

LENGTH OF RESTRAINT REQD ^① (FEET)								DESIGN FORCE ON RESTRAINT REQD (KIPS) ^②	
DEFLECTION ANGLE PIPE	22 1/2°	33 3/4°	45°	56 1/4°	67 1/2°	78 3/4°	TEE	45°	90° OR TEE
6"	3	6	11	16	23	29	37	2.0	5.0
8"	4	8	15	22	31	41	50	3	9.0
10"	5	11	18	28	38	49	61	4.0	14.0
12"	6	13	22	33	45	59	73	6.0	20.0
14"	7	14	25	37	52	68	84	8.0	28.0
16"	8	16	28	42	59	77	95	11.0	36.0
18"	8	18	31	47	66	86	107	14.0	46.0
20"	9	20	35	53	73	95	118	17.0	57.0
24"	11	23	40	61	85	111	138	24.0	81.0
30"	13	29	50	75	105	136	170	37.0	127.0
36"	15	34	59	88	123	160	199	54.0	183.0
42"	17	39	67	101	141	184	223	73.0	250.0
48"	19	43	75	113	157	206	255	96.0	326.0

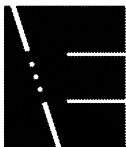
① IN EACH DIRECTION FROM POINT OF DEFLECTION EXCEPT FOR TEE AT WHICH ONLY THE BRANCH IN THE DIRECTION OF THE TEE STEM.

② IF TIE RODS ARE USED, USE 4 RODS MINIMUM AND ADD 1/8" TO BAR DIA AS CORROSION ALLOWANCE.

NOTE: "MEGALUG" JOINT RESTRAINTS OR EQUAL JOINT RESTRAINTS ARE ACCEPTABLE.

NOTE: THRUST BLOCKS ARE NOT ALLOWABLE.

PIPE RESTRAINT SCHEDULE FOR
GROUND BURIED PRESSURE PIPES



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PIPE RESTRAINT SCHEDULE
NOT TO SCALE

HANDY TOWNSHIP STANDARD DETAILS
DECEMBER 2005

DRAWING NO.

W-5
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