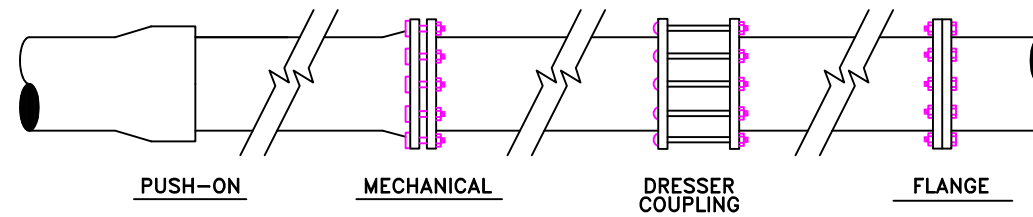


- NOTES:
1. ALL PIPE TO COMPLY WITH SPECIFICATIONS FOR WATER MAIN PIPING.
  2. OFFSET DISTANCE SHALL BE MINIMUM NECESSARY TO ACHIEVE 0.5' MINIMUM CLEARANCE.
  3. ALL JOINTS SHALL BE RESTRAINED AS NECESSARY

**A TYPICAL RELOCATION DETAIL**

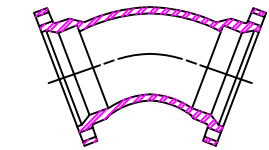
NOT TO SCALE



WHEN USING DIP, ALL FOUR JOINT TYPES SHALL BE ALLOWED.  
WHEN USING STEEL PIPE FOR SERVICE LINES, DRESSER AND FLANGE FITTINGS ONLY WILL BE ALLOWED.  
FLANGED JOINTS/FITTINGS ARE NOT ACCEPTABLE UNDERGROUND (EXCEPT AT HYDRANT BASE)

**B WATER PIPE JOINTS**

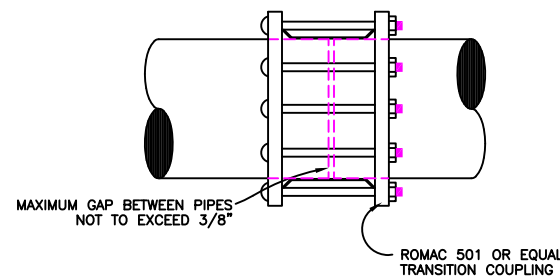
NOT TO SCALE



DIP FITTINGS SHALL BE MECHANICAL JOINT COMPACT FITTINGS CONFORMING TO AWWA C153

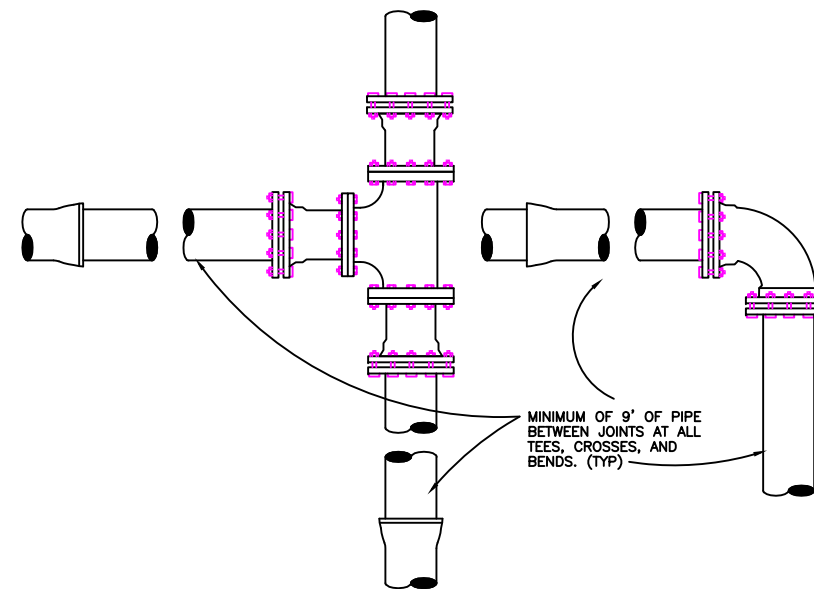
**C PIPE FITTINGS**

NOT TO SCALE



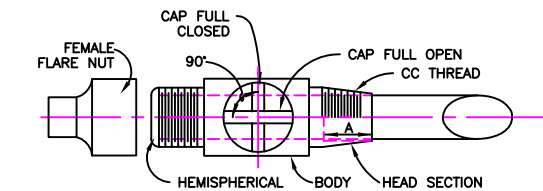
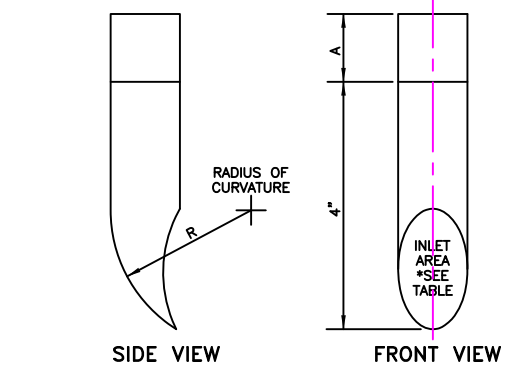
**D ADAPTATION - STEEL TO DUCTILE IRON PIPE**

NOT TO SCALE



**F PIPE LENGTHS REQUIRED AT TEES AND ELBOWS**

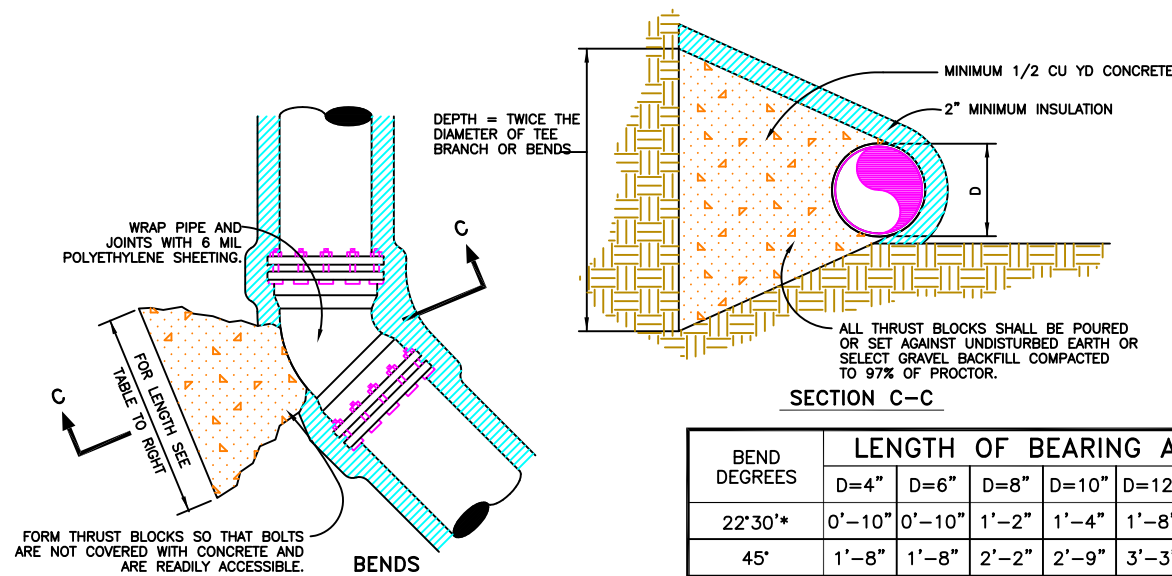
NOT TO SCALE



PITORIFICE BASIC DIMENSIONS			
NOMINAL SIZE	A (INCHES)	R (INCHES)	AREA INLET (IN <sup>2</sup> )
3/4	.75	2	0.75
1	1	2.25	1.34
1 1/2	1.25	2.75	3.00
2	1.25 TO 1.5	3.25	5.4

**G STANDARDS FOR PITORIFICE TYPE CORPORATION STOPS**

NOT TO SCALE



BEND DEGREES	LENGTH OF BEARING AREA					
	D=4"	D=6"	D=8"	D=10"	D=12"	D=14"
22'30'*	0'-10"	0'-10"	1'-2"	1'-4"	1'-8"	2'-0"
45'	1'-8"	1'-8"	2'-2"	2'-9"	3'-3"	3'-9"
60'**	2'-2"	2'-2"	2'-10"	3'-6"	4'-3"	5'-0"
90'	3'-0"	3'-0"	4'-0"	5'-0"	6'-0"	7'-0"

- \* FOR BENDS GREATER THAN 5', BUT LESS THAN 22'30', USE LENGTH FOR A 22'30'.  
\*\* FOR DEAD END, TEE, OR CROSS, USE LENGTH FOR A 60° BEND.

**E THRUST BLOCK DETAILS**

NOT TO SCALE

DATE	REVISION	BY
JAN 07	UPDATE	MJB
7-16-98		MJB

PLAN SCALE: NOT TO SCALE  
PLOT SCALE: 1=1

DESIGNED	RHP/GSC	APPROVED
DRAWN	NBB/DAL	
CHECKED	MJB	USA ENGINEER
DATE	FEB 1998	FILE: STANDARD DETAILS WD2

