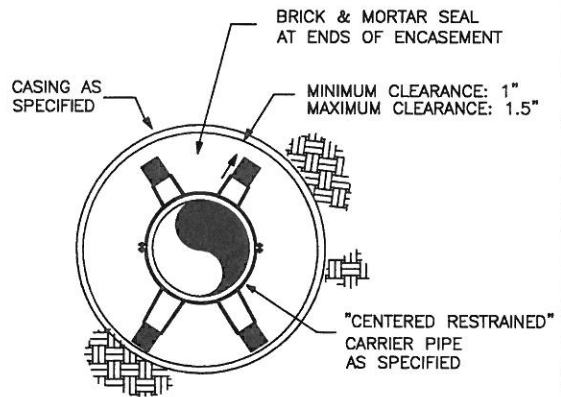


**CASING PROFILE**

**MINIMUM STEEL CASING SIZES\***

CARRIER PIPE		CASING SPACER		STEEL CASING		
NOMINAL PIPE DIAMETER	PIPE O.D.	O.D. OVER SPACER RUNNERS	BAND WIDTH	MINIMUM CASING THICKNESS**	CASING I.D.	MINIMUM CASING DIAMETER
4	4.8	9.2	8	0.25	11.5	12
6	6.9	11.3	8	0.25	13.5	14
8	9.05	13.45	8	0.25	15.5	16
10	11.1	15.5	8	0.25	17.5	18
12	13.2	18.6	8	0.25	23.5	24
14	15.3	20.7	12	0.25	23.5	24
16	17.4	22.8	12	0.3125	29.375	30
18	19.5	24.9	12	0.3125	29.375	30
20	21.6	27	12	0.3125	29.375	30
24	25.8	31.2	12	0.3125	35.375	36
30	32	37.4	12	0.5	41	42
36	38.3	43.7	12	0.5	47	48
42	44.5	49.9	12	0.5	53	54

\* ALL SIZES INDICATED ARE IN INCHES  
 \*\*CASING THICKNESSES LISTED ARE THE MINIMUM ACCEPTABLE TO THE MWWSSB, OTHER AGENCIES WITH JURISDICTION MAY REQUIRE A MORE STRINGENT DESIGN.



**CASING SECTION**

**NOTES**

CASING SPACERS SHALL:

1. BE MADE FROM T-304 STAINLESS STEEL OF A MINIMUM 14 GAUGE THICKNESS
2. HAVE A SYNTHETIC RUBBER OR PVC LINER TO INSULATE THE PIPELINE FROM THE SPACER.
3. HAVE 1.5" WIDE GLASS REINFORCED PLASTIC OR UHMW POLYMER RUNNERS TO INSULATE THE SPACER FROM THE CASING.
4. SPACERS TO BE MANUFACTURED BY CASCADE WATERWORKS MFG. CO., (PSI) PIPELINE SEAL AND INSULATOR, INC. OR EQUAL.
5. 4" THRU 12" DIAMETER PIPELINE SHALL USE 8" WIDE BANDS
6. CENTERED RESTRAINED CASING SPACERS SHALL BE SPACED AT A MAXIMUM OF TEN FEET APART WITH A MINIMUM OF TWO SPACERS PER JOINT OF PIPE.



**W**ATER WORKS & SANITARY SEWER BOARD  
 Montgomery Alabama

**MISCELLANEOUS DETAILS**

TITLE: **ENCASEMENT W/  
 STAINLESS STEEL SPACERS**

DRAWING NO.:

**110**

DESIGNED: TL DATE: 09/00 SCALE: NOT TO SCALE  
 CHECKED: BH REVISED: 03/09