



**N.T.S.**

1. WATER MAIN MAY BE LOOPED ABOVE OBSTRUCTION, IF 3' MINIMUM COVER IS MAINTAINED ABOVE WATER MAIN.
2. WATER MAIN SHALL BE DUCTILE IRON CEMENT LINED PIPE, ALL JOINTS SHALL BE MECHANICAL JOINT OR PUSH-ON AND ALL FITTINGS BE MECHANICALLY JOINT CAST IRON.
3. OFFSETS MAY BE SUBSTITUTED FOR A "T" OF UP TO 24' IF APPROVED BY THE ENGINEER.
4. CONCRETE THRUST BLOCKS SHALL BE PROVIDED AT ALL BENDS OR OTHER POINTS OF PIPE DIRECTION CHANGE.
5. MINIMUM CLEARANCE BETWEEN SANITARY SEWER AND WATER MAIN SHALL BE 18" MIN. CLEARANCE BETWEEN WATER MAIN AND OTHER OBSTRUCTIONS SHALL BE 6".
6. TIE RODS SHALL BE UTILIZED TO RESTRAIN PIPE JOINTS. DETAILS OF THE TIE ROD ASSEMBLY SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL. TIE RODS SHALL BE SUFFICIENT TO RESTRAIN THE THRUST DEVELOPED AT 100 PSI WORKING PRESSURE. MEGALUG RESTRAINT ALSO ACCEPTABLE IN PLACE OF TIE RODS.

**MECHANICAL JOINTS**

ANGLE	D =	R =	L =
45°	T x 1.414	T x 1.000	D-2A
22.5°	T x 2.613	T x 2.414	D-2A
11.25°	T x 5.126	T x 5.027	D-2A

**UTILITY CROSSING DETAIL  
JACKSON TOWNSHIP M.U.A.**

NO.	DATE REVISED
5	
4	
3	
2	
1	
DRAWN FEB 2003	
SHEET	9 OF 20

