SEWER DETAILS

TB-101 Typical Sewer Trench Section
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
TB-108 Section- New Manhole on existing line
    TB-109 Typical Drop Manhole
    TB-110 Sampling Manhole
EXCAVATED MATERIAL
BACKFILLED AND COMPACTED

CONSTRUCTION IN LANDSCAPED OR UNIMPROVED AREAS
COMPACT TO 90% MAX DRY DENSITY PER ASTM D 1557

CONSTRUCTION IN STREETS, ROADS, AND OTHER PAVED AREAS.
COMPACT TO 96% AVERAGE MAX. DRY DENSITY PER ASTM D 1557

PIPE BEDDING:
3/4" MINUS GRAVEL FOR ALL SEWER PIPE CONSTRUCTION IN LANDSCAPED OR UNIMPROVED AREAS
5' MINIMUM SEWER ROCK FOUNDATION, IF REQUIRED TO AFFORD SOLID FOUNDATION

INSTALL PIPE ON STABLE FOUNDATION WITH UNIFORM BEARING UNDER FULL LENGTH OF PIPE BARREL. EXCAVATE IN BEDDING FOR ALL PIPE JOINTS.

BUILT-UP - 6" MINIMUM SEWER ROCK FOUNDATION, IF REQUIRED TO AFFORD SOLID FOUNDATION

NOTE:
ROAD BASE AND PAVEMENT THICKNESS SHALL CONFORM TO REQUIREMENTS OF ROADWAY JURISDICTION.
MEET THE REQUIREMENT OF THE STATE, COUNTY, OR CITY IN WHICH THE CUTTING PERMIT WAS ISSUED

PIPE BEDDING: 3/4" MINUS GRAVEL FOR ALL SEWER PIPE

PIPE O.D. 2'-0" MIN.
WIDTH @ TOP OF PIPE

1'-0" MIN.

TB-101 TYPICAL SEWER TRENCH SECTION @ GRADE
N.T.S.

TBID STANDARD DETAIL

12/2018
CLEANOUT TYPICAL @ HOUSE

TYPICAL CLEANOUT IN PLANTED AREAS

HOUSE FOOTING

4X4 OR 3X4 FERNCO FLEXIBLE COUPLING MAY BE REQUIRED

PVC COMBINATION (WYE & 1/8 BEND)

NOTES:
1. NO SEWER LATERAL CONNECTIONS TO BE MADE AT MANHOLE, EXCEPT AS APPROVED BY T.B.I.D. INSPECTOR.
2. INSTALL PER TYPICAL SEWER TRENCH TB-101.
3. LEVEL & ADJUST COVER TO FINISH GRADE (1/4" MAX BELOW SURFACE).
4. ALL FITTINGS AND PIPE SHALL BE PVC SDR 35

TB-102 PROFILE OF TYPICAL SEWER LATERAL

TBID STANDARD DETAIL
ALL RUBBER SLEEVE MEETS OR EXCEEDS ASTM C-443

ELBOW FITTING ANGLE AS REQUIRED TO SUIT SLOPE

PVC HUB D-3034 (SDR 35)

CLAMP 302 SS

4" OR 6" LATERAL

HOLE TO BE ORE DRILLED

EXISTING SANITARY SEWER MAIN

NOTES:
1. USE INSERTA TEE OR APPROVED EQUAL PRODUCT. SPECIFY MAINLINE MATERIAL WHEN ORDERING
2. PVC SDR 35 ON ALL FITTINGS

TB-103 NOSE ON DETAIL

N.T.S.

TBID STANDARD DETAIL

12/2018
NEW SEWER MAIN

OPEN CHANNEL TO MATCH DIAMETER OF PIPES

NO BELL IN MANHOLE

TOP OF CONCRETE FLOOR @ MANHOLE WALL

TOP OF CONCRETE FLOOR @ CHANNEL

PIECE BOOT REQUIRED AT ALL CONNECTIONS TO MANHOLE (TYP.)

GROUT AROUND PIPE BOOTS (TYP.)

CONCRETE FLOOR AT TOP OF PIPE ELEVATION

*SLOPE CONCRETE FLOOR (2% MIN.) (TYP.)

SMOOTH TRANSITION REQUIRED BETWEEN PRECAST MANHOLE BASE AND PIPE

SEE TB-105

TB-104 TYPICAL PRECAST MANHOLE

N.T.S.

TBID STANDARD DETAIL

12/2018
NOTES:

1. CONCENTRIC OR ECCENTRIC MANHOLE CONES ARE ACCEPTABLE.
2. NO STEPS IN CONE OR ON MANHOLE WALL IN CONCENTRIC MANHOLES.
3. STEPS SHALL BE ALIGNED OVER THE SHELF OF ECCENTRIC MANHOLES.
4. MANHOLE SHALL BE 5'-0" Ø IF SEWER MAIN IS GREATER THAN 10'-0" Ø, OR IF THREE OR MORE SEWER MAIN PIPES CONNECT TO MANHOLE, OR IF OTHERWISE SPECIFIED ON DRAWINGS.
5. ALL MANHOLES WILL BE VACUUM TESTED.
6. LEVEL & ADJUST LID & FRAME TO FINISH GRAD (1/4" MAX BELOW SURFACE).
7. MANHOLE REQUIRED ON ALL SEWER MAIN STUB ENDS.

TB-105 TYPICAL MANHOLE SECTION

12/2018
TB-106 MANHOLE RING AND COVER
N.T.S.

TBID STANDARD DETAIL

12/2018
TB-107 PLAN-NEW CAST IN PLACE MANHOLE ON EXISTING SEWER LINE

N.T.S.

TBID STANDARD DETAIL

12/2018
NOTES:

1. CONCENTRIC OR ECCENTRIC MANHOLE CONES ARE ACCEPTABLE.
2. NO STEPS IN CONE OR MANHOLE WALL OF CONCENTRIC MANHOLES.
3. STEPS SHALL BE ALIGNED OVER THE SHELF IN ECCENTRIC MANHOLES.
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. PROVIDE TEMP. SUPPORT FOR EXISTING SEWER DURING CONSTRUCTION.
6. LEVEL & ADJUST LID & FRAME TO FINISH GRADE (1/4" MAX BELOW SURFACE).
7. THE BASE RISER SECTION OF A Poured IN PLACE MANHOLE SHALL BE A MINIMUM OF 2 FEET HIGH.

TB-108 SECTION-NEW MANHOLE ON EXISTING SEWER LINE

N.T.S.

TBID STANDARD DETAIL
1. CONCENTRIC OR ECCENTRIC MANHOLE CONES ARE ACCEPTABLE...
2. NO STEPS IN CONE OR MANHOLE WALL OF CONCENTRIC MANHOLES.
3. STEPS SHALL BE ALIGNED OVER THE SHELF IN ECCENTRIC MANHOLES.
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. LEVEL & ADJUST LID & FRAME TO FINISH GRADE (1/4" MAX BELOW SURFACE).

SEAL JOINTS USING FLEXIBLE RUBBER GASKETS

TOP OF FLOOR AT TOP OF PIPE ELEVATION

BROOM FINISH

1" MINUS GRAVEL UNDER MANHOLE BASE (COMPACTED) 12" MIN

PRECAST CONCRETE 4" OR 6" SET IN FULL BED OF GROUT GRADE RINGS AS REQUIRED (NO INTERIOR GROUTING)

WALL AND CONE SHALL CONFORM TO ASTM C-478

FERNCO COUPLING

SEWER PIPE

ASTM 3034 PVC SEWER PIPE SDR 35 2 EA. STAINLESS STEEL STRAPS

(MIN. OF 2, WITH SPACING NO GREATER THAN 3' APART) BOLTED TO MANHOLE WALL

P.V.C. 45° BEND

PLACE CONCRETE TO ANCHOR BEND

CAST IN PLACE CONCRETE BASE

SMOOTH TROWEL FINISH

PB-109 TYPICAL DROP MANHOLE SECTION

N.T.S.

TBID STANDARD DETAIL

12/2018
MANHOLE RING AND COVER D&L SUPPLY B5088

30" DIA

1" RECESS

CONSEAL 1/2" - 1 3/4"

3/8" TYPE 304 STAINLESS STEEL BOLTS

ALUMINUM L 2X2X1/4 WITH (3) 1/2" LAG SCREWS IN LEAD SHIELDS DRILLED INTO CONCRETE

#4 BAR @ 12" O.C. EA. WAY TYP.

TROUGH

SECTION-END VIEW

CUT OUT OVERFLOW TROUGH

2" CATCH RECESS

TB-110 SAMPLING MANHOLE
N.T.S.

TBID STANDARD DETAIL

12/2018