

# COLNE WWTW

## THE BACKGROUND



Selwood's pumping solutions teams in north-west England were called upon by contractors J N Bentley to help with works at the United Utilities Colne Wastewater Treatment Works in Lancashire.

J N Bentley's task was to rebuild inlet storm channels at the facility and install additional measures to increase the site's capacity, and therefore its ability to handle stormwater flows.

Selwood, a long term and trusted partner of J N Bentley, was asked to install a solution to overpump up to 225 litres per second from the chamber to enable the contractors to enter the facility and carry out the works.

## THE CHALLENGE



The limited dimensions and awkward profile of the chamber presented a significant **CHALLENGE** to the J N Bentley and Selwood teams. The conventional solution, which would have been to install submersible pumps in the chamber, was unsuitable for this job because the opening was around 1 m by 1 m, too small to fit submersibles through.

There was also a need to ensure detailed remote monitoring of the pumps which could be monitored at all times to ensure any issues with the setup would be flagged up immediately.

## THE SOLUTION



To get round the problem of limited space, Selwood's team recommended the use of surface-mounted pumps, with suction lines placed into the chamber to avoid the issues with having to mount equipment inside.

4 Selwood S150 electric pumps were chosen for the job, as this fitted the solution perfectly, was cost-effective and had a small footprint.

As space was tight on site, Selwood's CAD design team were commissioned to provide CAD files detailing the pumps' specifications. These were added to J N Bentley's drawings by their in-house design team, to ensure the solution would work in the space permitted.

The pumps were ran on automated variable speed control panels. These were suited to the level of monitoring the customer required because they enabled the use of more advanced telemetry than can be offered on diesel pumps.

Selwood installed **TELEMETRY** which specified three mobile phone numbers that would receive alerts if any of the pumps failed, if power failed or was restored, and if the storm channels reached high levels.

## THE RESULT

J N Bentley's team carried out the mechanical install themselves but Selwood completed the electrical installation and commission. The project required a long rental period and so electric surface mounts were a more **COST-EFFECTIVE** solution for the client than diesel units, which require daily maintenance diesel and oil checks. As a result the challenges of the site were overcome while still achieving a cost saving for the customer.

