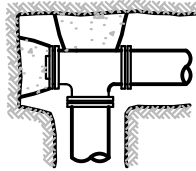
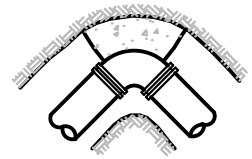


STEEL PLATE. FORM TO ALLOW FOR BOLT REMOVAL

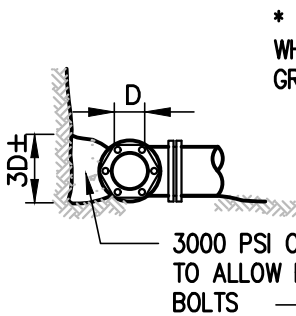
CROSS WITH PLUG



PLUGGED TEE

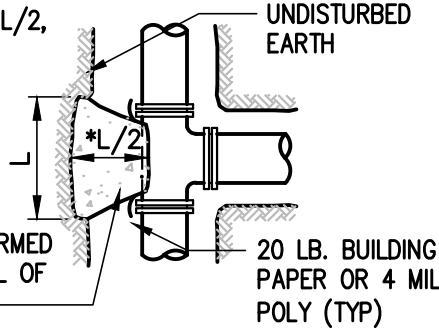


HORIZONTAL BEND

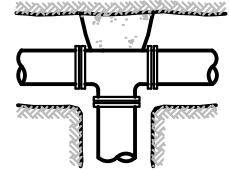


ELEVATION

\* USE 12" OR L/2, WHICHEVER IS GREATER.



PLAN



TEE

THRUST BLOCK TABLE

PIPE SIZE	TEE OR END PLUG	90°	45°	22 1/2°	11 1/4°
4" OR 6"	3	4	2	2	2
8"	6	7	4	2	2
10" OR 12"	12	16	9	5	3
16"	21	29	16	8	4

NOTES:

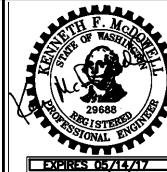
MINIMUM BEARING AREA AGAINST UNDISTURBED EARTH (SQUARE FEET)

1. BEARING AREA OF CONC. THRUST BLOCK BASED ON 200 PSI PRESSURE AND SOIL BEARING LOAD OF 2000 POUNDS PER SQUARE FOOT.
2. AREAS MUST BE ADJUSTED FOR OTHER SIZE PIPES, PRESSURES AND SOIL CONDITIONS.
3. CONCRETE BLOCKING SHALL BE CAST IN PLACE AND HAVE A MINIMUM OF 1/2 SQUARE FOOT BEARING AGAINST THE FITTING. SIDES SHALL BE FORMED WITH PLYWOOD OR EQUIVALENT.
4. THRUST BLOCK SHALL BEAR AGAINST FITTING ONLY AND SHALL BE CLEAR OF JOINTS TO PERMIT DISMANTLING OF JOINTS.
5. CONCRETE TO BE 3000 PSI MINIMUM. PRE-MIX CONCRETE IS PREFERRED. IF CONCRETE IS HAND MIXED THE PROPORTIONS SHALL BE IN ACCORDANCE WITH THE SPECIFICATIONS. COMPRESSIVE TESTS OF "HAND MIXED" CONCRETE MAY BE REQUIRED. PRE-INSPECTION OF BLOCKING AREA REQUIRED PRIOR TO PLACEMENT OF CONCRETE.
6. CONTRACTOR SHALL INSTALL BLOCKING ADEQUATE TO WITHSTAND FULL TEST PRESSURE AS WELL AS TO CONTINUOUSLY WITHSTAND OPERATING PRESSURE UNDER ALL CONDITIONS OF SERVICE.
7. SEE STANDARD PLAN NO. 2 FOR PIPE AND FITTING RESTRAINT REQUIREMENTS.
8. INSPECTION REQUIRED PRIOR TO BACKFILL.



**Woodinville  
Water District**

**THRUST BLOCKING  
REQUIREMENTS**



WATER STD.  
PLAN NO. (3)

REVISION DATE  
11-12