



# TAYLORSVILLE-BENNION IMPROVEMENT DISTRICT

## SEWER DETAILS

STANDARD SEWER DETAILS	
TB-101	-- TYPICAL SEWER TRENCH
TB-102	-- PROFILE OF TYPICAL SEWER LATERAL
TB-103	-- NOSE-ON DETAIL
TB-104	-- TYPICAL PRECAST MANHOLE
TB-105	-- TYPICAL MANHOLE SECTION
TB-106	-- MANHOLE RING AND COVER
TB-107	-- PLAN-NEW CAST IN PLACE MANHOLE ON EXISTING SEWER
TB-108	-- SECTION-NEW CAST IN PLACE MANHOLE ON EXISTING SEWER
TB-109	-- TYPICAL DROP MANHOLE
TB-110	-- SAMPLING MANHOLE/GREASE INTERCEPTOR

**TYPICAL SEWER TRENCH NOTES:**

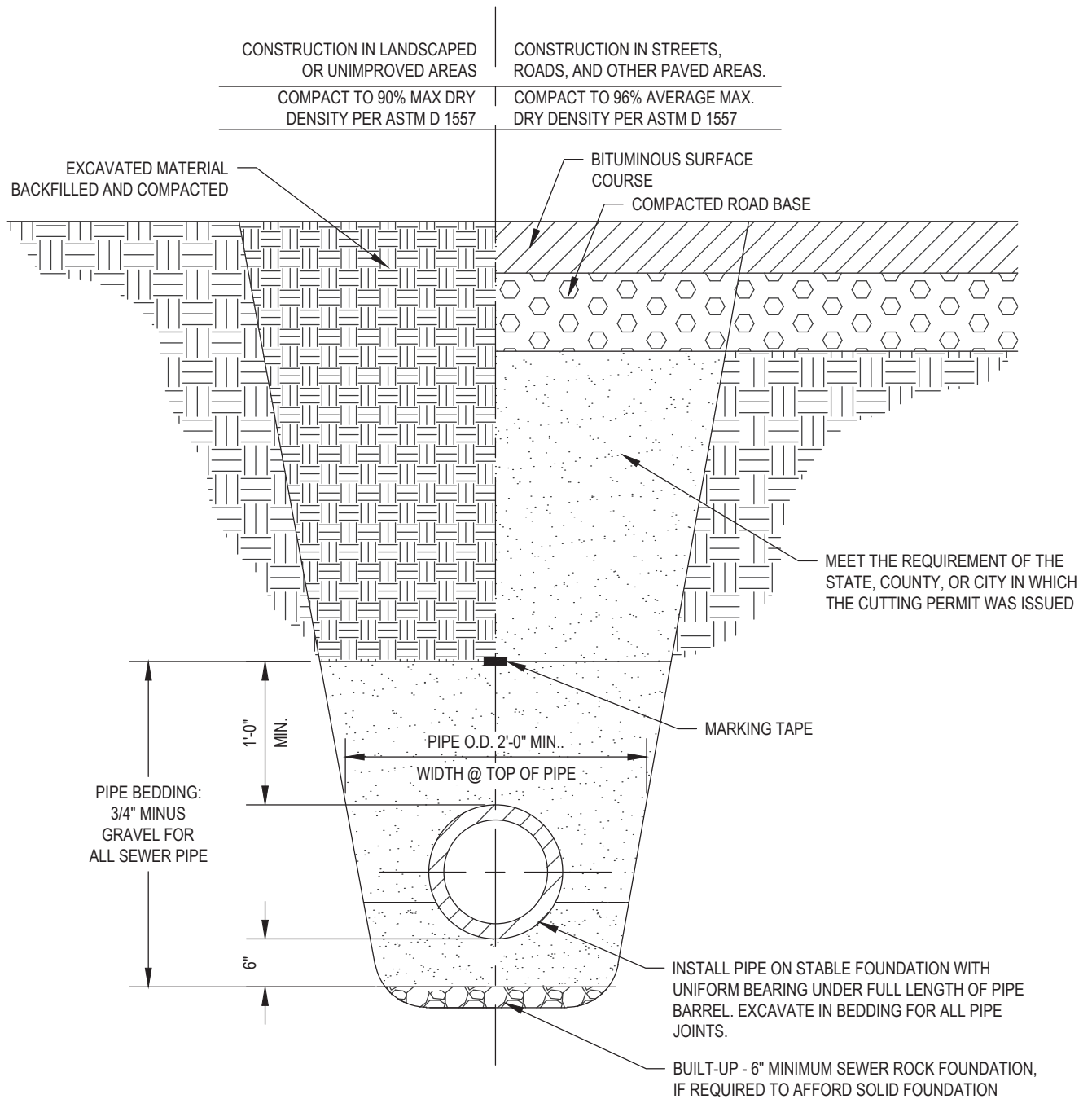
1. BLUE STAKES SHALL BE CONTACTED 48 HOURS BEFORE ANY EXCAVATION IS COMMENCED.
2. BACKFILL, ROAD BASE, AND PAVEMENT CONSTRUCTION SHALL CONFORM TO REQUIREMENTS, STANDARDS, AND REGULATIONS OF THE ROADWAY JURISDICTION.
3. TBID RECOMMENDS THE CONTRACTOR MEET ALL TRENCH SAFETY REQUIREMENTS ESTABLISHED BY OSHA & UOSHA.
4. THE DISTRICT INSPECTOR MAY REQUIRE UNSUITABLE MATERIALS BENEATH THE PIPE ZONE TO BE OVER-EXCAVATED, BACKFILLED, AND COMPACTED TO 95% MAX DENSITY.
5. EXCAVATE AT PIPE BELLS TO ENSURE PIPE IS SUPPORTED PROPERLY ALONG ITS ENTIRE LENGTH
6. PERMITS SHALL BE OBTAINED AND PAID FOR BY THE CONTRACTOR.
7. SEWER LINES SHALL BE PVC SDR35 PIPE. MINIMUM SEWER MAIN SIZE SHALL BE 8".
8. PIPE LAYING OPERATIONS SHALL PROCEED IN AN UPHILL DIRECTION WITH ALL BELLS FACING UPHILL.
9. PIPE PLUGS SHALL BE INSTALLED DURING CONSTRUCTION AT THE END OF EACH LENGTH OF PIPE TO PREVENT DEBRIS FROM ENTERING PIPE.

UPDATED DEC 2022



**TYPICAL SEWER TRENCH**  
NOTES

**TB-101**  
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## TYPICAL SEWER TRENCH

NOT TO SCALE

**TB-101**  
PAGE 2 OF 2

**TYPICAL SEWER LATERAL NOTES:**

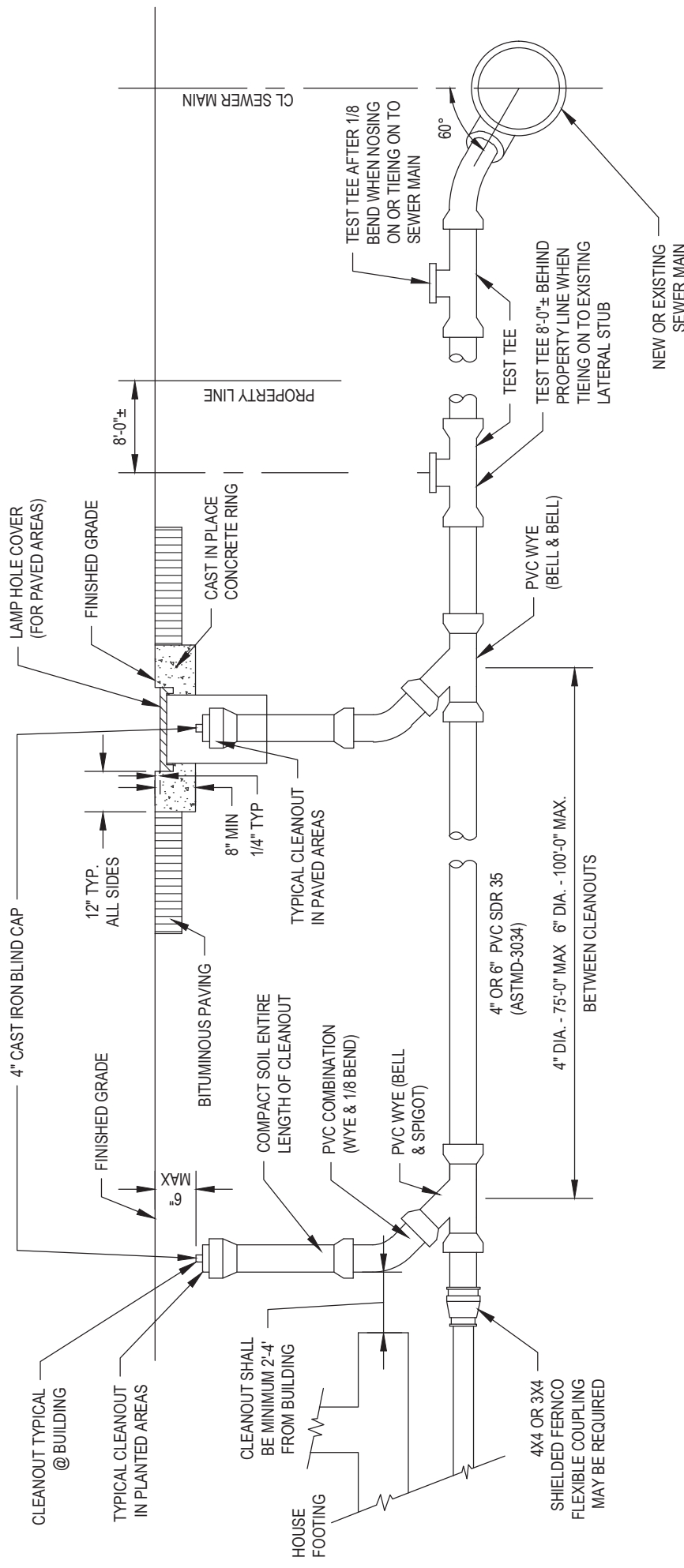
1. INSTALL PER TYPICAL SEWER TRENCH TB-101.
2. ALL FITTINGS AND PIPE SHALL BE PVC SDR 35.
3. MINIMUM 2' REQUIRED BETWEEN ALL BENDS ON SEWER LATERAL. 90 DEGREE BENDS ARE NOT PERMITTED.
4. PIPE LAYING OPERATIONS SHALL PROCEED IN AN UPHILL DIRECTION WITH ALL BELLS FACING UPHILL.
5. PROVIDE APPROVED "SHIELDED FERNCO" FITTINGS FOR CONNECTIONS TO EXISTING SERVICES WHERE REQUIRED.
6. COMPACT TO 96% MAX DENSITY UNDER PAVEMENTS AND IMPROVED AREAS. COMPACT TO 90% MAX DENSITY IN UNIMPROVED AREAS.
7. MINIMUM GRADE FOR 4" SEWER LATERAL IS 2%.
8. MINIMUM GRADE FOR 6" SEWER LATERAL IS 1%
9. DISTRICT TO INSPECT ALL LATERALS.
10. ALL SEWER LATERALS ARE PRIVATELY OWNED AND MAINTAINED.
11. SEE TB-103 FOR NOSE-ON DETAIL TO EXISTING SEWER.

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**TYPICAL SEWER LATERAL**  
NOTES

**TB-102**  
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# TYPICAL SEWER LATERAL

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**NOSE-ON DETAIL NOTES:**

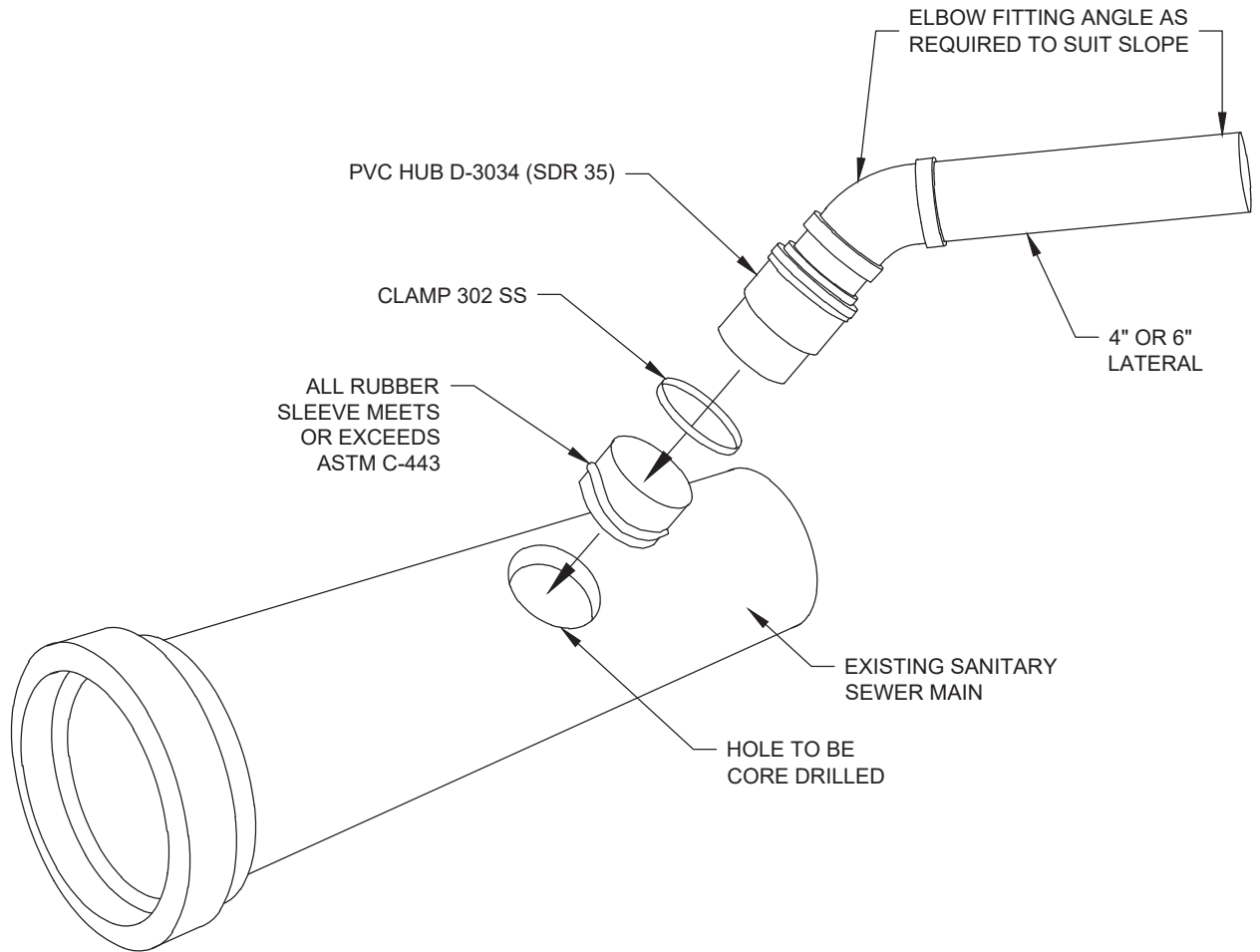
1. USE INSERTA TEE OR APPROVED EQUAL PRODUCT. SPECIFY MAINLINE MATERIAL WHEN ORDERING.
2. IF EXISTING SEWER MAIN IS CIPP LINED, EXTRA DEPTH INSERTA TEE WILL BE REQUIRED.
3. PVC SDR 35 REQUIRED ON ALL FITTINGS.
4. SEWER NOSE-ON SHALL BE ABOVE THE SEWER MAIN SPRING LINE.

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**SEWER NOSE-ON**  
NOTES

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# SEWER NOSE-ON

NOT TO SCALE

**TB-103**  
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**TYPICAL PRECAST MANHOLE NOTES:**

1. CONCENTRIC OR ECCENTRIC MANHOLE CONES ARE ACCEPTABLE .
2. NO STEPS IN CONE OR ON MANHOLE WALL IN CONCENTRIC MANHOLES. STEPS SHALL BE ALIGNED OVER THE SHELF OF ECCENTRIC MANHOLES
3. MANHOLES SHALL BE OF WATERTIGHT CONSTRUCTION, UTILIZING EITHER BITUMASTIC SEALANT OR RUBBER GASKET BETWEEN ADJACENT MANHOLE SECTIONS.
4. MANHOLE SHALL BE 5'-0" Ø IF SEWER MAIN IS GREATER THAN 10" Ø, OR IF THREE OR MORE SEWER MAIN PIPES CONNECT TO MANHOLE, OR OTHERWISE SPECIFIED ON DRAWINGS.
10. ALL MANHOLES WILL BE VACUUM TESTED. SEE SECTION 33 31 00 OF TBID STANDARD SPECIFICATIONS FOR MANHOLE TESTING REQUIREMENTS
11. LEVEL & ADJUST LID & FRAME TO FINISH GRADE (1/4" MAX BELOW SURFACE).
12. CONCRETE COLLARS REQUIRED IN PAVED AREAS.
13. MANHOLE REQUIRED ON ALL SEWER MAIN STUB ENDS.
14. THERE IS TO BE A 0.2' DROP THROUGH EVERY MANHOLE.
15. INSTALL SUITABLE BARRIERS OR COVERS DURING CONSTRUCTION TO PREVENT DEBRIS FROM ENTERING SEWER MAIN PIPING VIA MANHOLES.
16. SEE TB-105 FOR ADDITIONAL INFORMATION.

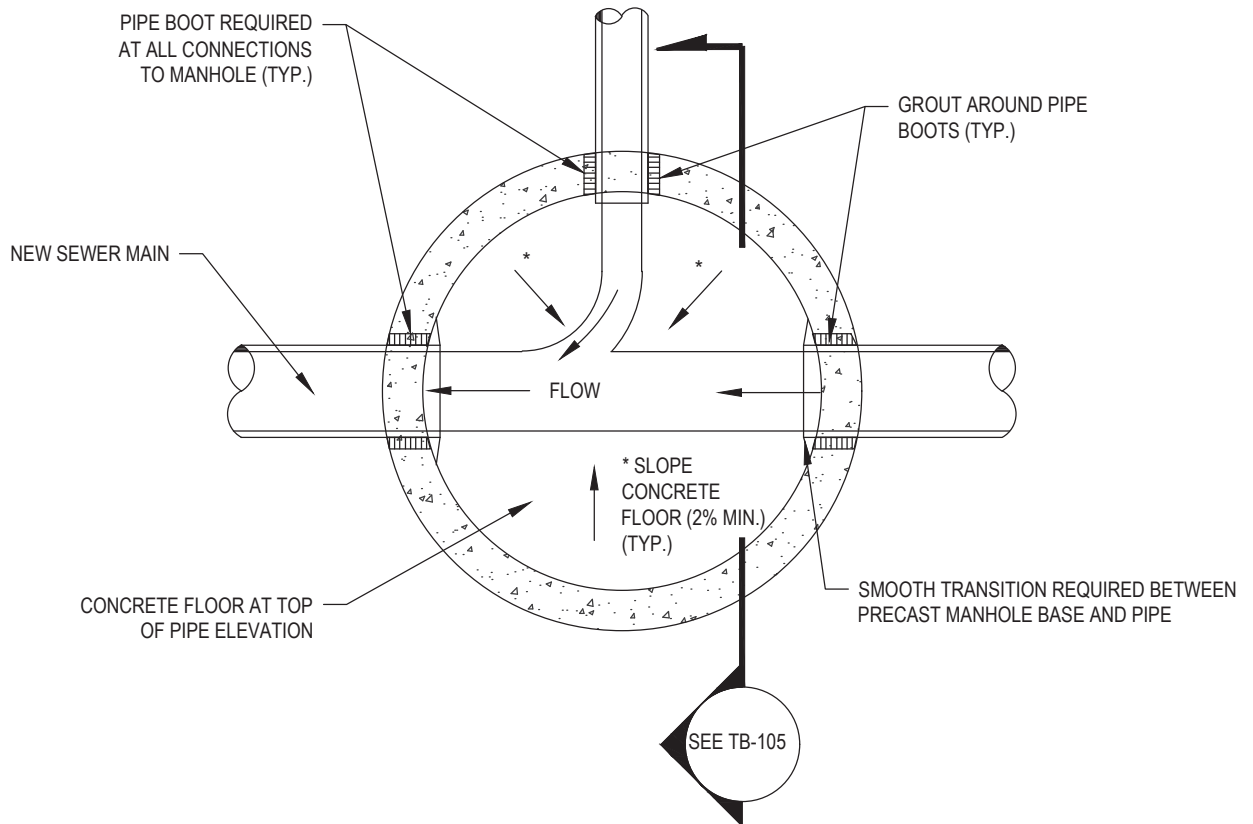
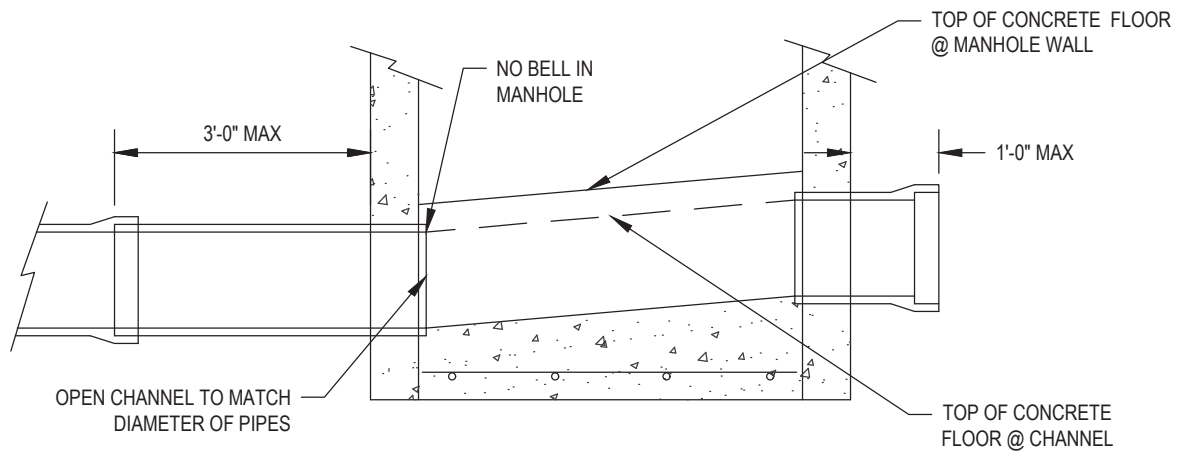
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**TYPICAL PRECAST MANHOLE**  
NOTES

**TB-104**  
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# TYPICAL PRECAST MANHOLE

NOT TO SCALE

**TB-104**

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**TYPICAL MANHOLE SECTION NOTES:**

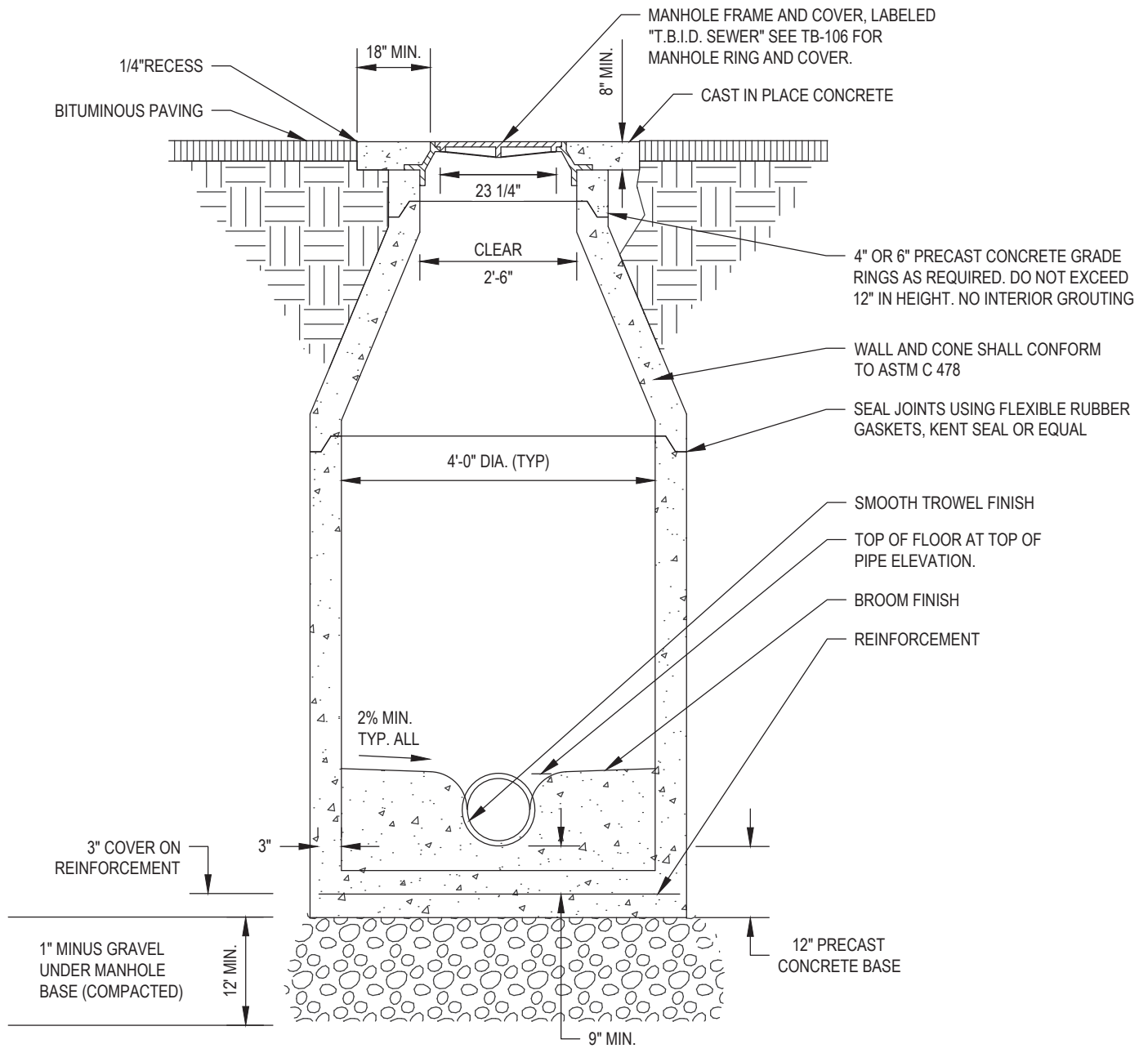
1. CONCENTRIC OR ECCENTRIC MANHOLE CONES ARE ACCEPTABLE .
2. NO STEPS IN CONE OR ON MANHOLE WALL IN CONCENTRIC MANHOLES. STEPS SHALL BE ALIGNED OVER THE SHELF OF ECCENTRIC MANHOLES
3. MANHOLES SHALL BE OF WATERTIGHT CONSTRUCTION, UTILIZING EITHER BITUMASTIC SEALANT OR RUBBER GASKET BETWEEN ADJACENT MANHOLE SECTIONS.
4. MANHOLE SHALL BE 5'-0" Ø IF SEWER MAIN IS GREATER THAN 10" Ø, OR IF THREE OR MORE SEWER MAIN PIPES CONNECT TO MANHOLE, OR IF OTHERWISE SPECIFIED ON DRAWINGS.
10. ALL MANHOLES WILL BE VACUUM TESTED. SEE SECTION 33 31 00 OF TBID STANDARD SPECIFICATIONS FOR MANHOLE TESTING REQUIREMENTS
11. LEVEL & ADJUST LID & FRAME TO FINISH GRADE (1/4" MAX BELOW SURFACE).
12. CONCRETE COLLARS REQUIRED IN PAVED AREAS.
13. MANHOLE REQUIRED ON ALL SEWER MAIN STUB ENDS.
14. THERE IS TO BE A 0.2' DROP THROUGH EVERY MANHOLE.
15. INSTALL SUITABLE BARRIERS OR COVERS DURING CONSTRUCTION TO PREVENT DEBRIS FROM ENTERING SEWER MAIN PIPING VIA MANHOLES.
16. COMPACT TO 96% MAX DENSITY UNDER PAVEMENTS AND IMPROVED AREAS. COMPACT TO 90% MAX DENSITY IN UNIMPROVED AREAS.
17. SEE TB-104 FOR ADDITIONAL INFORMATION.

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**TYPICAL MANHOLE SECTION**  
NOTES

**TB-105**  
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# TYPICAL MANHOLE SECTION

NOT TO SCALE

**TB-105**

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**MANHOLE RING AND COVER NOTES:**

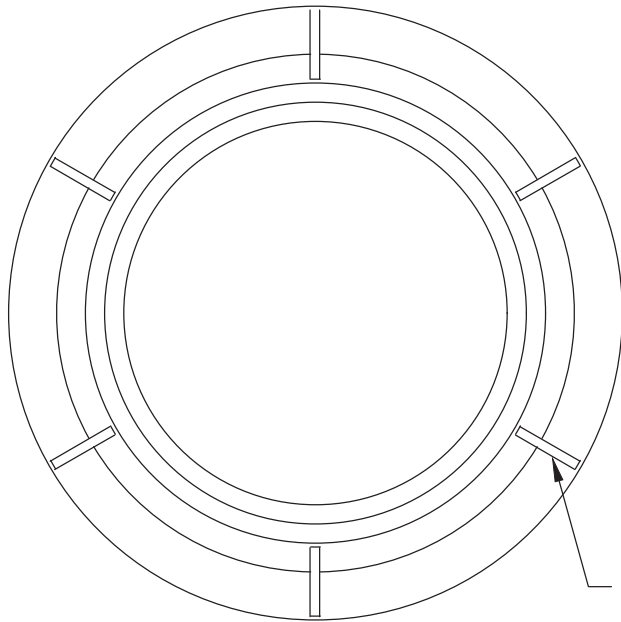
1. T.B.I.D. MANHOLE COVERS AVAILABLE AT D&L SUPPLY AND NEENAH FOUNDRY.
2. MANHOLES TO BE SUITABLE FOR HS-20 LOADINGS.

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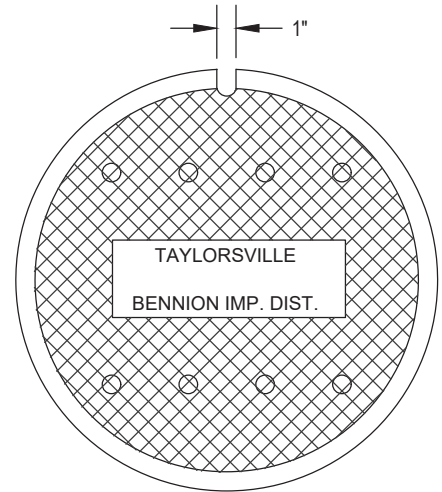


**MANHOLE RING AND COVER**  
NOTES

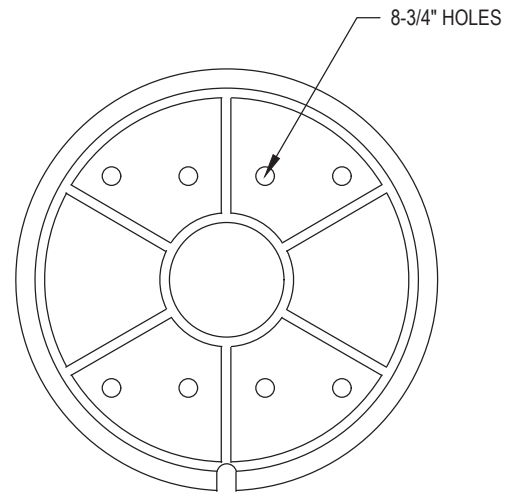
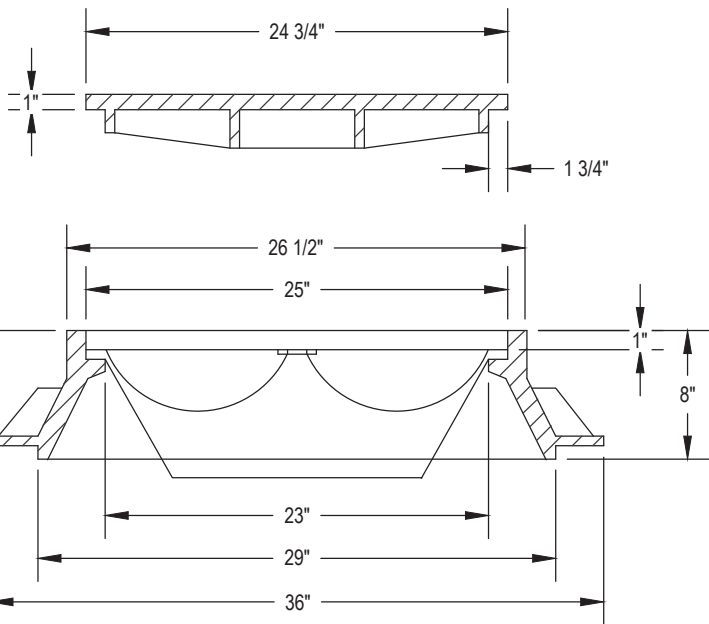
**TB-106**  
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1/2" GUSSETS  
(6 EACH AT 60 DEGREES)



TAYLORSVILLE  
BENNION IMP. DIST.



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# MANHOLE RING AND COVER

NOT TO SCALE

**TB-106**

PAGE 2 OF 2

**NEW CAST IN PLACE MANHOLE ON EXISTING SEWER NOTES:**

1. CONCENTRIC OR ECCENTRIC MANHOLE CONES ARE ACCEPTABLE.
2. NO STEPS IN CONE OR MANHOLE WALL OF CONCENTRIC MANHOLES. STEPS SHALL BE ALIGNED OVER THE SHELF IN ECCENTRIC MANHOLES.
3. MANHOLES SHALL BE OF WATERTIGHT CONSTRUCTION, UTILIZING EITHER BITUMASTIC SEALANT OR RUBBER GASKET BETWEEN ADJACENT MANHOLE SECTIONS.
4. MANHOLE SHALL BE 5'-0" Ø IF SEWER MAIN IS GREATER THAN 10" Ø, OR IF THREE OR MORE SEWER MAIN PIPES CONNECT TO MANHOLE, OR IF OTHERWISE SPECIFIED ON DRAWINGS.
5. CAST-IN-PLACE MANHOLES SHALL BE CAST WITH AT LEAST 80% OF THE FULL PIPE DIAMETER BELOW THE SKIRT/SHELF.
6. PROVIDE TEMPORARY SUPPORT FOR EXISTING SEWER DURING CONSTRUCTION.
7. INSTALL SUITABLE BARRIERS OR COVERS DURING CONSTRUCTION TO PREVENT DEBRIS FROM ENTERING SEWER MAIN PIPING VIA MANHOLES.
8. LEVEL & ADJUST LID & FRAME TO FINISH GRADE (1/4" MAX BELOW SURFACE).
9. THE BASE RISER SECTION OF A POURED IN PLACE MANHOLE SHALL BE A MINIMUM OF 2 FEET HIGH.
10. MAINTAIN PIPE SLOPE THROUGH TROUGH OF THE MANHOLE.
11. COMPACT TO 96% MAX DENSITY UNDER PAVEMENTS AND IMPROVED AREAS. COMPACT TO 90% MAX DENSITY IN UNIMPROVED AREAS.
12. SEE TB-108 FOR ADDITIONAL INFORMATION.

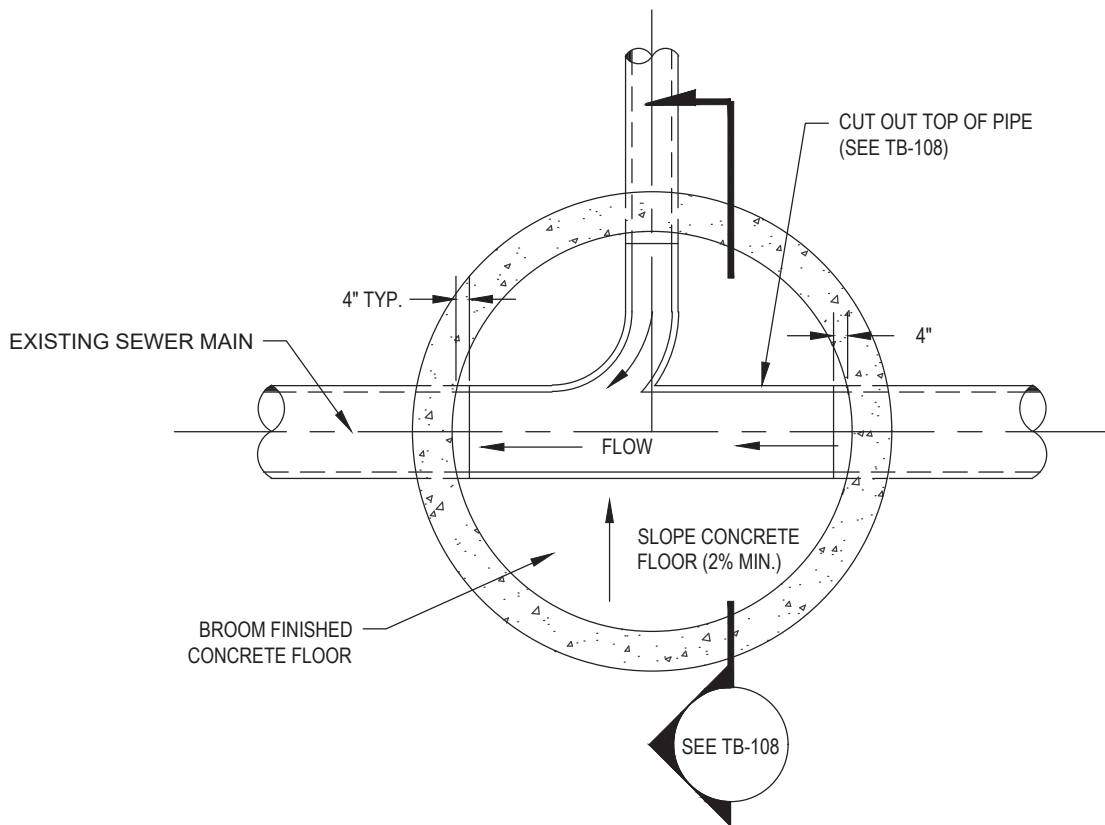
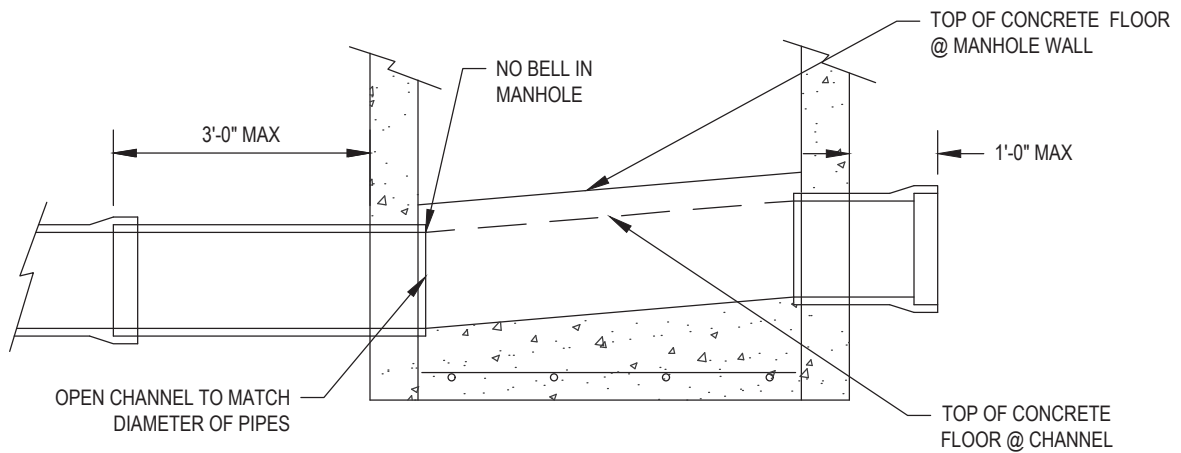
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**PLAN - NEW CAST IN PLACE  
MANHOLE ON EXISTING SEWER**

NOTES

**TB-107**  
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# PLAN - NEW CAST IN PLACE MANHOLE ON EXISTING SEWER

NOT TO SCALE

**TB-107**  
PAGE 2 OF 2

**NEW CAST IN PLACE MANHOLE ON EXISTING SEWER:**

1. CONCENTRIC OR ECCENTRIC MANHOLE CONES ARE ACCEPTABLE.
2. NO STEPS IN CONE OR MANHOLE WALL OF CONCENTRIC MANHOLES. STEPS SHALL BE ALIGNED OVER THE SHELF IN ECCENTRIC MANHOLES.
3. MANHOLES SHALL BE OF WATERTIGHT CONSTRUCTION, UTILIZING EITHER BITUMASTIC SEALANT OR RUBBER GASKET BETWEEN ADJACENT MANHOLE SECTIONS.
4. MANHOLE SHALL BE 5'-0" Ø IF SEWER MAIN IS GREATER THAN 10" Ø, OR IF THREE OR MORE SEWER MAIN PIPES CONNECT TO MANHOLE, OR IF OTHERWISE SPECIFIED ON DRAWINGS.
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10. THE BASE RISER SECTION OF A POURED IN PLACE MANHOLE SHALL BE A MINIMUM OF 2 FEET HIGH.
11. MAINTAIN PIPE SLOPE THROUGH TROUGH OF THE MANHOLE.
12. COMPACT TO 96% MAX DENSITY UNDER PAVEMENTS AND IMPROVED AREAS. COMPACT TO 90% MAX DENSITY IN UNIMPROVED AREAS.
13. SEE TB-107 FOR ADDITIONAL INFORMATION.

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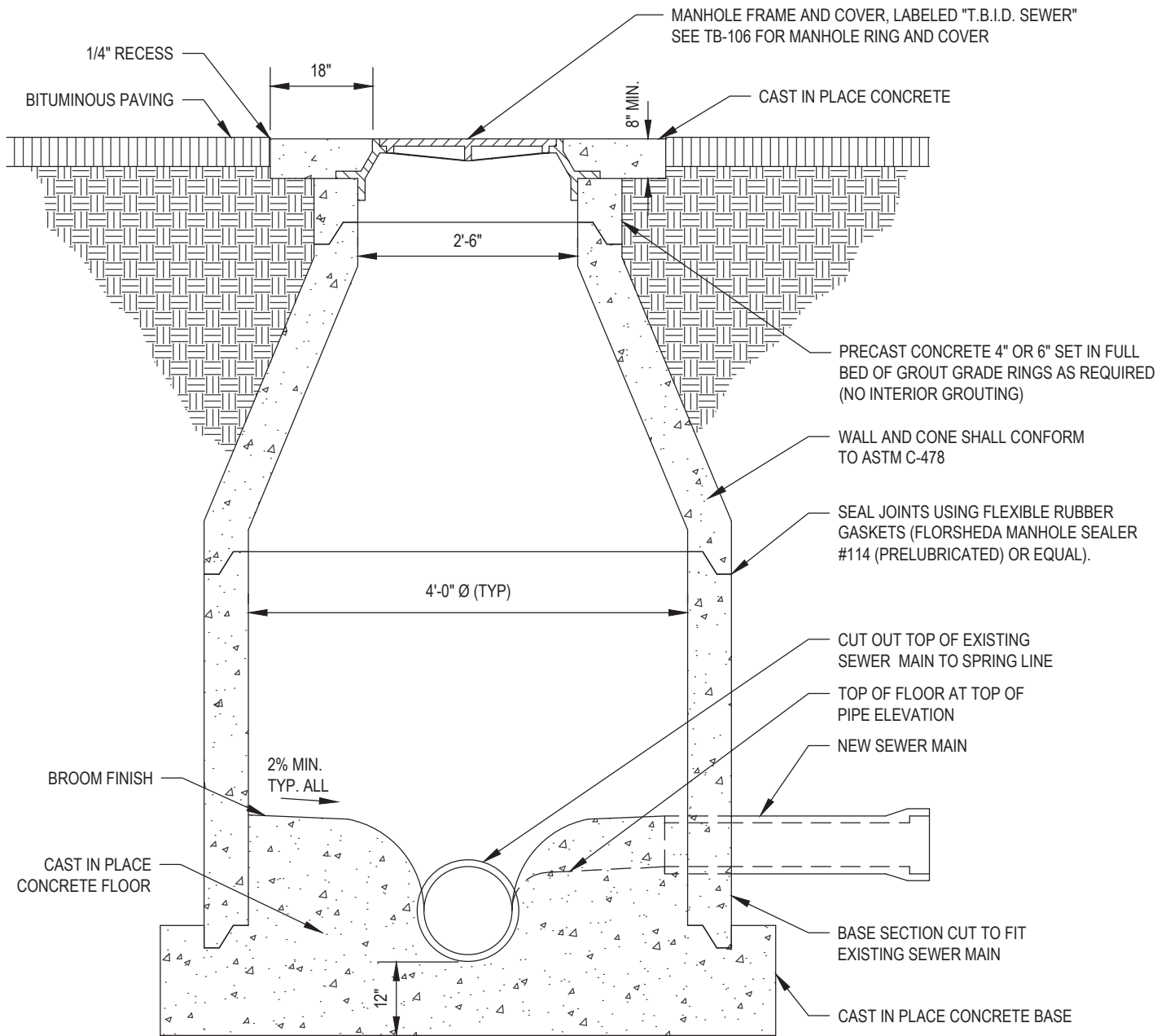


**SECTION- NEW CAST IN PLACE  
MANHOLE ON EXISTING SEWER**

NOTES

**TB-108**  
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## SECTION - NEW CAST IN PLACE MANHOLE ON EXISTING SEWER

NOT TO SCALE

**TB-108**

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**TYPICAL DROP MANHOLE NOTES:**

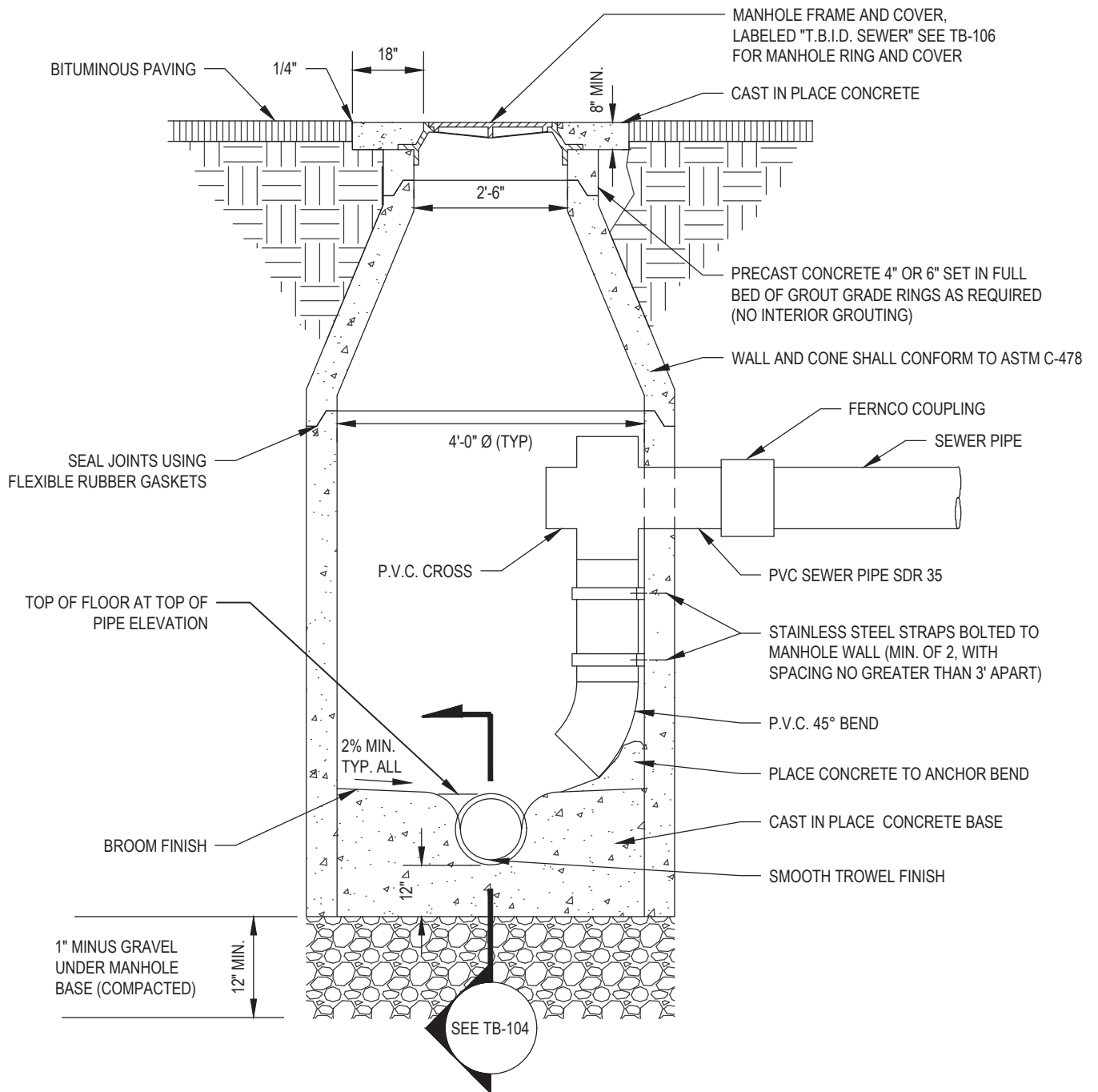
1. ALL DROP MANHOLES TO BE APPROVED BY THE DISTRICT.
2. CONCENTRIC OR ECCENTRIC MANHOLE CONES ARE ACCEPTABLE .
3. NO STEPS IN CONE OR ON MANHOLE WALL IN CONCENTRIC MANHOLES. STEPS SHALL BE ALIGNED OVER THE SHELF OF ECCENTRIC MANHOLES
4. MANHOLES SHALL BE OF WATERTIGHT CONSTRUCTION, UTILIZING EITHER BITUMASTIC SEALANT OR RUBBER GASKET BETWEEN ADJACENT MANHOLE SECTIONS.
5. MANHOLE SHALL BE 5'-0" Ø IF SEWER MAIN IS GREATER THAN 10" Ø, OR IF THREE OR MORE SEWER MAIN PIPES CONNECT TO MANHOLE, OR IF OTHERWISE SPECIFIED ON DRAWINGS.
10. ALL MANHOLES WILL BE VACUUM TESTED. SEE SECTION 33 31 00 OF TBID STANDARD SPECIFICATIONS FOR MANHOLE TESTING REQUIREMENTS
11. LEVEL & ADJUST LID & FRAME TO FINISH GRADE (1/4" MAX BELOW SURFACE).
12. CONCRETE COLLARS REQUIRED IN PAVED AREAS.
13. MANHOLE REQUIRED ON ALL SEWER MAIN STUB ENDS.
14. THERE IS TO BE A 0.2' DROP THROUGH EVERY MANHOLE.
15. INSTALL SUITABLE BARRIERS OR COVERS DURING CONSTRUCTION TO PREVENT DEBRIS FROM ENTERING SEWER MAIN PIPING VIA MANHOLES

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**TYPICAL DROP MANHOLE SECTION**  
NOTES

**TB-109**  
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# TYPICAL DROP MANHOLE SECTION

NOT TO SCALE

# TB-109

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**SAMPLING MANHOLE/GREASE INTERCEPTOR NOTES:**

1. SAMPLING MANHOLE AND GREASE INTERCEPTOR ARE PRIVATELY OWNED AND MAINTAINED BY THE PROPERTY OWNER.
2. SAMPLING MANHOLE AND GREASE INTERCEPTOR TO BE DESIGNED FOR HS-20 LOAD.
3. ALL PIPE AND FITTINGS TO BE SDR-35. ALL FITTINGS TO BE GASKETED .
4. PIPE BOOTS AND WATER TIGHT GROUT REQUIRED AT ALL PIPE CONNECTIONS TO MANHOLES.
5. SAMPLING MANHOLE AND GREASE INTERCEPTOR MUST BE ACCESSIBLE AND MUST NOT BE PLACED IN PARKING STALLS.
6. THE SIZE AND CAPACITY OF GREASE INTERCEPTORS SHALL BE DETERMINED BY A CERTIFIED PROFESSIONAL.
7. SEE TB-102 FOR ADDITIONAL SEWER LATERAL REQUIREMENTS AND INFORMATION.

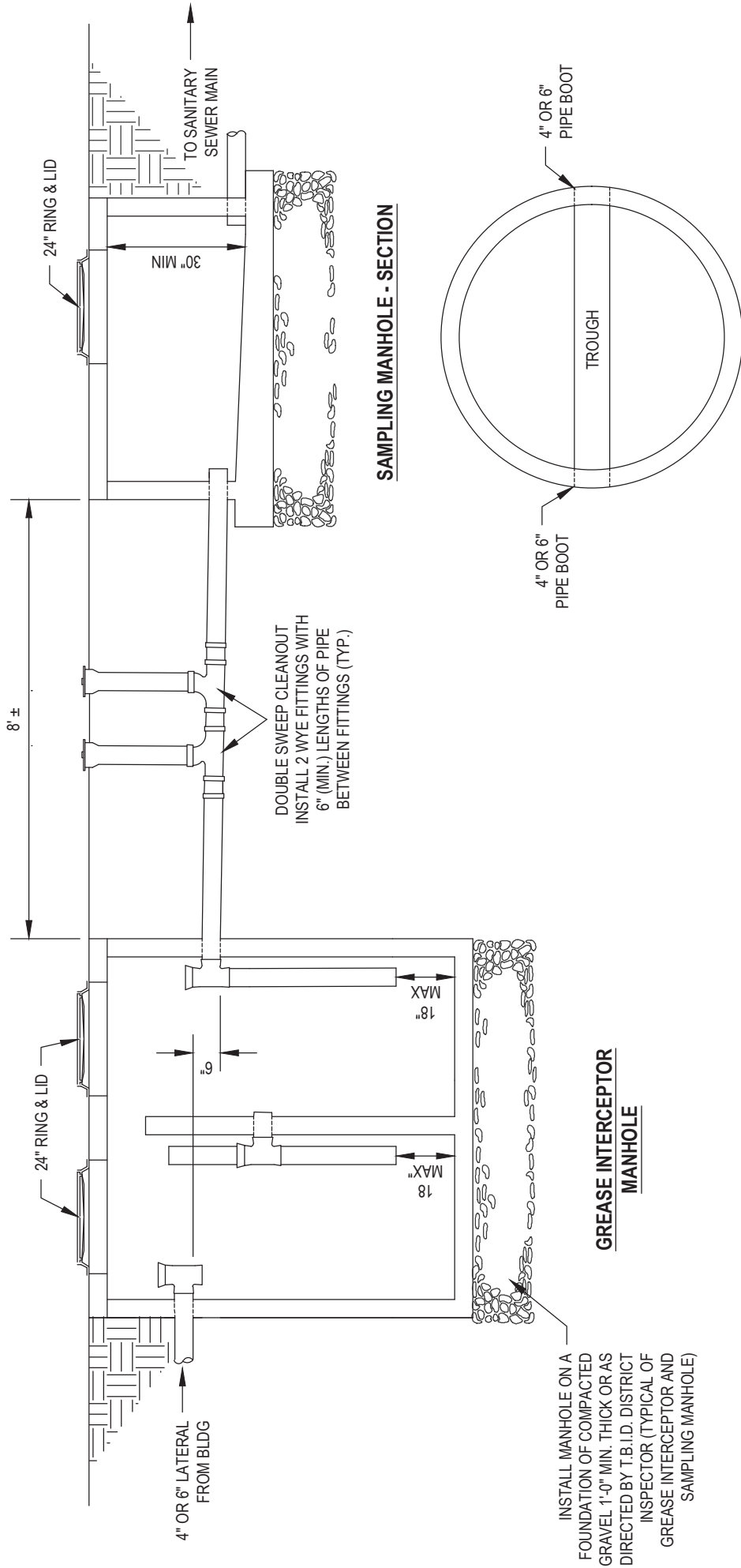
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**SAMPLING MANHOLE/GREASE  
INTERCEPTOR**

NOTES

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**SAMPLING MANHOLE - SECTION**

**SAMPLING MANHOLE - PLAN**

**GREASE INTERCEPTOR  
MANHOLE**

INSTALL MANHOLE ON A FOUNDATION OF COMPACTED GRAVEL 1'-0" MIN. THICK OR AS DIRECTED BY T.B.I.D. DISTRICT INSPECTOR (TYPICAL OF GREASE INTERCEPTOR AND SAMPLING MANHOLE)

UPDATED DEC 2022



**SAMPLING MANHOLE/GREASE INTERCEPTOR**

NOT TO SCALE