

PROJECT

EXPANSION

VIRGINIA TECH

CLIENT

4 RIVERSIDE CIRCLE

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CONSULTANT

Roanoke, Virginia 24011

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SLAM

STUDIO

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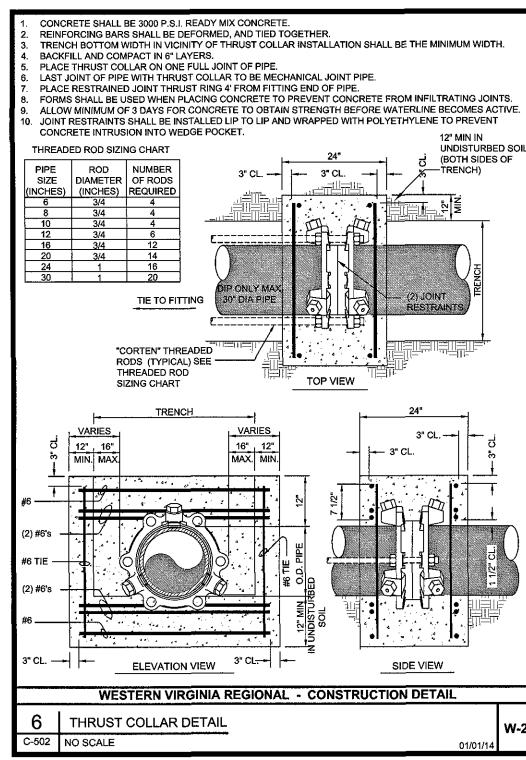
VIRGINIA TECH CARILION (VTC)

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INSTALLATION OF DUCTILE IRON WATER MAINS

Maximum Joint Deflection Full Length of Pipe - Push on Type Joint

Maximum Offset - S* (Inches)

Pipe Size Angle - 0 Length Length Length Length (inches) (degree) 18-Feet 20-Feet 18-Feet 20-Feet

3 5° 19 21 205 230

20 3° 11 12 340 380

30 3° 11 12 340 380

For 14-inch and larger push-on joints, maximum deflection angle may

INSTALLATION OF DUCTILE IRON WATER MAINS

TABLE 4 AWWA C600-05 Maximum Joint Deflection Full Length of Pipe - Mechanical Joint Pipe

Pipe Size Angle - 8 Length Length Length Length (inches) (degree) 18-Feet 20-Feet 18-Feet 20-Feet

8 5°-21" 20 22 195 220

24 2°-23" 9 10 450 500

C-502 NO SCALE

12 DUCTILE IRON PIPE DEFLECTION ALLOWANCE TABLES

Maximum Offset - S*

be larger than shown above. Consult the manufacturer.

Produced by Succession of Joint

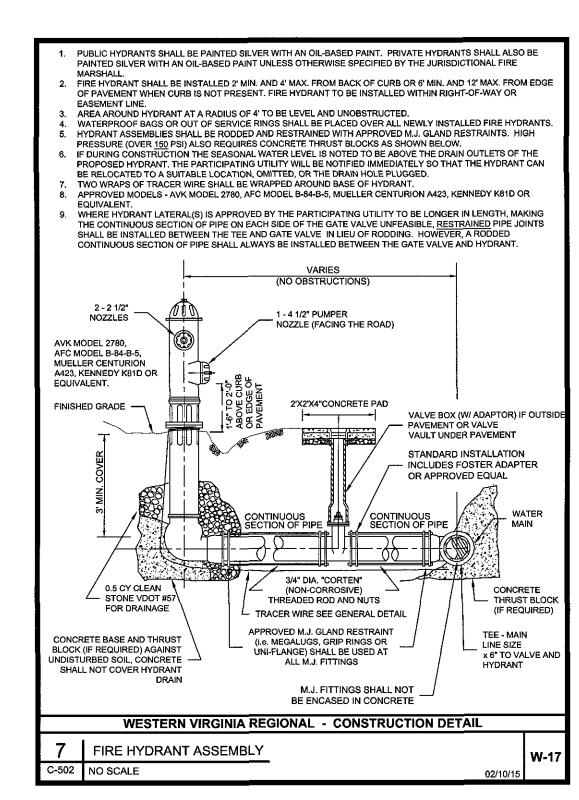
of Curve - R* Succession of Joints

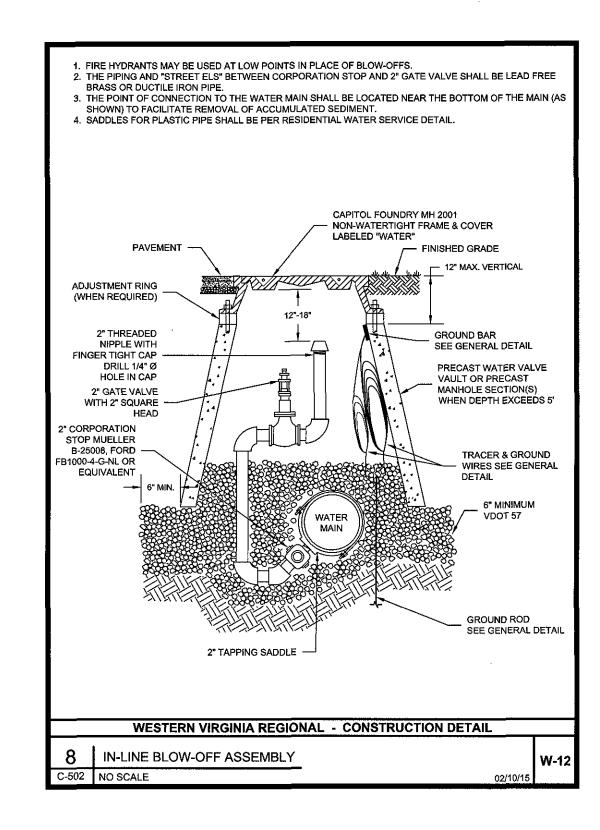
WESTERN VIRGINIA REGIONAL - CONSTRUCTION DETAIL

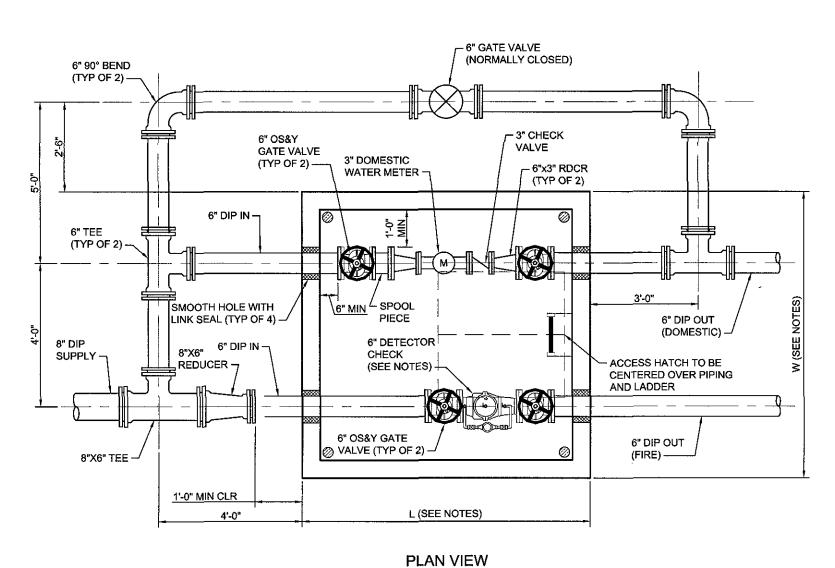
 θ = deflection angle

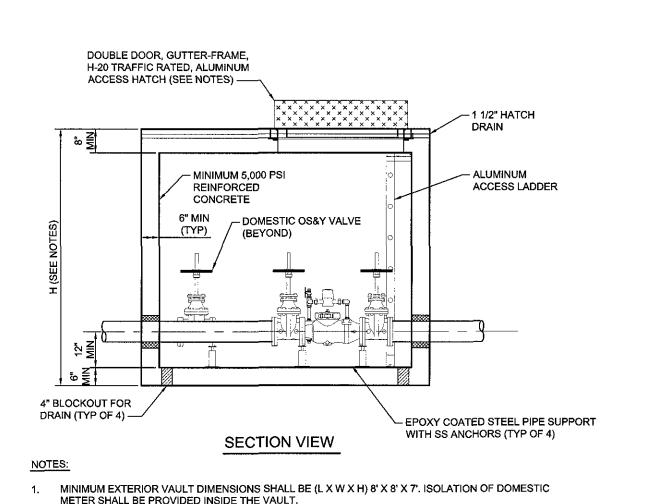
FIGURE 4

S = JOINT DEFLECTION OFFSET L = LAYING LENGTH R = RADIUS OF CURVE $R = \frac{1}{2} / (2 \tan \theta / 2)$









9 COMMERCIAL METER VAULT

SINGLE DETECTOR CHECK VALVE SHALL BE WILKINS 310 DALM, WATTS ES-SS07F - BP, OR APPROVED EQUAL WITH FLANGED END CONNECTIONS, BYPASS ASSEMBLY, AND TWO OS&Y GATE

DOMESTIC METER AND BYPASS METER TO BE SUPPLIED BY OWNER AND INSTALLED BY VENDOR.

PROVIDE MINIMUM OF 6" COMPACTED VDOT #57 STONE BENEATH VAULT WITH FILTER FABRIC

PLACED BETWEEN BOTTOM OF VAULT AND STONE BEDDING. FILTER FABRIC SHALL EXTEND

CONTRACTOR SHALL PROVIDE SHOP DRAWING OF COMMERCIAL METER VAULT TO WWWA FOR

DOMESTIC METER SHALL BE DUCTILE IRON PIPE WITH CHECK VALVE ON OUTLET.

CONTRACTOR SHALL PROVIDE 2- SENSUS SMART POINT RADIO READ RECESSED

DOMESTIC BYPASS SHALL BE PROVIDED OUTSIDE THE VAULT.

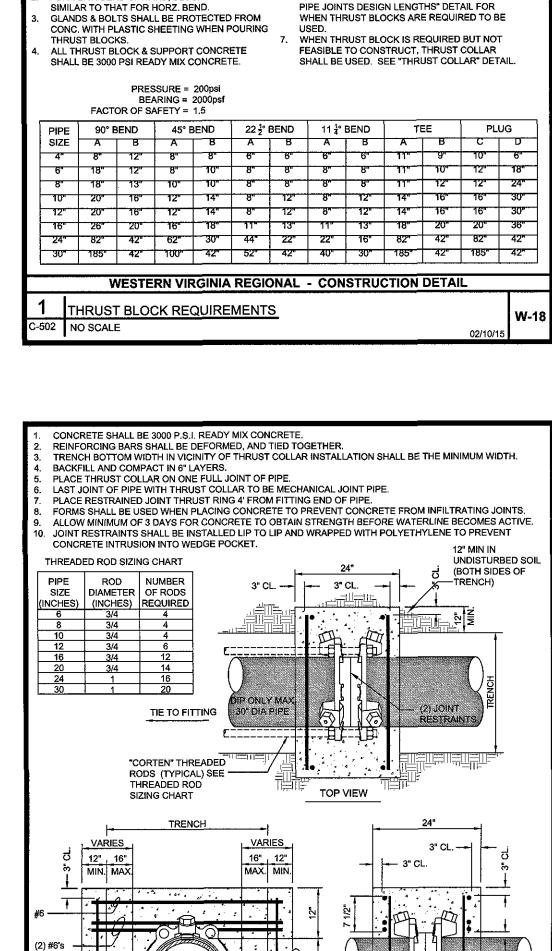
VERTICALLY A MINIMUM OF 6" ON ALL FOUR SIDES OF VAULT.

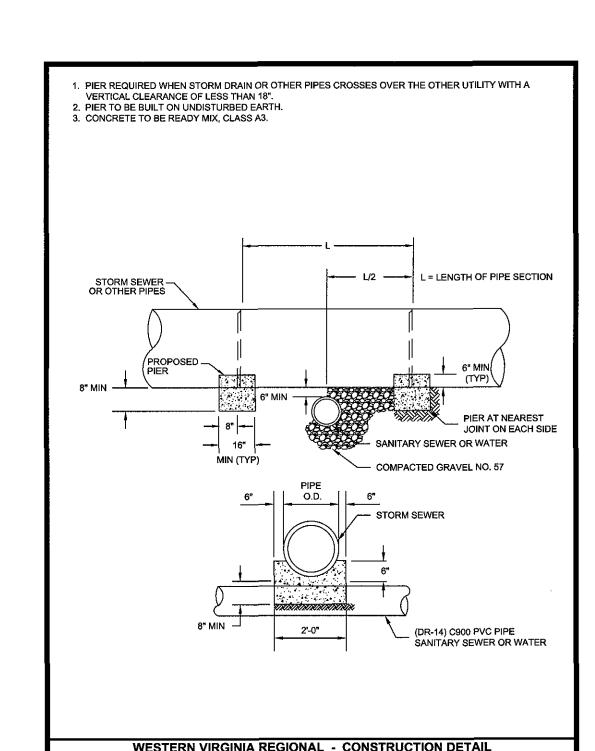
APPURTENANCES IN THE ACCESS HATCH LID.

ISSUE/REVISION 01/19/2018 CITY CP SUBMISSION 12/04/2017 FOR PRESUBMISSION MEETING 12/01/2017 FOUNDATION SUBMISSION DATE DESCRIPTION KEY PLAN

PROJECT NUMBER CIVIL DETAILS

SHEET NUMBER





11 CONCRETE PIER DETAIL

C-502 NO SCALE