

Vernon-Sicilian House & 21 Southampton Row

Design and Access Statement - **Section 7 of 8**

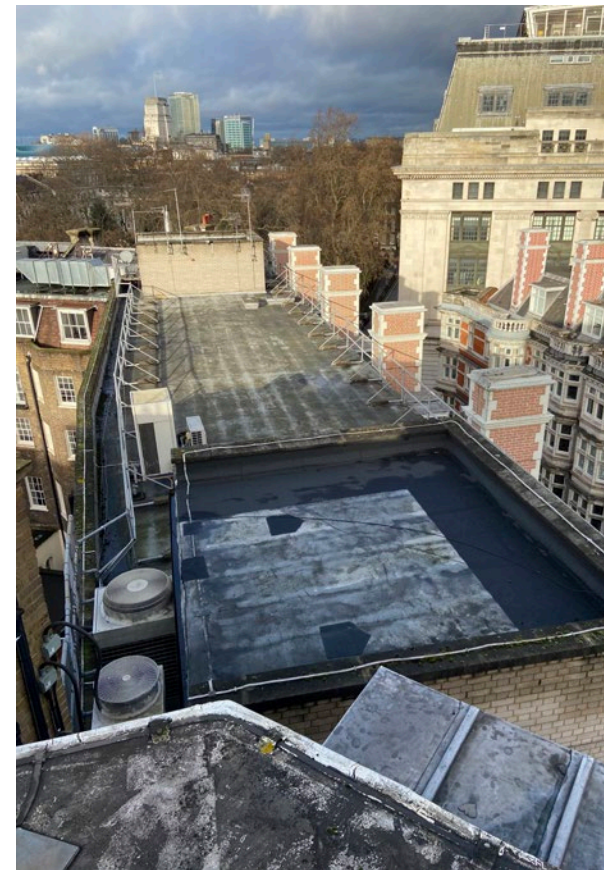
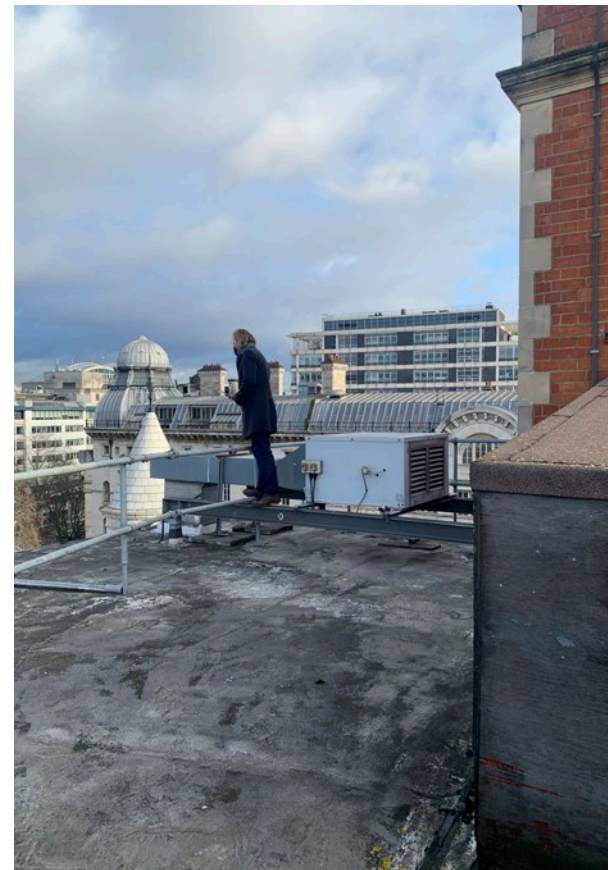
July 2022

halebrown

7.0

The Roof Proposals

7.1



Views of the existing plant positioned at roof level prior to the approved strip out works

Vernon-Sicilian House & 21 Southampton Row

Design & Access Statement - July 2022

The Roof Proposals Building Servicing Summary

When the buildings were in operation they were not energy efficient due to the age and type of plant equipment being used.

The proposed development concept has therefore been conceived and designed to minimise energy consumption and to provide simplicity of operation. With a low maintenance requirement and ultimately reduced whole-life carbon.

Under the proposals the old existing gas systems providing heating and hot water are to be removed and replaced with an all electric solution.

The proposed development will achieve an EPC rating of B and in line with the development's BREEAM Pre assessment achieve an excellent rating.

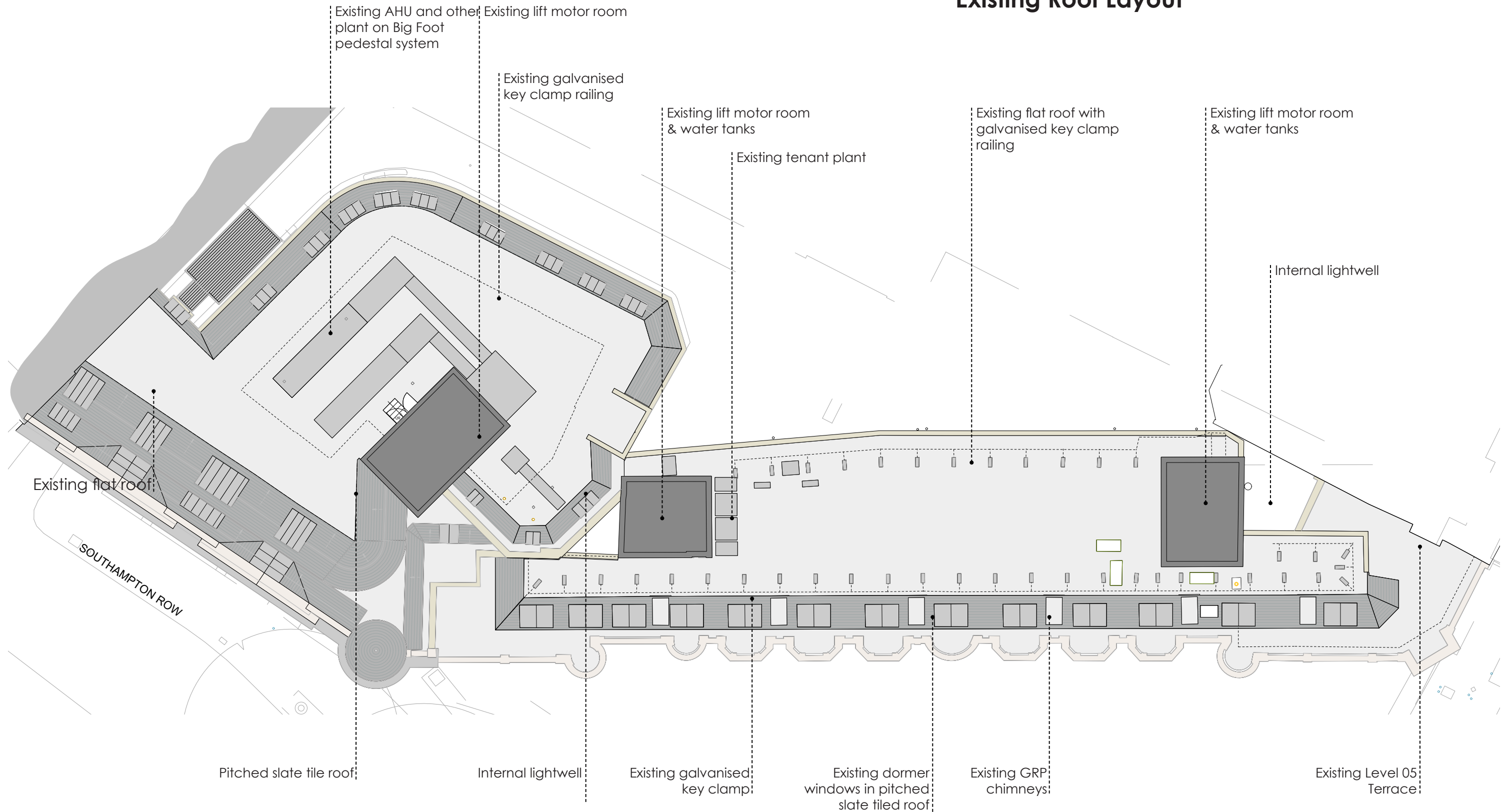
To achieve this the services strategy for the development will comprise new central plant areas for the offices at roof level roof on both buildings as well as ancillary plant within the existing basement spaces.

New efficient air handling plant is to be positioned at roof level for 21 Southampton Row to replace the existing plant provision, and a new air handling plant will also be located at roof level for Vernon and Sicilian to optimise the air quality within the offices areas. New heating and cooling plant in the form of high efficiency air source heat pumps (ASHP) will also be located at roof level.

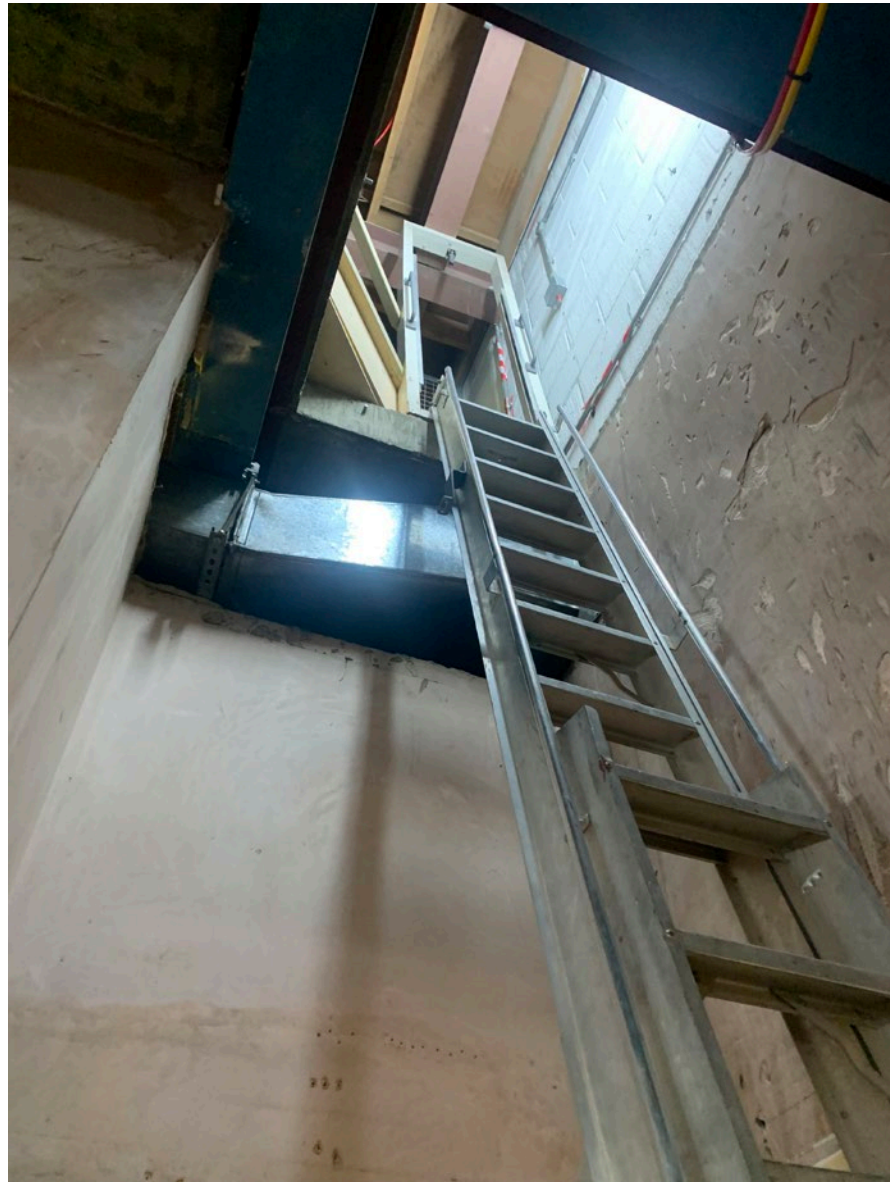
The proposed energy efficiency measures to be incorporated into the current proposal are summarised below:

- Mechanical ventilation heat recovery on main ventilation plant
- Provision of air source heat pump (ASHP) systems for heating and cooling
- Provision of ASHP fed hot water system (HWS) generation plant
- Provision of energy efficient dimmable LED light fittings with daylight and presence detection control

Roof Proposals Existing Roof Layout



7.3



Existing roof access to 21 Southampton Row roof



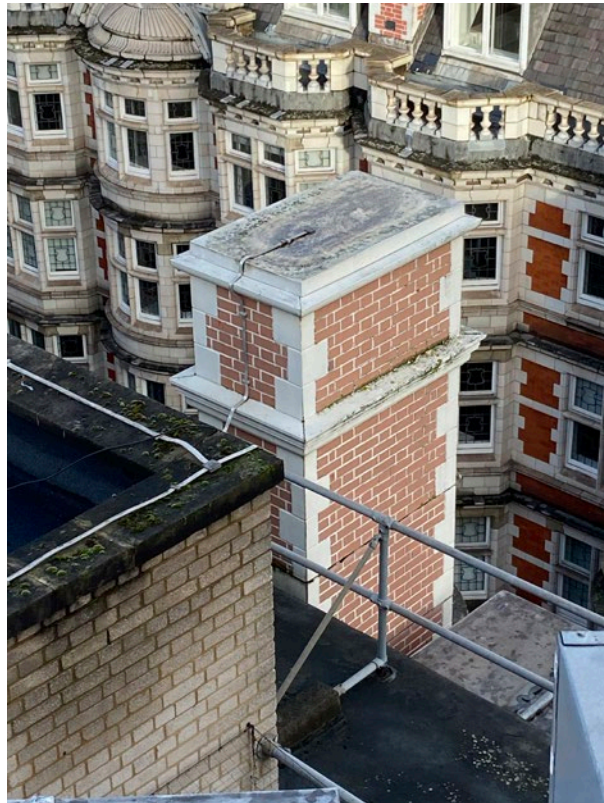
Existing roof access to Vernon and Sicilian House roof

Roof Proposals

Existing & Proposed Roof Access

- Access to the existing roofs and roof top plant areas of both 21 Southampton Row and Vernon & Sicilian House is via ladders.
- Within 21 Southampton Row a retractable ladder provides access to the lift motor room within the red brick lift over run and flat roof beyond.
- On Vernon & Sicilian House Cat ladders in both cores provide access to the lift overruns and water storage tank rooms positioned on top of the flat roof.
- For the purposes of plant maintenance and safe means of escape from the roofs neither arrangement is in line with current guidance.
- It is therefore proposed that stair access is provide to roof level of both buildings.
- Within 21 Southampton Row this can be achieved by extending the proposed new stair up into the existing lift motor room, as the new lifts will incorporate their running equipment within the lift shaft.
- In order to provide access to Vernon & Sicilian House roof it is proposed that the stair within Vernons core is extend within an enlarged enclosure at roof level.
- Cat ladder access from Sicilians core will be maintained as and alternative escape route in the event of an emergency.

7.4



Photos of Vernon & Sicilian House

The Roof Proposals

Existing Chimneys and Edge Protection

- As part of the reconstruction of the roof during the 1970's the original chimneys were removed and replaced with GRP replica chimneys.
- While originally colour matched to the existing brickwork the chimneys paintwork has now faded.
- The chimneys on 31 Southampton Row have also been replaced with GRP replica chimneys as per Vernon and Sicilian House.
- Key clamp edge protection railings were also added to the 5th floor terrace space of Vernon House and the roof tops of 21 Southampton Row and Vernon and Sicilian House.
- Under the proposals the existing GRP chimneys will be redecorated to a better colour match to the existing brick work.
- New key clamp edge protection will also be installed on both roofs.



31 Southampton Row Chimney



Sketch view of Vernon & Sicilian House - Existing arrangement



Pre application proposal illustrating new roof terrace and screened plant area



Pre application proposal illustrating removal of roof terrace but new screened plant area



Pre application proposal illustrating removal of roof terrace and plant area screening

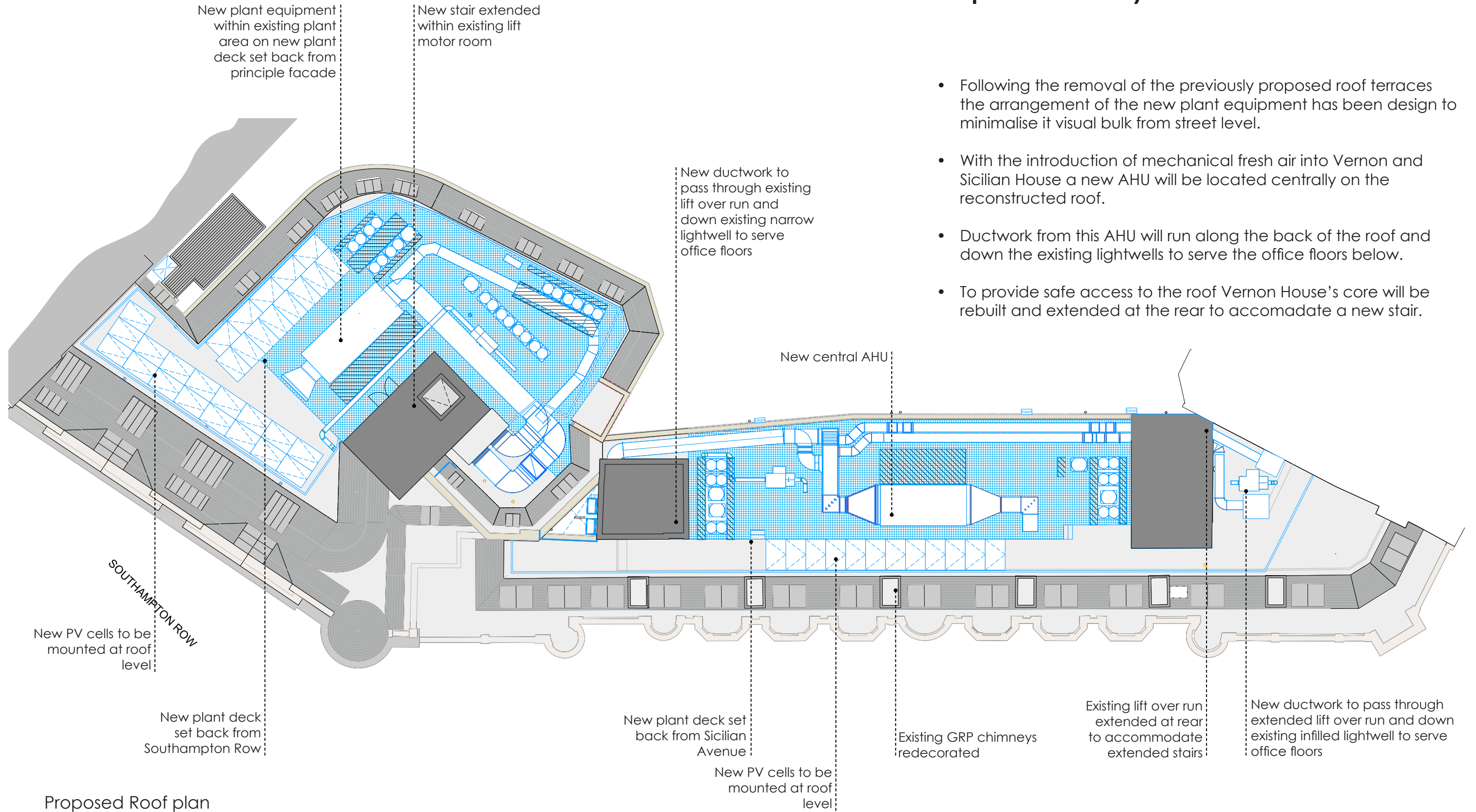
Roof Proposals

Design development during Pre Application

- In order to meet the developments targets for improved energy efficiency and ultimately a reduced whole-life carbon, additional external plant areas are required.
- As Vernon and Sicilian House did not originally have mechanical fresh air within the office space further plant space is required to accommodate its introduction into the building.
- For the new plant equipment to work to its maximum efficiency it needs to be positioned where maximum air circulation can occur and ideally be positioned away from higher levels of background air pollution.
- Combined with the limited suitable space available at ground floor the existing roof tops have been identified as the optimal locations.
- During the Pre Application process a number of proposals were therefore tabled with Camden exploring how the plant could be incorporated within a revised roof scape, whilst minimising visual impact.
- One option looked to combine the new plant area on top of Vernon and Sicilian House with a tenant amenity terrace space however this was strongly objected to by Camden's planning department.
- Another proposal put forward looked to remove the roof terrace and simply conceal the required plant equipment behind a plant screen.
- While the removal of the terrace was seen as an improvement the advise given by Camden was that it would prefer to see a more varied roof scape with the removal of the plant screen.
- The following proposals have therefore been developed with this advice in mind, as well as designing the plant equipment layout in order to minimise its visibility from key views at ground level.
- The proposals have also been tested with the use of agreed verified views.

Roof Proposals

Proposed Roof Layout



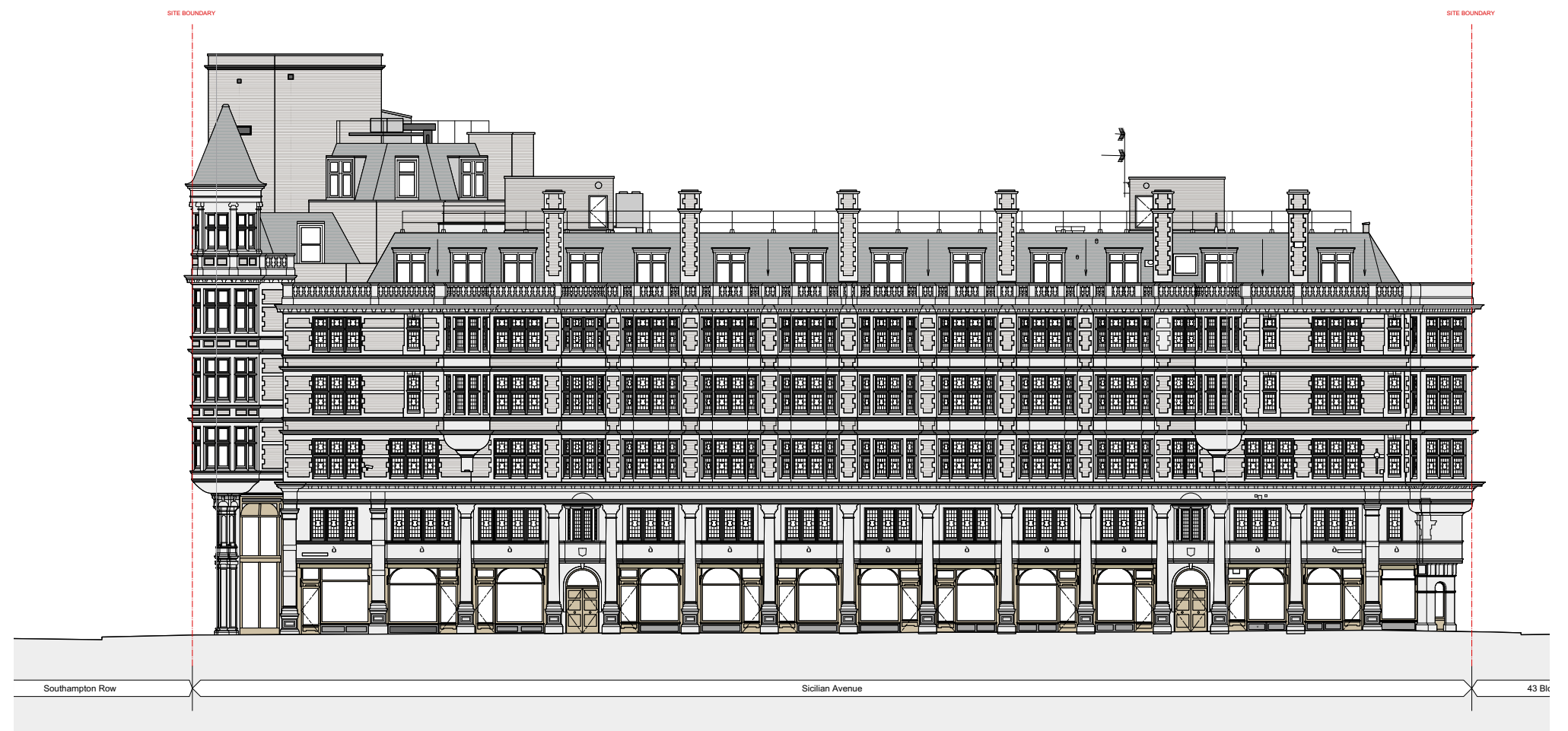
- Following the removal of the previously proposed roof terraces the arrangement of the new plant equipment has been design to minimise it visual bulk from street level.
- With the introduction of mechanical fresh air into Vernon and Sicilian House a new AHU will be located centrally on the reconstructed roof.
- Ductwork from this AHU will run along the back of the roof and down the existing lightwells to serve the office floors below.
- To provide safe access to the roof Vernon House's core will be rebuilt and extended at the rear to accomadate a new stair.

Roof Proposals

Existing Principle Elevations



Southampton Row Elevation



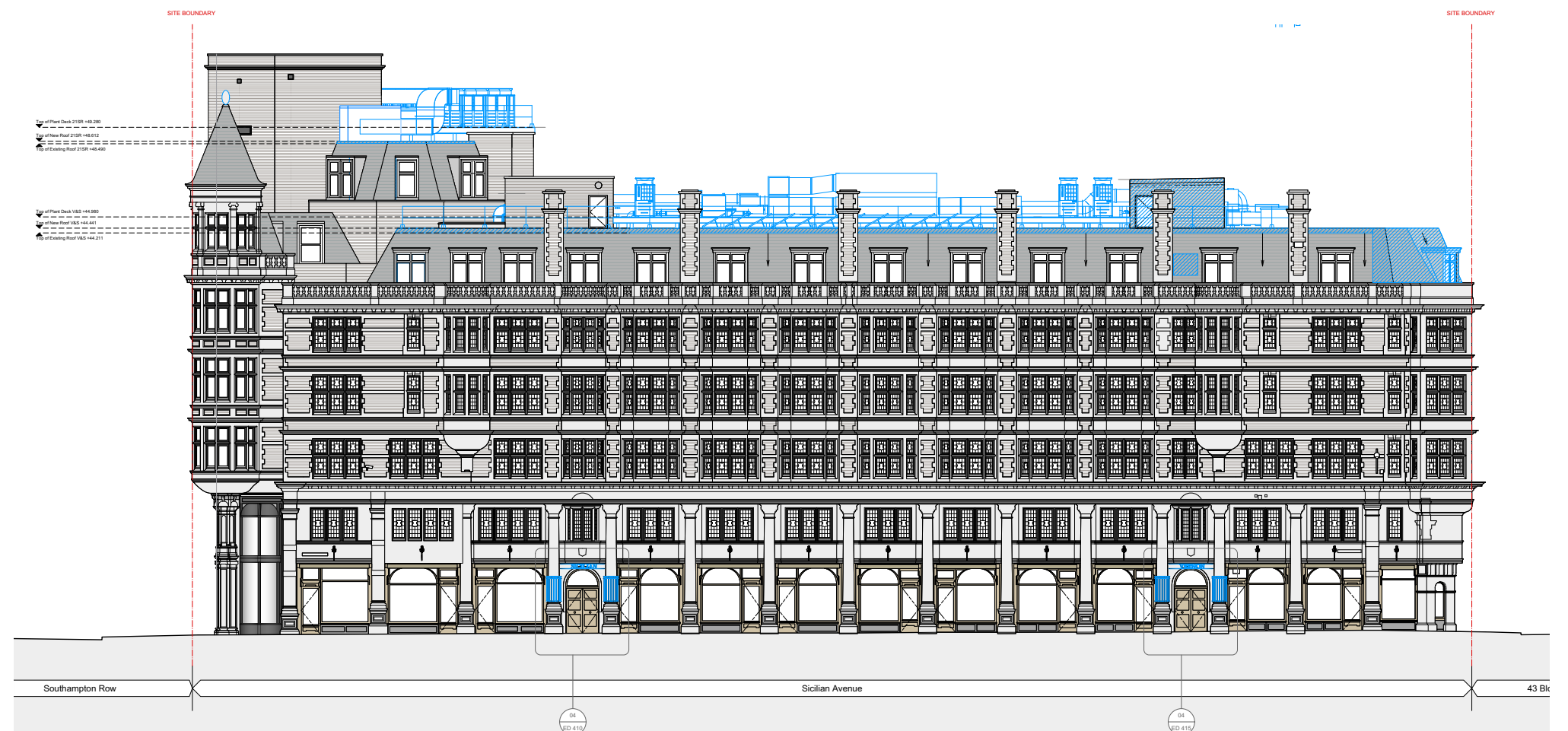
Sicilian Avenue Elevation

Roof Proposals

Proposed Principle Elevations



Southampton Row Elevation



Sicilian Avenue Elevation

Roof Proposals Key Views

In order to evaluate the impact of the proposals, key views have been identified and agreed with Camden's Planning Department.

The roof top proposals have then been modelled by an external consultant as verified views, which are illustrated on subsequent pages.

The identified key views are:

1. Southampton Row opposite the entrance into Sicilian Avenue
2. Vernon Place outside Victoria House
3. Bloomsbury Square



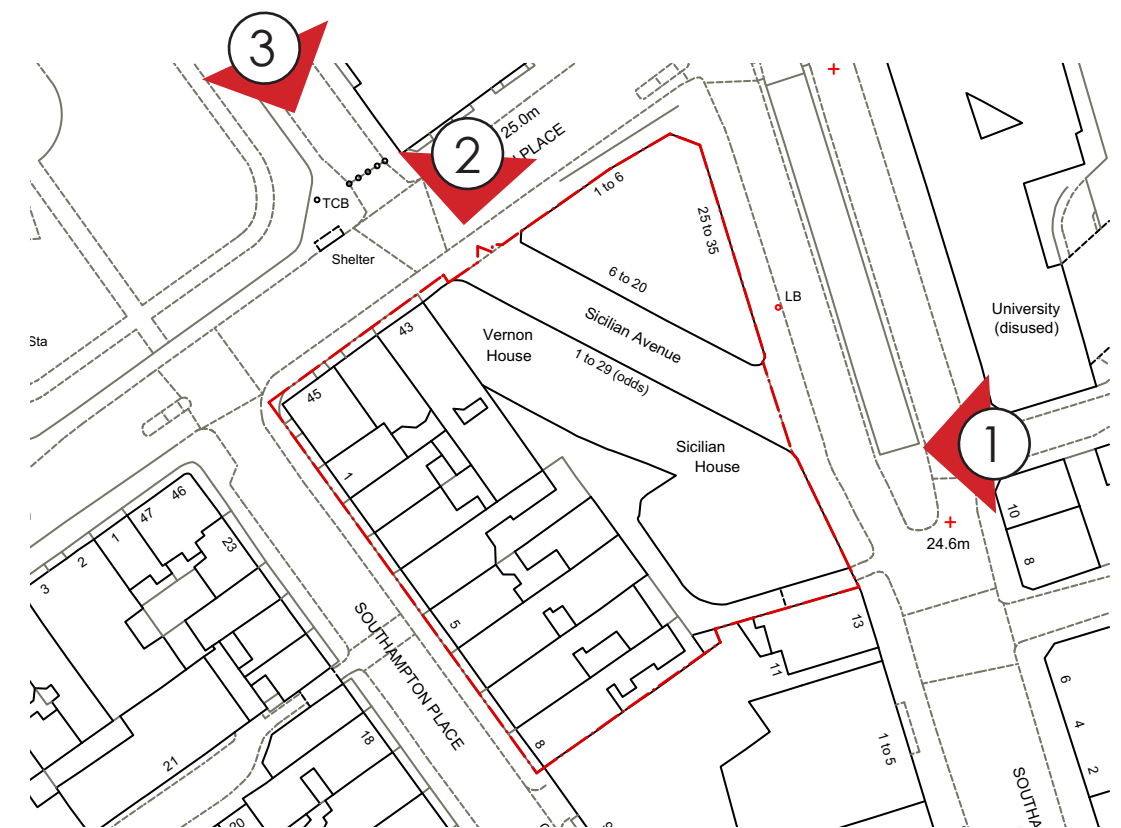
Key view 01



Key view 02



Key view 03



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Existing

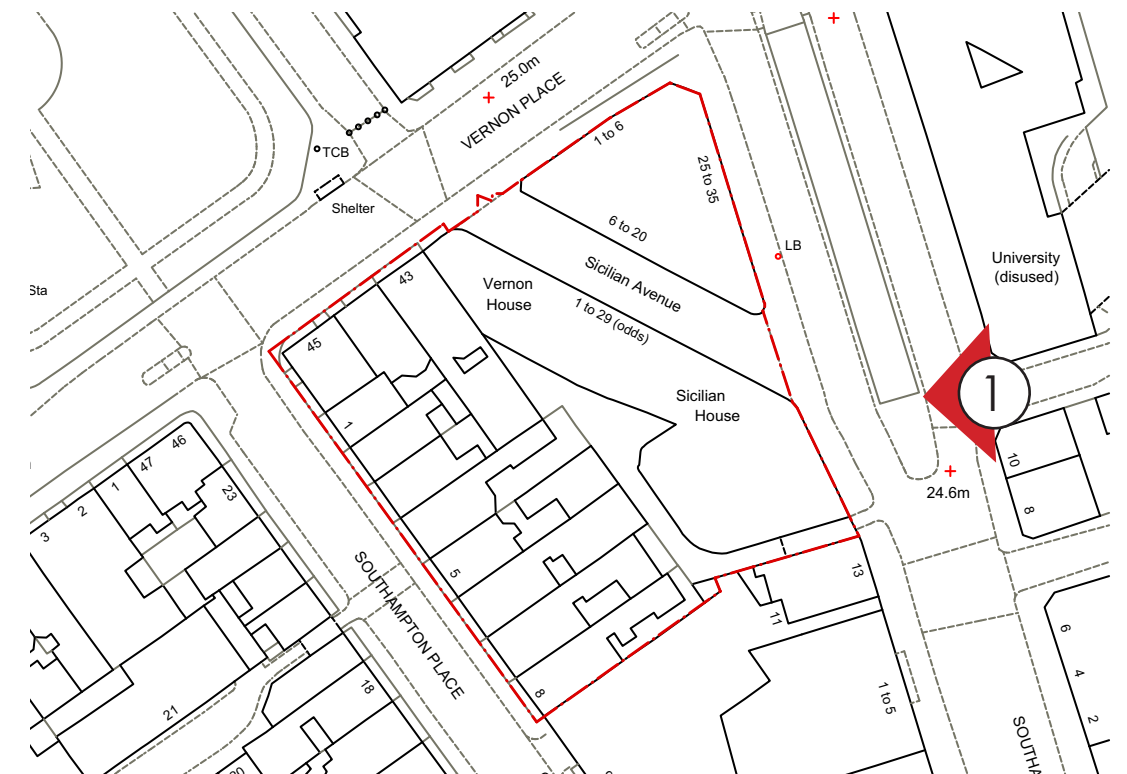


Proposed

Roof Proposals

Roof top servicing - Key view 01

- View from Southampton Row
- Non-verified - for reference only



Roof Proposals

Roof top servicing - Key view 02

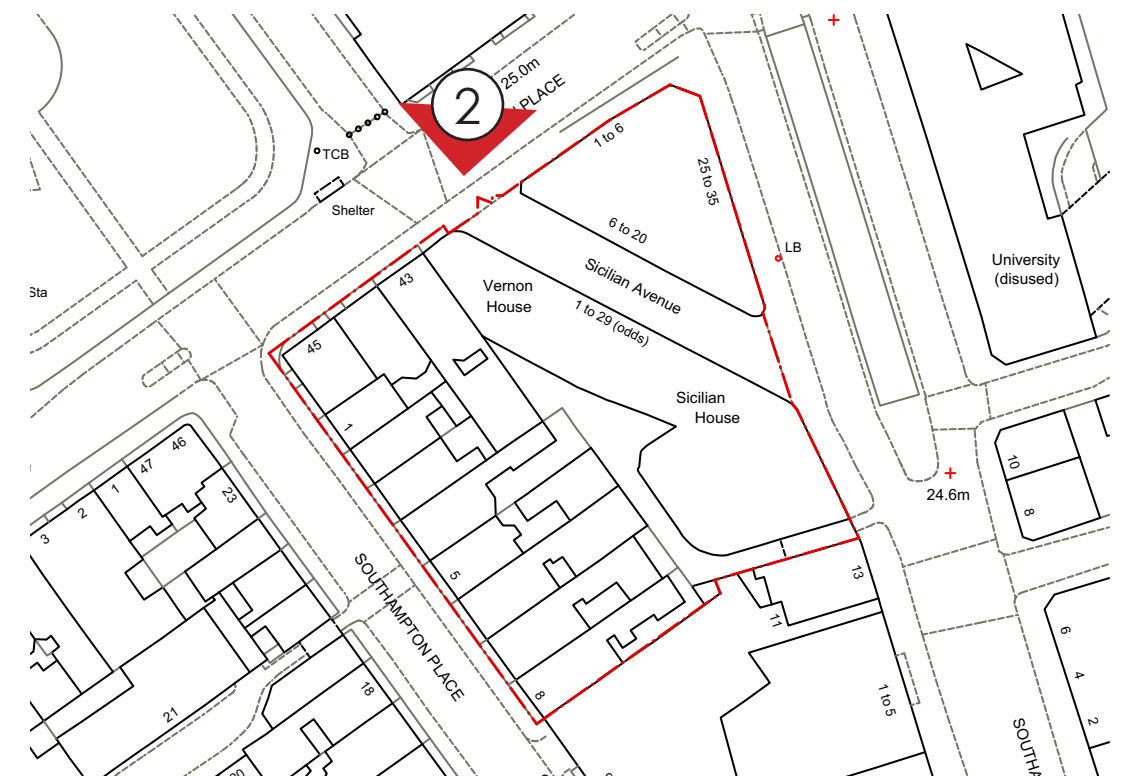
- View from Bloomsbury Way
- Non-verified - for reference only



Existing



Proposed



Roof Proposals

Roof top servicing - Key view 03

- View from Bloomsbury Square Gardens
- Non-verified - for reference only



Existing



Proposed

