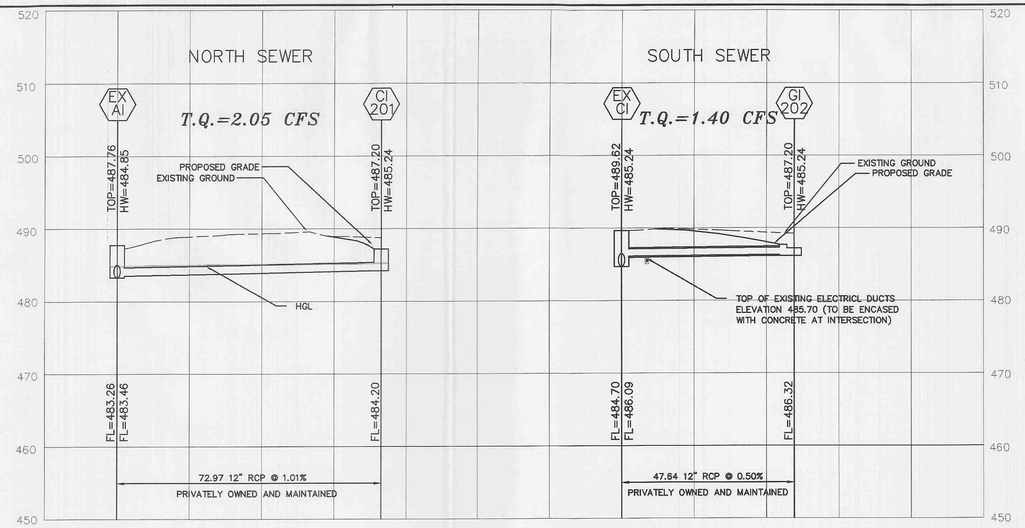
CONSTRUCTION DETAILS

YIPPIE-IE-0 GRILLE

95-7218KA 03-27-03

04-21-03	REVISED PER CITY COMMENTS
08-28-03	REVISED PER SANITARY DIST
09-18-03	REVISED PER SANITARY DIST
09-25-03	REVISED PER CITY/CLIENT

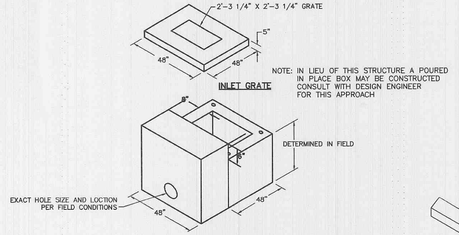


STORM SEWER PROFILES

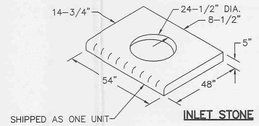
VERTICAL 1"=10'
HORIZONTAL 1'=20'

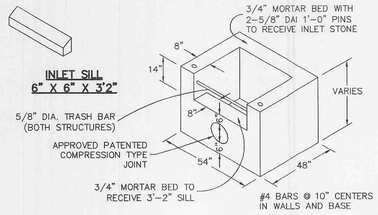
UPP STR	LOW STR	L	DIA	UPPER FL LN	LOWER FL LN	PS	UPPER ST EL	DEPTH HY GR	UPPER HY EL	LOWER HY EL	HYDR GRADE	FR HEAD	VEL	VEL HEAD	JUNC LOSS	TURN LOSS	TQ	PIPE CAP
FE118	CI115	35.69	24	485.00	479.83	14.49	487.00	-0.29	487.29	482.40	.03420	1.22	13.31	2.75	3.67	0.00	41.82	86.10
CI201	EXAI	72.97	12	484.20	483.46	1.01	487.20	1.96	485.24	484.85	.00330	0.24	2.61	0.11	0.15	0.00	2.05	3.59
EXCI	EXAI	29.00	21	483.73	483.46	0.93	487.29	1.99	485.30	485.21	.00070	0.02	1.77	0.05	0.07	0.00	4.25	15.29
EXAI	CI116	287.92	21	483.26	480.37	1.00	487.76	2.91	484.85	483.17	.00440	1.28	4.39	0.30	0.34	0.06	10.55	15.87
CI116	CI115	123.70	24	480.17	478.93	1.00	489.50	6.33	483.17	482.40	.00410	0.51	4.63	0.33	0.15	0.11	14.55	22.65
CI115	CI114	214.31	36	478.73	476.58	1.00	489.50	7.10	482.40	479.58	.00770	1.65	8.27	1.06	-0.74	1.91	58.45	66.81
CI114	CI113	302.47	36	476.38	473.36	1.00	490.50	11.13	479.37	476.36	.00840	2.54	8.65	1.16	0.20	0.27	61.14	66.65
CI113	FE112	251.06	36	473.16	470.64	1.00	489.65	13.31	476.34	473.64	.00950	2.39	9.21	1.32	0.31	0.00	65.08	66.82
CI202	EXCI	47.64	12	486.32	484.09	0.48	487.20	-0.01	487.21	487.09	.00150	0.07	1.78	0.05	0.05	0.00	1.40	2.53
CI105	GI104	76.37	18	486.77	486.39	0.50	490.50	2.43	488.07	487.97	.00070	0.06	1.60	0.04	0.04	0.00	2.83	7.41
GI104	CI103	213.55	18	486.19	485.32	0.41	490.20	2.23	487.97	486.86	.00410	0.87	3.79	0.22	0.21	0.03	6.69	6.70
CI103	EXCI	54.23	18	485.12	484.72	0.41	490.01	3.15	486.86	486.40	.00470	0.25	4.07	0.26	0.13	0.08	7.19	6.69
EXCI	CI101	44.00	21	484.52	484.26	1.00	490.50	4.22	486.28	486.01	.00380	0.17	4.07	0.26	0.08	0.03	9.79	15.85
CI101	FE100	46.21	21	484.06	483.83	0.50	490.50	4.61	485.89	485.58	.00480	0.22	4.56	0.32	0.12	0.00	10.96	11.18

CALCULATIONS ARE BASED PRIMARILY ON THE HYDRAULIC STUDY FOR THE ORIGINAL DEVELOPMENT. THE HIGH WATER ELEVATIONS USED WERE TAKEN FROM THE ORIGINAL ALAYSIS OF THE EXISTING SYSTEM. THE TWO SEWER EXTENSIONS WERE CALCULATED AS BRANCHES OF THE ORIGINAL SYSTEM. NO NEW AMOUNT OF IMPERVIOUS AREA WAS CREATED FROM WHAT WAS USED FOR CALCULATIONS IN THE ORIGINAL ANALYSIS AND THEREFORE THE ORIGINAL DETENTION STUDY IS STILL APPLICABLE.



GRATE INLET
NOT TO SCALE

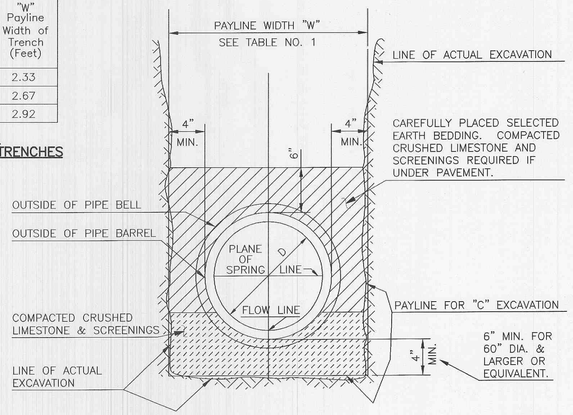




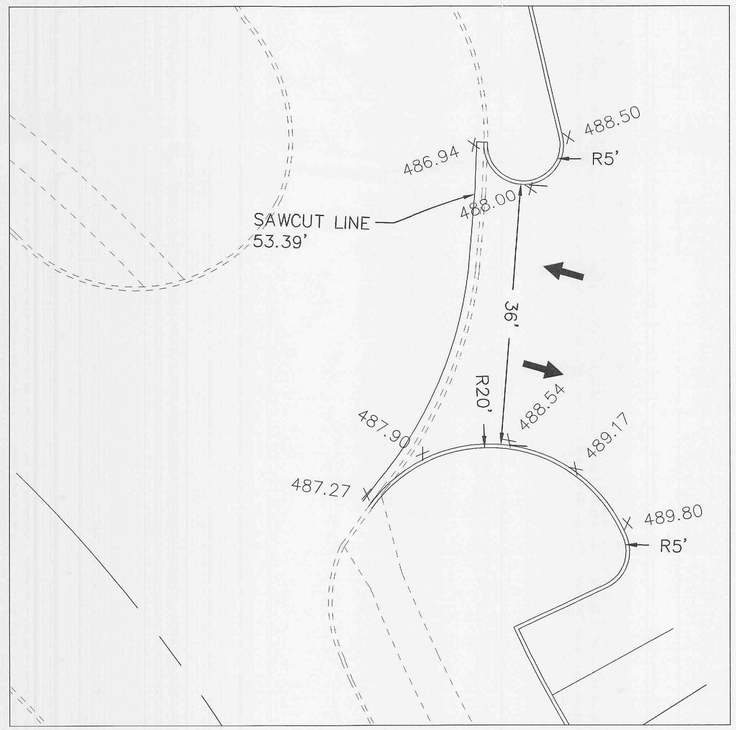
PRECAST CONCRETE
SINGLE CURB INLET
NOT TO SCALE

ROUND PIPE		
Inside Diameter of Pipe (Inches)	"W" Payline Width of Trench (Inches)	"W" Payline Width of Trench (Feet)
12	28	2.33
15	32	2.67
18	35	2.92

TABLE NO. 1
PAYLINE WIDTHS OF TRENCHES



PIPE BEDDING DETAIL



ENTRANCE DETAIL
SCALE 1"=10'