



Stonbury delivered a 55m³ sectional steel storm tank on a wastewater treatment site to facilitate compliance with new storm volume regulations.

Simply replacing the existing tank with a larger tank was cost-prohibitive as it would have meant installing a temporary storm tank to keep services operational. Working with the client, Stonbury offered to deliver an additional tank situated within the limited remaining space that would operate in conjunction with the existing asset and enable it to continue operation throughout the programme and into the future.

Existing mains pipework ran underneath the proposed location for the new tank, posing an issue for future maintenance. Therefore, Stonbury's first task was to excavate and identify the existing pipes in order to divert them. This was a challenging task due to the number of services present, underground concrete obstructions and a lack of accurate historical drawings.

Once the team had identified the pipes via tracing by excavation, these were isolated and rerouted around the perimeter of the new tank location, which included breaking out concrete for the new routes. These works, together with the identification, formed a substantial part of the programme.

The following task was to lay the reinforced concrete foundation for the new tank. This included excavation, stoning up, compacting and trimming, fixing screed rails and pouring the concrete blinding. Once this was complete the team affixed the perimeter formwork and the rebar before casting the final concrete base.

Once the base had cured, a sub-contractor installed the new steel storm tank. Stonbury backfilled then landscaped around the new concrete base, reinstating the area with gravel, and installed the sump drain chamber, overflow pipework and connection pipework to the storm return pump main. Finally, Stonbury fitted a new access platform and staircase, ultrasonic head and cabling for control and telemetry.

The new storm tank underwent a successful water test, once complete, sloping benching to the sump was cast in the tank. Following the cure period, the tank was returned to the client. This programme provided a cost-effective, low-carbon solution which negate the necessity for a new tank for another twenty years.