

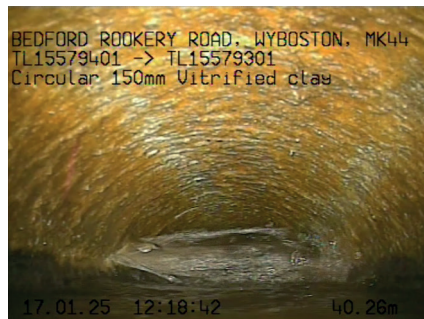
# Chawston and Wyboston Catchment Investigation

## Introduction

In recent years, the communities of Chawston and Wyboston have suffered from persistent spills and a repeated loss of sewerage facilities during periods of rainfall and raised ground water levels. Our designated investigation team was assigned to thoroughly investigate the catchment and identify the underlying root causes. This summary outlines our journey from initial findings to insights uncovered and actions taken to address these ongoing issues and work toward a long-term solution.

## Understanding the problem

Our journey into the Chawston and Wyboston catchment began after reports of repeated sewer flooding and service disruption. We observed flooding and loss of facilities would persist for weeks following rainfall. This pointed to a strong likelihood that groundwater infiltration, rather than immediate rainfall impact, was contributing to the problem. The behaviour suggested a slow subsidence of groundwater that continued to overwhelm the sewer system long after the rain had stopped.

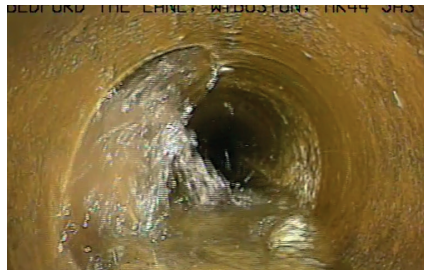


## Infiltration survey and findings

We undertook an extensive infiltration survey covering a total of 9,047 metres of sewer, which included 6,264 metres of surveyed lines and 2,783 metres that required cleaning and CCTV inspection.

Key areas of infiltration identified:

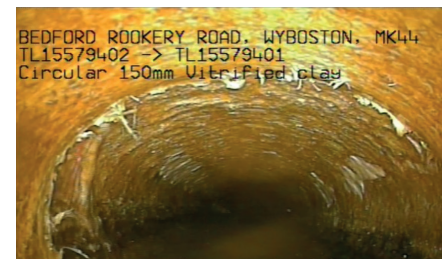
- Rookery Road
- The Lane
- Westfields Road
- Great North Road



Rookery Road emerged as the most significant area of concern. We identified 36 individual points of infiltration in this location alone. These, along with others, were reported to our delivery team for urgent attention.

Infiltration classification:

- 10 gushing infiltration points – indicative of major defects or springs
- 48 running infiltration points – moderate, consistent ingress likely from groundwater or faulty joints
- 28 dripping infiltration points – points of small amounts of water ingress
- 20 seeping infiltration points – low-level ingress, common in aging infrastructure



## Detailed CCTV insights on Rookery Road

CCTV inspections revealed significant infiltration in multiple pipe sections along Rookery Road. For example:

- CCTV inspections revealed significant infiltration in multiple pipe sections along Rookery Road, including gushing infiltration at multiple points throughout sections of Rookery road

One key area we identified was that where previous interventions of lining had been undertaken infiltration was seen to move downstream to sections of the sewer network. This is an example of infiltration entering the network at the end of the patched section of the sewer.



## Unexpected discovery – the water pump main

Understanding the area as whole, we identified a large 8-inch pumped water main running along Rookery Road. Installed in the 1950s, this main draws water from the River Great Ouse to irrigate nearby farmland. This had previously not been mentioned until the team corresponded with residents.

We discovered:

- Leaks were frequently reported by locals or detected by damp ground

- The main lacked proper pressure monitoring
- It ran parallel to areas with the most severe infiltration

Further discussion with the local parish council revealed that 300 metres of this main had recently been replaced. By comparing this information with pump run time data at our Water Recycling Centre (WRC), we observed a clear reduction in pump operations starting from 8 February 2025, potentially aligning with drier ground conditions and reduced infiltration.

## Other findings

### FOG accumulation – local establishment impact

Another issue identified was Fats, Oils, and Grease (FOG) build-up in the sewer network, with the likely source being nearby fast-food establishments. Jetting and cleaning have been recommended, and our Environmental Compliance contractor, ECAS, have been assigned to follow this up. Removing this FOG build up will create capacity in the sewer allowing smoother flow to the Water Recycling Centre (WRC). We're also recommending the installation of monitors to assess the levels/build up of FOG, so we know when interventions need to be undertaken.



### Private estate contributions

We've identified infiltration entering the foul water (FW) system from a private estate located at the old hospital site on Elstow Drive, Wyboston. A collapsed private sewer within this estate is allowing significant groundwater ingress into the foul system. As these flows originate from private assets, we're unable to undertake remedial works.

However, as these flows are contributing to the system overloading, Anglian Water will be in contact with the developer of the property and try and fix this issue.

## Contributing Area Survey (CAS)

Our catchment assessment also included detailed CAS studies, producing valuable data:

- 7,993 metres of foul sewer mapped
- 513 metres of transferred sewer assets
- 2,320m<sup>2</sup> of roof water and 867m<sup>2</sup> of semi-permeable areas (e.g., patios, car parks) were found connected to the foul system

This results in a total of 3,187m<sup>2</sup> of additional water load entering foul sewers, contributing to overloading during rainfall events.

## Conclusion and next steps

Our investigation has revealed a complex set of issues affecting Chawston and Wyboston. Key causes include widespread infiltration, especially along Rookery Road, potentially caused by old infrastructure like the previously unknown pumped water main. Additionally, stormwater entering foul systems and improper waste disposal (FOG) contribute to the system's performance issues.

CCTV surveys have been carried out on every sewer run throughout Chawston and Wyboston, allowing us to fully assess the condition of the network. The results confirm that the overall foul sewer network is in good condition, with little evidence of significant defects or structural failure. The grading of the network indicates that the sewers are serviceable and functioning as intended.

As part of our rehabilitation strategy to protect Anglian Water assets from groundwater infiltration, we will be relining approximately 2,941 metres of sewer. In addition, associated manhole chambers will be resealed. These works are designed to future-proof the network by significantly reducing the risk of local groundwater entering the foul sewer system, thereby improving resilience and reducing the impact on overall network performance.

Once the pipes are lined, this will reduce the spring water entering the foul sewer network. Instead, it will follow its natural

course through the environment. In most cases, this means the water will either soak into the ground or flow to the surface and join nearby streams, drainage ditches or other natural watercourses. Where appropriate, we'll also work with local authorities and landowners to make sure this water is safely and responsibly managed.

This doesn't mean the spring water is being blocked; it's simply no longer entering a system that wasn't designed to carry it. Allowing it to stay above ground or drain naturally helps prevent unnecessary pressure on the sewer network and reduces the chance of future flooding.

In most cases, this redirection of spring water won't cause any noticeable impact to residents or properties. However, we're closely monitoring the situation and we're ready to work with anyone who may experience issues related to changes in local water flow.

Ultimately, this work is about protecting the sewer system, reducing the risk of flooding, and managing natural water in a more sustainable way.

All identified defects and insights have been handed over to the appropriate repair teams, and steps are underway to mitigate and eventually reduce the sources of flooding.

This investigation exemplifies our commitment to protecting communities through thorough analysis, collaboration, and decisive action.