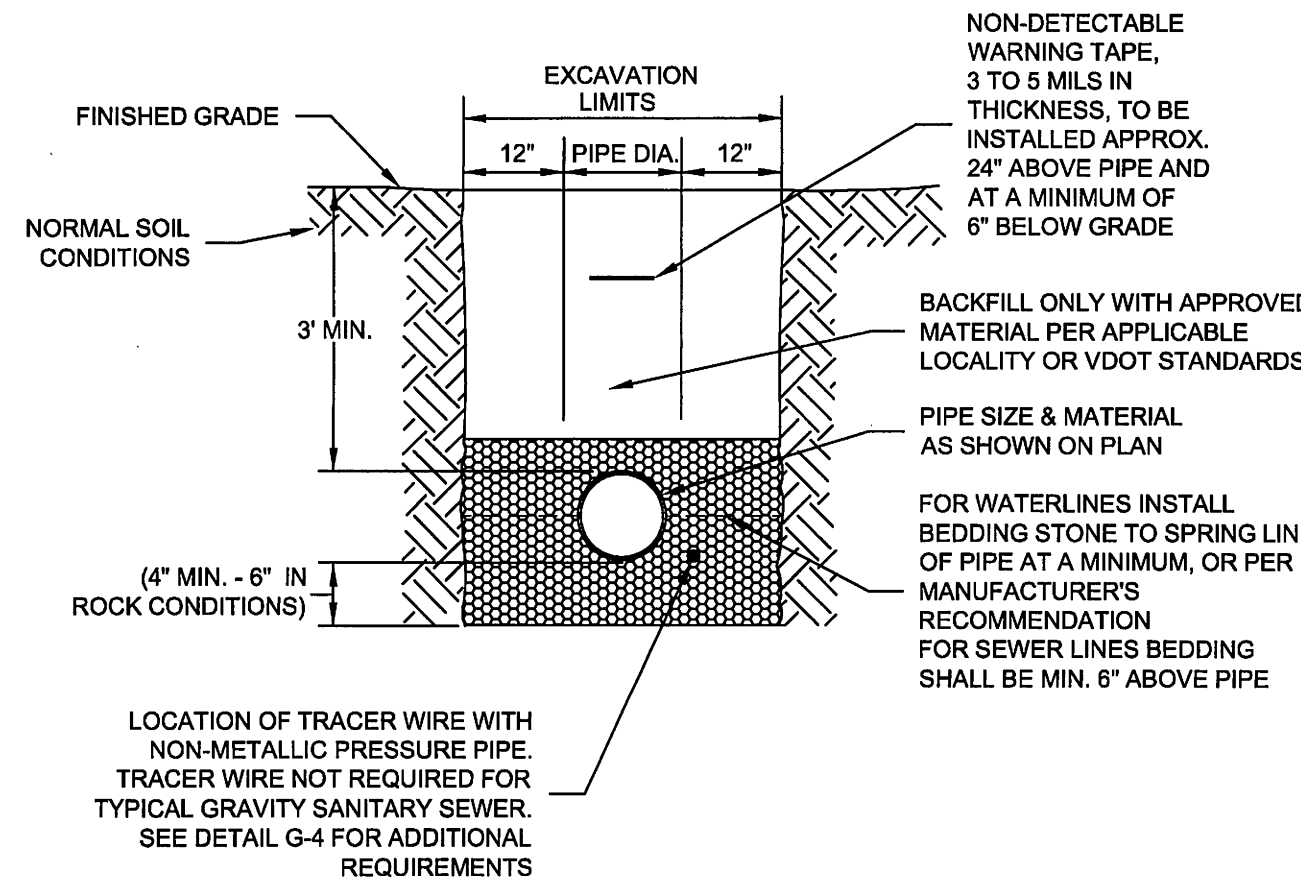
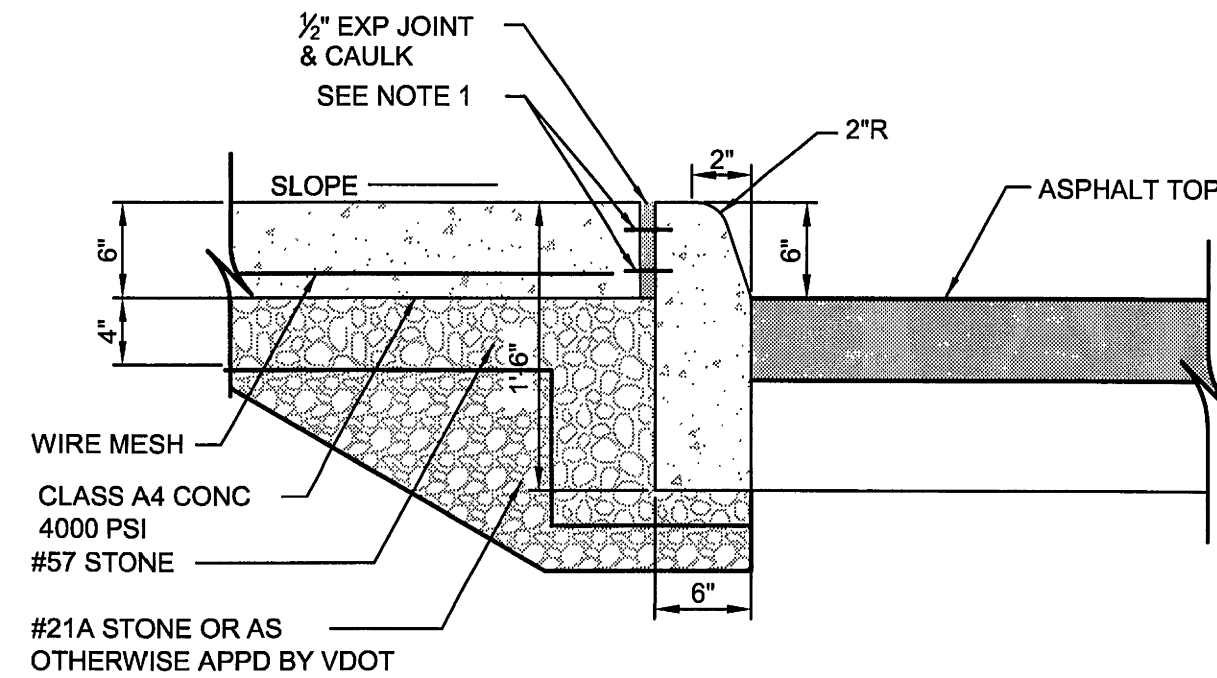
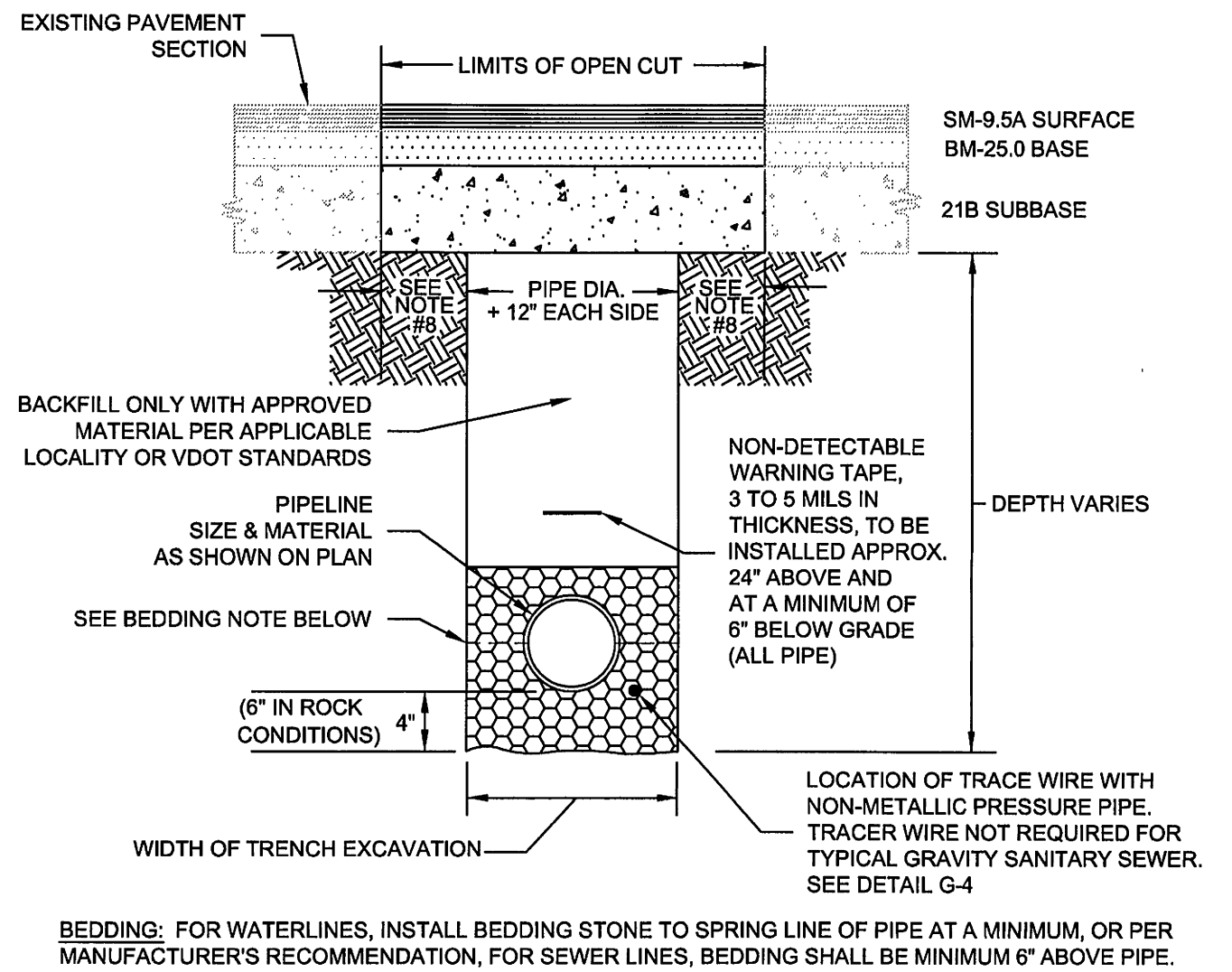


1. BEDDING, HAUNCHING AND INITIAL BACKFILL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THIS DETAIL AND MANUFACTURER'S RECOMMENDATION.
2. ALL PVC PIPE SHALL BE BEDDED IN COMPACTED VDOT #57 OR #58 STONE, OR CRUSHER RUN.
3. IN AREAS SUBJECT TO VEHICULAR TRAFFIC, BEDDING STONE AND FILL SHALL BE PLACED IN 6" LIFTS FROM BOTTOM OF TRENCH TO 1" ABOVE THE PIPE AND THE REMAINING SHALL BE PLACED IN 10" LIFTS AND SHALL BE COMPACTED TO AT LEAST 90% OF MAXIMUM DENSITY AS DETERMINED BY ASTM D 698.
4. BEDDING REQUIREMENTS FOR DUCTILE IRON WATER LINE ARE DEPENDENT ON MANUFACTURER'S BEDDING CRITERIA.
5. ALL EXCAVATIONS SHALL COMPLY WITH OSHA TECHNICAL MANUAL, CHAPTER 2, TITLED "EXCAVATIONS: HAZARD RECOGNITION IN TRENCHING AND SHORING."
6. THE TRACER WIRE SHALL BE PLACED ALONG THE LOWER QUADRANT OF THE PIPE. THE WIRE SHALL NOT TOUCH THE PIPE, BUT SHALL BE A MAXIMUM OF 6" FROM THE PIPE. NON-METALLIC SPACERS MAY BE USED TO MAINTAIN A SET DISTANCE FROM THE UTILITY.

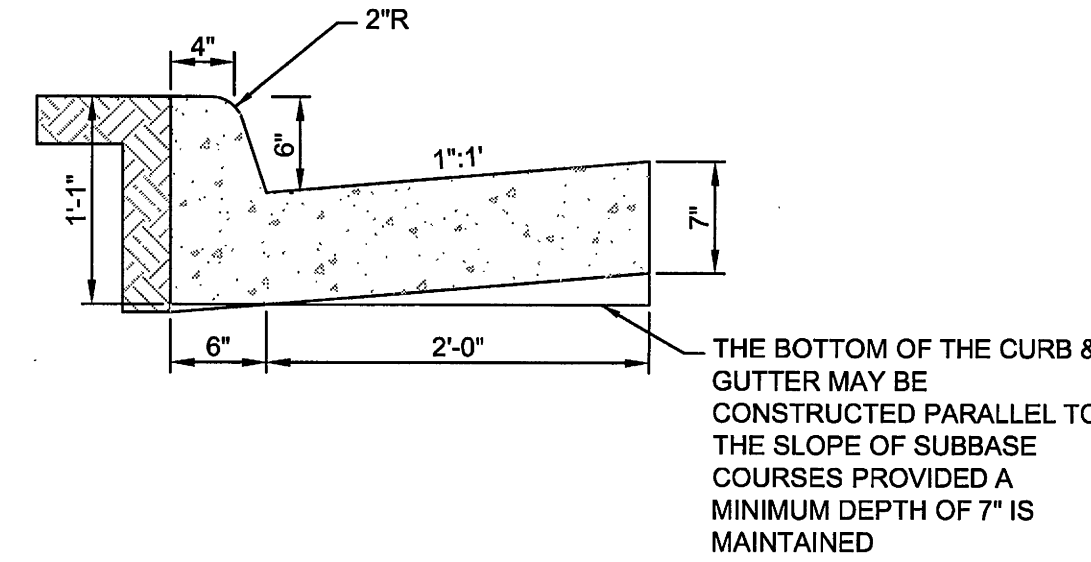


1. BEDDING, HAUNCHING AND INITIAL BACKFILL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THIS DETAIL AND MANUFACTURER'S RECOMMENDATION.
2. ALL PVC PIPE SHALL BE BEDDED IN COMPACTED VDOT #57 OR #58 STONE.
3. IN VDOT ROW, THE CONTRACTOR SHALL REPLACE THE OPEN CUT WITH A MINIMUM TOP COURSE OF 1.5" (MINIMUM) VDOT SM-9.5A, BASE COURSE OF 6" VDOT BM-25.0, AND SUBBASE OF 10" VDOT 21B, OR AS REQUIRED BY VDOT. IN ROANOKE CITY, CONTRACTOR SHALL REPLACE PAVEMENT AS REQUIRED BY CITY OF ROANOKE RIGHT-OF-WAY EXCAVATION AND RESTORATION STANDARDS, LATEST EDITION.
4. ALL CONSTRUCTION WITHIN THE PUBLIC RIGHT-OF-WAY SHALL BE AS SPECIFIED BY VDOT OR APPLICABLE LOCALITY.
5. PRIOR TO CONSTRUCTION, CONTRACTOR IS RESPONSIBLE FOR SECURING ALL REQUIRED PERMITS FROM VDOT AND/OR APPLICABLE LOCALITY.
6. IN AREAS SUBJECT TO VEHICULAR TRAFFIC, BEDDING STONE AND FILL SHALL BE PLACED IN 6" LIFTS AND SHALL BE COMPACTED TO AT LEAST 95% OF MAXIMUM DENSITY AS DETERMINED BY ASTM D 698.
7. ALL SEWER LINE PIPE SHALL BE BEDDED IN COMPACTED GRANULAR MATERIAL. BEDDING REQUIREMENTS FOR DUCTILE SEWER LINE ARE DEPENDENT ON MANUFACTURER'S BEDDING CRITERIA.
8. BENCH-CUT ON EACH SIDE OF PAVEMENT: CITY OF ROANOKE = 12"; VDOT RIGHT-OF-WAY = 6".
9. ALL EXCAVATIONS SHALL COMPLY WITH OSHA TECHNICAL MANUAL, CHAPTER 2, TITLED "EXCAVATIONS: HAZARD RECOGNITION IN TRENCHING AND SHORING."
10. THE TRACER WIRE SHALL BE PLACED ALONG THE LOWER QUADRANT OF THE PIPE. THE WIRE SHALL NOT TOUCH THE PIPE, BUT SHALL BE A MAXIMUM OF 6" FROM THE PIPE. NON-METALLIC SPACERS MAY BE USED TO MAINTAIN A SET DISTANCE FROM THE UTILITY.



- NOTES:
1. CONCRETE PATCHES MUST BE DOWELED TO EXISTING CONCRETE WITH 1/2"x12" STEEL ROD AT 3' ON CENTER WITH A MINIMUM OF TWO RODS.
 2. EXISTING CONCRETE TO BE REMOVED MUST BE CUT AND REMOVED AT THE NEAREST EXPANSION JOINT OR CONTROL JOINT. ANGLE SAW CUTS AND PATCHING NOT PERMITTED.
 3. SAW CUT OR TOOL CONTROL JOINTS AND CONCRETE EDGES TO MATCH EXISTING CONCRETE.

CONCRETE SIDEWALK & CURB
NOT TO SCALE



- NOTES:
1. THIS ITEM MAY BE PRECAST OR CAST IN PLACE.
 2. CONCRETE TO BE CLASS A3 IF CAST IN PLACE, 4000 PSI IF PRECAST.
 3. FOR USE WITH STABILIZED OPEN-GRADED DRAINAGE LAYER, THE BOTTOM OF THE CURB & GUTTER SHALL BE CONSTRUCTED PARALLEL TO THE SLOPE OF THE SUBBASE COURSES PROVIDED A MINIMUM DEPTH OF 7" IS MAINTAINED.

CONCRETE CURB & GUTTER
NOT TO SCALE

WESTERN VIRGINIA REGIONAL - CONSTRUCTION DETAIL

BEDDING AND BACKFILL
OUTSIDE OF PAVED AREAS

01/01/12

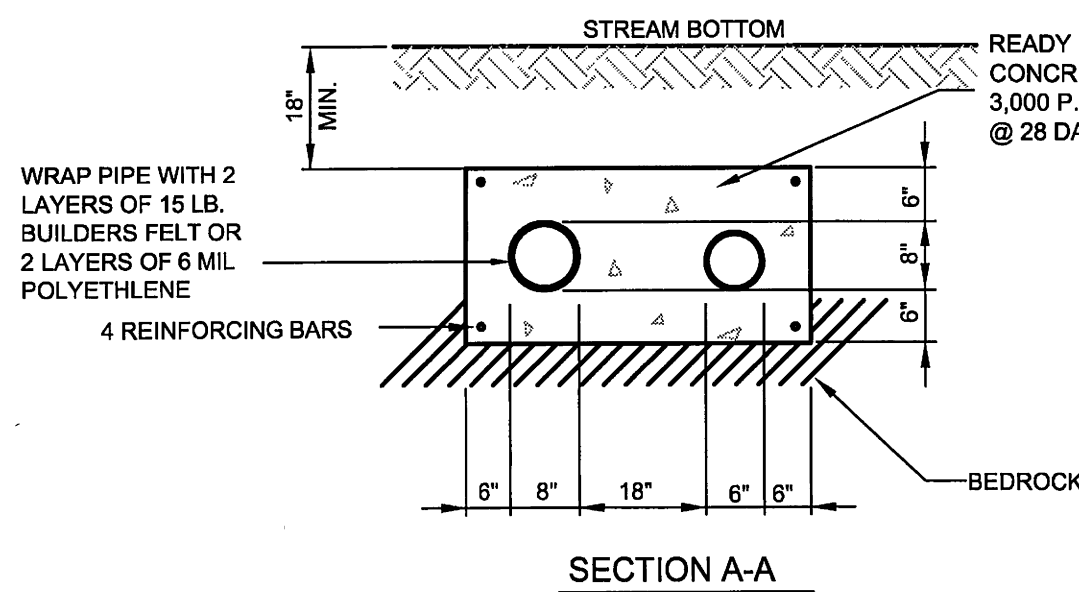
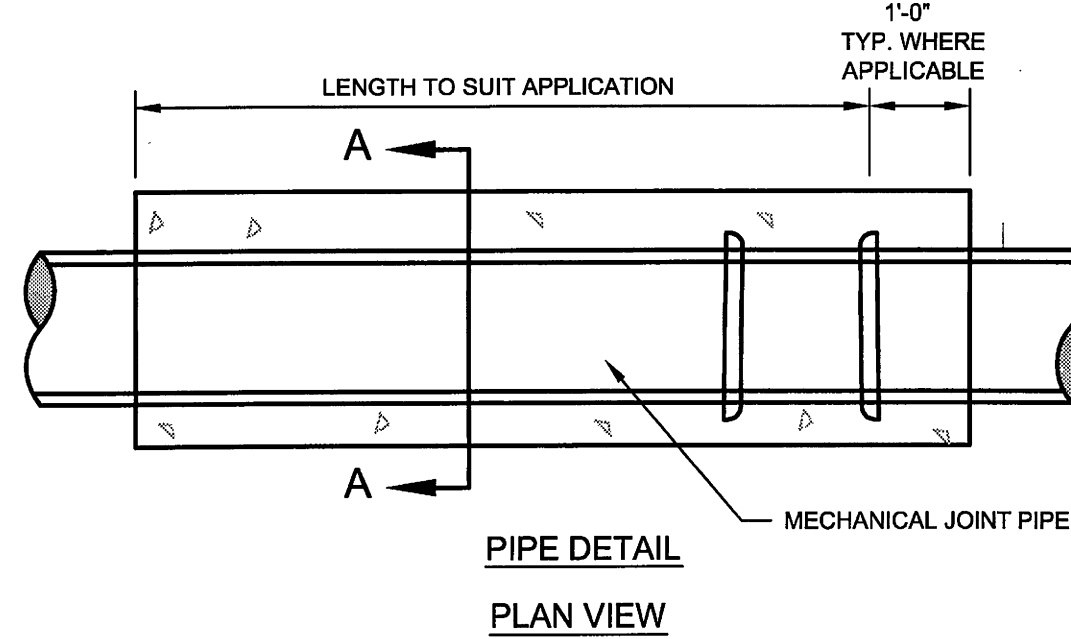
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WESTERN VIRGINIA REGIONAL - CONSTRUCTION DETAIL

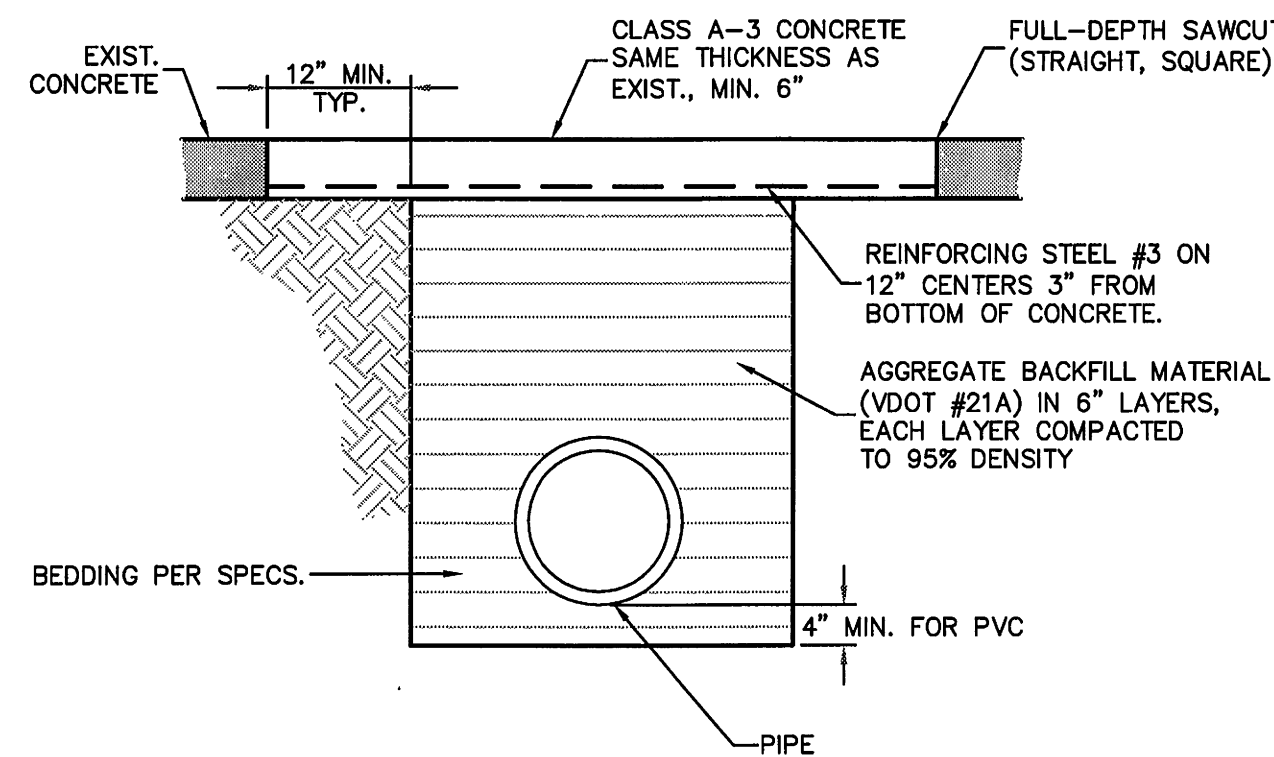
BEDDING AND BACKFILL
UNDER PAVEMENT AND IN RIGHT-OF-WAY

01/01/12

G-12

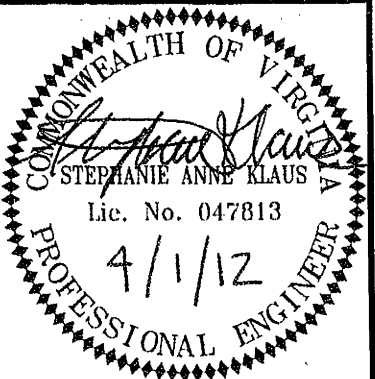


TINKER CREEK CROSSING
NOT TO SCALE



**OPEN CUT
CONCRETE DRIVEWAY CROSSING**
NOT TO SCALE

NOTE: IF EXISTING CULVERTS ARE DISTURBED THEY SHALL BE REMOVED AND REPLACED WITH NEW CULVERTS OF SIMILAR SIZE AND MATERIAL.



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Engineering • Surveying • Environmental Services



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DETAILS
WESTERN VIRGINIA WATER AUTHORITY
FY2011 VCWRLF COLLECTION SYSTEM PROJECTS
ROANOKE, VIRGINIA

REVISIONS

DESIGNED BY: SAK
DRAWN BY: LGB
CHECKED BY: LMR
SCALE: NO SCALE
DATE: APRIL 1, 2012
PROJECT NUMBER: B11132B-02

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