GENERAL

This standard governs installation of air taps on 16" and smaller water mains. It does not govern automatic air release and vacuum valves on any size of main unless otherwise stated within this Construction Standard.

AIR TAP SIZE

Install 1" air taps on 4" through 12" mains. Install 2" air taps on 16" mains.

TAP PROCEDURE

Pipe with polywrap shall be wrapped with 3 complete layers of polyethylene compatible adhesive tape at the tap location. Width of area wrapped with tape shall be wide enough to protect the polywrap from damage caused by the tapping machine (6" minimum width). Tap shall be made through the tape, polywrap, and piping. After tapping, repair any damage to tape and/or polywrap.

Taps on PVC mains shall utilize a service saddle per M.U.D. 119, located in the Standard Specifications for Water Main Construction manual, as shown in Fig 1. Taps on HDPE mains shall utilize a saddle per construction standard 6.0.6 or contact Engineering for the proper saddle. See Fig 2.

INSTALLATION

Air taps shall be installed on all high points of water mains, as illustrated in Fig. 1 through Fig. 3. A high point includes any point on the main which becomes the point of highest elevation when a valve is closed.

Note: Thread sealant shall be NSF 61 approved Teflon tape or pipe dope (Rectorseal #5). The NSF 61 designation (not just NSF) shall be shown on the container to be approved.

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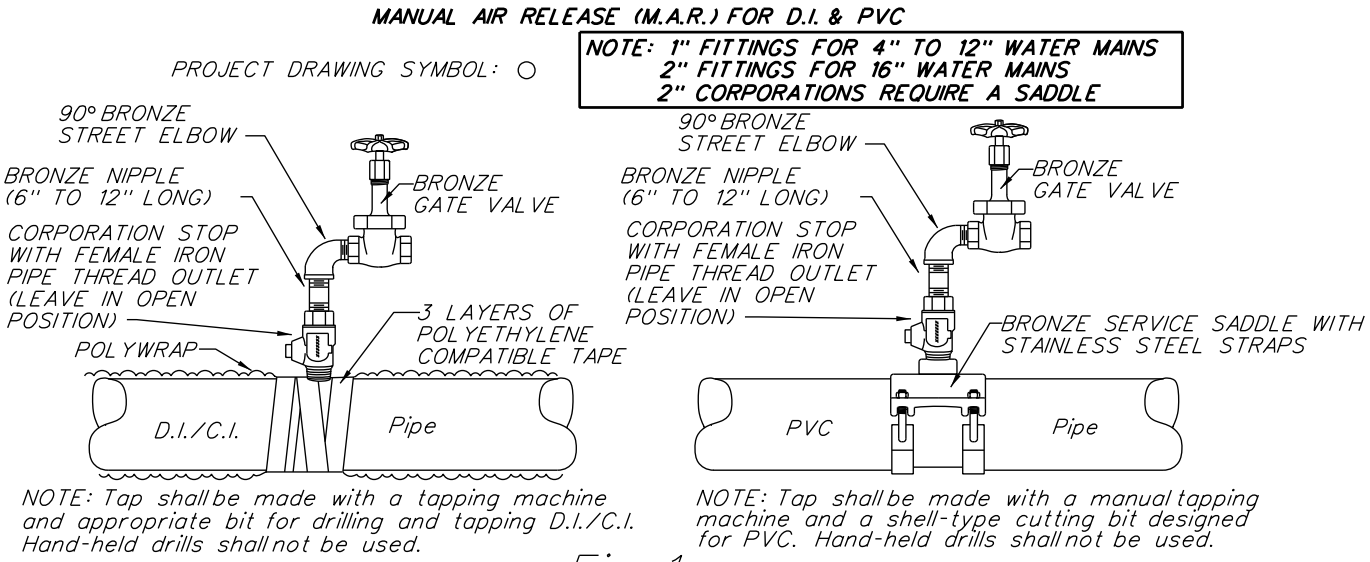

Fig 1

** Revised Drawing

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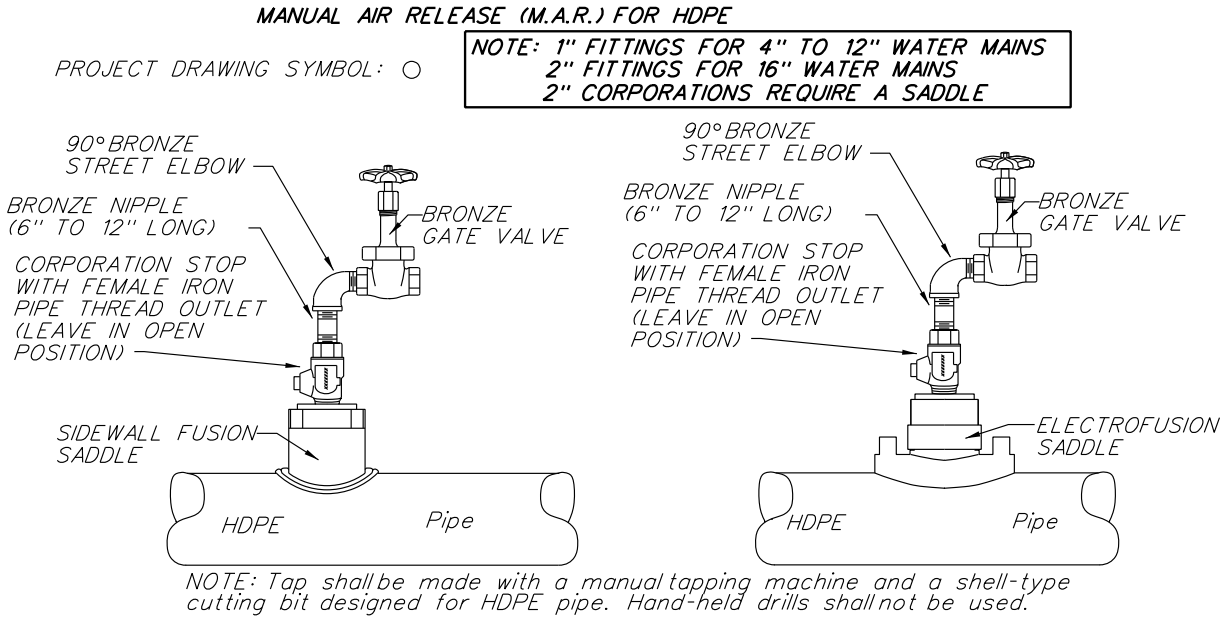

Fig 2

NOTE:

1. The bottom of the main shall be above the top of the vault floor.
2. If an air tap is installed with a gate valve, pipe the air tap toward the valve.
3. Do not locate air tap closer than 14" from pipe end or 12" from valve.
4. See M.U.D. 119, located in the Standard Specifications for Water Main Construction manual, for acceptable corporations, saddles, gate valves and air release valves.

Air taps shall be installed in 48" vaults. When an air tap and a valve occupy the same vault, install a 48" pre-cast vault for 4" through 14" valves and a 60" pre-cast vault for 16" valves. When two air taps and a valve, regardless of size, occupy the same vault, install a 60" vault.

** Revised Drawing

BUTTERFLY VALVE AIR TAPS

When installing an air tap adjacent to a butterfly valve, extend the piping into the vault over the valve operator. (See Fig 3). Size the pipe pass so the vault will not rest on the pipe.

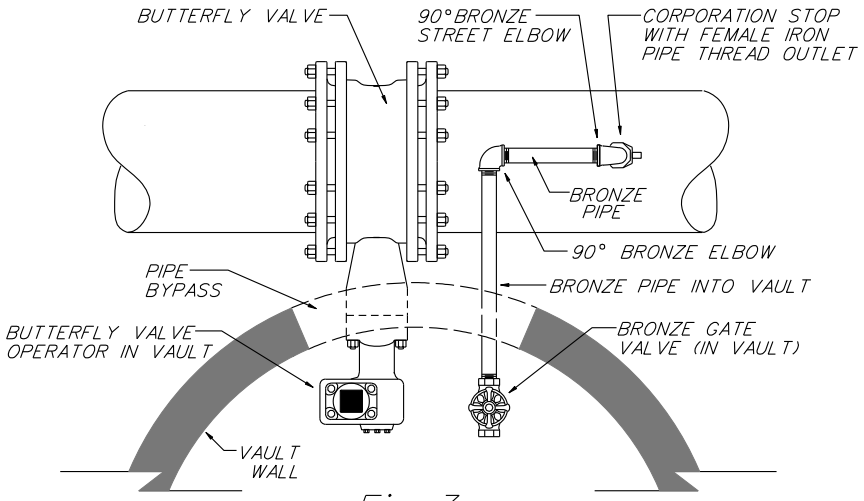

Fig 3

AIR TAP HYDRANTS

When convenient or if called for on the project drawings, use a fire hydrant as an air tap. On 6", 8", and 12" mains, install a typical hydrant branch. Where indicated on project drawings, air taps on 16" mains shall be Type 8 hydrants per Construction Standard 3.0.1.

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