

DeKalb County Department of Watershed Management

Construction Activities and Term Definitions

Water and sewer construction involves many different techniques to keep our county's infrastructure and its communities safe, reliable and up to date. The terms below explain the operational methods that crews use to install, repair and maintain the watershed system providing homes and businesses with clean water and disposing wastewater. Learning about these construction activities and its terms will help you understand the work happening in your area and why it is important.

Acoustical Testing	Acoustical testing utilizes a transmitter and receiver in separate manholes of a sanitary sewer main. The transmitter sends an acoustic signal, and based on how the signal is received, can indicate if there are blockages. Based on the data, the County may have the line cleaned.
Rock Fracturing	Rock fracturing is when controlled explosives are used to break apart hard rock underground so crews can dig trenches or tunnels for pipes. It's done carefully and safely to loosen the rock without damaging nearby homes, roads, or utilities.
Pipe Lining	Pipe lining is a trenchless method used to repair old or damaged water and sewer pipes by inserting a new lining inside the existing pipe, creating a smooth, durable inner surface. This process fixes leaks and cracks without having to dig up and replace the whole pipe, causing less disruption to streets and yards.
Bypass Work	Bypass work is when temporary pumps and pipes are set up to reroute the flow of water or sewage around a section of pipe that's being repaired or replaced. This keeps services running smoothly for the community while construction is underway.

<h2>CCTV Inspections</h2>	<p>CCTV inspections use small cameras that go inside water and sewer pipes to give crews a clear view of the pipe's condition. This helps identify cracks, blockages, or other issues without having to dig up the ground.</p>
<h2>CIPP Lining</h2>	<p>CIPP lining (Cured-in-Place Pipe lining) is a method where a flexible tube coated with resin is inserted into a damaged water or sewer pipe and then hardened to form a new, solid pipe inside the old one. This creates a strong, leak-free lining without the need to dig up and replace the entire pipe.</p>
<h2>Creek Crossing</h2>	<p>Creek crossing work is when water or sewer pipes are installed underneath or across a creek so the pipe system can continue on both sides of the creek. Special methods are used to protect the creek's flow and environment while ensuring the pipe is safely in place.</p>
<h2>Dye Testing</h2>	<p>Dye testing is when a harmless, colored dye is put into drains or pipes to trace the path of the water. This helps crews find leaks, cross-connections, or problem areas in the sewer or stormwater system.</p>
<h2>Flushing</h2>	<p>Flushing is when clean water is forced through water or sewer pipes at a high speed to wash out dirt, debris, or buildup. This keeps the system clear and working properly without the need for digging or heavy repairs.</p>
<h2>Jack and Bore Method</h2>	<p>The jack and bore method is a trenchless technique where a pipe is pushed (jacked) through the ground while a rotating drill removes soil (bore) to create a path. This allows water or sewer pipes to be installed under roads, railways, or other obstacles.</p>

	without digging open trenches and minimizing disruption to the ground surface.
Open Cut Method	The open cut method is when a trench is dug from ground surface to install or replace water and sewer pipes. After the pipe work is completed, the trench is backfilled, compacted and the ground surface or pavement is restored.
Paving	Paving is when construction crews restore the road or driveway surface after water or sewer pipe work has been completed underground. This ensures the roadway is smooth, safe, and usable again for traffic and pedestrians.
Pipe Bursting	Pipe bursting is a method where a special tool breaks apart an old underground pipe while pulling a new pipe into the same space along the length of an old pipe. This lets crews replace damaged water or sewer lines without digging long trenches and causes less surface disruption.
Point Repair	Point repairs are when only a small, damaged section of a water or sewer pipe is dug up and fixed instead of replacing the whole length of a pipeline in cases where the remaining pipe may be in adequate shape. This targeted repair saves time, money, and reduces disruption to the surrounding area.
Sanitary Sewer Cleaning	Sanitary sewer cleaning is when high-pressure water or special equipment is used to clear out grease, debris, and build up inside sewer pipes. This keeps the system flowing properly and helps prevent backups or overflows into streets and homes.
Slip Lining	Slip lining is a method where a smaller pipe is slid into an old, damaged water or sewer pipe to create a new, smooth passage inside it. This strengthens the pipe and restores flow without

	needing to dig up and replace the entire line, thus minimizing surface disruption.
Smoke Testing	Smoke testing is when non-toxic smoke is blown into sewer pipes to see where it escapes above ground. This helps crews quickly find cracks, leaks, or illegal connections in the sewer system.
Tunneling	Tunneling is when underground passages are dug to install water or sewer pipes without disturbing the surface above. This method is often used under roads, railways, sensitive areas or waterbodies to avoid open digging and major and costly surface disruptions.
Manhole Condition Assessment	Manhole condition assessment is performed by lowering a camera into a manhole or through physical entry to collect data on incoming and outgoing pipes, structural condition of the manhole, and any potential blockage or buildup that may reduce capacity. Based on the data, the County may clean or rehabilitate the manhole.
Manhole Rehabilitation	Manhole rehabilitation is when old or damaged manholes are repaired by sealing cracks, reinforcing walls, or adding new linings. This extends their life, prevents leaks, and keeps the sewer system working safely and efficiently.
Tie-Ins	Tie-ins are when new water or sewer pipes are connected to the existing system so the flow can continue through the new pipe section once it is completed. This step is important to make sure the new pipes work seamlessly with the existing system.