WATER RESOURCES
ENGINEERING DEPARTMENT

COMBINATION AIR RELEASE
VACUUM VALVE (WATER SERVICE)

1. D.I. WATER MAIN
2. - x 2" IP SADDLE
3. 2" BRASS NIPPLE
4. 2" BRASS BALL VALVE WITH HANDLE
5. 2"x3/4" BRASS TEE
6. ARV - AIR RELEASE VACUUM VALVE
7. 3/4" BRASS NIPPLE
8. 3/4" BRASS BALL VALVE
9. 3/4" FIP x FEMALE QUICK CONNECT #075D

CONC. GRADE RING IN ACCORDANCE WITH DETAIL S.2

STAINLESS STEEL DOUBLE STRAP SERVICE SADDLE NPT

60" DIAMETER (MIN.) DOGHOUSE MANHOLE

TRACER WIRE
MIN. 12 GAUGE, SINGLE STRAND COATED COPPER WIRE. INSTALL TRACER WIRE IN ACCORDANCE WITH FAYPWC REQUIREMENTS. SPLICES SHALL BE AS APPROVED BY THE FAYPWC PROJECT COORDINATOR. LOOP A MINIMUM OF 6' OF TRACER WIRE IN MANHOLE.

1 FULL JOINT DUCTILE IRON PIPE CENTERED AT VALVE

MANHOLE BASE SECTION SHALL BE SUPPORTED ON 4"x8"x16" SOLID CONCRETE BLOCKS STACKED 2 HIGH 180° APART.

24" (MIN.) NO. 57 OR NO. 5 STONE DRAINAGE PIT

FAYETTEVILLE PUBLIC WORKS COMMISSION
FAYETTEVILLE, N.C.

WATER RESOURCES ENGINEERING DEPARTMENT

FAYPWC RING AND COVER
IN ACCORDANCE WITH DETAIL S.7. NOTE: LID SHALL INDICATE "WATER".

FLAT TOP MANHOLE

2" BRASS NPT ISOLATION BALL VALVE (SEE DETAIL)

BRASS BIPPLE

FAYPWC RING AND COVER
IN ACCORDANCE WITH DETAIL S.7. NOTE: LID SHALL INDICATE "WATER".

FLAT TOP MANHOLE
NOTES:

1. Combination air release valves shall be of the single housing style that combines the operating features of both an air vacuum and air release valve.

2. The combination air release valve shall have 2" NPT inlet and 1" NPT outlet connections and a 3/16 inch diameter orifice (or orifice shall be determined by the engineer) for a maximum 200PSI working pressure.

3. All materials shall meet the standards and specifications of the Fayetteville Public Works Commission.

4. Manhole, frame, and cover shall be in accordance with FAYPWC standard details. Note: Lid shall indicate "WATER".

5. 2" tapping saddle shall be ductile iron with stainless steel straps, bolts, nuts, and washers.

6. Saddles for pipe sizes 8" thru 24" shall be double strap.

7. All internal parts shall be 316 stainless steel.

8. The combination air release valve shall have a single float design.

9. All combination air release valves shall be installed in accordance with manufacturer recommendations.

10. All combination air release valves shall be CRISPIN model UX20, ARI D-020, or approved equal.

11. Combination air release valve shall be centered in manhole. Offset the ring and cover to allow access.

12. Top of water main shall be a minimum 4' deep at air release valve, unless otherwise required due to force main and/or combination air release valve size.

13. Combination air release valve bodies shall be made of stainless steel or reinforced nylon.

14. The manhole shall be cast with an anti-microbial additive (CON-SHIELD or approved equal.)