

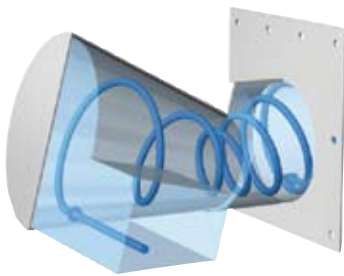
Project Profile

Objective

Increasing stormwater runoff from new developments surrounding Worthington village, were causing periodic flooding. Severn Trent Water designed a 310 m³ stormwater facility to store the excess.

Solution

A 183 mm Type CX Hydro-Brake® Flow Control was installed to regulate the flow into the storage facility.



Product Profile

- No moving parts.
- No power requirement.
- Self-activating and self-cleansing.
- Outlet 3-6 times larger than conventional controls.
- Can reduce storage requirements by up to 30% when compared to an orifice plate.

Hydro-Brake® Controls Main Street Flooding

As part of the flood alleviation programme for the main street of the pretty Leicestershire village of Worthington, Severn Trent Water designed a 310 m³ stormwater storage facility. To provide the discharge control, Severn Trent Water specified a Hydro-Brake® CX183 flow control, which ensures a maximum discharge of 40 l/s to the local watercourse treatment works.

The village suffered periodic flooding as it is sited at a low point, where runoff from surrounding new developments collects. Existing combined public sewers were no longer able to cope with the increasing volume of stormwater, so Severn Trent Water has invested in a scheme to alleviate foul flooding in the village.



The Hydro-Brake® Flow Control Installed at Worthington.

This comprises a new storage facility constructed from two 1600 mm diameter concrete pipes buried under local farmland, with the access chamber and Hydro-Brake® located on highway land for ease of maintenance. Using a Hydro-Brake® Flow Control ensures a constant maximum flow of water despite a fluctuating head, and the device achieves its maximum design flow at a much lower head than the equivalent orifice plate or other standard control device.

A further benefit of the Hydro-Brake® design is that it has no moving parts and needs no power, so operating costs are very low. The Hydro-Brake® intake opening is larger than the size of the equivalent penstocks, so is not so prone to blocking, maintenance is therefore minimal.

turning water around ...®

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