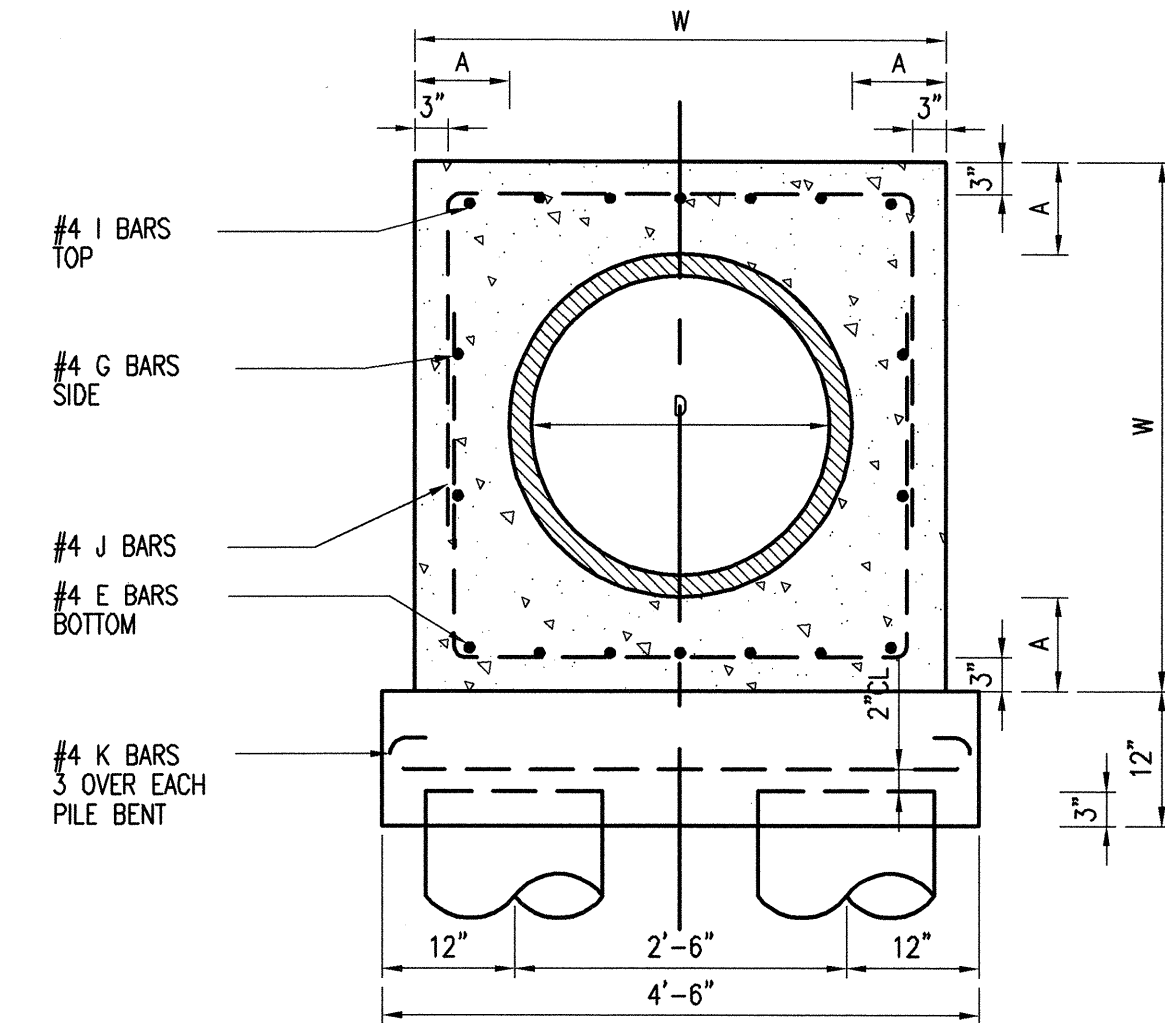
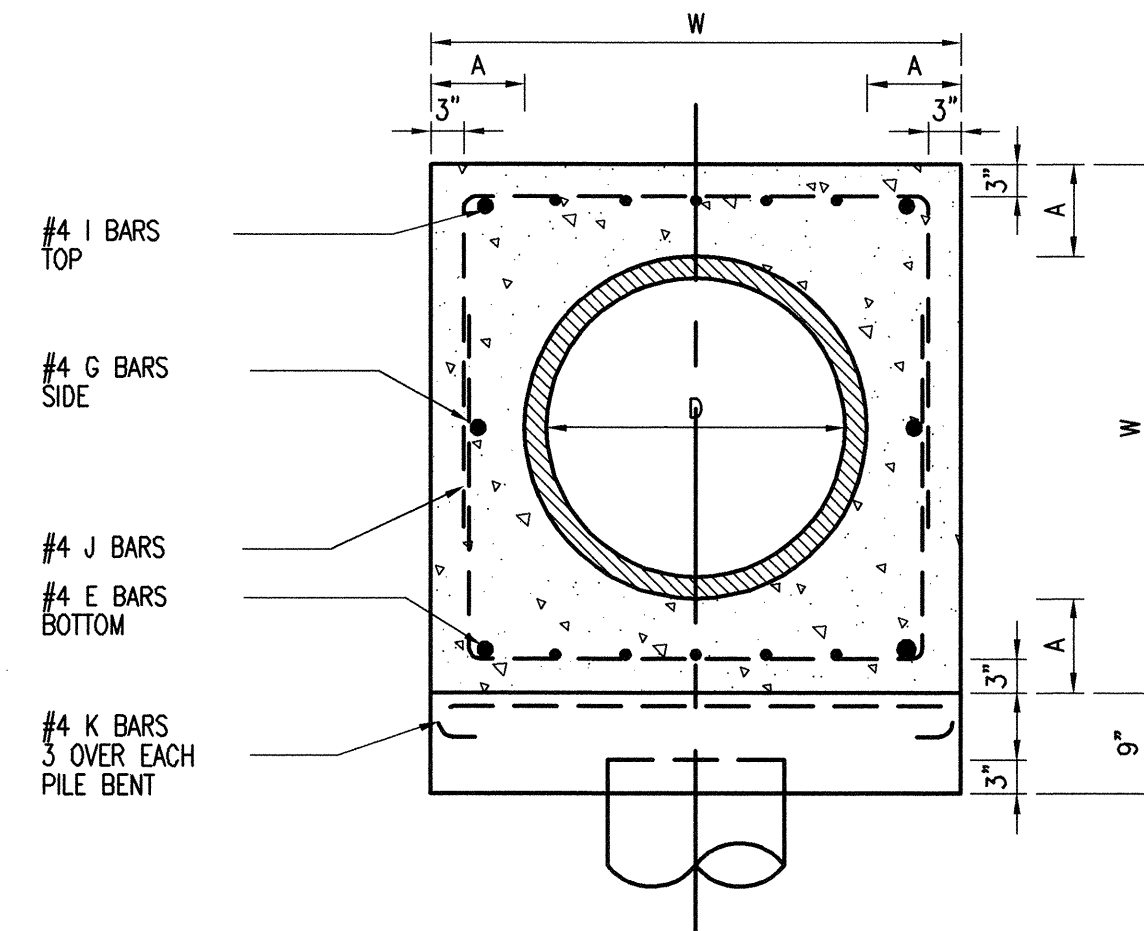


D IN.	A IN.	W	PILE SUPPORTS	4'-0" COVER + H-20 TRUCK								6'-0" COVER + H-20 TRUCK											
				REINFORCEMENT				QUANTITIES				REINFORCEMENT				QUANTITIES							
				LONGITUDINAL SIZE #4		TRANSVERSE SIZE #4		PER FT. OF SEWER		STEEL		CONC.		LONGITUDINAL SIZE #4		TRANSVERSE SIZE #4		PER FT. OF SEWER		STEEL		CONC.	
				E	G	I	J	K	STEEL	CONC.	E	G	I	J	K	STEEL	CONC.	E	G	I	J	K	STEEL
12	6	2'-2"	SIGNAL	10	4	2	4	12"	9'-5"	2'-6"	13.47	3.83	10	6	2	5	12"	9'-5"	2'-6"	15.48	3.83		
15	6 1/4"	2'-6"		10	4	2	4	12"	10'-9"	2'-10"	14.41	4.84	10	6	2	5	12"	10'-9"	2'-10"	16.41	4.84		
18	6 1/2"	2'-10"		10	4	2	4	12"	12'-1"	3'-2"	15.41	5.93	10	6	2	5	12"	12'-1"	3'-2"	17.40	5.93		
21	6 3/4"	3'-2"		10	4	2	4	12"	13'-5"	3'-6"	16.35	7.07	10	6	2	5	12"	13'-5"	3'-6"	18.35	7.07		
24	7	3'-6"		10	4	2	4	12"	14'-9"	3'-10"	17.30	8.34	9	4	2	4	12"	14'-9"	3'-10"	17.36	8.38		
27	7 1/4"	3'-10"	DOUBLE	10	4	4	4	12"	16'-1"	5'-0"	19.74	9.93	10	6	4	5	12"	16'-1"	5'-0"	21.73	9.93		
30	7 1/2"	4'-2"		10	4	4	4	12"	17'-5"	5'-0"	20.63	11.32	10	6	4	5	12"	17'-5"	5'-0"	22.62	11.32		
33	7 7/8"	4'-6"		10	4	4	4	12"	18'-9"	5'-0"	21.52	12.87	10	6	4	5	12"	18'-9"	5'-0"	23.51	12.87		
36	8 1/4"	4'-10"		10	4	4	4	12"	20'-1"	5'-0"	22.41	14.62	10	6	4	5	12"	20'-1"	5'-0"	24.40	14.62		

D IN.	A IN.	W	PILE SUPPORTS	8'-0" COVER + H-20 TRUCK								10'-0" COVER + H-20 TRUCK											
				REINFORCEMENT				QUANTITIES				REINFORCEMENT				QUANTITIES							
				LONGITUDINAL SIZE #4		TRANSVERSE SIZE #4		PER FT. OF SEWER		STEEL		CONC.		LONGITUDINAL SIZE #4		TRANSVERSE SIZE #4		PER FT. OF SEWER		STEEL		CONC.	
				E	G	I	J	K	STEEL	CONC.	E	G	I	J	K	STEEL	CONC.	E	G	I	J	K	STEEL
12	6	2'-2"	SIGNAL	10	8	2	7	12"	9'-5"	2'-6"	18.15	3.83	8	6	2	6	12"	9'-5"	2'-6"	16.25	3.87		
15	6 1/4"	2'-6"		10	8	2	7	12"	10'-9"	2'-10"	19.10	4.84	7	4	2	4	12"	10'-9"	2'-10"	14.64	4.95		
18	6 1/2"	2'-10"		9	6	2	5	12"	12'-1"	3'-2"	17.44	5.96	7	4	2	4	12"	12'-1"	3'-2"	15.63	6.05		
21	6 3/4"	3'-2"		8	4	2	4	12"	13'-5"	3'-6"	16.51	7.15	6	4	2	4	12"	13'-5"	3'-6"	16.78	7.27		
24	7	3'-6"		7	4	2	4	12"	14'-9"	3'-10"	17.69	8.46	6	4	2	4	12"	14'-9"	3'-10"	17.81	8.57		
27	7 1/4"	3'-10"	DOUBLE	10	6	4	6	12"	16'-1"	5'-0"	22.41	9.93	10	8	4	7	12"	16'-1"	5'-0"	24.40	9.93		
30	7 1/2"	4'-2"		10	6	4	6	12"	17'-5"	5'-0"	23.30	11.32	10	8	4	7	12"	17'-5"	5'-0"	25.29	11.32		
33	7 7/8"	4'-6"		10	6	4	6	12"	18'-9"	5'-0"	24.19	12.87	10	8	4	7	12"	18'-9"	5'-0"	26.18	12.87		
36	8 1/4"	4'-10"		10	6	4	6	12"	20'-1"	5'-0"	25.08	14.62	9	6	4	6	12"	20'-1"	5'-0"	25.21	14.70		



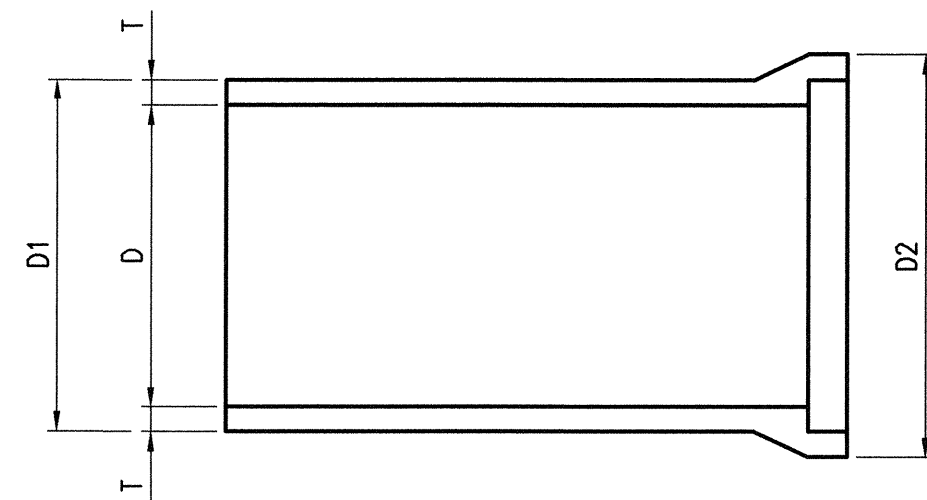
TYPICAL DOUBLE PILE SUPPORT



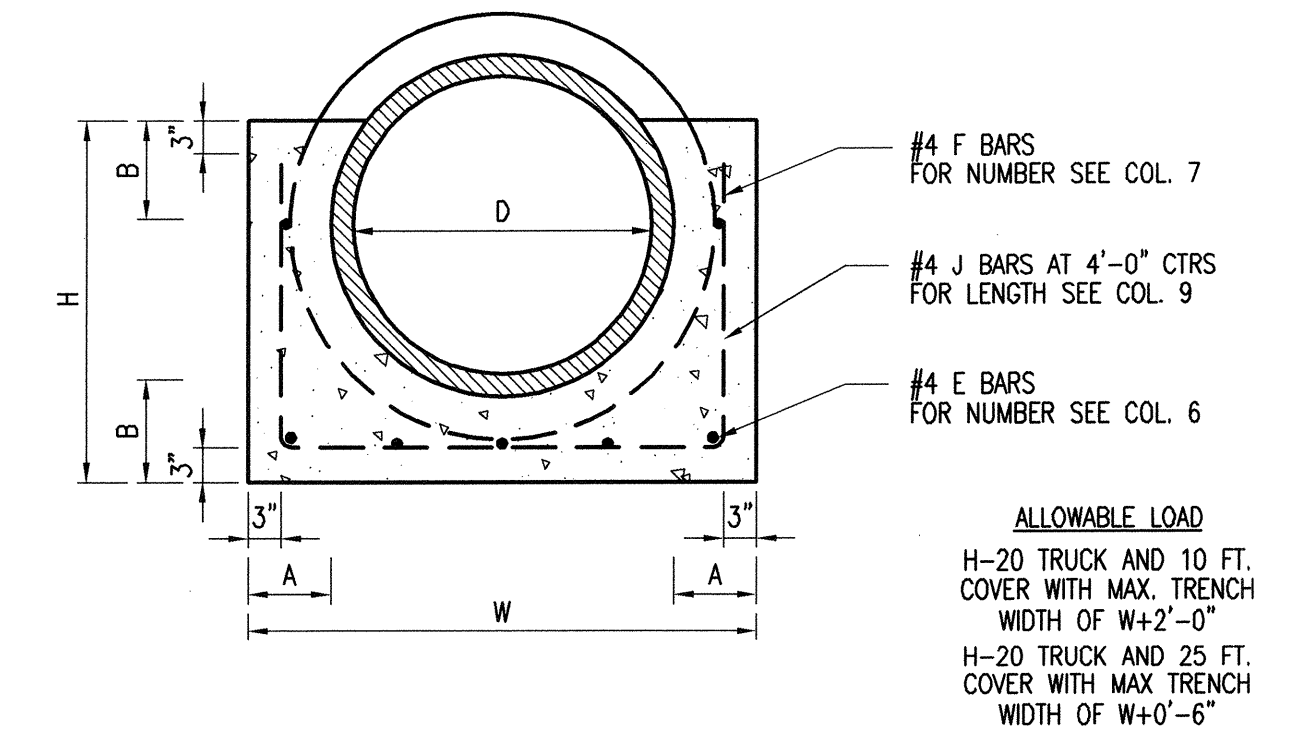
TYPICAL SINGLE PILE SUPPORT

D	T	D1	D2
6"	5/8"	7 1/4"	9 3/8"
8"	3/4"	9 1/2"	11 7/8"
10"	7/8"	11 3/4"	14 3/8"
12"	1"	14"	16 3/4"
15"	1 1/4"	17 1/2"	20 5/8"
18"	1 1/2"	21"	2'-0 5/8"
21"	1 3/4"	2'-0 1/2"	2'-4 5/8"
24"	2"	2'-4"	2'-8 5/8"
27"	2 1/4"	2'-7 1/2"	3'-0 5/8"
30"	2 1/2"	2'-11"	3'-4 1/2"
33"	2 5/8"	3'-2 1/4"	3'-8 1/4"
36"	2 3/4"	3'-5 1/2"	3'-11 5/8"

DIMENSIONS FOR VITRIFIED CLAY PIPE

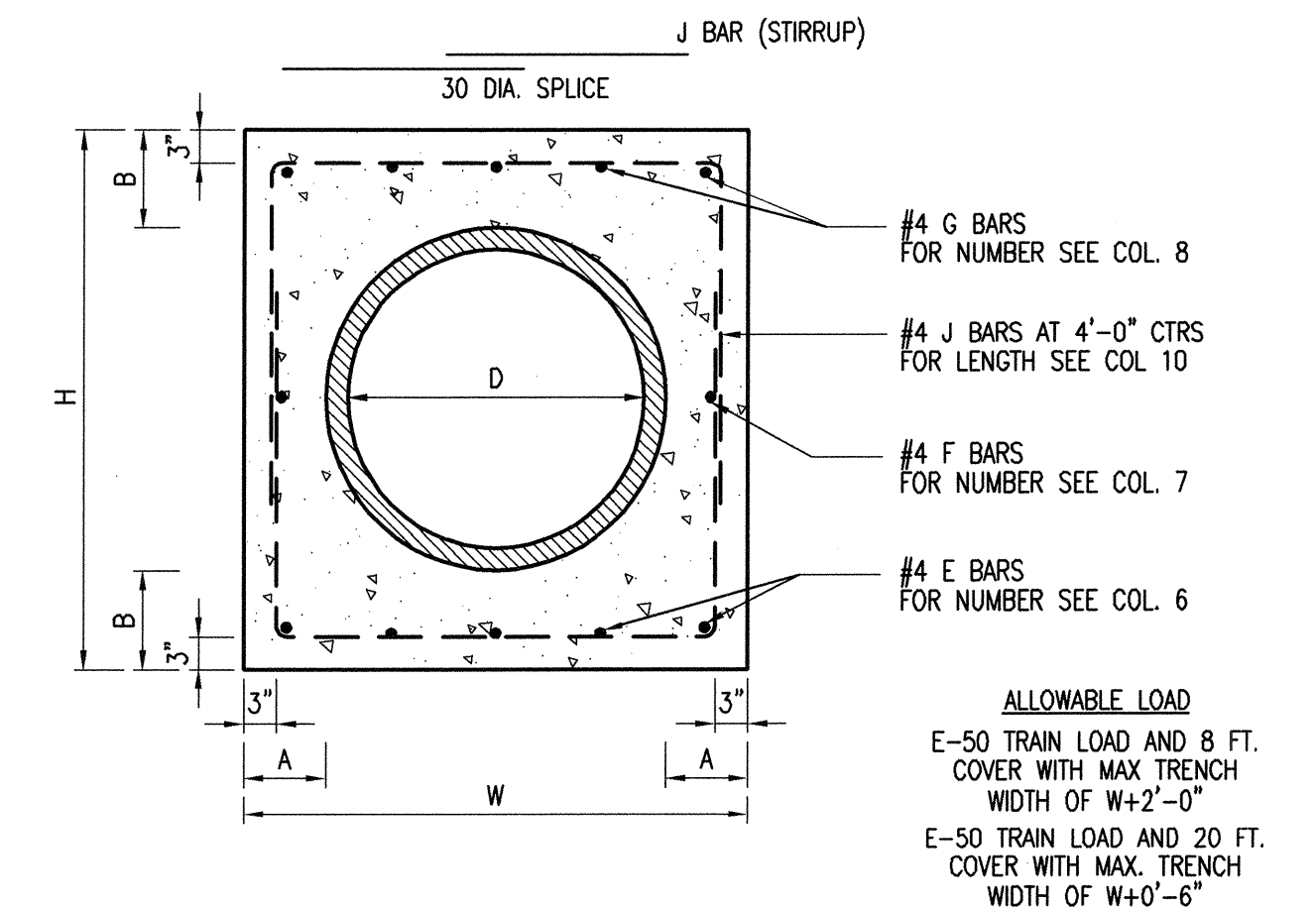


D IN.	A IN.	W	H	REINFORCEMENT				QUANTITIES					
				LONGITUDINAL		TRANS.		PER FT. OF SEWER		CONC.		STEEL	
				NUMBER OF BARS		LENGTH		CONC.		STEEL		LBS	
				E	F	G	H	I	J	K	L	M	N
6"	5 5/8"	5 1/8"	1'-6 1/2"	10"	4	4	1'-1 1/2"	1.08	2.98				
8"	5 3/4"	5 1/4"	1'-9"	12"	4	4	2'-5"	1.38	3.07				
10"	5 7/8"	5 3/8"	1'-11 1/2"	14"	4	4	2'-11 1/2"	1.69	3.17				
12"	6"	5 1/2"	2'-2"	16"	4	4	3'-6"	2.03	3.27				
15"	6 1/4"	5 3/4"	2'-6"	19"	4	2	4'-4"	2.58	4.73				
18"	6 1/2"	6"	2'-10"	22"	4	2	5'-2"	3.23	4.86				
21"	6 3/4"	6 1/4"	3'-2"	2'-1"	4	2	6'-10"	3.91	5.01				
24"	7"	6 1/2"	3'-6"	2'-4"	6	2	8'-10"	4.64	6.48				
27"	7 1/4"	6 3/4"	3'-10"	2'-7"	6	2	8'-8"	5.42	6.61				
30"	7 1/2"	7"	4'-2"	2'-10"	6	2	8'-6"	6.26	6.75				
33"	7 7/8"	7 3/8"	4'-0"	3'-1"	6	2	8'-4"	7.18	6.90				
36"	8 1/4"	7 3/4"	4'-10"	3'-4"	6	2	8'-2"	8.21	7.03				



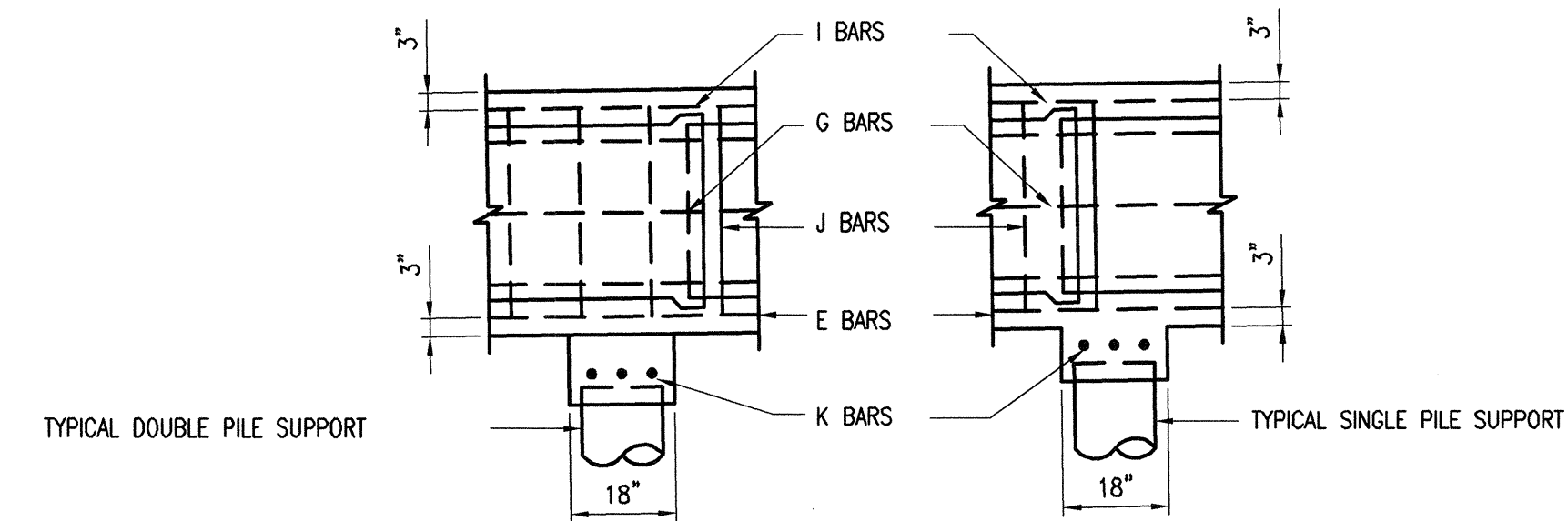
VITRIFIED CLAY PIPE ON REINFORCED CONCRETE FOUNDATION

TYPE I



VITRIFIED CLAY PIPE ENCASED IN REINFORCED CONCRETE

TYPE II



ELEVATION

VITRIFIED CLAY PIPE ENCASED IN REINFORCED CONCRETE & SUPPORTED ON PILES

TYPE III

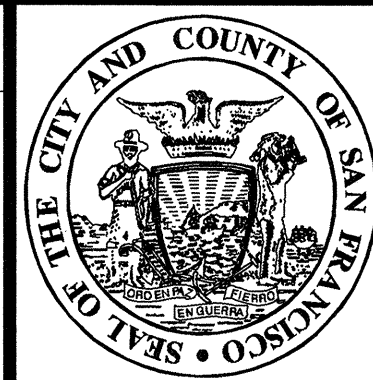
GENERAL NOTES

- MINIMUM COVER 4 FEET.
- LAP BARS 30 DIAMETERS OR AS SHOWN.
- CLASS 6-3000-3/4 CONCRETE.
- V.C.P. JOINTS SHALL BE MADE OF CLASS "C" MORTAR IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS.

This Standard Plan was developed for use on public works projects in the City and County of San Francisco, and shall not be used without consulting a Registered Professional Engineer. The Department of Public Works reserves the right to make revisions to this Standard Plan at any time.

NO.	DATE	DESCRIPTION	BY	APP.
CHECK WITH TRACING TO SEE IF YOU HAVE LATEST REVISION				

REFERENCE INFORMATION & FILE NO. OF SURVEYS



BUREAU OF ENGINEERING
DEPARTMENT OF PUBLIC WORKS
CITY AND COUNTY OF SAN FRANCISCO

REVIEWED:	DATE:	PLANS APPROVAL DATE:	APRIL 30, 2007
ID	12/2006	<i>Ben S.</i>	4/30/07
DRAWN:	DATE:	SECTION MANAGER	
AM	07/2003	<i>Mla</i>	4/30/07
CHECKED:	DATE:	DEPUTY BUREAU MANAGER	
KS	12/2006	<i>Joe Chin</i>	
		BUREAU MANAGER	

STANDARD PLAN		OLD FILE NO.
HYDRAULICS		A-15,006.1 CH 2
REINFORCED CONCRETE ENCASEMENT FOR VITRIFIED CLAY PIPE SEWER		FILE NO. 87,195
		REV. NO.