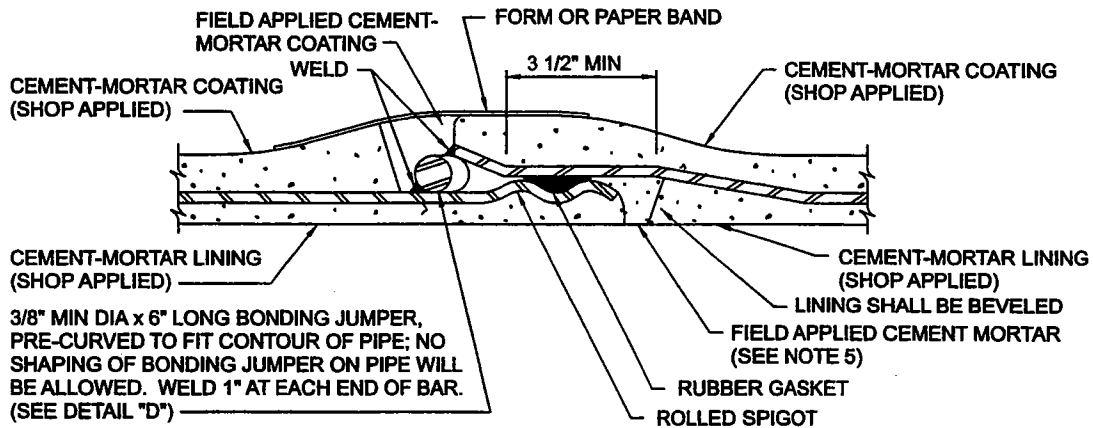
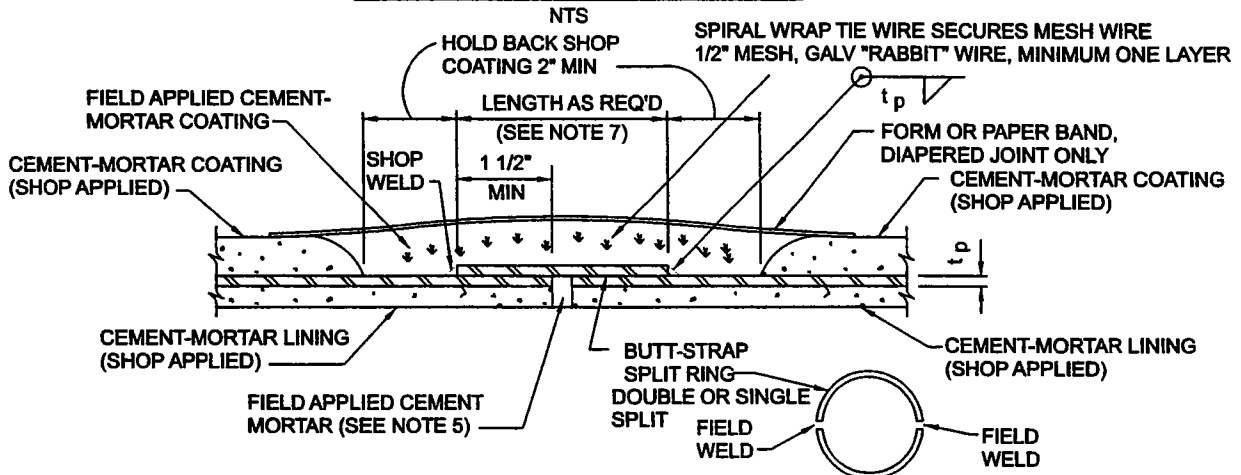


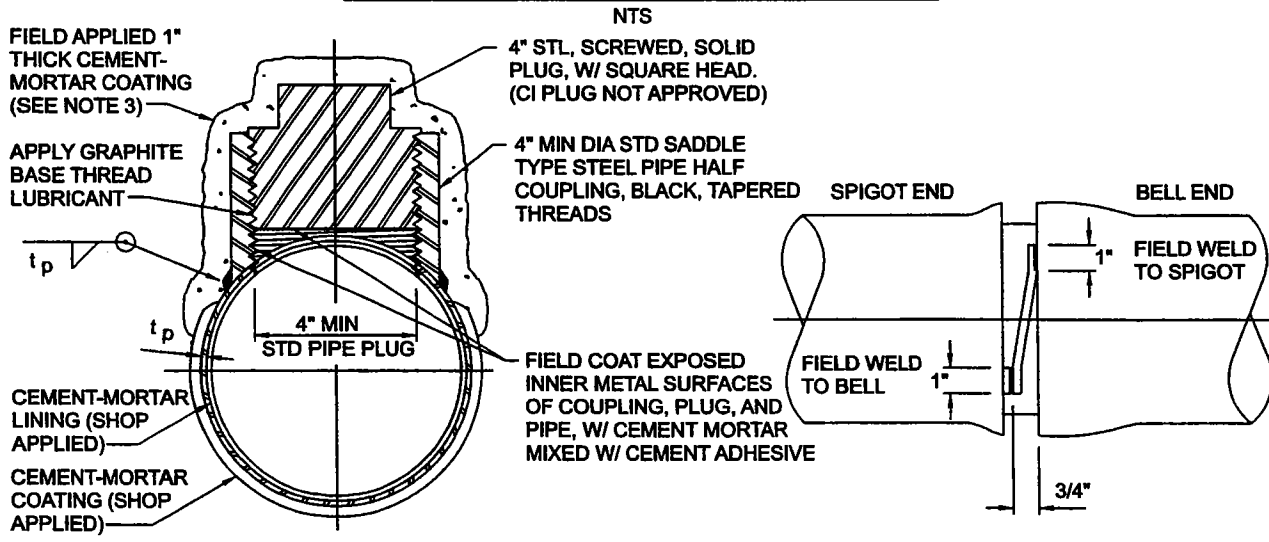
STEEL PIPE JOINT DETAILS



DETAIL A - RUBBER GASKET JOINT



DETAIL B - FIELD WELDED BUTT-STRAP JOINT



DETAIL C - POINTING HANDHOLE

DETAIL D - BONDING JUMPER

LOS ANGELES COUNTY WATERWORKS DISTRICTS

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SHEET 1 OF 2

STEEL PIPE JOINT DETAILS (CONTINUED)

GENERAL NOTES:

1. CEMENT MORTAR SHALL BE APPLIED TO WELDED JOINTS ONLY AFTER THE HEAT OF WELDING HAS DISSIPATED. JOINT WELDS SHALL NOT BE COOLED BY QUENCHING.
2. THE INTERIOR SURFACE OF JOINTS TO BE LINED WITH CEMENT MORTAR SHALL BE CLEANED, AND BRUSHED WITH APPROVED CEMENT ADHESIVE, IMMEDIATELY BEFORE THE MORTAR IS APPLIED.
3. CEMENT MORTAR FOR THE INTERIOR OF JOINTS SHALL CONSIST OF ONE PART CEMENT, ONE PART SAND, WATER, AND AN APPROVED CEMENT ADHESIVE ADDED ACCORDING TO MANUFACTURER'S RECOMMENDATIONS.
4. CEMENT MORTAR FOR THE EXTERIOR OF JOINTS SHALL CONSIST OF ONE PART CEMENT, ONE PART SAND, AND WATER, AND SHALL BE POURED INTO ONE SIDE OF FORM ONLY.
5. THE INTERIOR OF ALL JOINTS SHALL BE SWABBED BY MEANS OF A BALL AND ROD.
6. THE POINTING HANDHOLE SHALL BE INSTALLED ADJACENT TO A RUBBER GASKET JOINT, OR CENTERED OVER A BUTT-STRAP JOINT, AND SHALL BE USED AS NOTED ON PLANS OR WHERE A BALL AND ROD SWAB CANNOT BE USED.
7. FOR POINTING HANDHOLE, THE MINIMUM LENGTH OF THE BUTT STRAP SHALL BE 9 INCHES FOR ALL PIPE SIZES LISTED IN TABLE BELOW. WITHOUT HAND HOLE, THE MINIMUM LENGTH OF STRAP SHALL BE AS SHOWN IN THE FOLLOWING TABLE:

PIPE SIZES IN INCHES	MINIMUM LENGTH OF BUTT STRAP REQ'D IN INCHES
6 THRU 18	4
20 THRU 36	6

8. A BOLTED FLANGED JOINT MAY BE USED AS AN ACCEPTABLE ALTERNATE TO THE RUBBER GASKET OR THE BUTT-STRAP JOINT.

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