I Solutions I Design & Architecture

DAYLIGHT AND SUNLIGHT ANALYSIS

Dear Mr/Ms,

London Borough of Camden: No. 6 Highgate Road Kentish Town – Daylight and Sunlight Analysis

This letter outlines the results of the amended daylight and sunlight analysis for the amended development proposal at No 6 Highgate Road, Kentish Town.

Background

The assessment considers the effects of the development on the levels of natural light received by three windows serving the neighbouring property at 1 Fortess Rd, London, NW5 1AA.

Officers have previously confirmed that the windows serving other neighbouring properties do not require assessment as they are not residential in use.

The assessment has been undertaken in accordance with the guidelines set out in the revised Building Research Establishment (BRE) report "Site Layout Planning for Daylight and Sunlight: A Guide to Good Practice" (October 2011). It is important recognise that the Guide is intended to be advisory and does not contain mandatory standards. The introduction states:

"The guide is intended for building designers and their clients, consultants and planning officials. The advice given here is not an instrument of planning policy; its aim is to help rather than constrain the designer. Although it gives numerical guidelines, these should be interpreted flexibly since natural lighting is only one of many factors in site layout design. In special circumstances the developer or planning authority may wish to use different target values. For example in a historic city centre, or in an area with modern high rise buildings, a higher degree of obstruction may be unavoidable if new developments are to match the height and proportions of existing buildings."

Indeed, the BRE guide levels are based on a typical (two storey) suburban model of development and it is reasonable to assume that expectations of levels of daylight and sunlight will be different in an urban situation, and particularly within an urban environment in Inner London. This is confirmed by the guide itself.

On this basis, the indicative BRE guide levels frequently will not be achievable in more intensively developed urban areas such as Kentish Town.

Scope of Assessment

The assessment considers the levels of Vertical Sky Component (VSC) that will be received by three windows at first and second floor level serving 1 Fortess Rd, London, NW5 1AA, as existing and with the proposed development in place.

VSC provides a measure of the level of ambient daylight received by a window. The daylight assessment has been based on three dimensional AutoCAD models constructed for the site and surroundings as existing and with the proposed development in place. The VSC level at each of the windows requiring assessment has been quantified using Waldram Tools daylight and sunlight software (MBS Software Ltd).

Results

The following table contains the results of the VSC calculations.

Floor	Ref.	Window Ref.	Scenario	VSC	Difference	Above / Below

1 Fortess Rd,London, NW5 1AA

First	W1	Existing	24.15	0.68	Marginally
		Proposed	16.53		Below
Second	W1	Existing	32.33	0.91	Above
		Proposed	29.57		
Second	W3	Existing	30.13	0.78	Marginally Below
		Proposed	23.44		

The results for the amended scheme show an improvement in comparison with the results for the analyses undertaken in April 2013; particularly at second floor level windows assessed within the neighbouring property. The results are summarised below.

First floor level window W1:

The development will reduce the VSC levels at this window by 32% against a guide level of 20% (i.e. the degree of change is only 12% below the guide level). This degree of change is typical of an urban environment and reflects the suburban basis of the guide levels.

Second floor level window W1:

The development will comply fully with the BRE guidance in relation to this window. It will experience no noticeable reduction in daylighting.

Second floor level window W3:

The development will now result in an extremely marginal breach of the BRE guidance in relation to this window. (i.e. the degree of change [22%] is only 2% below the guide level [20%]).

Importantly, the residual VSC level with the development in place for all three windows (16.5%, 23.44% and 29.57%) remains good for an urban environment in Inner London

Conclusions

Overall, the results of the assessment demonstrate that the three windows will retain acceptable levels of VSC with the development in place. They will either comply with the guide levels or experience only marginal breaches of the guidance.

The following factors should be considered when interpreting these results:

• The levels of daylight experienced by neighbouring properties with the development in place and the levels that will be achieved across the proposed development are very good for an urban environment in Inner London.

• The development will not affect the levels of sunlight experienced by this building.

• The BRE guide indicates that, in interpreting the results of an assessment, a degree of flexibility is required.

• The BRE guide levels are based on a typical (two storey) suburban model of development. Expectations of levels of daylight and sunlight will be different in an urban situation, and particularly within an urban environment in Inner London. This is confirmed by the guide itself.

• The BRE guide states that: "...a higher degree of obstruction [to natural light] may be unavoidable if new developments are to match the height and proportions of existing buildings." This is precisely the case here.

• Both strategic and local planning policy of relevance to the site's redevelopment encourages the development of schemes which make efficient use of accessible sites in urban locations. The weight that is attached to the BRE guidelines therefore needs to reflect the existing and emerging policy framework, which in turn reflects the location of the site within an accessible, urban location.

Taking account of these factors, it is considered that the proposed development will not result in any materially unacceptable daylight and sunlight effects in relation to neighbouring residential properties. Having regard to the flexibility of the BRE guide, its suburban basis and the policy imperative to make efficient and sustainable use of accessible urban land, it is concluded that there are no reasons on which planning permission should be refused on daylight or sunlight impact grounds.