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Our Ref: 17845362
Client Ref:

Dear David

Proposed Redevelopment of 36-42 Kingsway and 61 Lincoln's Inn Field, London WC2

Daylight/Sunlight

Drivers Jonas Deloitte has been asked to provide daylight and sunlight advice with regard to the above site.

With regard to adjacent residential properties there is no predicted impacts caused by the proposed development. From site inspection there are no neighbouring residential properties that require assessment.

We have undertaken an internal daylight analysis for the proposed residential elements within 42 Kingsway. Attached is an internal layout plan for the proposed residential elements which are located at first, second and third floor levels. The average daylight factor (ADF) levels have been analysed and the results shown in red.

ADF Results

At first floor level, the secondary bedroom to the rear achieves an ADF level of 0.05%. The living/bedroom space that looks onto Kingsway achieves an ADF level of 0.9%. The master bedroom to the rear achieves an ADF level of 0.14%.

At second floor level the secondary bedroom to the rear obtains an ADF level of 0.7%. The living/bedroom space that looks onto Kingsway obtains an ADF level of 1.84%. The master bedroom to the rear achieves an ADF level of 0.77%.

At third floor level the secondary bedroom to the rear obtains an ADF level of 0.89%. The living/bedroom space that looks onto Kingsway obtains an ADF level of 1.01%. The master bedroom to the rear achieves an ADF level of 1.01%.

Summary

The rooms to the rear courtyard area do not achieve the suggest daylight level for their use. The proposal has sought to position bedrooms in these areas as they are deemed a lesser significance in terms of daylight requirements.

The main habitable areas fronting onto Kingsway obtain a better level of daylight compliance. However, not all rooms meet the BRE Guideline suggested criteria. This is due to the large room areas and high floor to ceiling heights, which are as a result of refurbishing the existing building. The windows for this property cannot be altered due to its cultural significance. However, the daylight quality for the habitable areas within the vicinity of the windows fronting Kingsway will be very good. The areas further back into the rooms will have a lower daylight level.

There are two internal light wells which will supplement daylight levels further back into the rooms. However, the ADF assessment does not take into consideration the potential reflected daylight penetration which will occur.

In summary, whilst habitable rooms do not necessarily meet the BRE Guideline suggestions for the ADF test, the main habitable living room areas have been designed to maximise the daylight that they do receive. The areas with a lesser requirement for natural daylight such as bedrooms have been positioned in the areas with lower daylight potential.

Guidance Documents

Camden's policy application statements within the UDP recommends that the standards set out in the following document is used:

- P J Littlefair, (1991) "Site layout planning for daylight and sunlight: a guide to good practice", Building Research Establishment Report 209. (Referred to in this report as the "BRE guidelines")

The BRE guidelines also refer to the following British Standard.

- British Standard, BS8206-02:2008 "Lighting for Buildings – Part 2 Code of practice for daylighting", British Standards Institution. (Referred to in this report as the "British Standard 8206-2")

The analysis and conclusions drawn within this report will be based on the methodology and recommended standards of the above two documents.

Daylighting Tests to Proposed Habitable Rooms

For proposed habitable rooms the BRE guidelines suggest that the Average Daylight Factor (ADF) test can be used. The methodology for this test is demonstrated in Appendix C of the BRE Guidelines and also set out in the British Standard 8206-2. The methodology within the British Standard 8206-2:2008 has been used in preference to Appendix C of the BRE Guidelines as British Standard is the most up-to-date.

The suggested values of ADF for dwellings are:

- 1% for bedrooms;
- 1.5% for living rooms; and
- 2% for kitchens.

Certain constants were assumed in the formula, which are as follows: -

(a) The diffuse light transmittance of the proposed glazing, including a maintenance factor for dirt on glass, was taken as 0.59.

(b) The average reflectance of interior surfaces was taken as 0.5.

The Average Daylight Factor (ADF) results are obtained for each room individually and expressed as a percentage. Where there are two or more windows within one room the ADF was found separately for each window, and the results summed.

Yours sincerely

Matthew Craske
for Deloitte LLP (trading as Drivers Jonas Deloitte)

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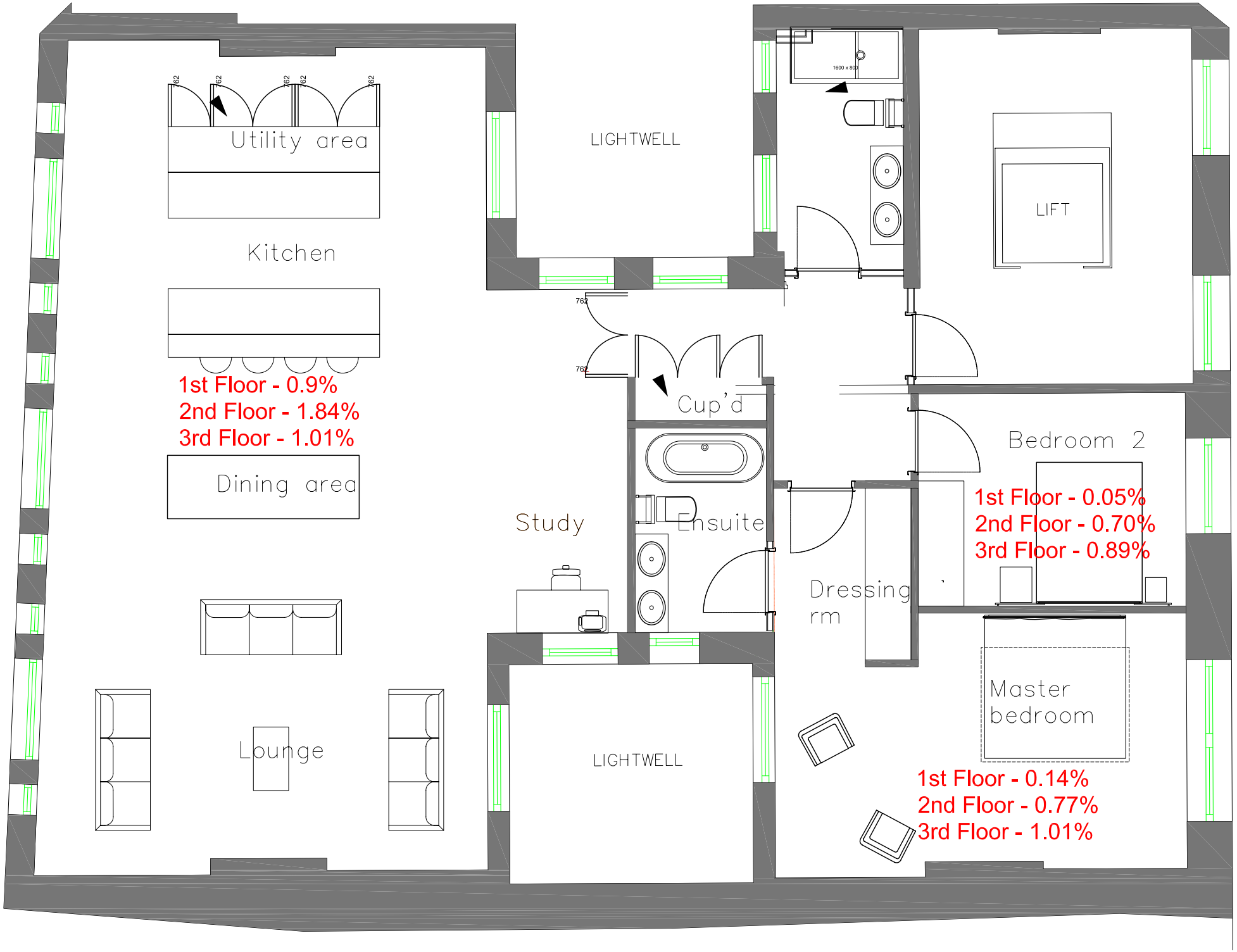
Utility area
Kitchen
1st Floor - 0.9%
2nd Floor - 1.84%
3rd Floor - 1.01%
Dining area
Lounge
LIGHTWELL
LIGHTWELL
Cup'd
Study
Ensuite
Dressing rm
LIFT
Bedroom 2
1st Floor - 0.05%
2nd Floor - 0.70%
3rd Floor - 0.89%
Master bedroom
1st Floor - 0.14%
2nd Floor - 0.77%
3rd Floor - 1.01%