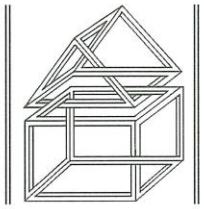

# DAVID MAYCOX & Co.

Party Wall and Rights of Light Consultants

55 Church Hill Road, East Barnet Village EN4 8SY • Tel: 020 8441 9900 / 020 8441 9980 • Email: office@davidmaycox.co.uk

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Email: office@davidmaycox.co.uk

20 May 2020

Mr and Mrs Palsson
15 Gayton Road
London
NW3 1TX

Dear Mr and Mrs Palsson

**Proposed development at 5B Prince Arthur Road, London NW3 6AX**

In accordance with your instructions and on the basis of the drawings supplied, I have now visited the site and would report as follows.

## 1.00 Town and Country Planning

The latest guidance note on the subject of sunlight, daylight and other associated matters is the Building Research Establishment report "Site Layout Planning for Daylight and Sunlight: A Guide to Good Practice". The report sets out tests that can be applied to assess the impact of redevelopment or extensions on neighbouring properties.

## 2.00 Methodology

The properties which may be affected by the proposed development are 5 Prince Arthur Road and 7-9 Prince Arthur Road.

The assessment has been carried out to the window at the lowest floor level and nearest to the proposed development. If the results are compliant with the BRE Report, as the distance height ratio will increase to windows at higher levels or further from the proposed development, the values will also increase and any such windows have not been assessed. The locations of the windows which have been assessed are shown in the photographs attached as Appendix A to this report.

The assessment has been prepared using 3D modelling and Autodesk Ecotech, computer aided design software which is based upon 2D drawings provided. It should be noted that the software takes into account reflected as well as direct light received by any window

and is therefore an accurate assessment of actual light that will be received.

The drawings used for the purposes of this assessment are listed in the drawing register attached as Appendix B to this report.

## 3.00 Light from the Sky

Building Research Establishment Report "Site layout planning for daylight and sunlight" deals with light from the sky in Section 2, and states in relation to existing buildings that:

"If any part of a new building or extension, measured in a vertical section perpendicular to a main window wall of an existing building, from the centre of the lowest window, subtends an angle of more than 25 degrees to the horizontal, then the diffuse daylighting of the existing building may be adversely affected. This will be the case if either:

the vertical sky component measured at the centre of an existing main window is less than 27%, and less than 0.8 times its former value;

and

the area of the working plane in a room which can receive direct skylight is reduced to less than 0.8 times its former value."

## 4.00 Vertical Sky Component

The vertical sky component at the windows likely to be affected has been measured in accordance with Appendix A of the Report. The results being as follows:

| **Window** | **Existing Sky Factor** (%) | **Proposed Sky Factor** (%) | **Loss** (%) | **Percentage Loss** (%) |
|---|---|---|---|---|
| 5 Prince Arthur Road | | | | |
| 1 | 16.96 | 11.11 | 05.85 | 34.49 |
| 2 | 23.86 | 20.05 | 03.81 | 15.97 |
| 3 | 34.39 | 30.80 | 03.59 | 10.44 |
| 4 | 33.07 | 29.04 | 04.03 | 12.19 |
| 5 | 30.57 | 29.92 | 00.65 | 02.13 |
| 6 | 30.59 | 30.20 | 00.39 | 01.27 |

| **Window** | **Existing Sky Factor** (%) | **Proposed Sky Factor** (%) | **Loss** (%) | **Percentage Loss** (%) |
|---|---|---|---|---|
| 7-9 Prince Arthur Road | | | | |
| 7 | No assessment required, refer to the summary below. | | | |
| 8 | 24.32 | 23.03 | 01.29 | 05.30 |
| 9 | 29.82 | 28.82 | 01.00 | 03.35 |
| 10 | 30.66 | 24.82 | 05.84 | 19.05 |

**4.01 Summary**

Each of the windows analysed at 5 Prince Arthur Road is in the side elevation of the building. The retained sky component at windows 2 to 6 will either be in excess of 27% or it will be more than 0.8 times its former value.

The existing sky component at window 1 is less than 27% and therefore it is not expected that the retained sky component will be in excess of 27%. The retained sky component at window 1 will be less than 0.8 times its former value. In these circumstances it is appropriate to analyse the impact on the daylighting distribution in the room served by the window as detailed in section 5.00 of this report below.

Each of the windows analysed at 7-9 Prince Arthur Road is in the front elevation and return wall at the front of the building. Window 7 is in the side elevation.

It has been established that window 7 is serving a bathroom. The guidance in the BRE Report states “Windows to bathrooms, toilets, storerooms, circulation areas and garages need not be analysed.”. Therefore window 7 has not been included in the assessment.

The retained sky component at windows 8 to 10 will either be in excess of 27% or it will be more than 0.8 times its former value.

**5.00 Daylight Distribution**

Building Research Establishment Report “Site layout planning for daylight and sunlight” also sets out in Section 2 the ‘no sky line’ assessment, and states in relation to existing buildings that:

“Where room layouts are known, the impact on the daylighting distribution in the existing building can be found by plotting the ‘no sky line’ in each of the main rooms …

The no sky line divides points on the working plane which can and cannot see the sky …

If, following construction of a new development, the no sky line moved so that the area of the existing room, which does not receive direct skylight, is reduced to less than 0.8 times its former value this will be noticeable to the occupants, and more of the room will appear poorly lit. This is also true if the no sky line encroaches on key areas like kitchen sinks and worktops."

Original drawings of the building at 5 Prince Arthur Road have been obtained and are attached as Appendix C to this report. This has enabled no sky line (NSL) analysis of windows 1 to 4 in accordance with Appendix D of the BRE Report, the results being as follows:

| **Window / Room** | | **Existing NSL (%)** | **Proposed NSL (%)** | **Loss (%)** | **Percentage Loss (%)** |
|---|---|---|---|---|---|
| 5 Prince Arthur Road | | | | | |
| 1 | basement, living room | 67.0 | 60.6 | 6.4 | 9.6 |
| 2 | ground floor, living room | 80.1 | 78.2 | 1.9 | 2.4 |
| 3 | first floor, bedroom | 58.2 | 51.8 | 6.4 | 11.0 |
| 4 | first floor, bedroom | 92.9 | 85.8 | 7.1 | 7.6 |

Diagrams of the no sky line assessments are attached as Appendix D to this report.

### 5.01 Summary

The area of the existing rooms subject of this assessment, which does not receive direct skylight, will not be reduced to less than 0.8 times its former value, and therefore meet the target values for daylight distribution.

Insofar as light from the sky is concerned, the proposed development is fully BRE compliant.

## 6.00 Sunlighting

Building Research Establishment Report "Site layout planning for daylight and sunlight" deals with sunlight in section 3, and states in relation to existing buildings that:

"Obstruction to sunlight may become an issue if:

- some part of a new development is situated within 90 degrees of due south of a main window wall of an existing building and

- in the section drawn perpendicular to this existing window wall, the new development subtends an angle greater than 25 degrees to the horizontal measured from a point 2m above the ground.

This will be the case if the centre of the window:

- receives less than 25% of annual probable sunlight hours, or less than 5% of annual probable sunlight hours in the winter months between 21st September and 21st March and

- receives less than 0.8 times its former sunlight hours during either period and

- has a reduction in sunlight received over the whole year greater than 4% of annual probable sunlight hours."

## 6.01 Report

The British Standard referred to in the Report recommends that at least 25% of annual probable sunlight hours be available at the reference point, including at least 5% of annual probable sunlight hours in the winter months between 21st September and 21st March.

No part of the proposed development is situated within 90 degrees of due south of a main window wall at 7-9 Prince Arthur Road and as such the windows at this property have not been assessed.

The results calculated at the same windows as the vertical sky component which are within 90 degrees of due south, are as follows:

| Window | Existing | | Proposed | |
|---|---|---|---|---|
| | **Annual (%)** | **Winter (%)** | **Annual (%)** | **Winter (%)** |
| 5 Prince Arthur Road | | | | |
| 1 | 39.00 | 23.35 | 25.12 | 11.97 |
| 2 | 55.34 | 22.16 | 46.13 | 17.51 |
| 3 | 75.51 | 31.29 | 69.18 | 27.43 |
| 4 | 71.01 | 33.95 | 63.18 | 29.53 |
| 5 | 66.80 | 34.51 | 66.56 | 34.30 |
| 6 | 67.27 | 34.91 | 67.12 | 34.87 |

## 6.02 Summary

Insofar as sunlighting is concerned, the scheme is fully BRE compliant in that all of the relevant windows receive more than 25% of annual probable sunlight hours, and more than 5% of annual probable sunlight hours in the winter months between 21st September and 21st March.

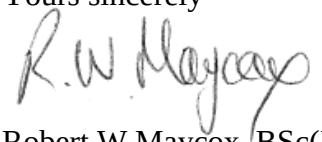
## 7.00 Conclusion

Insofar as light from the sky is concerned, the scheme is BRE compliant in that the retained sky component will be either be in excess of 27% or any loss will be less than 0.8 times its former value. Basement level window 1 in the side elevation at 5 Prince Arthur Road is the only exception in this respect, however the daylighting distribution analysis undertaken confirms the living room served by this window will not be adversely affected by the proposed development.

All of the windows subject of the sunlighting assessment, including windows 1 to 6, are fully BRE compliant.

It is important to note that the BRE Report states that the numerical values are purely advisory, and that the advice given is not mandatory as the document must not be seen as an instrument of planning policy. The numerical guidelines should be interpreted flexibly, and it is accepted that in city centres a higher degree of obstruction is acceptable and may in fact be unavoidable. The calculation methods in Appendices A, B and G of the BRE Report are entirely flexible in this respect.

Yours sincerely



Robert W Maycox BSc(Hons)
David Maycox & Co

# APPENDIX A

# WINDOW LOCATIONS


Above – Windows 1 to 4 at 5 Prince Arthur Road


Above – Windows 2 to 6 at 5 Prince Arthur Road


Above – Window 7 at 7-9 Prince Arthur Road


Above – Windows 8 to 10 at 7-9 Prince Arthur Road

# APPENDIX B

# DOCUMENT REGISTER

**Drawings by Charlton Brown Architects:**

1908 - S 01 - Existing Site Plan
1908 - S 02 - Existing Ground Floor Plan
1908 - S 03 - Existing First Floor Plan
1908 - S 04 - Existing Second Floor Plan
1908 - S 07 - Existing Roof Plan
1908 - S 08 - Existing Front Elevation
1908 - S 09 - Existing Rear Elevation
1908 - S 10 - Existing Front Elevation - Context
1908 - S 11 - Existing Side Elevations
1908 - S 12 - Existing Section A-A
1908 - S 13 - Existing Section B-B

1908 - AP 01 - Proposed Site Plan
1908 - AP 02 - Proposed Ground Floor Plan
1908 - AP 03 - Proposed First Floor Plan
1908 - AP 04 - Proposed Second Floor Plan
1908 - AP 05 - Proposed Attic Flr Plan
1908 - AP 06 - Proposed Basement Plan
1908 - AP 07 - Proposed Roof Plan
1908 - AP 08 - Proposed Front Elevation
1908 - AP 09 - Proposed Rear Elevation
1908 - AP 10 - Proposed Front Elevation - Context
1908 - AP 11 - Proposed Side Elevations
1908 - AP 12 - Proposed Section A-A
1908 - AP 13 - Proposed Section B-B

Proposed 3D model file name ‘200204_model_SMALL’

**Drawings by On Centre Surveys:**

26169A/1
26169A/2
26169A/3
26169A/4
26169A/5/A
26169A/5/B
26169A/5/C
26169A/5/D

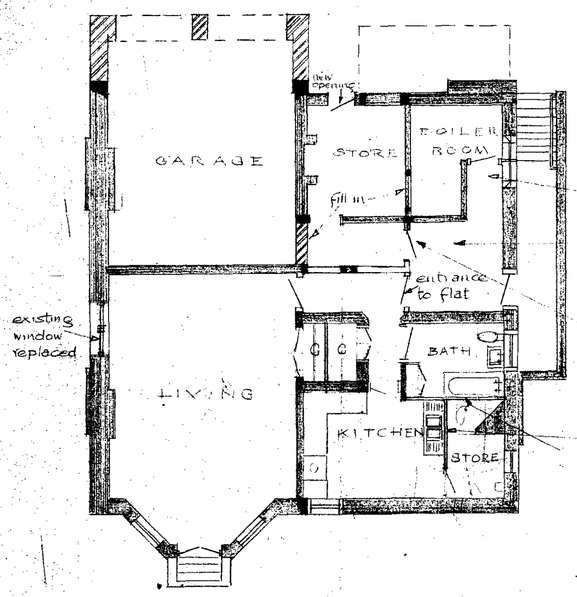
**Drawings of 5 Prince Arthur Road:**

60/7/2 dated 24 October 1959

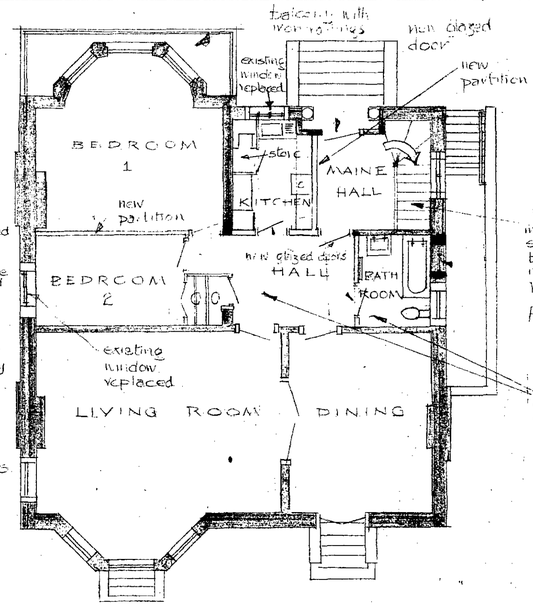
# APPENDIX C

## DRAWINGS OF 5 PRINCE ARTHUR ROAD:

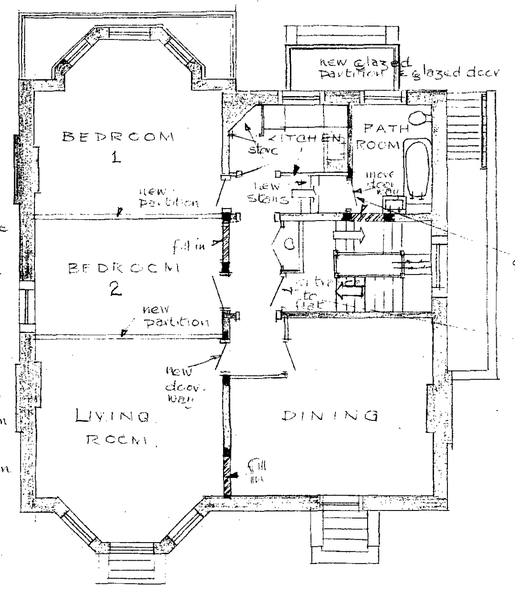
60/7/2 dated 24 October 1959



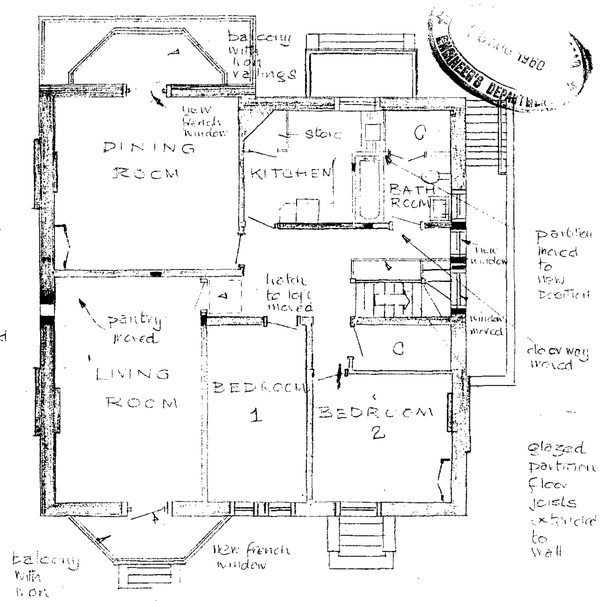

BASEMENT



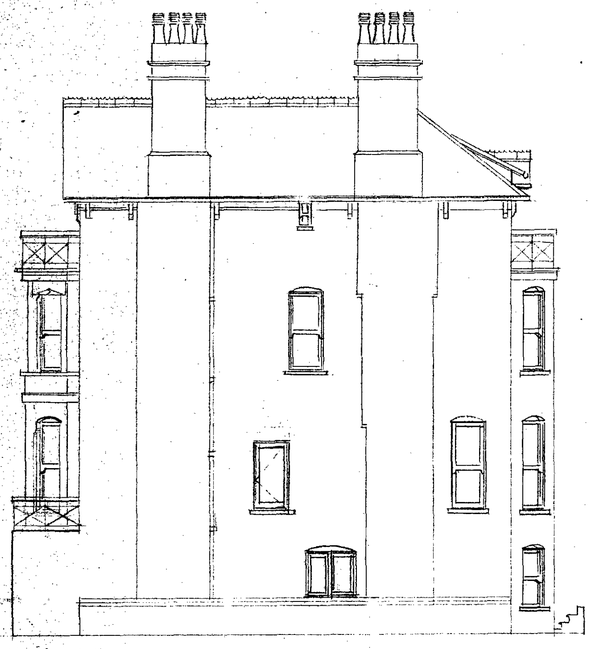

GROUND FLOOR




FIRST FLOOR



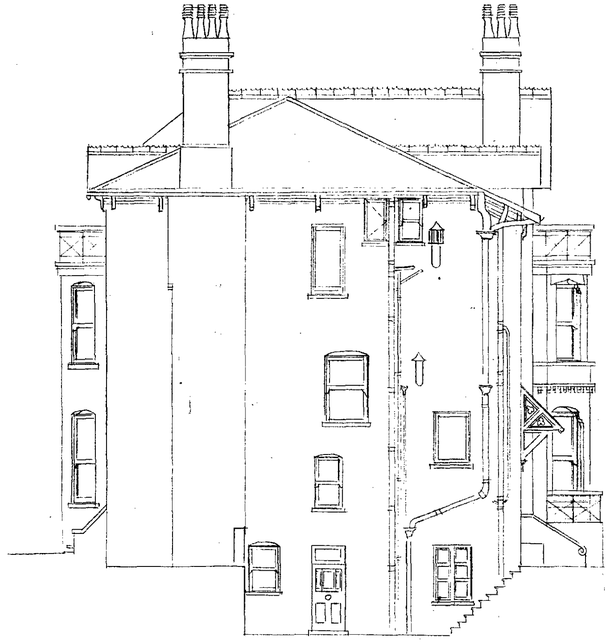

SECOND FLOOR



WEST ELEVATION

SOUTH EVEVATION

NORTH ELEVATION



EAST ELEVATION

# 15, PRINCE ARTHUR ROAD, HAMPSTEAD, N.W.3.

Proposed Conversion for Mr P. Bicknell & Mr J.S. Schofield.

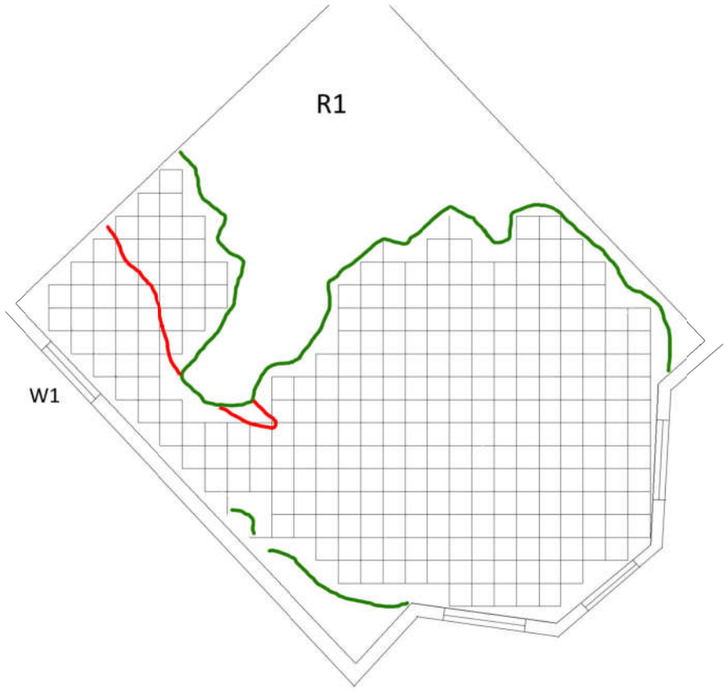
| SCALE | 1/8" : 1'-0" | DATE | Oct 24th '59 | Drawing 60/1/2 | JSS |
|---|---|---|---|---|---|

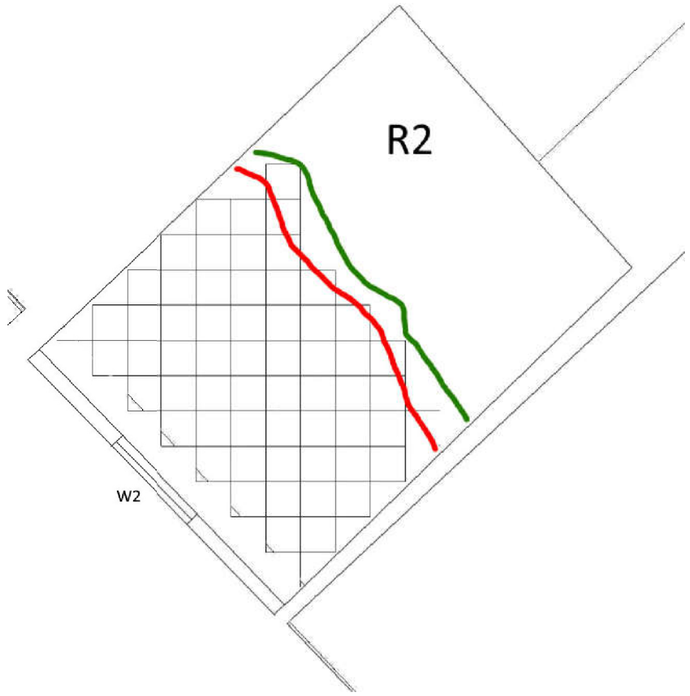
PLAN NO. T.P. 3156
COMMITTEE DATE: SEP 1960

11152
12 AUG 1960

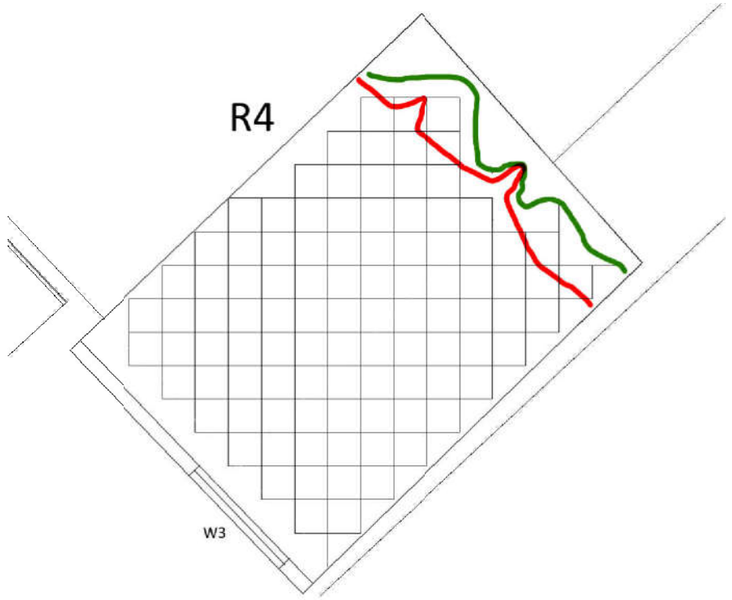
# APPENDIX D

# NO SKY LINE DIAGRAMS











DO NOT SCALE

LEGEND:

Lit Area - Existing

Lit Area - Proposed

Grid Size = 300mm

Drawings are NOT to scale

Where no red contour is shown Existing and Proposed are identical.

All windows are indicative only.

All modelling has been produced from a 3D model provided to us.

| Revision: | Date: | Description: | Drw: | Chk: |
|---|---|---|---|---|
| | | | | |

DAVID MAYCOX & Co.

Project:
5b Prince Arthur Road
London NW3

Drawing Title:
No Sky Line

Client:
-

| Drawn: | Checked: | Date: | Scale: | Paper Size: |
|---|---|---|---|---|
| OW | BW | May, 2020 | NTS | A3 |
| Job No.: | | Dwg No.: | Revision: | |
| 3404 | | 101 | - | |