

Client: Ark Continuity

Location: Corsham

Sector: Data Centre

Project value: £6,000,000

Project: SQ17 Phase 1 Data Centre design and Build



Brief

JCA were asked to complete the design and construction of a tier III data centre for Ark Continuity Ltd, as defined by the Uptime Institute of America's tier classification and performance standard (UTI), supported by TIA 942.

Action

The design was scalable to provide a full data centre facility to be built over six phases. Phase 1 consisted of 4 data suites, an administration block, network operating centre (NOC), meeting rooms, staging area, security office, support office and the appropriate welfare facilities. All elements of the installation were designed and installed so that they can be isolated to facilitate planned preventative maintenance without the loss of power or cooling, thereby allowing concurrent maintenance.

A resilience of the utility power supply (N+1 to the national grid 400kV/132kV transmission system) and standby power generation at N+1.

The facility can grow by using a flexible modular 2MVA power/cooling system designed around a nominal 4 data hall solution. This has a modular design that is scalable in terms of rack layout, electricity and cooling demand that is tailored to meet the occupier's technical requirements.

Each data suite was supplied with a nominal 200kVA technical load which provided a potential to host 60 racks with an average power demand of 3.3kVA per rack with no diversity and a maximum of 5kVA at any rack with the appropriate diversity applied to remain within the overall data suite capacity.

The outcome

The project was finished on time and to budget with all client's time scales being met. The professional and efficient manner in which the project was carried out, has meant that JCA has secured further work with the client.