

20. Entry Ports.

a. General Requirements.

- 1) Entry ports are required on pipelines 36-inch and larger diameter.
- 2) Locate entry ports along the pipeline:
 - a) Maximum spacing of entry ports shall be every two thousand (2000) feet.
 - b) Entry port should not be located at a low point on the pipeline.
 - c) Whenever possible, locate an entry port at every high point, with a maximum spacing of two thousand (2000) feet.

b. Piping and Vault Configuration.

- 1) For the piping and vault configuration for 36-inch to 48-inch diameter pipelines, refer to Standard Detail W/10.3. For pipelines larger than 48-inch diameter, provide design and details.
- 2) The minimum size of the entry port opening shall be 30-inch diameter for 36-inch to 48-inch diameter pipelines.
- 3) Provide a flanged tee for the entry port for 36-inch to 48-inch pipelines. For pipelines larger than 48-inch diameter, the flanged tee is not in accordance with AWWA C110, therefore verify layout dimensions and pressure rating of the tee with the manufacturer. Provide pipe and vault configuration similar to Standard Detail W/10.3.
- 4) Provide a blind flange designed to plug the branch outlet of the tee with the following requirements:
 - a) The material for the blind flange is to be steel, and shall meet the requirements of AWWA C207 and the Specifications. Specify the class of flange (per AWWA C207 standards) on the drawings.
 - b) Provide a total of four (4) lifting handles on the blind flange, placed ninety (90°) degrees apart, see Standard Detail W/10.3.
 - c) Provide a valve on the top of the blind flange, see Standard Detail W/10.3.
- 5) Locate entry port in a vault, see Standard Detail W/10.3.
 - a) Provide platforms in the vault along the pipeline for access into the entry port tee, see Standard Detail M/22.0.
 - b) Do not encase the joints on the entry port tee with concrete.

