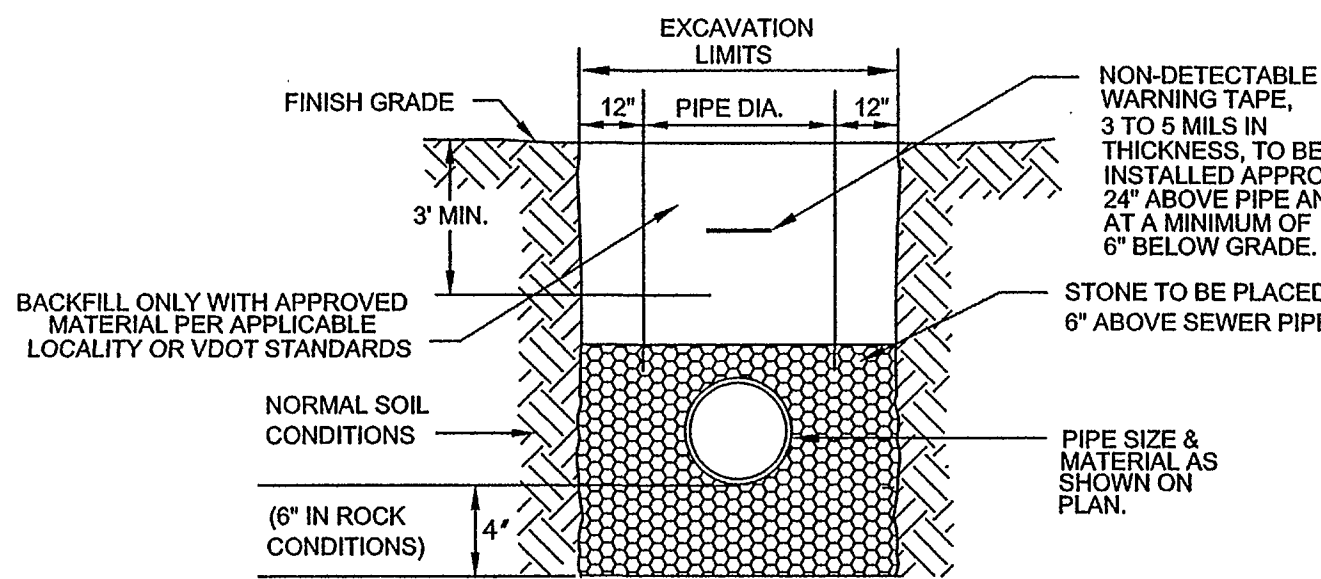
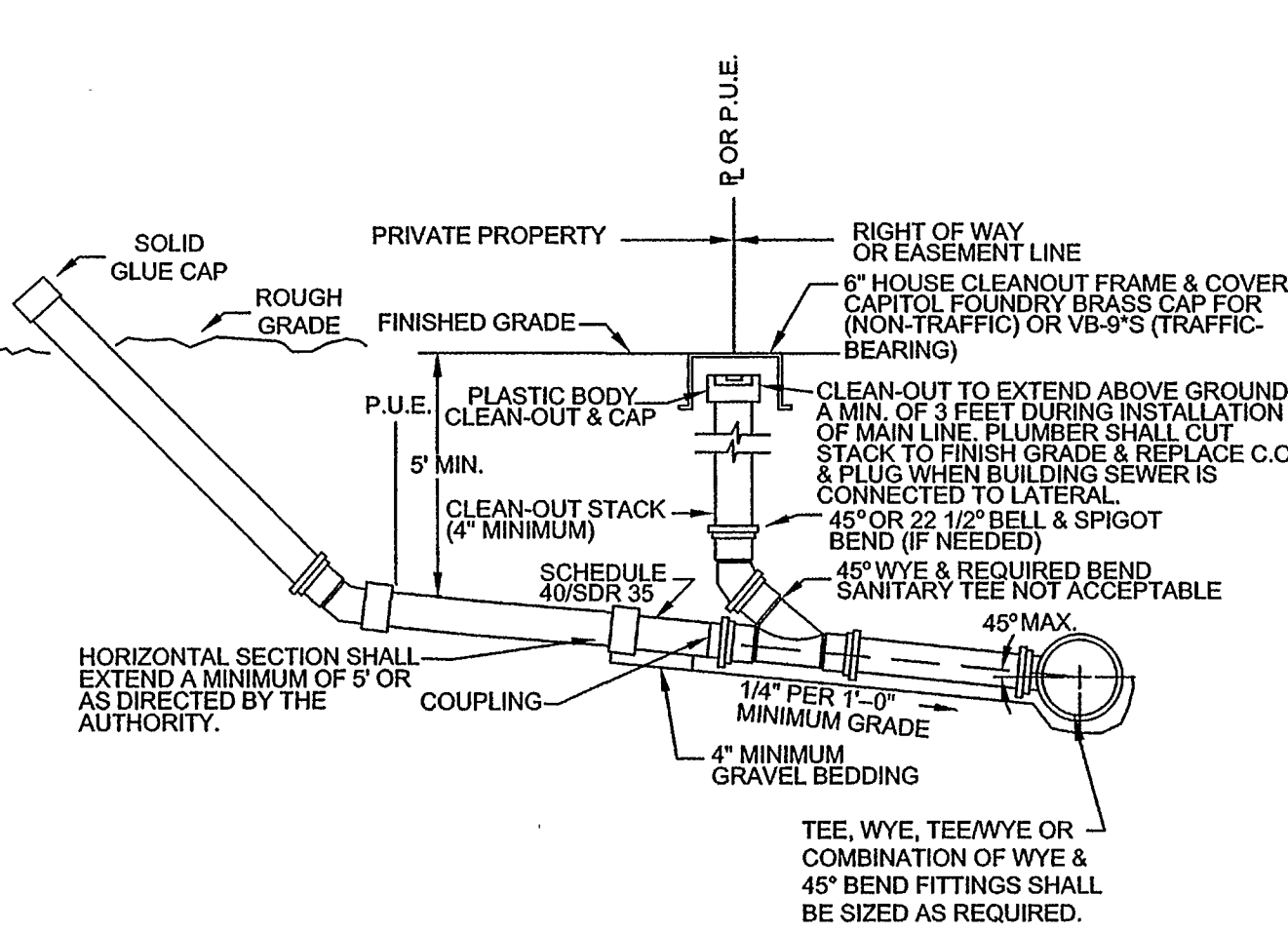


- NOTES:
1. BEDDING, HAUNCHING AND INITIAL BACKFILL CONSTRUCTION SHALL BE IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATION.
 2. ALL PVC PIPE SHALL BE BEDDED IN COMPACTED VDOT #57 OR #68 STONE.
 3. IN AREAS NOT SUBJECTED TO VEHICULAR TRAFFIC, BEDDING STONE AND FILL SHALL BE PLACED IN 6" LIFTS FROM BOTTOM 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. ALL SEWER LINE PIPE SHALL BE BEDDED IN COMPACTED GRANULAR MATERIAL. BEDDING REQUIREMENTS FOR DUCTILE SEWER 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."

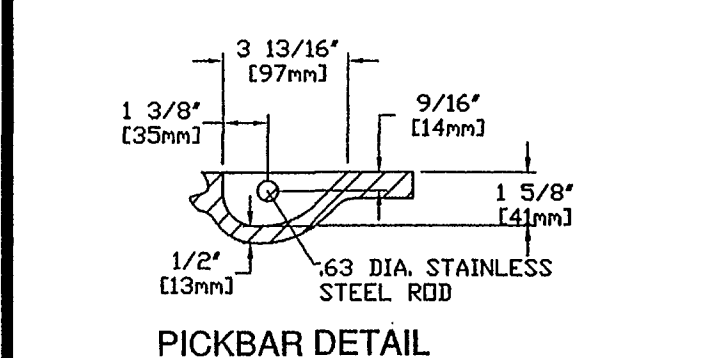
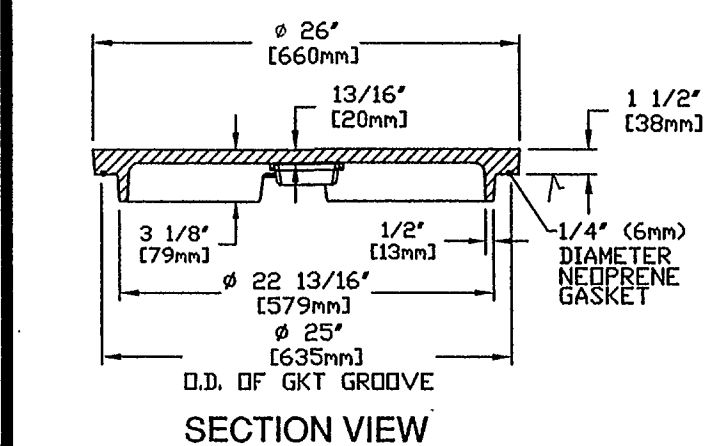
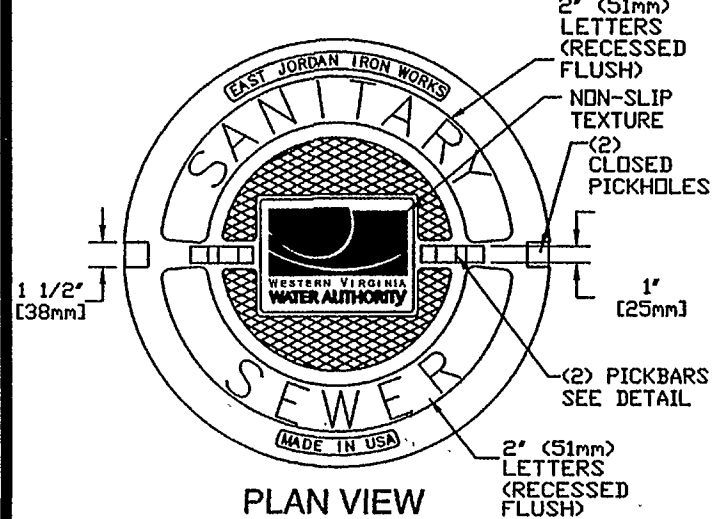


WESTERN VIRGINIA WATER AUTHORITY - CONSTRUCTION STANDARDS		
REVISION DATE		
07/01/04		
03/01/06		
	BEDDING AND BACKFILL OUTSIDE OF PAVED AREAS	S-30

- GENERAL NOTES:
1. TRAFFIC BEARING BOX REQUIRED IN TRAFFIC AREAS.
 2. ALL PIPE AND FITTINGS SHALL BE OF SIMILAR MATERIAL.
 3. ALL PIPE SHALL BE OF SAME SIZE.
 4. NO BENDS ARE ALLOWED IN THE LATERAL FROM THE MAIN TO THE CLEANOUT STACK WYE. (EXCEPT AS NOTED)
 5. ALL MAIN LINE TAPS ON ACTIVE MAINS WILL BE PERFORMED BY WESTERN VIRGINIA WATER AUTHORITY.
 6. PIPING BEHIND CLEANOUT TO BE INSTALLED PER BOCA CODE.
 7. MINIMUM LATERAL SIZE:
4" FOR RESIDENTIAL SERVICE
6" FOR NON-RESIDENTIAL SERVICE
 8. MINIMUM COVER FOR ALL SEWER LATERALS SHALL BE THREE (3) FEET.
 9. PROPERTY OWNER RESPONSIBLE FOR INSTALLING CLEANOUT ON PROPERTY LINE WHEN MAINTENANCE OCCURS. IN ACCORDANCE WITH THIS STANDARD.
 10. FLOWLINE AT CLEANOUT WYE SHALL BE A MINIMUM OF THREE FEET (3') BELOW LOWEST SERVED FINISHED FLOOR.

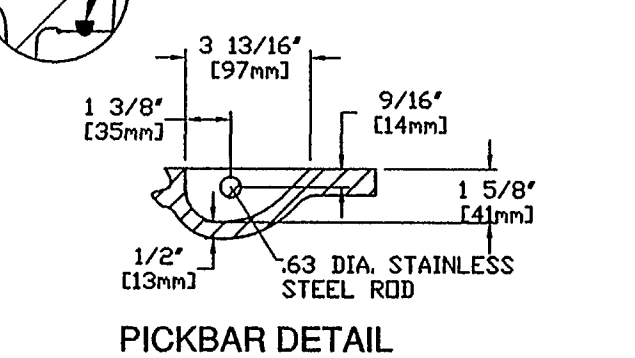
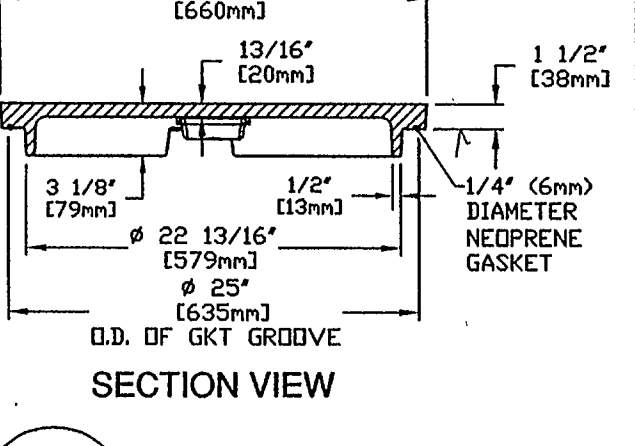
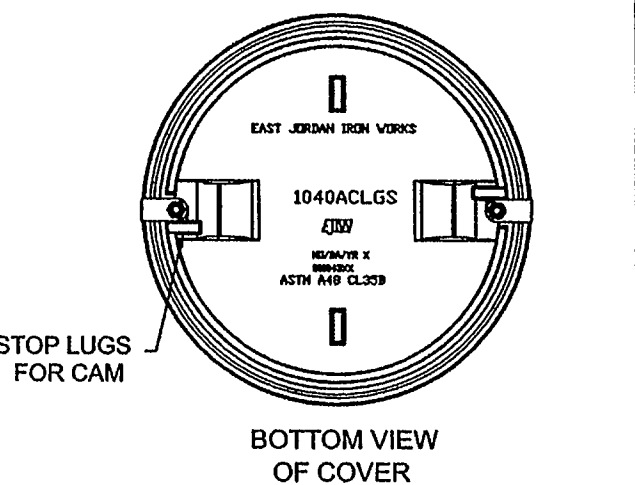


WESTERN VIRGINIA WATER AUTHORITY - CONSTRUCTION STANDARDS		
REVISION DATE		
07/01/04		
03/01/06		
	SANITARY SEWER LATERAL	S-08



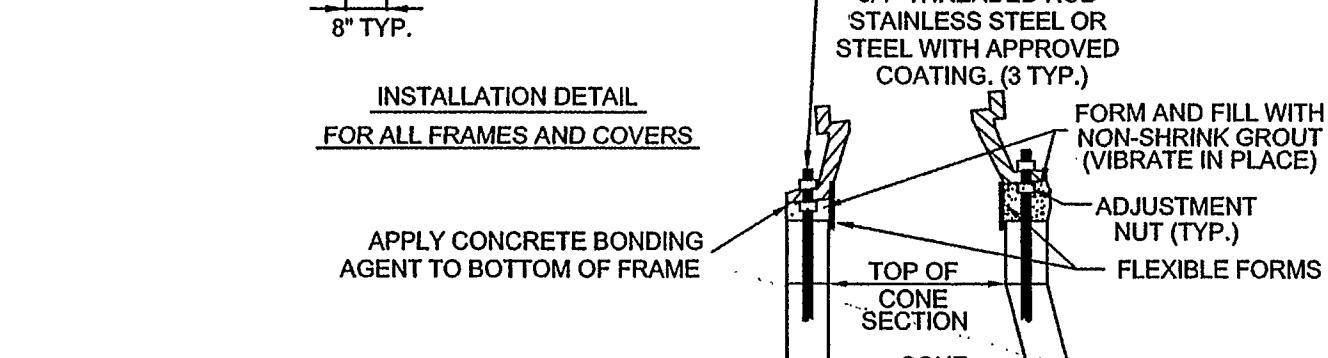
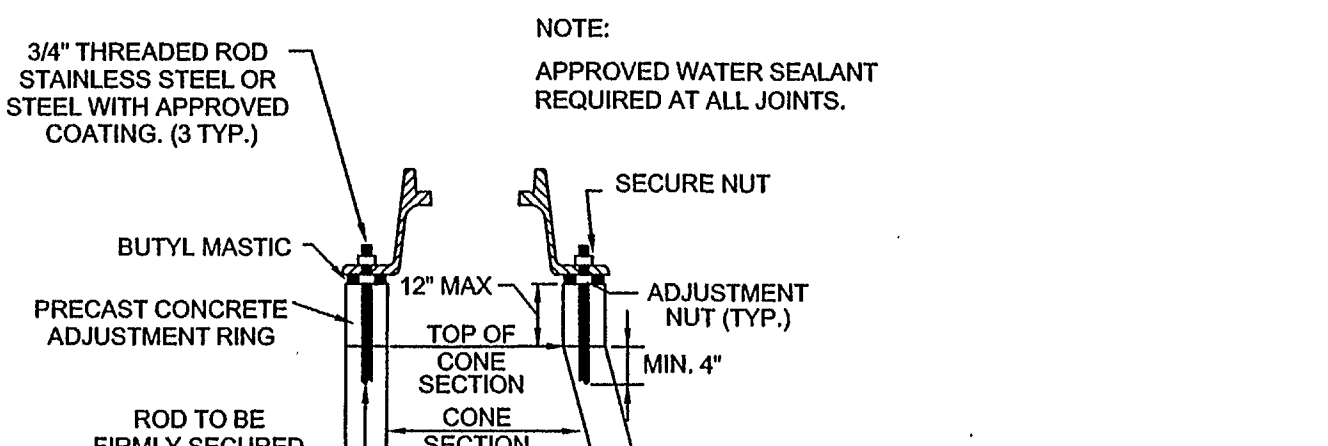
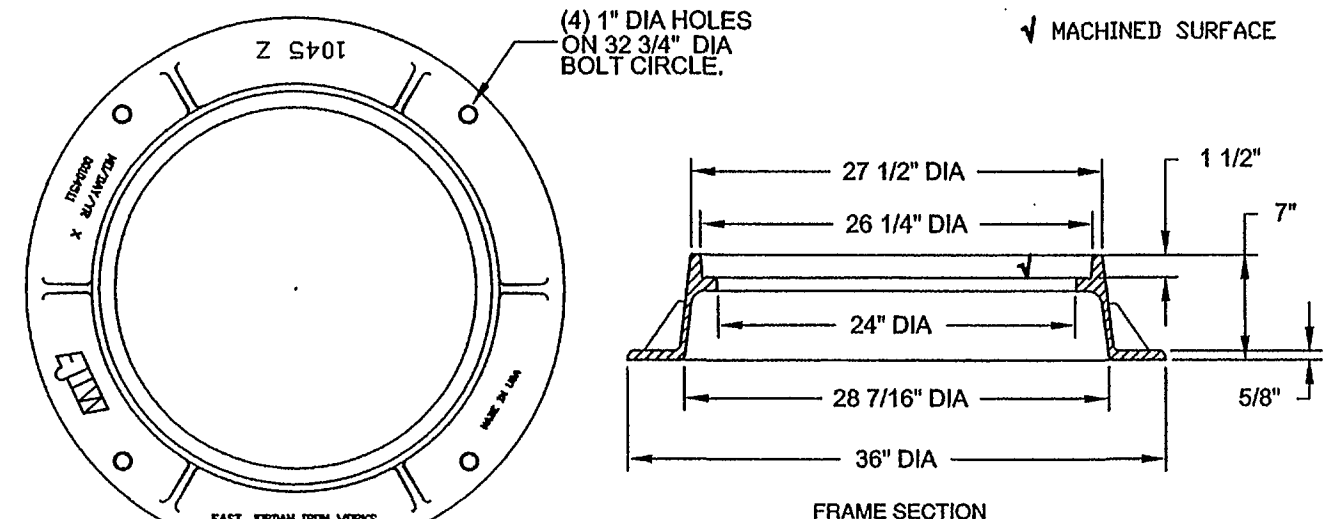
STANDARD MANHOLE COVER
BY EAST JORDAN IRON WORKS, INC OR EQUIVALENT.

WESTERN VIRGINIA WATER AUTHORITY - CONSTRUCTION STANDARDS		
REVISION DATE		
07/01/04		
03/01/06		
	WATERTIGHT MANHOLE COVER	S-06



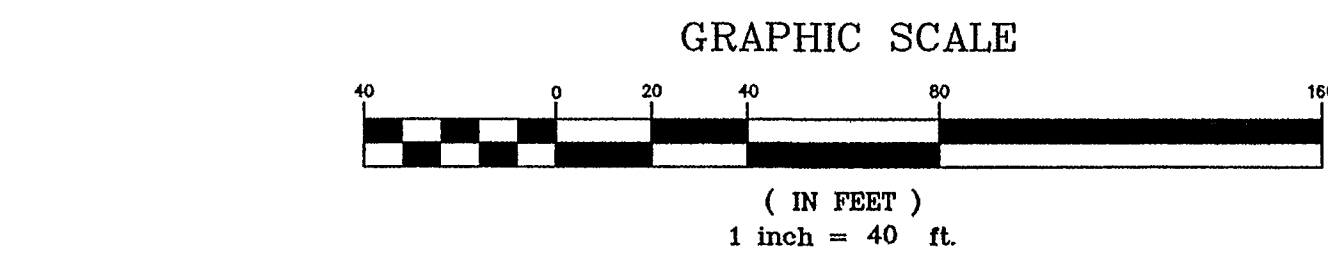
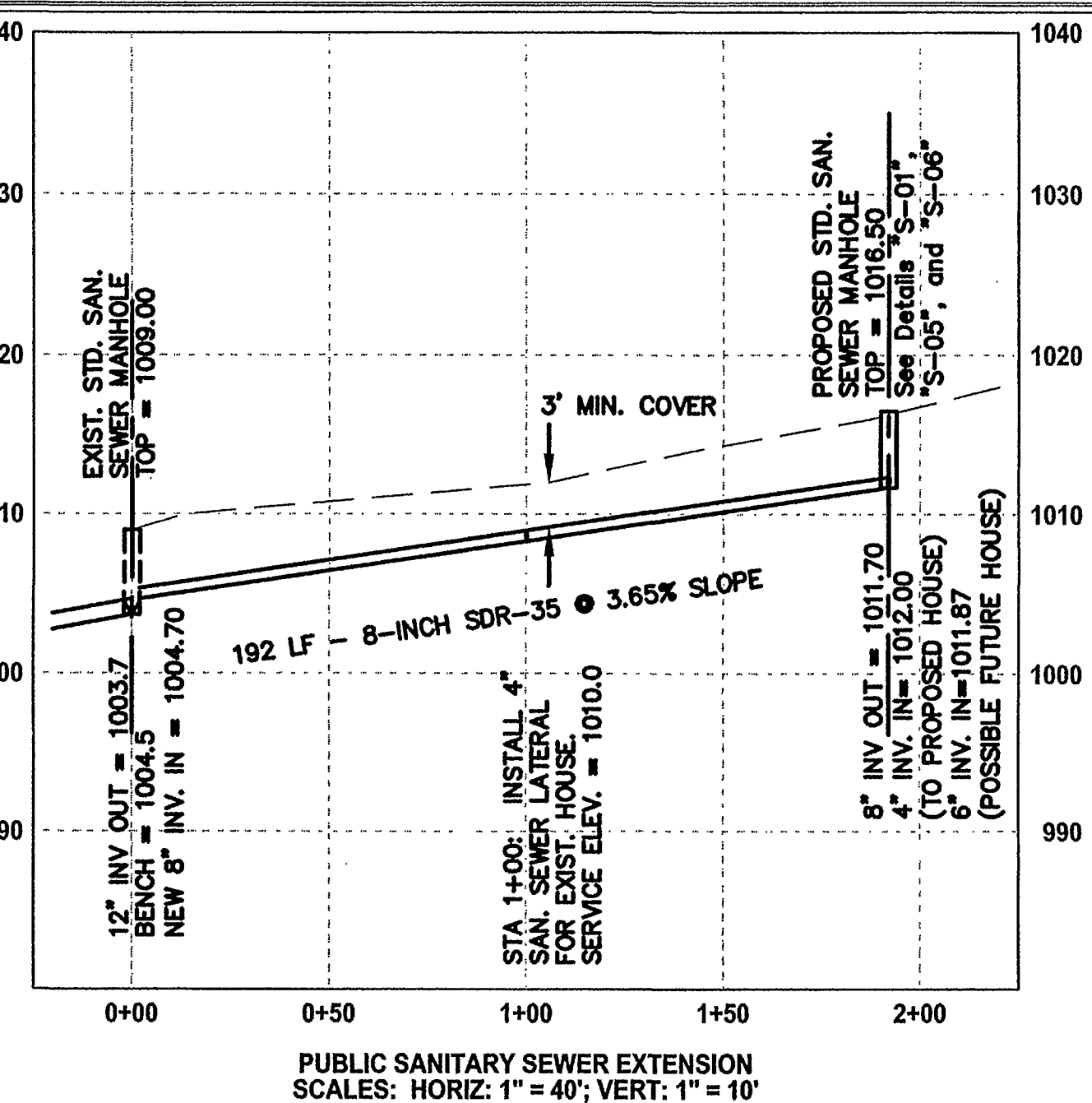
BOLT-DOWN MANHOLE COVER
BY EAST JORDAN IRON WORKS, INC OR EQUIVALENT.

WESTERN VIRGINIA WATER AUTHORITY - CONSTRUCTION STANDARDS		
REVISION DATE		
07/01/04		
03/01/06		
	WATERTIGHT MANHOLE FRAME	S-05

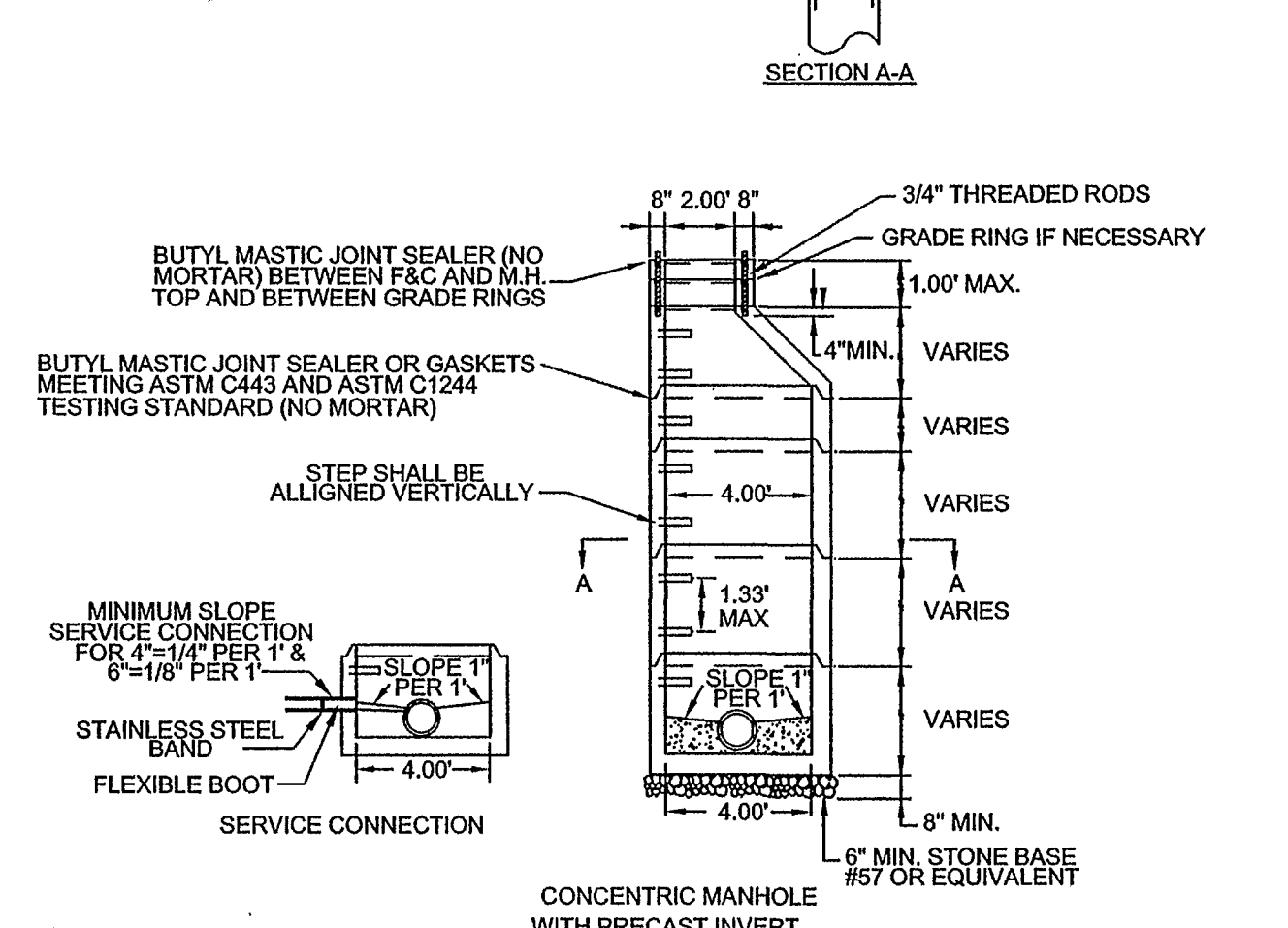


WATERTIGHT MANHOLE FRAME MODEL #1045Z
BY EAST JORDAN IRON WORKS, INC. OR EQUIVALENT.

WESTERN VIRGINIA WATER AUTHORITY - CONSTRUCTION STANDARDS		
REVISION DATE		
07/01/04		
03/01/06		
	WATERTIGHT MANHOLE FRAME	S-05



- NOTES:
1. ALL MANHOLE FRAMES AND COVERS SHALL BE EAST JORDAN IRON WORKS, INC. WATERTIGHT MANHOLE FRAME MODEL #1045Z. WATERTIGHT COVER MODEL #1040AGS AND BOLT-DOWN MANHOLE COVER MODEL #1040ACLS, OR APPROVED EQUAL. BOLT-DOWN MODEL TO BE USED IN AREAS SUBJECTED TO FLOODING OR AS DIRECTED BY THE AUTHORITY.
 2. STEPS TO BE VERTICALLY ALIGNED.
 3. THE FRAME AND COVER SHALL BE PROPERLY ALIGNED WITH THE 2 FOOT OPENING OF THE MANHOLE STRUCTURE AND BOLTED IN PLACE.
 4. FLAT TOP MANHOLES MAY ONLY BE SUBSTITUTED WITH THE PERMISSION OF THE UTILITY DIRECTOR. WHEN USED, THE ECCENTRIC OPENING MUST LINE UP WITH THE STEPS.
 5. SAMPLING MANHOLES IN TRAFFIC AREAS SHALL BE CONSTRUCTED AS PER MANHOLE DETAILS.
 6. FLEXIBLE JOINT MANHOLE CONNECTION SHALL BE AS MANUFACTURED BY PRES-SEAL GASKET CORPORATION OR EQUAL.
 7. GROUT ANNUAL SPACE BETWEEN PIPE AND PRECAST MANHOLE ON INSIDE OF MANHOLE.



CONCENTRIC MANHOLE
WITH PRECAST INVERT

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