

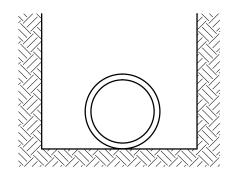
City Utilities Design Standards Manual

DUCTILE IRON PIPE TRENCH SECTION

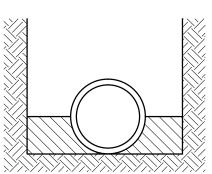
Created: January 1, 2002

Scale: N.T.S.

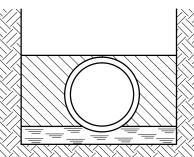
Revised: January 24, 2017



TYPE 1 FLAT-BOTTOM TRENCH WITH LOOSE BACKFILL.

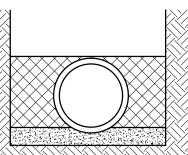


TYPE 2 FLAT-BOTTOM TRENCH WITH BACKFILL LIGHTLY CONSOLIDATED TO CENTERLINE OF PIPE.

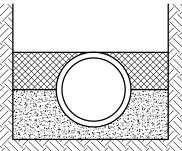


TYPE 3 PIPE BEDDED IN 4-IN. (100-MM) MINIMUM LOOSE SOIL WITH BACKFILL LIGHTLY CONSOLIDATED TO TOP OF PIPE.

TYPE 5



TYPE 4 PIPE BEDDED IN SAND, GRAVEL, OR CRUSHED STONE TO DEPTH OF 1/8 PIPE DIAMETER, 4-IN. (100-MM) MINIMUM, WITH BACKFILL COMPACTED TO TOP OF PIPE. (APPROXIMATELY 80 PERCENT STANDARD PROCTOR, AASHTO T-99)



PIPE BEDDED TO ITS CENTERLINE IN COMPACTED GRANULAR MATERIAL, 4-IN. (100-MM) MINIMUM UNDER PIPE. COMPACTED GRANULAR OR SELECT MATERIAL TO TOP OF PIPE. (APPROXIMATELY 90 PERCENT STANDARD PROCTOR, AASHTO T-99)

NOTES:

- CONSIDERATION OF THE PIPE-ZONE EMBEDMENT CONDITIONS INCLUDED IN THIS FIGURE MAY BE INFLUENCED BY FACTORS OTHER THAN PIPE STRENGTH. FOR ADDITIONAL INFORMATION ON PIPE BEDDING AND BACKFILL, SEE ANSI/AWWA C600.
- 2. FOR NOMINAL PIPE SIZES 14 IN. (356 MM) AND LARGER, CONSIDERATION SHOULD BE GIVEN TO THE USE OF LAYING CONDITIONS OTHER THAN TYPE 1.
- 3. FLAT BOTTOM IS DEFINED AS "UNDISTURBED EARTH."
- 4. LOOSE SOIL OR SELECT MATERIAL IS DEFINED AS "NATIVE SOIL EXCAVATED FROM THE TRENCH, FREE OF ROCKS, FOREIGN MATERIALS, AND FROZEN EARTH."
- 5. AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS, 444 N. CAPITOL ST. N.W., SUITE 225, WASHINGTON, DC 20001.