DOWNERS GROVE SANITARY DISTRICT
SPECIFICATION FOR
BUILDING SANITARY SERVICE AIR TESTING

Effective Date: August 24, 2001

1. The entire building sanitary service shall be air tested from the public sewer to the building, including the machine tap, wye or tee, the outside cleanout(s) and all service piping. If a new wye or tee is installed on an existing public sewer, the pipe connections on the public sewer on both sides of the wye or tee must also be air tested, as described in Item 11.

2. Prior to testing, flush and clean the sewers by a method acceptable to the District. If a new wye or tee is installed on a existing public sewer, clean the inside of all existing pipes to allow the test plugs to properly seal during testing.

3. Isolate the building sanitary service from the existing public sewer by installing two airtight plugs in the public sewer, by installing one airtight plug with a void positioned at the connection between the building service connection and the public sewer, or by other method acceptable to the District.

4. Install an airtight plug on the cleanout inside the building.

5. Properly brace the outside cleanout cap and collar to withstand air testing.

6. Whenever the sewer to be tested is submerged under groundwater, determine the groundwater hydrostatic pressure by a method approved by the District.

7. Add air to the plugged sewer sections under test through the cleanout or public sewer plug until initial air pressure reaches 4.0 psig greater than any groundwater hydrostatic pressure.

8. Allow at least two minutes for air temperature to stabilize, adding air to maintain the initial test pressure.

9. Shut off the air supply after stabilizing the air temperature and record the time in seconds using an approved stopwatch for the internal sewer pressure to drop from 3.5 psig to 2.5 psig greater than any groundwater hydrostatic pressure.

10. The building sanitary service shall pass if the recorded time for the allowable pressure drop equals or exceeds 2 minutes for a 4-inch and 6-inch diameter service less than 300 feet in total length. The minimum allowable time for larger pipe diameters or longer pipe lengths will be determined by the District.

11. The individual pipe joints on either side of a new wye or tee installed on an existing public sewer shall also be air tested as follows:

a. Comply with requirements of ASTM C1103-90.
b. Utilize commercially available test apparatus with two separate inflatable sealing rings or plugs, or one plug with a void positioned at the center, at least 2.50 inches, but no more than 2 feet apart.
c. Acceptable maximum air loss is 1 psi in 5 seconds.
d. Test pressure is 3.5 psi higher than groundwater pressure, but do not use a test pressure greater than 6 psi.
e. Provide test apparatus that allows remote monitoring of test by the District.

12. If the air test fails to meet these requirements, locate and repair, or remove and replace the faulty sections of sewer in a manner approved by the District, as necessary to meet the allowable limits upon retesting. The use of acrylamid gel sealant is not an acceptable method to correct leakage.

13. Provide and use equipment and measuring devices acceptable to the District.

14. All air testing for acceptance shall be done under the direct supervision of the District. The Contractor shall notify the District 48 hours prior to testing.

15. Air testing techniques shall be in accordance with the latest ASTM standard practice for testing sewer lines by low-pressure air test method for the appropriate pipe material.

16. Air testing may not be performed until the sanitary service trench has been completely backfilled.