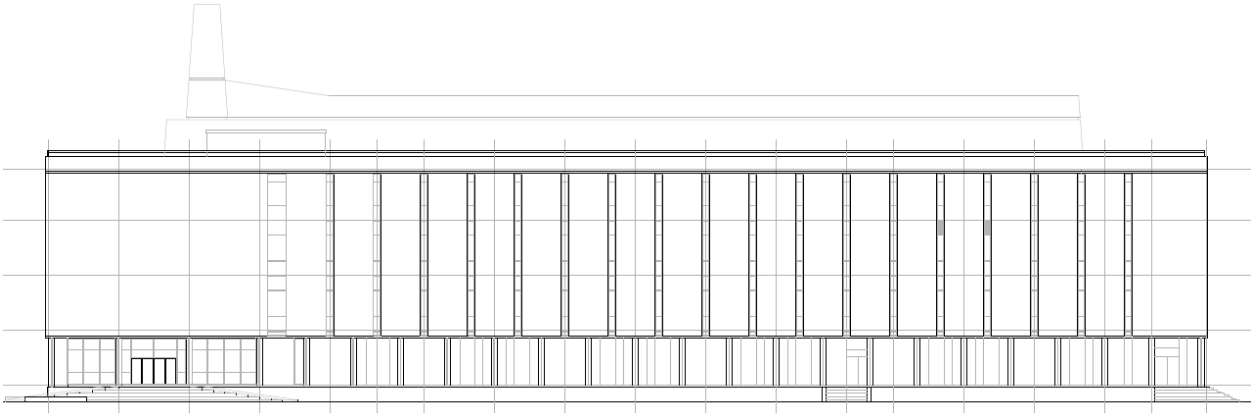
141156/FO/2024
Stopford Building West elevation glazed in louvres (A)
10 January 2025

Background:

In order to provide ventilation to new 2nd floor office (previously a kitchen), our Mechanical designer had identified new ventilation was required to this room. The room had no openable windows. An external intake and extract louvre was initially determined the way to provide ventilation.



Proposed ventilation through window opening can just be seen to top right of building.

Wilson Mason originally proposed a 'glazed in' louvre, similar to those on Stopford North Elevation and Kilburn building.

Meeting with Manchester University 18 November:

Following Manchester Planning recommendation of refusal of Planning permission 15 November, Wilson Mason had a meeting with University of Manchester and Ramboll (Mechanical designer) on 18 November to discuss options.

Wilson Mason explained the technical reasoning due to the change of room occupancy, and provided the economic reason for the works. We provided information on listed and conservation status.

Following this meeting Manchester Planning asked us to investigate electrically closing glass louvres. However, due to future maintenance concerns these could not be taken forward.

Meeting with Manchester Planning 16 December 2024.

Following meeting with Manchester Planning, Wilson Mason were asked to consider:

1. Changing the louvre to a perforated panel
2. In the event that adding this panel would reduce airflow, look into utilising 4 windows

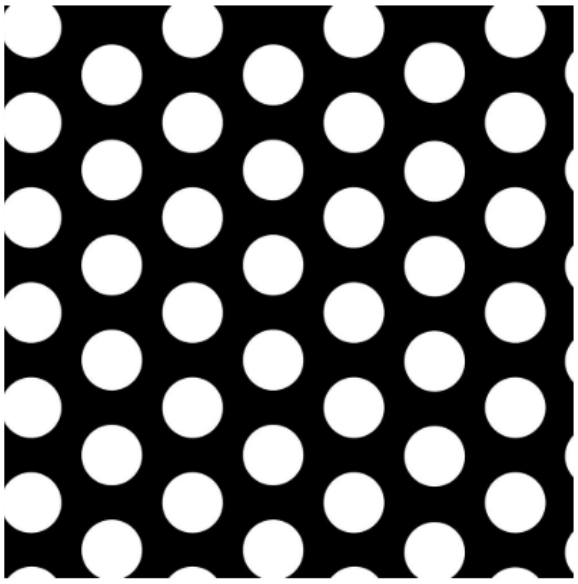
With regards to utilising 4 windows, existing ductwork in the ceiling void prohibits the new ventilation making its way to the remaining 2 windows in the room.

However, following the ideology set at National Graphene Institute we can change the glass in 2 windows to high gloss black perforated panels, to mimic the reflectance of glass. At this is a rainscreen approach, a louvre will be required behind the panel to provide weatherproofing, though this will not be seen.

The product proposed is FH Brundle perforated metal panel with a hole diameter of 5mm and free area of 63%.

This build up has been checked by our Mechanical designer who has reviewed a variety of different free area panels, and concluded this will provide the correct ventilation for the occupancy.

National Graphene Institute



5mm diameter, 63% free area, gloss black

https://www.fhbrundle.co.uk/products/0300R5T61__Perforated_Mild_Steel_R5_T6_1mm_2_x_1m_