



θd = Maximum joint deflection angle (degrees)
A = Offset at the end of the pipe (inches)
Rd = Minimum radius of curve produced by succession of joints (feet)

MAXIMUM JOINT DEFLECTION FOR DUCTILE IRON PIPE						
Size Of Pipe (inches)	UNRESTRAINED JOINTS			RESTRAINED JOINTS		
	Maximum Deflection Angle, " θd " (degrees)	Minimum Radius, " Rd " (feet)	Offset At Free End, " A " (inches)	Maximum Deflection Angle, " θd " (degrees)	Minimum Radius, " Rd " (feet)	Offset At Free End, " A " (Inches)
4	2.5	400	10	2.5	400	10
6	2.5	400	10	2.5	400	10
8	2.5	400	10	2.5	400	10
10	2.5	400	10	2.5	400	10
12	2.5	400	10	2.5	400	10
14	2.5	400	10	2.0	500	8
16	2.5	400	10	2.0	500	8
18	2.5	400	10	2.0	500	8
20	2.5	400	10	1.25	800	5
24	2.5	400	10	1.25	800	5
30	2.5	400	10	1.00	1100	4
36	2.5	400	10	0.75	1400	3
42	2.0	500	8	0.25	4000	1

DIRECTOR, DEPARTMENT OF WATER RESOURCES

COUNTY OF SACRAMENTO

MAXIMUM DEFLECTION FOR DUCTILE IRON PIPE

SCALE: NONE
DATE: 09/24

8-9A