Limavady Waste Water Treatment Facility

No luck needed when you install the best!

In 2004, DRD Water Service announced plans to upgrade the Limavady Wastewater Treatment Works, which was part of a 28 million dollar capital works program in Northern Ireland. Shaun Woodward, Regional Development Minister, said "Significant investment is required to upgrade water and wastewater infrastructure in Northern Ireland to protect public health, ensure cleaner beaches, safeguard the environment and respond to increasing demand."

As part of the upgrade, Northern Ireland Water (NIW), the local water authority, found it necessary to search for equipment that would hold up to the task of handling the remarkable amount of screenings brought in by the high quantity of rainwater flowing into the combined sewer system. In particular, problems often occurred at the headworks portion of the treatment plants due to the first flush of heavy rainstorms. NIW knew that only a very heavy duty screen at the front of a treatment facility could hold up to the beating, and capture the rubbish flowing in from the deluge without jamming.

NIW also had to abide by UK screenings capture requirements. NIW officials agreed that Headworks® Mahr® Bar Screen was the only screen up to the task.

The Limavady Wastewater Treatment Plant was part of the upgrade plan of replacing old non-working screens. After thorough research NIW was so impressed with the robust, durable construction of the Headworks' screens and their ability to withstand coarse screen abuse while delivering fine screen results that Headworks was accepted for the project. Williams Industrial Services, the contractor awarded the project, installed two 4mm Mahr Bar screens into a channel depth of 1.75m by 1m wide. They attached a Transporter and Compactor for conveying, washing, and compacting to the bar screens. The installation of the screens was successful and the client is very pleased that they have eliminated the need for a two-stage screening system.

These Mahr Bar screens hold up to debris like a coarse screen with peak flows of 480 l/s. Paul Davison, Project Sponsor at NIW, remarked "Since their installation, the screens have gone through several storm events without ever jamming. The volume of screenings captured at Limavady is significantly greater than had been previously removed. Additionally, the headloss is considerably less than anticipated. So far, the screens' performance is very good." Since the installation of Limavady in late 2008, NIW has accepted Headworks Mahr Bar screens for two additional projects.

Few facilities in the world are in an environment that receives 40 to 50 inches of rain each year, but even with the torrents of water and heavy debris that result from the "first flush" of heavy rainstorms, Headworks has provided equipment proven to last for decades with very little maintenance."

INFORMATION

Project: LImavady WWTW
Owner: Northern Ireland Water
Contractor: Williams Industrial
No. Of Screns: 2
Channel Depth: 1.75
Channel Width: 1m
Water Depth: 1m
Bar Spacing: 4mm
Max flow per screen: 480 l/s
Coarse screens upstream: no
Material: SS304
Equipment: totally enclosed for odor control
Pivots out for maintenance

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