Rhatigan
J.J. Rhatigan & Company

PROJECT EXPERIENCE

UCD Centre of Sythesis and Chemical Biology

Description

The building comprises of a 2,200 m² four story research building with the buildings plant room situated on top of the roof connected to the existing sciences building. The facade is a curtain wall glazing system to the front and rear of the building incorporating a powder coated aluminium wall cladding system to the rear elevation, end stairwell and perimeter of the front elevation. The ground floor is made up of visitor/occupants canteen off the main entrance lobby and upper floor access zones. The main areas off the ground floor reception lobby are the meeting rooms, offices, conference rooms and a NMR laboratory with a substantial plant installation of a Super conduction magnet, a 600mMHz Magnetic Nuclear Resonance Spectrometer. Also incorporated on the ground floor is a transform building that supplied the new build along with supplying the new power supply to the adjacent science buildings.

Each floor of the three upper floors were divided up into two main laboratories off a main corridor runs along the length of the front of the building, with stairwells on either ends and office spaces for the Professors/Lecturers, toilets, lift lobby and a connecting link corridor into the existing Sciences Building. There were three large main service riser shafts with three smaller services riser shafts starting from the 1st floor rising through the above floors to the service plant area on the roof. Each laboratory was fitted out with large specialist work spaces running down the middle of the laboratory and along the outer wall space.

These areas provide wash areas, power & data trunking supplies along with low and high level storage shelving. Along the ends of the laboratory rooms are wall to wall fitted Fume Cupboards that incorporated supplies and outlets for water, various gases, power supply, wastes and fume extract ducting. These fume cupboards were backing up against the main service riser shafts that provided the services supplies to the fume cupboard and facilitate for the bank of fan & damper assisted ducting route up through the building into an extract chimney housing stack on top of the roof.

Client Name :
UCD

Architect:
RKD Architects

Quantity Surveyor:
Davis Langdon PKS

Duration:
May 2004 - July 2005

Contract Value:
6.5m

PROJECT INFORMATION

Rhatigan
J.J. Rhatigan & Company

PROJECT EXPERIENCE

UCD Centre of Sythesis and Chemical Biology

Client Name :
UCD

Architect:
RKD Architects

Quantity Surveyor:
Davis Langdon PKS

Duration:
May 2004 - July 2005

Contract Value:
6.5m

Description

The ceiling incorporated plenum system zones of perforated metal ceiling tiles with plenum partitions above ceiling levels. These connected by ducting to the main through the smaller services riser shafts to the AHU plant mounted on the roof pant area. Due to the requirements of the laboratories a pressurised ventilation system was installed where the fume cupboard and the plenums AHU supply were linked as part of the BMS system and ramped up and down the air supply to the laboratories depending on volume of extract been created by the bank of fume cupboards in operation and the specific requirements for each fume cupboard. This ensures that no toxic gases could seep from the fume cupboard into the room areas and provides a safe working area for the graduates.

Off the main laboratories were a number of smaller specialist laboratories again with specialist works areas with gas supplies and two graduates write up rooms per laboratory. These were fitted out with fitted write up & filing furniture along with perimeter wall trunking supplying power and Cat 5 installed data points linking into the sciences networks system.

The roof incorporated was an insulated parlon flat roof cast to falls with upstands incorporated to facilate the cladded chimney stack cages AHUs and services riser shaft housings. The boiler plant & BMS plant was located in a plant room located in a building located on the roof and facilated ease of maintenance with all plant and system controls in the one area.

As part of the construction the linking with the existing science building was an ongoing part of the contract with areas such as changing over their original power supply, linking the existing building corridors with the new build and linking the data systems. All works were carried out in a controlled manner where method statements and risk assessments were carried out and agreed with the client before works commenced to the specific areas to minimise disruption to the live existing building users. The contract was completed to a exceptionally high standard and completed ahead of programme. These two areas were a particular point of noted commented on by UCD as part of hand over and something that has been noted and commented on by UCD and design teams during the number of subsequent contracts awarded to this company in UCD.

JJ Rhatigan & Company Project Overview

PROJECT INFORMATION