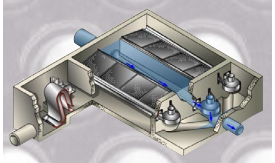
Hydro-Jet™ Screen



Hydro-Jet™ Screen

Retrofit to Existing CSO Structure

Provides Minimal Maintenance Solution for Yorkshire Water

Project Profile:
- **Short lead times.**
- **Configured to suit existing chamber.**
- **Rapid installation.**
- **Maintenance significantly reduced.**

Product Profile:
- **No moving parts.**
- **No power required.**
- **Exceeds current requirements.**
- **Self-cleansing.**
- **Self-activating.**
- **Minimal maintenance.**

Hydro's award-winning Hydro-Jet™ Screen has been retrofitted into an existing overflow chamber at Yorkshire Water's Helmsley site in North Yorkshire to overcome a number of operational problems.

The original overflow chamber had been fitted with a static screen which was causing a number of operational problems. During storm events the screen was blocking which in turn caused the water level to back up the system frequently causing flooding. This meant that a weekly cleaning routine was required at some considerable cost.

The original wedge wire screen.

With the Hydro-Jet™ Screen now in place site visits are conducted every 6 weeks and are soon to be reduced to bi-annual visits.

The Hydro-Jet™ Screen, supplied by Hydro, was installed in a straight forward operation over 2 days. The simple, robust construction, low unit depth and low head requirement meant that this was accomplished with minimal disruption.

The Hydro-Jet™ Screen screens all discharged flows through a 4 mm aperture screen, comfortably exceeding the requirement for removing 6 mm solids and guaranteeing compliance with AMP3 standards.

According to Roger Mills, Sewer Operations Technician, Yorkshire Water: "The unit, which has been installed since January 1999, has significantly reduced the number of routine inspections".

"The inspection includes the outfall to the River Rye at which there has not been any evidence of sewage litter. This is a vast improvement on the original screen."

The Hydro-Jet™ Screen at Helmsley, following operation during a storm.

The Hydro-Jet™ Screen is unique in that it requires no power to operate. A patented air break siphon is used to generate a backwash of the screen which flushes solids back into the main sewer whilst discharging screened water. As such, the Hydro-Jet™ Screen is self-activating and self-cleansing and thus requires minimal maintenance; with no power costs, its lifetime costs are very low, typically off-setting its capital cost over a relatively short time.

This case study forms part of a series demonstrating the flexibility, cost-effectiveness and extended track record of the Hydro-Jet™ Screen. Other case studies include:

Package Unit

New-Build Rotary Unit with Storm King®

Retrofit to Storm King®

New-Build Concrete Chamber

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