

PROJECT NEW BUILD TRANSFORMER CONCRETE BUNDED BASE



Due to a flood event inside a high voltage building, which was situated on a Water Treatment Works, Stonbury were asked to relocate the existing transformer onto a new concrete banded base and waterproof the building to prevent future ingress.

In addition, the client wanted upgrades to all the power supplies on-site and requested that the team installed ducting between the high voltage building and the new transformer base, and completed coring into an adjacent building for the new power cables.

However, no works could be completed until the high voltage cables were shut down, and the team working on site had attended a certified 'High Voltage Awareness' course.

The new transformer base was installed above the height of the previous flood level to prevent future contact with

water, should another flood event occur. Constructed out of reinforced concrete, the base was completed with a banded concrete surround, filled with stone and enclosed in palisade fencing.

Inside the building, the team were required to recast the duct entry points with concrete and replace the ducts with new. They also re-concreted the back wall as this was highlighted as the most vulnerable part of the building and the main source of ingress.

A cementitious coating was applied to the external walls of the HV building, from the foundations, up to 100ml above the 1 in 100-year flood level. Following application, the material was kept damp to ensure sufficient crystallisation and full compliance with the IFU.

On completion of the works, the site was inspected and handed back to the client for return to service.