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04307/SUN/301 & 401	Point 1	Basement	0	0	0.00
Winter					0.00
04307/SUN/302 & 402	Point 2	Basement	2	0	100.00
Winter					0.00
04307/SUN/303 & 403	Point 3	Basement	4	0	100.00
Winter					0.00
04307/SUN/304 & 404	Point 4	Ground	5	0	100.00
Winter					100.00
04307/SUN/305 & 405	Point 2	Ground	5	0	100.00
Winter					100.00
04307/SUN/306 & 406	Point 4	Ground	3	0	100.00
Winter					0.00
04307/SUN/307 & 407	Point 5	Ground	3	0	100.00
Winter					0.00

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04307/DAY/101 & 201	Point 1	Basement	6	6	0.00
04307/DAY/102 & 202	Point 2	Basement	2	0.5	75.00
04307/DAY/103 & 203	Point 3	Basement	3.25	0	100.00
04307/DAY/104 & 204	Point 1	Ground	11.5	9.5	17.39
04307/DAY/105 & 205	Point 2	Ground	10	7	30.00
04307/DAY/106 & 206	Point 4	Ground	4	0.25	93.75
04307/DAY/107 & 207	Point 5	Ground	4.25	0.25	94.12

Figures Highlighted denote windows that fail the BRE 20% reduction

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7th March 2005

Dear Charles

125 High Holborn – Daylight & Sunlight

In accordance with instructions issued on behalf of Grandsoft Ltd., we have carried out a daylight & sunlight study to assess the potential impact of the Sheppard Robson scheme proposals on the rear elevation of no. 8 Southampton Place.

Assessment Methodology

The studies have been undertaken in accordance with the recommendations of the Building Research Establishment guide "Site Layout Planning for Daylight & Sunlight : A Guide to Good Practice" published in 1991 by PJ Littlefair. It is understood that the BRE guide recommendations have been adopted by the London Borough of Camden in its UDP (2000) and UDP Revised Deposit Draft (2004) and is the standard by which daylight & sunlight will be assessed.

The BRE Report gives numerical guidelines to calculate levels of daylight & sunlight but advises "guidelines should be applied sensibly and flexibly". This is particularly relevant in an urban environment, where the highly developed nature of central London, and the close proximity of buildings, make it almost inevitable that in most cases, new development may have some detrimental effect on the daylight & sunlight available to surrounding buildings and spaces.

Daylight Assessment

The BRE Report advised that daylight & sunlight should be assessed to main habitable rooms of neighbouring residential properties. These are identified as living rooms, dining rooms and kitchens. Bedrooms are not considered to be habitable rooms as they are mainly occupied at night.

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Stuart Gray BSc

8 Southampton Place is currently in office use and therefore does not warrant the full protection offered by the BRE guidelines. Nevertheless, the rear elevation of no. 8 has been analysed in accordance with BRE guidance. No residential units will be affected by the proposals.

The BRE report proposes several methods for calculating daylight with two more predominantly relied on, involving the measurement of the vertical sky component (VSC) and average daylight factor (ADF). The VSC calculation is a general test to assess the potential for daylight to a building, measuring the light available on the outside plane of a particular window. The ADF calculation assesses the quality and distribution of light within a room served by a window and takes into account the VSC value, the size and number of the windows and room and the use to which the room is put. ADF assesses actual light distribution within a defined room area, whereas the VSC considers potential light at a single point of a window. As we have not had access to 8 Southampton Place, we have carried out the VSC calculation.

Overall, a very low percentage of the windows to 8 Southampton Place are affected by the proposals. Of the 7 windows tested, three are at basement level and four at ground floor level and represent a sample of the windows.

The study has been undertaken by calculating the levels of daylight at each window tested, based on the template drawings provided with the BRE report. This enables a calculation of visible sky from the window in question as if physically viewed from the centre looking outwards. A three dimensional computer model of the proposed development was used in conjunction with the templates to work out the loss in visible sky by calculating the obstructed area of sky.

The effective sky obstruction was calculated and plotted onto the semi-circular Direction Finder. The sky light indicator which calculates the VSC available to the centre of a window was superimposed.

Sunlight Assessment

The BRE Report advises that access to sunlight should be assessed for the main window in each room, which faces within 90° of due south.

The BRE report proposes the appropriate date for undertaking a sunlight assessment is on 21st March, being the Spring equinox. Relative orientation is key to the potential and probable sunlight hours that a window receives and the total number of annual probable sunlight hours (APSH) for London is 1,486 hours. It is recommended that at least one-quarter (25%) of APSH is available to a window including at least 5% during the winter months between 21st September and 21st March. "Probable Sunlight Hours" means the total number of hours in a year that the sun is expected to sun, allowing for average levels of cloud for the geographic location in question. For the sunlight study, the sunlight availability indicator for London has been overlaid onto the tested window and orientated correctly in accordance with the orientation of the site. The BRE sunlight template for London was selected for the study.

Significance Criteria

The BRE numerical values for sunlight and daylight analysis provide guidance on significance criteria for the purpose of determining whether the impact on either will be material. The two key measures are the adequacy of the light and the degree of change.

For daylight analysis, the BRE guide advises that the diffuse daylight to an existing neighbouring building may be adversely affected by a development if following that development, either the VSC at the centre of an existing main window is reduced to less than 27%, or less than 0.8 times its former value.

The VSC is the percentage of light a window receives from the sky which can be any figure in a range of 0% to 40% depending on the amount of sky obstructed, relevant to the tested window. For daylight analysis, relying entirely on numerical values and percentage changes may be misleading, particularly where a percentage change of more than 20% may represent only a very small difference in actual light value.

Similarly, the reductions of more than 20% of the former value for the total availability of sunlight, may represent only a very small difference in actual sunlight value relative to APSH.

Daylight Results

Point 1 – Basement – drawing no. 04307/DAY/101 and DAY/201. Currently the existing vertical sky component (VSC) is 6%. This will not change as a result of the proposals and although it does not meet the BRE recommended VSC of 27%, it would be deemed to comply on the basis that there was no change.

Point 2 – Basement – drawing no. 04307/DAY/102 and DAY/202. The existing VSC is 2%. The proposed VSC will be 0.5%. The percentage difference exceeds 20% as recommended by BRE.

Point 3 – Basement – drawing no. 04307/DAY/103 and DAY/203. The existing VSC is 3.25% which would be 0 in the proposed condition.

Point 1 – Ground floor – drawing no. 04307/DAY/104 and DAY/204. The existing VSC amounts to 11.5% and the proposed 9.5%. The percentage change of 17.39% is within the BRE recommendation and this window would be deemed to meet the criteria.

Point 2 – Ground floor – drawing no. 04307/DAY/105 and DAY/205. The existing VSC is 10% and the proposed 7%. The percentage difference would exceed the 20% recommended by BRE.

Point 3 – Ground floor – drawing no. 04307/DAY/106 and DAY/206. The existing VSC is 4% and the proposed 0.25%. the percentage change exceeds that recommended by the BRE.

Point 4 – Ground floor – drawing no. 04307/DAY/107 and DAY/207. The existing VSC is 4.25% and the proposed 0.25%. The percentage difference would not meet the BRE recommendations.

Conclusion

Two windows would meet the BRE recommendations. Point 1 at basement level, where there will be no change and point 1 at ground level where the percentage difference will be less than 20%. The other five windows tested do not meet the BRE either in the existing or proposed condition.

Sunlight Results

The orientation of 8 Southampton Row is such that only three windows are eligible for assessment – point 3 at basement level and points 4 & 5 at ground floor level.

Point 3 – Basement – drawing no. 04307/SUN/303 and 403. In the existing condition, this window would receive 4% APSH reducing to 0 after the development.

Point 4 – Ground floor – drawing no. 04307/SUN/306 and 406. The 3% existing APSH would be reduced to 0 although in the winter, there would be no change to the existing condition.

Point 5 – Ground floor – drawing no. 04307/SUN/307 and 407. The results are the same as for Point 4.

Conclusion

In the existing condition, none of the eligible windows meet the BRE recommendations, either as far as APSH throughout the year or in the winter months. The development will take away the small levels of APSH to the windows assessed with the exception of points 4 & 5 where there will be no change to the winter sun condition.

Yours sincerely

Delva Patman

Enc.

c.c. Ms N Horsfell – Montagu Evans
H Kauffmann Esq