

APPENDIX I

INSTALLATION OF BUILDING SEWERS

(APPENDIX I IS A REQUIREMENT OF THIS CODE)

I101 CAST IRON SOIL PIPE

I101.1 Trench Construction

Pipe shall be installed in as narrow a trench as possible while providing sufficient width for joint assembly.

I101.2 Bedding

Pipe shall be installed so that the trench bottom provides support of the pipe barrel. Hub holes and coupling holes shall be provided.

I101.3 Rock

When rock larger than 1 1/2 inches (38.1 mm) in diameter is encountered during installation, it shall be removed from the trench bottom and a 6 inch (152.4 mm) layer of selected fill shall be added to provide uniform support.

I101.4 Backfilling

Backfill trench following test. When backfilling, care shall be taken to protect the pipe from large rocks, stone, or frozen fill material which could damage the pipe.

I103 CLAY PIPE

I103.1 Trench and Material Preparation

I103.1.1 Width of trenches in which clay pipe is to be installed shall be such as to provide adequate space for workmen to place and joint the pipe properly.

I103.1.2 Bell holes shall be excavated so that, after placement, only the barrel of the pipe receives bearing pressure from the trench bottom.

I103.1.3 Preparation of the trench bottom and placement of the pipe shall be carefully done so that, when in final position, the pipe is true to line and grade.

I103.1.4 Pipe shall be protected during handling against impact shock and free fall. No pipe shall be used in the work which does not conform to the appropriate ASTM standard.

I103.2 Pipe Laying and Joining

I103.2.1 The laying of pipe in finished trenches shall be commenced at the lowest point, with the spigot ends pointing in the direction of flow.

I103.2.2 All pipe shall be laid with ends abutting and true to line and grade. They shall be carefully centered, so that when laid they will form a sewer with a uniform invert.

I103.2.3 Pipe shall be set firmly according to line and grade, and, preparatory to making pipe joints, all surfaces of the portion of the pipe to be joined shall be cleaned and dried. The joints shall then be carefully adjusted and filled with the jointing material.

I103.2.4 Trenches shall be kept water-free during joining and for a sufficient period thereafter to allow the jointing material to become fully set and completely resistant to water penetration. Trenches shall be backfilled immediately after pipe is laid therein to prevent dislocation of the sewer line or jointing material, except when factory applied flexible compression joints are used.

I103.3 Testing

The sewer line will be tested as required in Chapter 3, or as prescribed by local authority.



I104 PLASTIC PIPE

I104.1 Trenching and Supporting

I104.1.1 Trenching—Excavate to desired grade. Use template to detect high spots and holes. Fill holes and depressions, tamping thoroughly.

I104.1.2 Where trenching conditions are difficult, pipe shall be uniformly supported throughout using treated timber, concrete pad, sand, or select backfill properly tamped.

I104.2 Laying Bedding and Backfilling

I104.2.1 Lay the pipe line as described. Be sure the pipe is bedded in the selected backfill one-fourth to one-third of the pipe diameter. Under no circumstances should bricks or other supports be used to bring pipe to grade.

I104.2.2 After pipe is bedded and checked for grade, additional selected backfill is placed by shovel at sides and over top of pipe and tamped. By careful tamping at this point, the pipe can support a much greater load and is less likely to be subsequently disturbed or shifted.

104.2.3 Reasonably clean backfill shall be placed 12 inches (305 mm) over the pipe.

104.2.4 The trench may now be backfilled by any conventional means, bulldozer, loader, etc., and the pipe is protected.