

Description

- ◆ Detailed design of Mechanical and Electrical Services for the refurbishment and major extension of the Launceston Medical Centre
- ◆ A new two storey extension and alterations to the existing building to allow for 10 additional consulting rooms, larger waiting area, a new entrance to the dispensary and a staff training / meeting room



Benefits Delivered

- ◆ Detailed spatial co-ordination in a highly serviced building
- ◆ Pro-active advice on the engineering requirements of the Health Technical Memorandum and Health Building Notes
- ◆ 3D Revit modelling of services installation
- ◆ Careful luminaire selection and lighting controls to maximise the benefits of the natural daylight provision
- ◆ Collaborative approach resulting in an integrated MEP design with the building Architecture and Structure
- ◆ Consideration was given to the difficulties associated with space and access for services
- ◆ Co-ordination of services to specialist scientific engineering equipment, specialist laboratory equipment, and specialist ICT services
- ◆ Cost effective design of services to meet client specifications
- ◆ Design to achieve BREEAM Very Good
- ◆ Efficient MEP systems and controls that offer reliability and ease of maintenance
- ◆ Specified lower energy LED luminaire replacement with daylight controls to reduce latent lighting heat gains aiding thermal comfort within spaces
- ◆ Early identification of the spatial challenges posed with the proposed location enabled a collaborative approach to successfully resolution in a timely manner without affecting the programme, and avoided ongoing abortive work
- ◆ The building uses super insulated well sealed construction methods, using ventilation heat recovery systems for ventilation and heating in localised areas only.

Involvement

- ◆ Security design provided to enhance security to the site with CCTV cameras protecting the perimeter and key entry positions, with access control system to secure areas
- ◆ Hot and cold-water supplies to refurbished welfare facilities
- ◆ Replacement heat emitters and to the refurbished area, with improved controls for reduced energy consumption
- ◆ Out of hours building and property protection through the use of automatic intruder detection and alarm systems
- ◆ LED luminaires in all areas
- ◆ Extend existing fire alarm detection and sounder coverage to include the extension
- ◆ SDS carried out the detailed design for the project including all schedules and calculations to enable the client's technical advisor to review and approve the detailed design
- ◆ Develop energy strategies to meet planning requirements and achieve a minimum EPC rating of B
- ◆ SBEM calculations and EPC for the new build extension
- ◆ Provision of systems to accommodate people with additional needs including transportation systems, alarms systems, assisted bathing and audible and visual alarms
- ◆ Load estimates and infrastructure review and site diversions to accommodate the works
- ◆ Developed external lighting proposals to facilitate safe vehicular and pedestrian movement around the site, and to reflect the wider lighting strategy for the overall development of the site
- ◆ SDS were appointed to undertake the Stage 4a design. The MEP component was fully designed in 3-D using Revit platform.

"A new healthcare hub offering much needed space for patients and healthcare professionals"