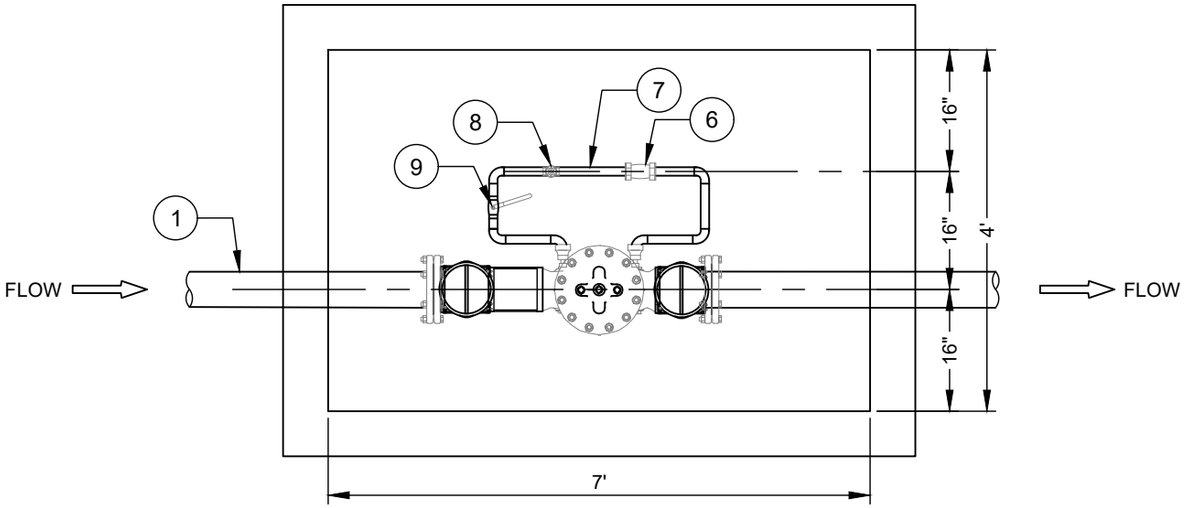
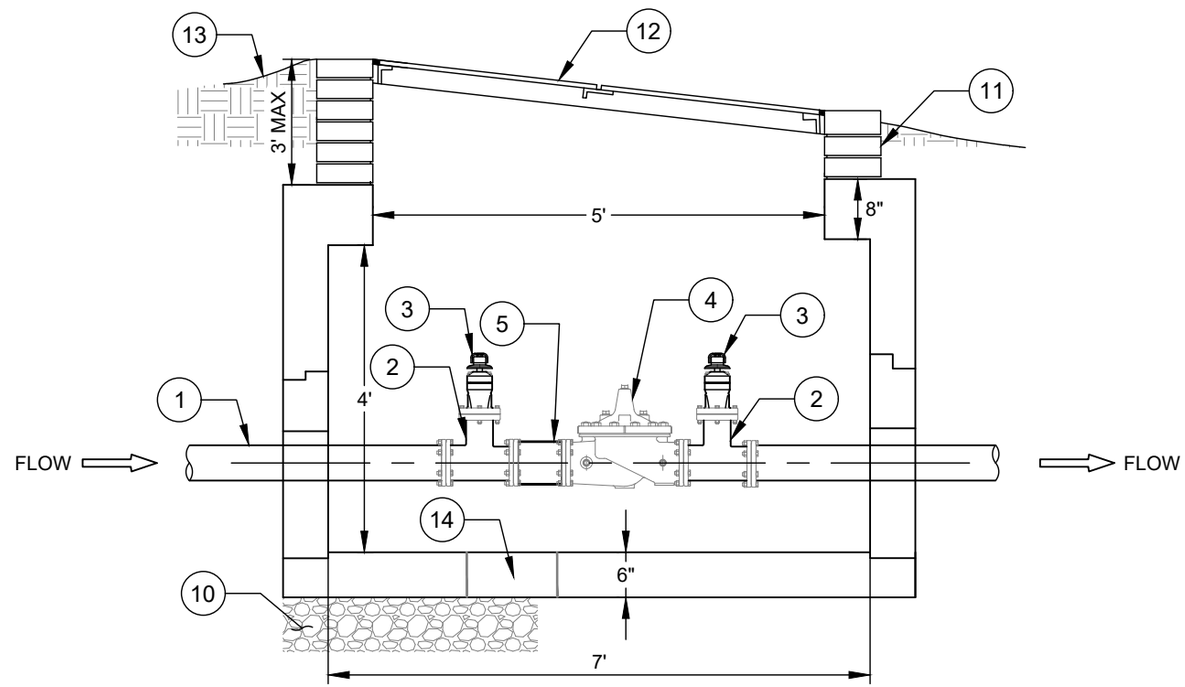


PLAN VIEW



ELEVATION VIEW

NO. DESCRIPTION:

1. 4" WATER MAIN.
2. 4" X 4" TEE (TYP.).
3. 4" GATE VALVE (TYP.).
4. 4" PRV.
5. 4" DISMANTLING JOINT.
6. 1" GATE VALVE (TYP.).
7. 1" BRASS PIPE.
8. 1" PRV.
9. 1" BALL VALVE.
10. #57 WASHED STONE.
11. MINIMUM OF 3 STANDARD BRICK COURSES LOCATED UNDER FRAME, OR UNDER FLAT SLAB TOP.
12. 5' X 4' DOUBLE LEAF STEEL COVER, HINGED & LOCKABLE. SEE STD. DETAIL.
13. FINISHED GRADE TO DRAIN AWAY FROM COVER.
14. 12" DIAMETER SUMP.

NOTES:

A. ALL PIPING SHALL BE MINIMUM CLASS 53 FLANGE DUCTILE IRON WITH FULL FACE GASKETS.
B. ALL FLANGE HARDWARE (BOLT/WASHER/NUT) SHALL BE STAINLESS STEEL - TYPE 304 WITH ANTI-SEIZE COMPOUND.
C. ALL PIPE SHALL BE RESTRAINED FROM TAP TO PROPERTY LINE VALVE.
D. VAULT SHALL BE RATED FOR NCDOT HS-20 LOADING - SUBMIT SHOP DRAWINGS/P.E. SEALED FOR REVIEW.
E. ALL CONCRETE SHALL BE MINIMUM 3,600 PSI COMPRESSIVE STRENGTH.
F. DESIGN SHALL CONFORM TO ASTM C858 - SPECIFICATIONS FOR "UNDERGROUND PRECAST CONCRETE UTILITY STRUCTURE".
G. STEEL REINFORCING DESIGN SHALL CONFORM TO ASTM C857.
H. REBARS SHALL BE GRADE 60 PER ASTM A615.
I. WELDED WIRE FABRIC SHALL CONFORM TO ASTM A185.
J. DIAGONAL REINFORCING SHALL BE ADDED AT ALL OPENINGS.
K. PIPE PENETRATIONS SHALL BE SEALED WITH FLEXIBLE CONNECTERS (MANHOLE BOOTS) OR WITH 4" OF BRICK & MORTAR (AND 1/2-INCH THICK CONSTRUCTION EXPANSION MATERIAL AROUND THE PIPE).
L. FRAME TO BE FLUSH WITH GROUND OR CONCRETE SIDEWALK, GROUND SHALL SLOPE AWAY FROM VAULT.
M. ALL JOINTS SHALL BE MADE WATERTIGHT USING 2 RINGS OF BUTYL RUBBER JOINT MASTIC.

CHARLOTTE WATER

CHARLOTTE WATER
A CITY OF CHARLOTTE DEPARTMENT
STANDARD DETAILS
WATER

4-INCH PRESSURE REDUCER VALVE

NO SCALE

VERSION 1.0

DATE 04/2024

DETAIL 10.8.4