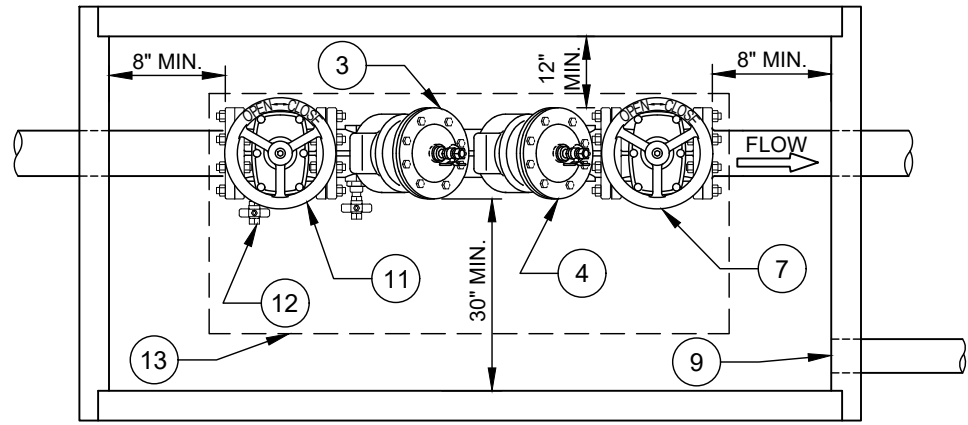
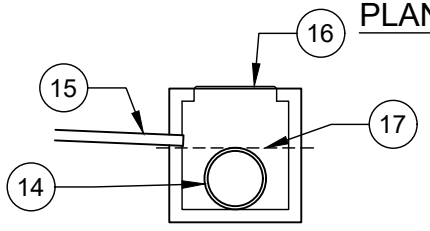


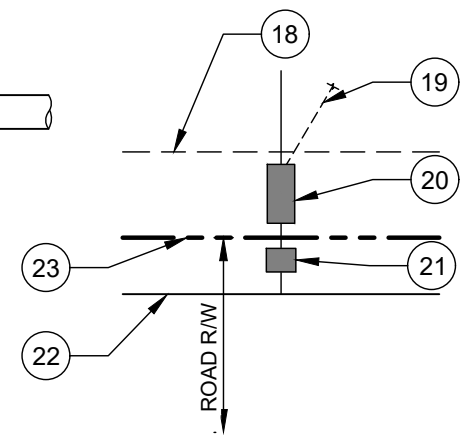
**ELEVATION VIEW**



**PLAN VIEW**



**DRAIN ALTERNATIVE:**  
TIE INTO PRIVATE CATCH BASIN OR PRIVATE STORMWATER MANHOLE PER DETAIL SHOWN ABOVE. NO TIE IN TO STORMWATER PIPE OR PUBLIC CATCH BASIN / MANHOLE WILL BE ACCEPTED.



**TYPICAL LOCATION REQUIREMENT FOR BELOW GROUND INSTALLATION**

N.T.S.

- NO. DESCRIPTION:**
1. SLEEVE REQUIRED (TYP.).
  2. 4' X 5', 5' X 5' OR 4' X 6' DOUBLE LEAF STEEL OR ALUMINUM DOORS HINGED AND LOCKABLE. SEE NOTE F.
  3. CHECK VALVE #1.
  4. CHECK VALVE #2.
  5. FINISHED GRADE TO BE SLOPED AWAY FROM COVER.
  6. 6" MIN. WHEN VALVE IS FULLY OPEN. VALVE CANNOT EXTEND THROUGH TOP.
  7. SHUT-OFF VALVE #2. SEE NOTE B.
  8. DIP OR TYPE K OR L COPPER TUBING FOR MIN. OF 5' ON EACH END OF ASSEMBLY. SEE NOTE D.
  9. 4" MIN. DIAMETER DRAIN BY GRAVITY TO ATMOSPHERE AS REQUIRED BY CLTW SPECIFICATIONS. SEE NOTE G.
  10. LOWEST POINT.
  11. SHUT-OFF VALVE #1. SEE NOTE B.
  12. TEST COCK #1.
  13. VAULT LID.
  14. STORM PIPE.
  15. DRAIN FROM BACKFLOW VAULT.
  16. CATCH BASIN WITH GRATE.
  17. TOP OF DISCHARGING STORM PIPE.
  18. ZONING SETBACK.
  19. DRAIN.
  20. CLTW REQUIRED BPA BELOW GROUND. SEE NOTE H AND I.
  21. CLTW METER.
  22. PUBLIC WATER MAIN.
  23. PROPERTY LINE OR R/W.

- NOTES:**
- A. BACKFLOW PREVENTION ASSEMBLIES (BPA's) SHALL CONFORM TO CLTW SPECIFICATIONS. SHUT-OFF VALVES ARE SPECIFIC TO EACH APPROVED BPA AND NO SUBSTITUTIONS OF SHUT-OFF VALVES ARE PERMITTED. REFER TO CLTW APPROVED LIST OF BPA's.
  - B. FIRE LINE SERVICES SHALL HAVE OUTSIDE STEM AND YOKE (OS & Y) HANDWHEEL OPERATORS OR BUTTERFLY VALVES, AND LISTED ON APPROVED LIST AS FIRE APPROVED. IF SERVING FIRE SPRINKLERS, TAMPER SWITCHES ARE REQUIRED.
  - C. ASSEMBLIES SHALL BE INSTALLED UPRIGHT AND IN THE HORIZONTAL POSITION.
  - D. PIPE MATERIAL AND FITTINGS SHALL BE AS SPECIFIED IN CLTW STANDARDS & SPECIFICATIONS.
  - E. VAULT AND SUPPORT OF ASSEMBLY SHALL BE DESIGNED BY OWNER, 8" - 12" SHALL BE SUPPORTED AT EACH VALVE.
  - F. ACCESS DOORS SHALL BE AS SPECIFIED IN CLTW WATER DETAILS OR APPROVED EQUAL.
  - G. DRAINAGE INLET MAY BE PROVIDED AS SHOWN OR AS FLOOR DRAIN.
  - H. ALL LOCATIONS FOR BPA's REQUIRE CLTW APPROVAL.
  - I. THERE SHALL BE NO TAPS, PIPING BRANCHES, UNAPPROVED BYPASS PIPING, HYDRANTS, FIRE DEPT. CONNECTION POINTS, OR OTHER WATER - USING APPURTENANCES CONNECTED TO THE SUPPLY LINE BETWEEN ANY WATER METER AND ITS CLTW - REQUIRED BACKFLOW PREVENTER.
  - J. EACH CLTW-REQUIRED BPA IS REQUIRED TO BE TESTED BY A CLTW - APPROVED CERTIFIED TESTER PRIOR TO PLACING THE WATER SYSTEM IN SERVICE. TEST RESULTS SHALL BE SUBMITTED TO CLTW WITHIN 30 DAYS AND TESTED ANNUALLY THEREAFTER SUBMITTING RESULTS TO CLTW.
  - K. ALL INSTALLATIONS INTENDED FOR ADDRESSING CLTW REQUIREMENTS, REQUIRE PRIOR APPROVAL FROM THE APPROPRIATE CLTW BACKFLOW INSPECTOR.

CHARLOTTE WATER  
A CITY OF CHARLOTTE DEPARTMENT

**WATER**

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CHARLOTTE WATER  
A CITY OF CHARLOTTE DEPARTMENT  
STANDARD DETAILS

**BACKFLOW PREVENTION**

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**DOUBLE CHECK VALVE ASSEMBLY (DC)**  
**2 1/2" - 12" BELOW GROUND VAULT**

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NO SCALE

VERSION  
1.0

DATE  
04/2024

DETAIL  
14.1.5