
Rooftop Ventilation Ducts

Medical Centre, 14-18 Newton Road
London, W2 5LT
29th April 2024

HKR
ARCHITECTS

BACKGROUND

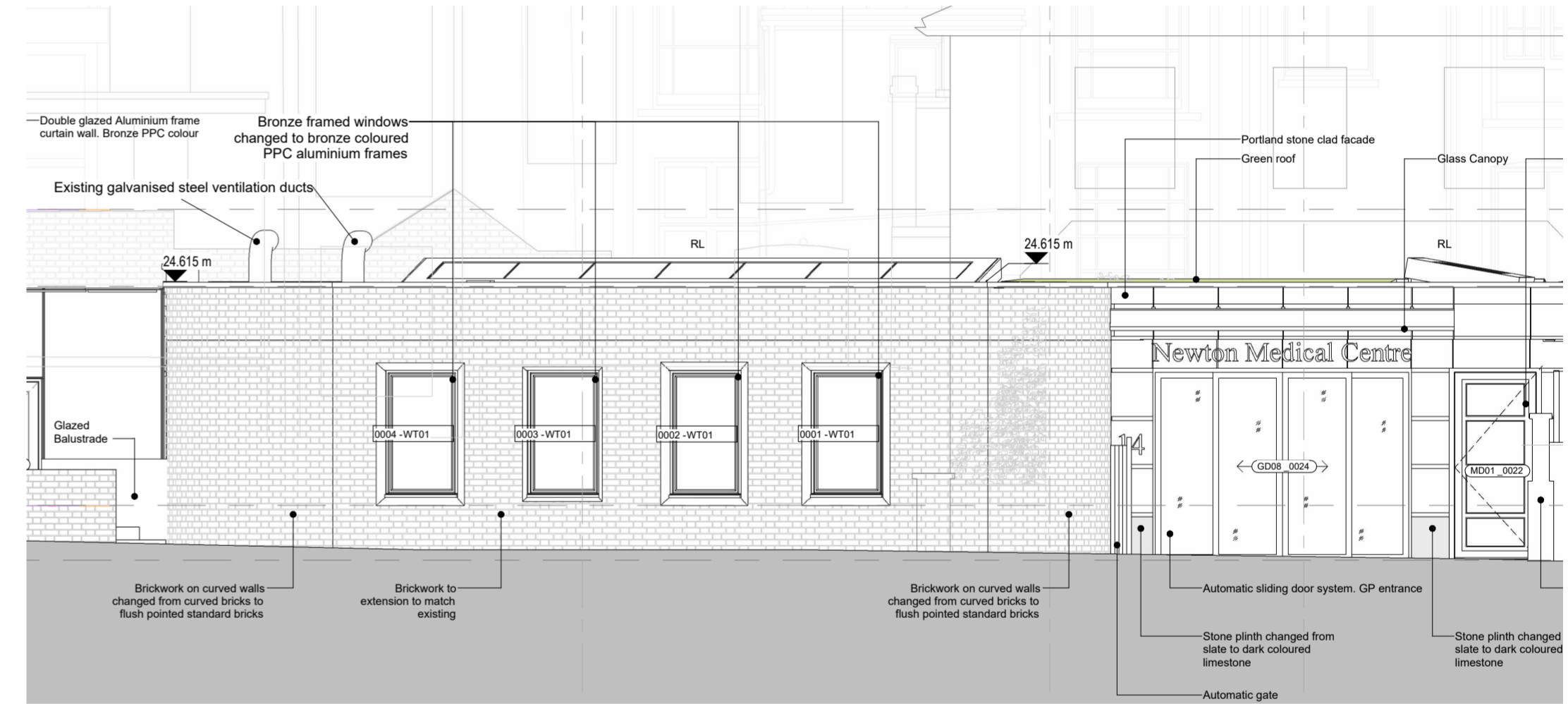
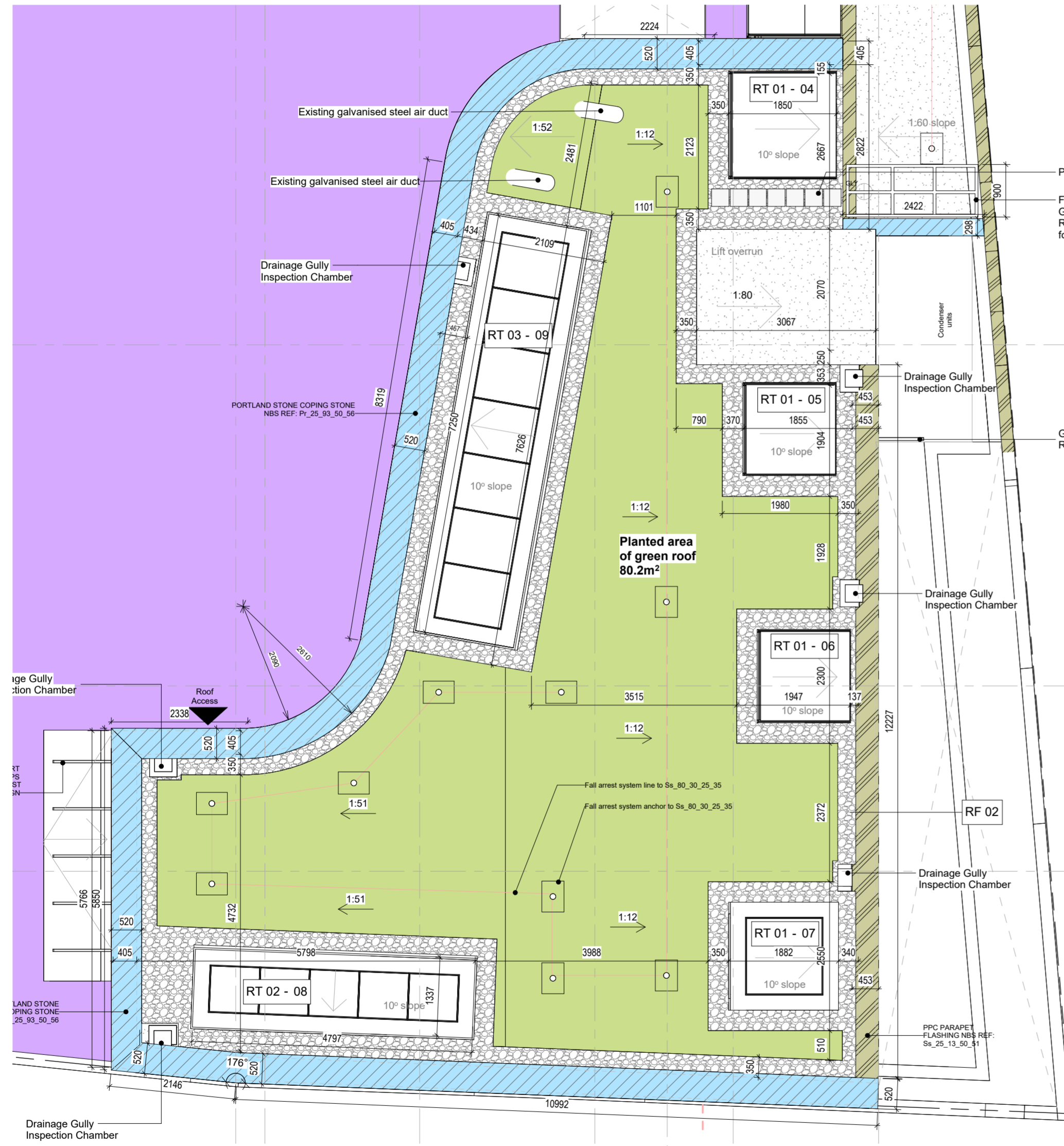
The existing ventilation ducts to the roof of the south part of the health centre are not in compliance with the planning permission for the development.

The ventilation ducts are vital to the functioning of the building and cannot be removed.

We are therefore proposing to change the ventilation ducts to smaller 'mushroom vents' which will have a much smaller visual impact while still providing the necessary functionality.



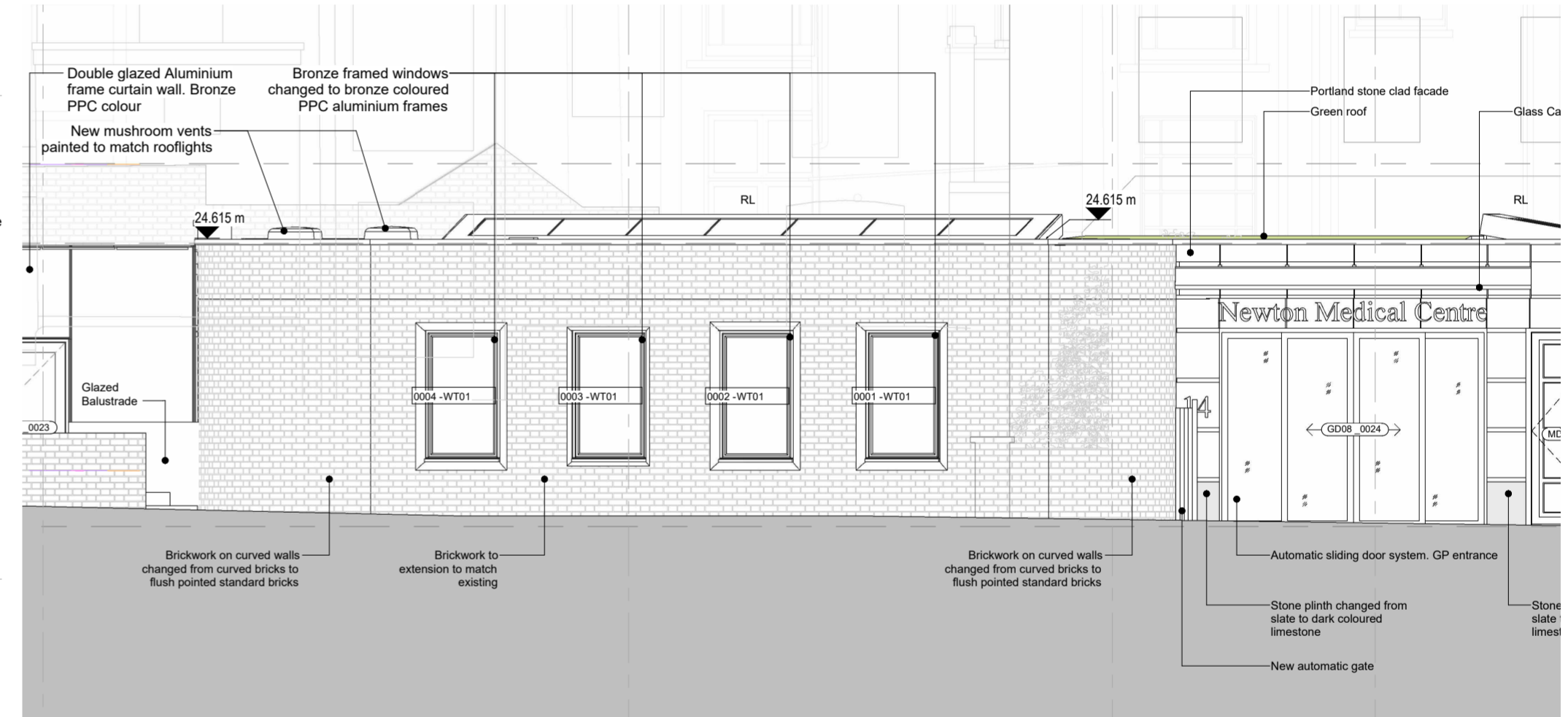
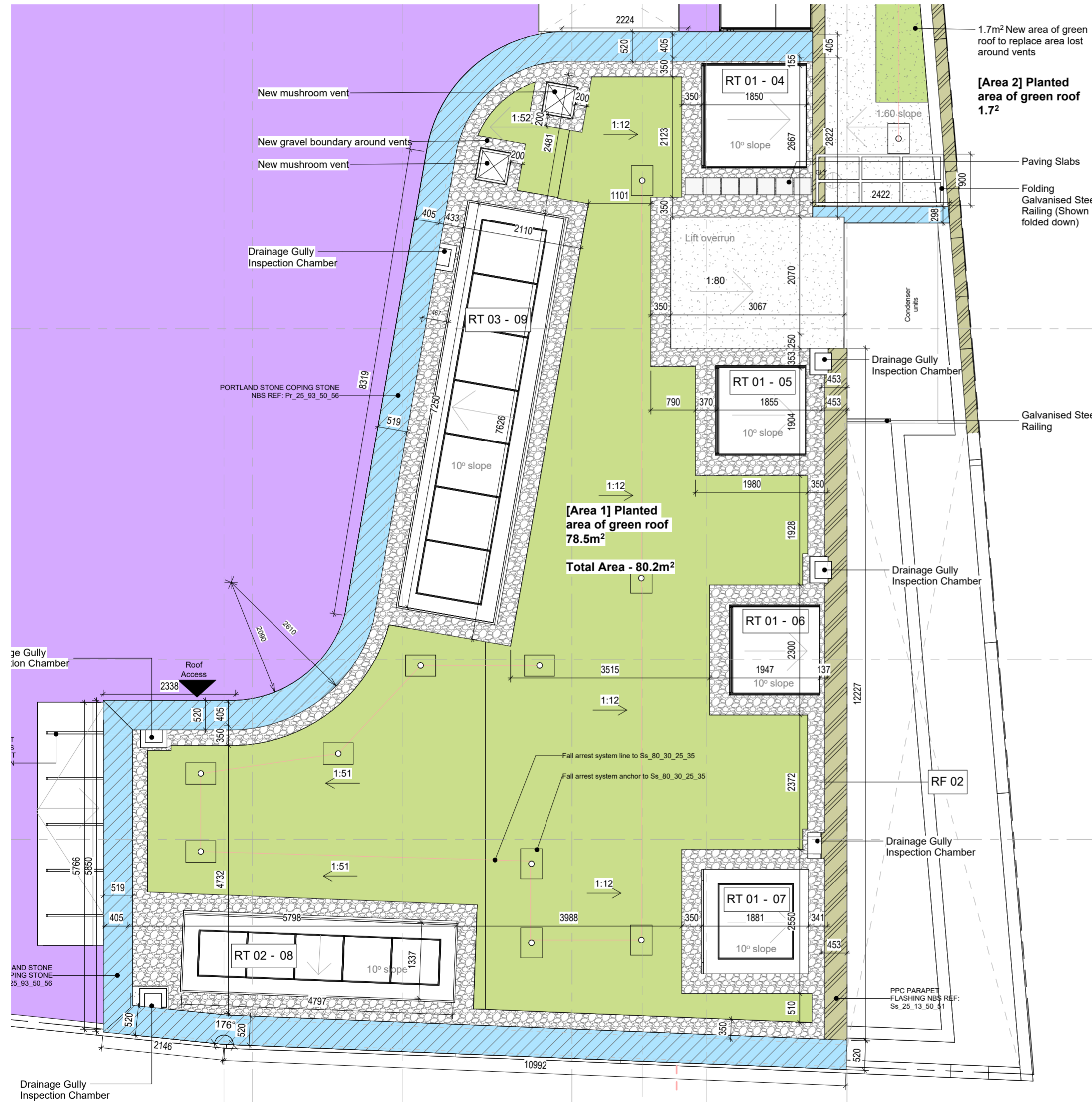
EXISTING PLAN & ELEVATION



The existing ducts are made from galvanised steel and are approximately 750mm above parapet level.

One duct is required to exhaust stale air and the other is required to draw in fresh air.

PROPOSED PLAN & ELEVATION



The proposed mushroom vents will be approx 150mm higher than the parapet. This is significantly lower than the existing ducts and the visibility from the ground will be extremely limited.

In order to reduce the visual impact further, the proposed mushroom vents will be painted in a similar bronze colour to the surrounds to the existing roof lights.

The area of the mushroom vents will be larger than the existing ventilation ducts. The mushroom vents also require an area around them to be cleared of planting.

In total approx 1.7m² of green roof planting will be lost. We are proposing that this is replaced with the same amount of green roof on another area of the roof which is currently clear of green roof.

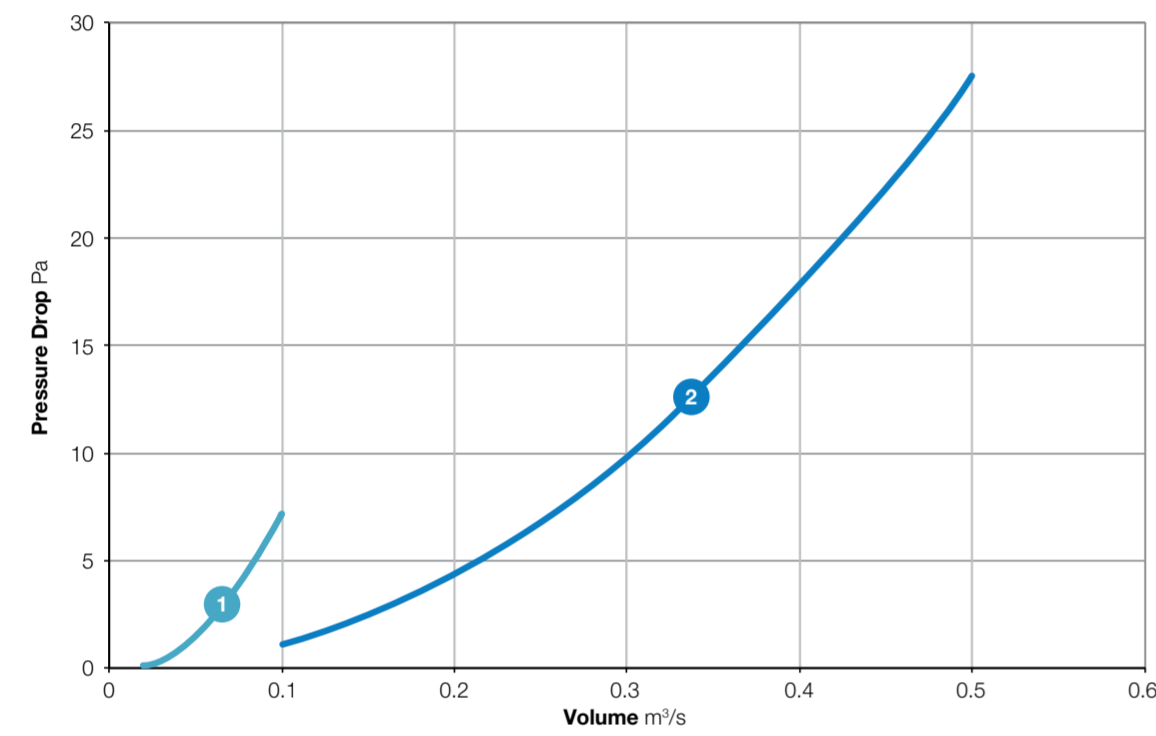
MINIFLOW SMF

Overview

- UV Stabilised
- Maintenance free
- Up to 30° roof pitch
- Goose Wing Grey paint finish (BS 00-A-05)

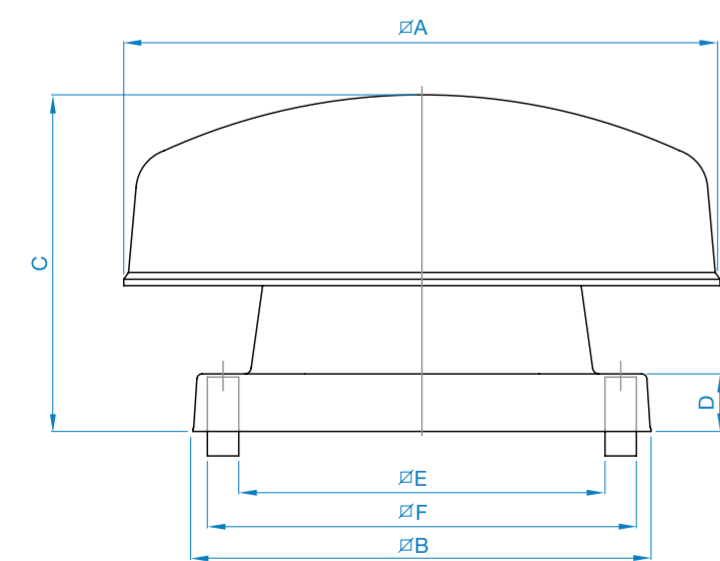


Cowl Pressure Drop Curve



- 1 SMF13
- 2 SMF20/3

Product Code	A	B	C	D	E	F	Weight kg
SMF13	310	276	200	30	200	250	1.9
SMF20/30	570	430	350	60	350	410	4.6



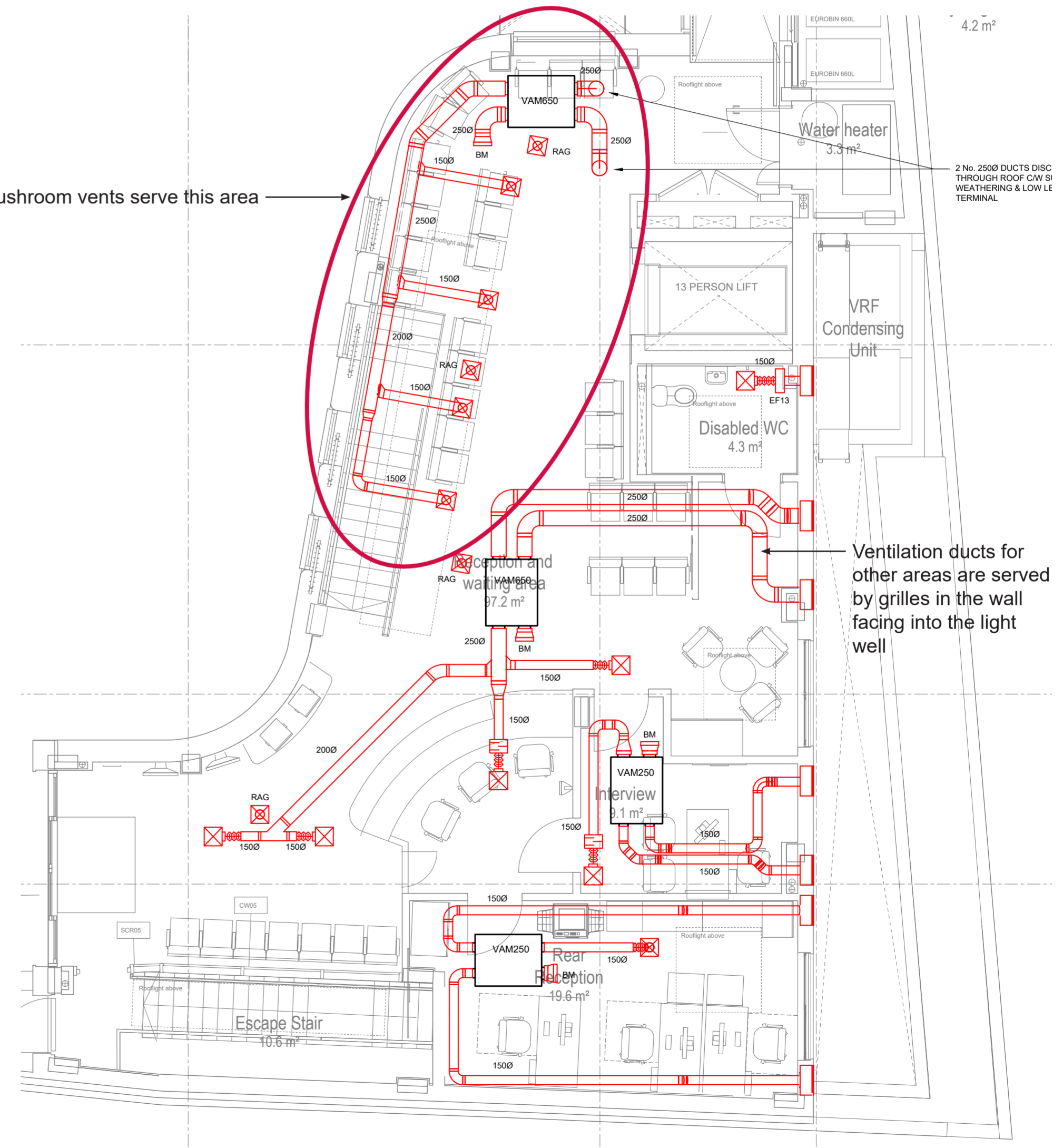
The proposed mushroom vents serve a the waiting area located on the ground floor of the southern part of the health centre.

The proposed vents will measure 570x570mm wide and will be 350mm high above the roof up stand. This will result in the vents being approximately 150mm above the parapet.

The ventilation ducts for other areas of the ground floor pass through the east facade wall into the light well.

Due to the configuration of the building it is not possible for the ventilation ducts serving the waiting area to run into the light well and it would not be desirable for ventilation ducts to be placed onto the principal facade facing west. Therefore the only option is for the ventilation ducts to terminate at roof level.

The mushroom vents serve this area



Ventilation ducts for other areas are served by grilles in the wall facing into the light well