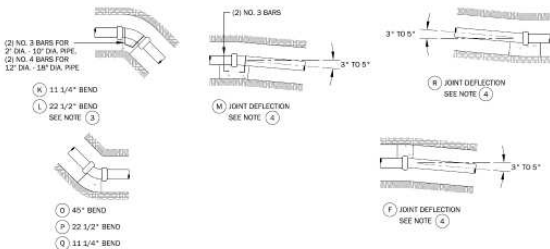


HORIZONTAL CONDITIONS

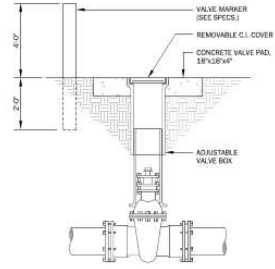


VERTICAL CONDITIONS

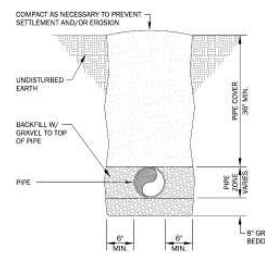
CONCRETE KICK BLOCK BEARING AREA IN SQ. FT. AGAINST UNDISTURBED EARTH									
CONDITION	PIPE SIZE								
	2'-4"	6"	8"	10"	12"	14"	18"	24"	30"
K1	2.0	4.2	7.5	11.6	16.7	22.8	30.0	37.7	
K2	1.8	3.9	7.2	11.0	15.9	21.7	28.4	36.0	
L1	1.0	2.5	4.0	6.0	9.0	13.3	18.1	23.4	
L2	0.5	1.3	2.1	3.2	4.6	6.7	9.2	12.0	
M1									
M2									
N1	1.3	3.0	5.0	8.0	11.9	16.9	21.1	26.6	
N2	0.7	1.5	2.5	3.7	5.2	7.4	9.9	12.8	
CONCRETE ANCHOR BLOCK VOLUME IN CU. FT.									
K	3.4	7.8	13.7	21.0	30.0	40.2	52.2	70.0	
L	6.8	15.6	27.8	43.2	62.0	84.4	110.4	140.0	
M			3.0	4.8	7.0	9.5	12.7	16.6	

- NOTES:**
- CONC. KICK BLOCKS SIZED FOR: MAX. 220 PSI INTERNAL PIPE PRESSURE; 2000 PSF EARTH BEARING CAPACITY.
 - KICK BLOCKS NOTED IN ALL PLUGGED FITTING STUB-OUTS IN ADDITION TO FITTING KICK BLOCKS AS CALLED FOR IN TABLE. KICK BLOCK # EA. PLUG TO BE SIZED IN ACCORDANCE W/ THE REQUIREMENTS OF CONDITION "F".
 - FOR ALL VERT. BENDS, GREATER THAN 22 1/2°, PRODUCING UPWARD THRUST, SEE SPEC. DETAIL OR NOTE AS APPLICABLE FOR EA. PARTICULAR SITUATION.
 - KICK BLOCKS NOT NOTED FOR JOINT DEFLECTION LESS THAN 3" UNLESS OTHERWISE NOTED. SEE PIPE SPEC. FOR MAX. ALLOWABLE DEFLECTION FOR EA. TYPE OF PIPE.
 - KICK BLOCK BEARING AREA IN SQ. FT. IN TABLE IS MIN. REQUIREMENT THICKNESS OF EA. KICK BLOCK TO BE APPROX. 1.5 x PIPE DIA. (MIN.-5", MAX.-24"), COORDINATE CONFIGURATION W/ ENGINEER PRIOR TO INSTALLATION.

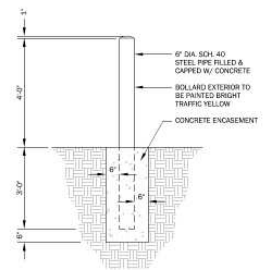
THRUST BLOCK DETAILS
NO SCALE



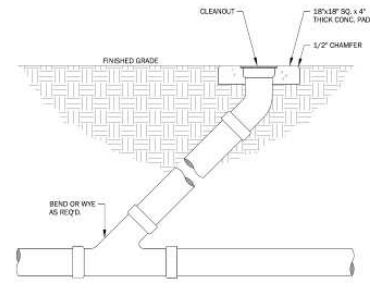
TYP. BURIED VALVE & BOX DETAIL
NO SCALE



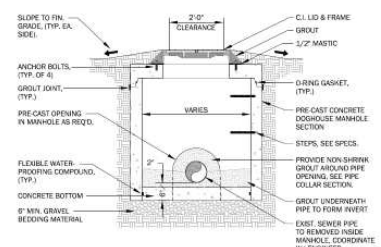
TYP. SEWER TRENCH DETAIL
NO SCALE



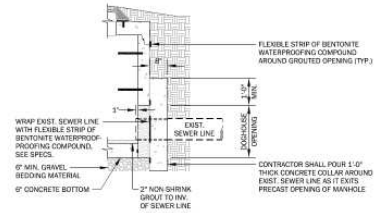
BOLLARD DETAIL
NO SCALE



TYP. LINE CLEANOUT DETAIL
NO SCALE



SECTION



PIPE COLLAR SECTION

DOGHOUSE MANHOLE DETAIL
NO SCALE

DISCLAIMER

These drawings, and the information contained herein, are for general presentation purposes only, and are not intended, nor should be taken, for engineering design plans.