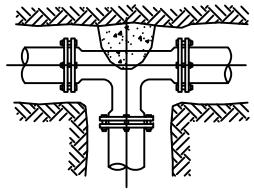
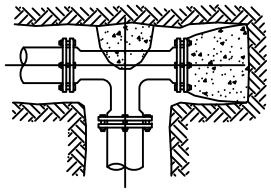
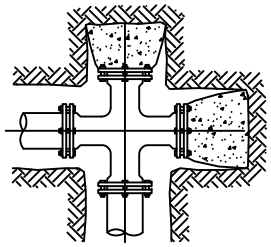


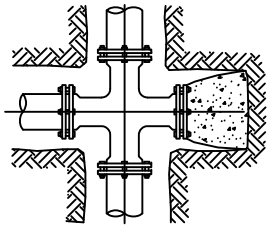
BLOCKING FOR TEE



BLOCKING FOR TEE WITH PLUG
(When Directed by Engineer)



BLOCKING FOR CROSS WITH 2 PLUGS
(When Directed by Engineer)



BLOCKING FOR CROSS WITH PLUG
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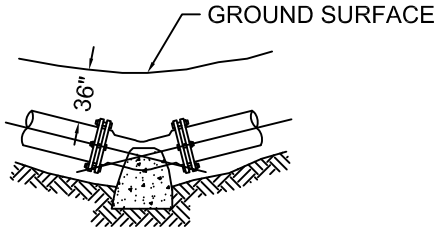
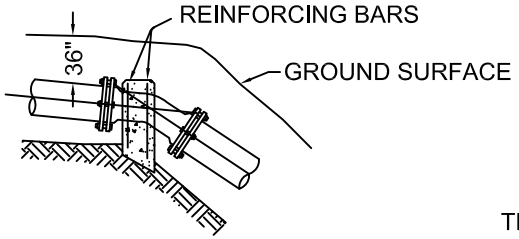
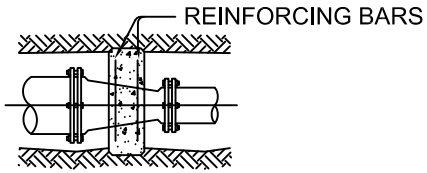
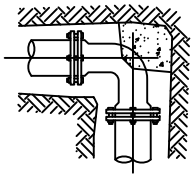




BLOCKING FOR VERTICAL BENDS



THRUST SUPPORT FOR REDUCER
(Sizes to be Determined by Engineer



BLOCKING FOR
HORIZONTAL BEND

NOTES:

1. ALL BLOCKING SHALL BE AGAINST UNDISTURBED HAND DUG SOIL AND SHALL BE CONCRETE HAVING A MINIMUM 28 DAY STRENGTH OF 3,000 PSI.
2. ALL BLOCKING SHALL HAVE A MINIMUM SOIL COVER OF 1 FOOT.
2. WHERE SOIL CONDITIONS MAKE IT NECESSARY TO POUR CONCRETE BLOCKING OVER JOINTS, THE ENDS OF THE ADJACENT PIPES MUST HAVE A KICKER BLOCK TO RESIST MOVEMENT OF THESE JOINTS.
3. WEIGHT CALCULATIONS TO BE BASED ON THRUST DUE TO WATER PRESSURE AT 100% OF TEST PRESSURE. THRUST = 2 AP SIN 1/2 Ø, WHERE A = AREA OF PIPE, P = WATER PRESSURE AND Ø = DEFLECTION ANGLE.
4. VERTICAL UPLIFT BLOCKS SHALL BE DESIGNED ON THE BASIS OF 150 LBS. PER CU. FT. FOR CONCRETE AND SOIL AT 120 LBS. PER CU. FT. OVER THE AREA OF BLOCK.
5. VERTICAL DOWN THRUST BLOCKS SHALL BE DESIGNED ON THE BASIS OF 3,000 PSI ALLOWABLE SOIL BEARING PRESSURE. DIMENSIONS MAY BE DECREASED WITH APPROVAL OF THE ENGINEER IF MEASURED SOIL CONDITIONS PERMIT. IN POOR SOIL CONDITIONS, BLOCK DIMENSIONS SHALL BE INCREASED IN PROPORTION TO THE ALLOWABLE BEARING VALUE.
6. THRUST BLOCKS ON HORIZONTAL BENDS, TEES, CROSSES AND REDUCERS SHALL BE SIZED BASED ON 2,400 PSI OF BLOCKING SURFACE AREA IN CONTACT WITH UNDISTURBED SOIL. BLOCK DIMENSIONS MAY BE DECREASED WITH APPROVAL OF ENGINEER IF SOIL CONDITIONS PERMIT. IN POOR SOIL CONDITIONS, BLOCK DIMENSIONS SHALL BE INCREASED IN PROPORTION TO THE ALLOWABLE BEARING VALUE.
7. ANCHOR COLLARS SHALL BE REINFORCED IN ACCORDANCE WITH REINFORCING BARS SCHEDULE FOR BLOCKING OF REDUCERS AS SHOWN. STEEL ANCHOR RINGS IN ACCORDANCE WITH DIEMSNIONS OF ANCHOR COLLAR.
8. WHERE SHEAR BECOMES A PROBLEM, PROPER REINFORCING MUST BE INSTALLED INTO THE BLOCKING.
9. CLEARANCE SHALL BE A MINIMUM OF 6" BETWEEN THE PIPE AND THE OBSTRUCTION.
10. CLEARANCE ON PIPES BELONGING TO OIL AND GAS COMPANIES SHALL BE 18" UNLESS SPECIAL PERMISSION IS GIVEN BY THESE COMPANIES.

CITY OF TYLER STANDARD DETAIL	**THRUST BLOCKING**	APPROVED: _____ UTILITIES ENGINEER REVISION DATE: 8/2/11