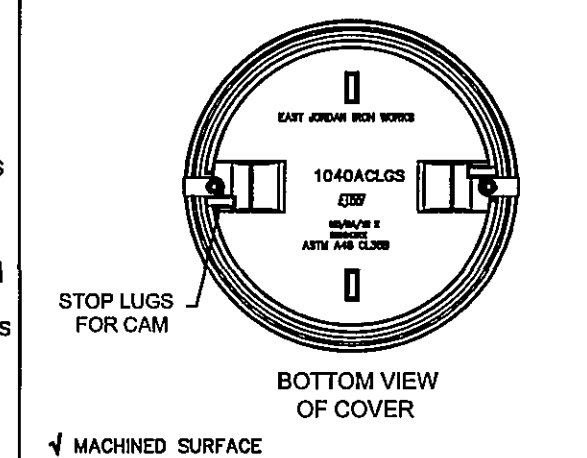
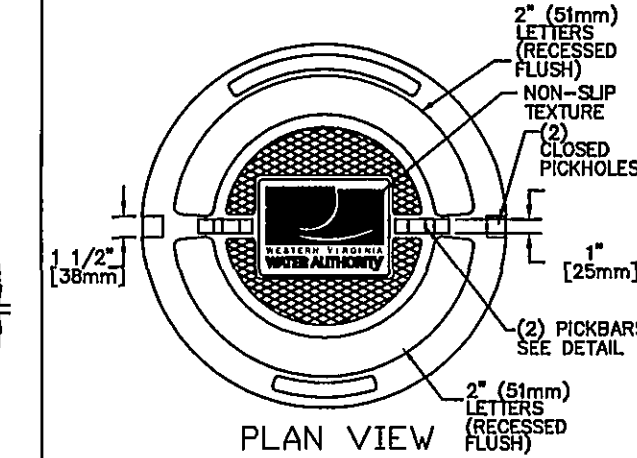
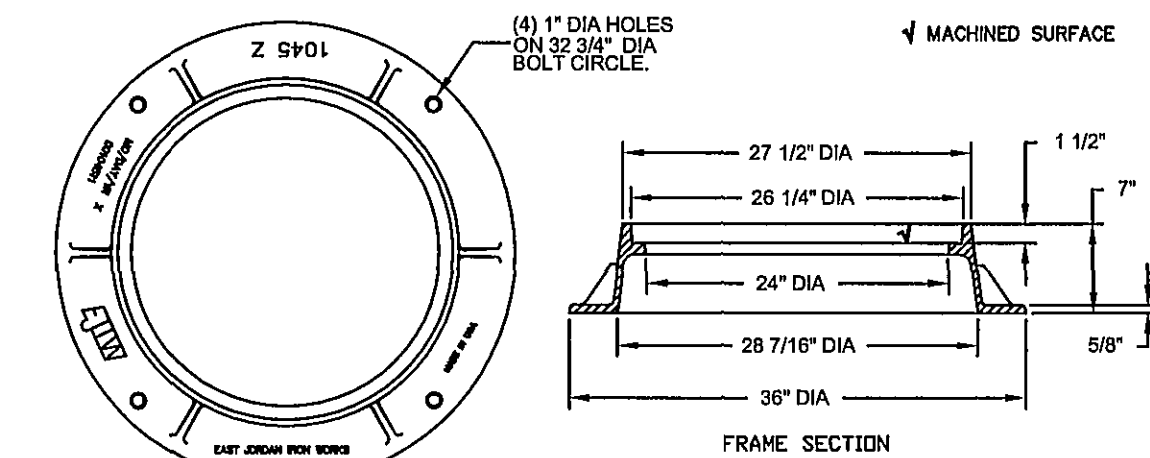
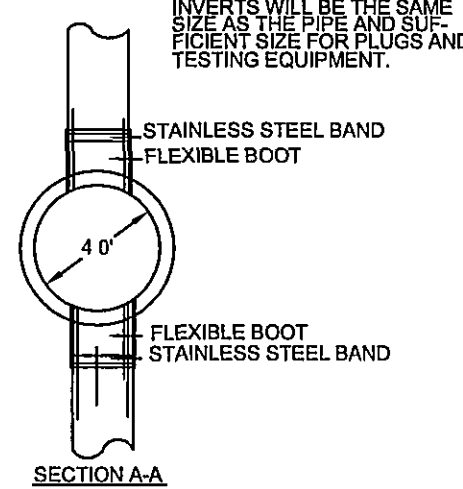
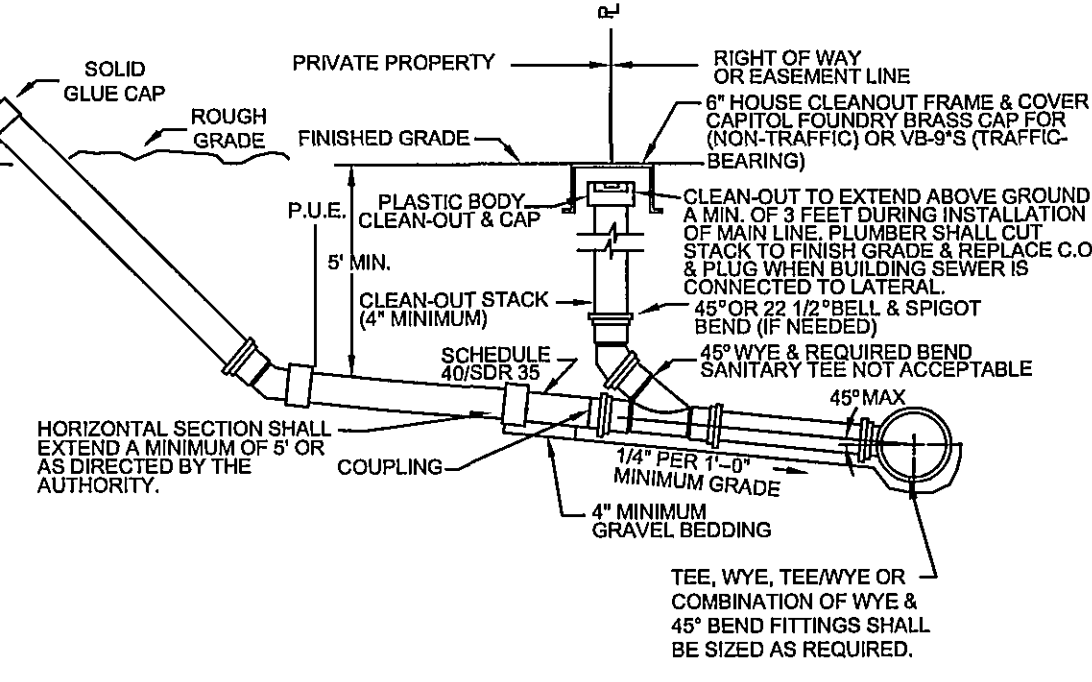
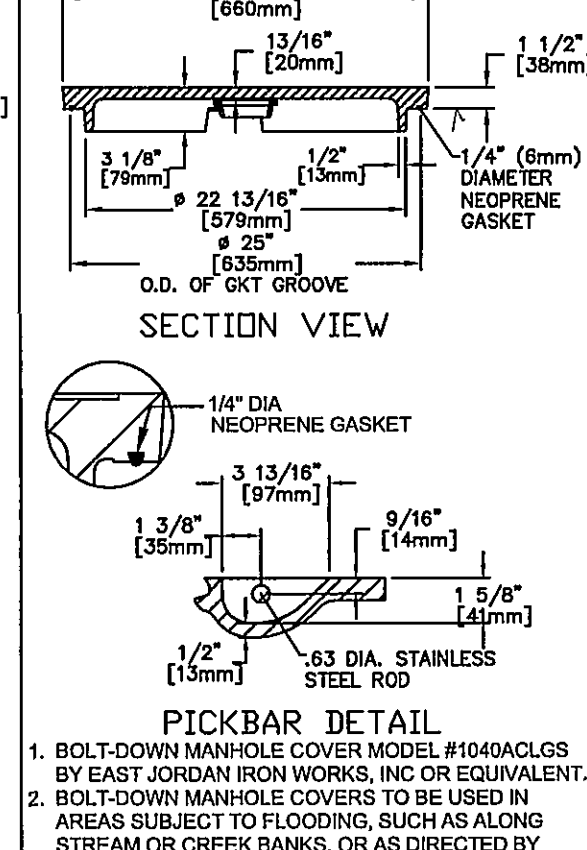
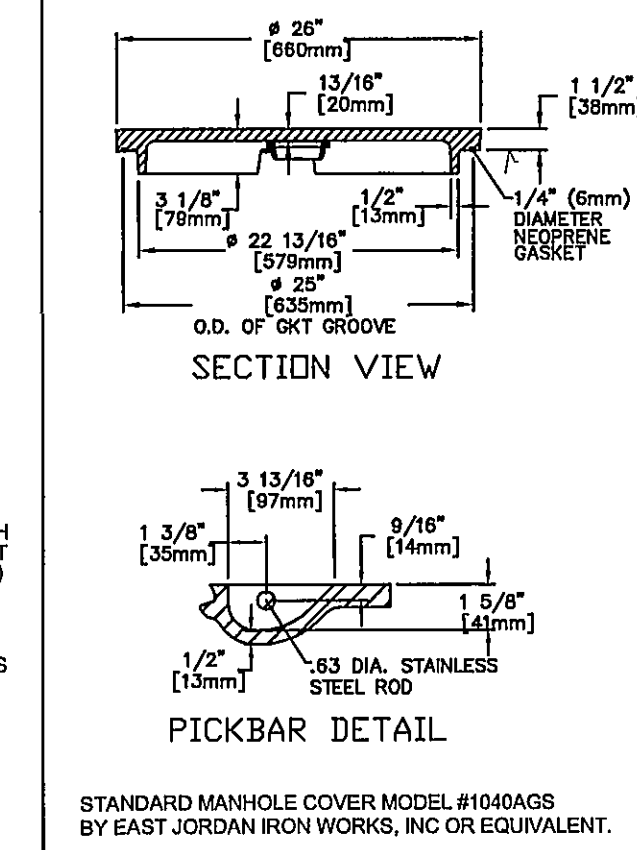
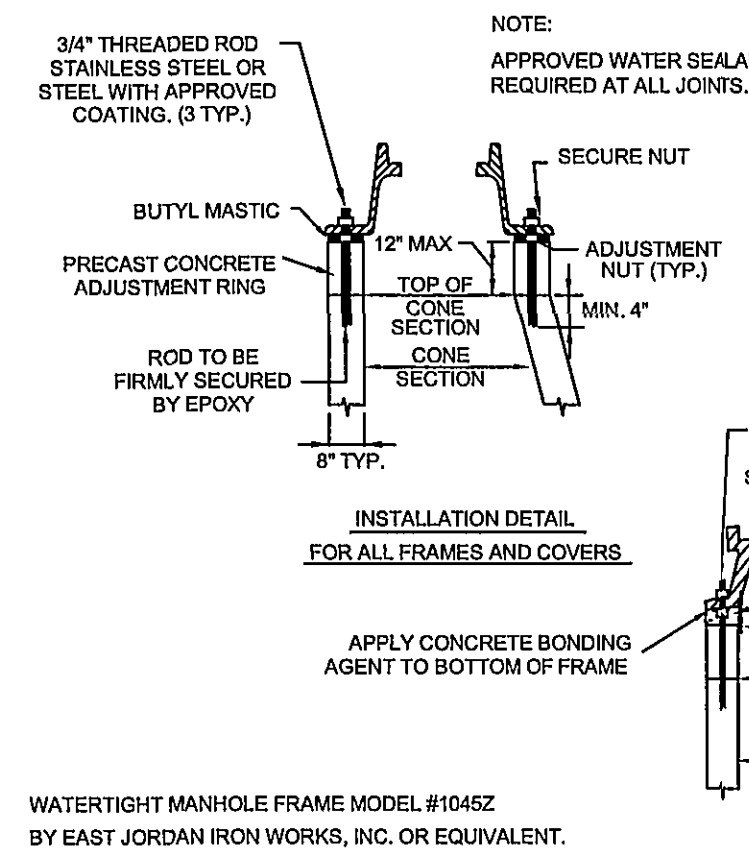
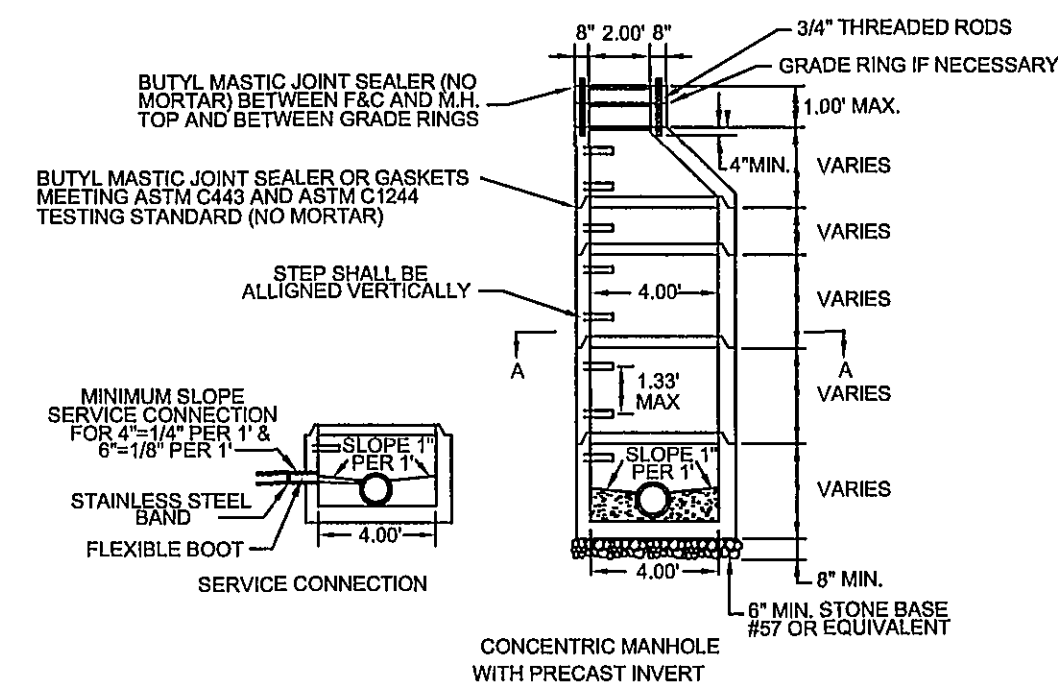


1. TRACER WIRES SHALL BE INSTALLED USING MANHOLES, VALVE BOXES OR VAULTS, WATER METERS AND FIRE HYDRANTS AS ACCORDING TO THE CITY OF KANSAS.
2. TRACER WIRE SHALL BE A 12 GAUGE SOLID COPPER WIRE WITH POLYETHYLENE INSULATION OF 30 MIL THICKNESS.
3. TRACER WIRE SHALL BE BENT TO FOLLOW THE CURVATURE OF SPLICED JCT (DBY) OR EQUIVALENT.
4. TRACER WIRE SHALL BE LONG ENOUGH TO EXTEND A DISTANCE OF FIVE FEET FROM THE STRUCTURE.
5. ASBUILTS SHALL SHOW TRACER WIRE(S) LOCATION AND DEPTHS IN NOTES.
6. THE TRACER WIRE SHALL BE PLACED ALONG THE LOWER SIDE OF THE PIPE, BUT NOT MORE THAN TWO FEET FROM THE PIPE, BUT SHALL BE A MAXIMUM OF 5" FROM THE PIPE. NON-METALLIC SPACERS MAY BE USED TO MAINTAIN A SET DISTANCE FROM THE PIPE.
7. WHERE LINES ARE GREATER THAN SIX(6) FEET IN DEPTH, THE TRACER WIRE SHOULD BE PLACED AT LEAST ONE HUNDRED (100) FEET AND PLACED IN A WATER METER BOX OR APPROVED JUNCTION BOX.
8. TRACER WIRE SHALL BE APPROVED BY THE AUTHORITY AS PART OF THE PROJECT'S FINAL ACCEPTANCE.
9. TRACER WIRE SHALL BE 12 GAUGE SOLID COPPER WIRE INSTALLED TO EXTEND A DISTANCE OF FIVE (5) FEET INTO THE STREET, GROUND SURFACE, AND ANOTHER FIVE FEET LENGTH TO EXTEND FIVE (5) FEET BEYOND THE TOP OF STRUCTURE AND THE OTHER END OF WIRE SHALL BE PLACED INTO THE K&U CONNECTOR.
10. THE GROUND BAR SHALL BE STAINLESS STEEL AND SHALL BE EMBEDDED IN CONCRETE AT LEAST FOUR INCHES. THE FOLLOWING SHALL BE INSTALLED IN 4' (FOUR) FEET SECTIONS: 10-32 X 3/4" SS PHILLIPS HEAD SCREWS AND 10-32 X 3/4" SS PHILLIPS. THE FOURTH HOLE SHALL HAVE A SUPPLY CONNECTION KARL FOR THE #6 GAUGE GROUND BARS. THE REMAINING THREE HOLES SHALL BE USED FOR TURN-UP CLAMP RFP-1 AT THE ENDS OF THE TRACER WIRES. THE FIRST HOLE IN EACH SECTION SHALL BE USED FOR



- GENERAL NOTES:
1. TRAFFIC BEARING BO REQUIRED IN TRAFFIC AREAS.
 2. ALL PIPE AND FITTINGS SHALL BE OF SIMILAR MATERIAL.
 3. ALL PIPE SHALL BE OF SAME SIZE.
 4. JOISTS ARE ALLOWED TO BE CUT BY THE LATERAL FROM THE MAIN TO THE CLEANOUT.
 5. STACK WORK, EXCEPT AS NOTED.
 6. ALL MAIN LINE TAPS ON ACTIVE MAINS WILL BE PERFORMED BY WESTERN VIRGINIA WATER AUTHORITY.
 7. PIPING BEHIND CLEANOUT TO BE INSTALLED PER BOCA CODE.
 8. MINIMUM LATERAL SIZE:
 - a. 4" FOR RESIDENTIAL SERVICE
 - b. 6" FOR NON-RESIDENTIAL SERVICE
 - c. MINIMUM COVER FOR ALL SEWER LATERALS SHALL BE THREE(3) FEET.
 9. PROTECT ALL EXISTING SERVICES FROM INSTALLING CLEANOUT ON PROPERTY LINE WHEN MAINTENANCE OCCURS, IN ACCORDANCE WITH THIS STANDARD.
 10. FLOWLINE AT CLEANOUT WILL SHALL BE A MINIMUM OF THREE FEET (3') BELOW



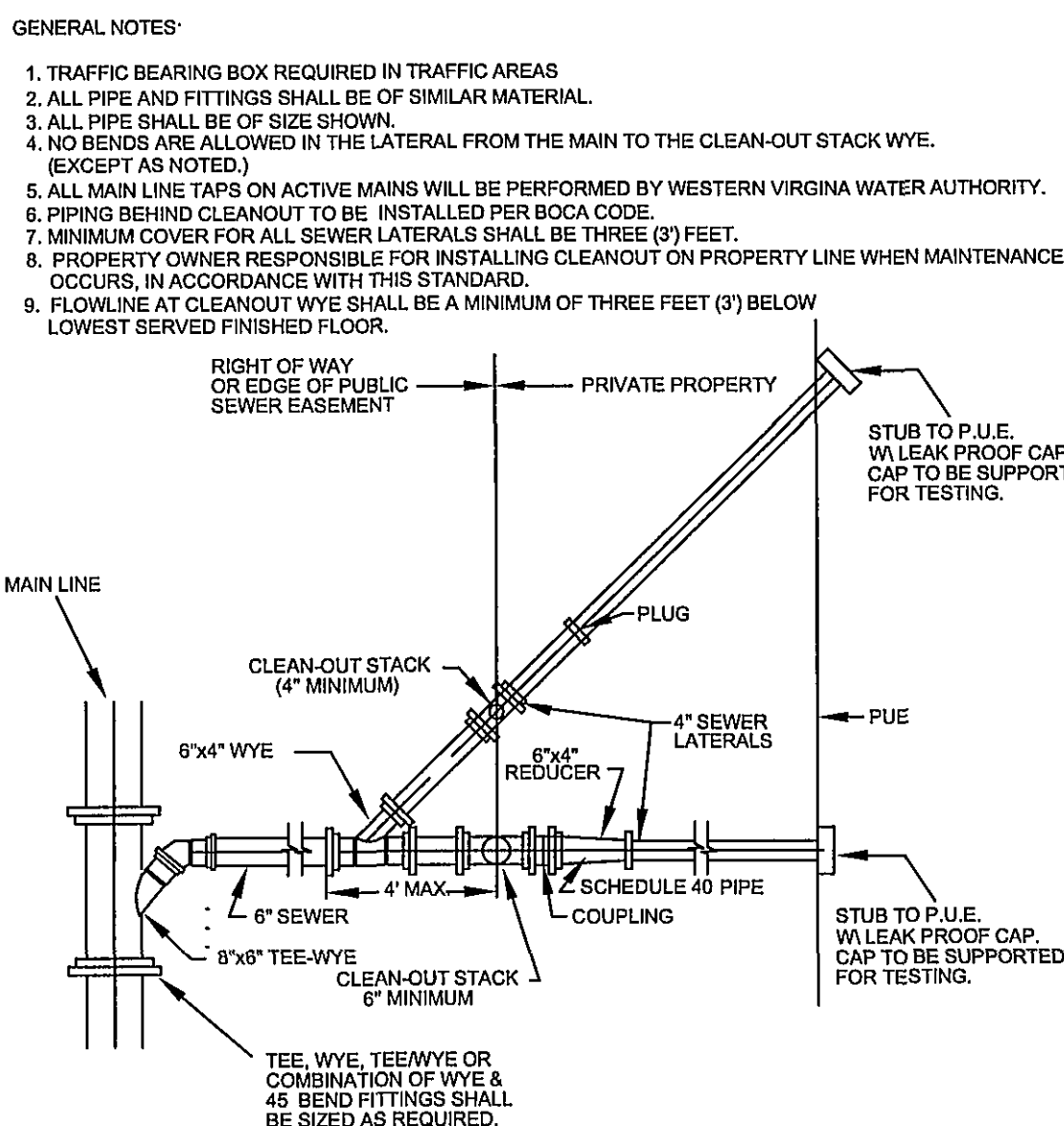
WESTERN VIRGINIA WATER AUTHORITY - CONSTRUCTION STANDARDS			
REVISION DATE		<p>TRACER WIRE FOR NON-METALLIC PRESSURE PIPE</p>	<p>G-05</p>
07/01/04			
03/01/06			

WESTERN VIRGINIA WATER AUTHORITY - CONSTRUCTION STANDARDS			
REVISION DATE		4' STANDARD MANHOLE FOR PIPE 15" OR SMALLER	S-01
07/01/04			
03/01/06			

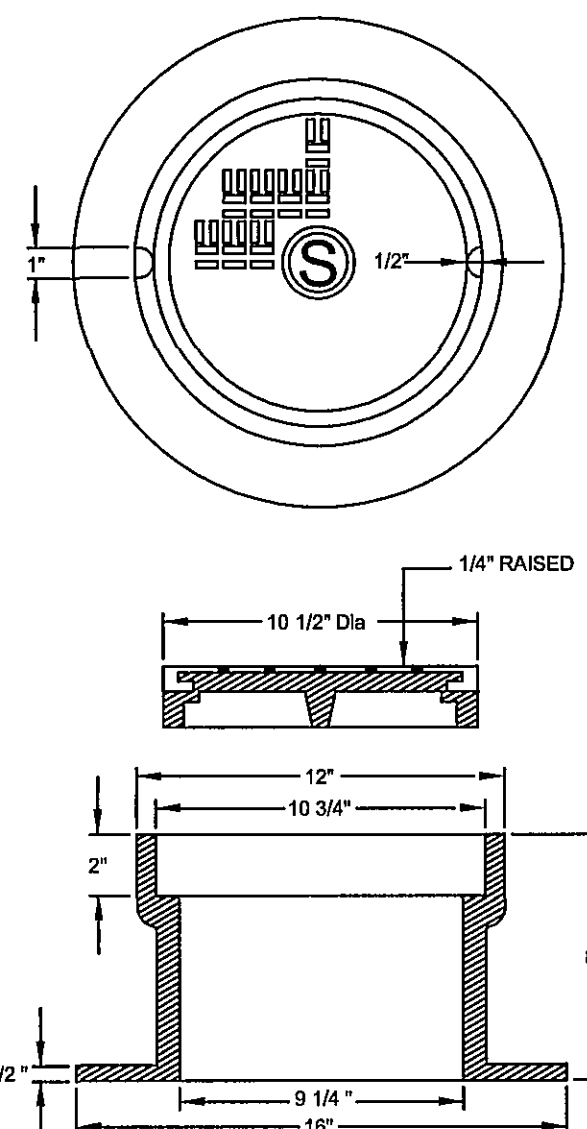
WESTERN VIRGINIA WATER AUTHORITY - CONSTRUCTION STANDARDS			
REVISION DATE		WATERTIGHT MANHOLE FRAME	S-05
07/01/04			

WESTERN VIRGINIA WATER AUTHORITY - CONSTRUCTION STANDARDS					
REVISION DATE					
07/01/84					
03/01/96					
	WATERTIGHT MANHOLE COVER				S-06

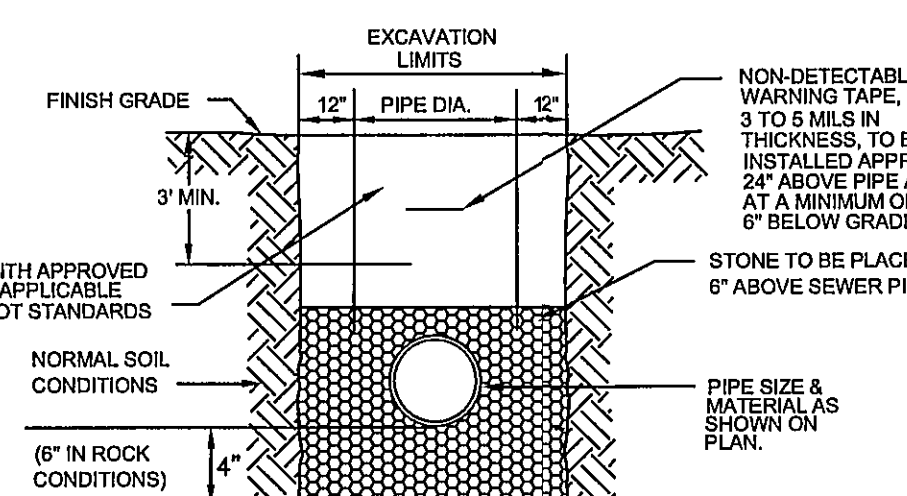
WESTERN VIRGINIA WATER AUTHORITY - CONSTRUCTION STANDARDS			
REVISION DATE		SANITARY SEWER LATERAL	S-08
07/01/04			
03/01/08			



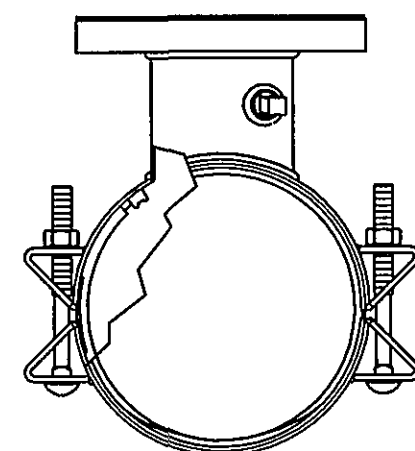
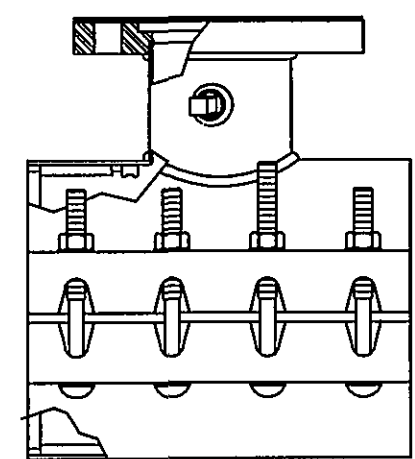
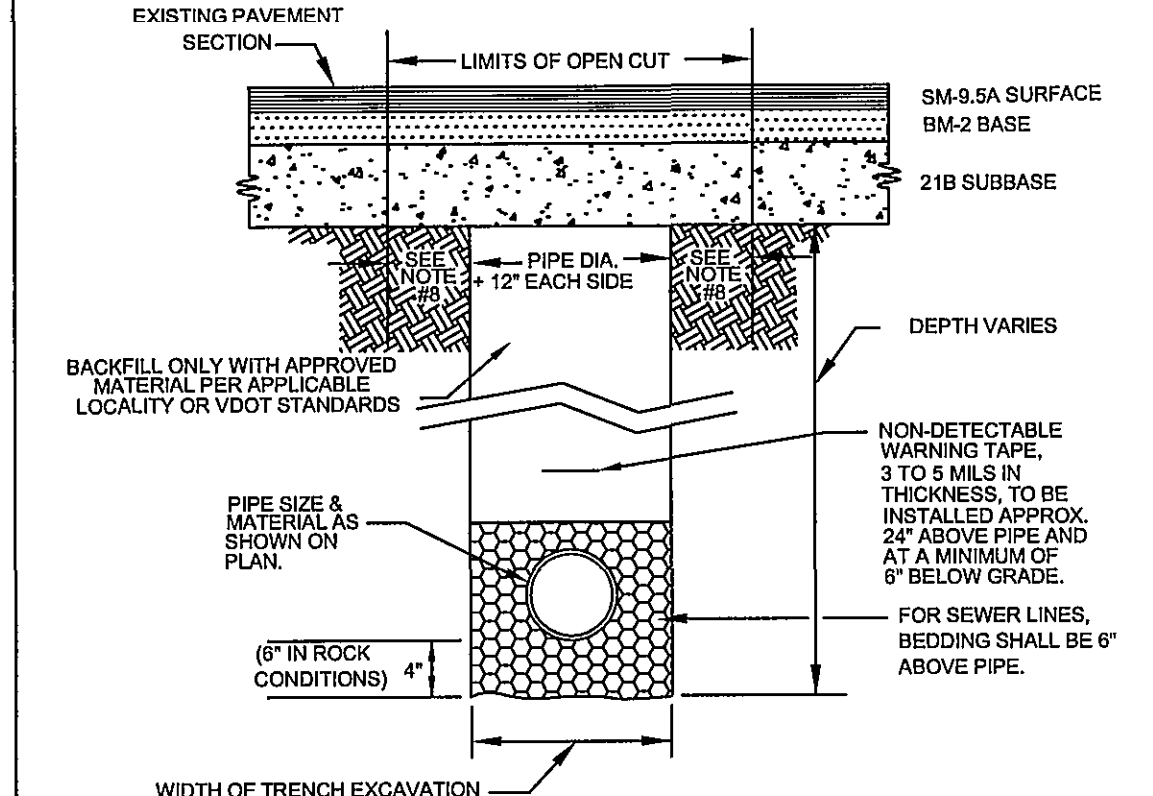
- NOTES:
1. A MINIMUM CLEARANCE OF 4 INCHES IS REQUIRED
BETWEEN CLEANOUT CAP AND TOP OF COVER
2. CAPITOL FOUNDRY FRAME AND COVER ITEM # VB-9'S



- NOTES:**
1. BEDDING, HAUNCHING AND INITIAL BACKFILL CONSTRUCTION SHALL BE IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATION.
 2. ALL PVC PIPE SHALL BE BEDDED IN COMPACTED W/57 OR #66 STONE.
 3. FOR DUCTILE IRON PIPE, BEDDING SHALL BE 6" OF 57 OR #66 STONE. 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 12" LIFTS FROM 1' ABOVE THE PIPE TO AT LEAST 1' ABOVE THE PIPE. THIS IS DETERMINED BY ASTM D 698.
 4. ALL SEWER LINE BEDDING SHALL BE COMPACTED GRANULAR MATERIAL. BEDDING REQUIREMENTS FOR DUCTILE IRON PIPE ARE DEPENDENT ON MANUFACTURER'S BEDDING CRITERIA.
 5. ALL EXCAVATIONS SHALL COMPLY WITH OSHA TECHNICAL MANUAL, CHAPTER 2, TITLED EXCAVATION, SHIELDING AND BACKFILLING.



- NOTES:
1. BEDDING, HAUNCHING AND INITIAL BACKFILL CONSTRUCTION SHALL BE IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATION.
 2. ALL JCP PIPE SHALL BE BEDDED IN COMPACTED VDOT #57 OR #88 STONE.
 3. IN ROCKAWE COUNTY, THE CONTRACTOR SHALL REPLACE THE OPEN CUT WITH A MINIMUM TOP COURSE OF 1.5" MINIMUM VDOT #54.5 GRAIN COURSE.
 4. IN ROCKAWE COUNTY, THE CONTRACTOR SHALL REPLACE PAVEMENT AS REQUIRED BY CITY OF ROCKAWE RIGHT OF WAY EXCAVATION AND RESTORATION STANDARDS.
 5. ALL CONSTRUCTION WITHIN THE PUBLIC RIGHT-OF-WAY SHALL BE AS SPECIFIED BY VDOT OR APPLICABLE LOCALITY.
 6. PRIOR TO CONSTRUCTION, CONTRACTOR IS RESPONSIBLE FOR SECURING ALL REQUIRED PERMITS FROM ALL APPLICABLE LOCAL JURISDICTIONS.
 7. AREAS SUBJECTED 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 D1556.
 8. ALL SEWER LINE PIPE SHALL BE BEDDED IN COMPACTED GRANULAR MATERIAL. BEDDING REQUIREMENTS FOR DUCTILE SEWER LINE ARE AS SPECIFIED IN THE CITY OF ROCKAWE DESIGN CRITERIA.
 9. ALL OPEN CUT ON EACH SIDE OF PAVEMENT: CITY OF ROCKAWE EQUALS 12", VDOT RIGHT-OF-WAY EQUALS 6".
 10. ALL EXCAVATIONS SHALL COMPLY WITH OSHA TECHNICAL MANUAL, CHAPTER 2, TITLED "EXCAVATION AND SHIELDING OPERATION IN TRENCHING AND SHIELDING".



1. TAPPING SLEEVE SHALL BE PERSEWAL MODEL 3490 TYPE 304 STAINLESS STEEL WITH CARBON STEEL FLANGE, ROMAC'S MODEL SST II OR APPROVED EQUIVALENT. SLEEVE SHALL BE RATED AT 250 PSI AND MUST HAVE A TEST PLUG.
2. TAPPING VALVE SHALL BE AVK RESILIENT SEATED GATE VALVE SERIES 25 MJFL OR MUELLER T-2360 RESILIENT WEDGE TAPPING VALVE WITH MJFL. VALVE SHALL BE RATED AT 250 PSI.
3. TAPPING PIPE AND VALVE SHALL BE FULL PORT TO ACCEPT FULL SIZE SHELL CUTTER.

WESTERN VIRGINIA WATER AUTHORITY - CONSTRUCTION STANDARDS			
REVISION DATE		COMBINED 6" BY TWO 4" LATERALS	S-11
07/01/04			
03/01/05			

WESTERN VIRGINIA WATER AUTHORITY - CONSTRUCTION STANDARDS			
REVISION DATE		TRAFFIC BEARING CLEANOUT BOX	S-13
07/01/04			

WESTERN VIRGINIA WATER AUTHORITY - CONSTRUCTION STANDARDS			
REVISION DATE		BEDDING AND BACKFILL OUTSIDE OF PAVED AREAS	S-30
07/01/04			
03/01/06			

WESTERN VIRGINIA WATER AUTHORITY - CONSTRUCTION STANDARDS					
REVISION DATE					
07/01/04		BEDDING AND BACKFILL UNDER PAVEMENT AND RIGHT-OF-WAY			S-31
03/01/08					

WESTERN VIRGINIA WATER AUTHORITY - CONSTRUCTION STANDARDS			
REVISION DATE		TAPPING SLEEVE AND VALVE	W-23
07/01/04			

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Roanoke, Virginia 24018
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FAX: 540/772-8050**

501 Branchway Road
Richmond, Virginia 23236
Phone: 804/794-0571
FAX: 804/794-2635

880 Technology Park Drive
Suite 200
Glen Allen, Virginia 23059
Phone: 804/853-0132
FAX: 804/553-0133

102 Hubbard Street
Blacksburg, Virginia 24060
Phone: 540/961-0861
FAX: 540/961-0962

1557 Commerce Road
Suite 201
Verona, Virginia 24482
Phone: 540/248-3220
FAX: 540/248-3221

STOKES MANOR

W.V.W.A. DETAILS

BOANOE COUNTY VIRGINIA

DRAWN BY: CPE
DESIGNED BY: CPE
CHECKED BY: JVA
DATE: 04/18/2007
REVISIONS:
06/10/2007

SCALE: N/A

SHEET NO.

C-11

JOB NO.
R0700065.0