

# Taking action at Cark-in-Cartmel

We're accelerating £1.5 million worth of investment and taking action right now to help reduce spills and improve water quality in the River Eea.

This accelerated funding builds on the steps we've already taken at Cark-in-Cartmel including:

- Installed new pumps which maintain the flows we need to pass forward to treatment at Grange-over-Sands WwTW
- Re-lined parts of the network to help stop water ingress
- Repaired or replaced air valves along the rising main
- Tested the capacity of the rising main
- Cleaned the rising main through an innovative technique called ice pigging (injecting ice into the rising main to clean it of any sediment)
- Constructed a new chamber and installed a flow meter to monitor flows leaving the pumping station
- Carried out infiltration and groundwater surveys to inform new longer-term solution

What are the challenges facing the wastewater system at Cartmel?



**The geology** – the Cartmel area has an unusually high water table which means groundwater and rainfall can affect the sewer system. This means our sewers are fuller for longer with both groundwater and rainwater which can result in spills from the storm overflow at the pumping station

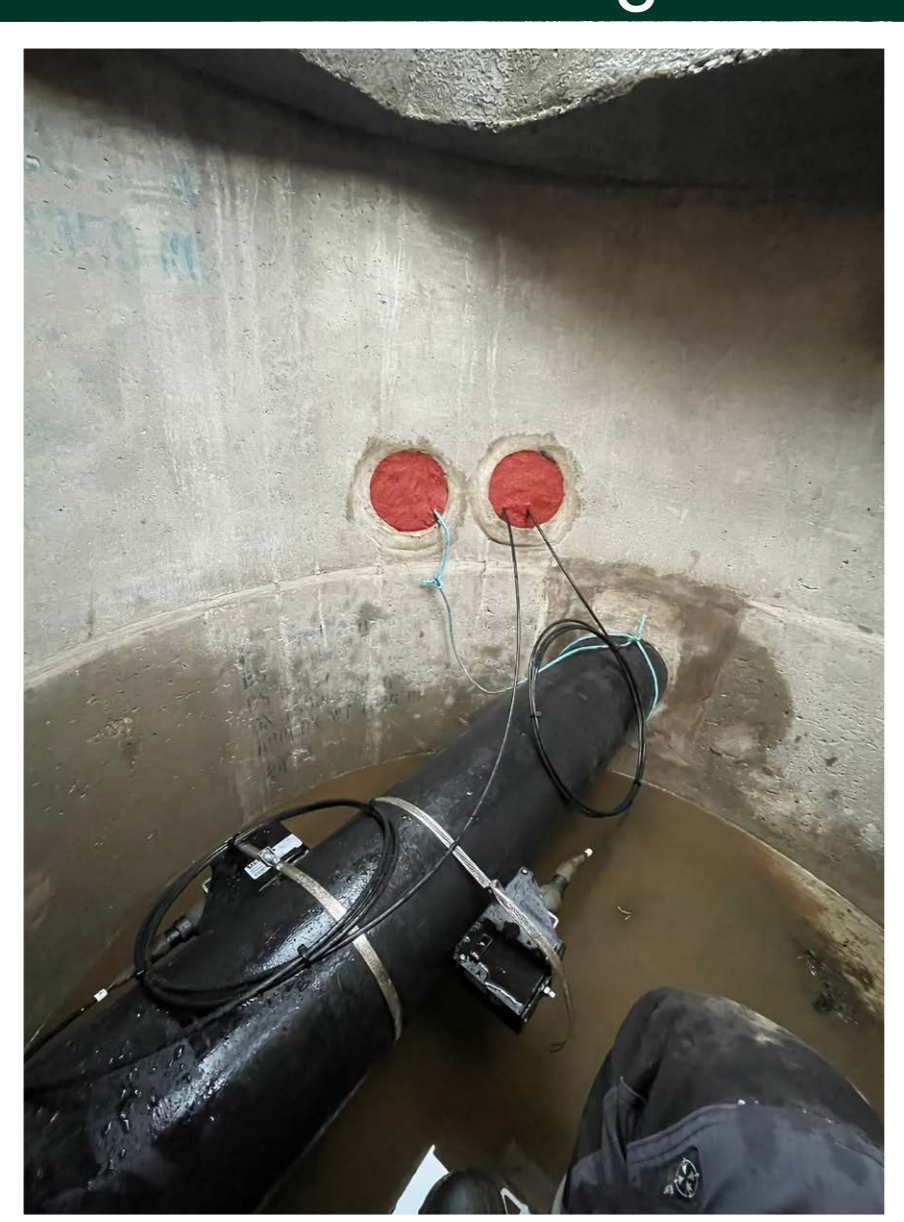


**Lots of persistent rain** - with 2023 being one of the wettest years on record, groundwater levels have remained high all year



**Tourism** - There are lots of great attractions in the Cartmel area which draw in lots of extra visitors and this can put additional strain on the wastewater network for short periods at a time

These factors have been taken into consideration for our interim and long term solution development to make the area resilient to future challenges.



# A new treatment works for Cartmel

Our engineers have designed a temporary solution to reduce spills right now. We'll be installing a new mini wastewater treatment works at the pumping station location, also known as a package plant. Once installed, we'll be continuing to work closely with the Environment Agency to develop a permanent treatment solution.

## How does this work?

Whereas the purpose of the pumping station was to pump wastewater uphill, sending the wastewater from homes and businesses to Grange-over-Sands treatment works, we'll now be able to treat wastewater to the highest of standards right here at Cartmel before returning it safely to the environment.

All of your waste that gets flushed down the loo will now be transported through the existing pumping station to be biologically treated at this new plant, which will also include some extra treatment to reduce phosphorus.

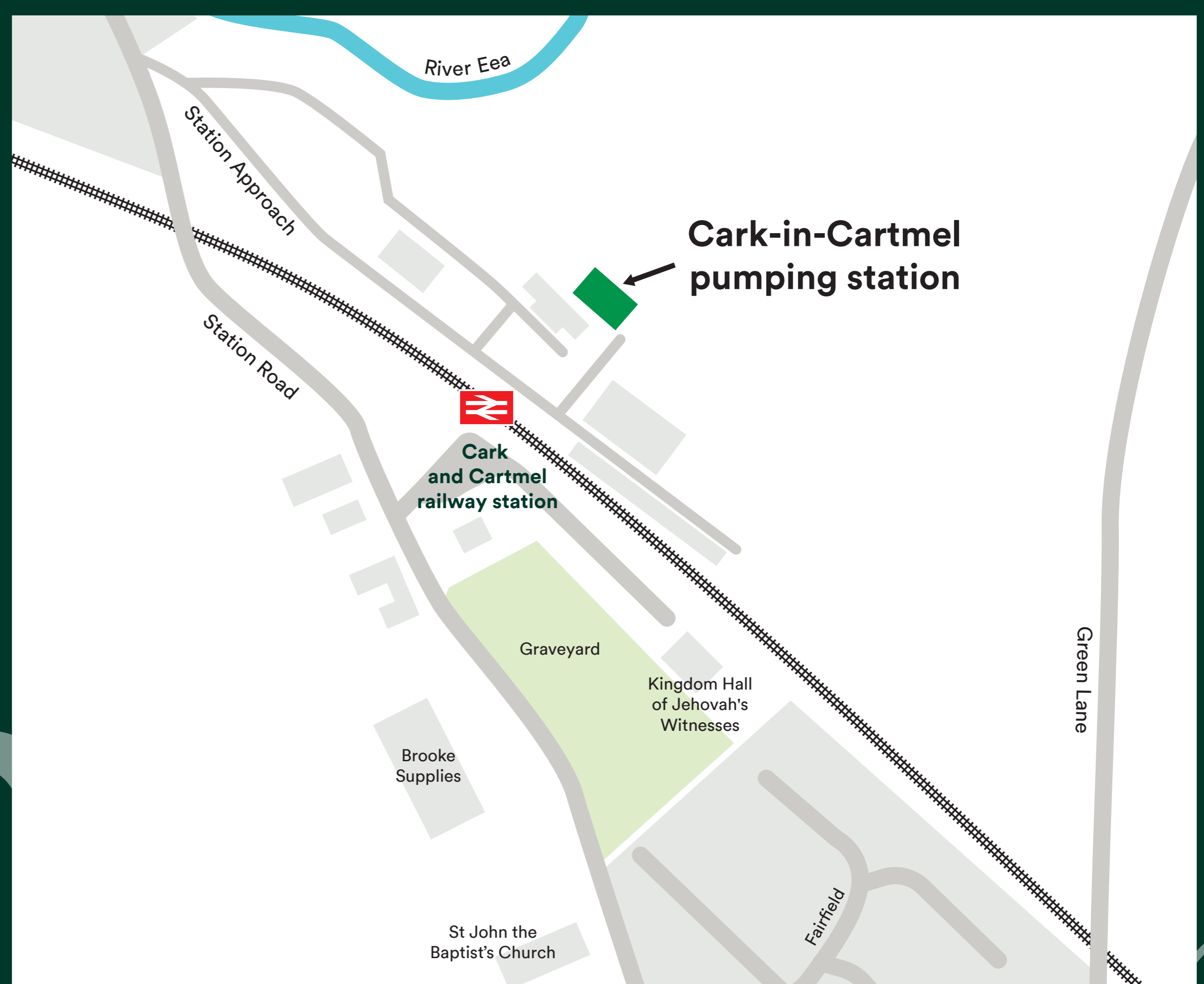
What's also great is that package plants arrive already manufactured, meaning we can get this solution up and running quickly.

## What are the benefits?

We'll reduce spills and treat up to **60 litres of water per second**

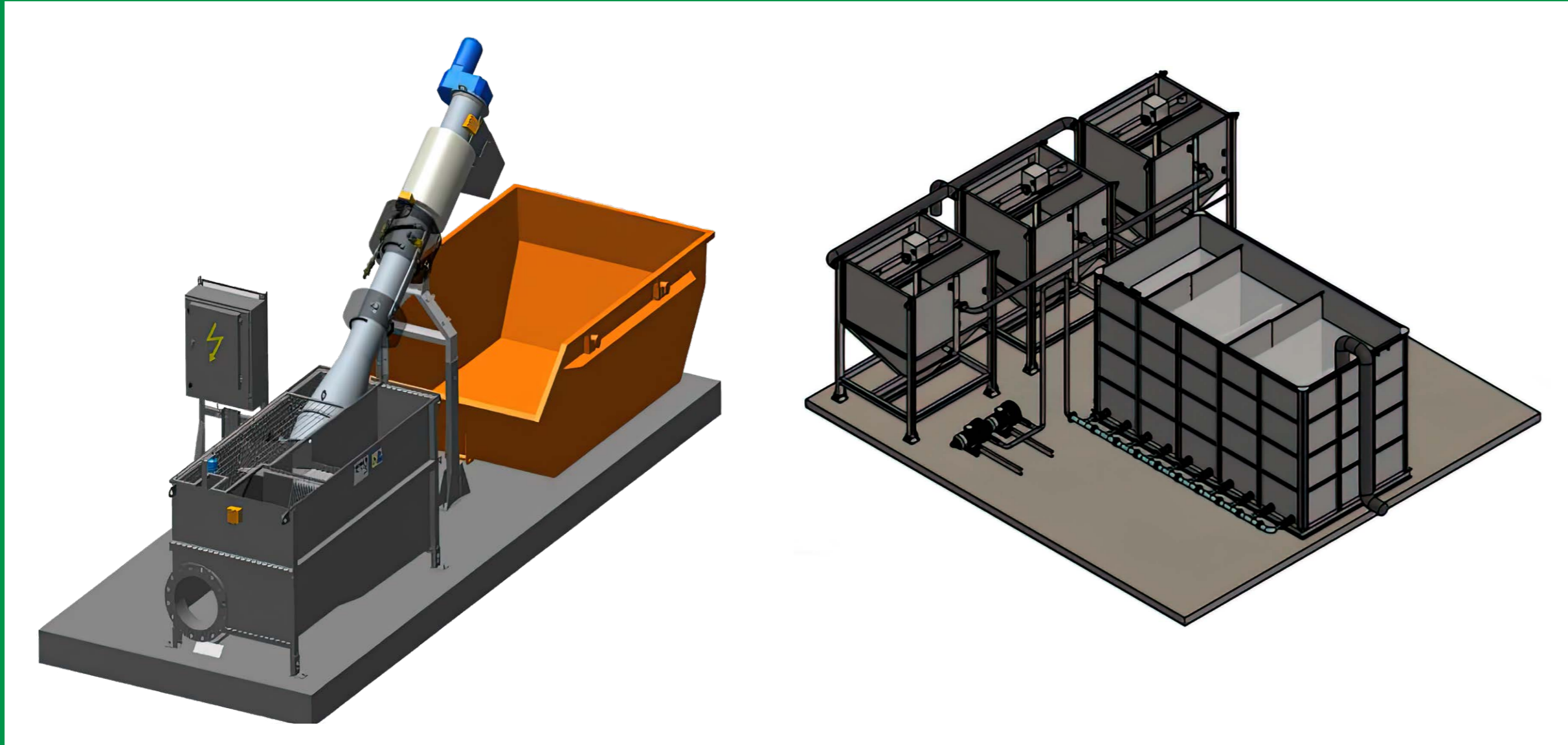
We'll **free up capacity** at Grange-over-Sands wastewater treatment works

New solution will provide **new and more effective screening.**



# What can I expect to see?

Here's a sneak peek of what the new treatment works will look like:



## What are your timescales?

Work is due to begin on **20 May** and we're likely to be on site **until mid-August**. We'll do our best to keep noise and disruption to a minimum and thank you for bearing with us while we carry out this essential work to enhance the environment.

## What's next?

We'll be continuing to take regular samples to ensure the treatment works is performing as expected. We'll be sharing these results with the Environment Agency and we'll work together on a permanent solution for the long-term.

