

San Antonio Water System Standard Specifications for Construction

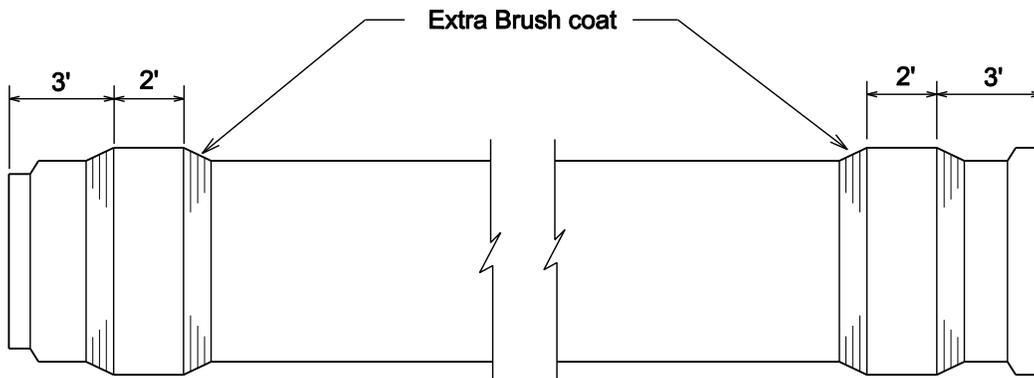
ITEM NO. 820
CONCRETE STEEL CYLINDER PIPE INSTALLATION

- 820.1** **DESCRIPTION:** This item shall consist of concrete steel cylinder pipe installation in accordance with these specifications and as directed by the Engineer.
- 820.2** **SUBMITTALS:** Contractor shall submit manufacturer's product data, instructions, recommendations, shop drawings, and certifications.
- 820.3** **MATERIALS:** The materials for concrete steel cylinder pipe installation shall conform to the specifications contained within the latest revision of SAWS' Material Specification Item No. 05-20, "Pre-stressed Concrete Pressure Pipe Steel Cylinder Type."
- 820.4** **CONSTRUCTION METHOD:** Concrete steel cylinder pipe shall be installed as specified within Item No. 812, "Water Main Installation" of these specifications. Bell holes for concrete steel cylinder pipe shall be of sufficient size to properly join the pipe and place the required grout. Subject to the above provisions, the length of excavation for bell holes below grade of the trench bottom shall be kept to a minimum.
- 820.5** **MEASUREMENT:** Concrete steel cylinder pipe will be measured by the linear foot for each size and type as follows:
- Measurements will be from the center line intersection of runs and branches of tees to the end of the valve of a dead end run.
- Measurements will also be between the center line intersection of runs and branches of tees. Where the branch is plugged for future connection, the measurement will include the entire laying length of the branch or branches of the fitting.
- The measurement of each line of pipe of each size will be continuous and shall include the full laying lengths of all fittings and valves installed between the ends of such line except that the laying length of reducers will be divided equally between the connected pipe sizes. Lines leading to a tapping connection with an existing main will be measured to the center of the main tapped.
- 820.6** **PAYMENT:** Payment for Concrete Steel Cylinder Pipe installed will be made at

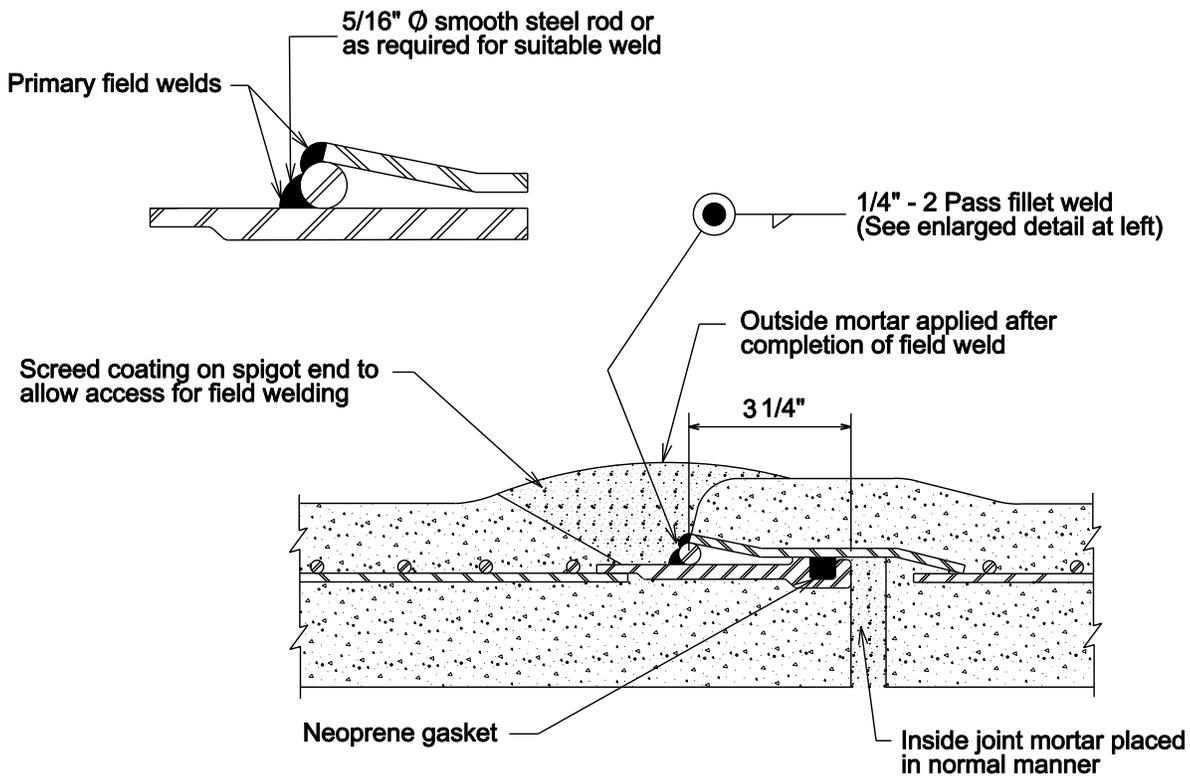
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the unit price bid per linear foot of pipe of the various sizes installed by the open cut method. Such payment shall also include excavation, selected embedment material, backfill, compaction, polyethylene sleeve, hauling and disposition of surplus excavated material, including all existing pipe, fittings, appurtenances to be abandoned (where specified or shown in the contract documents).

- End of Specification -



C.S.C. PIPE WITH EXTRA BRUSH COAT



FIELD PROCEDURE - Place a steel rod snugly into the recess between the bell and spigot as shown above and field weld as indicated. The weld should be continuous and need not be watertight. (No Skip Weld)

FIELD WELDED JOINT DETAIL

PROPERTY OF
SAN ANTONIO WATER SYSTEM
 SAN ANTONIO, TEXAS

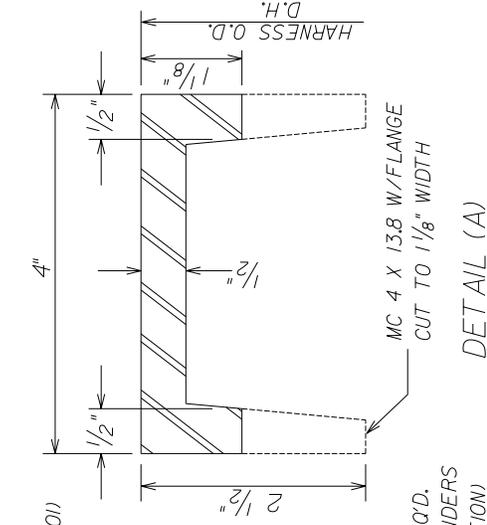
INSTALLATION OF C.S.C.
 PIPE IN CONDUIT OR BORE

APPROVED
 MARCH 2008

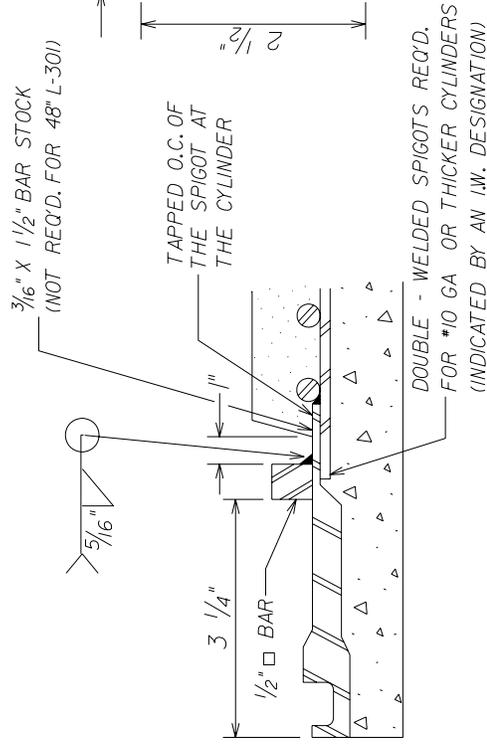
REVISED
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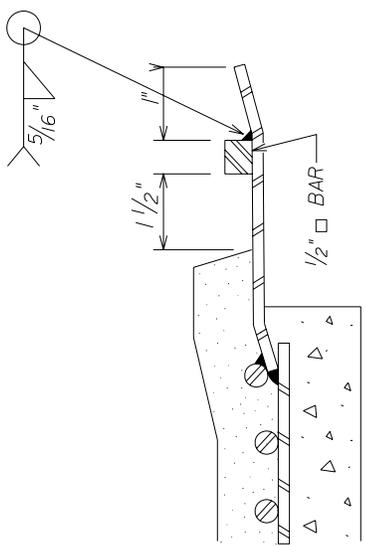
SHEET
 1 OF 3



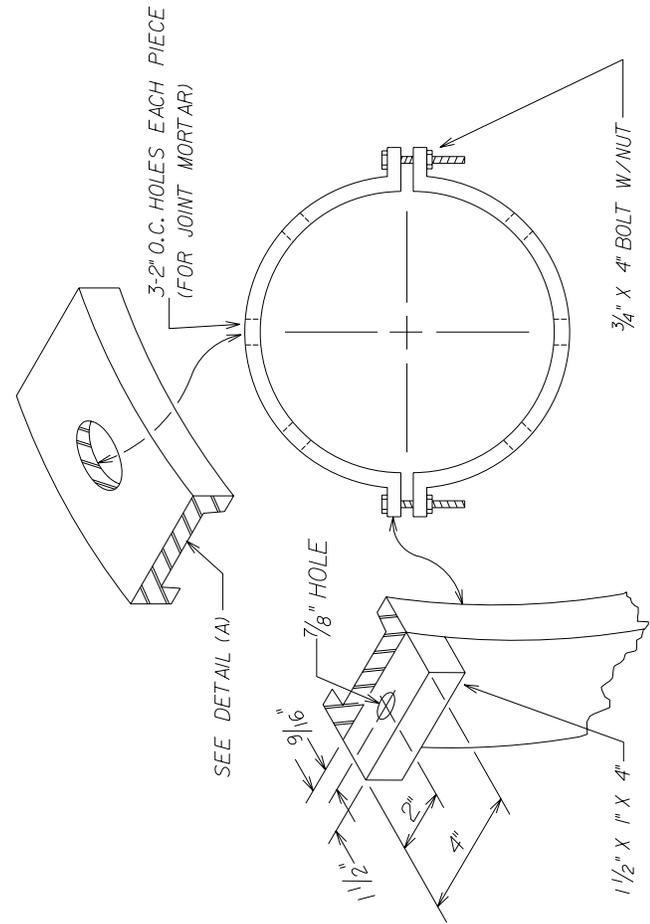
DETAIL (A)



TYPICAL SPIGOT DETAIL
FOR JOINT HARNESS



TYPICAL BELL DETAIL
FOR JOINT HARNESS



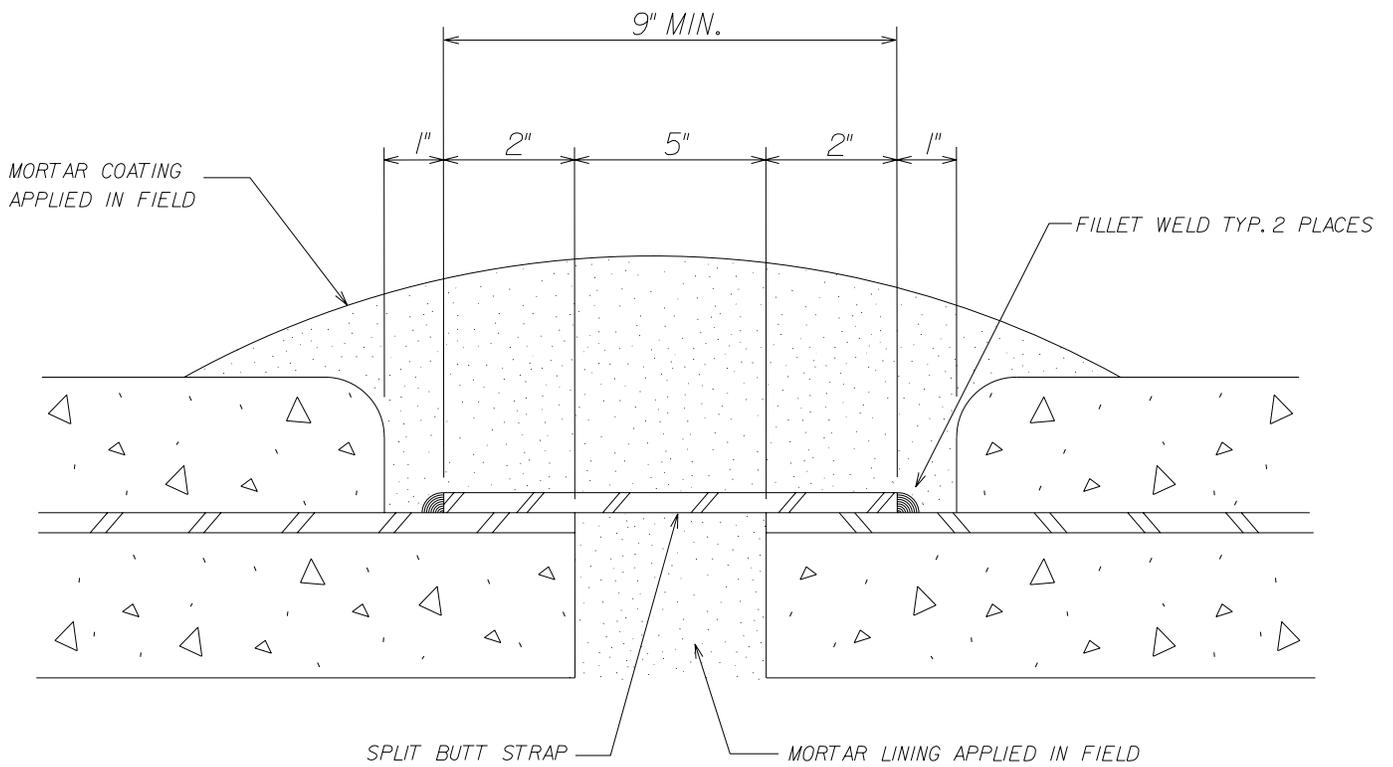
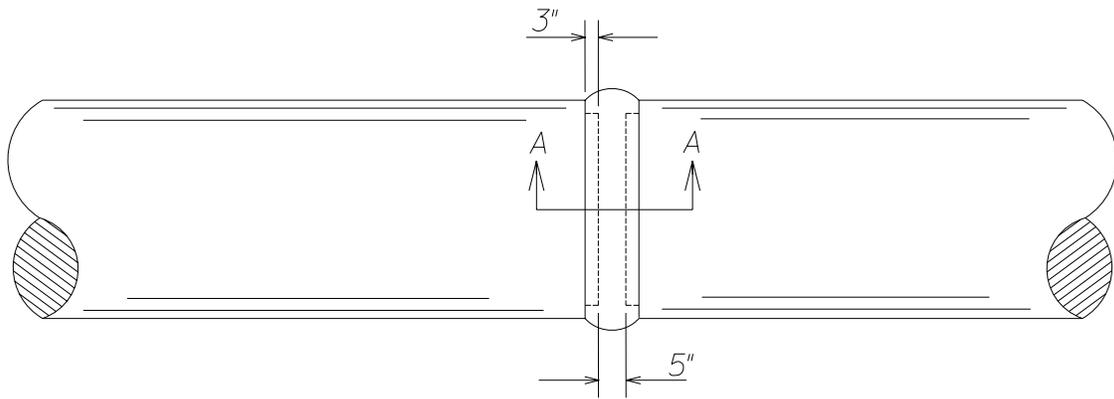
ASSEMBLED JOINT DETAIL
WITH JOINT HARNESS

ASSURE FULL CONTACT BETWEEN
BELL BAR FACE & HARNESS FLANGE
PRIOR TO MORTARING JOINT

NOTE:
1. HARNESS JOINT ASSEMBLY HAS BEEN DESIGNED
TO PROVIDE 3/4" JOINT FLEXIBILITY DURING INSTALLATION
2. 12" WIDE JOINT WRAPPER REQUIRED FOR EACH HARNESS JOINT

JOINT HARNESS DETAIL

PROPERTY OF SAN ANTONIO WATER SYSTEM SAN ANTONIO, TEXAS	JOINT HARNESS ASSEMBLY	APPROVED	REVISED
		MARCH 2008	
		DD-820-01	
		SHEET 2 OF 3	



DETAIL (A)

NOTE:

CEMENT MORTAR MAY BE APPLIED TO INTERIOR AND EXTERIOR OF JOINT FOR C.S.C. PIPE OR TO INTERIOR OF JOINT ONLY FOR STEEL PIPE.

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 SAN ANTONIO, TEXAS

SPLIT BUTT STRAP

APPROVED
 MARCH 2008

REVISED

DD-820-01

SHEET
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