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Daylight and Sunlight Study (Neighbouring Properties) 9 Fitzjohn's Avenue, London NW3 5JY

17th April 2013



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DAYLIGHT AND SUNLIGHT STUDY 9 Fitzjohn's Avenue, London NW3 5JY

CONTENTS

| 1 EX | ECUTIVE SU | JMMARY | 2 |
|-----------------|-------------------|--|---|
| 1.1 | Overview | | 2 |
| | | | |
| 2 INF | | SOURCES | |
| 2.1 | Documen | ts Considered | 3 |
| 3 MF | THODOL OG | BY OF THE STUDY | Δ |
| 3.1 | | e : Site Layout Planning for Daylight and Sunlight | |
| 3.1 | | | |
| 3.3 | | o Windowsvailability to Windows | |
| 3.4 | | owing to Gardens and Open Spaces | |
| J. T | Oversnad | owing to Cardons and Open Opaces | |
| 4 RE | SULTS OF 1 | THE STUDY | 7 |
| 4.1 | Windows | & Amenity Areas Considered | 7 |
| 4.2 | | Results | |
| 4.3 | Daylight to | o Windows | 7 |
| 4.4 | Sunlight to | o Windows | 7 |
| 4.5 | Overshad | owing to Gardens and Open Spaces | 7 |
| 4.6 | Conclusio | n | 7 |
| 5 CI | ARIFICATIO | NS | 8 |
| 5.1 | | | _ |
| 5.1 | | pecific | |
| 5.2 | i roject of | CONO | |
| APPE | NDICES | | |
| APPE | NDIX 1 | WINDOW & GARDEN KEY | |
| | NDIX 2 | DAYLIGHT AND SUNLIGHT RESULTS | |
| | NDIX 3 | OVERSHADOWING TO GARDENS AND OPEN SPACES | 3 |

1 EXECUTIVE SUMMARY

1.1 Overview

- 1.1.1 Right of Light Consulting has been commissioned to undertake a daylight and sunlight study of the proposed development at 9 Fitzjohn's Avenue, London NW3 5JY.
- 1.1.2 The aim of the study is to assess the impact of the development on the light receivable by the neighbouring residential properties at 7 and 11 Fitzjohns Avenue. The study is based on the various numerical tests laid down in the Building Research Establishment (BRE) guide 'Site Layout Planning for Daylight and Sunlight: a guide to good practice' by P J Littlefair 2011.
- 1.1.3 The window key in Appendix 1 identifies the windows analysed in this study.

 Appendix 2 gives the numerical results of the various daylight and sunlight tests.
- 1.1.4 In summary, the proposed development will have a low impact on the light receivable by its neighbouring properties. Right of Light Consulting confirms that the development design satisfies all of the requirements set out in the BRE guide 'Site Layout Planning for Daylight and Sunlight'.

2 INFORMATION SOURCES

2.1 Documents Considered

2.1.1 This report is based on the following drawings:

Finkernagel Ross Architects

| 9FIT-001 | Location and Existing Site Plan | Rev P1 |
|----------|---------------------------------|--------|
| 9FIT-002 | Existing Floor Plans | Rev P1 |
| 9FIT-020 | Existing Sections | Rev P1 |
| 9FIT-030 | Existing Elevations | Rev P1 |
| 9FIT-100 | Proposed Site Plan | Rev P5 |
| 9FIT-101 | Proposed Basement & | Rev P6 |
| | Lower Ground Floor | |
| 9FIT-102 | Proposed Upper Ground Floor | Rev P4 |
| | & First Floor | |
| 9FIT-103 | Proposed Second & Third Floor | Rev P5 |
| 9FIT-300 | Proposed Rear Elevation | Rev P6 |
| 9FIT-301 | Proposed Front Elevation | Rev P1 |
| 9FIT-302 | Proposed Side Elevation | Rev P2 |
| 9FIT-303 | Proposed Side Elevation | Rev P2 |

Metro Plans

| 3388-01 | Site Plan | Rev – |
|---------|-------------------------|-------|
| 3388-02 | Front Elevation | Rev - |
| 3388-03 | Rear Elevation | Rev – |
| 3388-04 | Side Elevation | Rev – |
| 3388-05 | Side Elevation | Rev – |
| 3388-06 | Lower Ground Floor Plan | Rev – |
| 3388-07 | Ground Floor Plan | Rev – |
| 3388-08 | First Floor Plan | Rev – |
| 3388-09 | Second Floor Plan | Rev – |
| 3388-10 | Third Floor Plan | Rev – |
| 3388-11 | Section A-A | Rev – |
| 3388-12 | Section B-B | Rev – |
| | | |

3 METHODOLOGY OF THE STUDY

3.1 BRE Guide: Site Layout Planning for Daylight and Sunlight

- 3.1.1 The study is based on the various numerical tests laid down in the Building Research Establishment (BRE) guide 'Site Layout Planning for Daylight and Sunlight: a guide to good practice' by P J Littlefair 2011. In general, the BRE tests are based on the requirements of the British Standard, BS 8206 Part 2.
- 3.1.2 The standards set out in the BRE guide are intended to be used flexibly. The following statement is quoted directly from the BRE guide:
- 3.1.3 "The guide is intended for building designers and their clients, consultants and planning officials. The advice given here is not mandatory and the guide should not be seen as 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."

3.2 Daylight to Windows

3.2.1 Diffuse daylight is the light received from the sun which has been diffused through the sky. Even on a cloudy day when the sun is not visible, a room will continue to be lit with light from the sky. This is diffuse daylight.

Diffuse daylight calculations should be undertaken to all rooms where daylight is required, including living rooms, kitchens and bedrooms. Usually, if a kitchen is less than 13m² it is considered to be a non-habitable room and the daylight tests need not be applied. The BRE guide states that windows to bathrooms, toilets, storerooms, circulation areas and garages need not be analysed.

3.2.2 The BRE guide contains two tests which measure diffuse daylight:

3.2.3 Test 1 Vertical Sky Component

The percentage of the sky visible from the centre of a window is known as the Vertical Sky Component. Diffuse daylight may be adversely affected if after a development the Vertical Sky Component is both less than 27% and less than 0.8 times its former value.

3.2.4 Test 2 Daylight Distribution

The BRE guide states that where room layouts are known, the impact on the daylighting distribution can be found by plotting the 'no sky line' in each of the main rooms. The no-sky line is a line which separates areas of the working plane that can and cannot have a direct view of the sky. Daylight may be adversely affected if after the development 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.

3.3 Sunlight availability to Windows

- 3.3.1 The BRE sunlight tests should be applied to all main living rooms and conservatories which have a window which faces within 90 degrees of due south. The guide states that kitchens and bedrooms are less important, although care should be taken not to block too much sunlight.
- 3.3.2 The BRE guide states that sunlight availability may be adversely affected if the centre of the window:
 - receives less than 25% of annual probable sunlight hours, or less than 5% of annual probable sunlight hours between 21 September and 21 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.

3.4 Overshadowing to Gardens and Open Spaces

- 3.4.1 The availability of sunlight should be checked for all open spaces where sunlight is required. This would normally include:
 - Gardens, usually the main back garden of a house
 - Parks and playing fields
 - Children's playgrounds
 - Outdoor swimming pools and paddling pools
 - Sitting out areas, such as those between non-domestic buildings and in public squares
 - Focal points for views such as a group of monuments or fountains.

3.4.2 The BRE guide recommends that at least 50% of the area of each amenity space listed above should receive at least two hours of sunlight on 21st March. If as a result of new development an existing garden or amenity area does not meet the above, and the area which can receive two hours of sun on 21st March is less than 0.8 times its former value, then the loss of light is likely to be noticeable.

4 RESULTS OF THE STUDY

4.1 Windows & Amenity Areas Considered

4.1.1 Appendix 1 provides a plan and photographs to indicate the positions of the windows and garden analysed in this study.

4.2 Numerical Results

4.2.1 Appendix 2 lists the detailed numerical daylight and sunlight test results. The results are interpreted below.

4.3 Daylight to Windows

4.3.1 All main habitable windows pass the Vertical Sky Component test. The proposed development therefore satisfies the BRE daylight requirements.

4.4 Sunlight to Windows

4.4.1 All windows which face within 90 degrees of due south have been tested for direct sunlight. All windows pass both the total annual sunlight hours test and the winter sunlight hours test. The proposed development therefore satisfies the BRE direct sunlight to windows requirements.

4.5 Overshadowing to Gardens and Open Spaces

4.5.1 The proposed development will not create any new areas which receive less than two hours of sunlight on 21st March. The before/after ratio is 1 (no loss) and the proposed development therefore passes the BRE overshadowing to gardens and open spaces test.

4.6 Conclusion

4.6.1 The proposed development will have a low impact on the light receivable by its neighbouring properties. Right of Light Consulting confirms that the development design satisfies all of the requirements set out in the BRE guide 'Site Layout Planning for Daylight and Sunlight'.

5 CLARIFICATIONS

5.1 General

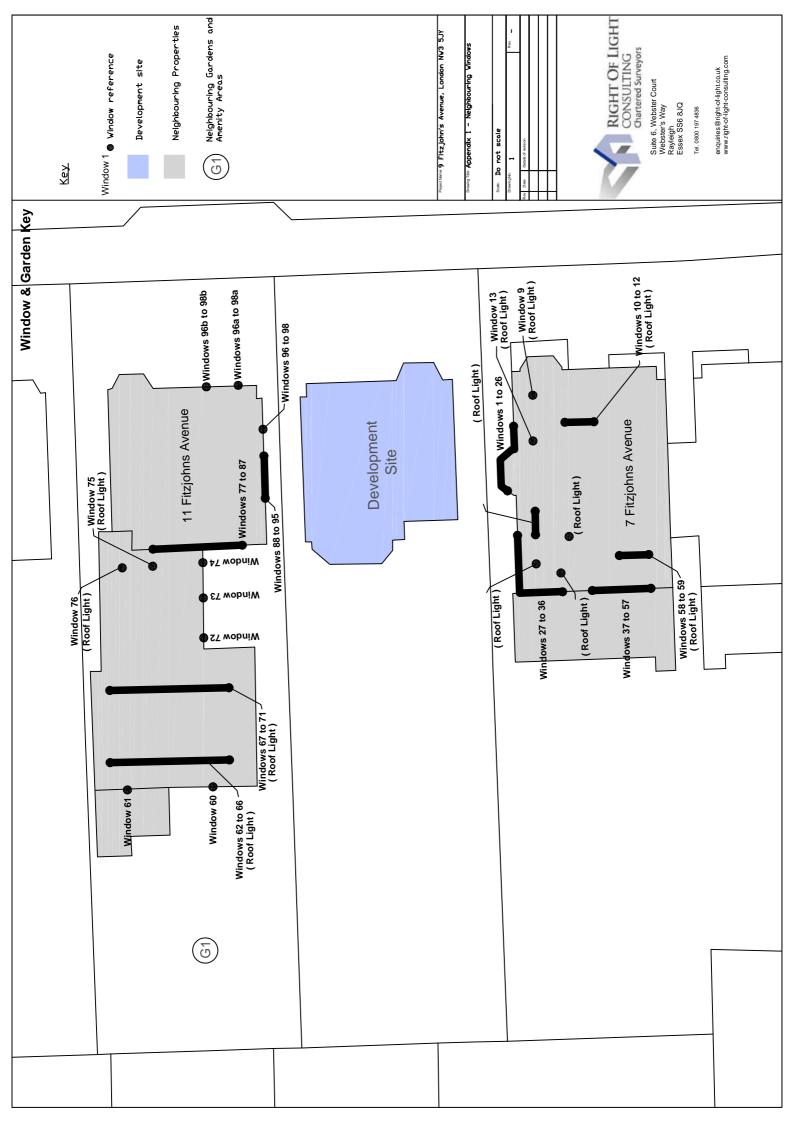
- 5.1.1 The report provided is solely for the use of the client and no liability to anyone else is accepted.
- 5.1.2 We have undertaken the survey following the guidelines of the RICS publication "Surveying Safely".
- 5.1.3 We have used our best endeavours to ensure all relevant windows within the neighbouring properties have been identified.
- 5.1.4 Where limited access is available, reasonable assumptions will have been made.
- 5.1.5 We have adopted the conventional approach of assessing all habitable rooms within domestic properties.
- 5.1.6 Right of Light Consulting have endeavoured to include in the report those matters, which they have knowledge of or of which they have been made aware, that might adversely affect the validity of the opinion given.

5.2 Project Specific

5.2.1 None



| APPENDIX 1 |
|---------------------|
| WINDOW & GARDEN KEY |
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Neighbouring Windows



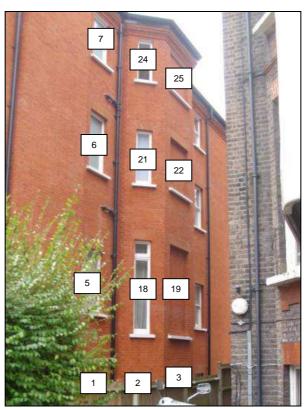
7 Fitzjohns Avenue



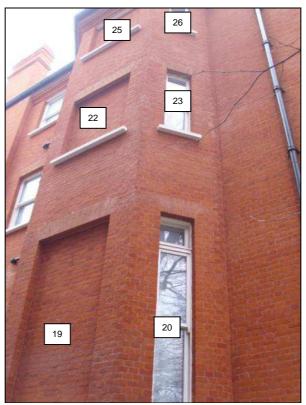
7 Fitzjohns Avenue



7 Fitzjohns Avenue



7 Fitzjohns Avenue



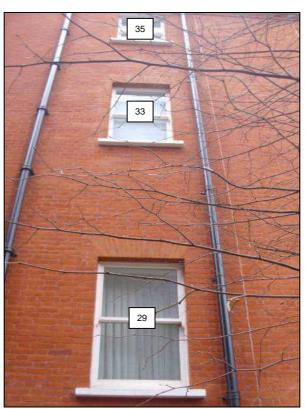
7 Fitzjohns Avenue



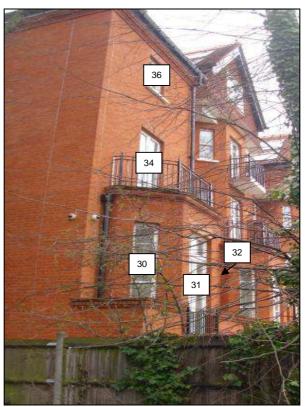
7 Fitzjohns Avenue



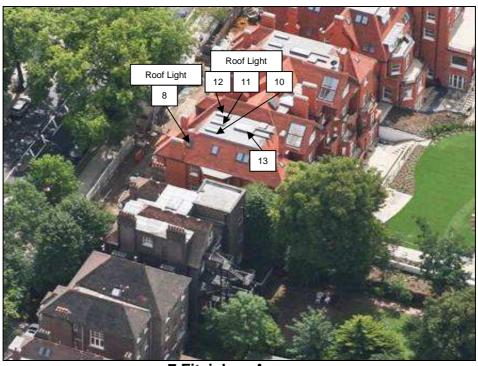
7 Fitzjohns Avenue



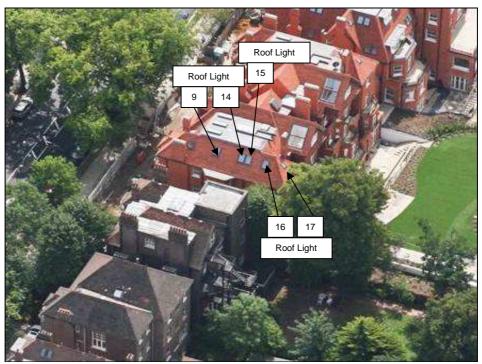
7 Fitzjohns Avenue



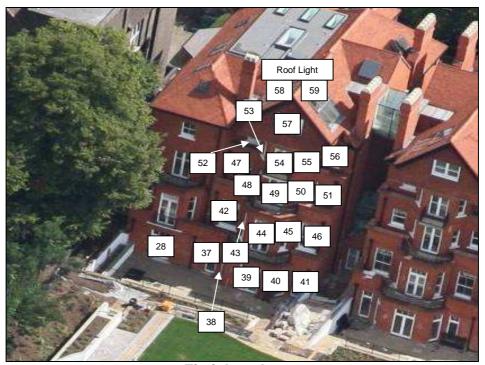
7 Fitzjohns Avenue



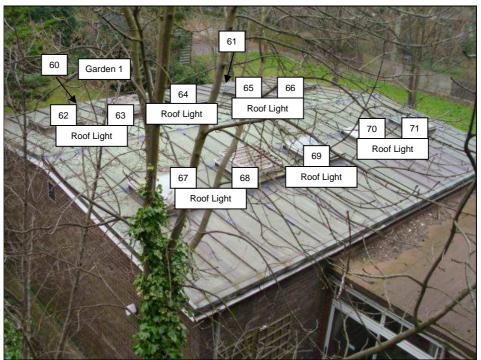
7 Fitzjohns Avenue



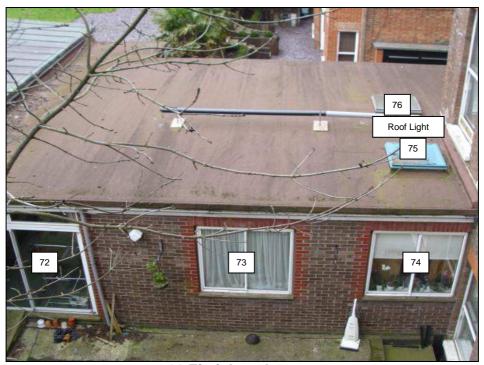
7 Fitzjohns Avenue



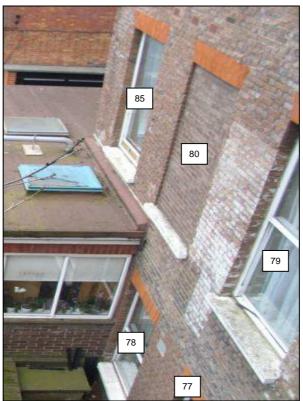
7 Fitzjohns Avenue



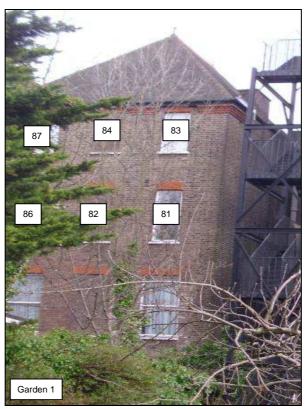
11 Fitzjohns Avenue



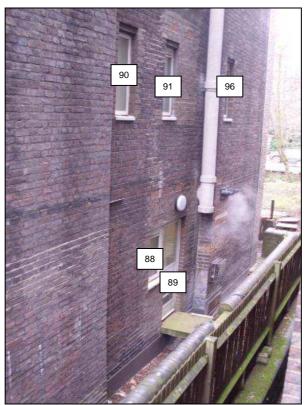
11 Fitzjohns Avenue



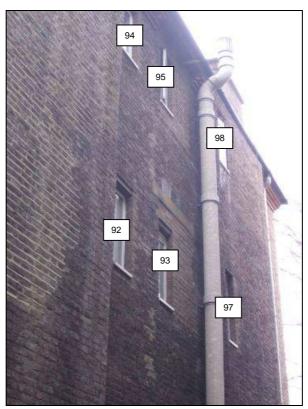
11 Fitzjohns Avenue



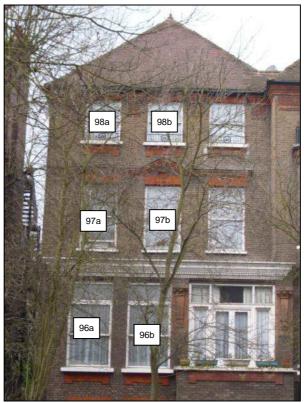
11 Fitzjohns Avenue



11 Fitzjohns Avenue



11 Fitzjohns Avenue



11 Fitzjohns Avenue

| APPENDIX 2 | |
|--------------------------|-------|
| DAYLIGHT AND SUNLIGHT RE | SULTS |
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Appendix 2 - Vertical Sky Component 9 Fitzjohns Avenue, London NW3 5JY

| Reference | Use Class | | Vertical Sky | Component | |
|----------------------|-------------|--------|--------------|-----------|-------|
| | | Before | After | Loss | Ratio |
| 7 Fitzjohns Avenue | | | | | |
| 7 Fitzjorins Averlue | | | | | |
| Window 1 | Bedroom | 5.9% | 6.2% | -0.3% | 1.05 |
| Window 2 | Bedroom | 10.3% | 10.4% | -0.1% | 1.01 |
| Window 3 | Bedroom | 4.8% | 4.4% | 0.4% | 0.92 |
| Window 4 | Bedroom | 13.8% | 11.9% | 1.9% | 0.86 |
| Window 5 | Ensuite | 7.7% | 8.1% | -0.4% | 1.05 |
| Window 6 | Ensuite | 12.3% | 12.9% | -0.6% | 1.05 |
| Window 7 | Ensuite | 20.4% | 20.8% | -0.4% | 1.02 |
| Window 8 | Kitchen | 75.4% | 75.5% | -0.1% | 1.0 |
| Window 9 | Kitchen | 75.2% | 75.2% | 0.0% | 1.0 |
| Window 10 | Kitchen | 99.0% | 99.0% | 0.0% | 1.0 |
| Window 11 | Kitchen | 98.4% | 98.4% | 0.0% | 1.0 |
| Window 12 | Kitchen | 96.2% | 96.2% | 0.0% | 1.0 |
| Window 13 | Habitable | 97.9% | 97.9% | 0.0% | 1.0 |
| Window 14 | Bedroom | 75.3% | 75.4% | -0.1% | 1.0 |
| Window 15 | Bedroom | 75.4% | 75.5% | -0.1% | 1.0 |
| Window 16 | Ensuite | 75.6% | 75.6% | 0.0% | 1.0 |
| Window 17 | Ensuite | 77.9% | 77.9% | 0.0% | 1.0 |
| Window 18 | Bedroom | 11.8% | 12.1% | -0.3% | 1.03 |
| Window 19 | Bedroom | 6.6% | 6.2% | 0.4% | 0.94 |
| Window 20 | Bedroom | 16.6% | 14.2% | 2.4% | 0.86 |
| Window 21 | Bedroom | 15.3% | 15.7% | -0.4% | 1.03 |
| Window 22 | Bedroom | 9.8% | 10.5% | -0.7% | 1.07 |
| Window 23 | Bedroom | 18.2% | 17.0% | 1.2% | 0.93 |
| Window 24 | Bedroom | 23.6% | 23.4% | 0.2% | 0.99 |
| Window 25 | Bedroom | 19.0% | 20.2% | -1.2% | 1.06 |
| Window 26 | Bedroom | 23.2% | 24.5% | -1.3% | 1.06 |
| Window 27 | Secondary | 12.8% | 9.7% | 3.1% | 0.76 |
| Window 28 | Dining | 36.1% | 36.1% | 0.0% | 1.0 |
| Window 29 | Secondary | 17.0% | 12.9% | 4.1% | 0.76 |
| Window 30 | Kitchen | 34.5% | 34.2% | 0.3% | 0.99 |
| Window 31 | Kitchen | 38.8% | 38.9% | -0.1% | 1.0 |
| Window 32 | Kitchen | 31.6% | 31.6% | 0.0% | 1.0 |
| Window 33 | Secondary | 20.0% | 17.3% | 2.7% | 0.87 |
| Window 34 | Living Room | 39.4% | 39.4% | 0.0% | 1.0 |
| Window 35 | Secondary | 23.5% | 24.3% | -0.8% | 1.03 |
| Window 36 | Living Room | 37.3% | 37.3% | 0.0% | 1.0 |
| Window 37 | Living Room | 34.1% | 34.1% | 0.0% | 1.0 |
| Window 38 | Living Room | 31.5% | 31.6% | -0.1% | 1.0 |
| Window 39 | Living Room | 37.2% | 37.2% | 0.0% | 1.0 |
| Window 40 | Living Room | 32.7% | 32.7% | 0.0% | 1.0 |

Appendix 2 - Vertical Sky Component 9 Fitzjohns Avenue, London NW3 5JY

| Reference | Use Class | | Vertical Sky | Component | |
|---------------------|-------------|-------------|--------------|-----------|-------|
| rtororonoo | Coc Glass | Before | After | Loss | Ratio |
| Window 41 | Living Room | 34.6% | 34.6% | 0.0% | 1.0 |
| Window 42 | Living Room | 35.0% | 35.0% | 0.0% | 1.0 |
| Window 43 | Living Room | 31.3% | 31.3% | 0.0% | 1.0 |
| Window 44 | Living Room | 38.8% | 38.9% | -0.1% | 1.0 |
| Window 45 | Living Room | 32.5% | 32.5% | 0.0% | 1.0 |
| Window 46 | Living Room | 35.9% | 35.9% | 0.0% | 1.0 |
| Window 47 | Kitchen | 30.0% | 30.0% | 0.0% | 1.0 |
| Window 48 | Kitchen | 29.6% | 29.6% | 0.0% | 1.0 |
| Window 49 | Kitchen | 39.4% | 39.5% | -0.1% | 1.0 |
| Window 50 | Kitchen | 32.3% | 32.3% | 0.0% | 1.0 |
| Window 51 | Kitchen | 35.4% | 35.4% | 0.0% | 1.0 |
| Window 52 | Kitchen | 14.9% | 14.9% | 0.0% | 1.0 |
| Window 53 | Kitchen | 28.0% | 28.0% | 0.0% | 1.0 |
| Window 54 | Kitchen | 39.5% | 39.5% | 0.0% | 1.0 |
| Window 55 | Kitchen | 30.0% | 30.0% | 0.0% | 1.0 |
| Window 56 | Kitchen | 21.2% | 21.2% | 0.0% | 1.0 |
| Window 57 | Bedroom | 39.5% | 39.5% | 0.0% | 1.0 |
| Window 58 | Bedroom | 72.7% | 72.7% | 0.0% | 1.0 |
| Window 59 | Bedroom | 73.6% 73.6% | | 0.0% | 1.0 |
| 11 Fitzjohns Avenue | | | | | |
| Window 60 | Habitable | 36.5% | 36.5% | 0.0% | 1.0 |
| Window 61 | Habitable | 36.9% | 36.9% | 0.0% | 1.0 |
| Window 62 | Habitable | 92.5% | 92.6% | -0.1% | 1.0 |
| Window 63 | Habitable | 93.6% | 93.7% | -0.1% | 1.0 |
| Window 64 | Habitable | 94.0% | 94.1% | -0.1% | 1.0 |
| Window 65 | Habitable | 94.4% | 94.5% | -0.1% | 1.0 |
| Window 66 | Habitable | 94.7% | 94.8% | -0.1% | 1.0 |
| Window 67 | Habitable | 87.2% | 87.7% | -0.5% | 1.01 |
| Window 68 | Habitable | 87.9% | 88.3% | -0.4% | 1.0 |
| Window 69 | Habitable | 88.8% | 89.1% | -0.3% | 1.0 |
| Window 70 | Habitable | 89.8% | 90.0% | -0.2% | 1.0 |
| Window 71 | Habitable | 90.6% | 90.7% | -0.1% | 1.0 |
| Window 72 | Habitable | 13.7% | 14.7% | -1.0% | 1.07 |
| Window 73 | Habitable | 17.2% | 19.0% | -1.8% | 1.1 |
| Window 74 | Habitable | 13.6% | 14.6% | -1.0% | 1.07 |
| Window 75 | Habitable | 53.5% | 54.7% | -1.2% | 1.02 |
| Window 76 | Habitable | 56.1% | 56.9% | -0.8% | 1.01 |
| Window 77 | Habitable | 25.8% | 26.3% | -0.5% | 1.02 |
| Window 78 | Habitable | 19.0% | 19.4% | -0.4% | 1.02 |
| Window 79 | Habitable | 35.5% | 36.6% | -1.1% | 1.03 |
| Window 80 | Habitable | 37.0% | 37.9% | -0.9% | 1.02 |

Appendix 2 - Vertical Sky Component 9 Fitzjohns Avenue, London NW3 5JY

| Reference Use Class | | Vertical Sky Component | | | | | | |
|---------------------|-----------|------------------------|-------|-------|-------|--|--|--|
| | | Before | After | Loss | Ratio | | | |
| Window 81 | Habitable | 36.9% | 39.2% | -2.3% | 1.06 | | | |
| Window 82 | Habitable | 38.3% | 39.3% | -1.0% | 1.03 | | | |
| Window 83 | Habitable | 38.6% | 39.4% | -0.8% | 1.02 | | | |
| Window 84 | Habitable | 39.2% | 39.5% | -0.3% | 1.01 | | | |
| Window 85 | Habitable | 37.8% | 38.3% | -0.5% | 1.01 | | | |
| Window 86 | Habitable | 38.9% | 39.4% | -0.5% | 1.01 | | | |
| Window 87 | Habitable | 39.3% | 39.5% | -0.2% | 1.01 | | | |
| Window 88 | Habitable | 1.7% | 1.9% | -0.2% | 1.12 | | | |
| Window 89 | Habitable | 1.9% | 2.0% | -0.1% | 1.05 | | | |
| Window 90 | Wc | 2.7% | 3.0% | -0.3% | 1.11 | | | |
| Window 91 | Wc | 2.8% | 3.0% | -0.2% | 1.07 | | | |
| Window 92 | Wc | 4.0% | 4.3% | -0.3% | 1.08 | | | |
| Window 93 | Wc | 4.1% | 4.2% | -0.1% | 1.02 | | | |
| Window 94 | Wc | 7.3% | 7.5% | -0.2% | 1.03 | | | |
| Window 95 | Wc | 7.3% | 7.4% | -0.1% | 1.01 | | | |
| Window 96 | Secondary | 4.0% | 3.9% | 0.1% | 0.98 | | | |
| Window 96a | Habitable | 35.1% | 35.1% | 0.0% | 1.0 | | | |
| Window 96b | Habitable | 35.0% | 35.0% | 0.0% | 1.0 | | | |
| Window 97 | Secondary | 5.2% | 5.1% | 0.1% | 0.98 | | | |
| Window 97a | Habitable | 36.8% | 36.8% | 0.0% | 1.0 | | | |
| Window 97b | Habitable | 36.5% | 36.5% | 0.0% | 1.0 | | | |
| Window 98 | Secondary | 9.0% | 9.0% | 0.0% | 1.0 | | | |
| Window 98a | Habitable | 36.5% | 36.5% | 0.0% | 1.0 | | | |
| Window 98b | Habitable | 36.4% | 36.4% | 0.0% | 1.0 | | | |

Appendix 2 - Sunlight to Windows 9 Fitzjohns Avenue, London NW3 5JY

| | | Sunlight to Windows | | | | | | | | |
|--------------------|---------------|---------------------|----------------------|------|-------|--------|-----------------------|------|-------|--|
| Reference | Use Class | Т | Total Sunlight Hours | | | | Winter Sunlight Hours | | | |
| | | Before | After | Loss | Ratio | Before | After | Loss | Ratio | |
| 7 Fitzjohns Avenue | | | | | | | | | | |
| Window 1 | Bedroom | 0% | 0% | 0% | 1.0 | 0% | 0% | 0% | 1.0 | |
| Window 2 | Bedroom | 5% | 5% | 0% | 1.0 | 0% | 0% | 0% | 1.0 | |
| Window 3 | Bedroom | 10% | 10% | 0% | 1.0 | 0% | 0% | 0% | 1.0 | |
| Window 4 | Bedroom | 7% | 7% | 0% | 1.0 | 0% | 0% | 0% | 1.0 | |
| Window 5 | Ensuite | 0% | 0% | 0% | 1.0 | 0% | 0% | 0% | 1.0 | |
| Window 6 | Ensuite | 1% | 1% | 0% | 1.0 | 0% | 0% | 0% | 1.0 | |
| Window 7 | Ensuite | 1% | 1% | 0% | 1.0 | 0% | 0% | 0% | 1.0 | |
| Window 8 | Kitchen | 56% | 56% | 0% | 1.0 | 0% | 0% | 0% | 1.0 | |
| Window 9 | Kitchen | 56% | 56% | 0% | 1.0 | 0% | 0% | 0% | 1.0 | |
| Window 10 | Kitchen | 97% | 97% | 0% | 1.0 | 27% | 27% | 0% | 1.0 | |
| Window 11 | Kitchen | 94% | 94% | 0% | 1.0 | 24% | 24% | 0% | 1.0 | |
| Window 12 | Kitchen | 86% | 86% | 0% | 1.0 | 16% | 16% | 0% | 1.0 | |
| Window 13 | Habitable | 91% | 91% | 0% | 1.0 | 21% | 21% | 0% | 1.0 | |
| Window 14 | Bedroom | 56% | 56% | 0% | 1.0 | 0% | 0% | 0% | 1.0 | |
| Window 15 | Bedroom | 56% | 56% | 0% | 1.0 | 0% | 0% | 0% | 1.0 | |
| Window 16 | Ensuite/Cloak | 56% | 56% | 0% | 1.0 | 0% | 0% | 0% | 1.0 | |
| Window 17 | Ensuite/Cloak | 68% | 68% | 0% | 1.0 | 18% | 18% | 0% | 1.0 | |
| Window 18 | Bedroom | 5% | 5% | 0% | 1.0 | 0% | 0% | 0% | 1.0 | |
| Window 19 | Bedroom | 11% | 11% | 0% | 1.0 | 0% | 0% | 0% | 1.0 | |
| Window 20 | Bedroom | 8% | 8% | 0% | 1.0 | 0% | 0% | 0% | 1.0 | |
| Window 21 | Bedroom | 6% | 6% | 0% | 1.0 | 0% | 0% | 0% | 1.0 | |
| Window 22 | Bedroom | 11% | 11% | 0% | 1.0 | 0% | 0% | 0% | 1.0 | |
| Window 23 | Bedroom | 8% | 8% | 0% | 1.0 | 0% | 0% | 0% | 1.0 | |
| Window 24 | Bedroom | 9% | 9% | 0% | 1.0 | 0% | 0% | 0% | 1.0 | |
| Window 25 | Bedroom | 12% | 12% | 0% | 1.0 | 0% | 0% | 0% | 1.0 | |
| Window 26 | Bedroom | 9% | 9% | 0% | 1.0 | 0% | 0% | 0% | 1.0 | |
| Window 27 | Secondary | 6% | 6% | 0% | 1.0 | 0% | 0% | 0% | 1.0 | |
| Window 28 | Dining | 49% | 49% | 0% | 1.0 | 14% | 14% | 0% | 1.0 | |
| Window 29 | Secondary | 7% | 7% | 0% | 1.0 | 0% | 0% | 0% | 1.0 | |
| Window 30 | Kitchen | 24% | 24% | 0% | 1.0 | 4% | 4% | 0% | 1.0 | |
| Window 31 | Kitchen | 50% | 50% | 0% | 1.0 | 15% | 15% | 0% | 1.0 | |
| Window 32 | Kitchen | 51% | 51% | 0% | 1.0 | 15% | 15% | 0% | 1.0 | |
| Window 33 | Secondary | 7% | 7% | 0% | 1.0 | 0% | 0% | 0% | 1.0 | |
| Window 34 | Living Room | 50% | 50% | 0% | 1.0 | 15% | 15% | 0% | 1.0 | |
| Window 35 | Secondary | 8% | 8% | 0% | 1.0 | 0% | 0% | 0% | 1.0 | |
| Window 36 | Living Room | 43% | 43% | 0% | 1.0 | 14% | 14% | 0% | 1.0 | |
| Window 37 | Living Room | 33% | 33% | 0% | 1.0 | 7% | 7% | 0% | 1.0 | |
| Window 38 | Living Room | 21% | 21% | 0% | 1.0 | 2% | 2% | 0% | 1.0 | |
| Window 39 | Living Room | 50% | 50% | 0% | 1.0 | 15% | 15% | 0% | 1.0 | |
| Window 40 | Living Room | 53% | 53% | 0% | 1.0 | 17% | 17% | 0% | 1.0 | |

Appendix 2 - Sunlight to Windows 9 Fitzjohns Avenue, London NW3 5JY

| | | Sunlight to Windows | | | | | | | |
|---------------------|-------------|---------------------|----------------------|------|-------|--------|----------|-----------|-------|
| Reference | Use Class | T | Total Sunlight Hours | | | W | inter Su | nlight Ho | urs |
| | | Before | After | Loss | Ratio | Before | After | Loss | Ratio |
| Window 41 | Living Room | 50% | 50% | 0% | 1.0 | 15% | 15% | 0% | 1.0 |
| Window 42 | Living Room | 40% | 40% | 0% | 1.0 | 9% | 9% | 0% | 1.0 |
| Window 43 | Living Room | 24% | 24% | 0% | 1.0 | 4% | 4% | 0% | 1.0 |
| Window 44 | Living Room | 50% | 50% | 0% | 1.0 | 15% | 15% | 0% | 1.0 |
| Window 45 | Living Room | 50% | 50% | 0% | 1.0 | 15% | 15% | 0% | 1.0 |
| Window 46 | Living Room | 49% | 49% | 0% | 1.0 | 14% | 14% | 0% | 1.0 |
| Window 47 | Kitchen | 32% | 32% | 0% | 1.0 | 7% | 7% | 0% | 1.0 |
| Window 48 | Kitchen | 24% | 24% | 0% | 1.0 | 4% | 4% | 0% | 1.0 |
| Window 49 | Kitchen | 50% | 50% | 0% | 1.0 | 15% | 15% | 0% | 1.0 |
| Window 50 | Kitchen | 53% | 53% | 0% | 1.0 | 15% | 15% | 0% | 1.0 |
| Window 51 | Kitchen | 40% | 40% | 0% | 1.0 | 10% | 10% | 0% | 1.0 |
| Window 52 | Kitchen | 16% | 16% | 0% | 1.0 | 3% | 3% | 0% | 1.0 |
| Window 53 | Kitchen | 24% | 24% | 0% | 1.0 | 4% | 4% | 0% | 1.0 |
| Window 54 | Kitchen | 50% | 50% | 0% | 1.0 | 15% | 15% | 0% | 1.0 |
| Window 55 | Kitchen | 47% | 47% | 0% | 1.0 | 16% | 16% | 0% | 1.0 |
| Window 56 | Kitchen | 38% | 38% | 0% | 1.0 | 10% | 10% | 0% | 1.0 |
| Window 57 | Bedroom | 50% | 50% | 0% | 1.0 | 15% | 15% | 0% | 1.0 |
| Window 58 | Bedroom | 47% | 47% | 0% | 1.0 | 0% | 0% | 0% | 1.0 |
| Window 59 | Bedroom | 94% | 94% | 0% | 1.0 | 29% | 29% | 0% | 1.0 |
| 11 Fitzjohns Avenue | | | | | | | | | |
| Window 60 | Habitable | 48% | 48% | 0% | 1.0 | 13% | 13% | 0% | 1.0 |
| Window 61 | Habitable | 48% | 48% | 0% | 1.0 | 13% | 13% | 0% | 1.0 |
| Window 62 | Habitable | 77% | 77% | 0% | 1.0 | 20% | 20% | 0% | 1.0 |
| Window 63 | Habitable | 77% | 76% | 1% | 0.99 | 21% | 21% | 0% | 1.0 |
| Window 64 | Habitable | 77% | 77% | 0% | 1.0 | 21% | 21% | 0% | 1.0 |
| Window 65 | Habitable | 83% | 83% | 0% | 1.0 | 22% | 22% | 0% | 1.0 |
| Window 66 | Habitable | 80% | 80% | 0% | 1.0 | 21% | 21% | 0% | 1.0 |
| Window 67 | Habitable | 70% | 71% | -1% | 1.01 | 20% | 20% | 0% | 1.0 |
| Window 68 | Habitable | 68% | 70% | -2% | 1.03 | 20% | 21% | -1% | 1.05 |
| Window 69 | Habitable | 69% | 71% | -2% | 1.03 | 19% | 21% | -2% | 1.11 |
| Window 70 | Habitable | 72% | 75% | -3% | 1.04 | 19% | 21% | -2% | 1.11 |
| Window 71 | Habitable | 74% | 74% | 0% | 1.0 | 21% | 21% | 0% | 1.0 |
| Window 72 | Habitable | 23% | 27% | -4% | 1.17 | 7% | 7% | 0% | 1.0 |
| Window 73 | Habitable | 38% | 43% | -5% | 1.13 | 10% | 11% | -1% | 1.1 |
| Window 74 | Habitable | 33% | 36% | -3% | 1.09 | 9% | 8% | 1% | 0.89 |
| Window 75 | Habitable | 48% | 49% | -1% | 1.02 | 13% | 13% | 0% | 1.0 |
| Window 76 | Habitable | 49% | 49% | 0% | 1.0 | 13% | 13% | 0% | 1.0 |
| Window 77 | Habitable | 25% | 30% | -5% | 1.2 | 3% | 2% | 1% | 0.67 |
| Window 78 | Habitable | 26% | 32% | -6% | 1.23 | 4% | 3% | 1% | 0.75 |
| Window 79 | Habitable | 35% | 42% | -7% | 1.2 | 12% | 7% | 5% | 0.58 |
| Window 80 | Habitable | 42% | 48% | -6% | 1.14 | 11% | 13% | -2% | 1.18 |

Appendix 2 - Sunlight to Windows 9 Fitzjohns Avenue, London NW3 5JY

| | | Sunlight to Windows | | | | | | | | |
|------------|-----------|----------------------|-------|------|-------|-----------------------|-------|------|-------|--|
| Reference | Use Class | Total Sunlight Hours | | | | Winter Sunlight Hours | | | | |
| | | Before | After | Loss | Ratio | Before | After | Loss | Ratio | |
| Window 81 | Habitable | 41% | 49% | -8% | 1.2 | 12% | 14% | -2% | 1.17 | |
| Window 82 | Habitable | 45% | 49% | -4% | 1.09 | 10% | 14% | -4% | 1.4 | |
| Window 83 | Habitable | 46% | 50% | -4% | 1.09 | 11% | 15% | -4% | 1.36 | |
| Window 84 | Habitable | 50% | 50% | 0% | 1.0 | 15% | 15% | 0% | 1.0 | |
| Window 85 | Habitable | 46% | 50% | -4% | 1.09 | 13% | 15% | -2% | 1.15 | |
| Window 86 | Habitable | 49% | 50% | -1% | 1.02 | 14% | 15% | -1% | 1.07 | |
| Window 87 | Habitable | 50% | 50% | 0% | 1.0 | 15% | 15% | 0% | 1.0 | |
| Window 88 | Habitable | 9% | 10% | -1% | 1.11 | 0% | 0% | 0% | 1.0 | |
| Window 89 | Habitable | 7% | 9% | -2% | 1.29 | 0% | 0% | 0% | 1.0 | |
| Window 90 | Wc | 11% | 13% | -2% | 1.18 | 1% | 0% | 1% | 0.01 | |
| Window 91 | Wc | 9% | 12% | -3% | 1.33 | 1% | 1% | 0% | 1.0 | |
| Window 92 | Wc | 12% | 15% | -3% | 1.25 | 1% | 2% | -1% | 2.0 | |
| Window 93 | Wc | 12% | 15% | -3% | 1.25 | 2% | 4% | -2% | 2.0 | |
| Window 94 | Wc | 23% | 23% | 0% | 1.0 | 3% | 3% | 0% | 1.0 | |
| Window 95 | Wc | 23% | 22% | 1% | 0.96 | 3% | 3% | 0% | 1.0 | |
| Window 96 | Secondary | 19% | 18% | 1% | 0.95 | 1% | 1% | 0% | 1.0 | |
| Window 96a | Habitable | 46% | 46% | 0% | 1.0 | 12% | 12% | 0% | 1.0 | |
| Window 96b | Habitable | 46% | 46% | 0% | 1.0 | 12% | 12% | 0% | 1.0 | |
| Window 97 | Secondary | 19% | 20% | -1% | 1.05 | 2% | 3% | -1% | 1.5 | |
| Window 97a | Habitable | 48% | 48% | 0% | 1.0 | 14% | 14% | 0% | 1.0 | |
| Window 97b | Habitable | 47% | 47% | 0% | 1.0 | 14% | 14% | 0% | 1.0 | |
| Window 98 | Secondary | 29% | 30% | -1% | 1.03 | 4% | 5% | -1% | 1.25 | |
| Window 98a | Habitable | 44% | 44% | 0% | 1.0 | 14% | 14% | 0% | 1.0 | |
| Window 98b | Habitable | 43% | 43% | 0% | 1.0 | 13% | 13% | 0% | 1.0 | |

Appendix 2 - Overshadowing to Gardens and Open Spaces 9 Fitzjohns Avenue, London NW3 5JY

| Reference | Total Area | Area r | Area receiving at least two hours of sunlight on 21st March | | | | | | | |
|---------------------|------------|----------|---|-----------|-----|---------|----|-------|--|--|
| | | Before | | After | | Loss | | Ratio | | |
| 11 Fitzjohns Avenue | | | | | | | | | | |
| Garden 1 | 409.2 m2 | 275.6 m2 | 67% | 275.57 m2 | 67% | 0.03 m2 | 0% | 1.0 | | |

| APPENDIX 3 | |
|--------------------------------|-------------|
| OVERSHADOWING TO GARDENS AND (| OPEN SPACES |
| | |
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