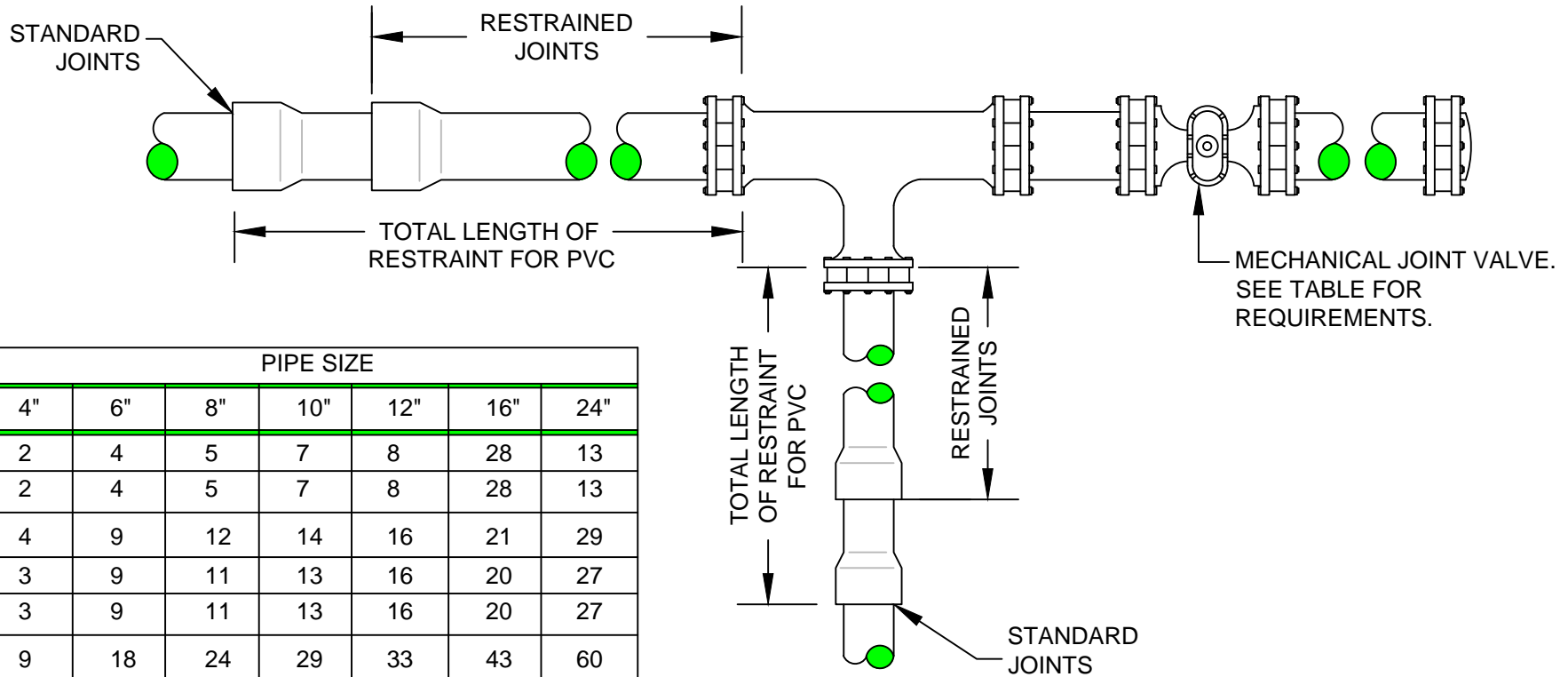


PUBLIC WORKS & UTILITIES ENGINEERING & DESIGN STANDARDS



		PIPE SIZE						
		4"	6"	8"	10"	12"	16"	24"
11.25°	H-B	2	4	5	7	8	28	13
	VU-B	2	4	5	7	8	28	13
	VD-B	4	9	12	14	16	21	29
22.5°	H-B	3	9	11	13	16	20	27
	VU-B	3	9	11	13	16	20	27
	VD-B	9	18	24	29	33	43	60
45°	H-B	6	18	23	28	32	41	56
	VU-B	6	18	23	28	32	41	56
	VD-B	19	38	49	59	69	89	124
90°	H-B	14	43	56	67	78	99	136
	VU-B	14	43	56	67	78	99	136
	VD-B	46	92	119	143	168	214	299
DEAD END PLUG AND VALVE		46	92	119	143	168	214	299
TEE		17	81	119	143	168	214	299

MINIMUM DESIGN CRITERIA

BEDDING TYPE: 2
 DESIGN PRESSURE: 150 PSI
 SAFETY FACTOR: 1.5
 DEPTH OF COVER: 3.0 FT

MINIMUM FOOTAGE OF PIPE RESTRAINT

H-B: HORIZONTAL BEND
 VU-B: VERTICAL-UP BEND
 VD-B: VERTICAL DOWN BEND

NOTES:

1. FOR LENGTHS OF PIPE AND NUMBER OF JOINTS TO BE RESTRAINED, SEE TABLE.
2. ONLY DUCTILE IRON PIPE FITTINGS SHALL BE USED AT JOINTS TO BE RESTRAINED UNLESS OTHERWISE SPECIFIED BY THE CITY ENGINEER.



CITY OF ALTAMONTE SPRINGS
 950 CALABRIA DRIVE
 ALTAMONTE SPRINGS, FLORIDA 32714

RESTRAINED JOINT DETAIL

GU012-0

ISSUED 2017

REVISED 03/01/2017 BY DJB