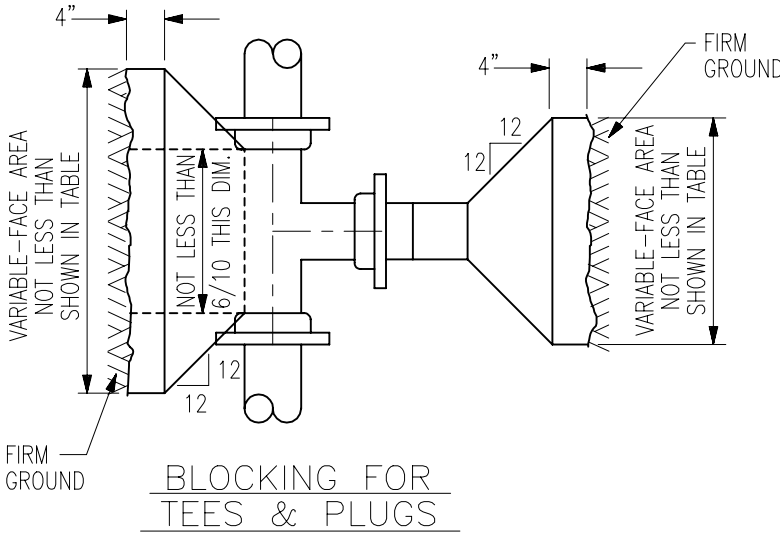


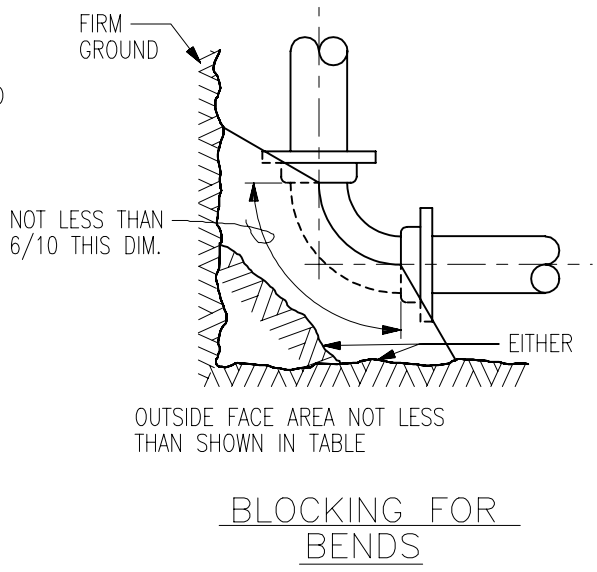
BAR = 1" AT PLOT SCALE

INTL REF: M:\projects\2487108-Details\Working\2-72.dgn

STD: C-0801-11X8A



BLOCKING FOR TEES & PLUGS



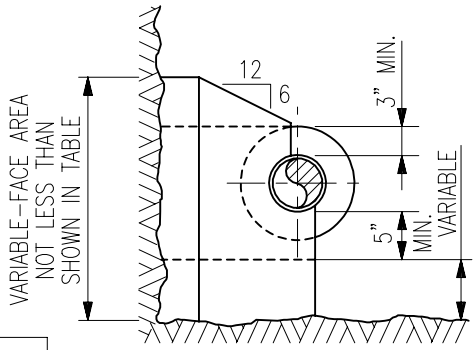
BLOCKING FOR BENDS

ALL TEES, WYES, CROSSES & PLUGS, & BENDS OF 10' OR MORE SHALL BE BLOCKED AGAINST FIRM EARTH WITH CONCRETE

NOTE:

EARTH PRESSURE FIGURED AT 4000#/SQ' IF EARTH ENCOUNTERED WILL NOT WITHSTAND THIS PRESSURE, THE AREA OF THE BLOCK MUST BE INCREASED PROPORTIONATELY.

CALCULATIONS ARE BASED ON 225#/SQ" OR 150# WORKING PRESSURE PLUS 50% WATER HAMMER FOR SIZES 4" TO 24" INCLUSIVE.



APPLICABLE TO TEES WYES & BENDS

PIPE SIZE (IN.)	AREA SQ."	TOTAL FORCE (lbs)	AREA OF BLOCK IN SQUARE FEET				
			TEES & PLUGS	90° BENDS	45° BENDS	22 1/2° BENDS	11 1/4° BENDS
UP THRU 4	13	2,900	1.0	1.0	1.0	1.0	1.0
6	29	6,500	1.7	2.3	1.3	1.0	1.0
8	53	12,000	3.0	4.1	2.2	1.2	1.0
10	82	19,000	4.8	6.3	3.4	1.8	1.0
12	118	26,800	6.7	9.1	4.9	2.5	1.3
14	168	37,800	9.5	12.3	6.7	3.4	1.8
16	220	48,500	12.2	16.1	8.8	4.5	2.3
18	276	62,200	15.6	20.4	11.0	5.6	2.9
20	342	77,000	19.3	25.7	13.7	7.0	3.6
24	486	109,500	27.4	36.3	19.7	10.0	5.2
30	706	84,800	21.2	30.5	16.5	8.4	4.4
36	1017	122,000	30.5	43.7	23.7	12.1	6.2

* FOR SIZES 30" & 36" THE TABLE IS BASED ON 120#/SQ" OR 75# WORKING PRESSURE PLUS 50% WATER HAMMER.

4000 PSI AIR ENTRAINED CONCRETE



Chester Engineers
260 Airside Drive, Moon Twp., PA 15108-2793
(412)809-6600 FAX(412)809-6611
www.chester-engineers.com

Drawing
2-72

SCALE: NONE DATE: 01/07
SHEET: 1 OF 1 STD. NO. 2-72

McCANDLESS TOWNSHIP SEWER AUTHORITY
ALLEGHENY COUNTY, PENNSYLVANIA
CONCRETE BLOCKING