



WESTERN VIRGINIA REGIONAL - CONSTRUCTION DETAIL

TYPICAL WATER
PRESSURE TEST RIG

01/01



TAPPING SLEEVE AND VALVE

01/01/14

* SEE FIGURE 4.
For 14-inch and larger push-on joints, maximum deflection angle may be larger than shown above. Consult the manufacturer.

INSTALLATION OF DUCTILE IRON WATER MAINS
TABLE 4 AWWA C600-05
Maximum Joint Deflection Full Length of Pipe - Mechanical Joint Pipe

* SEE FIGURE 4.

WESTERN VIRGINIA REGIONAL - CONSTRUCTION DETAIL

DUCTILE IRON PIPE DEFLECTION ALLOWANCE TABLES

01/01/14



FIRE HYDRANT ASSEMBLY

W-17

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- Diagram illustrating the cross-section of a trench excavation for pipe installation, showing various layers and materials:
- FINISHED GRADE
 - NORMAL SOIL CONDITIONS
 - 3' MIN
 - NON-DETECTABLE WARNING TAPE, 3 TO 5 MILS IN THICKNESS, TO BE INSTALLED APPROX. 24" ABOVE PIPE AND AT A MINIMUM OF 6" BELOW GRADE (ALL PIPE)
 - BACKFILL ONLY WITH APPROVED MATERIAL PER APPLICABLE LOCALITY OR VDOT STANDARDS
 - PIPE SIZE & MATERIAL AS SHOWN ON PLAN
 - FOR WATERLINES INSTALL BEDDING STONE TO SPRING LINE OF PIPE AT A MINIMUM, OR PER MANUFACTURER'S RECOMMENDATION
 - FOR SEWER LINES BEDDING SHALL BE MIN. 6" ABOVE PIPE
 - (4' MIN - 6" IN ROCK CONDITIONS)
 - WIDTH OF TRENCH EXCAVATION PIPE DIA. + 6" EACH SIDE (MINIMUM)
 - LOCATION OF TRACER WIRE WITH NON-METALLIC PRESSURE PIPE. TRACER WIRE NOT REQUIRED FOR TYPICAL GRAVITY SANITARY SEW. SEE DETAIL G-4 FOR ADDITIONAL REQUIREMENTS

WESTERN VIRGINIA REGIONAL - CONSTRUCTION DETAIL

BEDDING AND BACKFILL OUTSIDE OF PAVED AREAS

08/01

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- EXISTING PAVEMENT SECTION
- LIMITS OF OPEN CUT
- SURFACE MIX ASPH
BASE MIX ASPHALT
SUBBASE
- BACKFILL ONLY WITH APPROVED MATERIAL PER APPLICABLE LOCALITY OR VDOT STANDARDS
- PIPE SIZE & MATERIAL AS SHOWN ON PLAN
- SEE BEDDING NOTE BELOW
- (6" IN ROCK CONDITIONS)
- 4"
- WIDTH OF TRENCH EXCAVATION
PIPE DIA. + 6" EACH SIDE (MINIMUM)
- NON-DETECTABLE WARNING TAPE,
3 TO 5 MILS IN THICKNESS, TO BE
INSTALLED APPROX.
24" ABOVE PIPE AND
AT A MINIMUM OF
6" BELOW GRADE
(ALL PIPE)
- LOCATION OF TRACER WIRE WITH
NON-METALLIC PRESSURE PIPE
TRACER WIRE NOT REQUIRED FOR
TYPICAL GRAVITY SANITARY SEWER
- DEPTH VARIES

WESTERN VIRGINIA REGIONAL - CONSTRUCTION DETAIL

BEDDING AND BACKFILL
UNDER PAVEMENT AND IN RIGHT-OF-WAY

08/01/15

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- Diagram illustrating two methods for grounding a 5' trace safe:
- Left Method:** A ground bar is shown with a 5" span and a 1" height. A locating clip (TS19-IL-LC-C) is attached to the bar. A ground wire is connected to the safe, and the safe is labeled "5' TRACE SAFE". The connection is labeled "TO GROUNDING SOURCE".
 - Right Method:** A tracer wire access box lid is shown with a 3 1/8" span and a 1 1/2" height. A locating clip (TS19-IL-LC-C) is attached to the lid. A 5' trace safe is connected to the lid, and the connection is labeled "5' TRACE SAFE".

WESTERN VIRGINIA REGIONAL - CONSTRUCTION DETAIL

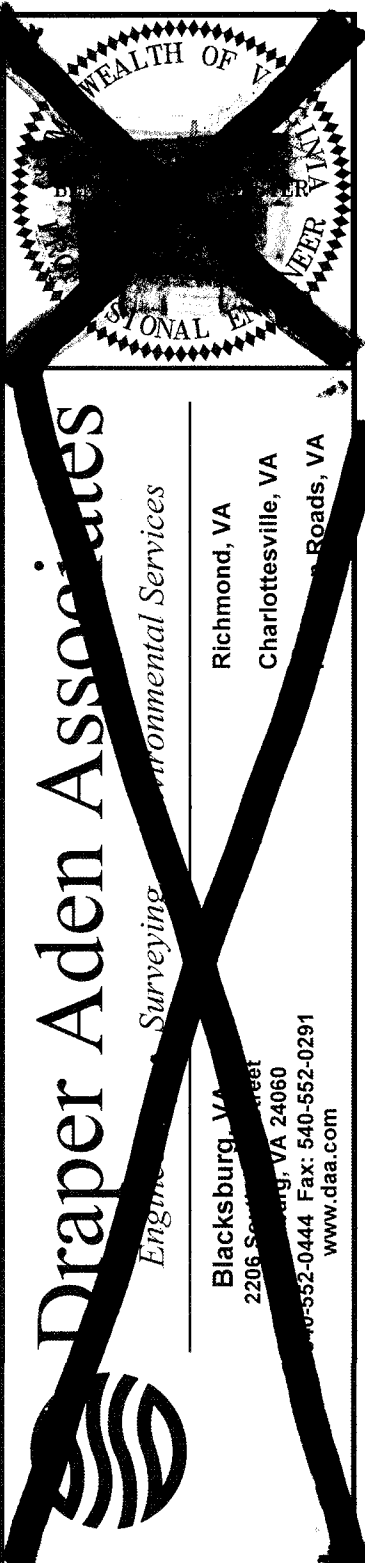
TRACER WIRE FOR NON-METALLIC PRESSURE PIPE

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WESTERN VIRGINIA REGIONAL - CONSTRUCTION DETAIL

CONCRETE PIER

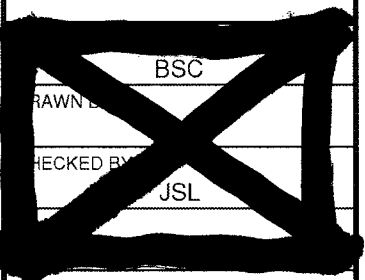
G-8



DETAILS

OAKLAND BLVD. WATER MAIN
REPLACEMENT
ROANOKE, VIRGINIA

REVISIONS



DATE: _____

2/6/2018

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