DETECTRONIC

An Adler & Allan company

CASE STUDY

Restoring Flow Confidence:

Collaborative Syphon Cleansing at Meole Brace

Meole Brace

Severn Trent Water

Overview

Severn Trent Water commissioned Detectronic, working in partnership with our sister company Oneline, to address long-standing hydraulic challenges and pollution risks at Meole Brace Golf Course in Shrewsbury. The site contained multiple syphon systems and gravity sewers that had suffered from over 15 years of pollution history and upstream flooding. Our goal was to restore pass-forward flow, improve CSO performance, and protect the surrounding environment through a combination of cleansing, survey, and monitoring activities.

Project Background

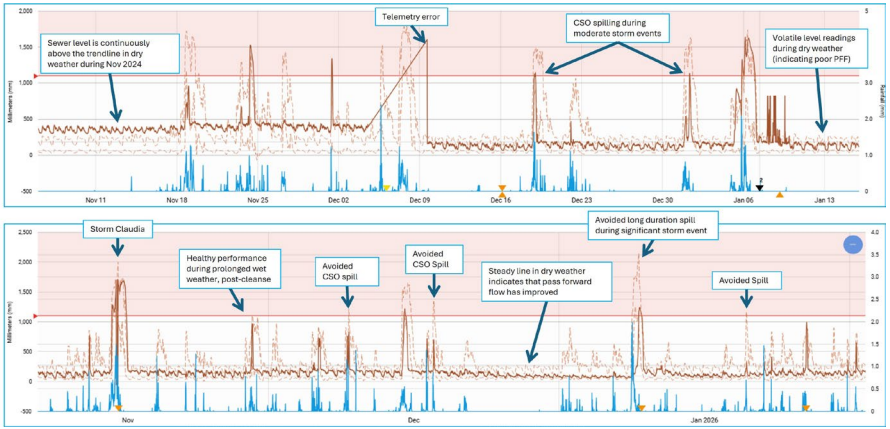
The Meole Brace network is complex, with two interlinked syphon systems crossing the Rea Brook and several gravity sewers running beneath the golf course. Sensitive ground conditions and uneven surfaces meant that access required careful planning. To minimise disruption, temporary roadways were laid and protective fencing was installed, allowing our teams and lorries to operate without causing damage to the course.

Our Approach

Detectronic and Oneline worked together to deliver a comprehensive programme of cleansing and CCTV surveys across key locations, including the Hereford Road syphons, The Rocks syphon, and Kemps Eye syphon. These interventions were designed to remove blockages and restore hydraulic efficiency. In addition, Detectronic installed downstream depth monitors at The Rocks syphon to capture baseline and post-cleanse data, providing clear evidence of performance improvements.

Results and Insights

The monitoring data confirmed that cleansing had a significant impact. Baseline flows increased and volatility in receiving flows reduced, demonstrating healthier syphon behaviour. EDM data from upstream CSOs reinforced these findings, showing improved continuity and reduced spill risk during storm events. At Kemps Eye, immediate reductions in upstream depths were evident following cleansing, with improved pass-forward flow and reduced environmental risk during high-flow conditions.

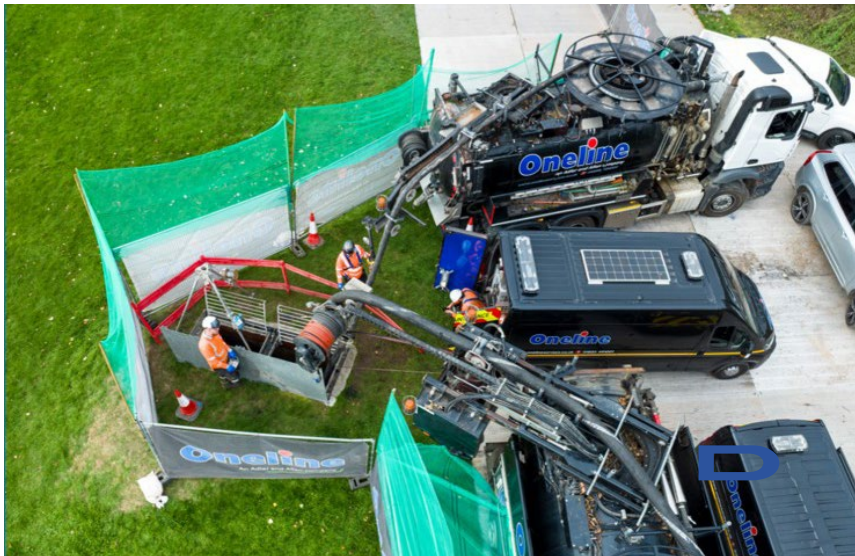


Looking Ahead

Further works are planned for Hazeldine Way syphon in Spring 2026. Continued monitoring will help validate long-term benefits and inform future maintenance strategies, ensuring the network remains resilient under varying hydraulic conditions.

Conclusion

By combining Detectronic's monitoring expertise with Oneline's operational capabilities, we delivered a solution that restored confidence in network performance while protecting sensitive environments. This collaborative approach demonstrates our commitment to supporting Severn Trent Water in smarter, greener wastewater management.



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