



Bartow County Water Department
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BARTOW COUNTY WATER & SEWER SYSTEM
SANITARY SEWER SYSTEMS INSPECTION & TESTING PROCEDURES

- A. All material and work shall be subject to inspection by the Bartow County Water Department Engineer (or authorized department personnel) at any time without prior notification. All inadequate, defective, or improper work or materials will be rejected and the Contractor shall be required to either replace or reconstruct the work.
- B. Prior to inspection of installed sewer piping, flush the pipe clean of all water, sand, dirt, debris or other obstructions.
- C. Provide labor and supplies for videoing completed sewers in the presence of the Bartow County Water Department Engineer (or authorized department personnel). Inspect each section of sewer by videoing from manhole to manhole. Any section of sewer which does not exhibit a smooth, straight, “full-moon” bore will be rejected. Videoing equipment must also possess a swivel head that has the capability of looking at each lateral connection.
- D. Conduct deflection tests upon PVC sewers in the presence of the Bartow County Water Department Engineer (or authorized department personnel). Tests shall consist of free passage of a properly sized mandrel or sewer ball. Maximum allowable deflection shall be 5%.
- E. Conduct tests for water tightness of gravity flow pipelines in the presence of the Bartow County Water Department Engineer (or authorized department personnel).
 - 1. Sewer service laterals shall be installed to the edge of the right-of-way prior to testing procedures. Temporary restraints may be required for clean-outs and plugs for testing.
 - 2. Air Testing: Low pressure air testing in accordance with ASTM-C828 may be used. Allowable leakage will be based upon a maximum allowable loss of 0.003 ft³/ft² of surface area/min with an initial pressure of 3.5 p.s.i. to 4.0 p.s.i.
- F. Test all sewer manholes for leakage by one of the following methods:
 - 1. Vacuum Test: Testing must be conducted on completed manhole prior to backfilling. Place a vacuum of 10” Hg on the manhole. Maximum allowable vacuum loss shall be 1” of Mercury (Hg) in 60 seconds for 4-foot diameter manhole, 75 seconds for a 5-foot diameter manhole and 90 seconds for 6-foot diameter manhole.
 - 2. Hydrostatic Test: Testing must be conducted by plugging all inlet and outlet sewers after completion of manhole construction. Fill sewer manhole with water to top rim of the frame and cover. After concrete has been thoroughly moistened, monitor water loss over a 2-hour period. Maximum allowable loss shall be 2” of water at the rim.
- G. Repair all sewers and manholes that fail the leakage test and retest until satisfactory results are obtained.