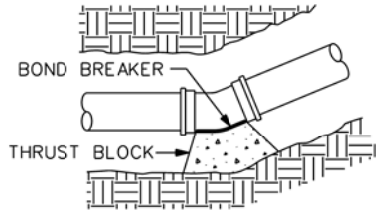
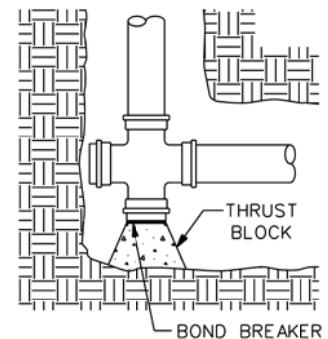
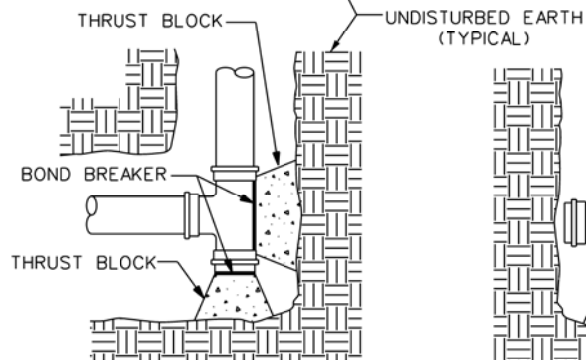
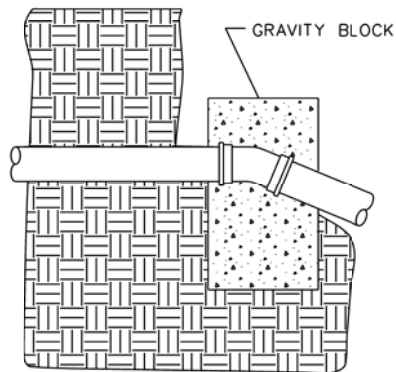
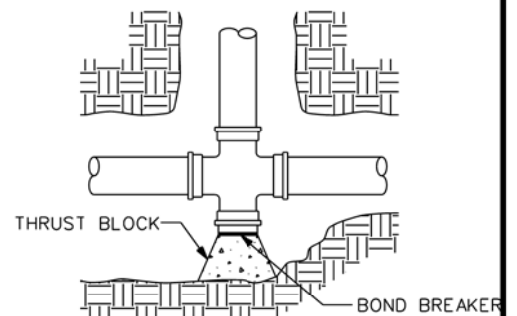
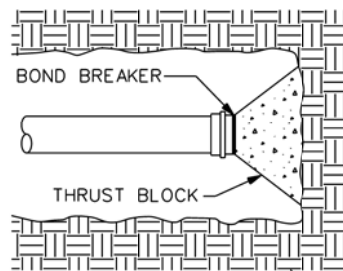
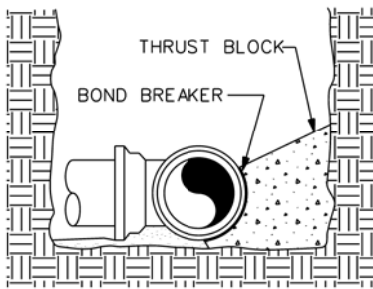


SIZE OF PIPE	B E N D S				TEE OR DEAD END
	11 1/4°	22 1/2°	45°	90°	
6"	1.00	1.25	2.25	4.50	3.00
8"	1.00	2.00	4.00	7.90	5.25
12"	2.00	4.25	8.25	18.00	11.00
16"	8.00	15.25	28.00	48.00	35.00
20"	8.50	16.50	32.00	57.00	40.00
24"	9.00	18.00	35.00	65.00	45.00



Note: Restrained joints may be used in lieu of blocking with prior approval from Urbandale Water Utility.



SCALE: NONE

URBANDALE WATER UTILITY

CONCRETE THRUST BLOCK STANDARD

DATE: 07-01-2013