# **Case Study**



# Heliscreen® CSO Retrofit Beneath Main Road

### Project profile

#### Objective

To provide a reliable, low maintenance CSO solution under a main arterial route through Sheffield with the minimum of disruption.

#### Solution

Design and supply a packaged CSO system capable of being installed within one day to comply with construction restraints and minimise road closures.

## **Product profile**

- Self-cleansing by rotating helical brushes.
- All screenings retained on the foul side of the weir.
- Low headloss.
- · Operates under surcharged conditions.

Find out more at: www.hydro-int.com

Two Combined Sewer Overflow upgrade projects in urban Sheffield demonstrate the versatility of Hydro International's Heliscreen® in assisting the Yorkshire Water Services Ltd to improve the city's water quality to the Environment Agency's standards. At the Atlas Works and Carlisle Street sites, twin Heliscreen® units were retrofitted into existing chambers under the road surface.

Both projects were designed to improve existing CSO arrangements. During heavy rainfall the chamber overflowed into the watercourse causing pollution by visually offensive material.

To upgrade this to a positive screening method, at an economical cost, Yorkshire Water installed twin patented Heliscreen®s in double high-sided weirs. Both units were supplied with bespoke stainless steel flow channels which enabled complete mechanical installation within one day with minimal civil work.



The Atlas Works installation under an urban road comprised two 700 x 2500 mm units with a maximum inlet flow of 1593 l/s (1 in 5 year) and a maximum screened flow of 1328 l/s (1 in 5 year).

Yorkshire Water's Contracts Manager, Peter Myerscough, commented: "The Heliscreen® is an efficient, versatile and cost-effective unit. The bespoke Heliscreen® installations at Carlisle Street and Atlas Works were completed on time and within our normal 10-12 week delivery period".

Hydro International's patented Heliscreen® is a self-cleansing, low head loss screening device that protects CSO outfalls by retaining all matter greater than 6 mm (in 2 directions) in the foul continuation flow to the treatment. The Heliscreen® works effectively even in totally flooded chambers with surcharged outflow pipes.

#### Learn more

To learn more about how the Heliscreen® can help you to manage water more effectively, visit **hydro-int.com**, search **Heliscreen** online or contact us:

#### **Americas**

+1 (866) 615 8139 inquiries@hydro-int.com

#### Asia Pacific

+61 436 433 686 enquiries@hydro-int.com

#### Europe & RoW

+44 (0)1305 821142 enquiries@hydro-int.com

#### Middle East

+971 506 026 400 enquiries@hydro-int.com