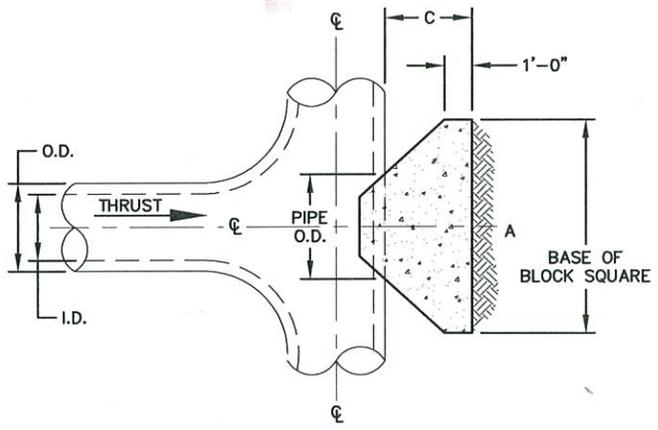


PLAN OF PLUG



PLAN OF TEE

I.D. (IN.)	THRUST (TONS)	C (FT.)	A (FT.)	VOL. (C.Y.)	EARTH		ROCK	
					A (FT.)	VOL. (C.Y.)	A (FT.)	VOL. (C.Y.)
4,6,8	5.1	1.5	2.5	0.3	2.0	0.2		
10,12	11.3	1.5	3.5	0.6	2.5	0.3		
16,18	25.5	2.0	5.5	1.6	4.0	0.9		
20	31.5	2.0	6.0	1.9	4.0	0.9		
24	45.2	2.5	7.0	3.1	5.0	1.7		
30	53.0	3.0	7.5	4.1	5.5	2.4		
36	76.3	4.0	9.0	7.3	6.5	4.2		
42	104.0	4.5	10.5	11.0	7.5	6.2		
48	136.0	5.0	12.0	15.6	8.5	8.7		
54	172.0	5.5	13.5	21.4	9.5	11.9		
60	212.0	6.0	15.0	28.4	10.5	15.7		
66	257.0	6.5	16.5	36.8	11.5	20.5		
72	305.0	7.5	17.5	47.2	12.5	27.2		
78	358.0	8.0	19.0	58.9	13.5	33.7		
84	416.0	8.5	20.5	72.3	14.5	41.2		
90	477.0	9.0	22.0	87.7	15.5	49.7		
96	543.0	9.5	23.5	104.8	16.5	61.0		

GENERAL NOTES:

1. CONCRETE BLOCKING SHALL BE CLASS "B".
2. ALL CALCULATIONS ARE BASED IN INTERNAL PRESSURE AT 200 PSI FOR DUCTILE IRON, P.V.C., AND 150 PSI FOR CONCRETE PIPE.
3. VOLUMES OF THRUST BLOCKS ARE NET VOLUMES OF CONCRETE TO BE FURNISHED. THE CORRESPONDING WEIGHT OF THE CONCRETE (CLASS "B") IS EQUAL TO OR GREATER THAN THE VERTICAL COMPONENT OF THE THRUST ON THE VERTICAL BEND.
4. WALL THICKNESS (T) ASSUMED HERE FOR ESTIMATING PURPOSES ONLY.
5. POUR CONCRETE FOR BLOCK AGAINST UNDISTURBED EARTH.
6. DIMENSIONS MAY BE VARIED AS REQUIRED BY FIELD CONDITIONS WHERE AND AS DIRECTED BY THE ENGINEER. THE VOLUME OF CONCRETE BLOCKING SHALL NOT BE LESS THAN SHOWN HERE.
7. THE SOIL BEARING PRESSURES ARE BASED ON 1000 LBS./S.F. IN SOIL AND 2000 LBS./S.F. IN ROCK.
8. USE POLYETHYLENE WRAP OR EQUAL BETWEEN CONCRETE AND BEND, TEE, OR PLUG TO PREVENT THE CONCRETE FROM STICKING TO IT.
9. CONCRETE SHALL NOT EXTEND BEYOND JOINTS.

HORIZONTAL THRUST BLOCKS  
AT TEES AND PLUGS

NOT TO SCALE

DISCLAIMER: This standard is governed by the City of Wichita Falls Engineering Department. No warranty of any kind is made by the City of Wichita Falls for any purpose whatsoever. The City of Wichita Falls assumes no responsibility for the conversion of this standard to other formats for incorrect results or damages resulting from its use.

APPROVED	CITY OF WICHITA FALLS, TX ENGINEERING DIVISION	HORIZONTAL THRUST BLOCK AT TEES AND PLUGS	
<i>Dan Noell, P.E.</i> CITY ENGINEER		MARCH 2016	DETAIL NO. 4030