

Charing Cross Hospital

LABORATORY BLOCK 4TH FLOOR MICROBIOLOGY RELOCATION



Client:	Imperial College Healthcare NHS Trust
Consultant engineer:	Eta Projects Ltd
Quantity surveyor:	WT Partnership
Architects:	Brunton Boobyer
Cdmc:	WT Partnership
Value:	£1.2M
Timescale:	9 months

Description

Imperial College Healthcare NHS Trust is rationalising the Pathology department to Charing Cross Hospital. This involved the relocation of the Microbiology departments from Hammersmith Hospital, St Mary's Hospital and Chelsea and Westminster Hospital to Charing Cross Hospital. The project involved the strip out of the existing, redundant installation and the installation of new versions to suit the specific requirement of a Microbiology Department.

Objectives

To provide mechanical and electrical services to suit a new Microbiology department. The existing ventilation and heating systems were utilised where possible and supplemented with new ones to ensure that the required space conditions were provided. A new power supply was provided to supplement the existing one, as the new area required a greater electrical load on the system than presently provided. The new laboratory CAT III laboratories, require a dedicated protected supply.

Design

The design of the new mechanical services included ventilation/comfort cooling, steam/condensate, Low Temperature Hot Water (LTHW) heating, chilled water domestic hot and cold water services, drainage, hot and cold rooms, pneumatic tube system, laboratory gases and safety cabinet exhaust systems. The electrical services consisted of a new power supply, essential and nonessential power to the work areas, Uninterrupted Power Supply (UPS) for the CAT III area, lighting/emergency lighting, security, fire alarm, voice and data and power supplies to serve the mechanical plant.

Specific design requirements

The new Microbiology department contained two CAT III laboratories. The services design was critical to the operation of the area. The layout and operation of the area was carried out in accordance with the requirements of Counter Terrorism. This project posed a particular constraint on the security of the floor and the Trust's fire policy.