

Pipe Lining Policy



This policy sets out the conditions under which pipe lining may be considered as a method of repairing existing sewers or pipes that are to be adopted by Anglian Water.

Adoptable or public sewers which are constructed by a Developer for the purposes of that development must comply with [Sewerage Sector Guidance](#) and the specification outlined in Appendix C – Design Construction Guidance. It is a technical requirement that all pipes are watertight, free from defects and offered in an ‘as new’ condition before a final certificate of completion will be issued by Anglian Water.

We recognise that, where minor pipe defects are identified, a dig-down repair and full pipe replacement may be constrained for a number of reasons within an occupied development. Where circumstances are appropriate and at our entire discretion, Development Services will consider pipe lining as a suitable means of repair to overcome these issues subject to compliance with this policy.

Pipe lining is a process of inserting a new structural liner inside an existing pipe, creating a continuous and seamless pipe within a pipe. Pipe lining can resolve minor issues relating to the structural integrity of the damaged host pipe and reduce the risk of leakage, blockage, ground water infiltration and root intrusion.

Pipe lining may be considered as an alternative to conventional pipe replacement or rehabilitation in situations where:

- The host pipe is structurally sound and has adequate capacity, but suffers from minor defects such as hairline cracks and minor to medium displaced joints
- The host pipe is located in areas where excavation would cause significant disruption, damage, or environmental impact, such as main roads (including estate roads), railways, conservation areas or under bridges and watercourses;
- The host pipe is difficult to access due to its depth, vicinity to nearby buildings and public areas and/or constraints presented by other services and utilities

Where these conditions do not exist, a conventional pipe repair must be undertaken.

Pipe lining is not suitable for all situations, for example:

- Lining is not acceptable where a negative gradient or pipe belly has been identified.
- Lining is not acceptable where the host pipe has significant structural defects such as fractures, collapses, or deformations.
- Patch lining will not be accepted, the full length of pipe must be lined.

Pipe lining also has limitations meaning it is not always appropriate, such as:

- The reduction of the internal diameter of the host pipe, which may affect the flow rate or capacity of the system;
- The presence of bends, junctions or connections which may not be compatible with the lining material or method;
- The possibility of damage to the host pipe or the lining during installation or operation, such as cracking, buckling, or delamination;
- The uncertainty of the long-term performance and durability of the lining material or method
- The potential for the liner ends to increase the risk of blockages

Therefore, pipe lining must be approved by Anglian Water as an accepted means of repair **before** installation.

If lining is accepted by Anglian Water, the following conditions will apply:

Before works begin:

- all works must be carefully planned and designed
- a full design and specification for the lining technique, material and method must be provided and accepted by Anglian Water
- works must be completed by an appropriate pipe lining professional
- Installation must follow all the relevant standards, specifications, and best practices.

Once works are carried out:

- Pipe lining must be inspected and tested after installation, to ensure that it meets the requirements of the Sewerage Sector Guidance.
- A CCTV survey comprising of recorded footage and a supporting report must be provided to Anglian Water.
- Any guarantee offered from the pipe lining contractor to the client should be provided to Anglian Water. Where possible, this guarantee should include Anglian Water Services Limited as a beneficiary.

Our acceptance of the CCTV survey will act as authorisation of the lining works completed.

- An extended maintenance or defects liability period of 24 months will be required from the date of acceptance of the CCTV survey.