

# Standard Operating Procedures

## Sanitary Sewer Collection Department

4/20/2018

Winchester Utility System

Standard Operating Procedures – Sanitary Sewer Collection Department



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# Gravity Sewer Service Line Inspection

- Four-inch (4") building sewers shall be laid on a grade greater than 1/8 inch per foot. Larger building sewers shall be laid on a grade that will produce a velocity when flowing full of at least 2.0 feet per second.
- Slope and alignment of all building sewers shall be neat and regular.
- Building sewers shall be constructed only of (1) ductile iron pipe with compression joints; (2) polyvinyl chloride pipe with solvent welded or with rubber compression joints of approved type; or (3) such other materials of equal or superior quality as may be approved by the Wastewater Superintendent. Under no circumstances will cement mortar joints or clay pipe be acceptable for new installations.
- Cleanouts shall be located no more than five (5) feet outside of the building, one as it taps onto the utility lateral and one at each change of direction of the building sewer which is greater than 45 degrees. Additional cleanouts shall be placed not more than eighty (80) feet apart in horizontal building sewers of four (4) inch nominal diameter and not more than one hundred (100) feet apart for larger pipes. Cleanouts shall be extended to or above the finished grade level directly above the place where the cleanout is installed, housed in an appropriate clean box. A wye and 1/8 bend shall be used for the cleanout base. Cleanouts shall not be smaller than four-inch (4") pipe.
- Connections of building sewers to the public sewer system shall be made at the appropriate existing wye or tee branch using compression type couplings or collar type rubber joint with corrosion resisting or stainless steel bands. Where existing wye or tee branches are not available, connections of building services shall be made by either removing a length of pipe, replacing it with a wye, or tee fitting or installing a tee-saddle or tee-insert of a type approved by the Wastewater Superintendent. All such connections shall be made gastight and watertight.
- The building sewer may be brought into the building below the basement floor when gravity flow from the building to the sanitary sewer is at a grade of 1/8 inch per foot or more if possible. In cases where basement or floor levels are lower than the ground elevation at the point of connection to the sewer, adequate precautions by installation of check valves or other backflow prevention devices to protect against flooding shall be provided by the Owner. In all buildings in which any building drain is too low to permit gravity flow to the public sewer, sanitary sewage carried by such building drain shall be lifted by an approved means and discharged to the building sewer at the expense of the Owner.
- All new & replacement sewer services (building sewer) shall be air tested with not less than five (5) psi of air pressure for a period of not less than fifteen (15) minutes & shall prove to be air tight without introduction of additional air.
- Tee joint clean outs are not permitted under any circumstances.
- All new & replacement sewer service lines shall not, under any circumstance, cross over a potable water line.
- All new & replacement sewer service lines shall be inspected & tested on the portion of sewer piping beginning from where the sewer exits the building to the point of connection at Winchester Utility System's sewer main.
- All new & replacement sewer service mains shall have the underground portion of pipe inspected after trenches/ditches have been excavated, piping installed in said trench/ditch & prior to any back fill of said trench/ditch. The inspection shall include a review of all aspects included in this policy to ensure conformance & a record of the inspection shall be maintained by Winchester Utility System.
- **Connection to & commencement of sewer services shall not be permitted without receipt of inspection.**
- For all sewer work/installation projects carried out under the jurisdiction of Winchester Utilities' Sewer Department, it shall be a required that said work be performed by a contractor in possession of a current & valid State of Tennessee Plumber's License. Proof of said license shall be required.

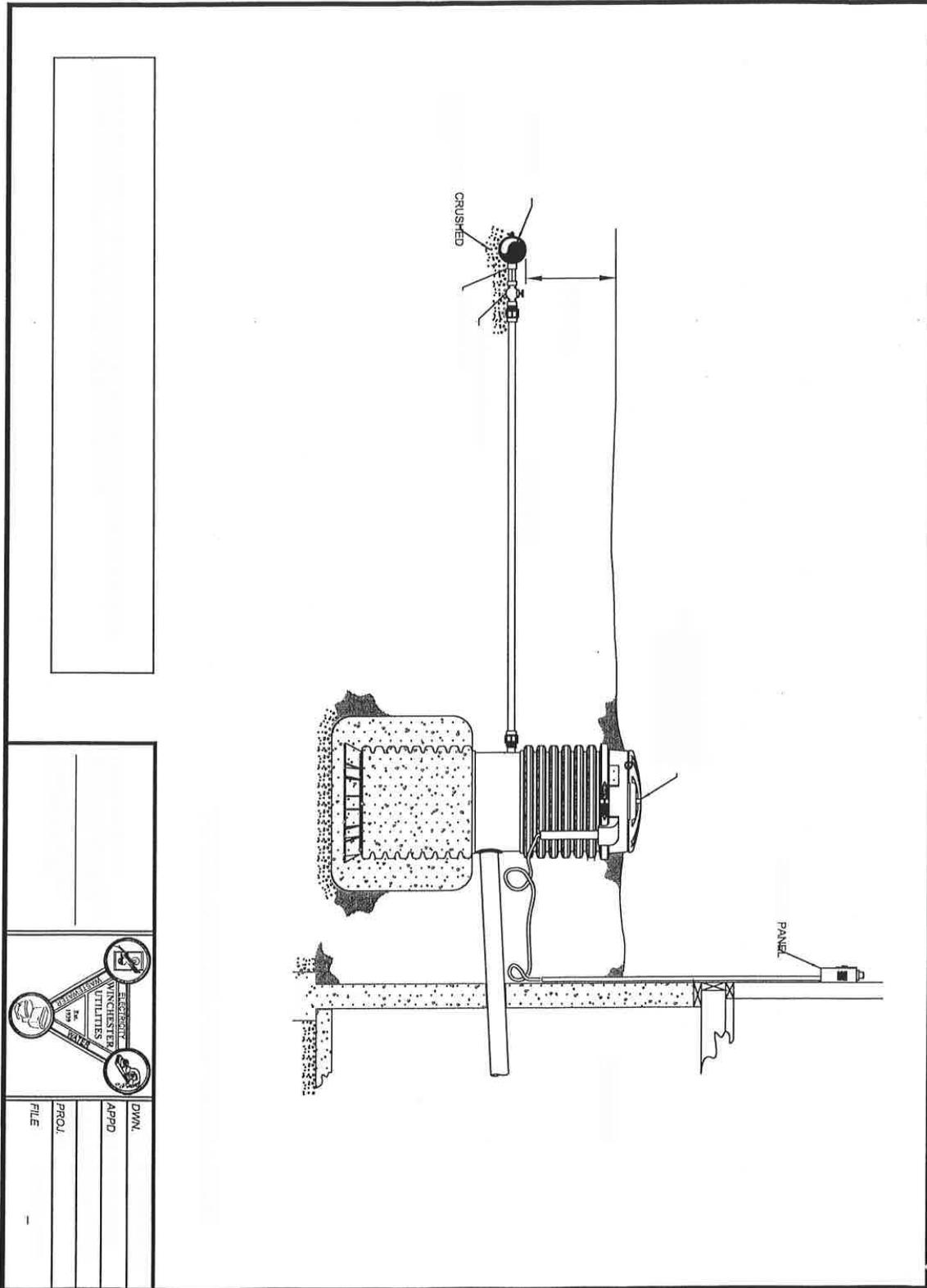
Advance notice is required for inspection & re-inspection & shall be performed during normal working hours. Contact the Utility Office @ 931-967-2238 to request inspection.

## Grinder Pump Sewer Service Line

- All new & replacement sewer service (sewer from pump to main) shall be air tested with not less than thirty (30) psi of air pressure for a period not less than fifteen (15) minutes & shall prove to be air tight without the introduction of additional air. All new & replacement sewer service (building sewer to pump) shall be air tested with not less than five (5) psi of air pressure for a period not less than fifteen (15) minutes & shall prove to be air tight without the introduction of additional air.
- All customers requiring a grinder pump for sewer services, shall purchase said pump from Winchester Utility System. Winchester Utility System shall not be responsible for nor shall Winchester Utilities service/maintain any grinder pump which is not purchased from Winchester Utility System, but all such pumps/purchases shall be the sole responsibility of the customer.
- All new & replacement pressure sewer services (sewer from pump to main) shall be constructed of schedule 40 PVC pipe, not smaller in diameter than the manufacture's requirement & have tracer wire install in the trench/ditch with the pipe. All new & replacement pressure sewer services (building sewer to pump) shall be constructed of schedule 40 PVC pipe, not smaller in diameter than the manufacture's requirement.
- For all new & replacement pressure sewer services it shall be required to install a check valve where the service enters Winchester Utility System pressure sewer main & shall have an isolation ball valve installed between the check valve and the main. The check valve shall be of stainless steel construction & the ball valve shall be of either stainless steel or brass construction. If the service enters Winchester Utility System gravity sewer main or manhole, the check and ball valves shall not be required, unless otherwise directed by Winchester Utility System and/or their authorized representatives.
- Both check valve and ball valve shall be enclosed in an approved clean out box.
- All new & replacement grinder pump installations as well as all new and replacement pressure sewer service mains shall have the underground portion of pipe inspected after trenches/ditches have been excavated, piping installed in said trench/ditch & prior to any back fill of said trench/ditch. The inspection shall include a review of all aspects included in this policy to ensure conformance & a record of the inspection shall be maintained by Winchester Utility System.
- Connection to & commencement of sewer services shall not be permitted without receipt of inspection.
- For all sewer work/installation projects carried out under the jurisdiction of Winchester Utility System Sewer Department, it shall be a required that said work be performed by a contractor in possession of a current & valid State of Tennessee Plumber's License. Proof of said license shall be required.

Advance notice is required for inspection & re-inspection & shall be performed during normal working hours. Contact the Utility Office @ 931-967-2238 to request inspection.





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Typical Grinder Pump Service Installation Diagram

## Guidelines for having your sewer tap made.

Thank you for your recent sewer tap purchase. Please read the following carefully so as to insure your tap is made in a timely and convenient manner for you.

- Sewer tap fees: **Customer** \$1000.00: **Developer** \$500.00 (To qualify for developer rates, the developer of a given tract for new housing must install the water and sewer lines in the entire development at her/his expense. An individual or a builder that purchases a vacant lot(s) in the development is not entitled to the developer rates.) **Contractor** \$725.00 (Contractor fees based on the purchase of 5 or more taps. If contractor wishes to purchase less than 5 taps, the fee will be the same as the customer rate for each tap.) **Grinder Pumps** \$3500. **These fees are base prices ONLY. Additional fees shall also be added as they occur. Examples of such fees include but shall not be limited to cutting and repairing of roads, boring of roads, subcontractor labor, TDOT and/or other state/federal agencies additional costs, and unforeseen issues arising during excavation efforts.**
- If possible, please schedule the date you'd like to have your tap made at the time you pay for the tap.
- For taps/locations requiring a grinder pump: Crane/Barnes Station is required, if Winchester Utility System is to maintain the system. Winchester Utility System will sell the customer this pump system. Any customer who chooses not to purchase the Crane/Barnes Station from Winchester Utility System shall not have their chosen system maintained/serviced by Winchester Utility System.
- If you need to postpone the actual time you want or need your tap to be physically made, please insure that you give us at least a five (5) day notice prior to your expected date of need. This will allow us to plan for your schedule. If you wait until the day of or day prior to when you want/need your tap made, we've already scheduled other work to be done and will not be able to meet your deadline. We will not make any guarantees regarding when we will make your tap without this five (5) day prior notice.
- If there are extenuating circumstances regarding your lot/yard where the tap is to be made, please notify us at the time you make payment so we can evaluate the situation and prepare for any issues or unique needs your situation may require.
- To schedule your sewer-tap to be made, please call Winchester Utility System's Customer Service at 931-967-2238 to give our representatives the 14-day notice.