



Stonbury was contracted to replace the hatch covers on a live potable water reservoir in the East Midlands.

Stonbury advised replacing three large hatch covers after an inspection revealed issues with their locking mechanisms.

The covers weighed almost two tonnes; therefore, a crane was the preferred method to lift and position them into place. However, a 40t weight restriction on the access bridge forced the team to employ an alternative solution in the form of a wheeled gantry.

The existing security system was disarmed by the client before works commenced. Heavy duty track matting was installed between the hatches and holding area to protect the grass area on the tank roof, and all covers were sealed using clean, taped plywood to protect the water in the tank from contamination.

A small crane was utilised to address the cover nearest to the edge of the tank. With the crane positioned on the tarmac road, the arm of the crane could reach to successfully lift off the old cover and position the replacement.

The wheeled frame gantry was then positioned above the remaining two covers and attached with slings and chains to a block and tackle lifting device. The existing covers were then lifted and seal broken from the concrete upstand.

Old bolts were removed, the concrete upstands were then cleaned and primed. New sealant was applied to the surface of the concrete upstand before the new covers were lowered into position using the gantry system and secured with new fixings.

The programme was successfully completed within a five-day schedule.