Quick thinking solves double leak at Network Rail yard

> “Due to the complex infrastructure of the rail yard, there was a degree of problem solving required to resolve the issue. Thanks to Business Stream expertise, we were able to identify, trace and fix the leaks quickly, helping us to save a significant amount of money and water.”

Kenny Lowe
Senior Asset Engineer
Network Rail

NetworkRail

business stream
A SCOTTISH WATER COMPANY

Business Stream has been Network Rail's water supplier in Scotland since the market opened in 2008, and now services all of the rail infrastructure company's major rail stations in Scotland and England, as well as its numerous operational sites around the country.

Network Rail owns, operates and develops Britain's railway – the 20,000 miles of track, 40,000 bridges, tunnels and viaducts and the thousands of signals, level crossings and stations, which millions of people depend on every day.

The challenge

Network Rail's site at Slateford Road in Edinburgh is a large operational rail depot with numerous buildings which have been developed, removed or redeveloped over time. This has contributed to a complex infrastructure plan, which can make locating pipes and other underground services a complex exercise.

After installing an Automatic Meter Reader (AMR) at the site in June 2021, Business Stream analysts quickly spotted an irregular water usage pattern, at odds with the normal water use expected from a typical rail yard. This suggested that the site could have a leak or multiple leaks which required further investigation.

The solution

Business Stream's water experts worked with Network Rail to trace connection-by-connection and building-by-building all of the assets covered by the AMR. Following an investigation on site, the team located a faulty meter, and an initial leak, which was losing 504 litres of water per hour. Further investigation found a second, larger leak on a fire hydrant which was losing a significant amount of water, 4,392 litres per hour. Engineers located the issue using a combination of highly sensitive sounding equipment and signal devices to locate the problem pipes beneath ground.

Thanks to the speedy repair of the leaks, the site's **carbon use was reduced by over 1.24kg per hour and costs by over £100,000 per year**. Business Stream also undertook a full network survey and submitted a leak allowance application to Scottish Water to recover the costs of excess consumption before the leak was fixed.