

**DAYLIGHT AND SUNLIGHT
REPORT ON THE PROPOSED
EXTENSION OF 38-40
WINDMILL STREET, LONDON
W1T 2JX**

by

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of

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CONTENTS

<u>SECTION</u>	<u>PAGE NOS.</u>
1. QUALIFICATIONS AND EXPERIENCE.....	3
2. INTRODUCTION AND SCOPE OF REPORT	4
3. INFORMATION RELIED UPON	6
4. THE RELEVANT BRE TESTS.....	7
5. SCHEME ASSESSMENT	10
6. CONCLUSION	12

KW1 Brill Owen Drawing Numbers 09/702/sur09 and 09/702/SK101.

1. QUALIFICATIONS AND EXPERIENCE

- 1.1 I am a Member of the Royal Institution of Chartered Surveyors and was accepted as an Associate of the Building Surveying Division (now Faculty) in 1992.
- 1.2 I am a member of the CIBSE Daylight Group and provide academic training and support to Local Authorities, The Bartlett School of Architecture, Oxford Brookes University, Solicitors, Architects and fellow Surveyors.
- 1.3 I am a Director of the firm of Anstey Horne & Company, a long established practice specialising in rights of light, daylight and sunlight and party wall matters.
- 1.4 I have more than 20 years specialist experience in the fields of rights of light (common law), sunlight and daylight (for town and country planning) and party wall and boundary disputes.
- 1.5 I advise both Developers and Adjoining Owners on the potential impact of new development. I have also been retained by a number of Local Authorities and Development Agencies to provide expert advice on daylight issues. Those services include analysing the impact of proposed development, preparation and presentation of technical and expert evidence, leading to the presentation of that expert evidence at planning appeals, Public Inquiries and the High Court.

2. INTRODUCTION AND SCOPE OF REPORT

- 2.1 I am instructed by Giordano Limited to advise on the potential impact on natural daylight and sunlight as a result of the extension of 38-40 Windmill Street, London W1 and assess the availability of daylight and sunlight to the habitable rooms in the proposed new dwellings within the development itself.
- 2.2 The existing building has a mixture of commercial and residential use and the proposal is to extend that existing building rearwards and introduce a larger proportion of residential dwellings. The building itself lies in an area of mixed use properties with a combination of retail, leisure, office and residential premises in close proximity.
- 2.3 The purpose of this report is to provide an objective assessment of the impact on daylight and sunlight in accordance with the standards contained in the Building Research Establishment (BRE) Guidelines “*Site Layout Planning for Daylight and Sunlight – A Guide to Good Practice*” 1991. These are the standards and controls referred to in Camden’s UDP in terms of protecting the existing amenity of neighbouring dwellings. As a separate exercise, I will also comment on the adequacy of daylight and sunlight that will be enjoyed by the proposed new dwellings.

2.4 We have not had access to any of the existing neighbouring buildings around the site but the only residential building that could be affected by the proposed development, and hence fall within the Council's policy considerations is 7-15 Whitfield Street. That building has recently been constructed and a full set of design drawings for that building has been obtained. It has therefore been possible to set out the relationship of the two buildings both in terms of plan and section.

3. INFORMATION RELIED UPON

3.1 My assessment has been based on the following information:

- For the existing building, I have relied upon the Brill Owen drawing numbers 09/002/Sur01, Sur02, Sur03, Sur04, Sur05, Sur06, Sur07, Sur09, Sur11 and Sur 12.
- For the proposed building, I have relied upon the Brill Owen drawing numbers 09/702/SK101, SK102, SK103, SK104, SK105, SK106 and SK107.

3.2 I have also reviewed the planning records for 7-15 Whitfield Street.

4. THE RELEVANT BRE TESTS

- 4.1 The Council's policy in connection with amenity is measured objectively by the use of the scientific and empirical measurements contained in the BRE Guidelines. These are the standards that are generally adopted for assessing the impact on "amenity" in the context of daylight and sunlight for planning purposes and are also the standards adopted by the Planning Inspectorate at appeal.
- 4.2 It is not however always necessary to undertake the numerical tests for every application as the tests are only required where daylight or sunlight is likely to be affected by a proposed development. In order to make that judgement, the BRE Guidelines contain an initial Rule of Thumb which should be used to determine whether there is the potential for daylight or sunlight to be affected and hence whether it is necessary to undertake more detailed calculations. That initial test is the simple trigonometric "angle test" whereby a building will continue to be able to receive good levels of daylight provided that the height of the proposed development does not breach a vertical angle subtended at 25 degrees from the horizontal taking the mid point of the ground floor (or lowest) windows serving a habitable room in a neighbouring existing building. This 25 degree rule is a very simple and crude test and should only be applied where the proposed obstruction is directly opposite and parallel to the plane of the window being tested, and where it is a reasonably uniform profile. It is equally applicable when undertaking a screen test for new-build habitable rooms.

4.3 Where more detailed numerical testing is required, the most appropriate test from the Guidelines is the measurement of Vertical Sky Component on the face of the lowest window under “existing” and “proposed” conditions. The values obtained from the VSC analysis should be interpreted using two scales of measurement. First, the actual value can be measured on an absolute scale whereby any value in excess of 27% VSC represents a good level of natural daylight. This level of daylight is comparable to the level that would be expected to be obtained for windows in the principal elevations of low density suburban housing and is often difficult to achieve in a higher density urban environment. In view of this, the second scale on which the VSC values should be measured is a percentage comparative scale. That is, the Guidelines recognise that it is often difficult to achieve the 27% threshold in an urban environment and through the research undertaken at the Building Research Establishment, they have determined that existing daylight and sunlight levels can be reduced by a factor of 0.2 (20%) before the change in lighting levels is deemed to be noticeable. It is therefore permissible to reduce the existing value of daylight or sunlight by a factor of 0.2 (20%) and satisfy the Guidelines.

4.4 This can be followed by the calculation of internal daylight distribution within each of the rooms by plotting the “no skyline” contour if the percentage reduction in VSC shows that the loss of light will be noticeable.

4.5 For proposed new dwellings, the adequacy of daylight is usually measured using Average Daylight Factors (ADF) rather than Vertical Sky Component (VSC) and Daylight Distribution. The methodology for calculating ADF is contained in Appendix C of the BRE Guidelines and is the methodology set out in the British Standard Code of Practice for Daylighting, BS8206 Part 2. That said, it is nonetheless unnecessary for any detailed numerical tests to be undertaken for daylight or sunlight where the obstruction in front of the window being tested subtends an angle of less than 25 degrees measured vertically taking the mid point of the window as the origin.

5. SCHEME ASSESSMENT

5.1 Annexed at Appendix KW1 are the Brill Owen drawing numbers 09/702/sur09 and 09/702/SK101. The first drawing is a section taken through the “existing” building and through the windows serving habitable rooms in 7-15 Whitfield Street. The second drawing is the same section but this time taken through the “proposed” extension. On that latter drawing, the Architect has drawn a “sight line” through each of the Whitfield Street windows to illustrate the position of the “no skyline” through each of those rooms. It can be seen from that section that the structure of the proposed new extension will be entirely within and below both sight lines and there therefore will be no impact on daylight or sunlight. If we were to run a technical analysis to measure VSC or Daylight Distribution to any of the windows within 7-15 Whitfield Street, the results would show that there would be no material impact for this very reason. It is therefore unnecessary for any detailed calculations to be undertaken.

5.2 It should also be noted that the Brill Owen drawing number 09/702/SK101 annexed at Appendix KW1 shows privacy louvers over the windows in 7-15 Whitfield Street. I understand that one of the conditions of the planning consent for 7-15 Whitfield Street was that the windows overlooking the Application Site, i.e. 38-40 Windmill Street, had to be obscured with these horizontal louvers for privacy reasons in order to prevent direct overlooking to the rear windows of 38-40 Windmill Street. This was also the subject of an agreement between the owner of 7-15 Whitfield Street and the current Applicant. As those louvers prevent a direct line of sight from one building to the other, the consequential effect on daylight and sunlight is the same and in real terms, there therefore will also be no impact on

daylight or sunlight at all. It should however be noted that the louver screens have yet to be erected on 7-15 Whitfield Street and this condition have therefore yet to be discharged.

5.3 Turning to the availability of daylight to the proposed new dwellings, it should be clear from the section drawing 09/702/SK101 at Appendix KW1 that the angle subtended from the lowest (first floor) window serving habitable rooms in the proposed development will not be greater than 25 degrees to the parapet of 7-15 Whitfield Street. Those windows will therefore receive well in excess of 27% VSC and it is therefore unnecessary for any detailed numerical testing as they comfortably satisfy the 25 degree screening rule.

5.4 As the windows in the proposed extensions do not face within 90 degrees of due south, they do not fall within the BRE sunlight criteria in any event as they do not receive any material sunlight on the spring equinox.

6. CONCLUSION

- 6.1 In conclusion, it is clear from the section drawing that the proposed extension will be within the “sight lines” of the existing parapet when viewed from the first and second floor windows of 7-15 Whitfield Street. There therefore will be no impact on daylight and sunlight at all to these windows as the proposed extension will be within the existing “shadow” of the existing building.
- 6.2 The south facing windows in 7-15 Whitfield Street are required to be obscured using horizontal louvers as part of the planning condition of their planning consent. A consequence of this condition is that the louvers prevent a direct line of sight in any event.
- 6.3 The habitable rooms in the proposed new dwellings will not have any obstruction that subtends an angle in excess of 25 degrees directly opposite each of the windows and those windows will therefore receive well in excess of 27% VSC and it is therefore unnecessary for any detailed measurements to be taken as the BRE Guidelines will be satisfied by a very comfortable margin.

6.4 In overall conclusion, the scheme is therefore well within the BRE Guidelines and it should therefore follow that the Council's policy objectives have been satisfied.

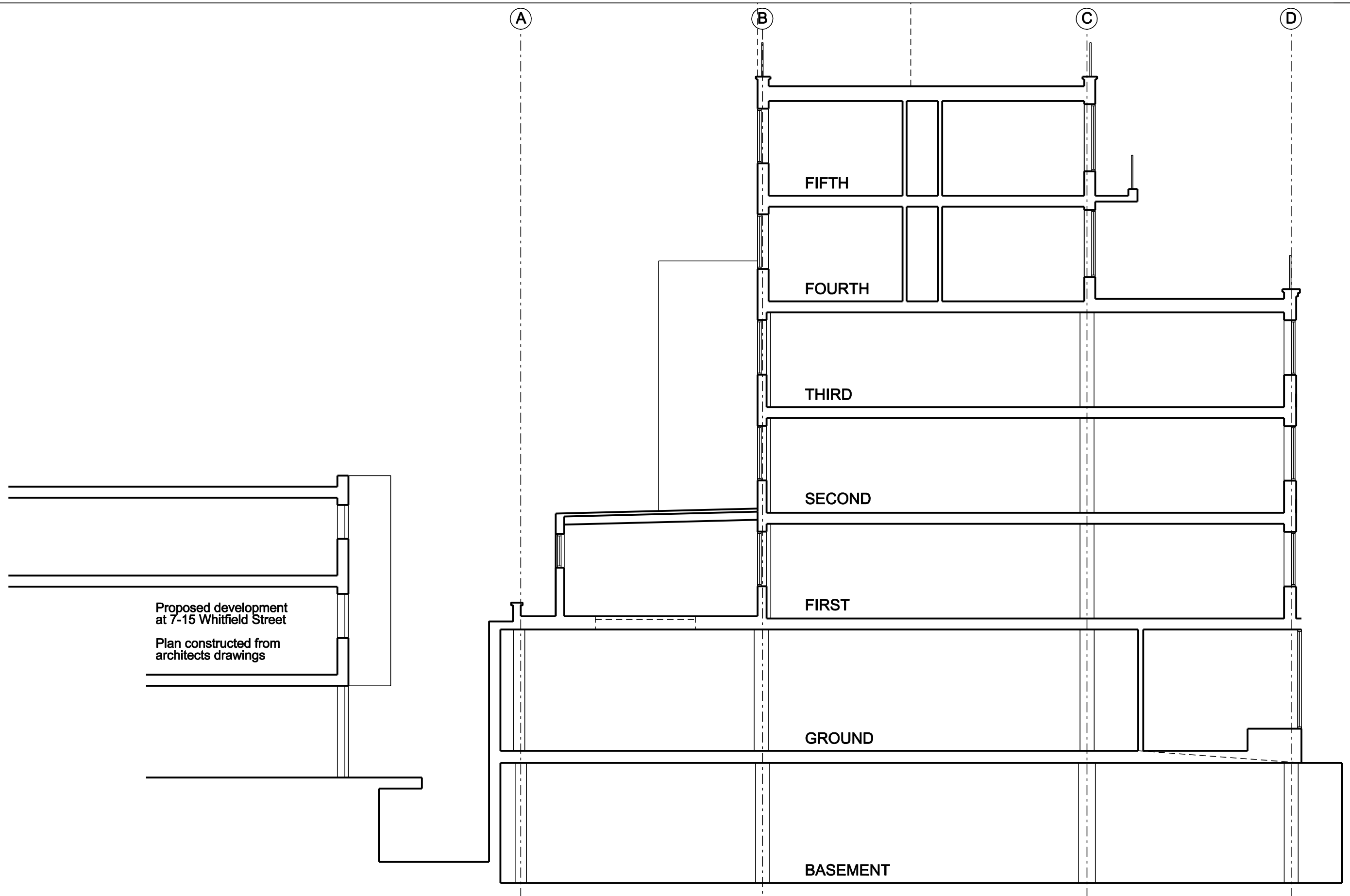
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Kaivin Wong

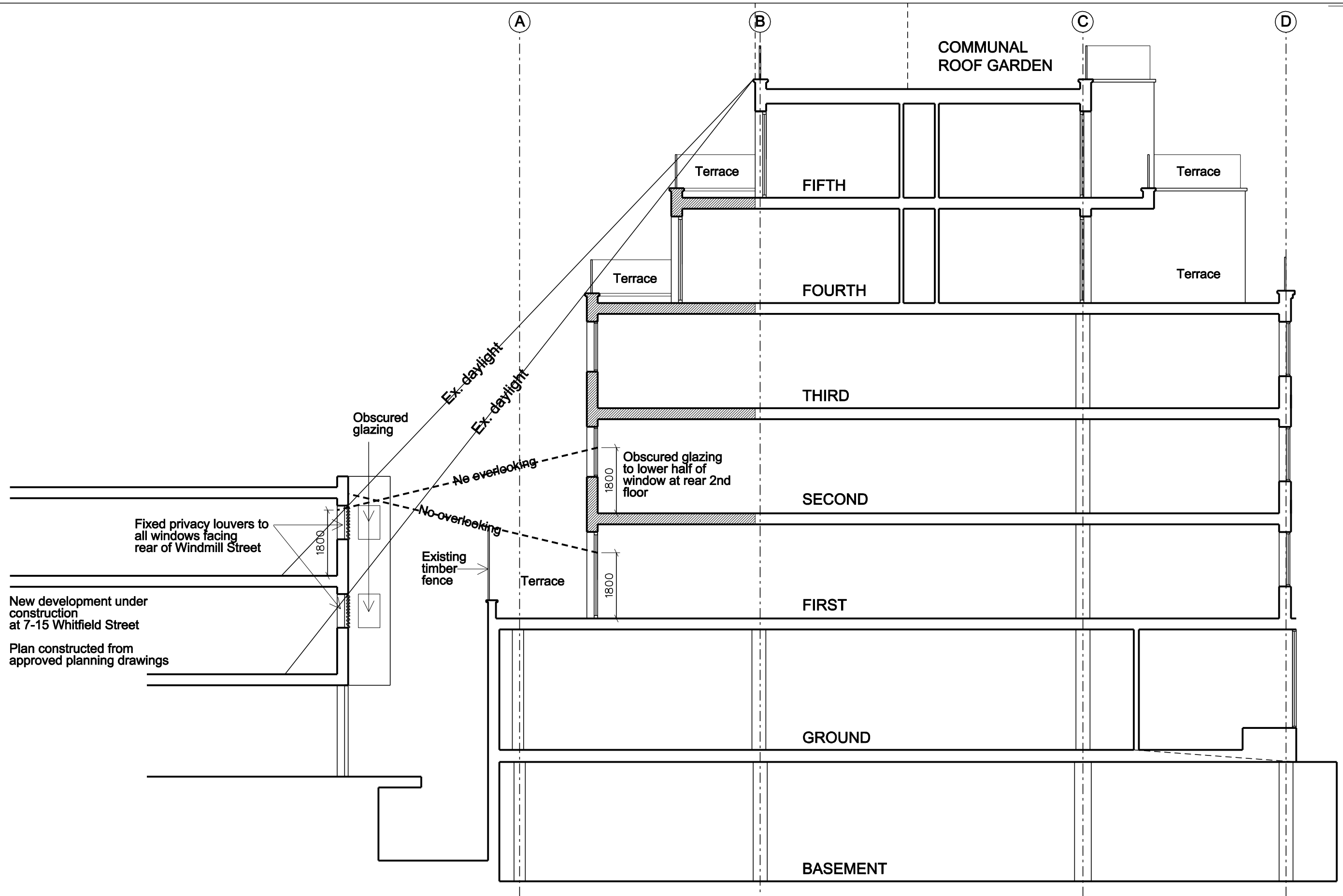
10 September 2010

KW 1



EXISTING SECTION A
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PROPOSED SECTION A
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