//MAINTENANCE // REFURBISHMENT // NEW BUILD

PROJECT HISTORIC RESERVOIR REFURBISHMENT

















Stonbury recently returned to a historic site to complete a large-scale refurbishment on a grade II listed stone reservoir. A roof was placed over the original build in the mid-twentieth century, and Stonbury were contracted nine years ago to install a Reg 31 Hylam liner due to historic ingress.

The scope of the recent project covered both internal and external refurbishments, including the installation of a waterproof roof membrane, improvements to drainage, mortar repairs to internal stone walls, upgraded scour valve chamber, sample tap kiosk, and access hatches.

External works began by removing the roof overburden and excavating a trench around the perimeter of the tank to access the top of the reservoir walls. Removal of the existing drainage pipe and concrete infilling of the original gulley was completed to create a chamfered edge on which to overlay the waterproof membrane. An impermeable liner was installed within the new drainage channel.

The roof slab was then jet-washed in preparation for the waterproofing works and access hatches were lifted and re-bedded. The team installed approximately 500 metres of overbanding to joints. After preparation of the roof slab, a waterproof membrane was laid over the roof and perimeter; a challenging task due the unusual shape of the tank.

For internal works to begin, a blanking flange was installed to the bell mouth to block water from the network main. Following removal of the existing lining and a flood test to assess the level and location of ingress, the team repaired leaks to stone walls and raked out and re-sealed existing repairs. Upon completion of repairs to the walls, the internal lining was reinstated.

Final checks including flood and spark testing were successfully completed on the walls, roof and perimeter, and the drainage channel was flooded to ensure it held water without any leaks on the welds. Deckdrain was installed before the existing soil overburden was reinstated, using aerial drawings to replicate the original shape as closely as possible before final landscaping and turfing.