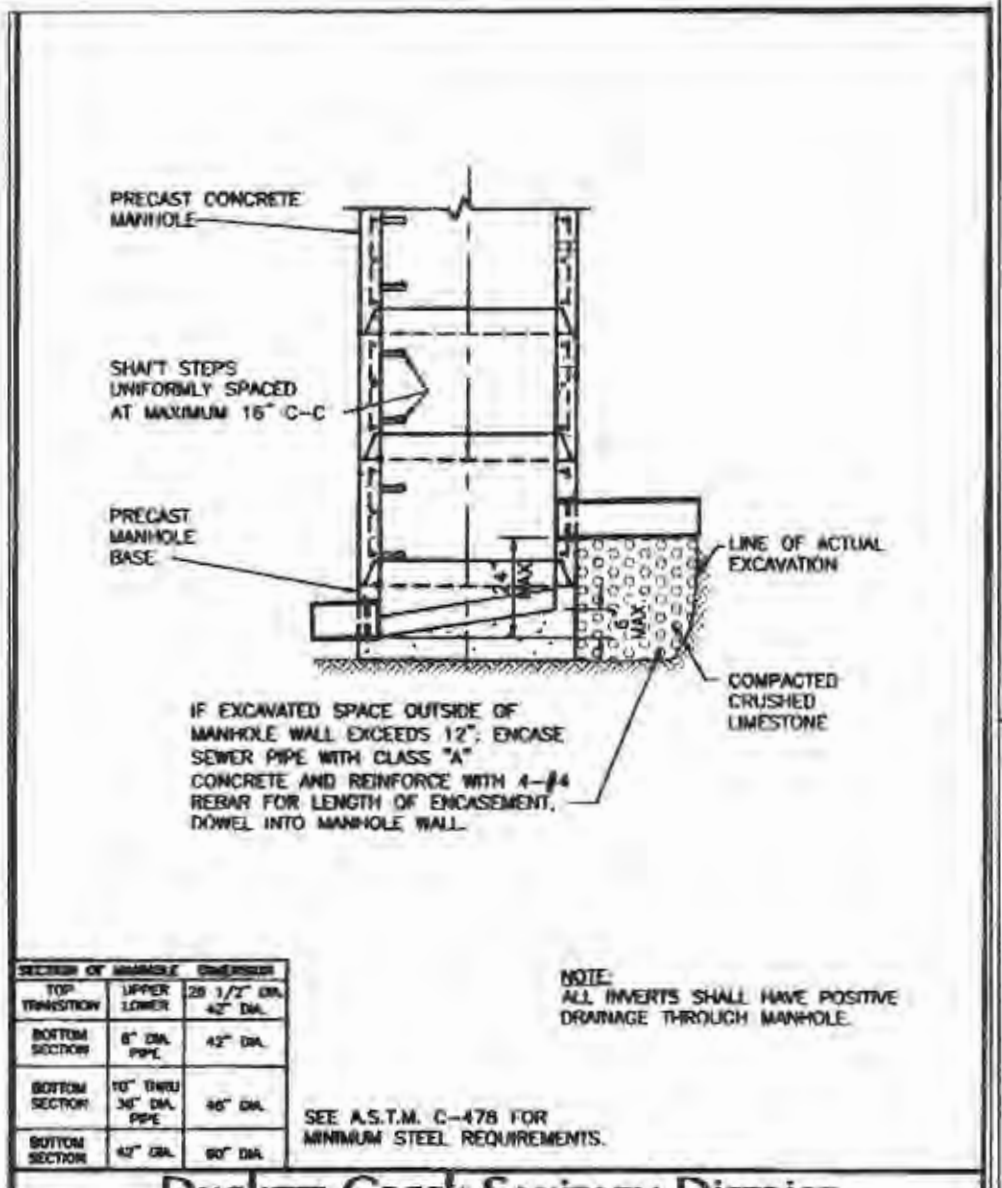
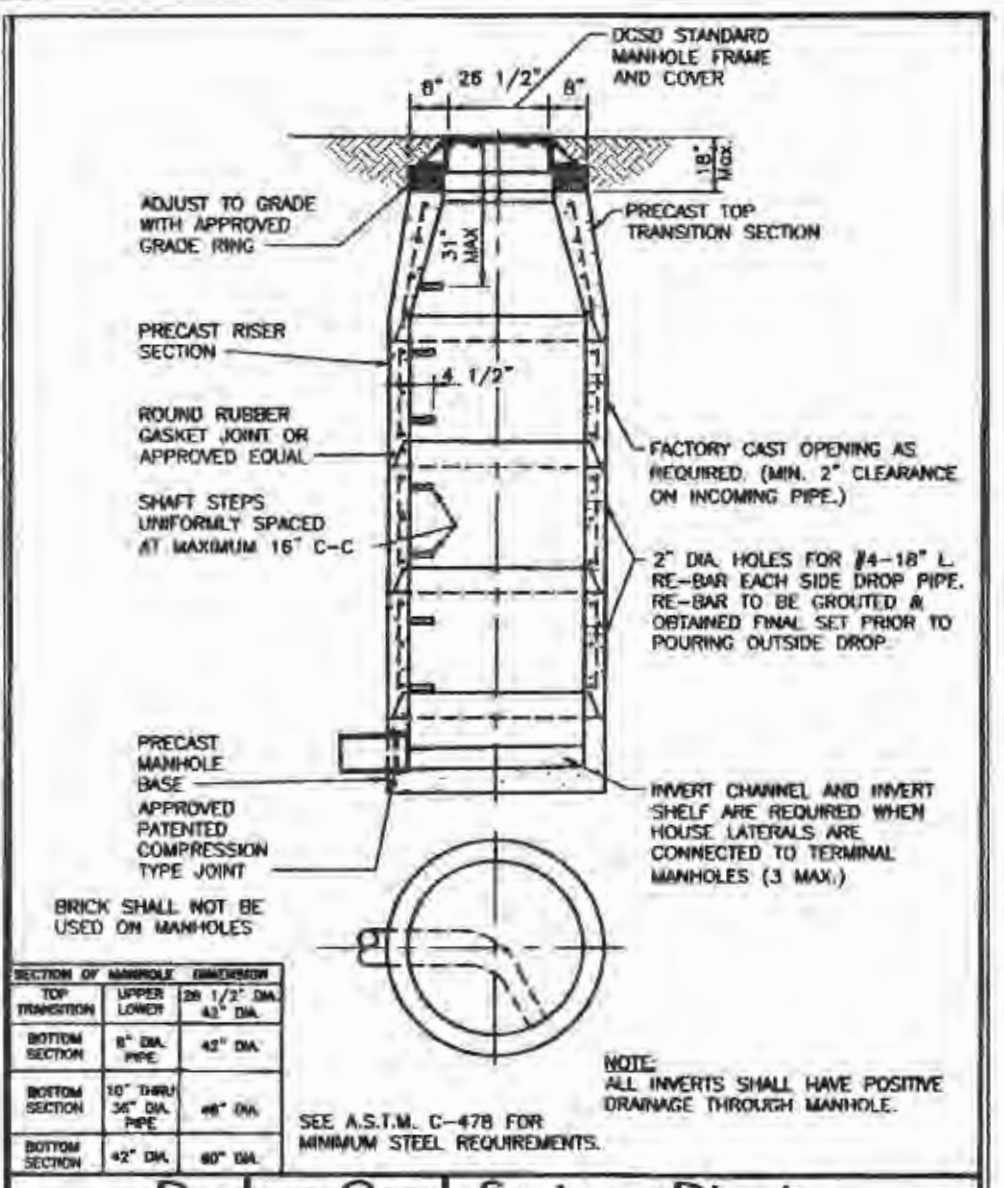
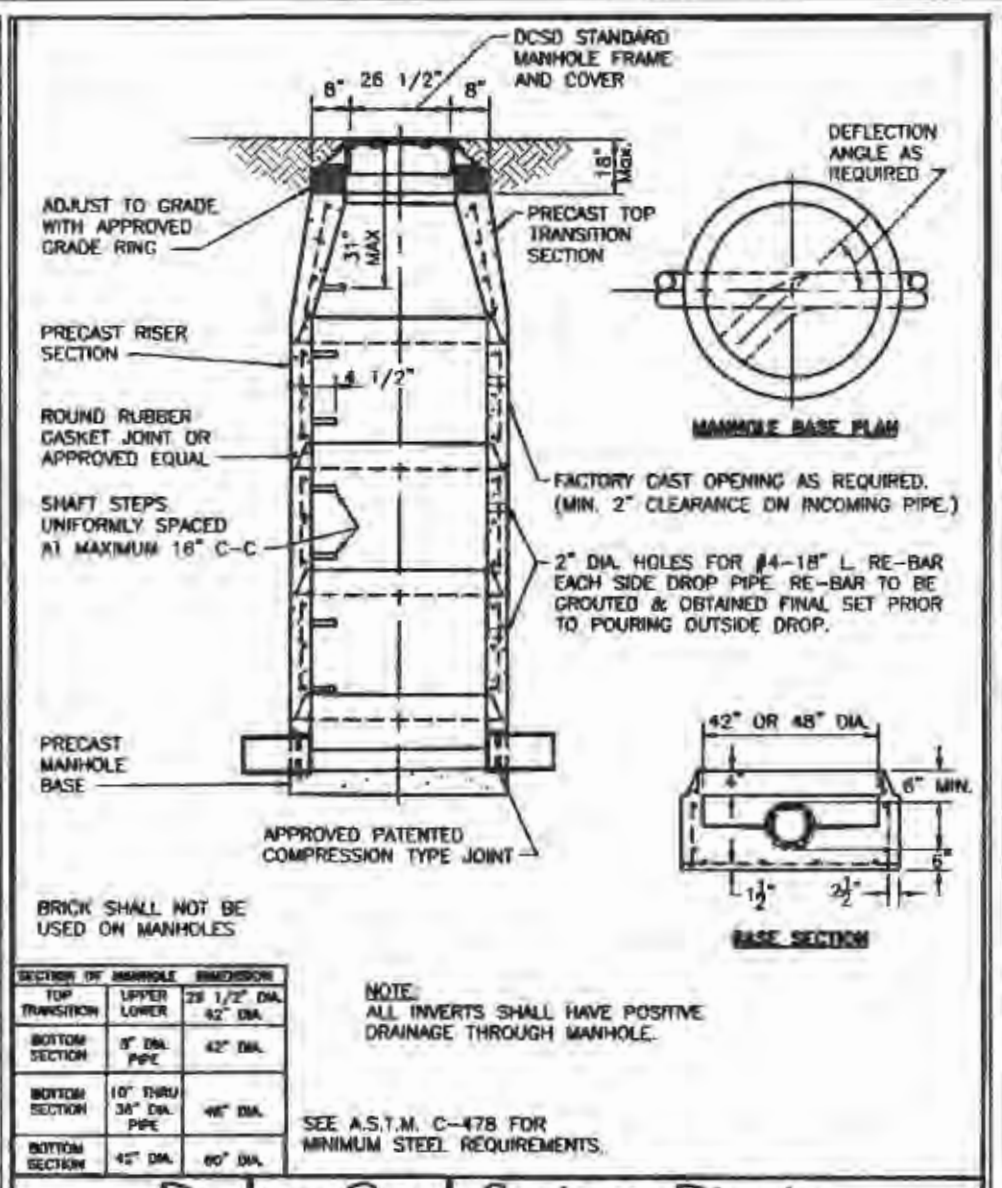
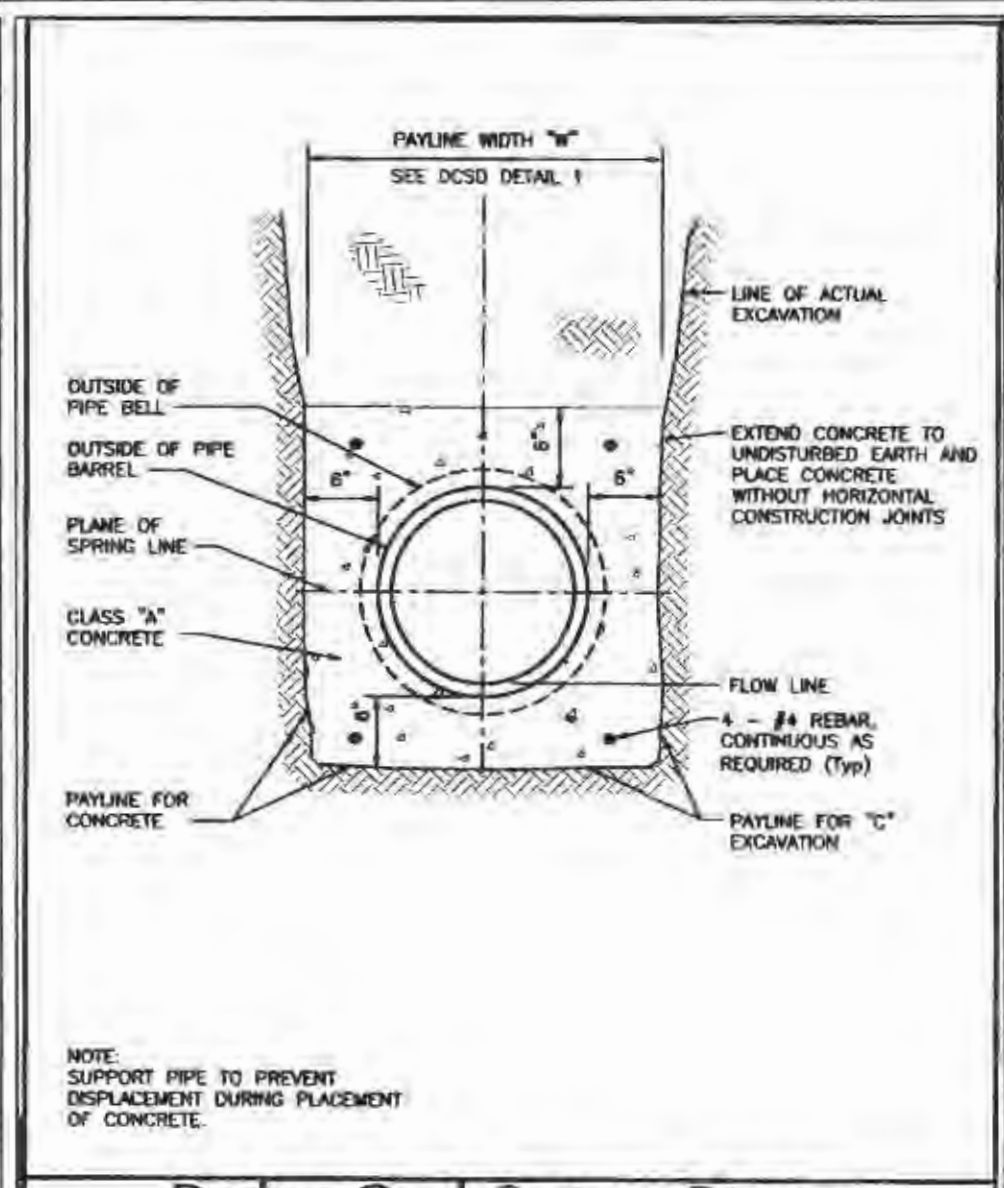
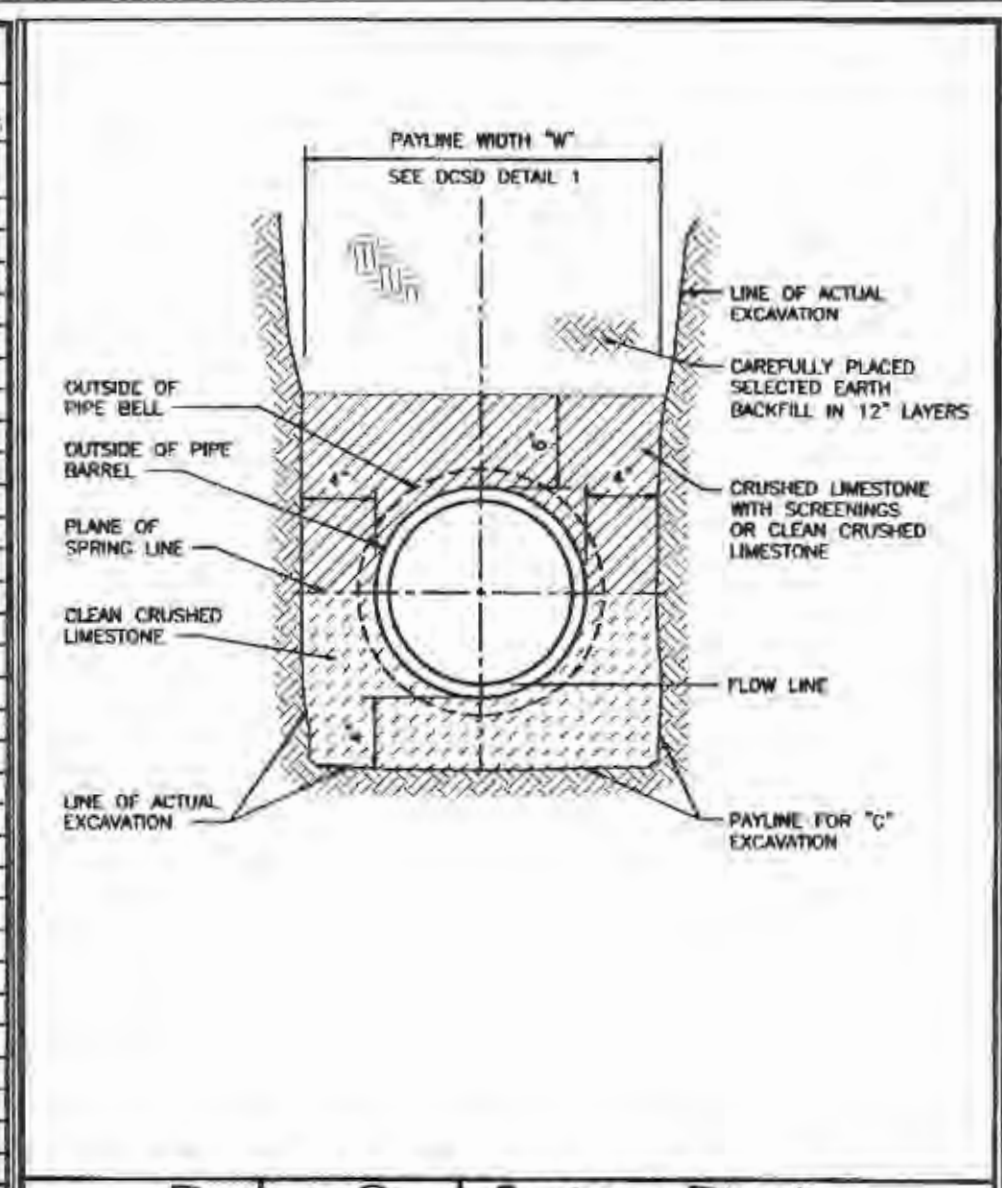


ROUND PIPE				HORIZONTAL ELLIPTICAL PIPE			
INSIDE DIAMETER OF PIPE (INCHES)	PAYLINE WIDTH OF TRENCH (INCHES)	PAYLINE WIDTH OF TRENCH (FEET)	PIV-VOLUMES CU. FT. PER FT. OF CONCRETE ENCASUREMENT	INSIDE DIAMETER OF PIPE (INCHES)	PAYLINE WIDTH OF TRENCH (INCHES)	PAYLINE WIDTH OF TRENCH (FEET)	PIV-VOLUMES CU. FT. PER FT. OF CONCRETE ENCASUREMENT
4	30	2.50	3.28				
6	30	2.50	3.59				
8	30	2.50	3.87				
10	30	2.50	4.09				
12	30	2.50	4.25				
15	36	3.00	5.55				
18	36	3.00	5.77	14 x 23	41	3.42	5.94
21	39	3.25	6.61				
24	42	3.50	7.19	19 x 30	49	4.06	7.28
27	45	3.75	8.18	22 x 34	53	4.42	8.81
30	48	4.00	9.30	24 x 38	58	4.83	9.70
33	53	4.42	10.53	27 x 42	62	5.17	10.71
36	56	4.67	11.43	29 x 45	66	5.50	11.72
39		DISCONTINUED		32 x 49	71	5.92	13.14
42	63	5.25	13.38	34 x 53	75	6.25	14.05
48	70	5.83	15.87	38 x 60	83	6.92	18.18
54	77	6.42	18.15	43 x 68	92	7.67	18.81
60	84	7.00	20.73	48 x 78	101	8.42	21.58
66	91	7.58	23.45	53 x 83	109	8.98	24.35
72	98	8.17	26.37	58 x 91	118	9.83	27.45
78	105	8.75	29.39	63 x 98	126	10.50	30.50
84	112	9.33	32.57	68 x 106	135	11.25	33.81
90	119	9.92	35.90	72 x 113	143	11.92	36.99
96	126	10.50	39.37	77 x 121	152	12.67	40.69
102	133	11.08	42.99	82 x 128	160	13.33	44.43
108	140	11.67	46.75	87 x 136	168	14.00	47.79
114	147	12.25	50.66	92 x 143	176	14.67	51.70
120	154	12.83	54.72	97 x 151	185	15.42	56.01
126	161	13.42	58.92				
132	168	14.00	63.27	106 x 186	202	16.83	64.48
144	182	15.17	72.40	116 x 180	218	18.17	73.59



Duckett Creek Sanitary District
PAYLINE WIDTHS OF TRENCH AND PAY-QUANTITIES OF CONCRETE
BSM MOOB 12-21-89 1

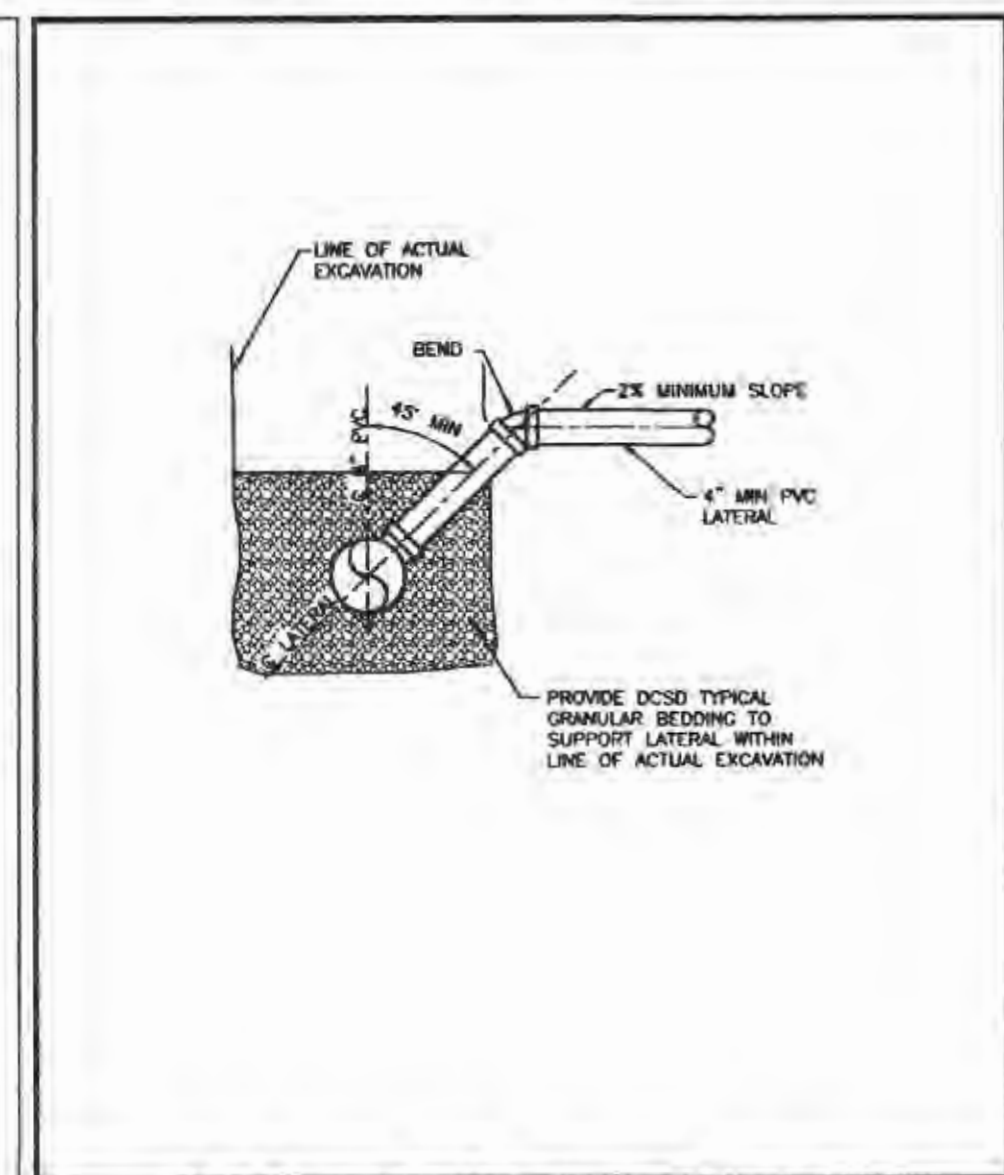
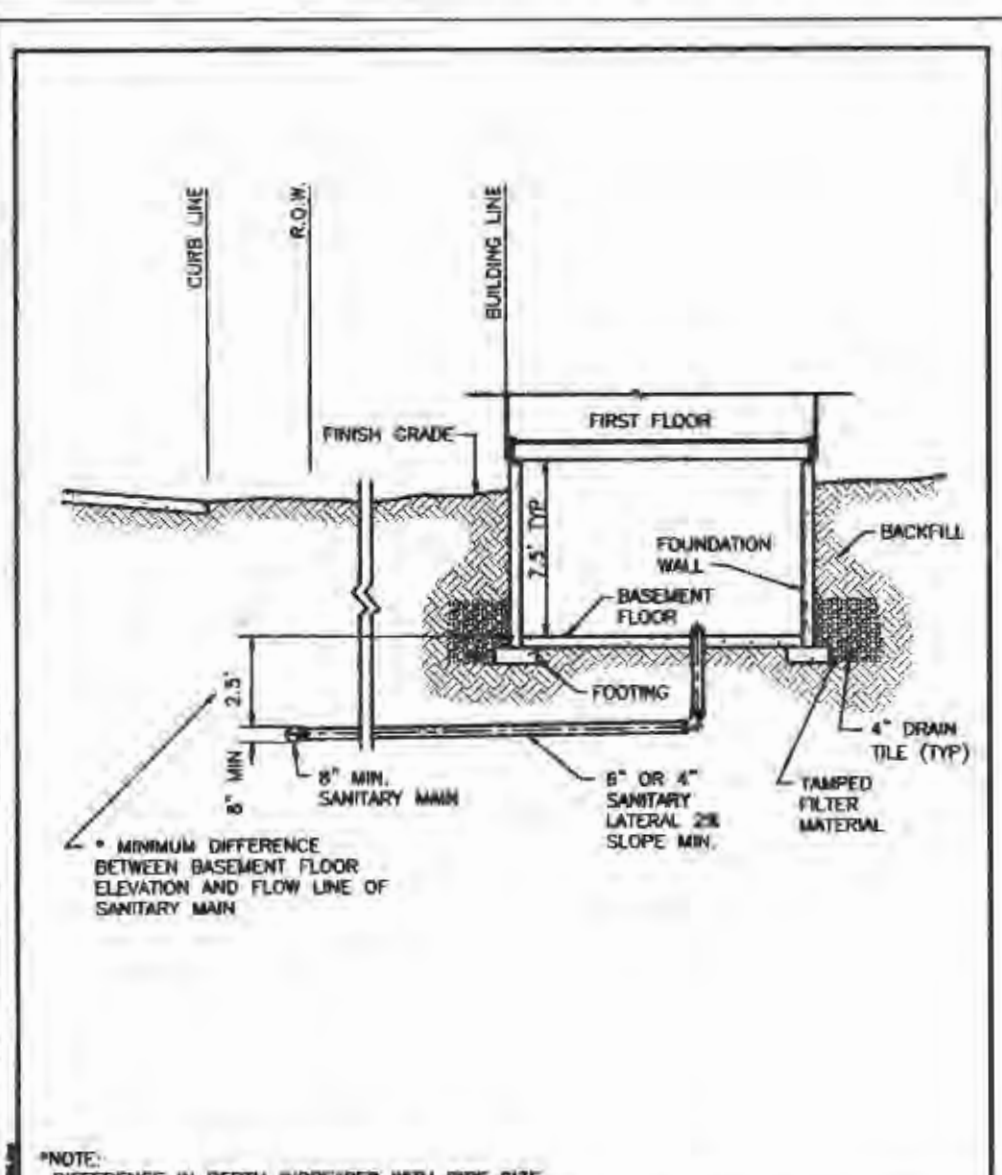
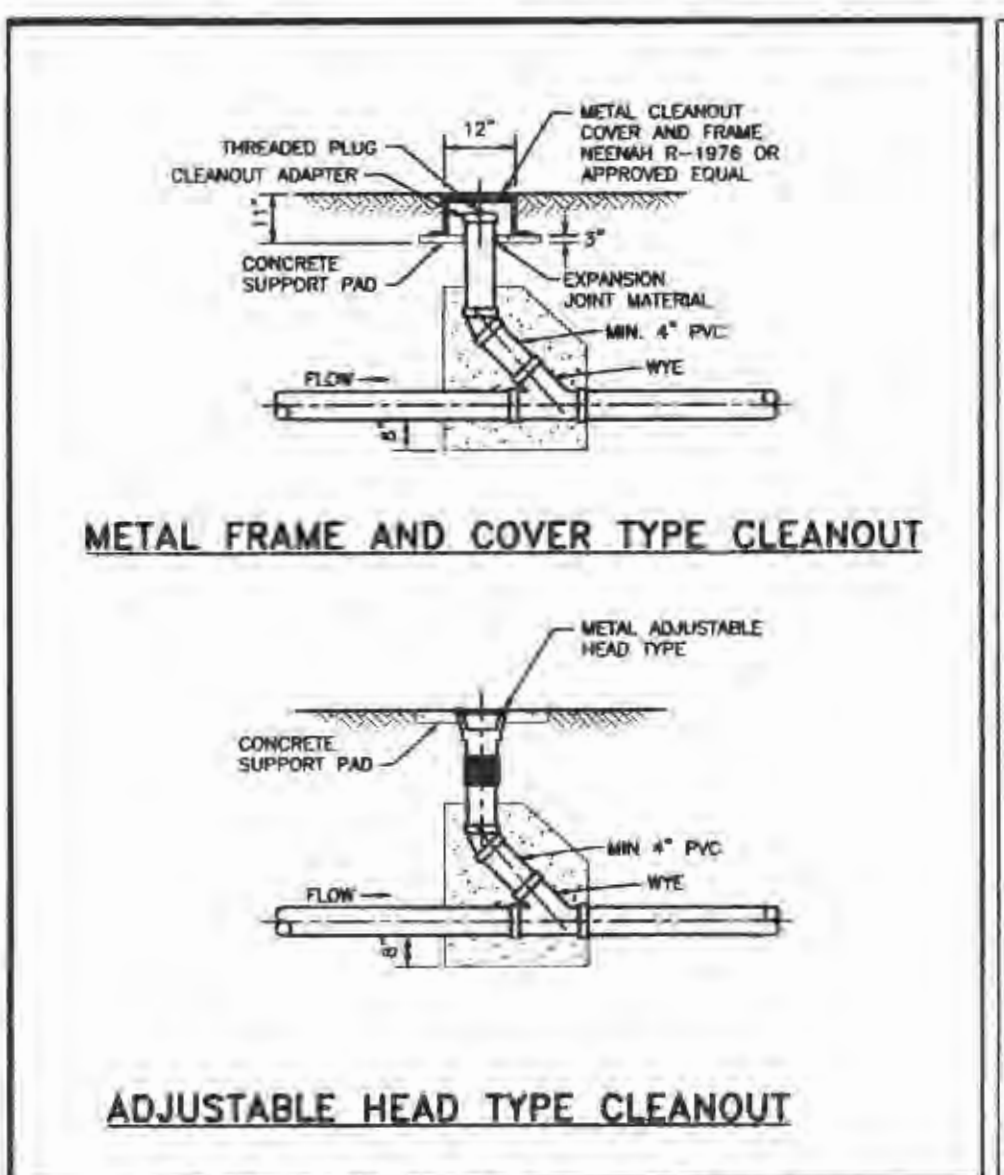
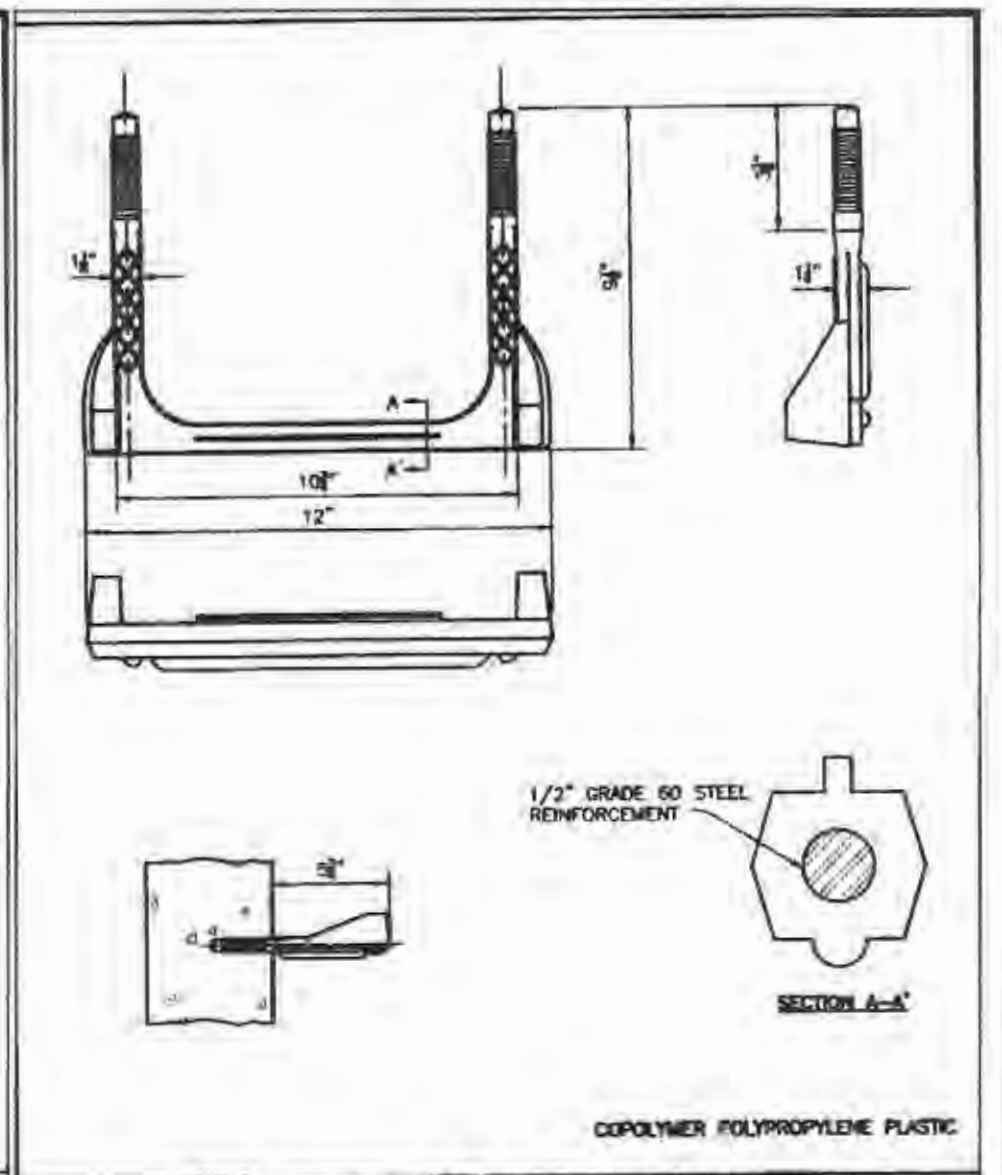
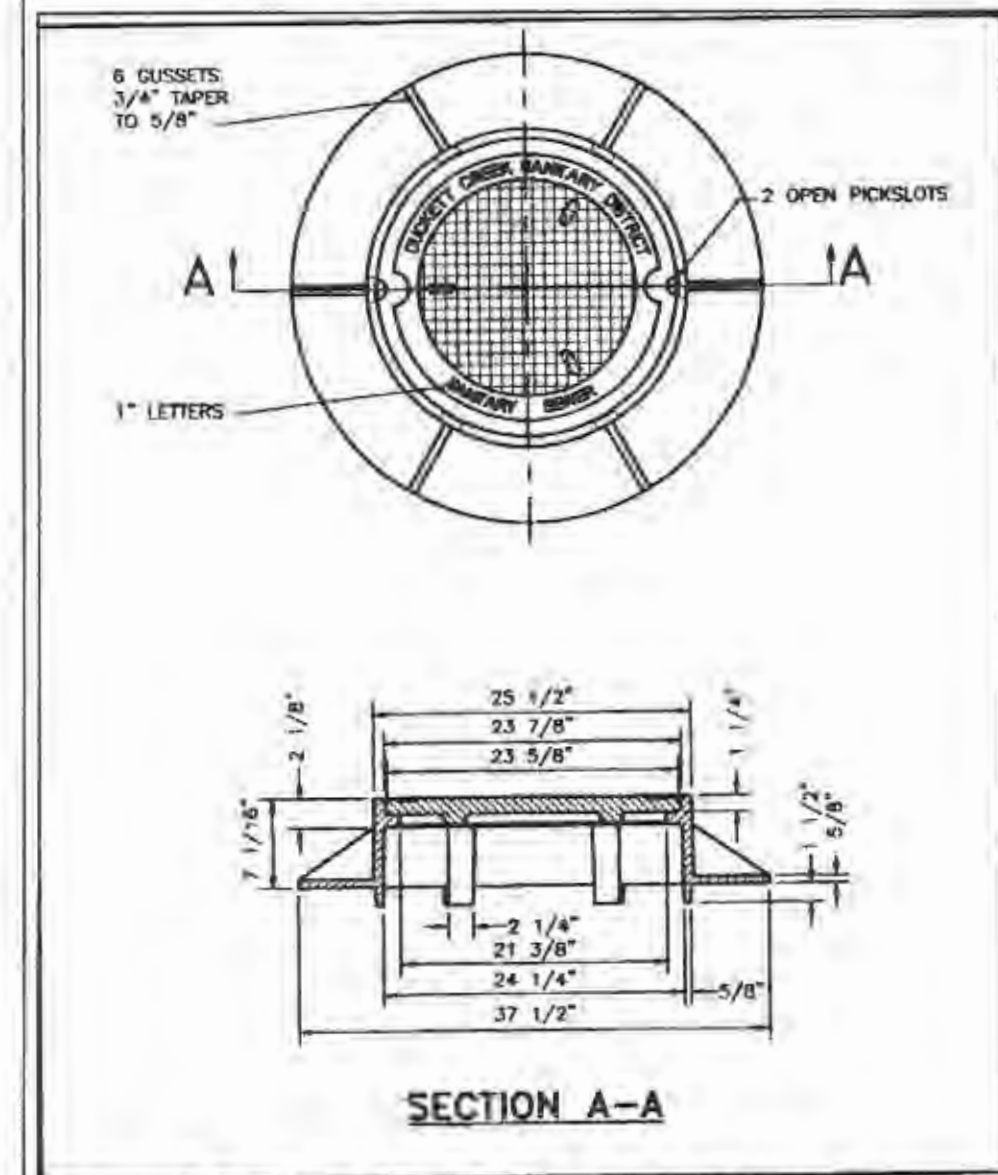
Duckett Creek Sanitary District
PIPE BEDDING CLASS "C" (FOR ALL PIPE EXCEPT REINFORCED CONCRETE PIPE)
BSM MOOB 12-21-89 3

Duckett Creek Sanitary District
TYPICAL CONCRETE ENCASUREMENT
BSM MOOB 12-21-89 4

Duckett Creek Sanitary District
PRE-CAST CONCRETE MANHOLE FOR SEWERS 8" THROUGH 18"
BSM MOOB 12-30-99 7

Duckett Creek Sanitary District
TERMINAL MANHOLE FOR SEWERS 2" THROUGH 18"
BSM MOOB 01-03-00 8

Duckett Creek Sanitary District
INSIDE FOUR-WATER DROP MANHOLE (SWEEP INVERT)
BSM MOOB 01-04-00 9



Duckett Creek Sanitary District
MANHOLE FRAME AND COVER
BSM MOOB 01-14-00 12

Duckett Creek Sanitary District
MANHOLE STEP PRECAST MANHOLE
BSM MOOB 1-3-01 18

Duckett Creek Sanitary District
TYPICAL SEWER LATERAL CLEANOUT DETAILS
BSM MOOB 1-8-01 25

Duckett Creek Sanitary District
TYPICAL SANITARY SEWER LATERAL PROFILE
BSM MOOB 1-8-01 26

Duckett Creek Sanitary District
SANITARY SEWER LATERAL RISER DETAIL
BSM MOOB 1-9-01 27

PROJECT TITLE
**PENNIAL PARK
PLAT FOUR**

MUSLER ENGINEERING COMPANY
32 PORTWEST CT.
ST. CHARLES, MO 63303
PHONE: 636-916-0444
FAX: 636-916-3444

ENGINEER SIGNATURE
BLOCK
Robert Walker
STATE OF MISSOURI
PROFESSIONAL ENGINEER
6-18898
7/8/75

Developer / Owner Information
FRED AND KAREN ZYKAN
4652 SEEBURGER RD.
ST. CHARLES, MO 63301
TELEPHONE: 314-565-5096
DUCKETT CREEK SANITARY DISTRICT DETAILS

P+Z No.99-79.20.02

City No.

Page No.