

Daylight and Sunlight Report for the Proposed Development at Kings College Road, London, NW3

Prepared for	Square Feet Architects
Prepared by	Desrine Oak BSc (Hons) MRICS
Date	27 November 2017
Reference	62917/IM/DTO

Malcolm Hollis LLP
140 London Wall, London, EC2Y 5DN
T +44 20 7622 9555 **F** +44 20 7627 9850 **W** malcolmhollis.com

Malcolm Hollis LLP, a Limited Liability Partnership. Registered in England and Wales number OC314362.
Registered office: Battersea Studios, 80-82 Silverthorne Road, London SW8 3HE.
VAT number 863 8914 80. A list of members is available from our registered office

Contents

Page

1.	Executive Summary	2
1.1	Scope	2
1.2	Assessment Criteria.....	2
1.3	Summary of Effect of Proposed Development on Existing Surrounding Buildings.....	2
1.4	Summary of Analysis of Daylight, Sunlight and Overshadowing for the New Development	3
1.5	Overall.....	3
2.	Introduction	4
2.1	Scope	4
2.2	Planning Policy.....	4
2.3	Assessment Criteria.....	4
2.4	Limitations	5
3.	Assessment & Results – Impact of New Development on Existing, Surrounding Buildings.....	7
3.1	Daylight	7
3.2	Sunlight.....	8
4.	Assessment & Results – Daylighting, Sunlighting & Overshadowing issues in the New Development	9
4.1	Internal Daylight.....	9
Appendix A Tests to be Applied		
Appendix B Context Drawings		
Appendix C Window/Room Reference Drawings		
Appendix D Daylight Study		
Appendix E Sunlight Study		

1. Executive Summary

1.1 Scope

- 1.1.1 We have been instructed by Square Feet Architects to determine the impact upon the daylight and sunlight amenity of the existing surrounding buildings which may arise from the proposed development at Kings College Road, London, NW3. We have also undertaken a sample of internal daylight and sunlight tests to determine whether the proposed building itself will receive sufficient daylight.

1.2 Assessment Criteria

- 1.2.1 To ensure that this assessment can be appropriately evaluated against London Borough of Camden Council's planning policy, daylight and sunlight calculations have been undertaken in accordance with the Building Research Establishment Report 'Site Layout Planning for Daylight and Sunlight – A Guide to Good Practice' 2nd Edition, 2011 (the "BRE guide") and also British Standard 8206 – 2: 2008 – 'Lighting for Buildings – Part 2: Code of Practice for Daylighting', to which the BRE guide refers. The standards and tests applied within this assessment are briefly described in Appendix A.

1.3 Summary of Effect of Proposed Development on Existing Surrounding Buildings

Daylight

- 1.3.1 Of the 10 windows assessed for Vertical Sky Component (VSC) at No. 1 Kings College Road, all but 1 will continue to meet the target values as set out in the BRE guidelines (90% will meet the targets).
- 1.3.2 The window which falls short of the targets serves an open plan living space which is also served by 3 other windows, all of which comfortably meet the BRE's numeric criteria for Daylight amenity. Furthermore, the affected window spans the entire length of the south elevation and will admit good levels of daylight to the living area.
- 1.3.3 It is therefore considered that the proposed development will not have a significant effect upon the Daylight amenity at this property.

Sunlight

- 1.3.4 Of the 5 windows assessed for Annual Probable Sunlight Hours (APSH) at No. 1 Kings College Road, all but 1 will continue to meet the target values as set out in the BRE guidelines (83% will meet the targets).
- 1.3.5 The one window which falls short of the targets does so marginally and displays high levels of residual annual sunlight in the proposed scenario. Furthermore, the window serves an open plan living area which is also served by 3 other windows, all of which comfortably meet the BRE's numeric criteria for Sunlight amenity.
- 1.3.6 Therefore, it is considered that the proposed development will not have a significant impact upon the Sunlight amenity at this property.

Overshadowing

- 1.3.7 Having reviewed the surrounding areas, it is considered that the proposed development will not have a significant effect upon any of the neighbouring amenity areas. More specifically, this is due to the low rise nature of the proposals, consisting of basement, lower ground and upper ground floor levels.

1.4 Summary of Analysis of Daylight, Sunlight and Overshadowing for the New Development

Internal Daylight

- 1.4.1 Of the 6 rooms assessed within the proposed development, 4 will meet the BRE's numeric criteria in terms of Average Daylight Factor (67% will meet the targets).
- 1.4.2 2 rooms fall marginally short of the target values, one at basement and one at lower ground floor level. The use of these rooms as an annexe and bedroom would suggest that they do not require high levels of daylight, as their primary functions are for sleeping. Further to this, the BRE states that the rooms which require most daylight are principal living rooms and kitchens.
- 1.4.3 Therefore the main room which requires daylight in this scenario is the living room/kitchen/dining room on the upper ground floor. This room achieves a high ADF value of 10.77% (BRE target is 2%).
- 1.4.4 As such, the proposed development is considered to be broadly compliant in terms of ADF.

1.5 Overall

- 1.5.1 The results of our assessment show that the proposed development will not have significant impact upon the Daylight & Sunlight amenity at the neighbouring residential properties. While minor effects are noted at No. 1 Kings College Road, the overall impact is small, with only one window demonstrating results which are marginally below the BRE's numeric targets.
- 1.5.2 The open plan nature of No.1 Kings College Road means that the main living area is served by at least 4 large windows, enabling high levels of Daylight & Sunlight to enter the property.
- 1.5.3 The proposal itself has been designed in such a way as to limit the effects on neighbouring properties in terms of Daylight & Sunlight amenity. More specifically, this has been achieved by having basement, lower ground and upper ground levels as opposed to a more traditional construction.
- 1.5.4 Internally, the proposed development will achieve excellent levels of daylight within the principal habitable room on the upper ground floor, with the majority of the bedrooms at lower levels also meeting the BRE's numeric criteria.
- 1.5.5 Overall, it is considered that the proposed development has been well designed in order to utilise the space available, minimising any potential impacts on Daylight & Sunlight amenity.

2. Introduction

2.1 Scope

- 2.1.1 We have been instructed by Square Feet Architects to determine the impact upon the daylight and sunlight amenity that may arise from the proposed development of Kings College Road, London, NW3 in respect of the existing surrounding buildings. We have also undertaken an internal daylight assessment to determine whether the proposed building will receive sufficient daylight.

2.2 Planning Policy

- 2.2.1 London Borough of Camden Council's Local Plan (LP) refers to the following documents as those being used to review adequacy of daylight and sunlight. This Report is therefore based on the following publications which contain the accepted standards for assessing daylight and sunlight:

- Building Research Establishment (BRE) Report "Site Layout Planning for Daylight and Sunlight – a guide to good practice, 2nd Edition, 2011" ("the BRE guide").
- BS8206 – Part 2: 2008 Code of Practice for Daylighting.

- 2.2.2 London Borough of Camden Council's Local Plan contains the following policy guidance under Policy A1 Managing the impact of development:

Sunlight, daylight and overshadowing

- 6.5 *Loss of daylight and sunlight can be caused if spaces are overshadowed by development. To assess whether acceptable levels of daylight and sunlight are available to habitable, outdoor amenity and open spaces, the Council will take into account the most recent guidance published by the Building Research Establishment (currently the Building Research Establishment's Site Layout Planning for Daylight and Sunlight – A Guide to Good Practice 2011). Further detail can be found within our supplementary planning document Camden Planning Guidance on amenity.*

2.3 Assessment Criteria

- 2.3.1 To ensure that this assessment can be appropriately evaluated against London Borough of Camden Council's planning policy, daylight and sunlight calculations have been undertaken in accordance with the 'BRE guide' and also on BS8206-2: 2008 to which the BRE guide refers. The standards and tests applied are briefly described in Appendix A.
- 2.3.2 The existing buildings adjacent to the proposed development site are shown on the Site Plan (see below) and comprise:

Name/Address of Building	Assumed Use	Position in Relation to the Development
1 Kings College Road	Residential	North



2.4 Limitations

2.4.1 Our assessment is based on the scheme drawings provided by Squarefeet Architects as listed below:

Title	Date
010 Proposed Site Plan.dwg	09 November 2017
121 Proposed Roof Plan.dwg	09 November 2017
122 Proposed Upper Ground Plan-2.dwg	09 November 2017
123 Proposed Lower Ground Plan-2.dwg	09 November 2017
124 Proposed Basement Plan.dwg	09 November 2017
130 Proposed West Elevation.dwg	09 November 2017
131 Proposed Street Elevation.dwg	09 November 2017
132 Proposed North Elevation.dwg	09 November 2017
133 Proposed East Elevation.dwg	09 November 2017
134 Proposed South Elevation.dwg	09 November 2017
140 Proposed Section A-A'.dwg	09 November 2017
141 Proposed Section B-B'.dwg	09 November 2017
142 Proposed Section C-C'.dwg	09 November 2017
Promap.co.uk - 145750859_1 62917 - Kings College Road_171117_Solids.dwg	17 November 2017

- 2.4.2 A topographical survey has not been undertaken and all levels and elevation details are approximate, having been obtained from the site inspection, OS data and elevation drawings. However, it is noted that there were no significant changes in ground level between the proposed development and the existing surrounding buildings.

3. Assessment & Results – Impact of New Development on Existing, Surrounding Buildings

3.1 Daylight

3.1.1 In accordance with the BRE guide (see also Appendix A) and our site inspection the following building required assessment:

- 1 Kings College Road.

3.1.2 Windows to other adjacent buildings, such as those to the properties along Eton Avenue and Fellows Road are at such a distance/angle from the proposed development as to pass the 'Three times height' and '25 degree' tests (see Appendix A) and therefore, pursuant to the BRE guide, do not require testing for daylight or sunlight availability. .

3.1.3 The results of our VSC analysis are shown in full in Appendix D. The following table is a summary of our findings:

Building Address	No. of Rooms Analysed	BRE Compliant		Total Percentage BRE Compliant
		Yes	No	
No.1 Kings College Road	10	9	1	90
Totals	10	9	1	90

3.1.4 Of the 10 windows assessed, all but 1 will continue to meet the target values as set out in the BRE guidelines (90% will meet the targets).

3.1.5 One window on the ground floor falls marginally short of the targets, achieving a VSC of 19.9%, which is only a 36% reduction from its former value of 26.7%.

3.1.6 We believe that this window will continue to receive a reasonable level of daylight with the proposed development in place, as the affected glazed area spans the entire length of the south elevation. Furthermore, No. 1 Kings College Road has an open plan layout and the main living area is served by 3 windows in addition to the one which falls short of the targets; one at either end of the property and a further high level window on the south elevation, all of which will continue to meet the BRE's numeric criteria.

3.1.7 Therefore it is considered that the proposed development is broadly compliant with the BRE guide.

3.2 Sunlight

3.2.1 In accordance with the BRE Guide, our analysis of the plans provided and our observations on site, one of the surrounding buildings required Annual Probable Sunlight Hours (APSH) testing – (see Appendix A):

- No1 Kings College Road.

3.2.2 The table below shows a summary of the results of the APSH testing. Full test results are contained in Appendix E.

Building Address	No. of Windows Analysed	BRE Compliant		Total Percentage BRE Compliant
		Yes	No	
No.1 Kings College Road	5	4	1	80
Totals	5	4	1	80

3.2.3 Of the 5 windows assessed, all but 1 will continue to meet the target values as set out in the BRE guidelines.

3.2.4 One window on the ground floor falls marginally short of the numeric targets. However, the results demonstrate that the window will receive high levels of residual daylight, with an APSH of 57% (BRE target is 25%), with 3% of these occurring during the winter months (BRE target is 5%).

3.2.5 Further to this, the open plan living area at No. 1 Kings College Road is served by 4 windows in total, 3 of which comfortably meet the BRE's numeric criteria for sunlight, with the results demonstrating no effects as a result of the proposed development. These windows experience high levels of annual sunlight and will ensure that the open plan living area within this property will meet the BRE's guidelines for sunlight amenity.

3.2.6 Therefore it is considered that the proposed development is broadly compliant with the BRE guide.

4. Assessment & Results – Daylighting, Sunlighting & Overshadowing issues in the New Development

4.1 Internal Daylight

- 4.1.1 ADF tests have been undertaken to a sample of the principal habitable rooms within the proposed development. The full ADF test results are shown in full in Appendix D. Below is a summary of our findings:

Building	No. of Rooms Analysed	BRE Compliant		Total Percentage BRE Compliant
		Yes	No	
Proposed Development	6	4	2	67
Total	6	4	2	67

- 4.1.2 Of the 6 rooms assessed within the proposed development, 4 will meet the BRE's numeric criteria in terms of Average Daylight Factor.
- 4.1.3 2 rooms fall marginally short of the target values, one at basement and one at lower ground floor level. The use of these rooms as an annexe and bedroom would suggest that they do not require high levels of daylight, as their primary functions are for sleeping. Further to this, the BRE states that the rooms which require most daylight are principal living rooms and kitchens.
- 4.1.4 Therefore the main room which requires daylight in this scenario is the living room/kitchen/dining room on the upper ground floor. This room achieves a high ADF value of 10.77% (BRE target is 2%).
- 4.1.5 As such, the proposed development is considered to be broadly compliant in terms of ADF.

Appendix A

Assessments to be Applied



Introduction

The main purpose of the guidelines in the Building Research Establishment Report "Site Layout Planning for Daylight and Sunlight – a guide to good practice 2011, 2nd Edition" ("the BRE guide") is to assist in the consideration of the relationship of new and existing buildings to ensure that each retains a potential to achieve good daylighting and sunlighting levels. That is, by following and satisfying the tests contained in the guidelines, new and existing buildings should be sufficiently spaced apart in relation to their relative heights so that both have the potential to achieve good levels of daylight and sunlight. The guidelines have been drafted primarily for use with low density suburban developments and should therefore be used flexibly when dealing with dense urban sites and extensions to existing buildings, a fact recognised by the BRE Report's author in the Introduction where Dr Paul Littlefair says:

'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..... 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.....'

In many cases in low-rise housing, meeting the criteria for daylight and sunlight may mean that the BRE criteria for other amenity considerations such as *privacy* and *sense of enclosure* are also satisfied.

The BRE guide states that recommended minimum privacy distances (in cases where windows of habitable rooms face each other in low-rise residential property), as defined by each individual Local Authority's policies, vary widely, from 18-35m¹. For two-storey properties a spacing within this range would almost certainly also satisfy the BRE guide's daylighting requirements as it complies with the 25⁰ rule and will almost certainly satisfy the 'Three times height' test too (as discussed more fully below). However, the specific context of each development will be taken into account and Local Authorities may relax the stated minimum, for instance, in built-up areas where this would lead to an inefficient use of land. Conversely, greater distances may be required between higher buildings, in order to satisfy daylighting and sunlighting requirements. It is important to recognize also that privacy can also be achieved by other means: design, orientation and screening can all play a key role and may also contribute towards reducing the theoretical 'minimum' distance.

A sense of enclosure is also important as the perceived quality of an outdoor space may be reduced if it is too large in the context of the surrounding buildings. In urban settings the BRE guide suggests a spacing-to-height ratio of 2.5:1 would provide a comfortable environment, whilst not obstructing too much natural light: this ratio also approximates the 25⁰ rule.

Daylight

The criteria for protecting daylight to existing buildings are contained in Section 2.2 and Appendix C of the BRE guide. There are various methods of measuring and assessing daylight and the choice of test depends on the circumstances of each particular window. For example, greater protection should be afforded to windows which serve habitable dwellings and, in particular, those serving living rooms and family kitchens, with a lower requirement required for bedrooms. The BRE guide states that circulation spaces and bathrooms need not be tested as

¹ The commonest minimum privacy distance is 21m (Householder Development Consents Review: Implementation of Recommendations – Department for Communities and Local Government – May 2007)

they are not considered to require good levels of daylight. In addition, for rooms with more than one window, secondary windows do not require assessment if it is established that the room is already sufficiently lit through the principal window.

The tests should also be applied to non-domestic uses such as offices and workplaces where such uses will ordinarily have a reasonable expectation of daylight and where the areas may be considered a principal workplace.

The BRE has developed a series of tests to determine whether daylighting levels within new developments and rooms within existing buildings surrounding new developments will satisfy or continue to satisfy a range of daylighting criteria

Note: Not every single window is assessed separately, only a representative sample, from which conclusions may be drawn regarding other nearby dwellings.

Daylighting Tests

'Three times height' test - If the distance of each part of the new development from the existing windows is three or more times its height above the centre of the existing window then loss of light to the existing windows need not be analysed. If the proposed development is taller or closer than this then the 25° test will need to be carried out.

25° test – a very simple test that should only be used where the proposed development is of a reasonably uniform profile and is directly opposite the existing building. Its use is most appropriate for low density well-spaced developments such as new sub-urban housing schemes and often it is not a particularly useful tool for assessing urban and in-fill sites. In brief, where the new development subtends to an angle of less than 25° to the centre of the lowest window of an existing neighbouring building, it is unlikely to have a substantial effect on the diffuse skylight enjoyed by the existing building. Equally, the new development itself is also likely to have the potential for good daylighting. If the angle is more than 25° then more detailed tests are required, as outlined below.

VSC Test - the VSC is a unit of measurement that represents the amount of available daylight from the sky, received at a particular window. It is measured on the outside face of the window. The 'unit' is expressed as a percentage as it is the ratio between the amount of sky visible at the given reference point compared to the amount of light that would be available from a totally unobstructed hemisphere of sky. To put this unit of measurement into perspective, the maximum percentage value for a window with a completely unobstructed outlook (i.e. with a totally unobstructed view through 90° in every direction) is 40%.

The target figure for VSC recommended by the BRE is 27%. A VSC of 27% is a relatively good level of daylight and the level we would expect to find for habitable rooms with windows on principal elevations. However, this level is often difficult to achieve on secondary elevations and in built-up urban environments. For comparison, a window receiving 27% VSC is approximately equivalent to a window that would have a continuous obstruction opposite it which subtends an angle of 25° (i.e. the same results as would be found utilising the 25° Test). Where tests show that the new development itself meets the 27% VSC target this is a good indication that the development will enjoy good daylighting and further tests can then be carried out to corroborate this (see under).

Through research the BRE have determined that in existing buildings daylight (and sunlight levels) can be reduced by approximately 20% of their original value before the loss is materially noticeable. It is for this reason that they consider that a 20% reduction is permissible in circumstances where the existing VSC value is below the 27% threshold. For existing buildings

once this has been established it is then necessary to determine whether the distribution of daylight inside each room meets the required standards (see under).

Daylight Distribution (DD) Test – This test looks at the position of the “No-Sky Line” (NSL) – that is, the line that divides the points on the working plane (0.7m from floor level in offices and 0.85m in dwellings and industrial spaces) which can and cannot see the sky. The BRE guide suggests that areas beyond the NSL may look dark and gloomy compared with the rest of the room and BS8206 states that electric lighting is likely to be needed if a significant part of the working plane (normally no more than 20%) lies beyond it.

In new developments no more than 20% of a room’s area should be beyond the NSL. For existing buildings the BRE guide states that if, following the construction of a new development, the NSL moves so that the area beyond the NSL increases by more than 20%, then daylighting is likely to be seriously affected.

The guide suggests that in houses, living rooms, dining rooms and kitchens should be tested: bedrooms are deemed less important, although should nevertheless be analysed. In other buildings each main room where daylight is expected should be investigated.

ADF Test –The ADF (Average Daylight Factor) test takes account of the interior dimensions and surface reflectance within the room being tested as well as the amount of sky visible from the window. For this reason it is considered a more detailed and representative measure of the adequacy of light. The minimum ADF values recommended in BS8206 Part 2 are: 2% for family kitchens (and rooms containing kitchens); 1.5% for living rooms; and 1% for bedrooms. This is a test used in assessing new developments, although, in certain circumstances, it may be used as a supplementary test in the assessment of daylighting in existing buildings, particularly where more than one window serves a room.

Room depth ratio test - This is a test for new developments looking at the relative dimensions of each room (principally its depth) and its window(s) to ensure that the rear half of a room will receive sufficient daylight so as not to appear gloomy.

Sunlight

Sunlight is an important ‘amenity’ in both domestic and non-domestic settings. The way in which a building’s windows are orientated and the overall position of a building on a site will have an impact on the sunlight it receives but, importantly, will also have an effect on the sunlight neighbouring buildings receive. Unlike daylight, which is non-directional and assumes that light from the sky is uniform, the availability of sunlight is dependent on direction. That is, as the United Kingdom is in the northern hemisphere, we receive virtually all of our sunlight from the south. The availability of sunlight is therefore dependent on the orientation of the window or area of ground being assessed relative to the position of due south.

In new developments the BRE guide suggests that dwellings should aim to have at least one main living room which faces the southern or western parts of the sky so as to ensure that it receives a reasonable amount of sunlight. Where groups of dwellings are planned the Guide states that site layout design should aim to maximise the number of dwellings with a main living room that meet sunlight criteria. Where a window wall faces within 90° of due south and no obstruction subtends to angle of more than 25° to the horizontal or where the window wall faces within 20° of due south and the reference point has a VSC of at least 27% then sunlighting will meet the required standards: failing that the Annual Probable Sunlight Hours (APSH) need to be analysed. APSH means the total number of hours in the year that the sun is expected to shine on unobstructed ground, allowing for average levels of cloud for the location in question. If the APSH tests reveal that the new development will receive at least one quarter of the available APSH, including at least 5% of APSH during the winter months (from 21 September to

21 March), then the requirements are satisfied. It should be noted that if a room has two windows on opposite walls, the APSH due to each can be added together.

The availability of sunlight is also an important factor when looking at the impact of a proposed development on the existing surrounding buildings. APSH tests will be required where one or more of the following are true:

- The 'Three times height' test is failed (see 'Daylight' above);
- The proposed development is situated within 90° of due south of an existing building's main window wall and the new building subtends to angle of more than 25° to the horizontal;
- The window wall faces within 20° of due south and a point at the centre of the window on the outside face of the window wall (the reference point) has a VSC of less than 27%.

Where APSH testing is required it is similar to the test for the proposed development. That is to say that compliance will be demonstrated where a room receives:

- At least 25% of the APSH (including at least 5% in the winter months), or
- At least 0.8 times its former sunlight hours during either period, or
- A reduction of no more than 4% APSH over the year.

The Guide stresses that the target values it gives are purely advisory, especially in circumstances such as: the presence of balconies (which can overhang windows, obstructing light); when an existing building stands unusually close to the common boundary with the new development and; where the new development needs to match the height and proportion of existing nearby buildings. In circumstances like these a larger reduction in sunlight may be necessary.

The sunlight criteria in the BRE guide primarily apply to windows serving living rooms of an existing dwelling. This is in contrast to the daylight criteria which apply to kitchens and bedrooms as well as living rooms. Having said that, the guide goes on to say that care should be taken not to block too much sun from kitchens and bedrooms. Non-domestic buildings which are deemed to have a requirement for sunlight should also be checked.

Sunlight – Gardens and Open Spaces

As well as ensuring buildings receive a good level of sunlight to their interior spaces, it is also important to ensure that the open spaces between buildings are suitably lit. The recommendations as set out in the BRE guide are meant to ensure that spaces between buildings are not permanently in shade for a large part of the year. Trees and fences over 1.5m tall are also factored into the calculations.

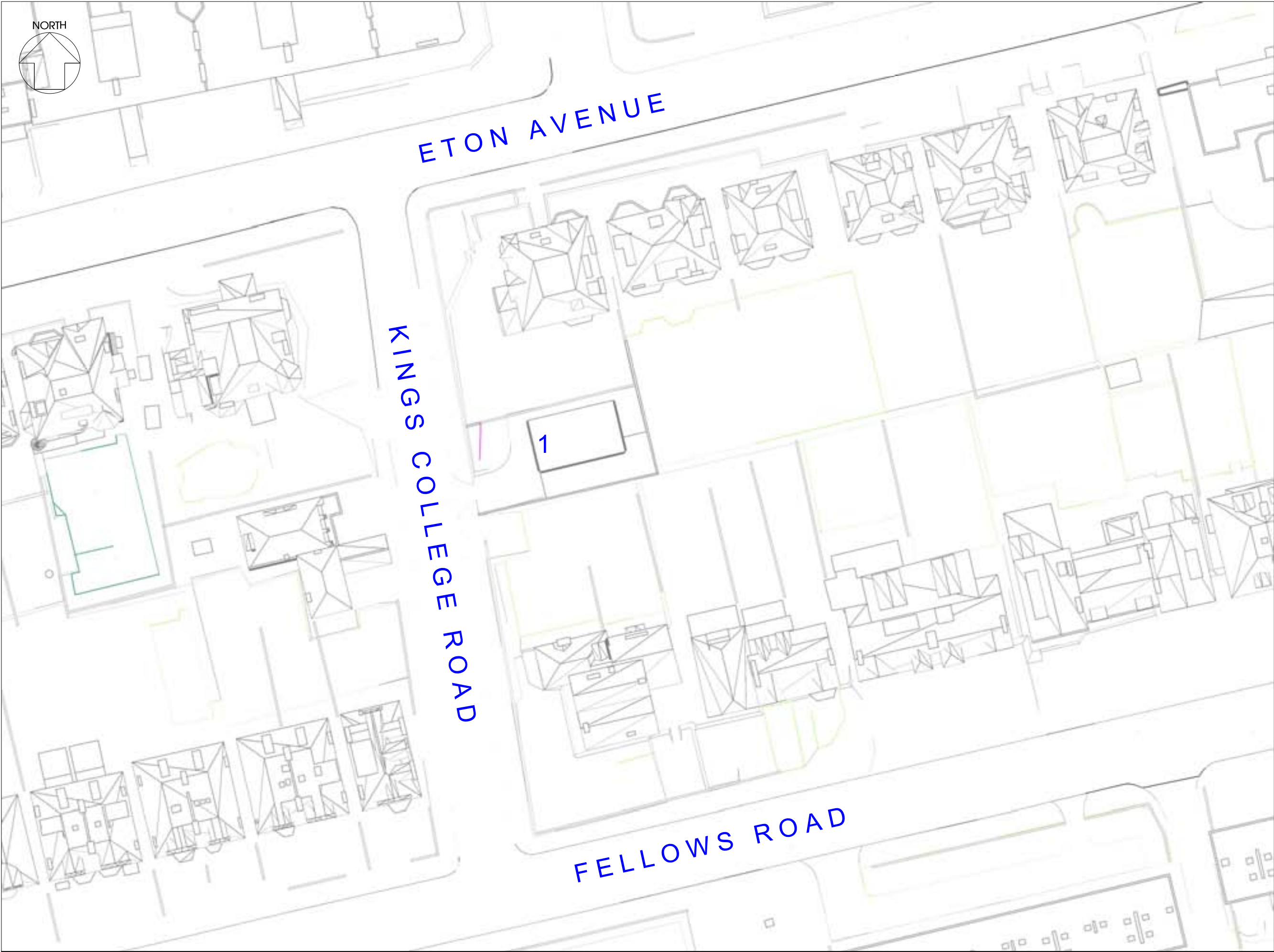
The BRE guidelines state that:

- For a garden or amenity area to appear adequately sunlit throughout the year, at least 50% of the area should receive at least two hours of sunlight on 21 March;
- In addition, if, as result of new development, an existing garden or amenity area does not reach the area target above and the area which can receive two hours of direct sunlight on 21 March is reduced by more than 20% this loss is likely to be noticeable.

Appendix G of the BRE guidelines describes a methodology for calculating sunlight availability for amenity spaces.

Appendix B
Context Drawings





Existing Site Plan

SOURCES OF INFORMATION:
SQUAREFEET ARCHITECTS
010 Proposed Site Plan.dwg
121 Proposed Roof Plan.dwg
122 Proposed Upper Ground Plan-2.dwg
123 Proposed Lower Ground Plan-2.dwg
124 Proposed Basement Plan.dwg
130 Proposed West Elevation.dwg
131 Proposed Street Elevation.dwg
132 Proposed North Elevation.dwg
133 Proposed East Elevation.dwg
134 Proposed South Elevation.dwg
140 Proposed Section A-A'.dwg
141 Proposed Section B-B'.dwg
142 Proposed Section C-C'.dwg
Received 09 November 2017
PROMAP.CO.UK
145750859_1 62917 - Kings College Road_171117_Solids.dwg
Received 17 November 2017

Rev.	Date	Amendments	Initial
MALCOLM HOLLIS SHALL BE INFORMED IN WRITING OF ANY DISCREPANCIES. ALL DIMENSIONS ARE IN MILLIMETERS ONLY			

TITLE
Existing Site Plan

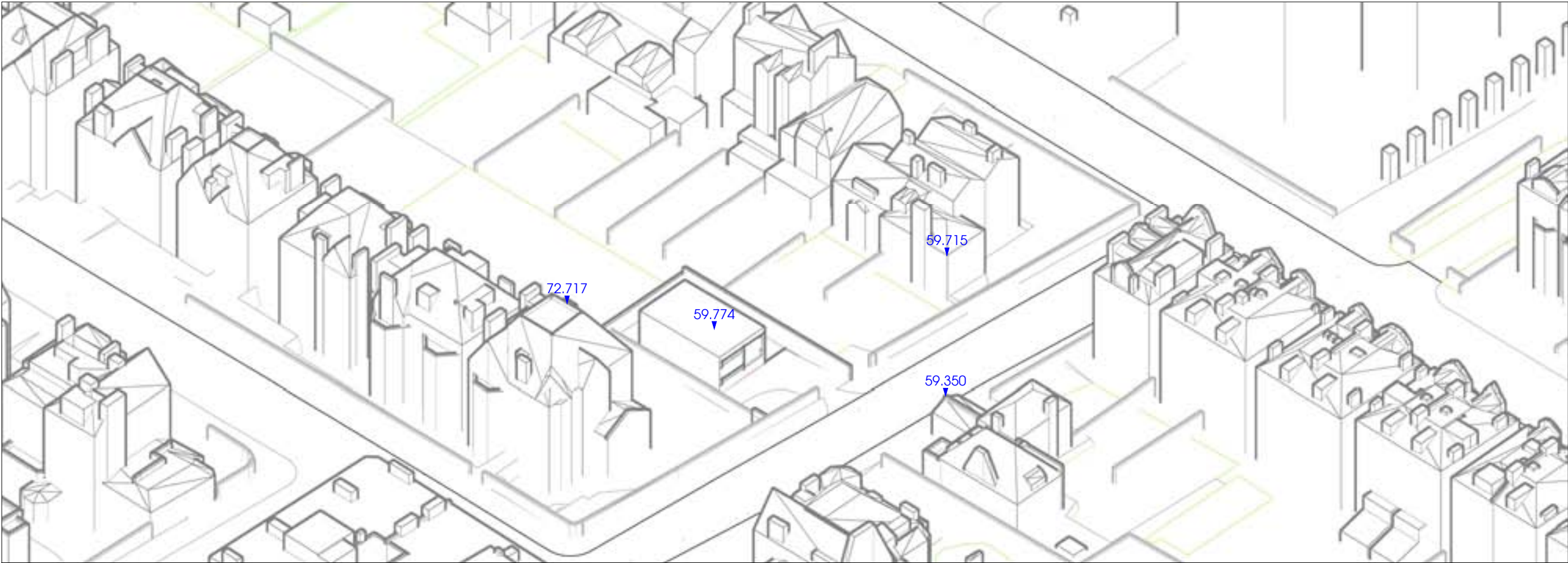
CLIENT
Square Feet Architects

PROJECT
Kings College Road
London
NW3

DRAWN BY	CHECKED
OW	SL
SCALE	DATE
1:500@A3	November 2017

malcolm hollis
80-82 Silverthorne Road
London
SW8 3HE
T 020 7622 9555
F 020 7627 9850
W malcolmhollis.com

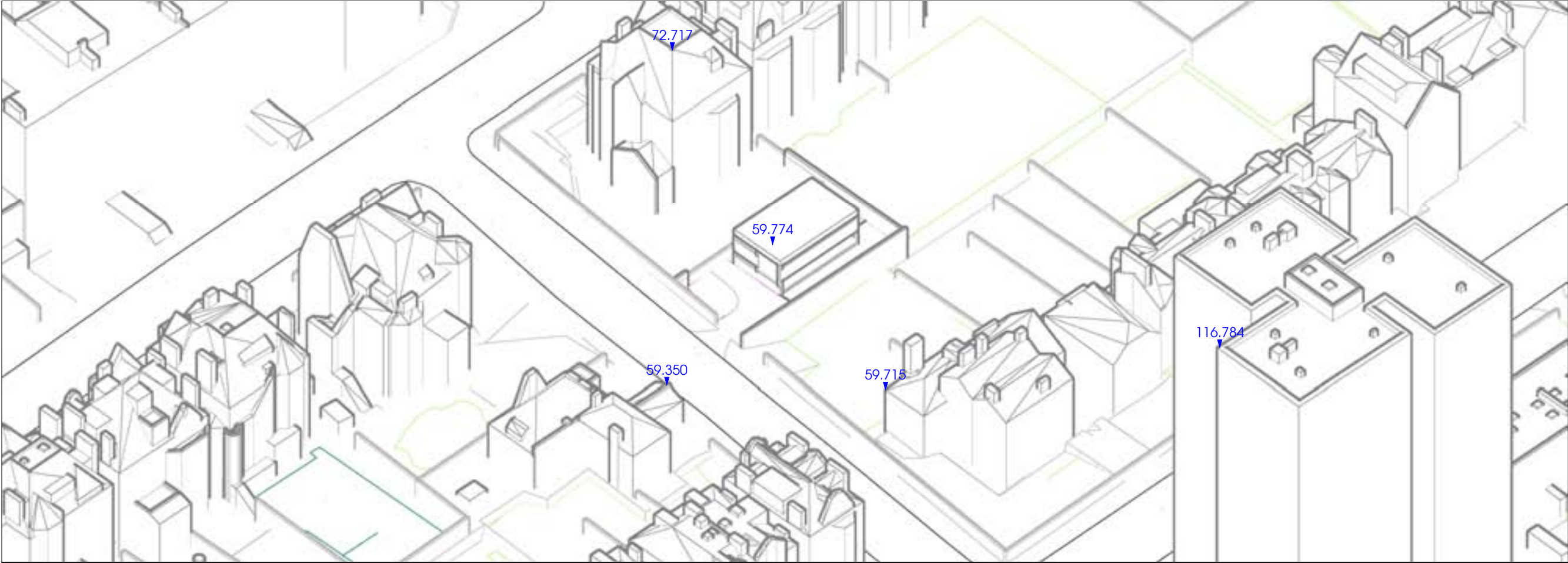
DRAWING NO. 62917_CTXT_01	RELEASE NO. 1
------------------------------	------------------



3D Context View - View from North West (Proposed)

SOURCES OF INFORMATION:
SQUAREFEET ARCHITECTS
010 Proposed Site Plan.dwg
121 Proposed Roof Plan.dwg
122 Proposed Upper Ground Plan-2.dwg
123 Proposed Lower Ground Plan-2.dwg
124 Proposed Basement Plan.dwg
130 Proposed West Elevation.dwg
131 Proposed Street Elevation.dwg
132 Proposed North Elevation.dwg
133 Proposed East Elevation.dwg
134 Proposed South Elevation.dwg
140 Proposed Section A-A'.dwg
141 Proposed Section B-B'.dwg
142 Proposed Section C-C'.dwg
Received 09 November 2017
PROMAP.CO.UK
145750859_1_62917 - Kings College Road_171117_Solids.dwg
Received 17 November 2017

ALL HEIGHTS IN METERS AOD



3D Context View - View from South West (Proposed)

Rev.	Date	Amendments	Initial
MALCOLM HOLLIS SHALL BE INFORMED IN WRITING OF ANY DISCREPANCIES. ALL DIMENSIONS ARE IN MILLIMETERS ONLY			

TITLE
**3D Views
Proposed Site**

CLIENT
Square Feet Architects

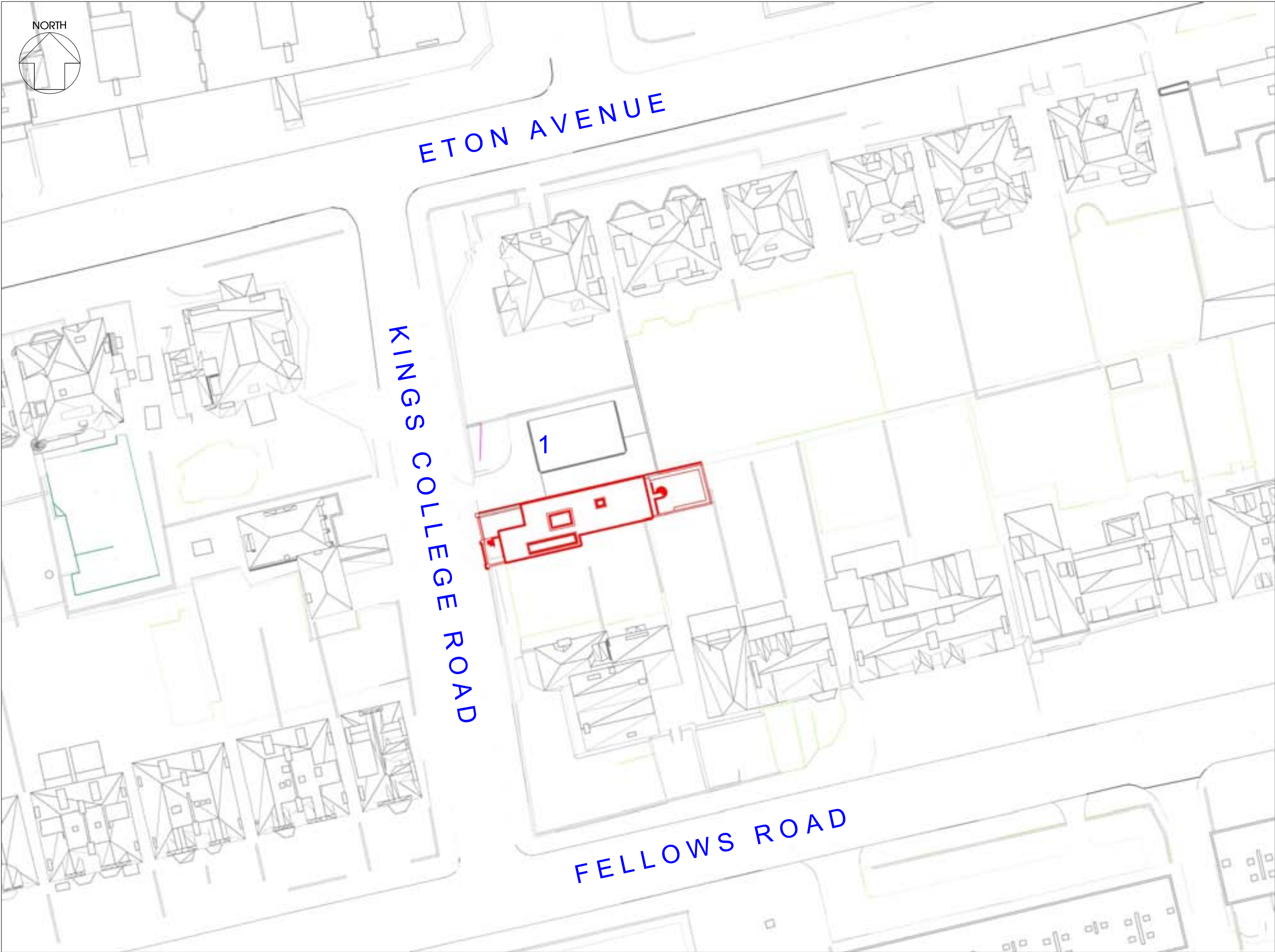
PROJECT
**Kings College Road
London
NW3**

DRAWN BY	CHECKED
OW	SL

SCALE	DATE
1:500@A3	November 2017

malcolm hollis
80-82 Silverthorne Road
London
SW8 3HE
T 020 7622 9555
F 020 7627 9850
W malcolmhollis.com

DRAWING NO.	RELEASE NO.
62917_CTXT_02	1



Proposed Site Plan

SOURCES OF INFORMATION:
SQUAREFEET ARCHITECTS
010 Proposed Site Plan.dwg
121 Proposed Roof Plan.dwg
122 Proposed Upper Ground Plan-2.dwg
123 Proposed Lower Ground Plan-2.dwg
124 Proposed Basement Plan.dwg
130 Proposed West Elevation.dwg
131 Proposed Street Elevation.dwg
132 Proposed North Elevation.dwg
133 Proposed East Elevation.dwg
134 Proposed South Elevation.dwg
140 Proposed Section A-A'.dwg
141 Proposed Section B-B'.dwg
142 Proposed Section C-C'.dwg

Received 09 November 2017

PROMAP.CO.UK

145750859_1 62917 - Kings College Road_171117_Solids.dwg

Received 17 November 2017

Rev.	Date	Amendments	Initial
MALCOLM HOLLIS SHALL BE INFORMED IN WRITING OF ANY DISCREPANCIES. ALL DIMENSIONS ARE IN MILLIMETERS ONLY			

TITLE
Proposed Site Plan

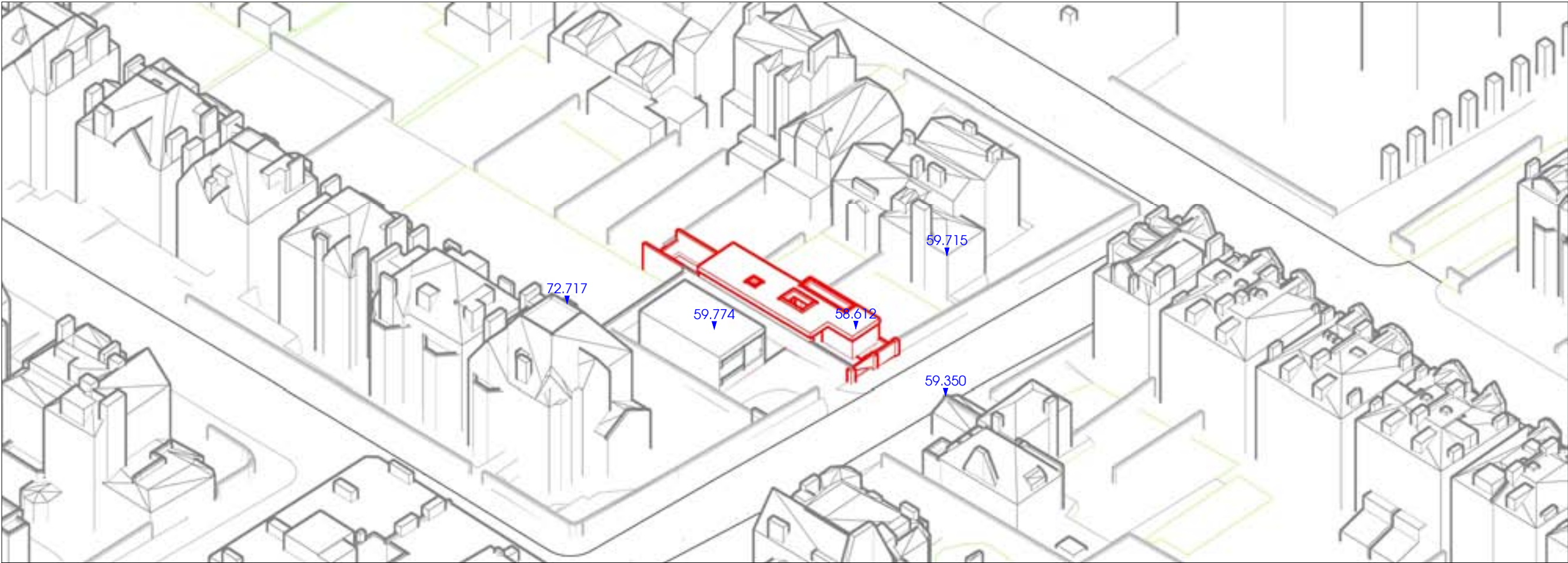
CLIENT
Square Feet Architects

PROJECT
**Kings College Road
London
NW3**

DRAWN BY	CHECKED
OW	SL
SCALE	DATE
1:500@A3	November 2017

malcolm hollis
80-82 Silverthorne Road
London
SW8 3HE
T 020 7622 9555
F 020 7627 9850
W malcolmhollis.com

DRAWING NO. 62917_CTXT_01	RELEASE NO. 1
-------------------------------------	-------------------------



3D Context View - View from North West (Proposed)

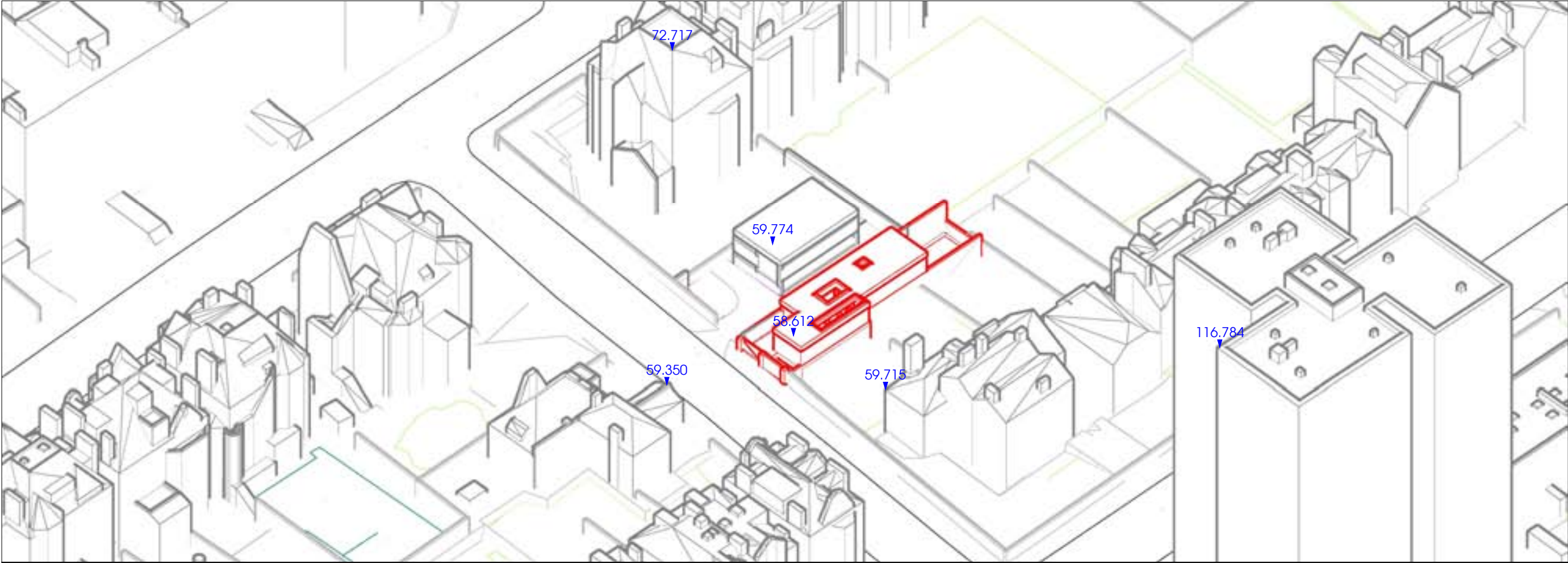
SOURCES OF INFORMATION:
SQUAREFEET ARCHITECTS
010 Proposed Site Plan.dwg
121 Proposed Roof Plan.dwg
122 Proposed Upper Ground Plan-2.dwg
123 Proposed Lower Ground Plan-2.dwg
124 Proposed Basement Plan.dwg
130 Proposed West Elevation.dwg
131 Proposed Street Elevation.dwg
132 Proposed North Elevation.dwg
133 Proposed East Elevation.dwg
134 Proposed South Elevation.dwg
140 Proposed Section A-A'.dwg
141 Proposed Section B-B'.dwg
142 Proposed Section C-C'.dwg

Received 09 November 2017

PROMAP.CO.UK
145750859_1 62917 - Kings College Road_171117_Solids.dwg

Received 17 November 2017

ALL HEIGHTS IN METERS AOD



3D Context View - View from South West (Proposed)

Rev.	Date	Amendments	Initial
MALCOLM HOLLIS SHALL BE INFORMED IN WRITING OF ANY DISCREPANCIES. ALL DIMENSIONS ARE IN MILLIMETERS ONLY			

TITLE
**3D Views
Proposed Site**

CLIENT
Square Feet Architects

PROJECT
**Kings College Road
London
NW3**

DRAWN BY OW	CHECKED SL
SCALE 1:500@A3	DATE November 2017

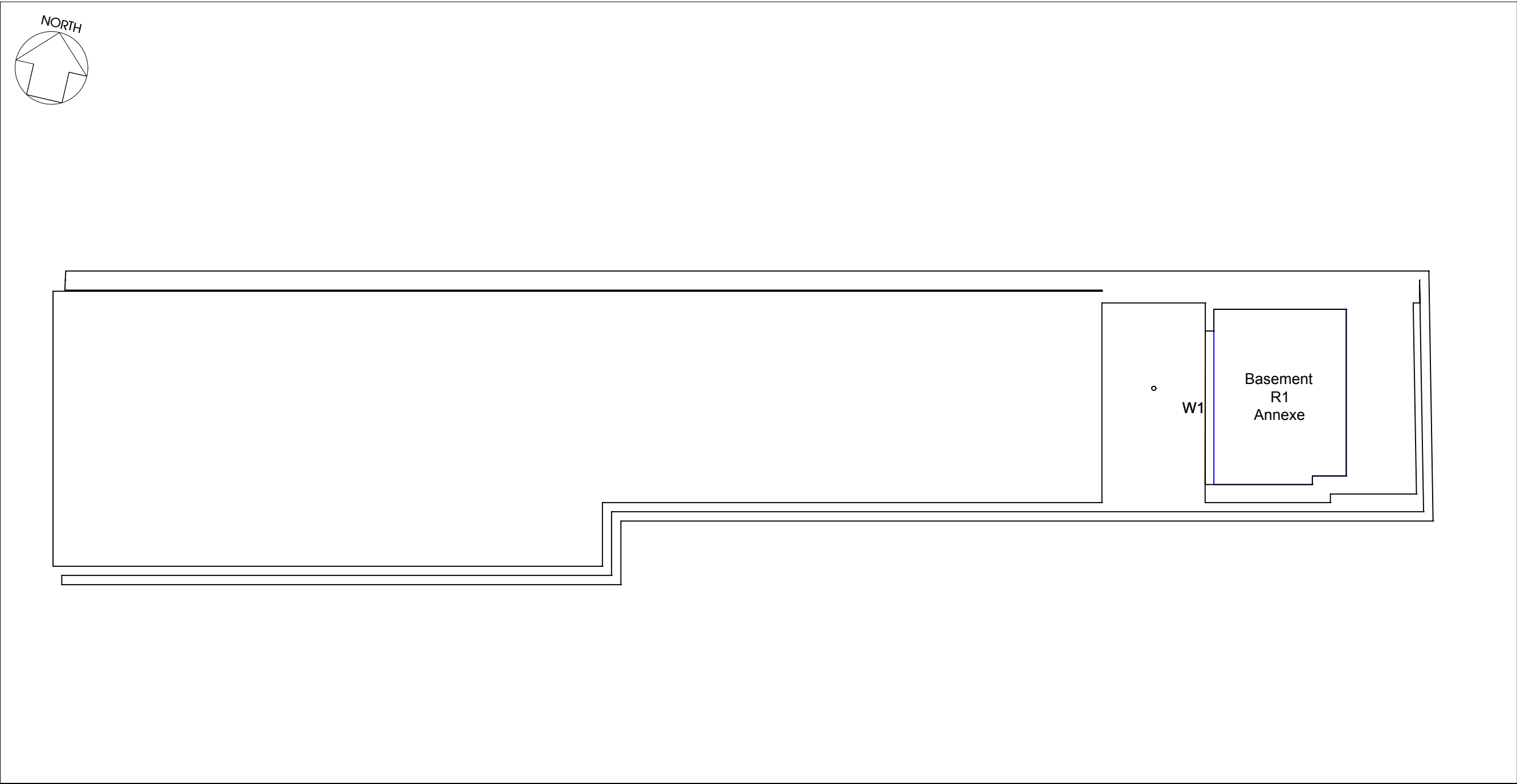
malcolm holis
80-82 Silverthorne Road
London
SW8 3HE
T 020 7622 9555
F 020 7627 9850
W malcolmhollis.com

DRAWING NO. 62917_CTXT_04	RELEASE NO. 1
-------------------------------------	-------------------------

Appendix C

Window/Room Reference Drawings





SOURCES OF INFORMATION:
SQUAREFEET ARCHITECTS

010 Proposed Site Plan.dwg
121 Proposed Roof Plan.dwg
122 Proposed Upper Ground Plan-2.dwg
123 Proposed Lower Ground Plan-2.dwg
124 Proposed Basement Plan.dwg
130 Proposed West Elevation.dwg
131 Proposed Street Elevation.dwg
132 Proposed North Elevation.dwg
133 Proposed East Elevation.dwg
134 Proposed South Elevation.dwg
140 Proposed Section A-A'.dwg
141 Proposed Section B-B'.dwg
142 Proposed Section C-C'.dwg

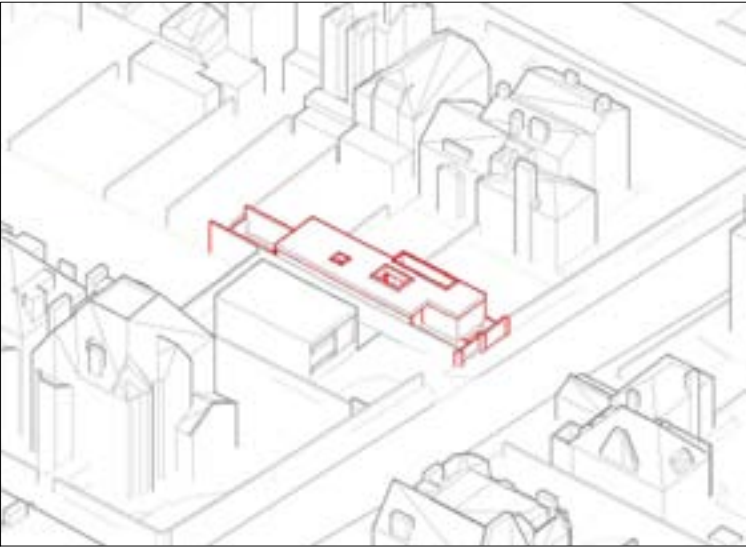
Received 09 November 2017

PROMAP.CO.UK

145750859_1 62917 - Kings College Road_171117_Solids.dwg

Received 17 November 2017

Rev.	Date	Amendments	Initial
MALCOLM HOLLIS SHALL BE INFORMED IN WRITING OF ANY DISCREPANCIES. ALL DIMENSIONS ARE IN MILLIMETERS ONLY			
TITLE			
Average Daylight Factor Proposed Plans			
CLIENT			
Square Feet Architects			



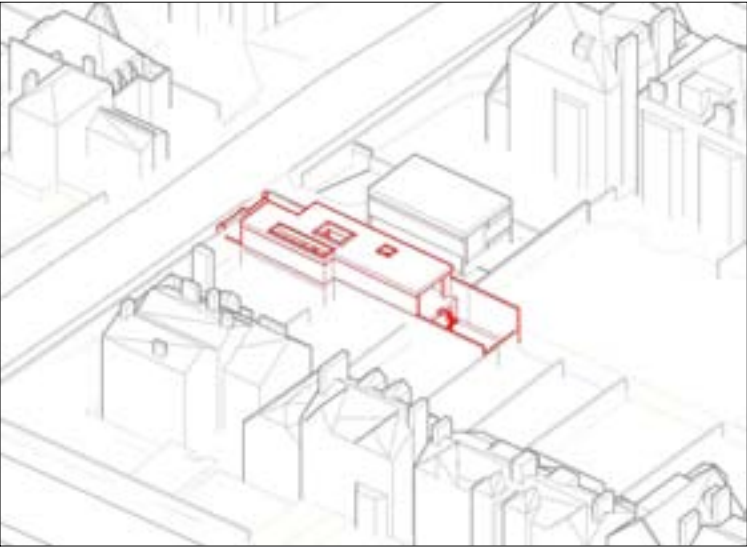
3D Context View - North West

KEY

R1

Proposed contour

Subject room



3D Context View - South East

PROJECT

Kings College Road
London
NW3

DRAWN BY
OW

CHECKED
SL

SCALE
1:100@A3

DATE
November 2017

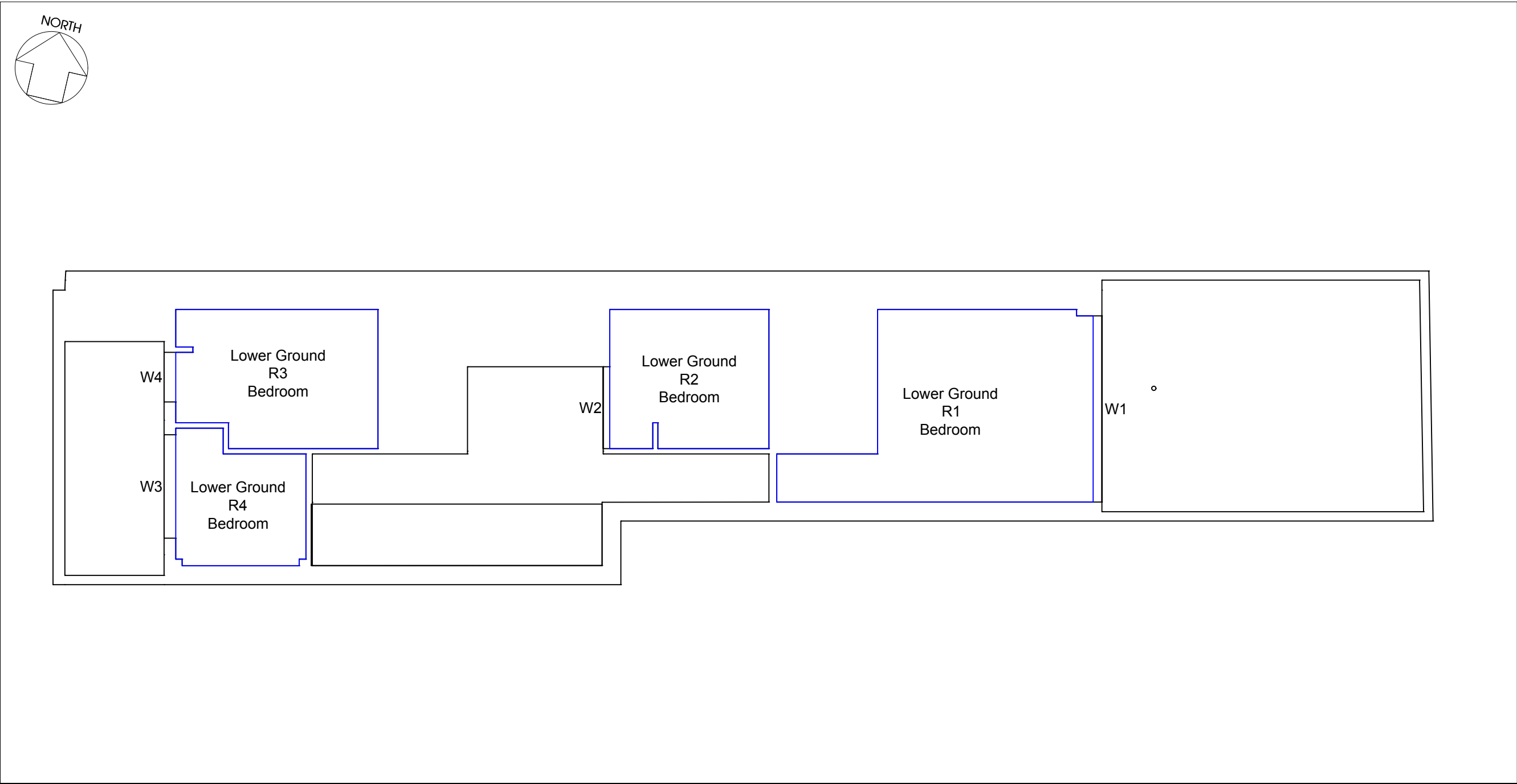
malcolm hollis

80-82 Silverthorne Road
London
SW8 3HE

T 020 7622 9555
F 020 7627 9850
W malcolmhollis.com

DRAWING NO.
62917_DD_01

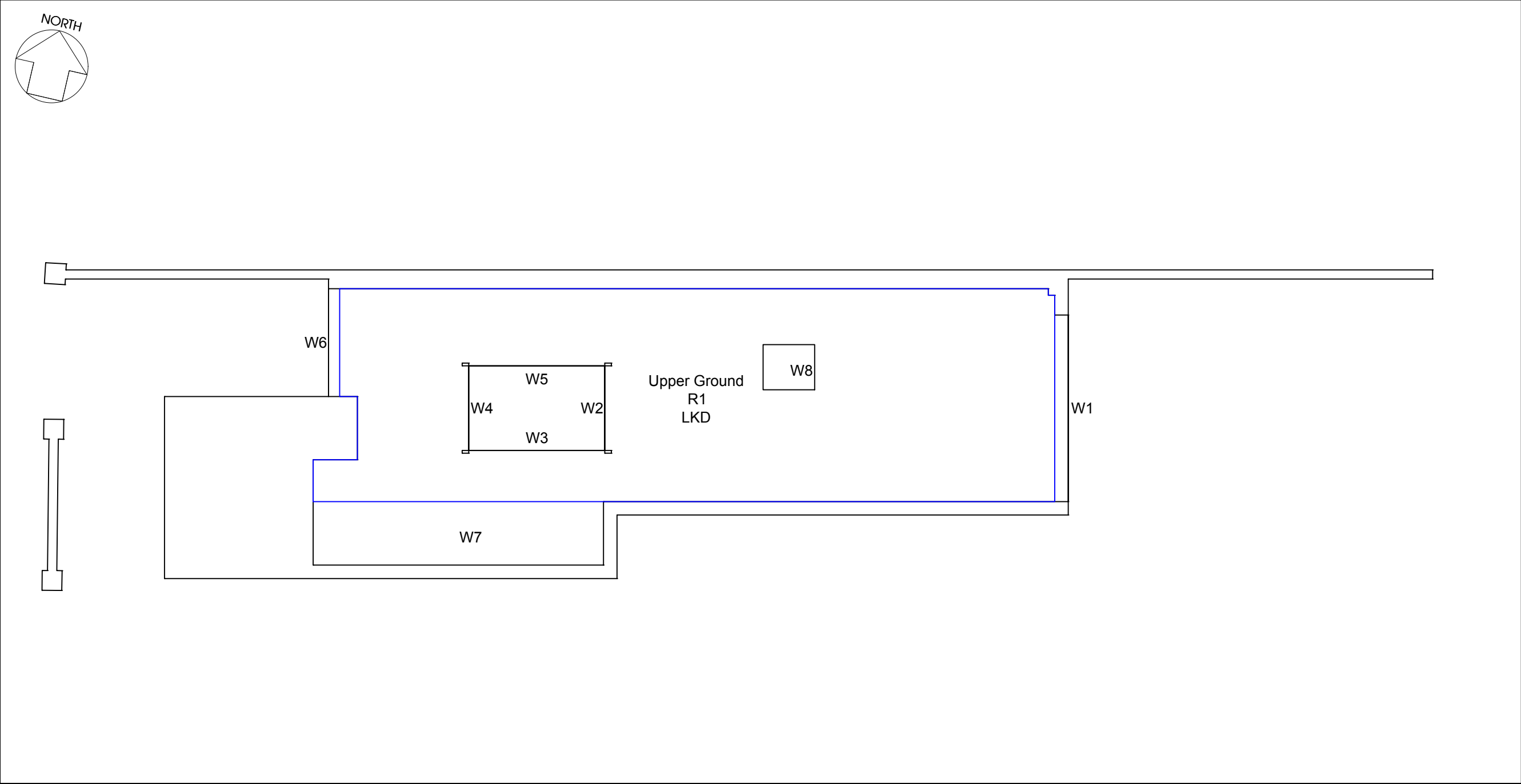
RELEASE NO.
1



KEY



62917_DD_02



Proposed - Upper Ground

SOURCES OF INFORMATION:
SQUAREFEET ARCHITECTS
010 Proposed Site Plan.dwg
121 Proposed Roof Plan.dwg
122 Proposed Upper Ground Plan-2.dwg
123 Proposed Lower Ground Plan-2.dwg
124 Proposed Basement Plan.dwg
130 Proposed West Elevation.dwg
131 Proposed Street Elevation.dwg
132 Proposed North Elevation.dwg
133 Proposed East Elevation.dwg
134 Proposed South Elevation.dwg
140 Proposed Section A-A'.dwg
141 Proposed Section B-B'.dwg
142 Proposed Section C-C'.dwg
Received 09 November 2017
PROMAP.CO.UK
145750859_1 62917 - Kings College Road_171117_Solids.dwg
Received 17 November 2017

Rev.	Date	Amendments	Initial
MALCOLM HOLLIS SHALL BE INFORMED IN WRITING OF ANY DISCREPANCIES. ALL DIMENSIONS ARE IN MILLIMETERS ONLY			

TITLE
**Average Daylight Factor
Proposed Plans**

CLIENT
Square Feet Architects

PROJECT
**Kings College Road
London
NW3**

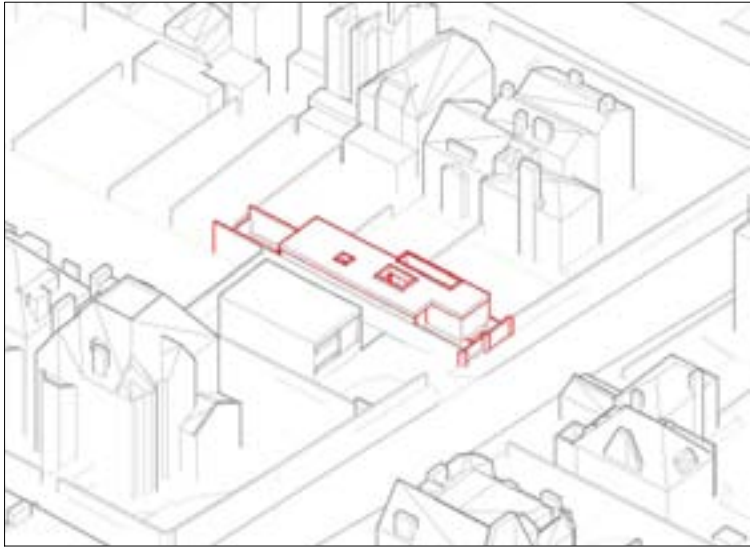
DRAWN BY OW	CHECKED SL
SCALE 1:100@A3	DATE November 2017

malcolm hollis

80-82 Silverthorne Road
London
SW8 3HE

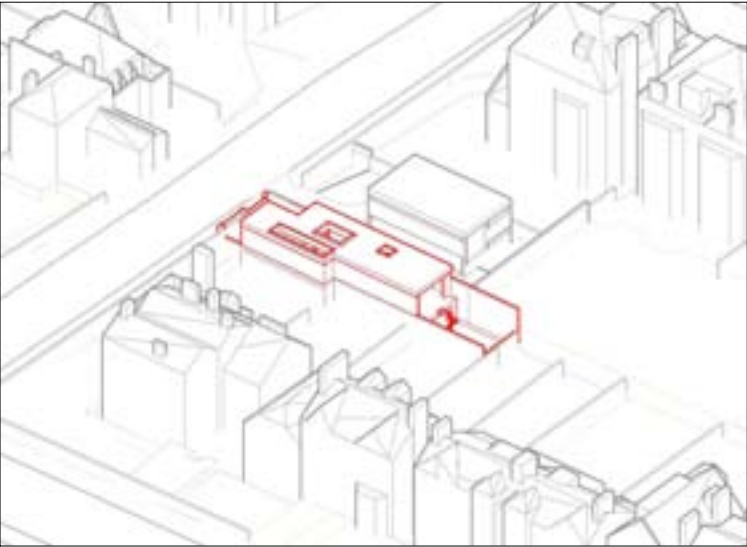
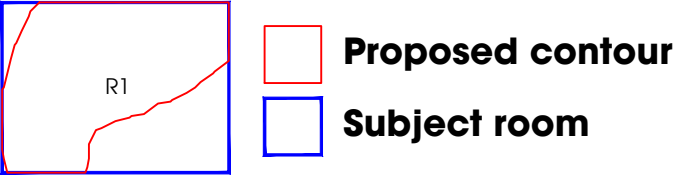
T 020 7622 9555
F 020 7627 9850
W malcolmhollis.com

DRAWING NO. 62917_DD_03	RELEASE NO. 1
-----------------------------------	-------------------------

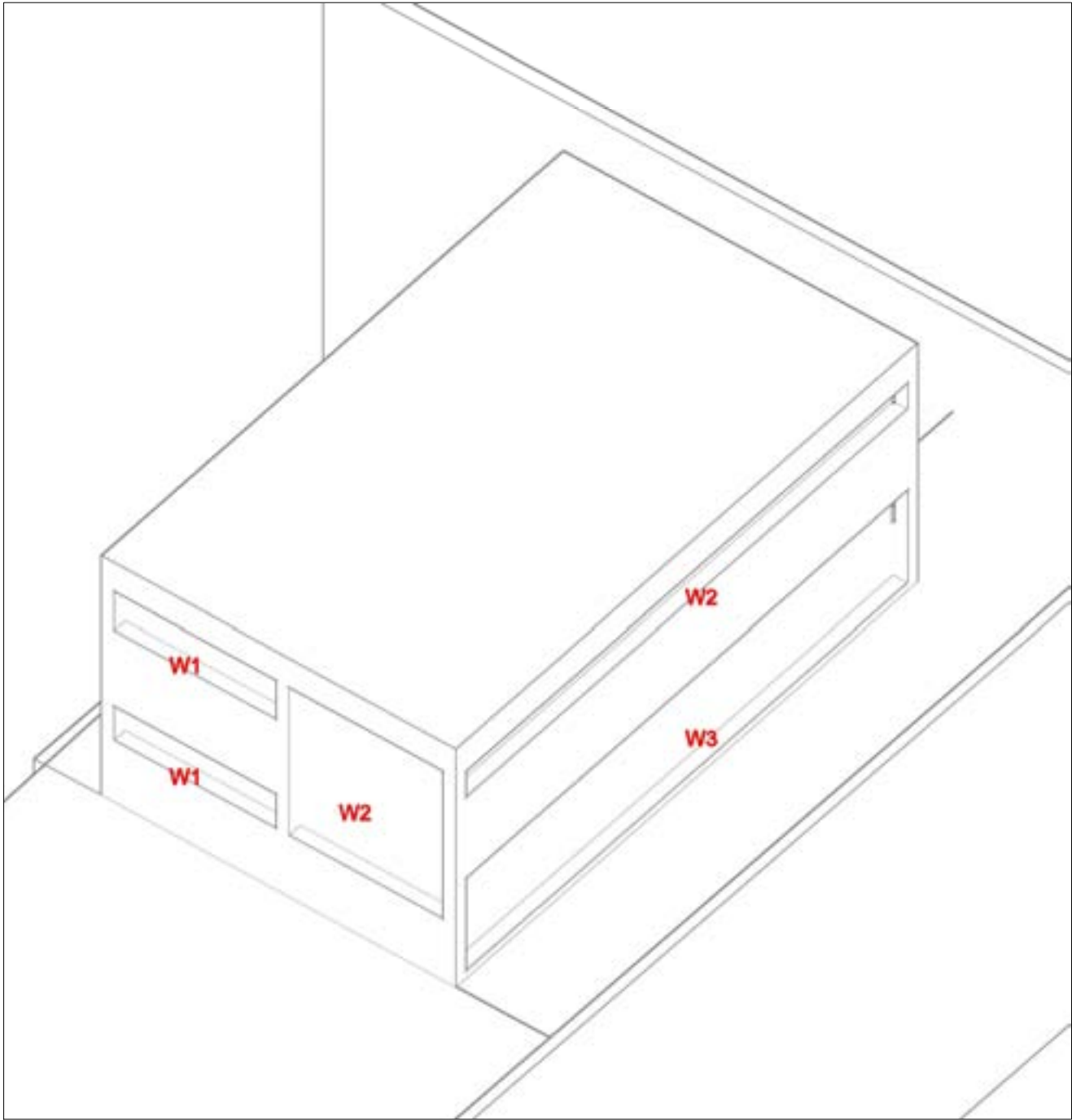


3D Context View - North West

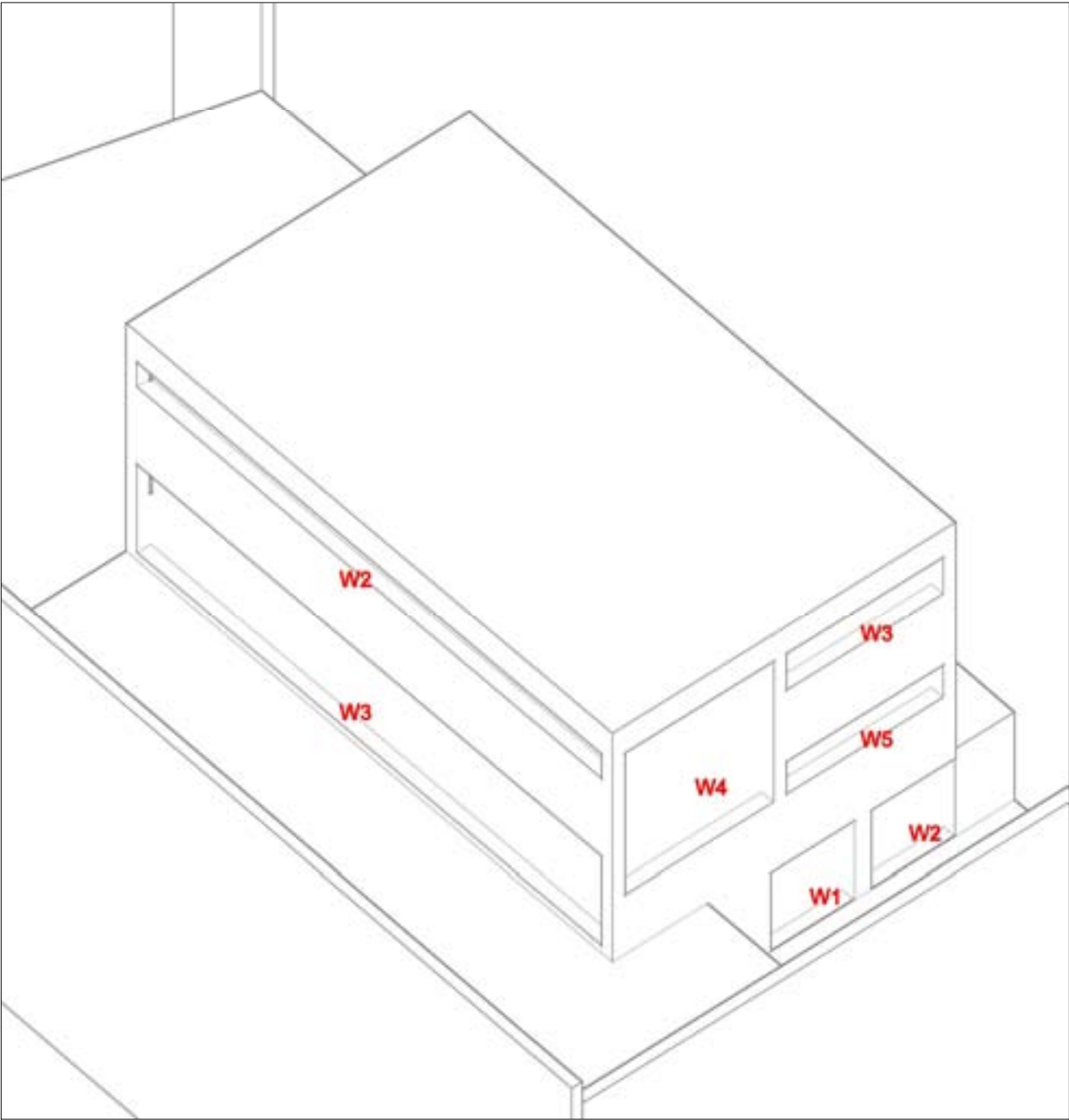
KEY



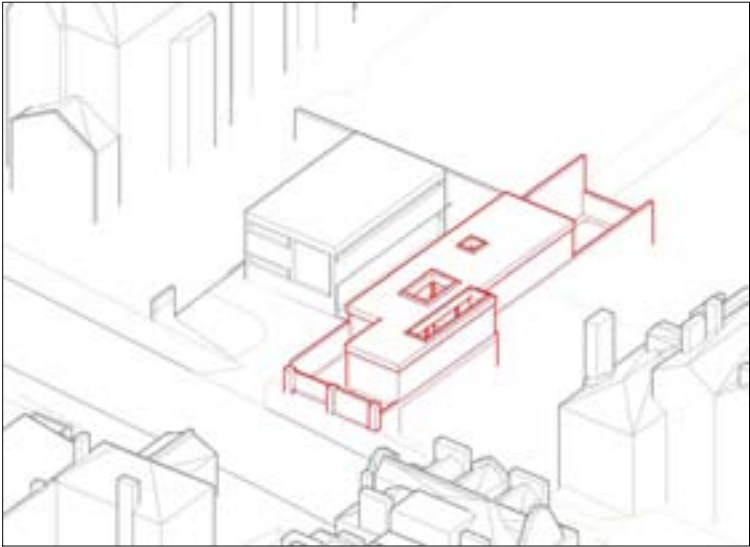
3D Context View - South East



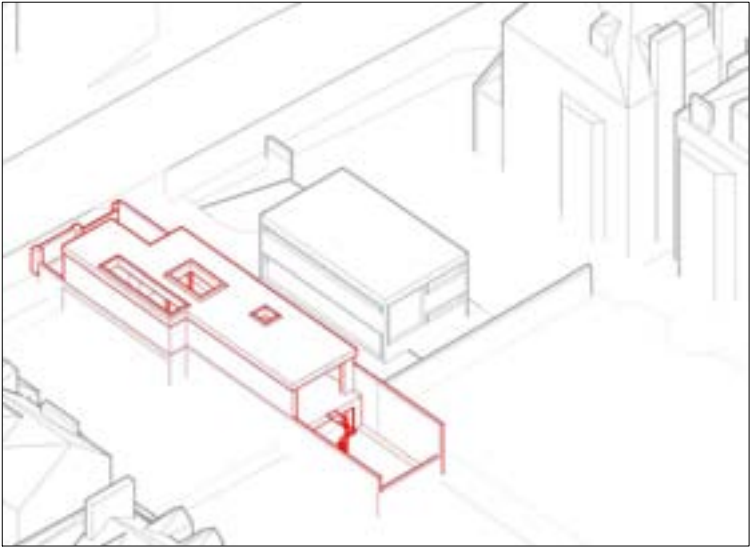
1 Kings College Road



1 Kings College Road - Continued



3D Context View - South West



3D Context View - South East

SOURCES OF INFORMATION:
SQUAREFEET ARCHITECTS

010 Proposed Site Plan.dwg
121 Proposed Roof Plan.dwg
122 Proposed Upper Ground Plan-2.dwg
123 Proposed Lower Ground Plan-2.dwg
124 Proposed Basement Plan.dwg
130 Proposed West Elevation.dwg
131 Proposed Street Elevation.dwg
132 Proposed North Elevation.dwg
133 Proposed East Elevation.dwg
134 Proposed South Elevation.dwg
140 Proposed Section A-A'.dwg
141 Proposed Section B-B'.dwg
142 Proposed Section C-C'.dwg

Received 09 November 2017

PROMAP.CO.UK

145750859_1 62917 - Kings College Road_171117_Solids.dwg

Received 17 November 2017

Rev.	Date	Amendments	Initial
MALCOLM HOLLIS SHALL BE INFORMED IN WRITING OF ANY DISCREPANCIES. ALL DIMENSIONS ARE IN MILLIMETERS ONLY			

TITLE

Window Referencing Diagrams
1 Kings College Road

CLIENT

Square Feet Architects

PROJECT

Kings College Road
London
NW3

DRAWN BY	CHECKED
OW	SL
SCALE	DATE
1:100@A3	November 2017

malcolm hollis

80-82 Silverthorne Road
London
SW8 3HE

T 020 7622 9555
F 020 7627 9850
W malcolmhollis.com

DRAWING NO.	RELEASE NO.
62917_WR_01	1

Appendix D
Daylight Study



Vertical Sky Component (VSC) - Numerical Analysis (Existing Buildings)

BRE VSC

Floor Ref.	Window Ref.	Existing VSC	Proposed VSC	Times Former Value	BRE Compliant
No.1 Kings College Road					
Below Ground	W1	14.2	14.2	1	Yes
Below Ground	W2	12.7	12.7	1	Yes
Ground	W1	31.9	31.7	0.99	Yes
Ground	W2	33.0	32.7	0.99	Yes
Ground	W3	26.7	19.9	0.74	No
Ground	W4	32.0	32.0	1	Yes
Ground	W5	29.9	29.8	1	Yes
First	W1	33.8	33.8	1	Yes
First	W2	31.8	31.8	1	Yes
First	W3	32.1	32.1	1	Yes

Average Daylight Factor (ADF) Analysis - Proposed Buildings

Floor Ref	Room Ref	Room Use	Window Ref
Proposed Development			
Basement	R1	Annexe	W1-L
Basement	R1	Annexe	W1-U
Lower Ground	R1	Bedroom	W1-L
Lower Ground	R1	Bedroom	W1-U
Lower Ground	R2	Bedroom	W2-L
Lower Ground	R2	Bedroom	W2-U
Lower Ground	R2	Bedroom	W7
Lower Ground	R3	Bedroom	W4-L
Lower Ground	R3	Bedroom	W4-U
Lower Ground	R4	Bedroom	W3-L
Lower Ground	R4	Bedroom	W3-U
Upper Ground	R1	LKD	W1-L
Upper Ground	R1	LKD	W1-U
Upper Ground	R1	LKD	W2-L
Upper Ground	R1	LKD	W2-U
Upper Ground	R1	LKD	W3-L
Upper Ground	R1	LKD	W3-U
Upper Ground	R1	LKD	W4-L
Upper Ground	R1	LKD	W4-U
Upper Ground	R1	LKD	W5-L
Upper Ground	R1	LKD	W5-U
Upper Ground	R1	LKD	W6-L
Upper Ground	R1	LKD	W6-U
Upper Ground	R1	LKD	W7
Upper Ground	R1	LKD	W8

Appendix E

Sunlight Study



Numeric Results for the Annual Probable Sunlight Hours (APSH) Tests - Existing Buildings

Floor Ref.	Window Ref.	Existing		Proposed		Winter Times Former Value	Annual Times Former Value	BRE Compliant
		Winter %	Annual %	Winter %	Annual %			
No.1 Kings College Road								
Ground	W1	12	45	12	45	1.00	1.00	YES
Ground	W2	12	46	12	46	1.00	1.00	YES
Ground	W3	13	71	3	57	0.23	0.80	NO
First	W1	12	46	12	46	1.00	1.00	YES
First	W2	22	80	22	80	1.00	1.00	YES