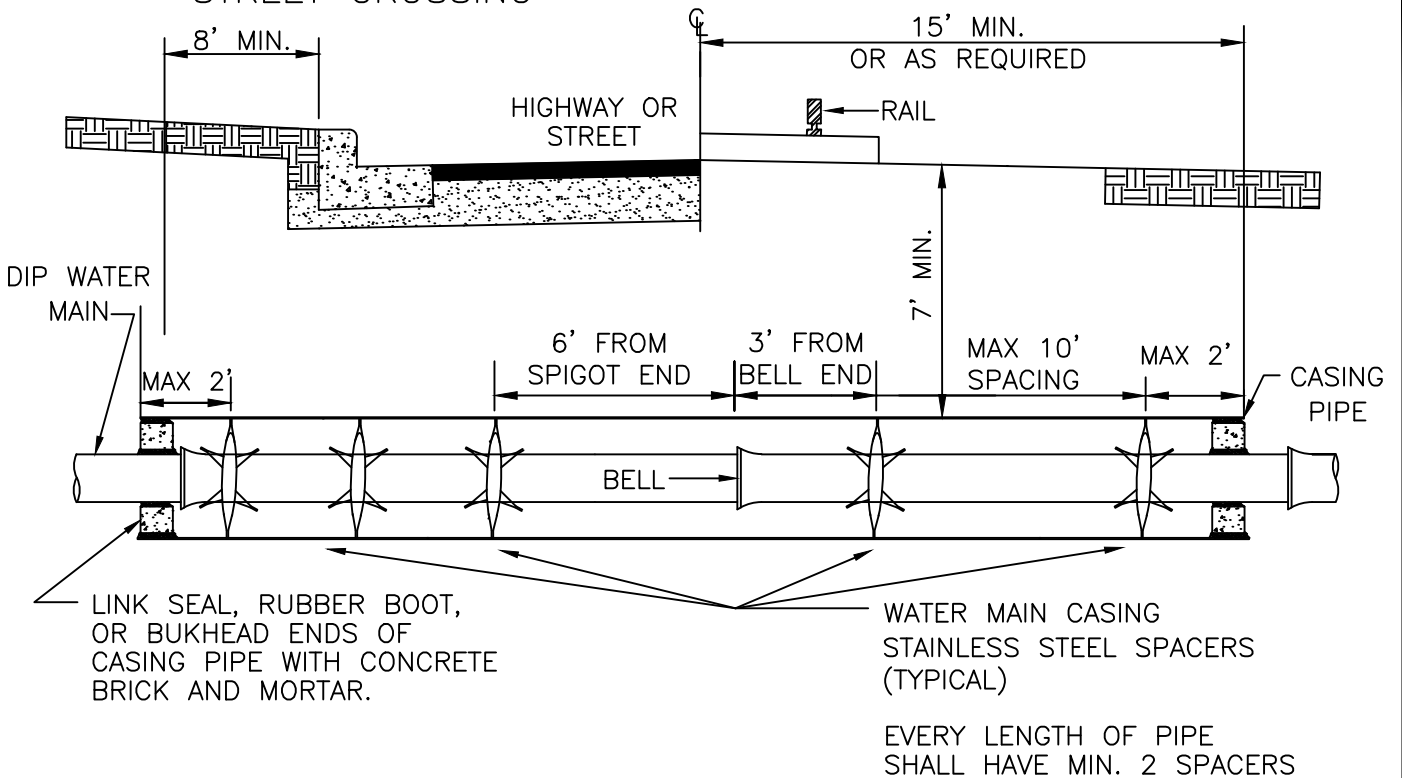


TYPICAL HIGHWAY OR STREET CROSSING

TYPICAL RAILWAY CROSSING



BELL O.D. (MJ PIPE)	SIZE OF MAIN	MINIMUM CASING SIZE	MINIMUM CASING WALL THICKNESS
11.12"	6"	18"	0.250"
13.37"	8"	20"	0.250"
17.88"	12"	24"	0.250"
22.50"	16"	30"	0.375"
27.00"	20"	36"	0.500"
31.50"	24"	42"	0.500"

- CASING SPACERS ARE REQUIRED ON WATER MAIN AND SHALL BE INCIDENTAL TO CASING UNLESS OTHERWISE SPECIFIED.
- ALL WATER MAIN IN CASING PIPE SHALL BE APPROVED RESTRAINED JOINT.
- CASING PIPE TO BE WELDED STEEL WITH A MINIMUM YIELD OF 35,000 PSI. WALL THICKNESS AND SHALL BE AS DESIGNATED BY THE PERMITTING AUTHORITY. IN NO CASE SHALL THE CASING PIPE WALL THICKNESS BE LESS THAN 0.25". STEEL CASING PIPE SHALL BE COATED INSIDE AND OUT WITH AT MINIMUM, A BITUMINOUS ASPHALT COATING.
- CASING SPACERS SHALL BE STAINLESS STEEL AS MANUFACTURED BY CASCADE WATERWORKS MFG., ADVANCED PRODUCTS & SYSTEMS, INC. OR APPROVED EQUAL.

DR. *AMB* DATE. 01/13/2020

CH. *TMJ*

APPROVED

RWH

SAINT PAUL REGIONAL WATER SERVICES
CITY OF ST. PAUL, MN

TYPICAL CASING PIPE INSTALLATION

STANDARD
PLATE

D-6