



TOTAL SOLUTION CONTAINERISED DATA CENTRE DESIGN & BUILD

HYWEL DDA UNIVERSITY HEALTH BOARD GLANGWILI GENERAL HOSPITAL DATA CENTRE CARMARTHEN, WALES

CASE STUDY

A new energy efficient
ModCel Containerised
Data Centre for an
NHS Hospital.



Hywel Dda University Health Board provides services to a total population of around 373,000 throughout Cymarthanshire, Ceredigion and Pembrokeshire providing Acute, Primary, Community and Mental Health Services. The Health Board employs 9,500 staff and operates out of 56 sites.

Selected for its track record in delivering NHS Data Centres, Secure I.T. Environments Ltd. (SITE) worked with the hospital to develop an energy efficient solution that would replace the old data centre currently in use.

With space at Glangwili General Hospital at a premium it was established that an 'Energy Efficient' ModCel containerised data centre located in an atrium area in the middle of the hospital would be the best solution.

The project included all related groundworks which entailed piling into the ground for concrete pillars and ground membrane overlaid with pea grit.

Due to the restricted access to crane the ModCel into position precise coordination with the hospital team was carried out to ensure a successful installation. The hospital car park area had to be cordoned off and all Doctors consultancy had to cease to allow the ModCel to be lifted over the consulting rooms into its final location. With the wealth of experience SITE has working within the NHS sector all went according to plan. Once the container was sited on the concrete posts the mains incoming power and fibre supplies were connected. Followed by the mechanical and electrical integrated system test to ensure the functionality of the ModCel infrastructure. The ModCel containerised data centre specification for this project included a N+1 mechanical and electrical solution to ensure concurrent maintainability and included:

- N+1 energy efficient air conditioning
- Full resilient power supply infrastructure
- N+1 UPS system
- 19" server/communications cabinets
- Novec fire suppression and detection
- CCTV/biometric access control
- Lightning protection
- Raised access flooring
- Cabinet intelligent PDU's
- Electrical mechanical board monitoring
- Cold aisle containment
- Fibre backbone
- Structured cabling
- Full ongoing maintenance

