

Project Profile

Project Description:	Gilbert Bain Hospital, Electrical Switchboard Replacement
Location:	Gilbert Bain Hospital, Lerwick, Shetland
Client:	NHS Shetland
Project Value:	£100K
Project Duration:	January 2015 - July 2015
Sector:	Healthcare



Callidus Design was appointed by NHS Shetland to generate a report and proposed sequence of works to replace the existing Outpatients Switchboard at Gilbert Bain Hospital, Lerwick. The switchboard is located in a small electrical switchroom outside the Outpatients waiting area.

The existing switchboard had previously been identified as being in need of replacement due to its age and current health & safety standards for safe maintenance / access in operation at the hospital. The switchboard currently supplies a large percentage of the hospital with non-essential loads and essential supplies backed up by the site generator.

The new switchgear is two separate moulded case circuit breaker (MCCB) panel boards – one serving the non-essential supplies and the other serving the essential supplies. An additional sub main supply from the

main switchboard was installed to serve the second panel board rather than the current change over switch arrangement of the existing switchboard.

The requirement for a comprehensive and accurate sequence of works to replace this switchboard was extremely important due to the shutdowns required and the effect these would have on the normal operation of the hospital. The sequence of works endeavoured to minimise the number and duration of the shutdowns to allow the hospital to continue to operate.

It was important to estimate accurate timescales for each activity to ensure that the hospital staff are aware of the expected duration of any shutdowns or periods of only limited supplies being available. These estimates included the time to arrange the necessary permits, ensure all supplies are correctly isolated before commencing works, carry out the necessary works, carry out the appropriate checks & tests, re energise supplies and cancel permits.

As well as highlighting the sequence of works, the report highlighted the preparatory works which need to be carried out before any shutdowns and the precautions that the hospital are to take for these shutdowns. This included temporary supplies, provision of battery powered torches and increased staffing levels to compensate for the Nurse Call system being out of action.