

CASE STUDY



**McBreen
Enviro UK**
Part of the **McBreen Group**



MCBREEN ENVIRO UK TACKLES INFILTRATION CHALLENGES WITH K-PREMA INTERNAL PIPE SEAL

Inspection Highlights:

- Groundwater infiltration in a newly installed, unconnected sewer network
- The network, consisting of 120-meter-long sections of 1500mm diameter concrete pipes, was experiencing rapid water ingress, threatening the integrity and functionality of the new drainage system
- CCTV drain survey confirmed groundwater infiltration at several joints along the network



GLOUCESTER

A comprehensive CCTV drain survey confirmed groundwater infiltration at several joints along the network, which was promptly communicated to the client.

The challenge was to find a cost-effective repair method, as traditional no-dig repair techniques involving extensive machinery were too expensive. Moreover, the repair needed to suit large diameter pipes and be operable within confined spaces.

CASE STUDY



**McBreen
Enviro UK**
Part of the **McBreen Group**



Solution:

- The K-Prema Internal Pipe Seal System is a mechanical sealing solution for pipe sections that utilises trenchless installation methods
- Suitable for a range of large diameter pipes; the K-Prema mechanical seal can be used on an array of pipe materials
- Withstanding internal pressures of up to 20 bar, the K-Prema seal provides a reliable solution for sealing infiltration points and preventing future leaks

Collaborating with S1E Ltd, specialist suppliers of trenchless technology, the team opted for mechanical pipe seals from the K-Prema range. The K-Prema Internal Pipe Seal System includes a large EPDM rubber sleeve and retaining clamping bands made of high-grade 304 stainless steel. This system is suitable for various applications, including sewage, water, oil, and air.

After meticulous cleaning and preparation of the pipe, our technicians undertook a challenging 60m ascent to the infiltration points within the massive 1500mm diameter concrete pipe.

Their commitment to efficiency and safety was evident at every stage of the project, with a rescue team on-site and risks efficiently assessed.

CASE STUDY



**McBreen
Enviro UK**
Part of the **McBreen Group**

Efficient Installation

Despite the large pipe diameter and long pipe lengths, the team successfully installed six 1500mm internal mechanical pipe seals. The K-Prema solution minimised system disruption and avoided extensive excavation. It was significantly more cost-effective than traditional repair methods, meeting the client's budget constraints.

McBreen Enviro UK, said:

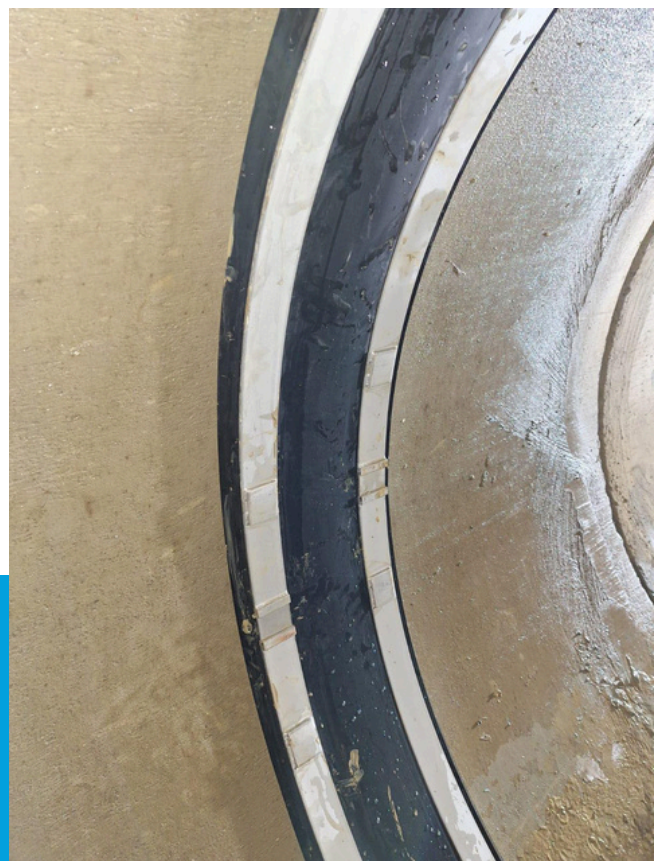
“The decision to choose the K-Prema mechanical seal was a strategic one; for its cost-effectiveness, ease of installation, and compliance with the Water Authority specification. S1E’s support throughout the project was invaluable, from their expertise in the product and the seamless supply.”

“The success of this project was down to how simple and easy it was for the team to install the K-Prema seals. When you’re up against tight deadlines it’s important to be using solutions that are efficient as well as reliable.”

Project Success

The successful project completion ensured that the infiltration challenge was effectively addressed, with a second phase scheduled to commence in the following weeks.

The collaborative effort between S1E Ltd and McBreen Enviro UK demonstrates how innovative solutions and a commitment to excellent service can overcome complex infiltration challenges.



**WANT TO LEARN MORE ABOUT OUR
DRAINAGE SOLUTIONS?**

☎ 01905 959013

✉ sales@mcbreenviro.co.uk

🌐 www.mcbreenviro.co.uk