

## Case Study - Healthcare

# MARS Project - Addenbrookes Hospital Campus

**Client name:** Medical Research Council  
**Project:** MARS Project, Addenbrookes Hospital Campus  
**Date:** 2007 - 2010  
**Value:** £125m  
**Service:** Quantity Surveying (to RIBA stage C) and CDM Co-ordination

Keegans were appointed as quantity surveyors to conduct a feasibility study to outline estimates up to RIBA stage C.

The new Bio-medical Research Facility 24407m<sup>2</sup> (excluding Plant) LMB Complex is currently designed over three floors with a central atrium, roof canteen and partial basement laboratory facility.

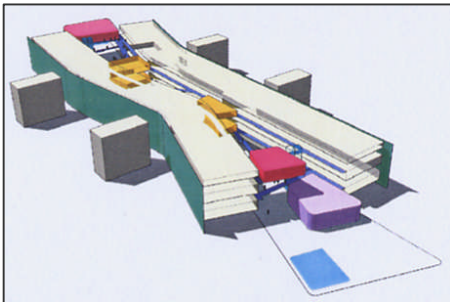


The MARS Project comprises a three story building for Bio-medical Research together with a separate 2 storey Energy Centre which provides services to the main building via 4 No. free standing independent service towers. An element of extract plant will be sited upon the roof structure. The Energy Centre and towers will house air handling equipment and auxiliary equipment and to facilitate the routing of engineering services to the various areas.

The Bio-medical Research Facility which would be maintained by the air handling distribution equipment incorporating environmental treatment to maintain design conditions including the use of double HEPA filters supplying air, positively pressurized to ambient, to prevent contamination. Initially the double HEPA housings would be equipped with single filters but the supply air handling plant to be sized to allow the system to operate with double HEPA's at a later date. The extract air volume from the barriered area would be automatically varied to match the supply air volume to each zone less that determined during commissioning to maintain the specified pressure regime. With the exception of the Quarantine and isolation areas the extract air from each zone would not be include HEPA filters.

The areas forming separate zones would comprise of:

Usable Floor Space;	Laboratory Module Areas Specialist Laboratory Areas Administration Areas Meeting and Social Areas
Non-usable Space	Energy Centre & Towers Basement Service Tunnels Interstitial Plant Floors - Ground, 1 <sup>st</sup> & 2nd Floors Stairwells & Walkways



The project currently has provision for CAT.2 and isolation areas, served from the main supply air-handling plant but with independent extract. These areas to be airtight construction with a negative pressure to ambient and adjacent areas, and to be capable of being fumigated on a room by room basis.

A central Engineering Service Plant room is to be provided for the installation of steam boilers and heat generation low pressure hot water, liquid chilling units, auxiliary equipment, sub-stations, HV and LV switch rooms, standby diesel generator installations, incoming gas, fuel oil and water supplies and BEMS / maintenance office and stores etc..

The building layout would facilitate a second phase extension although the building has not been designed to cater for the same as the nature and need and therefore size, of such an extension is undefined. The site infrastructure and the central plant would need to be modified and reinforced to cater to serve such an extension.

The project will include road, car park and footpath access complete with external lighting, fire hydrant ring main, surface water drainage, landscaping, etc.