



Royal Free Hospital Level 3 HDU Plant Design and Access Statement

Project Ref. 18028

The Royal Free currently has 14 operating theatres located on Level 3. These theatres provide a varying level of care and theatre use including many specialisms and complex cases. The theatre complex is midway through an extensive refurbishment to provide state of the art theatres with high quality theatre technology, ensuring the Royal Free is able to offer ongoing first class operative treatment.

The theatres are supported by a recovery ward which is located adjacent to the theatre complex on level 3. Due to the increasing number of complex surgical procedures carried out at the Royal Free, there is a need to be able to relocate those patients requiring additional time to recover, to free up standard recovery beds for new patients leaving theatre. This project includes the re-development of the area on level 3 immediately adjacent to the current recovery ward to create 8 high dependency recovery bays for use by patients requiring more time to recover. The ward is designed to accommodate patients requiring in the region of 24 hours of higher dependency recovery, rather than the normal few hours as afforded in the recovery ward.

The high dependency bays are not the same as those elsewhere in the Trust which look after critically ill long term patients. It is essential that HDU beds for long term patients are not occupied by those patients in a post-operative recovery condition.

Key Project Requirement

The existing ventilation plant serving the proposed site for the new theatre HDU area is of inadequate duty and standard to provide the required heating, cooling and ventilation levels required for the proposed unit. Therefore the project includes new ventilation plant and a supporting chiller to provide the correct air volumes to manage infection control, as well as controlling the heating and cooling to the areas. This is a critical part of the project and necessary in order to offer this new HDU department.

The new ventilation plant is fully compliant with the Health Technical Memoranda defining the ventilation plant and required air changes. The ventilation plant required to provide the air changes is essential to manage infection, especially in post operation departments where patients are particularly vulnerable.

Due to the design of the hospital building, the tower block limits the locations for new plant that are compliant with the current standards. The location of the plant has been chosen as it is the only accessible location which is serviceable to the new department.

In summary, the key elements of this project are:

- The essential development to provide 8 high dependency recovery bays and associated support rooms for complex post-operative patients ensuring normal recovery bays are maintained available for normal post-operative patients.
- The installation of new critical air handing plant to service this department to ensure the areas are ventilated correctly to manage infection control and also provide the required heating and cooling to the areas.
- The installation of a new packaged chiller to provide the required cooling to support the AHU.



Access Proposals

The area chosen for the plant is currently accessed via the mechanical plant rooms by authorised hospital maintenance personnel only. The areas have adequate access lighting and will be provided with new edge protection hand rails where the plant has been located to the rear of the roof. The roof areas are also currently the access routes for the new plant being installed under the Theatres refurbishment project and power distribution systems. Therefore the new plant will in no way change the maintenance access requirements for the Hospital.

The location of the plant area does not in anyway impact on public access around or within the hospital. The areas are purely plant areas.

The hospital have chosen to crane the new plant onto the roof via their services yard as opposed to the highway, such that the handling and lifting of the plant does not impact on the highways or public access to and around the site's peripheries.