

SECTION 2230 - AIR RELEASE, AIR/VACUUM RELEASE, AND COMBINATION AIR VALVES

PART 1 - GENERAL

1.1 SCOPE OF WORK:

Provide all labor, materials, equipment and services required to furnish and install all air release, air/vacuum release, and combination air valves (collectively "air valves"), manholes, and boxes shown on the drawings and/or specified herein. Air valves and manholes or curb boxes shall be installed at high points of water mains at locations shown on the plans or otherwise determined in the field by the ENGINEER.

1.2 RELATED WORK SPECIFIED ELSEWHERE:

A. Manholes: Section 2237

1.3 SUBMITTALS:

- A. Descriptive literature, catalog cuts, and dimensional prints clearly indicating all dimensions and materials of construction, shall be submitted on all items specified herein to the ENGINEER for review before ordering.
- B. At the time of submission, the CONTRACTOR shall, in writing, call ENGINEER's attention to any deviations that the submittals may have from the requirements of the ENGINEER's Contract drawings and specifications.

PART 2 - PRODUCTS

2.1 MANUAL AIR RELEASE VALVES (AIR RELEASE COCK):

- A. Manual air release valves on mains 12" and smaller shall consist of a 3/4" corporation stop, 3/4" water service piping, a 3/4" angle ball service valve (Ford #BA44-333W or equal), one 3/4" hose bib, 20" PVC meter pit, Wabash W-3 Meter Cover with Frost Lid (or equal), and a 1" PVC pipe cross brace. For water mains larger than 12", one inch (1") corporation stop, service piping, and angle ball service valve (Ford #BA44-444W) shall be used.
- B. Meter box should be located outside of roadways or driveways and should be flush with finished grade. The Angle Ball Service Valve should be installed directly above the 3/4" corporation stop. The 3/4" service piping should run inside the meter box from the angle ball service valve to the hose bib. The meter box should be set on the water main around the corporation stop. The 1" PVC brace should be inserted through holes in either side of the meter box, and the 3/4" service piping should be tied to the brace with stainless steel clamp(s).
- C. The hose bibb shall be mounted 16" to 20" below the finished grade.

2.2 AUTOMATIC AIR VALVE MANHOLES:

- A. Automatic air valve manholes shall be set on a crushed stone or gravel base. Foundation slab may be precast or poured-in-place, round or square, and shall extend at least six inches (6") outside the manhole wall.
- B. Manholes shall conform to standard specifications for precast manholes with slab tops, except that arch-shaped cutouts in the barrel section shall be fit over the water main instead of installing the water main through sealed openings in the manhole wall.
- C. The manhole lid shall be identified with the word "WATER" cast into the top.

PART 3 - BASIS OF PAYMENT

Payment for automatic air valves will be made at the Contract unit price each, complete in place, which price shall include compensation for furnishing and installing the corporation stop, connection piping, air valve(s), ball valve(s), manhole, gravel base, aggregate, and all other labor and materials necessary for a complete installation.

Payment for manual air release valves (air release cocks) will be made at the Contract unit price each, complete in place, which price shall include compensation for furnishing and installing the corporation stop, water service piping, curb stop, curb boxes, concrete or asphalt pad, and all other labor and materials necessary for a complete installation.

END OF SECTION