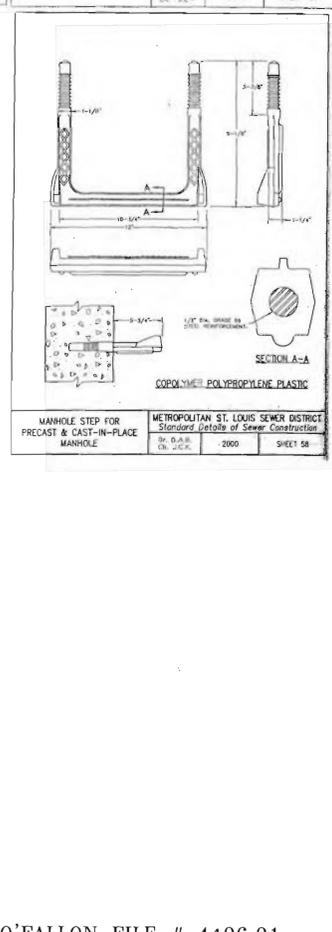
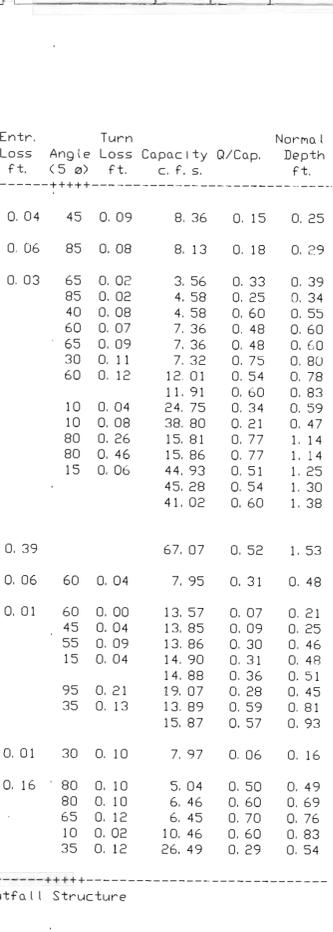
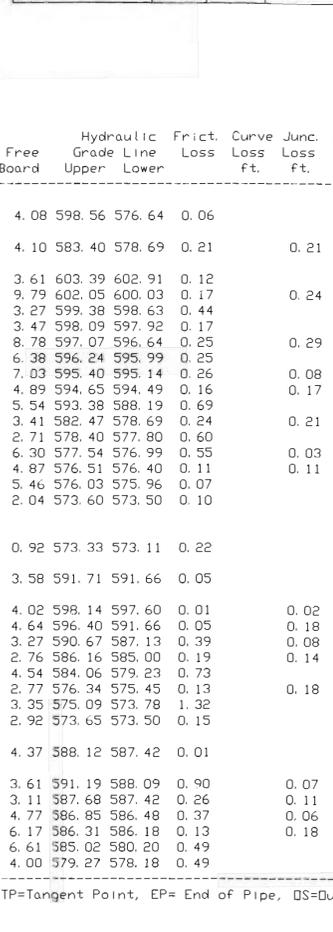
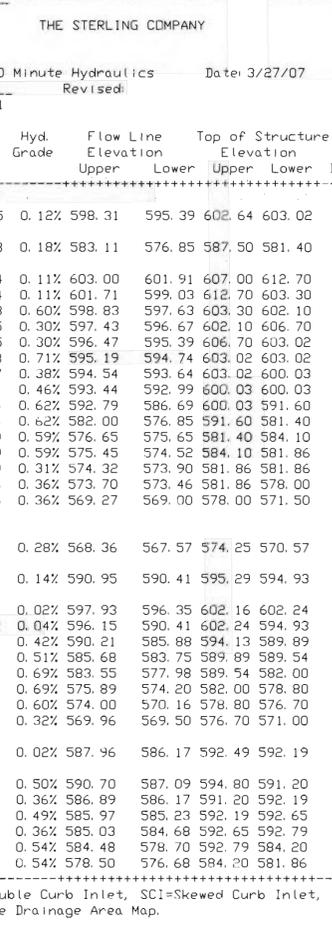
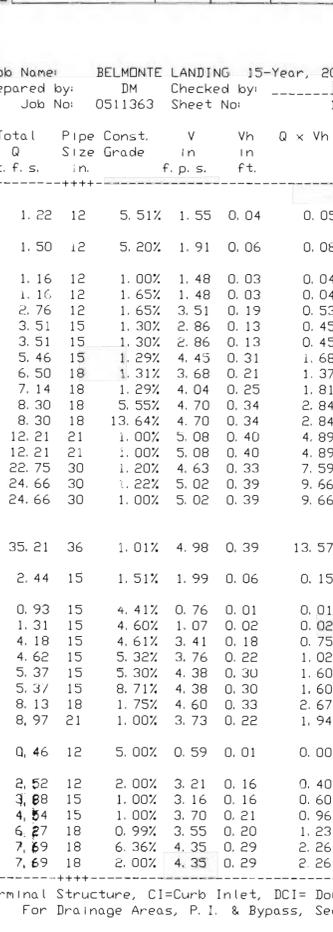
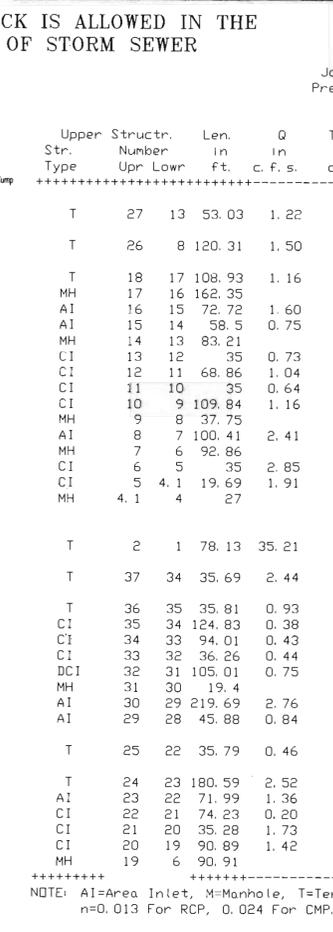
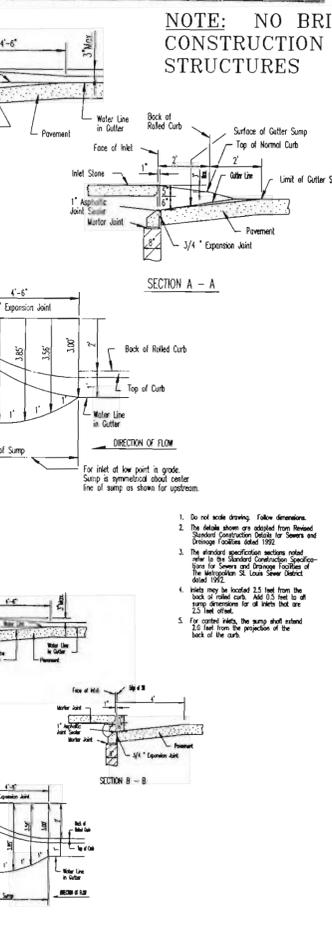
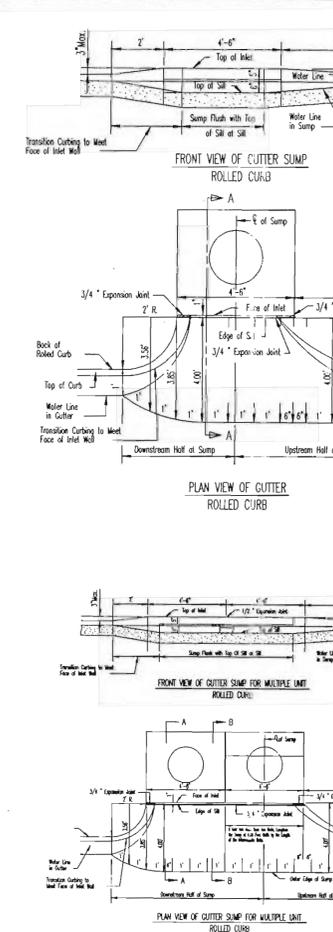
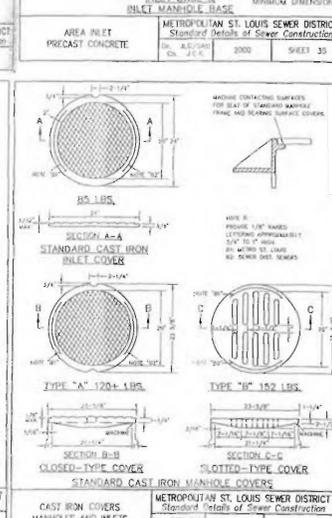
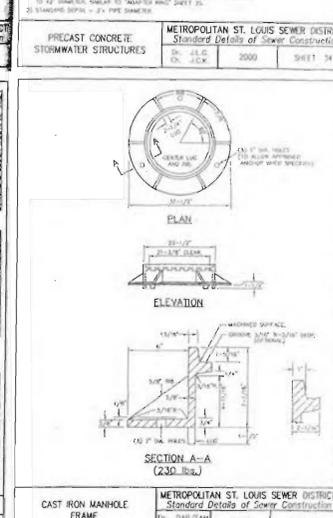
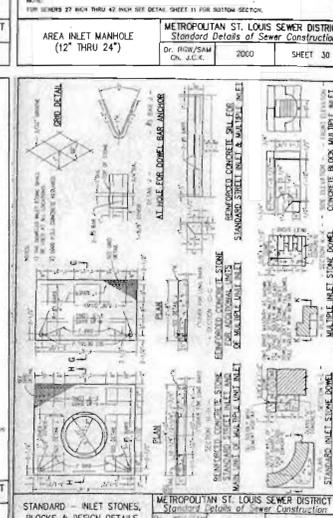
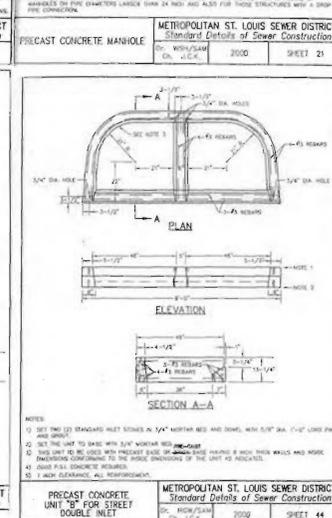
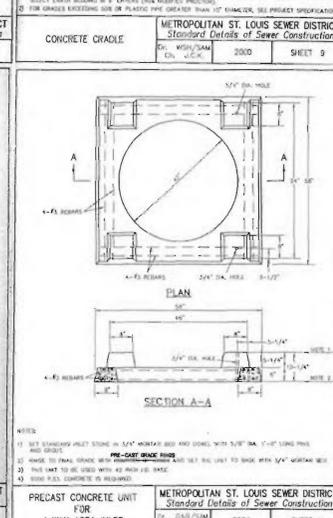
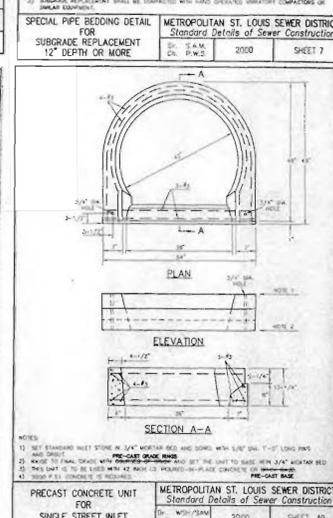
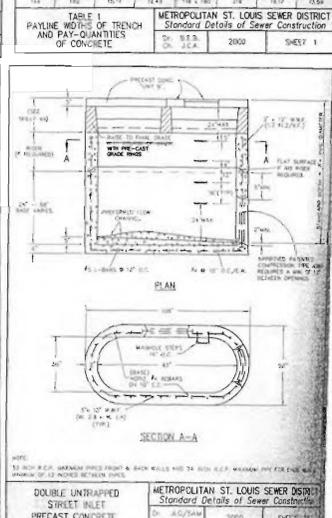
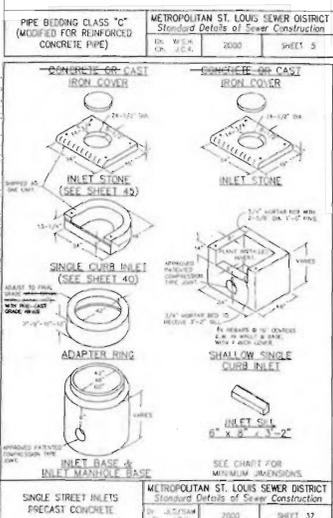


ROUND PIPE				HORIZONTAL ELLIPTICAL PIPE			
DIAMETER (INCHES)	WEIGHT (LBS/FT)	DEPTH (INCHES)	CONCRETE REQUIREMENT	DIAMETER (INCHES)	WEIGHT (LBS/FT)	DEPTH (INCHES)	CONCRETE REQUIREMENT
6	3.50	3.50		6	3.50	3.50	
8	5.50	5.50		8	5.50	5.50	
10	8.50	8.50		10	8.50	8.50	
12	12.50	12.50		12	12.50	12.50	
14	17.50	17.50		14	17.50	17.50	
16	23.50	23.50		16	23.50	23.50	
18	30.50	30.50		18	30.50	30.50	
20	38.50	38.50		20	38.50	38.50	
22	47.50	47.50		22	47.50	47.50	
24	57.50	57.50		24	57.50	57.50	
26	68.50	68.50		26	68.50	68.50	
28	80.50	80.50		28	80.50	80.50	
30	93.50	93.50		30	93.50	93.50	
32	107.50	107.50		32	107.50	107.50	
34	122.50	122.50		34	122.50	122.50	
36	138.50	138.50		36	138.50	138.50	
38	155.50	155.50		38	155.50	155.50	
40	173.50	173.50		40	173.50	173.50	
42	192.50	192.50		42	192.50	192.50	
44	212.50	212.50		44	212.50	212.50	
46	233.50	233.50		46	233.50	233.50	
48	255.50	255.50		48	255.50	255.50	
50	278.50	278.50		50	278.50	278.50	
52	302.50	302.50		52	302.50	302.50	
54	327.50	327.50		54	327.50	327.50	
56	353.50	353.50		56	353.50	353.50	
58	380.50	380.50		58	380.50	380.50	
60	408.50	408.50		60	408.50	408.50	
62	437.50	437.50		62	437.50	437.50	
64	467.50	467.50		64	467.50	467.50	
66	498.50	498.50		66	498.50	498.50	
68	530.50	530.50		68	530.50	530.50	
70	563.50	563.50		70	563.50	563.50	
72	597.50	597.50		72	597.50	597.50	
74	632.50	632.50		74	632.50	632.50	
76	668.50	668.50		76	668.50	668.50	
78	705.50	705.50		78	705.50	705.50	
80	743.50	743.50		80	743.50	743.50	
82	782.50	782.50		82	782.50	782.50	
84	822.50	822.50		84	822.50	822.50	
86	863.50	863.50		86	863.50	863.50	
88	905.50	905.50		88	905.50	905.50	
90	948.50	948.50		90	948.50	948.50	
92	992.50	992.50		92	992.50	992.50	
94	1037.50	1037.50		94	1037.50	1037.50	
96	1083.50	1083.50		96	1083.50	1083.50	
98	1130.50	1130.50		98	1130.50	1130.50	
100	1178.50	1178.50		100	1178.50	1178.50	
102	1227.50	1227.50		102	1227.50	1227.50	
104	1277.50	1277.50		104	1277.50	1277.50	
106	1328.50	1328.50		106	1328.50	1328.50	
108	1380.50	1380.50		108	1380.50	1380.50	
110	1433.50	1433.50		110	1433.50	1433.50	
112	1487.50	1487.50		112	1487.50	1487.50	
114	1542.50	1542.50		114	1542.50	1542.50	
116	1598.50	1598.50		116	1598.50	1598.50	
118	1655.50	1655.50		118	1655.50	1655.50	
120	1713.50	1713.50		120	1713.50	1713.50	
122	1772.50	1772.50		122	1772.50	1772.50	
124	1832.50	1832.50		124	1832.50	1832.50	
126	1893.50	1893.50		126	1893.50	1893.50	
128	1955.50	1955.50		128	1955.50	1955.50	
130	2018.50	2018.50		130	2018.50	2018.50	
132	2082.50	2082.50		132	2082.50	2082.50	
134	2147.50	2147.50		134	2147.50	2147.50	
136	2213.50	2213.50		136	2213.50	2213.50	
138	2280.50	2280.50		138	2280.50	2280.50	
140	2348.50	2348.50		140	2348.50	2348.50	
142	2417.50	2417.50		142	2417.50	2417.50	
144	2487.50	2487.50		144	2487.50	2487.50	
146	2558.50	2558.50		146	2558.50	2558.50	
148	2630.50	2630.50		148	2630.50	2630.50	
150	2703.50	2703.50		150	2703.50	2703.50	



NOTE: NO BRICK IS ALLOWED IN THE CONSTRUCTION OF STORM SEWER STRUCTURES

Job Name: BELMONTE LANDING 15-Year, 20 Minute Hydraulics Date: 3/27/07
 Prepared by: DM Checked by: _____ Revised: _____
 Job No: 0511363 Sheet No: 1

Upper Str. Type	Number	Len. in	Q in c.f.s.	Total Q c.f.s.	Pipe Size in.	V in f.p.s.	Vh in ft.	Q x Vh	Hyd. Grade	Flow Line Elevation Upper	Top of Structure Elevation Upper	Free Board	Hydraulic Grade Line Upper	Frict. Loss	Curve Loss	Junc. Loss	Entr. Loss	Angle Turn (5°)	Turn Loss	Capacity Q/Cap. c.f.s.	Normal Depth ft.					
T	27	13	53.03	1.22	1.22	12	5.51%	1.55	0.04	0.05	1.22	598.31	595.39	602.64	603.02	4.08	598.56	576.64	0.06	0.04	45	0.09	8.36	0.15	0.25	
T	26	8	120.31	1.50	1.50	12	5.20%	1.91	0.06	0.08	1.18	583.11	576.85	587.50	581.40	4.10	583.40	578.69	0.21	0.21	0.06	85	0.08	8.13	0.18	0.29
MH	18	17	108.93	1.16	1.16	12	1.00%	1.48	0.03	0.04	0.11%	603.00	601.91	607.00	612.70	3.61	603.39	602.91	0.12	0.24	0.03	65	0.02	3.56	0.33	0.39
A1	16	15	72.72	1.60	2.76	12	1.65%	3.51	0.19	0.53	0.60%	598.83	597.63	603.30	602.10	3.27	599.38	598.63	0.44	0.40	0.08	40	0.08	4.58	0.60	0.55
A1	15	14	58.5	0.75	3.51	15	1.30%	2.86	0.13	0.45	0.30%	597.43	596.67	602.10	606.70	3.47	598.09	597.92	0.17	60	0.07	7.36	0.48	0.60		
MH	14	13	83.21	1.16	3.51	15	1.30%	2.86	0.13	0.45	0.30%	596.47	595.39	606.70	603.02	6.38	597.07	596.64	0.25	0.29	0.09	7.36	0.48	0.60		
C1	13	12	35	0.73	5.46	15	1.29%	4.43	0.31	1.68	0.71%	595.19	594.74	603.02	603.02	6.38	596.24	595.99	0.25	65	0.11	7.32	0.75	0.80		
C1	12	11	68.86	1.04	6.50	18	1.31%	3.68	0.21	1.37	0.38%	594.54	593.64	603.02	600.03	7.03	595.40	595.14	0.26	0.08	0.12	12.01	0.54	0.78		
C1	11	10	35	0.64	7.14	18	1.29%	4.04	0.25	1.81	0.46%	593.44	592.99	600.03	600.03	4.49	594.65	594.49	0.16	0.17	0.12	11.91	0.60	0.83		
C1	10	9	109.84	1.16	8.30	18	5.55%	4.70	0.34	2.84	0.62%	592.79	586.69	600.03	591.60	5.54	593.38	588.19	0.69	0.10	0.04	24.75	0.34	0.59		
MH	9	8	37.75	0.64	8.30	18	13.64%	4.70	0.34	2.84	0.62%	582.00	576.85	591.60	581.40	3.41	582.47	578.69	0.24	0.21	10	0.08	38.80	0.21	0.47	
A1	8	7	100.41	2.41	12.21	21	1.00%	5.08	0.40	4.89	0.59%	576.65	575.65	581.40	581.40	2.71	578.40	577.80	0.60	0.80	0.26	15.81	0.77	1.14		
MH	7	6	92.86	0.64	12.21	21	1.00%	5.08	0.40	4.89	0.59%	575.45	574.52	584.10	581.86	6.30	577.54	576.99	0.55	0.03	0.46	15.86	0.77	1.14		
C1	6	5	35	2.85	22.75	30	1.20%	4.63	0.33	7.59	0.31%	574.32	573.90	581.86	581.86	4.87	576.51	576.40	0.11	0.11	15	0.06	44.93	0.51	1.25	
C1	5	4	19.69	1.91	24.66	30	1.22%	5.02	0.39	9.66	0.36%	573.70	573.46	581.86	578.00	5.46	576.03	575.96	0.07	0.11	0.06	45.28	0.54	1.30		
MH	4	1	4	27	24.66	30	1.00%	5.02	0.39	9.66	0.36%	569.27	569.00	578.00	571.50	2.04	573.60	573.50	0.10	0.10	0.06	41.02	0.60	1.38		
T	2	1	78.13	35.21	35.21	36	1.01%	4.98	0.39	13.57	0.28%	568.36	567.57	574.25	570.57	0.92	573.33	573.11	0.22	0.39	0.06	67.07	0.52	1.53		
T	37	34	35.69	2.44	2.44	15	1.51%	1.99	0.06	0.1																