Planning and Built Environment
London Borough of Camden
Camden Town Hall
Judd Street
London WC1H 9JE

Our Ref : 1117-01-01(1)

DATE: 23rd AUGUST 2017

c/o Nicholas Taylor and Associates, 31 Windmill Street, London W1T 2JN

Dear Sirs

TOWN & COUNTRY PLANNING ACTS - Daylight and Sunlight Assessment
Application Site at: 307-309 Finchley Road, London NW3 6EH

1.00 AMENDMENT REPORT:

1.01 This Amendment Report supercedes the earlier report of 22nd June 2017 ref. 1117-01-01 which no longer applies.

2.00 IN BRIEF:

2.01 The site is positioned on the corner of Finchley Road and Lithos Road. It is proposed to alter and extend the existing buildings, "the development proposal".

2.02 I have been requested to verify that the proposed extension of the building known as Lithos House fronting onto Lithos Road to the rear of 307 Finchley Road will not adversely reduce the daylight and sunlight amenity of the neighbouring residential property opposite; and, that the proposed residential habitable accommodation to the rear of 309 Finchley Road at first floor and above will continue to receive an accustomed amount of daylight for its proposed habitable use.

3.00 FINDING :

3.01 I can confirm that the development proposal will have a negligible environmental impact on the daylight and sunlight to the neighbouring dwellings, and will continue to receive an accustomed level of daylight for itself.

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4.00 TERMS OF REFERENCE :

3.01 The Building Research Establishment Practice Guidance Report, Site Layout Planning for Daylight and Sunlight, a Guide to Good Practice, 2nd Ed. BR209 Oct. 2011 – "The BRE Guidelines"; and, the British Standards Code of Practice for Day-lighting, "BS8206-2:2008".

3.02 The drawings forming a part of the planning application, and the analytic appendices 1017-A01 and A02, attached herewith.

4.00 ASSESSMENT CRITERIA:

4.01 All daylight is sunlight, and by the terms of reference *daylight* means the sun's radiation diffused over the dome of an overcast sky [the modelled CIE (Commission Internationale de l'Eclairage) standard overcast sky]; and, *sunlight* means the sun's radiation unobstructed by cloud formation.

4.02 The guideline criteria are formulated principally to provide an objective means of assessing daylight and sunlight amenity values for main habitable rooms in neighbouring dwelling houses and residential apartment blocks, with respect to a development proposal, with the aim of minimising any adverse affect from the proposed environmental change, including the future cohesive development of adjoining neighbouring lands.

4.03 Subject to any qualifying conditions that may apply, the guidelines provide for new residential development to leave a daylight value (assessed with respect to the vertical plane) of 27% VSC *[vertical sky component]* of the total dome of sky, available for the windows of the main habitable rooms in any overlooking residence. For windows orientated into the sun-arc E-180°-W, a daylight value of 27% VSC will give more than the sought sunlight value of 25% APSH *[annual probable sunlight* hours*]*, of which 5% are in the winter months. [Note: *Total Annual Probable Sunlight Hours at Latitude 51.5° =1486*].

4.04 In most existing urban areas however there is a recognised abidance with less than the preference guideline values, because of the more densely built neighbourhood characteristics.

4.05 So that where a development proposal involves the extension and alteration of existing buildings or infill development, or the entire replacement of existing buildings with others, more detailed terms for assessing acceptable daylight and sunlight change within the given neighbourhood area, are available.

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4.06 In cases where the development change will reduce the existing VSC to a value that is less than 27%, or the existing APSH to a value that is less than 25% (of which 5% is in the winter months); the guidelines offer that an amenity reduction of up to 1/5th, is unlikely to be noticeable by inhabitants, and that the development proposal will in such circumstances have a negligible or at most minor adverse environmental affect.

4.07 NEGLIGIBLE OR MINOR ADVERSE ENVIRONMENTAL EFFECT:

(i) Factors implying a negligible or minor adverse environmental effect will include minimal obstruction of access to the sky for the cohesive future development of adjoining neighbouring land, and an un-noticeable or just noticeable reduction of daylight and sunlight to a small number of overlooking windows serving the habitable rooms in neighbouring residential buildings.

(ii) When the reduction values are 1/5th or less than the existing values the implication is that the effect will be negligible; and, it is submitted, though not expressed by the guidelines, that when this reduction is more than 1/5th but less than 2/5ths, then the effect may be considered minor.

4.08 MODERATE OR MAJOR ADVERSE ENVIRONMENTAL EFFECT:

(i) Factors implying a moderate or major adverse environmental effect will include the obstruction of access to the sky for the cohesive future development of adjoining neighbouring land, and a noticeable reduction of daylight and sunlight to a large number of overlooking windows serving the habitable rooms in neighbouring residential buildings.

(ii) Though not expressed by the guidelines, it is submitted that when the reduction values move through 2/5ths of the existing values, then the effect may be regarded moderate; but that if they transcend 3/5ths, the effect will probably be considered as major.

4.09 It is submitted that in those cases where buildings do admit daylight and sunlight through windows that face adjoining neighbouring lands, on, or near to the curtilage boundary line, alternative values may be deemed to locally apply by a balanced policy that seeks to permit lands that adjoin one another, to contain buildings of a similar plot ratio, and without any unfair detriment arising against one another.

INTERIOR DAYLIGHT :

4.10 For INTERIOR DAYLIGHT, broadly in assessing a good standard of interior daylight for dwelling house habitable rooms in new development, the BRE guidelines provide the following three principle criteria for analysis, recommending a flexible interpretation.

4.11 An assessment of :

(i) The percentage "Average Daylight Factor" within a subject room (*ADF*)

(ii) For rooms lit by windows in one wall only: A "Limiting Value" for room depth (*LV*)

(iii) The significance of direct sky daylight spread over the room illumination plane (adopted at 850mm above finished floor level), with reference to the exterior townscape horizon no-sky-line : Daylight Distribution (*DD*).

4.12 These criteria seek to collectively apply the found values for exterior vertical sky component, with interior and exterior reflected daylight components to give an average daylight factor, and then weigh this with an assessment of the size and shape of any windows relative to the size and shape of the rooms they serve.

4.13 The percentage value for average daylight factor *(ADF)*, applies the ratio of the exterior sky illumination adjusted for clean glass light transmissibility through the window area, to the interior surface area of the room adjusted for average light reflectivity. If the percentage value for bedrooms is less than 1%, or for living rooms is less than 1.5%; then by common expectations, the implication is that inhabitants may find these rooms gloomy in appearance.

4.14 The limiting value for room depth *(L)*, where a room is lit by windows in one wall only, applies a ratio of the window head height above the interior floor level to the room width, and seeks to discourage the design of especially deep rooms, whether or not the exterior built townscape horizon is high in relation to the proposed window head.

4.15 If the designed depth of a room is greater than the limiting value, then depending on the room daylight distribution (see below at 4.17 and 4.18), the implication is that inhabitants may find the room gloomy to its rear.

4.16 The percentage value for "daylight distribution" *(DD)*, applies the ratio of the sky quadrant above the exterior built townscape horizon visible through a window mapped onto the illumination plane of the corresponding room, with respect to its total analytic area.

4.17 There are no percentage values for daylight distribution given by the guideline criteria, but it is submitted that where a dominant daylight appearance is not an expectation for the proposed room use, such as basement bedrooms or lightwell rooms in densely populated inner urban areas where the daylight distribution is commonly found low, then a low daylight distribution over the illumination plane may be regarded acceptable.

4.18 Broadly the guideline recommendation is for an Authority to apply the criteria permissively rather than restrictively, when weighing the merits of all other applicable environmental planning criteria to a particular scheme.

5.00 COMMENTARY and FINDING : (Please see appendices 1117-A01 and A02)

5.01 DAYLIGHT IMPACT ON THE HOUSES OPPOSITE IN LITHOS ROAD: Appendix 1117-A01

5.011 The station point "A1" has been adopted at No 1 Lithos Road, to the centre of the first floor main bay window system overlooking the development proposal, which represents the position of the potential greatest impact variation by the scheme; applying the axiom that if the development proposal has little or no impact affect at this point, then it will have little or no impact affect at all other relevant window points.

5.012 The development proposal will at most reduce the existing Vertical Sky Component by 2% from an integer value of 23% to 21%, which is well within the given criteria implying the change will not be noticeable to inhabitants.

5.02 SUNLIGHT IMPACT ON THE HOUSES OPPOSITE IN LITHOS ROAD: Appendix 1117-A01

5.021 The development proposal lies in the northern sky quadrant with respect to the overlooking houses, and will have no affect on sunlight

5.02 INTERIOR DAYLIGHT TO THE ACCOMMODATION TO THE REAR OF 309 FINCHLEY ROAD:

Please see appendix 1117-A02.

5.021 First Floor Level:

(i) Room R11 :

(a) ADF = 0.4%

(b) L = 5.3m … (designed depth 2.9m)

(c) DD = 30%

(ii) Room R12

(a) ADF = 0.5%

(b) L = 5.4m … (analytic depth 4.2m)

(c) DD = 20%

(iii) Observations: Room R11 exists in use as a bedroom, and its interior daylight values will materially remain at the same accustomed levels. Room R12 is proposed for bedroom use and will attain a slightly higher *adf* level from the accustomed level of Bedroom R11. The lower percentage value for daylight distribution compared with R11 is due to R12's greater depth, though this is comfortably within the found limitation value of 5.4m.

5.022 Second Floor Level:

(i) Room R21 :

(a) ADF = 0.6%

(b) L = 4.7m … (designed depth 2.9m)

(c) DD = 40%

(ii) Room R12

(a) ADF = 0.8%

(b) L = 4.8m … (analytic depth 4.2m)

(c) DD = 25%

(iii) Observations: Room R21 exists as a part of a kitchen. The proposed interior partitioning reduces the depth of the existing kitchen, thereby increasing the current daylight values for the proposed bedroom, which are at a higher standard than those accustomed levels for bedroom R11 at first floor level. Room R22 attains a slightly higher *adf* level still, and its lower percentage value for daylight distribution compared with R21 is due to its greater depth, though comfortably within the limitation value of 4.8m.

5.023 Third Floor Level:

(i) Room R31 :

(a) ADF = 2.0%

(b) L = N/A

(c) DD = 80%

(ii) Observations: Room R31 is proposed for living and dining use, and meets the guideline preference interior daylight values for new development.

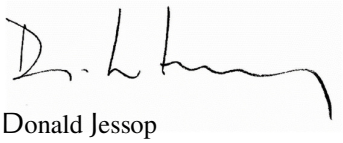
5.024 Fourth Floor Level: The room above R31 at fourth floor level is proposed for bedroom use. The surrounding built horizon line relative to its windows subtends a plane less than 25°, and it is submitted by the analytic findings for room 31 it is self-evident this room will enjoy a high standard of daylight for its proposed bedroom use.

6.00 CONCLUSION :

6.01 The development proposal has been well designed with no adverse impact on the daylight and sunlight of the neighbouring residential dwellings opposite fronting on Lithos Road.

6.02 With respect to the proposed lightwell rooms to the rear of No 309 Finchley Road at first and second floors, it is submitted that flexibility may be applied in that they will attain a slightly better level of interior daylight than the current values accustomed; and albeit these levels are low the overall development promotes the proposed accommodation above at third and fourth floors which will attain a very good standard of interior daylight for its proposed habitable use.

Yours faithfully



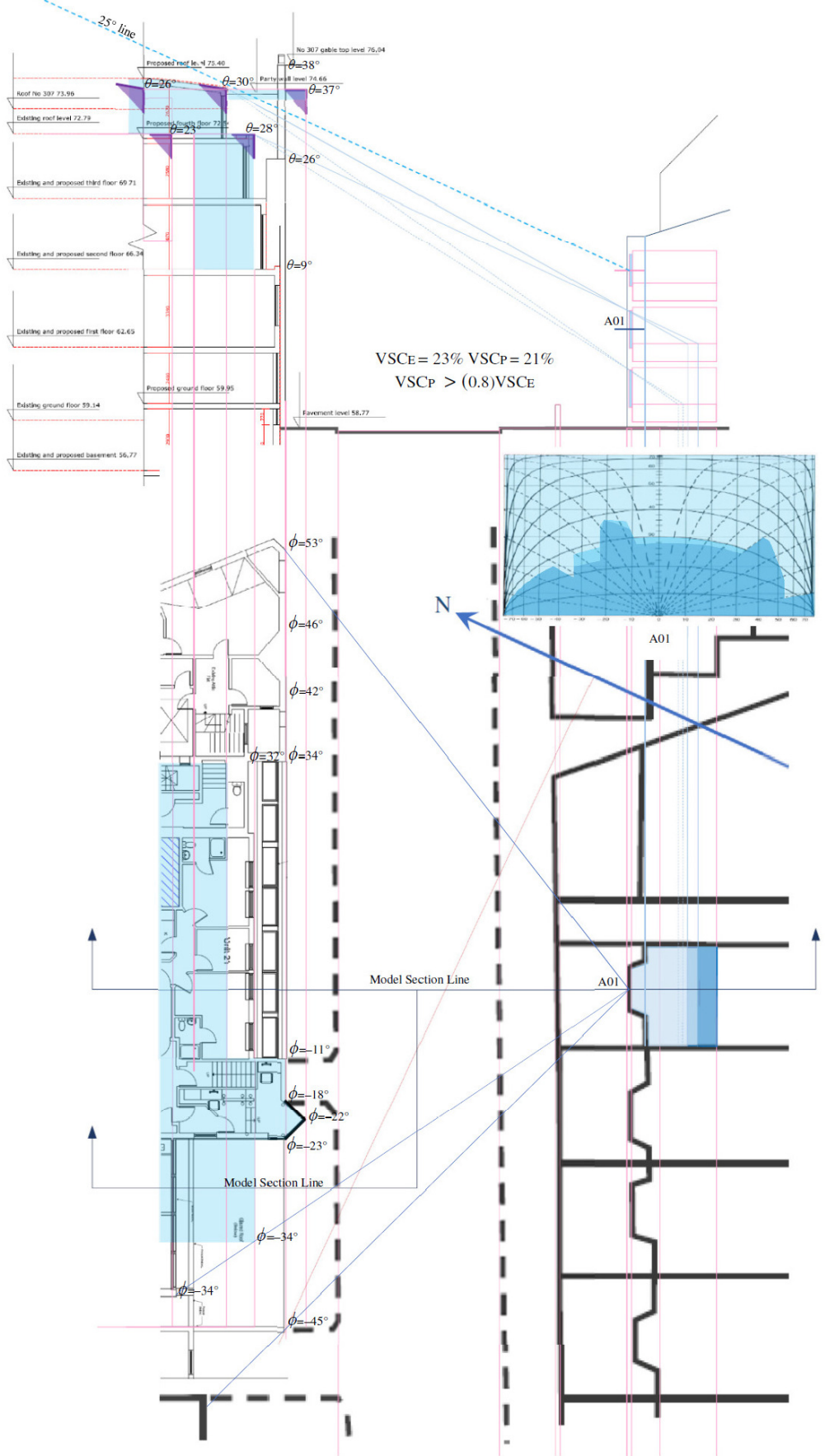
Donald Jessop
Jessop Associates (UK) Ltd
DAYLIGHT AND SUNLIGHT CONSULTANTS

APPENDIX

Application Site at: 307-309 Finchley Road, London NW3 6EH

TOWN and COUNTRY PLANNING ACTS (BRE Guideline Criteria)

Extract Drawings for Identification and Modelling Purposes ONLY - Reduced Scale (subject to survey) - August 2017

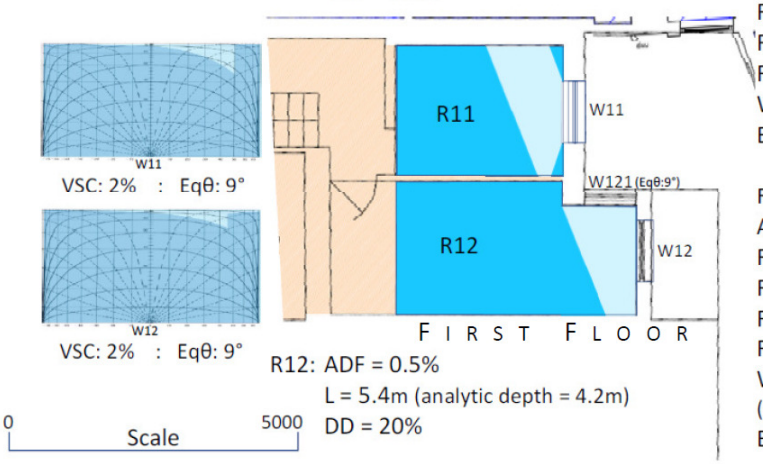


Application Site at: 307-309 FINCHLEY ROAD, LONDON NW3 6EH

TOWN and COUNTRY PLANNING ACTS (BRE Guideline Criteria)

Extract Drawings for Identification and Modelling Purposes ONLY - Reduced Scale (subject to survey verification) - August 2017

R11: ADF = 0.4%
L = 5.3m (designed depth = 2.9m)
DD = 30%

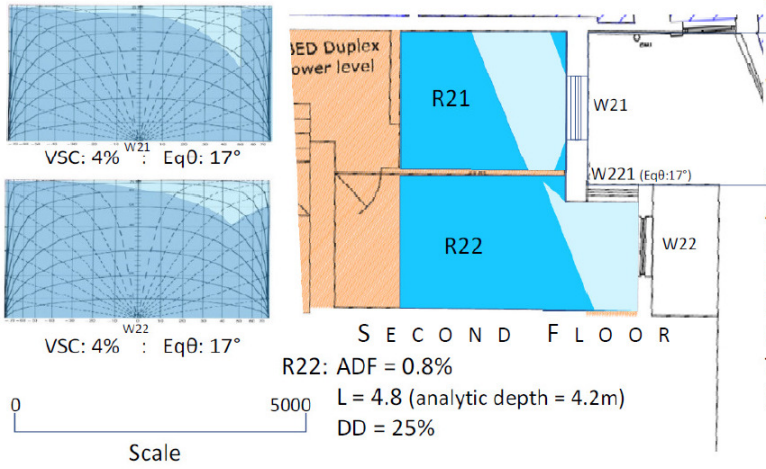


R12: ADF = 0.5%
L = 5.4m (analytic depth = 4.2m)
DD = 20%

R11
Analytic Room Height: 3000mm (ff-wh)
Room Depth: 2900mm
Room Width: 2250mm
Room Perimeter: 10.3m
Room Area: 6.5m²
Window Area: 1.9m² (1750mm x 1100mm)
Eqθ: 9°

R12
Analytic Room Height: 3000mm (ff-wh)
Room Analytic Depth: 4200mm
Room Width: 2300mm
Room Analytic Perimeter: 13m
Room Analytic Area: 9.7m²
Window Area: 3.3 m²
(1750mm x 1000mm) + (1750mm x 800mm)
Eqθ: 9°

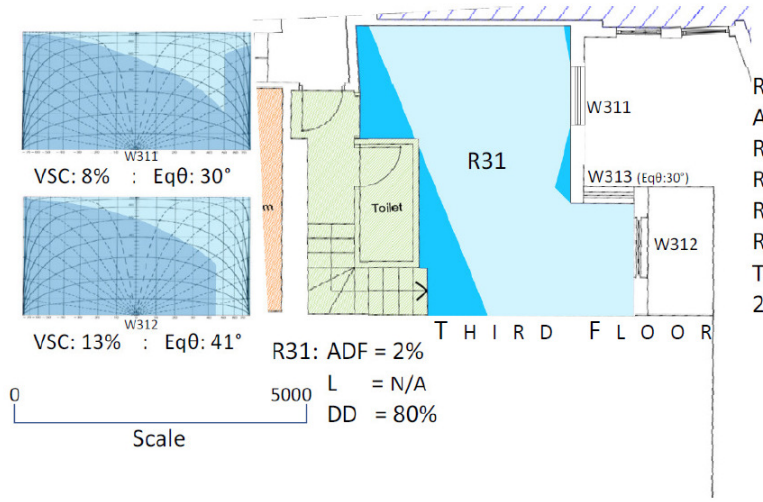
R21: ADF = 0.6%
L = 4.7 (designed depth = 2.9m)
DD = 40%



R22: ADF = 0.8%
L = 4.8 (analytic depth = 4.2m)
DD = 25%

R21
Analytic Room Height: 2500mm (ff-wh)
Room Depth: 2900mm
Room Width: 2250mm
Room Perimeter: 10.3m
Room Area: 6.5m²
Window Area: 1.5m² (1500mm x 1000mm)

R22
Analytic Room Height: 2500mm (ff-wh)
Room Analytic Depth: 4200mm
Room Width: 2300mm
Room Analytic Perimeter: 13m
Room Analytic Area: 9.7m²
Total Window Area: 2.7 m²
(1500mm x 1000mm) + (1500mm x 800mm)



R31: ADF = 2%
L = N/A
DD = 80%

R31
Analytic Room Height: 2500mm (ff-wh)
Room Depth: 5000mm (overall)
Room Width: 2250mm
Room Perimeter: 14.5m
Room Area: 13.4m²
Total Window Area: 4.2m²
2(1500mm x 1000mm) + (1500 x 800)