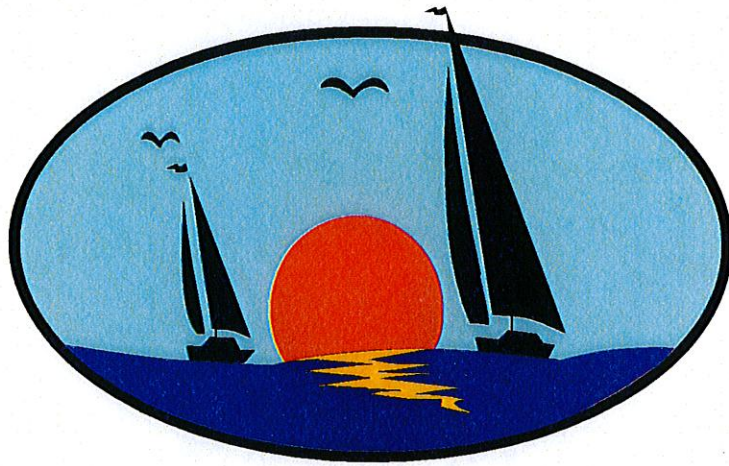


SEWER GUIDE

Willowick



Service Dept.

FOR OUR HOMEOWNERS

What Is A...

Sanitary Sewer ?

A Sanitary sewer is a system of pipes that carry sewage from inside your home to a treatment plant that removes out solid waste and treats the water to further clean it. The sanitized water is then released into the fresh water stream, river or in our case the lake.

Storm Sewer ?

A Storm sewer is a system of pipes that collects and carries storm water from roof gutters, driveway drains, yard drains and foundation drains (drain tile) to fresh water streams, rivers or again, in our case to the lake.

Main Sewer ?

A main sewer is a large pipe that carries either Sanitary or Storm water to its destination. The main sewer is located under the street and is the responsibility of the City to install and maintain. A sanitary main routes sewage to its destination (treatment plant) and a storm main routes its water to the lake.

Lateral Sewer ?

A sewer lateral is the pipe that leads from your house to the City's Main Sewer whether it is a Sanitary or Storm lateral. These laterals are the responsibility of the property owner. The City is only responsible for the Main. (except point of sale failures within the right of way may be repaired by the City if funds from the levy are available)

Test Tee ?

A test tee is an inspection point in a lateral sewer. It is usually located in the lawn area in front of your house close to your sidewalk. A test tee is used to test your sewer (dye test) or it can be used to access your lateral for cleaning (snaking).

Sewer Trap ?

A trap is a curved sewer pipe that retains a small amount of water from its last use to form a seal. This seal stops or traps the sewer gas (smell) from re-entering the living space. The trap is also used for inspection and cleaning purposes.

Catch Basin ?

A catch basin is a collection basin in the street. It is located at the curb and it's function is to receive surface water from the street. Catch basins are connected directly into the storm main sewer and are also the responsibility of the city to install and maintain.

Manhole ?

A manhole is access to a main sewer; Manholes are used for cleaning and testing main sewers. Manholes are located in the street and the City is also responsible for the installation and maintenance.

Backflow Preventer ?

A Backflow Preventer is a device used to stop sewer backups from entering your home. There are several types of backflow preventers. Most use a flap which allows water to flow from the house, but closes to prevent sewage from re-entering you home. Backflow Preventers can be installed in both Sanitary and/or Storm Laterals.

Crossover ?

A crossover is an area where your storm line crosses over the Sanitary Lateral. The crossover is usually where your storm lateral receives it's connection from downspouts and yard drains and is above the sanitary lateral.

Dye Test ?

A dye test is a test performed on your sewer system to determine whether or not your sewers are connected to the correct laterals. Storm inlets to the Storm Lateral and Sanitary inlets to the Sanitary Lateral. A dye test can also detect whether one lateral is leaking into the other. Dye Tests can also aid in locating where an inlet is tied into. This is the test performed for the Point of Sale Inspection.

Point Of Sale Inspection

Why a POS Inspection ? ...

In the mid 60's the EPA mandated the City to start reducing infiltration from storm water getting into sanitary sewer systems and more importantly sanitary sewage infiltrating storm sewers. The reason for this mandate is sanitary sewage levels in the lake were out of control. It was almost to a point where it affected the longevity of fish and other wildlife in and around the lake. Another reason is the storm water that was getting into the sanitary system which the City pays the City of Euclid to treat was very high; thus the Willowick residents were paying a lot more than they should have to process our sanitary sewage. This infiltration also causes sewer systems to overload and backup.

How POS Inspections are performed ...

Dye testing is the best way to determine if a system has infiltration. Dye is induced into a house's sanitary sewer by way of a floor drain or sink inside the house. The storm sewer is then observed to see if the dyed water appears. If it does, then we know that there is infiltration. The storm sewer receives a different color dye by way of a downspout or driveway drain outside the house. The sanitary is observed to determine the same. If infiltration is present in either sewer, then repairs to the sewer system must be made.

Who is Responsible ? ...

When a dye test failure occurs, repairs have to be made. If the Property side (from the test tees to the house) fails, the homeowner is responsible for the cost of repairs. If the Right of Way (from the test tees to the street) fails and Willowick Sewer Levy funds are available, the City will make the repairs.

More Info on POS ...

If you have any questions about the Point of Sale Inspection you can refer to ... Willowick's Codified Ordinance # 1355. You can find Ordinances at www.cityofwillowick.com or at the Willowick Public Library.

The City of Willowick's Home Owners Guide is also located at www.cityofwillowick.com

Or give the Building Department a call at 440-516-3000.

Who's Responsible ...

Sanitary Main Sewer ?

The City is responsible to provide each dwelling a connection into it's Main Sanitary Sewer. The City is also responsible for the maintenance and repairs of the Sanitary Main. Cleaning of the Sanitary Mains is an ongoing project. If a problem arises the City will then televise and make necessary repairs . The cleaning process takes about three years to complete the entire City.

Storm Main Sewer ?

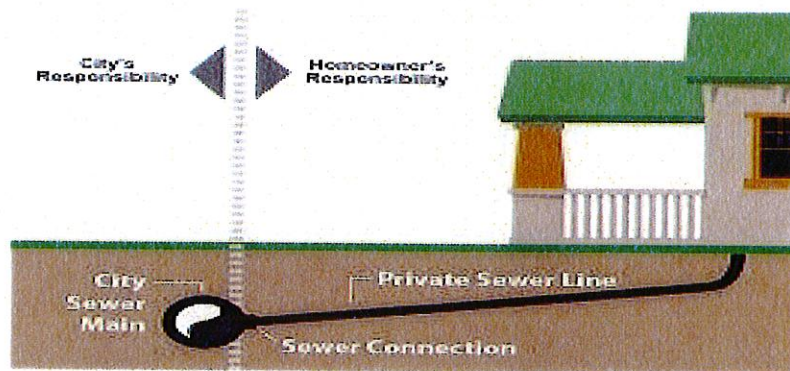
The City is responsible to provide each dwelling a connection into it's Main Storm Sewer. The City is also responsible for the maintenance and repairs of the Storm Main. Cleaning of the Storm mains is an ongoing project. If a problem arises, the City will then televise and make the necessary repairs . The cleaning process takes about three years to complete the entire City.

Catch Basins ?

The City is also responsible to clean and maintain all Catch Basins in the street. This is also an ongoing project where the City inspects the catch basins and if needed, cleans and repairs them. This usually takes about two years

Manholes ?

The City is also responsible to clean and maintain all Manholes in the street. This is also an ongoing project where the City inspects the Manhole and if needed cleans and repairs them. Manhole are used in the cleaning, televising and repairs of both the Storm and Sanitary Mains. This usually takes about three years to complete the entire City.



SANITARY LATERALS ? (1)

The Property Owner is also responsible to clean and maintain their Sanitary Lateral from the dwelling to the connection to the main in the street. This includes all repairs needed to the lateral and all connections into the lateral and any and all inspection tees. *The City will snake homeowners laterals during regular business hours provided the property owner signs a sewer cleaning disclaimer. If service is needed after hours residents can call the Police Department at 440-585-1234 for a list of contractors that provide special pricing for Willowick Residents.

STORM LATERALS ?** (1)

The Property Owner is also responsible to clean and maintain their Storm Lateral from the dwelling to the connection to the main in the street. This includes all repairs needed to the lateral and all connections into the lateral and any and all inspection tees or trap. *The City will snake homeowners laterals during regular business hours provided the property owner signs a sewer cleaning disclaimer. If service is needed after hours residents can call the Police Department at 440-585-1234 for a list of contractors that provide special pricing for Willowick Residents.

(1) The City may make repairs to the laterals in the right of way if failures are discovered during Point of Sale Inspections and if funds are available

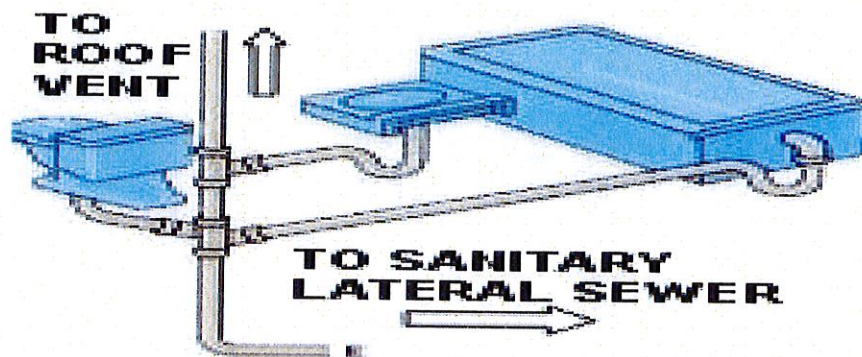
* If tees are not located, the city will try one time for one hour to locate the tees. If unsuccessful the resident will be responsible to have the tees located before the City will return to snake the laterals.

** The City will attempt to clean the property owners Storm Lateral from the trap to the street. In some cases, the snake will not be able to maneuver through the curve in the trap. The Storm Lateral will not be snaked from the trap to the house.

How Does It Work...

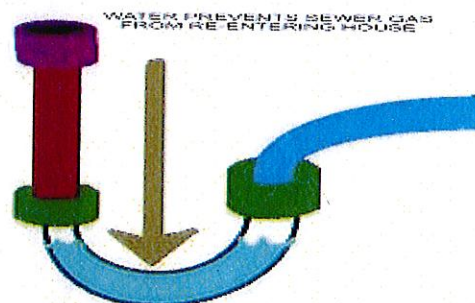
Sanitary Sewer ?

A Sanitary sewer system is used to collect and carry sewage to the City's Main Sanitary Sewer. Collection points include everything inside of the home. toilets, bathtubs, sinks etc. Water enters the sanitary sewer by way of a trap. The sewage drops into the sewer and the trap blocks the odor and vents the sewer gas to the sewer stack that exits through the dwelling's roof.



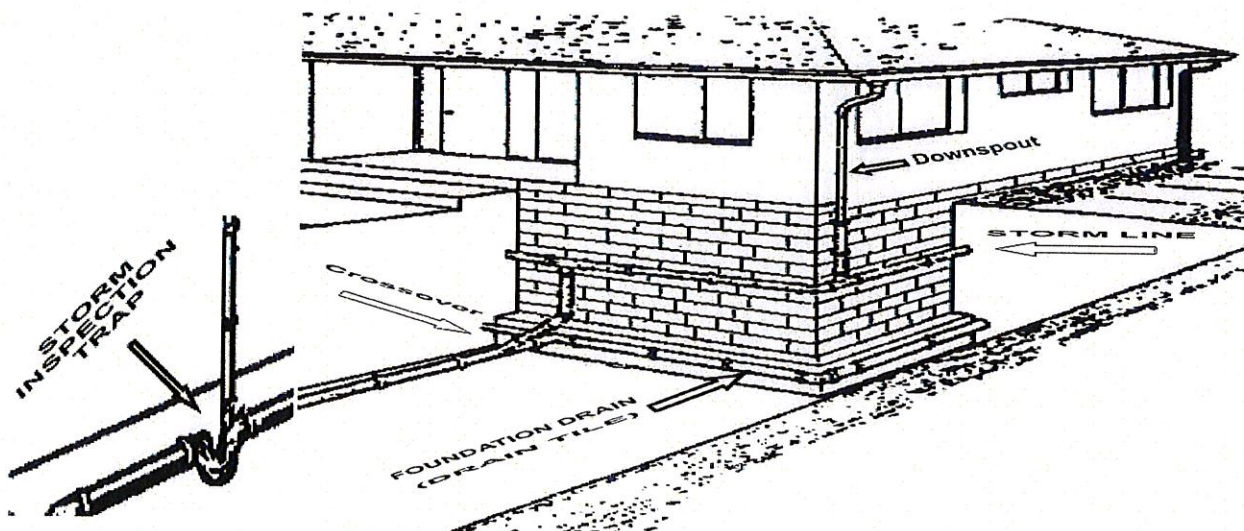
Sewer Trap ?

A trap is a curved sewer pipe that retains a small amount of water from its last use to form a seal. This seal stops or traps the sewer gas (smell) from re-entering the living space. The trap is also used for inspection and cleaning purposes.



Storm Sewer ?

A Storm sewer is used to collect and carry storm water from all connections outside of the dwelling. Roof gutters, driveway drains, yard drains and foundation drains (drain tile) are some of collection points. Unlike the Sanitary system the storm is trapped at the inspection tee. The trap in the storm line insures that no odor can back up into your storm system. Why is your storm sewer trapped? Infiltration, if a sanitary sewer is leaking into or connected into a storm line, the odor will back up into your storm system up from downspouts, drain tile and any open drains.



Backflow Prevention

Back up can occur for several reasons...

Heavy rains, thawing snow or a combination of both can cause a restricted flow in the mains because all of the inlets (laterals, catch basins) are dumping water into the sewer main all at the same time.

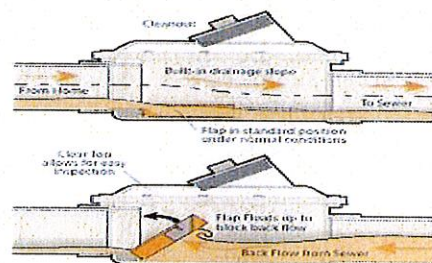
Blocked mains can also cause a back up.

Infiltration from storm water leaking out of storm lateral and into the sanitary lateral during a heavy rain and/or fast thaw. Please see section on Point of Sale Inspection.

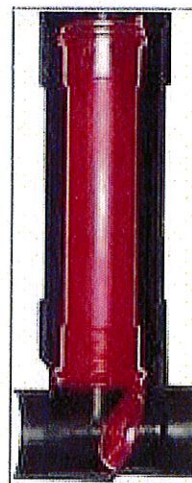
Collapsed pipes, low areas (bellies), offset joints, tree roots, grease or foreign objects (toys, personal hygiene items, etc.) can and do cause blockages and thus a backup.

Backflow Preventers ...

There are several type of backflow preventers. Most use a flap which allows water to flow from the house but close to prevent sewage from re-entering your home. Some use a ball that allows water to flow out and seals the pipe if water tries to flow back. Backflow Preventers can be installed inside or outside of the home and can be installed in both Sanitary and/or Storm Laterals. Please check with the Building Department for more information on what preventer is best for your needs.



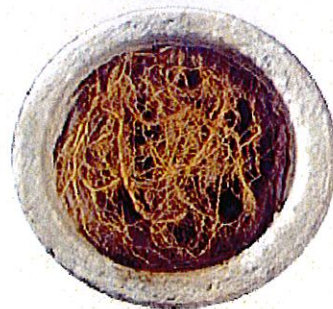
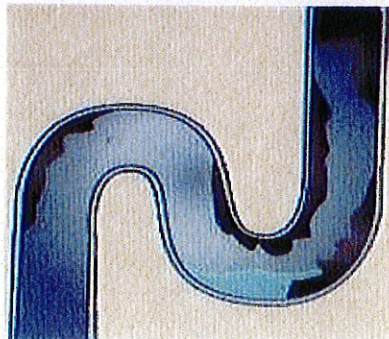
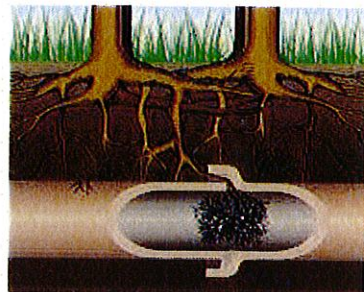
Warning: While backflow preventers can serve a valuable function, they can also fail if not maintained and can cause back-ups.



Prevention Do's & Dont's

- DO:** Collect grease in a container and throw it into the garbage.
- DO:** Put food scraps in your *compost bin or garbage.
- DO:** Place a waste basket in your bathrooms to dispose of items such as disposable diapers and personal hygiene products.
- DO:** Clean out your gutters, downspouts, yard drains and driveway drain regularly.
- DO:** Install a Backflow Prevention Device as needed.
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- DON'T:** Pour grease, fats and oils from cooking down the drain.
- DON'T:** Use the sewer to dispose of food scraps.
- DON'T:** Use the toilet as a waste basket for garbage or chemicals. These items can kill "good" bacteria used for sewage treatment, cost much more to treat, and can enter the lake.
- DON'T:** Plant trees above sewer lines. Tree roots seek water sources, such as cracked sewer lines. Once the roots have penetrated the line through cracks, the roots can create a dense mat and trap materials.
- DON'T:** Pour automotive fluids, paints or other hazardous materials into driveway or yard drains.**



- Please refer to Ordinance # 963 for requirements on compost piles.
- ** Please contact the Lake County Solid Waste District at 440-350-2644 for scheduled paint and hazardous material drop off dates.