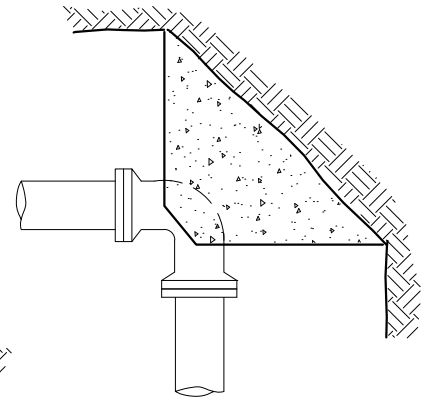
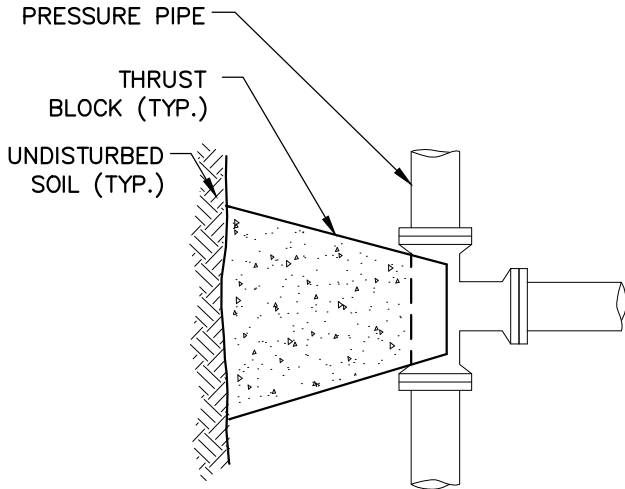


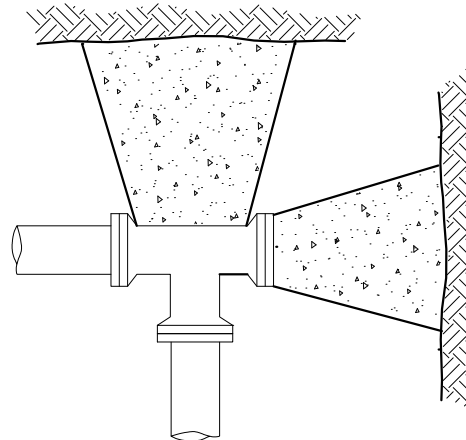
TEE



BEND



TEE



TEE (PLUGGED)

TABLE 1: 4" THRU 10" FITTINGS

| SOIL TYPE | TEES | | BENDS | |
|-----------|------|-----|-------|-----|
| | A | B | A | B |
| SOFT CLAY | 48" | 24" | 48" | 24" |
| SAND | 24" | 24" | 24" | 24" |
| GRAVEL | 24" | 18" | 24" | 18" |

TABLE 2: 12" THRU 16" FITTINGS

| SOIL TYPE | TEES | | BENDS | |
|-----------|------|-----|-------|-----|
| | A | B | A | B |
| SOFT CLAY | 60" | 36" | 72" | 36" |
| SAND | 36" | 30" | 48" | 30" |
| GRAVEL | 30" | 24" | 40" | 24" |

NOTES:

1. CONCRETE FOR ALL THRUST BLOCKS TO BE MINIMUM 3,000 PSI, 28 DAY STRENGTH, TYPE I CEMENT, 3/4" STONE.
2. WHERE POSSIBLE, CONSTRUCT THRUST BLOCKS AGAINST UNDISTURBED SOIL. WHERE NOT POSSIBLE, PLACE FILL BETWEEN THE THRUST BLOCK AND THE UNDISTURBED SOIL COMPACTED TO 90% STANDARD PROCTOR DENSITY.
3. WRAP FITTINGS WITH POLYETHYLENE PRIOR TO CONSTRUCTING THRUST BLOCKS. NO JOINTS SHALL BE COVERED WITH CONCRETE.
4. THRUST BLOCK DIMENSIONS ARE BASED ON A MAXIMUM PIPE PRESSURE OF 150 PSI.
5. PROVIDE THRUST BLOCKS FOR ALL PRESSURE WATER AND SEWER MAINS.



**DEPARTMENT OF PUBLIC WORKS
ENGINEERING DIVISION
TOWN OF BILLERICA,
MASSACHUSETTS**

THRUST BLOCK

CREATED BY: DCW/KCS

SCALE: NTS

FILE:

CHECKED BY: GA/JT

DATE: 06/29/2015