GROVES NATCHEVA ARCHITECTS

LTR/1163/E/1/MG

Martin Harradine AZ Urban Studio 2 John Street London WC1N 2ES

17 June 2021

Dear Martin

Re: 13 Elsworthy Road London. Ref: 2021/2071/P

Thank you for your email confirming registration of the above application and the request from the case officer for justification for the A/C unit.

With our services engineer David Dyer of EDP Environmental we have together written a short statement setting out how the hierarchy has been followed and other measures for addressing the top floor from overheating.

Firstly, it is important to state that the air conditioning is only proposed for the top floor which is to be used as a home office. The owner of the house is the owner of a fitness company and as a part of his business he often tests gym equipment at home and as such requires a space which will provide the necessary level of comfort for this sole purpose.

EDP Environmental have stated the following statement:

Efforts to reduce the cooling required to the room in line with the cooling Hierarchy are summarised below:

- 1. There is minimal glazed area helping to reduce solar gains to the space and reduce the amount of cooling required.
- 2. This glazed area is south facing, however with shading/blinds, the heat gains to the space will be further reduced.
- 3. The glazing g-value has been considered to balance solar control and daylight provision to the space.
- 4. The building fabric and air tightness shall be improved, where possible, to achieve improvements against the requirements or Part L2A.
- 5. Openable windows have been considered for natural ventilation. However, there is potential for acoustic issues associated with relying solely on natural ventilation to provide thermal comfort.
- 6. LED lighting and energy efficient services have been specified for the property, reducing the internal heat gains within the space, where possible.

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In summary, the above measures will be suitable for the office environment, however in the event of activity associated with the R&D of equipment, active cooling has been proposed. This active cooling would be provided by a single small fan coil unit only and associated energy efficient external unit.

With reference to Point 4 and the upgrading of the roof to comply with Building Regulations Part L2A the U-Value we are achieving will be 0.13W(m2K). The roof will be a fully ventilated warm roof construction.

I trust the above is helpful and do let me know if you require further information or clarification.

Yours sincerely

Murray Groves for and on behalf of

Groves Natcheva Architects

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