

**NATURAL RESOURCES CONSERVATION SERVICE
CONSTRUCTION SPECIFICATION**

IA-52 STEEL PIPE CONDUITS

1. SCOPE

The work shall consist of furnishing and installing steel pipe complete with appurtenances.

2. MATERIALS

Steel pipe shall be new, new reject or used seamless and welded steel pipe. Reject or used pipe may be accepted if inspected by the Natural Resources Conservation Service before installation and found to be in good condition. All pipe must have the following minimum wall thickness.

<u>Pipe Diameter</u>	<u>Minimum Wall Thickness</u>
4-16"	1/4"
18-26"	9/32"
over 26"	3/8"

Unless otherwise specified, special fittings and appurtenances shall be of the same material as the pipe.

Steel welding electrodes shall conform to the requirements of American Welding Society specifications AWS A5.1. "Specification for Mild Steel Covered Arc-Welding Electrodes," except that they shall be uniformly and heavily coated (not washed) and shall be of such a nature that the coating will not chip or peel while being used with the maximum amperage specified by the manufacturer.

3. LAYING AND BEDDING THE PIPE

Pipe shall be laid to the line and grade shown on the drawings. Unless otherwise specified, the pipe shall be laid so that there are no reversals of grade between joints, and shall also be installed in accordance with the manufacturer's recommendations. The pipe shall be firmly and uniformly bedded to the depth and in the manner specified on the drawings. An ample "bell hole" working area may be left at pipe joints to perform welding, coating, etc., activities. The "bell hole" area shall then be bedded, as specified, prior to backfill operations.

The pipe shall be weighed down sufficiently to prevent its displacement from the bedding during placement of the backfill under the haunches.

4. JOINTS

Pipe joints shall conform to the details shown on the drawings and shall be sound and watertight.

Welded Joints. Welding and welded joints shall conform to the welding procedure details and requirements of AWWA Standard C 206. Field welding shall be done in such a way as to avoid burning the protective coating on the pipe except in the immediate vicinity of the weld.

Welded field joints shall be single welded butt joints or lap welded slip joints, as shown on the drawings.

5. HANDLING THE PIPE

The Contractor shall furnish such equipment as is necessary to place the pipe without damaging the pipe.

6. BACKFILLING

Backfill material shall have sufficient moisture so that optimum compaction can be obtained. Backfill around the pipe shall be placed in layers not more than 4 inches thick before compaction.

Each layer of backfill shall be compacted with power tampers, hand tampers, or plate vibrators to the same density requirements as specified for the adjacent embankment. Backfill over and around the pipe shall be brought up uniformly on all sides. The passage of earth moving equipment will not be allowed over the pipe until backfill has been placed above the top of the pipe surface to a depth of two (2) feet.

7. SPECIAL SPECIFICATIONS