

SECTION A-A

NOTES:

- 1. SPACING BETWEEN THE CASING INSULATORS SHALL BE PER THE MANUFACTURERS RECOMMENDATIONS EXCEPT THAT THERE SHALL BE AT LEAST 3 CASING INSULATORS PER PIPE SECTION, ON 12" FROM EACH JOINT AND ONE CENTERED. ADDITIONALLY, ONE INSULATOR SHALL BE INSTALLED 12" FROM EACH END OF THE CASING.
- 2. BOTH ENDS OF THE CASING BETWEEN THE CASING AND CARRIER PIPE MUST BE SEALED WATERTIGHT USING CONCRETE OR A HEAT SHRINK WRAP AROUND SEAL SUCH AS MODEL W/ AS MANUFACTURED BY PIPELINE SEAL AND INSULATOR LTD. OR APPROVED EQUAL. BANDS SHALL BE TYPE 316 STAINLESS STEEL.
- 3. ALL STEEL CASING PIPE JOINTS SHALL BE WELDED FULL CIRCUMFERENCE.
- 4. SIZE AND THICKNESS OF CASING SHALL BE AS SHOWN IN SCHEDULE.
- 5. CASING SHALL BE INSTALLED BY THE BORE AND JACK AND/OR TUNNEL METHOD.
- 6. THE STEEL CASING SHALL BE LINED AND COATED WITH HOT APPLIED COAL TAR ENAMEL PER AWWA C203. ENAMEL SHALL BE AWWA TYPE II.

| SCHEDULE STEEL CASING FOR PIPELINES | | | | | | |
|---|---|--|--|--|--|--|
| CARRIER PIPE NOMINAL SIZE (INCHES) | CASING WALL THICKNESS (INCH) | MINIMUM CASING O.D. (INCHES) | | | | |
| 8 10 12 14 15 16 18 20 21 24 27 30 | 3/8 3/8 3/8 7/16 7/16 1/2 1/2 1/2 1/2 1/2 5/8 5/8 5/8 | 20 22 24 26 26 30 32 34 34 42 42 | | | | |

| Revision | Ву | Approved | Date | CITY OF OCEANSIDE | | |
|----------|-----|----------|----------|-------------------|------------------------|---------|
| 03/02/01 | kal | | | CITY OF OCEANSIDE | Steven E Strapse | 9/17/17 |
| 08/30/04 | AC | | | 1 | CITY ENGINEER | Date |
| 09/24/10 | DW | | | | STANDARD DRAWING NO. R | RW-21 |
| 07/01/17 | SM | | 08/01/17 | | | |
| | | | | | DRAWING NO. 1 | \ |