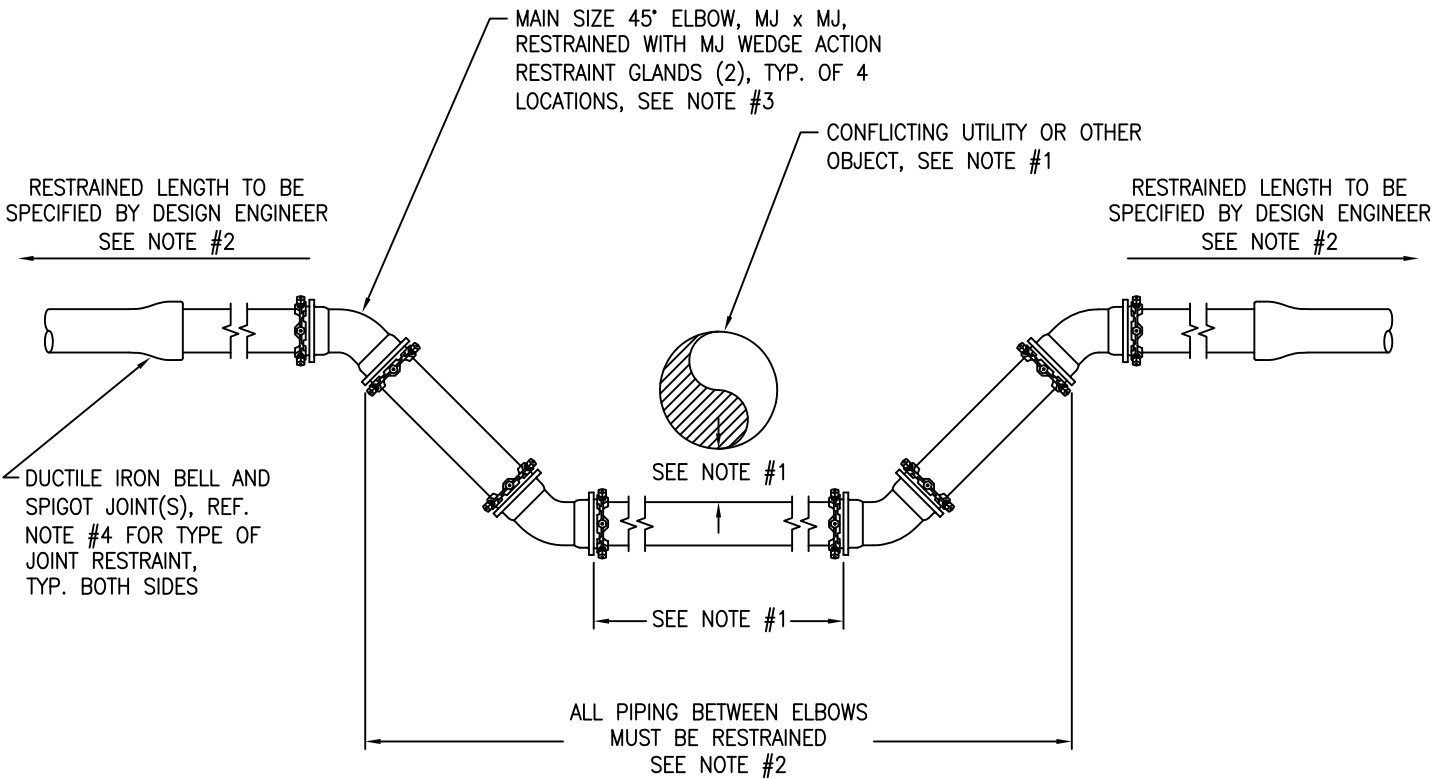


NOTES:

1. REFERENCE TMWA ENGINEERING & CONSTRUCTION STANDARDS SECTIONS 7, 8, AND/OR 8A FOR UTILITY SEPARATION REQUIREMENTS.
2. ALL RESTRAINED JOINT PIPING SHALL BE DUCTILE IRON PIPE (RJ-DIP). RESTRAINED LENGTHS OUTSIDE OUTERMOST ELBOWS SHALL BE CALCULATED BY THE DESIGN ENGINEER AND SPECIFIED ON THE WATER IMPROVEMENT PLANS.
3. RESTRAINED JOINT FITTINGS SHALL BE MECHANICAL JOINT (MJ) DUCTILE IRON RESTRAINED WITH MECHANICAL JOINT WEDGE ACTION RESTRAINT GLANDS.
4. BELL AND SPIGOT PUSH-ON JOINTS SHALL BE RESTRAINED USING RUBBER GASKETS WITH STAINLESS STEEL LOCKING SEGMENTS VULCANIZED INTO THE RUBBER GASKET.
5. ALL BOLTS AND EXPOSED METAL SHALL BE COATED WITH BRUSHED-ON MASTIC.
6. FITTINGS, DUCTILE IRON PIPE, AND OTHER METAL PARTS SHALL BE ENCASED WITH POLYETHYLENE WRAP PER AWWA C105.



DATE

7/2001

REV

7/2011

APPENDIX 10I
VERTICAL ELBOW INSTALLATION

RESTRAINED JOINT VERTICAL OFFSET
UNDER UTILITY/OBJECT
FOR MAINS 6" TO 12"

DRAWING NUMBER

10I-2