

History of Grinder Pump Program

"Pressure sewers using grinder pumps were first adopted City early in the 1970's by a few visionary engineers and regulatory agencies who, faced with the virtually insurmountable problems posed by the helter-skelter adoption of septic tanks in the suburbs, felt that the potential gains justified the risk of being a pioneer.

It has taken three decades, corresponding to nearly 60% of this author's working life, for pressure sewers to begin to take their proper place within the public health engineering field. For indeed today there are hundreds of thousands of grinder pumps in routine daily operation in projects ranging in size from a single pump to many with thousands of pumps. The skeptics have been pleasantly surprised as decades of operating experience pile up with O&M costs equal to or less than original estimates.

Even with general adoption in every state and a new generation of consulting engineers who don't even remember when there weren't pressure sewers, there are still a few applications and variations which are not generally considered. These include more general application of trenchless technology, indoor installations, use as a weapon in the fight against infiltration and inflow, application in flat land, and as an excellent stop gap measure to fight waterfront pollution one house at a time by re-siting absorption fields "up, up and away!" from the water's edge."

"The "Secret" Life of Pressure Sewers"

By: R. Paul Farrell
Consulting Engineer
Niskayuna, NY, USA



Brentwood Water Services

1750 General George Patton Dr
Brentwood, TN 37027

Bus. Hrs. 615-371-0080
After Hrs. 615-371-0160

www.brentwood-tn.org



Brentwood Water Services

Sewage Grinder Pump Program

Grinder Pump Maintenance Program

Frequently Asked Questions

Purpose

The purpose of this brochure is to provide general information and answer frequently asked questions about the City's, low-pressure residential sewer grinder system and grinder pump maintenance service options.

What is a Residential Sewage Grinder Pump System?

Traditionally, sewer service to a house is provided by a "gravity" line. This means that sewer from the home drains by gravity to the City lines at the street. When this method of sewer service is unavailable due to any number of reasons, a "low pressure sewer" is often installed to provide sewer service to the home. This method of service requires the use of a sewage grinder pump, to pump sewage from the house out to the public sewer.

Why does the City operate a grinder pump maintenance program?

The City offers maintenance services on the grinder pump because the use of a residential grinder pump requires specialized mechanical maintenance compared with traditional gravity sewer service. This is an enhanced customer service, not typical of many utilities. .

What is the process for installing a grinder pump system?

Once a residential development or builder with a planned grinder system, or a homeowner wishing to install or upgrade a grinder system has been inspected and approved by the Water Services Department (WSD), a \$1,900 "Grinder Pump

Maintenance / Replacement Fee" is paid to the City and a grinder pump maintenance program agreement executed by the homeowner. The builder / owner is then required to install the grinder pump system according to the current WSD sewer specifications. The specifications include: pump type, tank type, control panel and electrical disconnect, electrical conduit, p.v.c. piping, tank depth and location.

The grinder pump system is inspected during installation by the WSD inspector. The first is an underground inspection, the second is a final electrical / practical inspection before a "certificate of occupancy" is issued.

What are the various parts of a grinder pump system?

A residential grinder pump system includes a grinder pump installed within a tank buried in the yard. The sewer drain from the house is plumbed into this tank. Flow from the home (bathrooms, dishwasher, showers, etc.) drains to the tank where it is collected. The grinder pump inside the tank then pumps out of the tank into typically a 1 ½" service line that runs out to the public sewer main near the road (or an easement) where there is located a connection point or valve and box. An electrical control panel and disconnect box are typically installed on the exterior of the house near the grinder pump basin.

Who owns the grinder pump and how is it maintained?

Ownership of the grinder pump system including the pump, tank, electrical controls, and all piping &

valves from the house to the public sewer, is by the homeowner. Once installation of the system is approved by the WSD, a one year warranty period is in effect in which the Builder and/or pump manufacturer will be responsible for all repair & maintenance associated with the grinder pump system, under a warranty.

One year after the date on the "certificate of occupancy" or date of approval by City staff, the City of Brentwood's WSD will provide a maintenance service for repairs to the contents inside the tank and the electrical panel mounted on the home. As is the case with a gravity service to a home, ***the City does not offer repair or maintenance services on any portion of the service line piping.*** (Please contact your homeowner's insurance for reimbursement of repairs on both your water and sewer service line repairs). That is the responsibility of the homeowner. Also, the WSD also will refrain from working on the grinder pump unit if damaged from neglect by the homeowner; including placing excessive wipes, grease or other items not intended for the sewer system as outlined in the Chapter 70-45 of the City Code.

What are the service fees and how do I call for service?

Fees shall be as approved by the Board of Commissioners. They include a during and after - hour's service charge. There is no charge for parts or labor. Please contact the WSD at 371-0080 during regular business hours and 371-0160 during non-business hours. The homeowner may opt to call a plumber for their maintenance needs since they do own the system. But note the City is not responsible for any outside contractor charges.