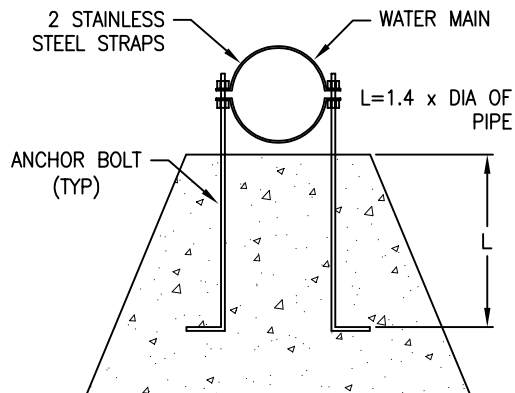
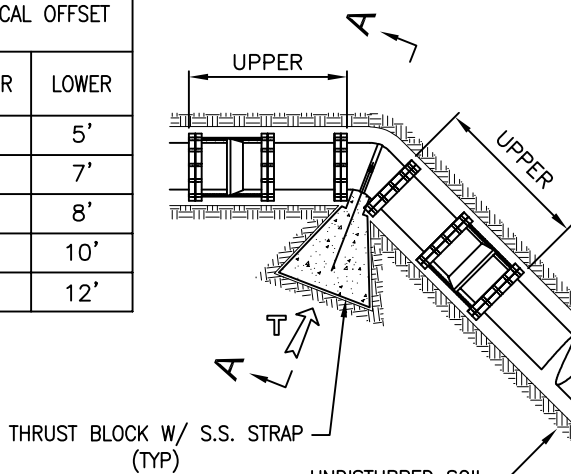


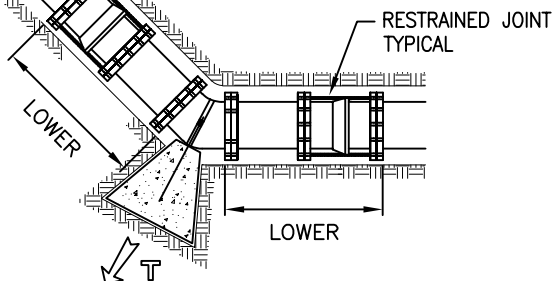
RESTRAINED JOINT DIMENSIONS FROM BEND

PIPES SIZE	VERTICAL OFFSET	
	UPPER	LOWER
6"	15'	5'
8"	20'	7'
10"	24'	8'
12"	28'	10'
16"	36'	12'



SECTION A-A
THRUST BLOCK
ANCHOR DETAIL

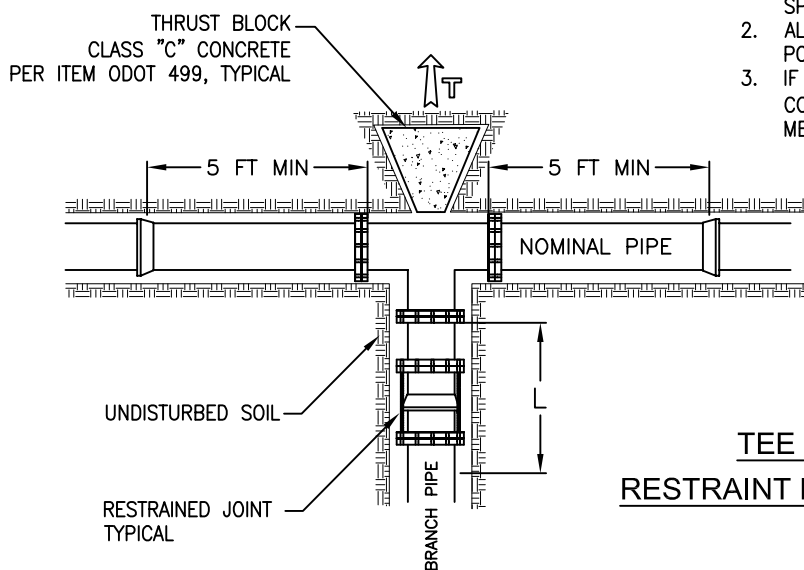
THRUST BLOCKING BEARING AREA (S.F.) REQUIRED FOR 200 PSI WATER PRESSURE BASED ON 2000 PSF SOIL					
NOM. PIPE DIA.	DEAD END	90° BEND	45° BEND	22½° BEND	11¼° BEND
(IN.)	S.F.	S.F.	S.F.	S.F.	S.F.
6"	3.7	5.3	2.9	1.5	0.7
8"	6.4	9.1	4.9	2.5	1.3
10"	9.7	13.7	7.4	3.8	1.9
12"	13.7	19.4	10.5	5.3	2.7
16"	23.8	33.6	18.2	9.3	4.7



VERTICAL OFFSET
RESTRAINT LENGTH

NOTES:

1. SEE DETAIL WM-1 FOR AGGREGATE BEDDING SPECIFICATIONS.
2. ALL DUCTILE IRON WATER MAIN SHALL BE WRAPPED IN POLYETHYLENE.
3. IF WATER MAIN IS GOING TO BE CHARGED BEFORE CONCRETE THRUST BLOCKS HAVE CURED (28 DAYS), MECHANICAL RESTRAINING RODS ARE REQUIRED.



TEE
RESTRAINT LENGTH

*TEE/NOMINAL PIPE SIZE					
BRANCH PIPE SIZE	6"	8"	10"	12"	16"
6"	6'	1'	1'	1'	1'
8"	24'	17'	9'	1'	1'
10"			26'	20'	6'
12"				36'	25'
16"					55'