

Our pipe lining policy explained

This guide explains when and how pipe lining can be used to repair existing sewers or drains that will eventually be adopted by us.

When developers construct adoptable or public sewers as part of a development, they must make sure they meet the standards set out in the [Sewerage Sector Guidance](#) (specifically those in Appendix C – Design Construction Guidance).

Before we can issue a final certificate of completion, all pipes must be watertight, free from defects, and in an ‘as new’ condition. We know that sometimes it might not be practical to do a dig-down repair and full pipe replacement for minor pipe defects (e.g. where a development’s already occupied). When this is the case (and at our discretion), we might agree that **pipe lining** is an acceptable repair method.

What is pipe lining?

Pipe lining is where a new lining is inserted into an existing pipe, creating a new pipe within the old one. It can help fix minor problems like small cracks or misaligned joints in the pipe. It can also prevent leaks, blockages, groundwater infiltration, and roots getting into the pipe.

When pipe lining could be used

Pipe lining can be considered as an alternative to conventional pipe replacement only when:

- The existing pipe is structurally sound but has some minor issues like hairline cracks or minor/medium displaced joints.
- Excavating the pipe would cause disruption or impact to the environment (e.g. where pipes are under main roads, railways, conservation areas or water).
- The existing pipe is difficult to reach because of how deep it is, or how close it is to buildings, public areas or other utilities.

When pipe lining shouldn’t be used

Pipe lining isn’t always the best option and shouldn’t be used if the pipe:

- Has been identified as having a negative gradient or pipe belly.
- Has significant issues like fractures, collapses, deformities or large displaced joints.
- Isn’t going to be lined along its entire length. Patch lining (where only part of the pipe is lined) isn’t acceptable.

What are the limitations of pipe lining?

Even when pipe lining seems like the right option, it’s important to think about other factors that mean it might not be suitable:

- **Reduced pipe diameter:** Because lining will make the inside of the pipe narrower, it could reduce the water flow or the amount of water the pipe can carry.
- **Bends, junctions and connections:** A complicated pipe system might not suit the lining method or materials.
- **Possibility of damage:** If there’s a risk that the lining could be damaged through cracking, buckling or delamination (either before or after installation).

- **Long-term performance:** If there's uncertainty around how well the material or methods used will hold up over a long period of time.
- **Blockages:** If there's a potential risk that the ends of the liner within the pipe could increase the risk of blockages.

It's for all of these reasons that we must approve the use of pipe lining **before** installation.

Once we have approved the use of pipe lining, you should follow these steps:

Before work begins:

- All work must be carefully planned and designed.
- You must submit a full design and specification for the lining technique, material, and method to us. This will have to be approved before you do any work.



During work:

- All work must be completed by an appropriate pipe lining professional.
- The installation must adhere to the relevant standards, specifications, and best practices.



After the work's finished:

- The pipe lining must be inspected and tested to make sure it meets the requirements of the Sewerage Sector Guidance.
- Any guarantees offered by the pipe lining contractor should be provided to us. Please ask them to include Anglian Water Services Limited as a beneficiary where possible.
- A CCTV survey must be provided to us (this includes the footage and a report). Our acceptance of the CCTV survey will act as authorisation of the completed work. From this date, we need an extended maintenance or defects liability period of **24 months**.