

## PLANNING STATEMENT ADDENDUM 20 FLAXMAN TERRACE, LONDON, WC1H 9PN

### 1.0 Introduction

This statement has been prepared in respect of revisions to the ongoing planning application at 20 Flaxman Terrace, WC1H 9PN, for the;

*Installation on the roof 3 New VRV/VRF condenser units And Relocation Of 1 No Existing VRV/VRF condenser unit within new acoustic enclosure*  
Ref: 2020/0941/P

**Table 1** below details the new, revised, and superseded documents and plans.

**Table 1: Revised and Superseded Material**

New / Revised Document / Plan	Superseded Document / Plan
Amended Proposed Roof Level Layout: 20 FT - Roof - V13 - 1:50 @ A3 Cummings Commercial	Proposed Roof Level Layout: 20 FT - Roof - V8 - Proposed - 1:50 @ A3
Amended Proposed Roof Level Layout: 20 FT - Roof - V13 1:125 @ A3 Cummings Commercial	Proposed Roof Level Layout: 20 FT - Roof - V8 - Proposed - 1:125 @ A3
Proposed Front Elevation 20FT (FT)30 Rev A 1:100@A3 Nicola Roberts Architects	Proposed Front Elevation: 20 FT - SE Elevation - V8 - Proposed
Steelwork Grillage for plant support FT-S-SK-001 Rev 102 Davies Maguire	Steelwork Grillage for plant support Rev 101
Environmental Noise Assessments of Proposed Mechanical Plant Ref: EPL/9788/ENA/RP/02B The EQUUS Partnership	Environmental Noise Assessments of Proposed Mechanical Plant Ref: EPL/9788/ENA/RP/01B
Planning Overheating Report, 3882/ Rev 1: New document Leonard Engineering Design Associates	

These revisions have been prepared in response to comments relating to the application set out within a email from Mark Chan on the 14<sup>th</sup> May 2020, relating to Design and Climate Change. This email forms appendix 1 of this statement and its broad requirements are summarised below and responses given.

It is important to note that Leonard Engineering Design Associates ('LEDA') was commissioned to advise on all matters relating to the cooling hierarchy (<https://leonardengineering.co.uk>). Additionally, the change in location of the proposed plant and equipment with its associated acoustic screening has required consequential revised plans and elevations, as well as the updating of the environmental noise impact assessments by the EQUUS Partnership

## 2.0 Design

### **i. Justification for the need to house the plant equipment outside the envelope of the building**

#### ***Design***

- ➔ *The applicant should demonstrate there is clear and convincing justification for housing the plant equipment outside the envelope of the existing building.*
  
- ➔ *Special attention would then need to be paid to how to integrate the plant at rooftop level without harming the existing building's character and appearance, the local street scene along Flaxman Terrace or the appearance of the conservation area.*

Careful consideration has been given by the owners of the property, Salaff Properties, and their chartered surveyors, Cummings Commercial, to establish whether the plant and equipment can be accommodated within the envelope of the building.

20 Flaxman Terrace is constructed over our floor levels from lower ground floor to second floor inclusive. The building occupies the entire site, save for a small courtyard entrance at the south west end of the building with access to Duke's Road, along with fire and means of escape footpaths at that end of the building.

Locating the plant and equipment internally within the building has also been considered at each and every floor level, with the following observations and conclusions reached:-

**Lower Ground Floor Level:** A small restricted height plant room exists at LGF immediately adjacent to the lift motor room in the SW corner of the building. The room already accommodates boilers and associated equipment, pumps, etc serving the whole of the building.

The VRV/VRF units could not physically be accommodated within the existing plant room or adapted to do so. Supply and extract ventilation to the VRV/VRF units would not be possible direct to atmosphere, whilst ducting supply/extract would equally be impractical, if not impossible, given the location of the room at lower ground floor level.

Conclusion: No viable Option available.

**Ground Floor Level:** The entire ground floor of the building is given over to entrance lobbies, staircases, offices and WC facilities. There is no suitable accommodation on the ground floor where the VRV/VRF plant and equipment could be located internally within the building having regard to the physical size of the units, associated noise and disturbance to tenant occupiers and lack of proximity to atmosphere for supply/exhaust ventilation.

Conclusion: No viable option available.

**1st Floor Level:** The same comments are applicable.

Conclusion: No viable option available

**2nd Floor Level:** The same comments are applicable.

Conclusion: No viable option available

**External:** There are no external areas suitable to accommodate the VRV/VRF plant and equipment given the physical magnitude of the units. Locating the plant and equipment external to the building is not therefore viable, save at roof level within an acoustic enclosure.

Conclusion: There is no other viable option for locating the equipment externally. The far rear of the building's flat roof provides the most suitable visually inconspicuous alternative position.

**In overall conclusion,** there is no suitable location externally or internally within the building to accommodate the VRV/VRF plant and equipment due to the restriction of the site, potential for disturbance to the tenants in occupation and the practical difficulties of providing supply/exhaust ventilation to the equipment.

The tight footprint of the building and its busy office use would make it extremely difficult to accommodate the proposed plant within the internal envelope of the building itself. To do so would require substantial remodelling of the building and would result in considerable disturbance to existing tenants and at significant financial cost. The strictures of the ongoing coronavirus COVID-19 pandemic compound the significant difficulties involved in attempting to pursue an alternative solution to the problem.

The only exception is locating the plant and equipment externally at roof level (third floor level) within a bespoke acoustic enclosure. With plant equipment already located on the roof of the subject building (and neighbouring buildings), the proposal will represent an improvement upon the existing situation.

## **ii. Integration of the plant at rooftop level**

Paragraph 9.21 of the Camden Planning Guidance ('CPG') on Design (draft July 2020) states:

*External solutions are less likely to be appropriate in conservation areas than in other locations.*

It has been established that an internal solution is simply not an option that can be pursued in this instance. An external option is the only solution to the need to control the internal climate of the building effectively and efficaciously. Hence, the solution advanced in this planning application proposes siting the VRV/VRF plant and equipment in the least visually incongruous position, in compliance with the requirements for the location of building services equipment set out at paragraph 7.34 of the Camden Local Plan.

To ensure this is the case and in order to address the comments relayed by Mr Chan, design changes are proposed with the aim of minimising the visual impact of the proposal upon the host building, Flaxman Terrace itself, and its wider setting within the Bloomsbury Conservation Area.

The location of the air conditioning units and acoustic enclosure has been rotated 90 degrees anticlockwise. The locations of the original submitted scheme and the revised scheme are shown in the plans reproduced overleaf. The elevational drawing prepared by Nicola Roberts Architects submitted as part of the revised material also aids the appreciation of the level of visual impact.

The revised scheme places the units and their enclosure slightly further away from the main frontage of the building. This will result in the proposed plant and equipment being visually inconspicuous, particularly from the flats within Flaxman Court opposite. From that perspective, the proposal will sit almost behind the upper floors of No.16 Flaxman Terrace. The revised proposal is also more integrated between the adjoining elevations of No.17 Duke's Road and No.16 Flaxman Terrace, in accordance with Camden Local Plan Policy D1 Design.

The proposed location of the acoustic screening will have a further additional benefit in blocking views from the flats in Flaxman Court opposite of the existing unscreened cooling plant on the roof of No.16 Flaxman Terrace, home to 'The Place' Dance Studios.



### Existing Views from the front



The acoustic enclosure will be located approximately 8 metres behind the front elevation of the building. Coupled with its height above the second floor, it will not be visible when stood directly in front of the building

### Existing Views from the east



When viewed from the east of the subject building, the 3<sup>rd</sup> floor of 16 Flaxman Terrace will block views of the enclosure from Flaxman Terrace itself. It is considered that the proposal will be inconspicuous from this view.

## Existing Views from the west



When viewed from the west of the subject building the set back of the enclosure and the overhanging roof parapet will ensure that the proposal remains visually inconspicuous.

### 3.0 Climate Change

#### *Climate Change*

→ *The applicant should demonstrate, in statement and drawings, why other methods higher up in the cooling hierarchy are not suitable for the subject building and that Active cooling is necessary.*

A detailed planning overheating report has been prepared by Leonard Engineering Design Associates. This report establishes why other methods higher up in the cooling hierarchy are not suitable for the subject building and that active cooling is necessary.

The report details the building against each element of the cooling hierarchy, in compliance with Local Plan Policy CC2

The report concludes as follows;

*The calculation results show that the risk of overheating is still present within over 55% of the occupied office areas with high occupant densities and internal heat gains.*

*The review of the overheating mitigation measures suggests that whilst providing a combination of internal blinds, natural and mechanical ventilation will reduce overheating in some areas, it may not always be possible for the occupant controlled mitigation measures (blinds and opening windows) to be practically applied, and even if these were applied it would not resolve overheating in all areas.*

*The conclusions to be gained from the results of the investigation suggest that:*

- Mitigation measures as detailed above will not be effective enough to reduce the risk of overheating within the occupied spaces of 20 Flaxman Terrace,*
- In order to guarantee occupant comfort, comfort cooling will need to be provided within the occupied spaces.*

In addition to its cooling function, the proposed plant will also provide the additional benefit of heating the building, thus rendering the existing comparatively energy inefficient gas boilers redundant.

It is likely that the plant will be in 'heating mode' for at least half of the year, and potentially up to two thirds of it. The proposed VRV / VRF plant will have about four times the energy efficiency of traditional gas boilers.

This will provide a more energy efficient and environmentally friendly option that that which is currently in use.

#### **4.0 Conclusion**

In this statement we have been able to establish that active cooling is the appropriate solution for the subject building and that no other technology higher in the cooling hierarchy is suitable; that there is no location within the envelope of the building that could accommodate the proposed plant and equipment; that the location proposed by this revised planning application would afford the least conspicuous site for it and that there will be negligible impact on the Bloomsbury Conservation Area, the significance of which will not be affected, and moreover there will be no adverse environmental noise impacts arising from the proposed plant and equipment.

The material that has been commissioned and prepared since Mark Chan sent his detailed email on the 14th May 2020 has led to a revised scheme that fully and, we trust satisfactorily, addresses the comments and associated policy issues set out by Mr Chan.

We consider that the planning application proposals are justified in respect of the location, design, visual impact and nature of the plant and equipment proposed. They have the additional benefit of introducing a more energy efficient and environmentally friendly heating regime than that which is currently in use.



As no other issues were identified within the email correspondence after the validation of the planning application, we respectfully request that the application be approved as soon as possible to enable the proposed modernisation of the building to be carried out.

The owners of the property and their project team are grateful to the local planning authority for the considerable patience and tolerance it has shown to enable them to commission and provide the material required to support the proposals.

## Appendix 1: Copy of email text from Mark Chan, 15<sup>th</sup> May 2020

### Design

Whilst it is recognised that consideration has been given to trying to reduce the visual impact of the proposal by setting it back, away from the main frontage. the proposed enclosure is still likely have visual impact, by virtue of its scale and incongruous design. The subject building is very much of its time, is architecturally interesting, has been designed as a complete composition with a strong horizontal emphasis, and symmetrical façade. Furthermore, the external appearance of the building remains largely unaltered.

As such, the current proposal is contrary to Policy D1 Design which states development should 'carefully integrates building services equipment'. This is then expanded on in paragraph 7.34 of the policy, which makes clear that building services equipment, such as air cooling, heating, ventilation and extraction systems, lift and mechanical equipment, as well as fire escapes, ancillary plant and ducting should be contained within the envelope of a building or be located in a visually inconspicuous position.

The current proposal is also not in line with Camden's design CPG. The guidance makes clear that special consideration should be given to the installation of plant equipment in conservation area. It highlights: *'The visual impact of building services equipment should be considered, including views into and from conservation areas'* and *'External solutions are less likely to be appropriate in conservation areas than in other locations'*

The applicant should demonstrate there is clear and convincing justification for housing the plant equipment outside the envelope of the existing building. When that is provided, special attention would then need to be paid to how to integrate the plant at rooftop level without harming the existing building's character and appearance, the local street scene along Flaxman Terrace or the appearance of the conservation area. This should take account of the policy and design guidance as set out above.

### Climate Change

Our Local Plan Policy CC2 Adapting to climate change, amongst many things, requires all development to adopt appropriate climate change adaptation measures such as reduce the impact of urban and dwelling overheating, including application of the cooling hierarchy. It goes on to explain that Active cooling (air conditioning) will only be permitted where dynamic thermal modelling demonstrates there is a clear need for it after all of the preferred measures are incorporated in line with the cooling hierarchy.

The cooling hierarchy includes (from high to low):

- Minimise internal heat generation through energy efficient design;

- Reduce the amount of heat entering a building in summer through orientation, shading, albedo, fenestration, insulation and green roofs and walls;
- Manage the heat within the building through exposed internal thermal mass and high ceilings;
- Passive ventilation;
- Mechanical ventilation; and
- Active cooling.

The current proposal involves the installation of 7x plant equipment including 4x VRV/VRF air conditioning units with no existing units installed. The applicant should demonstrate, in statement and drawings, why other methods higher up in the cooling hierarchy are not suitable for the subject building and that Active cooling is necessary.