

Design and Access Statement

ICU Air Handling System Improvement
A continuation of the removed elements
of planning application 231087

Royal Berkshire Hospital
Reading



GBS health 



14th Dec 2023

GBS Health+ Job Number: 7069

Revision – B 15/04/24

Introduction

The following Design and Access Statement has been prepared and researched by GBS Health+ on behalf of Royal Berkshire Hospital NHS Foundation Trust (RBH).

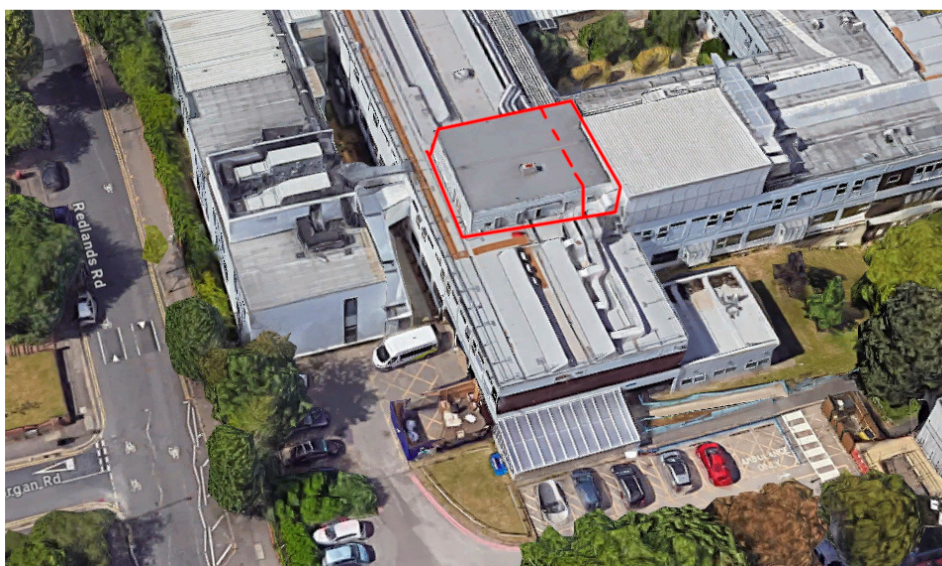
The Trust are in the process of upgrading the air handling system within the Intensive Care Unit (ICU) located within the South Block Building level 3. Upgrading the system to modern standards has proved a problem however as the current air handling system is within an enclosed plant room on the roof of level 3 and a modern system is larger than the existing installed system.

The Trust is looking to modify this plant room however as a section of the plant room is dedicated to other services, not all the plant room can be demolished. Instead, a section of the plant room will be demolished and then rebuilt once the new air-handling equipment is installed.

Existing

The site is located on the roof of South Block, part of Royal Berkshire Hospital, Reading, RG1 5AN. South Block is an Oxford Method building, steel frame with cladding panel infill panels that support a simple glazing system.

The existing roof top site is a plant room on level 4 of South Block. The plant room houses the existing air handling equipment along with other services. The plant room is fully enclosed and clad with horizontal metal cladding and a single ply roofing membrane.



Proposal

The proposal is to demolish a section of the existing plant room to allow the new, larger AHU to be installed. Once in, the plant room would be reconstructed around the new AHU using what remains of the existing steel frame that carries the current cladding system. New panels would be installed if the existing were no longer usable and a new single ply roofing system would be installed over the form an enclosed plant room.

Access

The acoustic plant room compound will be accessible only by maintenance personnel from the existing plant room or from door sets in the compound system designed to blend in with the acoustic cladding. The roof is accessible via other access points across South Block's large roof.

Flood Risk Assessment

The site is deemed very low risk, an area with a low probability of flooding and not near a water course. Therefore, a flood risk assessment is not applicable

Noise Impact Statement

An acoustic assessment has been provided under a separate cover.

Daylight or Sunlight Assessment

We do not feel a daylight or sunlight assessment is necessary as the proposal is for maintenance equipment and set back from the hospital boundary, therefore there is no effect on the daylight or sunlight to nearby properties.

Trees

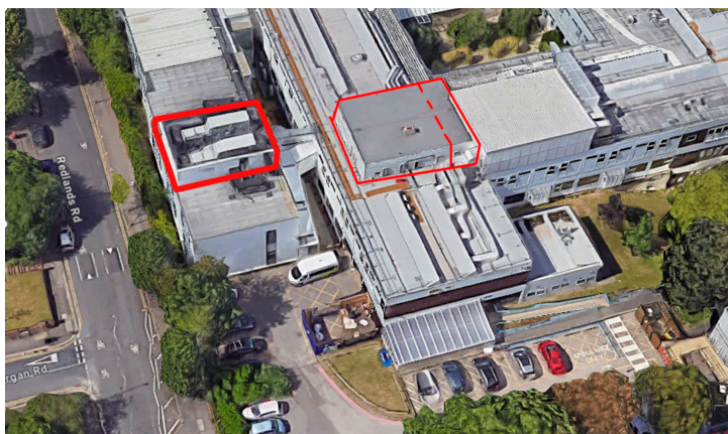
There are no trees in either of the effected areas.

Other Issues

During the initial planning application for the ICU access stair and AHU alterations, a noise complaint was raised during the application period. This led to the AHU elements being removed from the application to allow the external escape stair to proceed. As we are now looking to proceed with the AHU works under a separate application, we would note how the noise complaint is being addressed.

The AGSS (Anaesthetic Gas Scavenging System) cabinets in Redlands plant area (shown below) appear to be the items making the noise. Trust maintenance has visited the plant area and found the units are producing much more noise than they should as typically these units are near silent. They are also in line with the first-floor bedrooms of number 26 across the road and while we do not know who made the complaint, we suspect that this is the culprit. Local Authority representatives have visited the site and examined the plant compounds and agreed that the Redlands plant is the likely suspect as the cause of the problem.

On further examination by the Acoustician, it appears that the screening of the Redlands compound is not of an acoustic construction. In a discussion with the Local Authority, it was agreed that a new acoustic screen should replace the screening around the Redlands plant or be installed behind the existing screen. We are looking to include this in the application to assist in resolving the current noise complaint.



Conclusion

In conclusion the project for the plant room is designed to add additional facilities to the existing South Block. This will allow the Trust to proceed with much need internal refurbishments to improve the air handing systems without any detriment to patient services.