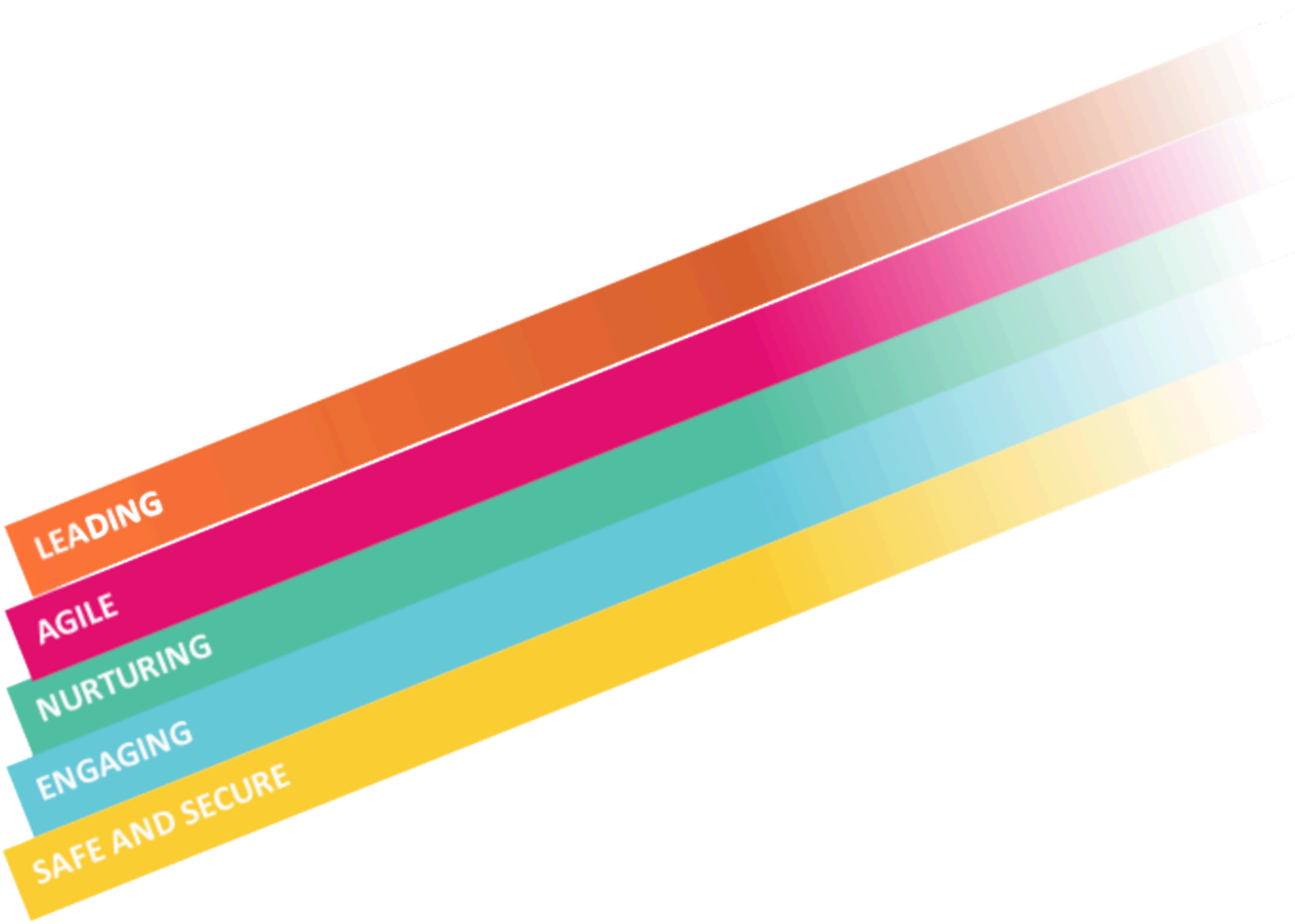
Sewer Flooding Resolved with UV-Cured Pipe Lining



Lanes Group Case Study

Trenchless Sewer Rehabilitation | Goose Green, Musselburgh

Lanes Group helped resolve persistent sewer flooding in Goose Green, Musselburgh, by installing a 165-metre UV-cured Cured-In-Place Pipe (CIPP) liner within a 600mm diameter sewer alongside the River Esk. Working for Scottish Water's principal contractor, AG Wilson, the team delivered a trenchless solution to prevent tidal water entering the defective pipeline, improve network resilience and minimise disruption to the local community.

The Challenge: Preventing Tidal Ingress and Flooding

Located alongside the River Esk, the sewer was affected by tidal water entering through a defect in the concrete pipe. During high tides, this additional water placed pressure on the network's capacity, contributing to sewer overflows and recurring local flooding.

Persistent rainfall compounded the issue by increasing flows through the system, causing further disruption to the local community and generating public complaints.

CCTV surveys were required to establish the condition of the pipeline and identify the most effective repair method, while the riverbank location presented additional access and operational challenges.

.

The Solution: A Trenchless Approach

Lanes Group's Glasgow depot, supported by its specialist lining division, selected UV-cured CIPP lining to rehabilitate the pipeline without the need for full excavation and replacement.

CCTV inspections assessed the pipe's condition and informed the liner specifications. Drone surveys provided an overview of the site, helping the team plan the works safely around the riverbank's constraints.

Overpumping and tankering operations were established to manage flows during installation and help prevent further flooding. The 165-metre liner was then winched through the sewer between two access chambers, inflated using compressed air and cured using a specialist UV light train. Limited excavation provided the additional working space required for installation.

The process created a strong, continuous pipe within the existing sewer, sealing the defect and preventing tidal water ingress. The new lining has a design life of at least 50 years.

The Results: Long-Term Network Resilience

Completed in just over one month, the project successfully addressed the source of the flooding problem while avoiding the greater disruption associated with traditional pipe replacement.

The completed lining prevented tidal ingress into the sewer, resolved the reported flooding issue and strengthened the pipeline for long-term performance. The trenchless approach also reduced the need for excavation and reinstatement, helping minimise disruption to the surrounding community.



Conclusion

This project demonstrates how specialist UV-cured CIPP lining can provide an effective, long-term solution for ageing or defective sewer infrastructure in challenging locations. By combining detailed surveys, flow management and trenchless rehabilitation, Lanes Group helped Scottish Water and AG Wilson address a persistent flooding issue while improving the resilience of the local sewer network.

Client Testimonial

> “We were pleased to work with Lanes Group on this challenging project at Goose Green in Musselburgh. The team demonstrated a high level of expertise and responsiveness in addressing a complex issue influenced by tidal conditions and heavy rainfall.
>
> The solution delivered has successfully eliminated flooding and provided a long-term improvement to the resilience of the network, all while minimising disruption to the local community.”
>
> **Dean McAleese, Project Manager, AG Wilson**