

## CASE STUDY: CHERTSEY SUBSTATION (SHEPPERTON)

## Background

The works at Shepperton Sub-station were commissioned as part of Falco's Minor Works Sub-station Framework contract. The project was to extend the existing open trough route within the sub station to allow for the installation of 11Kv new switch gear to facilitate an 11Kva power supply to the nearby Shepperton studios.

The works were split into two sections one for Shepperton Studios extension and a second for future-proofing should additional capacity be required.

## **Planning & Mobilisation**

A risk assessment was conducted during the lead-in period which identified the risks associated with the site which, given the proximity to the substation, focused on protecting the asset and competency of staff.

A method statement was prepared and submitted for approval which described the methodology to be implemented for the following sequence of works:

- Provide temporary ply protection to HV switches
- Break out concrete and reform walls to extend section 1
- Core drill and extend section 2 Unistrut's
- Mill down 10mm and apply self-levelling material and grey floor paint /temp GRP board (section 1&2)
- Excavate 7.0 m trench in unmade (approximately 1m deep) and back fill
- Remove temporary ply protection

## The Works

During construction of the troughing extensions, it was necessary to install a temporary ply screen to protect the switch gear from flying debris. Polythene sheeting was also used to protect the assets within the substation from dust. Coring was carried out using a mini coring rig. A high section of slab was scabbled with pneumatic tools and screeded with self-leveling screed.

Sector: Power
Client: UKPN
Value: £13k
Duration: 2 weeks
Completed: Nov 2021
Location: Shepperton, Surrey

Upon completion the flooring was painted with UKPN-approved paint, the cores and temporary voids were covered with aluminium sheet (future proofing area) and GRP walk boards for the extension area.

Quality control was achieved with adherence to an Inspection Test Plan with Supervisor sign-off required at each stage.



