JT/TB/P19-2694

10th June 2020

Mr M. Chan
London Borough of Camden Planning Department
5 Pancras Square
Kings Cross
London
N1C 4AG

Dear Mark,

11 Monmouth Street, London, WC2H 9EQ
LPA Ref: 2019/4442/P

Following your email dated 18 May 2020 and our further discussions by email and telephone in regard to the current application at 11 Monmouth Street, London, WC2H 9EQ (your ref. 2019/4442/P), this letter seeks to provide a response to the comments made by the Covent Garden Community Association. This letter will provide justification and reasoning for the installation of 2 x HVAC units to the rear elevation of the application site taking into consideration the cooling hierarchy.

The reason for cooling within this unit is due to the operations that will take place within the unit by the future occupier, Starbucks, which will lead to a level of internal heat production, from coffee machines and other equipment for the reheating of foodstuffs, including toasties and paninis, as well as dishwashers and coffee roasters. Due to the proposed high level of use of this equipment and the constraints on the site, natural ventilation and other cooling methods, which are discussed below, would not be sufficient to cool the unit to the required 22C.

It is understood that Policy CC2 of the Camden Local Plan (2017) states the following:

> *"The Council will require development to be resilient to climate change.*
> *All development should adopt appropriate climate change adaptation measures such as:*
>
> a. *The protection of existing green spaces and promoting new appropriate green infrastructure;*
> b. *Not increasing, and wherever possible reducing, surface water run-off through increasing permeable surfaces and use of Sustainable Drainage Systems;*
> c. *Incorporating bio-diverse roods, combination green and blue roofs and green walls where appropriate; and*
> d. *Measures to reduce the impact of urban and dwelling overheating, including application of the cooling hierarchy."*

The cooling hierarchy, which is stated for all new development, is outlined in paragraph

8.43, and includes the following:

- 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 below will provide justification and assessment of the site against the cooling hierarchy.

Minimise internal heat generation through energy efficient design

The unit in which this application is subject, is the ground floor unit of a longstanding building. Alterations to the design of the whole building in order to make it more efficient would not be possible for the Applicant alone and would come at a high cost. This would also likely have an adverse impact upon the character and appearance of the host building and the surrounding Seven Dials (Covent Garden) Conservation Area.

It is therefore not an option to redesign the building in order to provide an efficient design that would minimise the internal heat generation from the existing.

Reduce the amount of heat entering a building in summer through orientation, shading, albedo, fenestration, insulation and green roofs and walls

Similar to the above, the site is a longstanding building rather than a new development, therefore alterations to the orientation, shading, albedo, fenestration, insultation and green roof/walls would not be possible nor a viable option to adopt for this small unit and would likely cause greater harm to the character and appearance of the surrounding area.

Manage the heat within the building through exposed internal thermal mass and high ceilings

The site is a highly constrained ground floor unit, that is fully locked by buildings and with residential units at first floor above, an upward extension of the unit to create higher ceilings would not be possible. The internal area would also not be sufficient to create a useable space with sufficient circulation as well as install the required level of 'thermal mass' to sufficiently cool the unit when compared to the proposed air conditioning units. It is also noted that within central London, there is not a big enough variation between the day and night outdoor temperatures, which is when thermal mass is particularly beneficial.

Passive ventilation

The existing building and the proposed alterations include a number of passive ventilation methods in order to provide air circulation and cooling to the unit, including openable windows to the front, louvre panels to the rear and high level extracts, as shown in the submitted HVAC design plan (drawing no. 86203-M-1101). Due to the orientation of the building and the need for a 'Back of House' area for preparation of goods, storage, as well as staff and managers space, the amount of passive ventilation that can occur throughout the unit is limited. The amount of cooling that would occur from passive ventilation would not be sufficient for this unit.

Mechanical Ventilation and Active Cooling

Taking the above into consideration, it is found that the only viable method for sufficient cooling of this unit under the proposed development and in consideration of the cooling hierarchy, is through the installation of 2 x HVAC units, which are to be located within the small area to the rear of the unit connected to 3no. AC units throughout the unit. These units will provide sufficient cooling to the unit, without causing detriment to the appearance or character of the area, nor harm the amenity of any neighbouring use, in particular the residential units above nor the hotel to the rear.

Notwithstanding the above, other methods of cooling this site have been considered that would provide a more resilient unit to climate change, however it was found that due to the constraints of the site that these were no other cost effective measures that could be utilised. The area to the rear of the unit where the proposed HVAC units are located, there is not sufficient space to provide bigger kit that would be considered more efficient and is likely to be create a higher level of noise, in turn would take up considerable space through the required mitigation measures to ensure that the development does not harm the amenity of surrounding users.

The space is highly limited and therefore any kit that would be more efficient would be larger than the proposed as well as increase the level of noise, harming the amenity of the hotel and residential residents nearby. Therefore, in order to mitigate against this, the development would require mitigation measures, further increasing the area required for the plant, which would not be possible.

Other considerations that were considered were to tap into other existing infrastructure, however it was found that there were no other units that could be utilised despite a number of HVAC units being located externally to the units that they serve, including to the roof of No.15 Monmouth Street, and the roof of No.2 Neal's Yard.

I hope that the above provides sufficient information in regard to the requirement and justification of the proposed 2 x HVAC units to the rear elevation and that this will allow you to determine this application positively. If you require any additional information, then please do not hesitate to contact me.

Yours sincerely,

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