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Sebastian Potiriadis
Estate Office
The Roma Building
32-38 Scrutton Street
London
EC24 4RQ

20th April 2018

Dear Sebastian,

PROPOSED DEVELOPMENT OF 24 HEATH DRIVE, NW3 – DAYLIGHT AND SUNLIGHT AMENITY, AND; 23 HEATH DRIVE, NW3

Instruction

We are instructed to consider the potential impact the proposed development of 24 Heath Drive will have upon the daylight and sunlight amenity to number 23 Heath Drive. Our assessment has been undertaken in accordance with BRE Guidance, being the principle authority on daylight/sunlight amenity at planning.

Our assessment is based upon the sources of information detailed below. We will provide a synopsis on daylight and sunlight and discuss the effect of the proposed scheme upon number 23.

Sources of Information

Point 2 Surveyors Ltd	-	Site Photography Site measurements of: - Site facing elevation - Site facing rooms
Gleeds Building Survey Ltd	-	Existing building survey drawings LNB0490_E02.dwg, LNBS0490_E01.dwg, LNBS0490_FP00.dwg, LNBS0490_Fp01.dwg, LNBS0490_FP02.dwg, LNBS0490_FPB.dwg, LNBS0490_FPR.dwg, LNBS0490_S01.dwg
Kyson Architects	-	Proposed Scheme Drawings Proposed Elevations.dwg, Proposed Landscape Design.dwg, Proposed Plans.dwg, Proposed Section.dwg

BRE Overview and Daylight / Sunlight Methodology

It is usual to assess daylight and sunlight in relation to the guidelines set out in the 2011 Building Research Establishment (BRE) Report 'Site layout planning for daylight and sunlight - A guide to good practice' by Paul Littlefair. This document is most widely accepted by planning authorities as the means by which to judge the acceptability of a scheme. One of the primary sources for the BRE Report is the more detailed guidance contained within 'British Standard 8206 Part 2:2008'.

In relation to the properties surrounding a site, usually the local planning authority will only be concerned with the impact to main habitable accommodation (i.e. living rooms, bedrooms and kitchens) within residential properties.

To determine whether a neighbouring existing building may be adversely affected, the initial test provided by the BRE is to establish if any part of the proposal subtends an angle of more than 25˚ from the lowest window serving the existing building. If this is the case then there may be an adverse effect, and more detailed calculations are required to quantify the extent of any impact.

The BRE guidelines provide two principal measures of daylight for assessing the impact on properties neighbouring a site, namely Vertical Sky Component (VSC) and No-Sky Line (NSL). They also detail a third measure of daylight which is primarily used for assessing amenity within proposed accommodation, namely Average Daylight Factor (ADF).

In terms of sunlight we examine the BRE Annual Probable Sunlight Hours (APSH); and in relation to sunlight amenity to gardens and amenity spaces, we apply the quantitative BRE overshadowing guidance.

These measures of daylight and sunlight are discussed in the following paragraphs –

Diffuse Daylight

Vertical Sky Component (VSC) – VSC is a measure of the direct skylight reaching a point from an overcast sky. It is the ratio of the illuminance at a point on a given vertical plane to the illuminance at a point on a horizontal plane due to an unobstructed sky. For existing buildings, the BRE guideline is based on the loss of VSC at a point at the centre of a window, on the outer plane of the wall.

The BRE guidelines state that if the VSC at the centre of a window is less than 27%, and it is less than 0.8 times its former value (i.e. the proportional reduction is greater than 20%), then the reduction in skylight will be noticeable, and the existing building may be adversely affected.

No-Sky Line (NSL) - NSL is a measure of the distribution of daylight within a room. It maps out the region within a room where light can penetrate directly from the sky, and therefore accounts for the size of and number of windows by simple geometry.

The BRE suggest that the area of the working plane within a room that can receive direct skylight should not be reduced to less than 0.8 times its former value (i.e. the proportional reduction in area should not be greater than 20%).

Average Daylight Factor (ADF) - ADF is a measure of the overall amount of diffuse daylight within a room. It is the average of the daylight factors across the working plane within a room. This equates to the ratio of the average illuminance across the working plane, to the illuminance due to an unobstructed sky.

In addition to accounting for external obstructions, the ADF accounts for the number of windows and their size in relation to the size of the room, the window transmittance and the reflectance of the internal walls, floor and ceiling.

While the ADF can be calculated from first principles using a lighting simulation software suite such as Radiance, in simple situations it can approximated using the empirical formula detailed in both British Standard 8206 Part 2:2008 and Appendix C of the BRE Report.

Both the BRE Report and BS 8206 Part 2:2008 provide guidance for acceptable ADF values in the presence of supplementary electric lighting, depending on the room use. These are 1.0% for a bedroom, 1.5% for a living room and 2.0% for a kitchen.

Sunlight

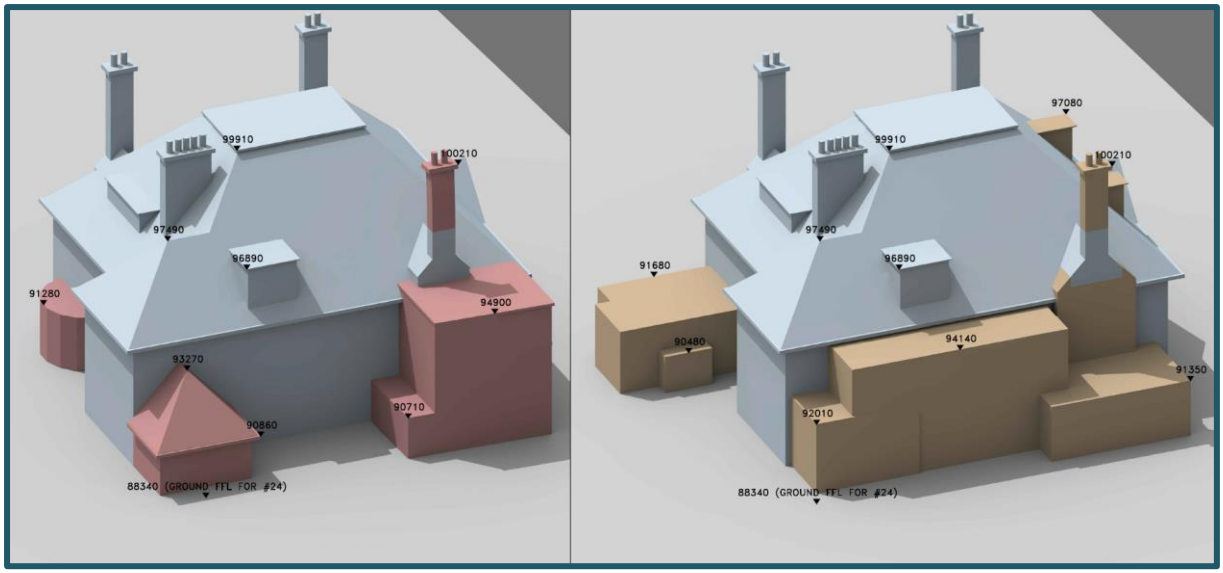
Annual Probable Sunlight Hours (APSH) - In relation to sunlight, the BRE recommends that the APSH received at a given window in the proposed case should be at least 25% of the total available, including at least 5% in winter.

Where the proposed values fall short of these, and the absolute loss is greater than 4%, then the proposed values should not be less than 0.8 times their previous value in each period (i.e. the proportional reductions should not be greater than 20%).

The BRE guidelines state that *'...all main living rooms of dwellings, and conservatories, should be checked if they have a window facing within 90 degrees of due south. Kitchens and bedrooms are less important, although care should be taken not to block out too much sun'*.

The APSH figures are calculated for each window, and where a room is served by more than one window the contribution of each is accounted for in the overall figures for the room. The acceptability criteria are applied to overall room based figures.

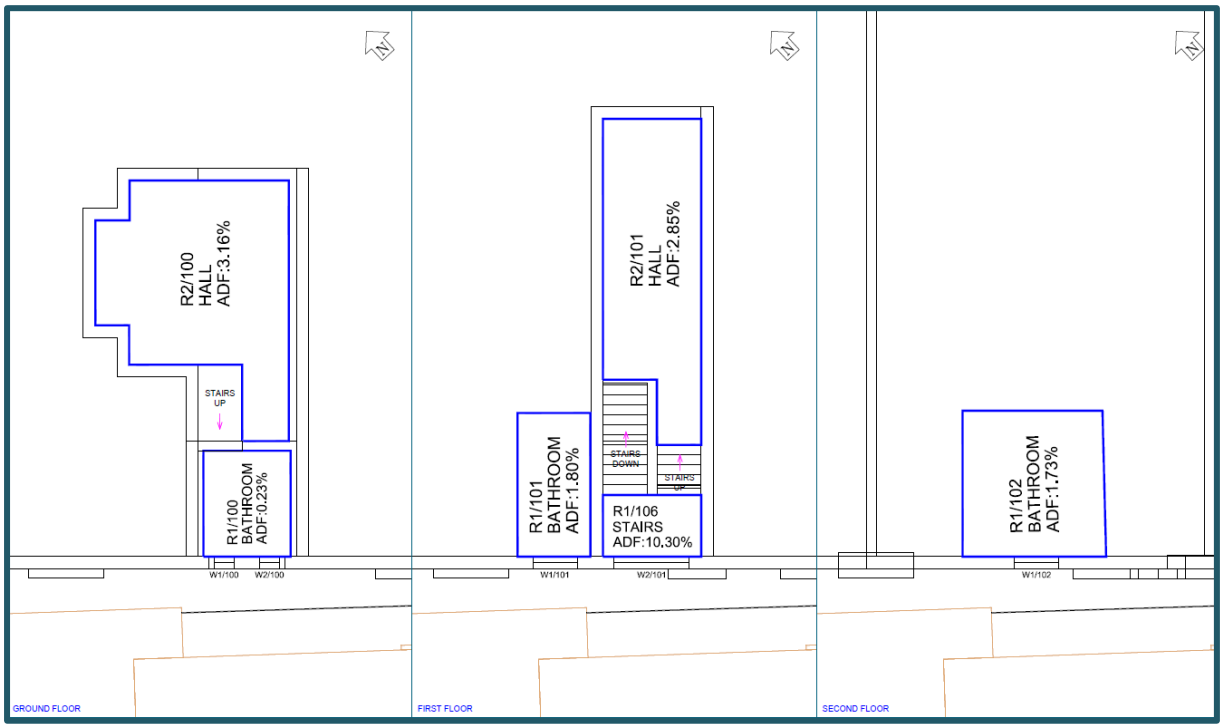
The Existing and Proposed Building



Drawing Reference: P1723/09 – 3D View – Existing (pink), Proposed (beige) and Retained Structure (blue)

Daylight and Sunlight Assessment of 23 Heath Drive

Point 2 Surveyors attended the above property on 18th April 2018 to inspect the internal arrangement of the property and measure the site facing rooms.



Drawing Reference: P1763/09 – Site Facing Rooms

As you can see from the above drawing, at ground floor there is a hallway (R2/100) which is served by the large stained glass window at the top of the stairs. There is also a bathroom (R1/1000) served by two narrow, frosted windows. Going up the house, there is a landing between ground and first (R1/106) leading up to the first floor hallway (R2/101), both served by the large stained glass window. There is also a first floor en-suite bathroom (R1/101). Finally, on the second floor there is another en-suite bathroom (R1/102).

We should highlight that the BRE Guidelines states that *"The guidelines given here are intended for use for rooms in adjoining dwellings where daylight is required, including living rooms kitchens and bedrooms. Windows to bathrooms, toilets, storerooms, circulation areas and garages need not be analysed."* (BRE Guide 209, paragraph 2.2.2). Notwithstanding this, we have assessed the rooms in any event.

As a result of the proposed development, the ground floor hall (R2/100), ground to first stairwell (R1/106), first floor bathroom (R1/101) and first floor hallway all experience improvements in daylight and sunlight from the existing situation.

The ground floor bathroom experiences a small reduction daylight, however the change is not considered material to having regard to the frosted windows and non-habitable use of the room. Moreover, the existing daylight conditions in this room would mean it needs to be lit by electric lighting so any change in daylight is largely irrelevant.

Finally, the second floor bathroom experiences a minimal reduction but retains a absolute VSC of 34% after construction of the proposal. BRE Guidance concludes a window that achieves a VSC of at least 27% will receive very good daylight.

Conclusion

With reference the technical analysis, the majority of rooms actually enjoy improvements in daylight as a result of the proposed scheme.

The only two reductions relate to bathrooms where daylight is not considered essential in any event.

We trust this letter provides adequate comfort that the daylight amenity of number 23 Heath Drive will not be adversely affected as a result of the proposed development. If you have any questions please do not hesitate to contact me.

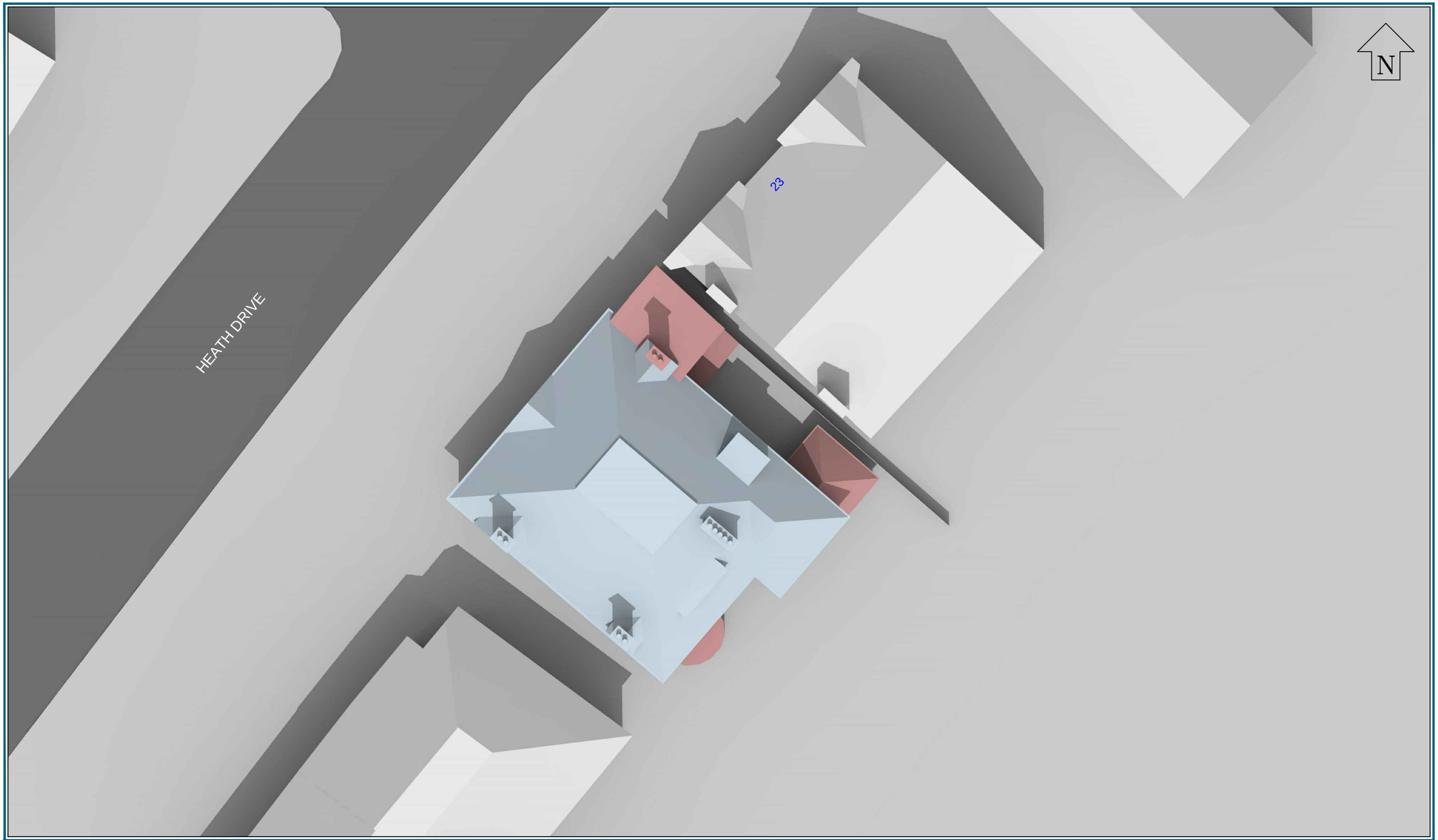
Yours sincerely,

Matthew Hensey
Senior Surveyor
Point 2 Surveyors Ltd
Matt.Hensey@point2surveyors.com

Encls.

a) Existing and Proposed Drawings
b) Technical VSC/ADF, NSL and APSH Analysis

ENCLOSURE A – EXISTING AND PROPOSED DRAWINGS



Sources: Point 2 Surveyors
Site measurements and photographs

Gleeds Building Survey LTD
Existing building survey drawings
LNB0490_E02.dwg, LNBS0490_E01.dwg, LNBS0490_FP00.dwg, LNBS0490_FP01.dwg, LNBS0490_FP02.dwg, LNBS0490_FPB.dwg, LNBS0490_FPR.dwg, LNBS0490_S01.dwg

Kyson Architects
Proposed scheme drawings (received 16/04/18)
Proposed Elevations.dwg, Proposed Landscape Design.dwg, Proposed Plans.dwg, Proposed Section.dwg

Key: Existing Building
Proposed Scheme
Retained Building

Project: 24 Heath Drive
Camden
London

Title: Plan View
Existing Buildings

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17 Slingsby Place,
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Scheme Confirmed: - Date : -

Drawn By: SDJ | Scale: 1:200 @ A3 | Date: Apr 18 | Dwg No: **P1763/01** | Rel: 01

Sources: Point 2 Surveyors
Site measurements and photographs

Gleeds Building Survey LTD
Existing building survey drawings
LNB0490_E02.dwg, LNBS0490_E01.dwg, LNBS0490_FP00.dwg, LNBS0490_FP01.dwg, LNBS0490_FP02.dwg, LNBS0490_FPB.dwg, LNBS0490_FPR.dwg, LNBS0490_S01.dwg

Kyson Architects
Proposed scheme drawings (received 16/04/18)
Proposed Elevations.dwg, Proposed Landscape Design.dwg, Proposed Plans.dwg, Proposed Section.dwg

Key: Existing Building
Proposed Scheme
Retained Building
All Heights in mm AOD

Project: 24 Heath Drive
Camden
London

Title: 3D View
Existing Buildings

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Scheme Confirmed: - Date : -

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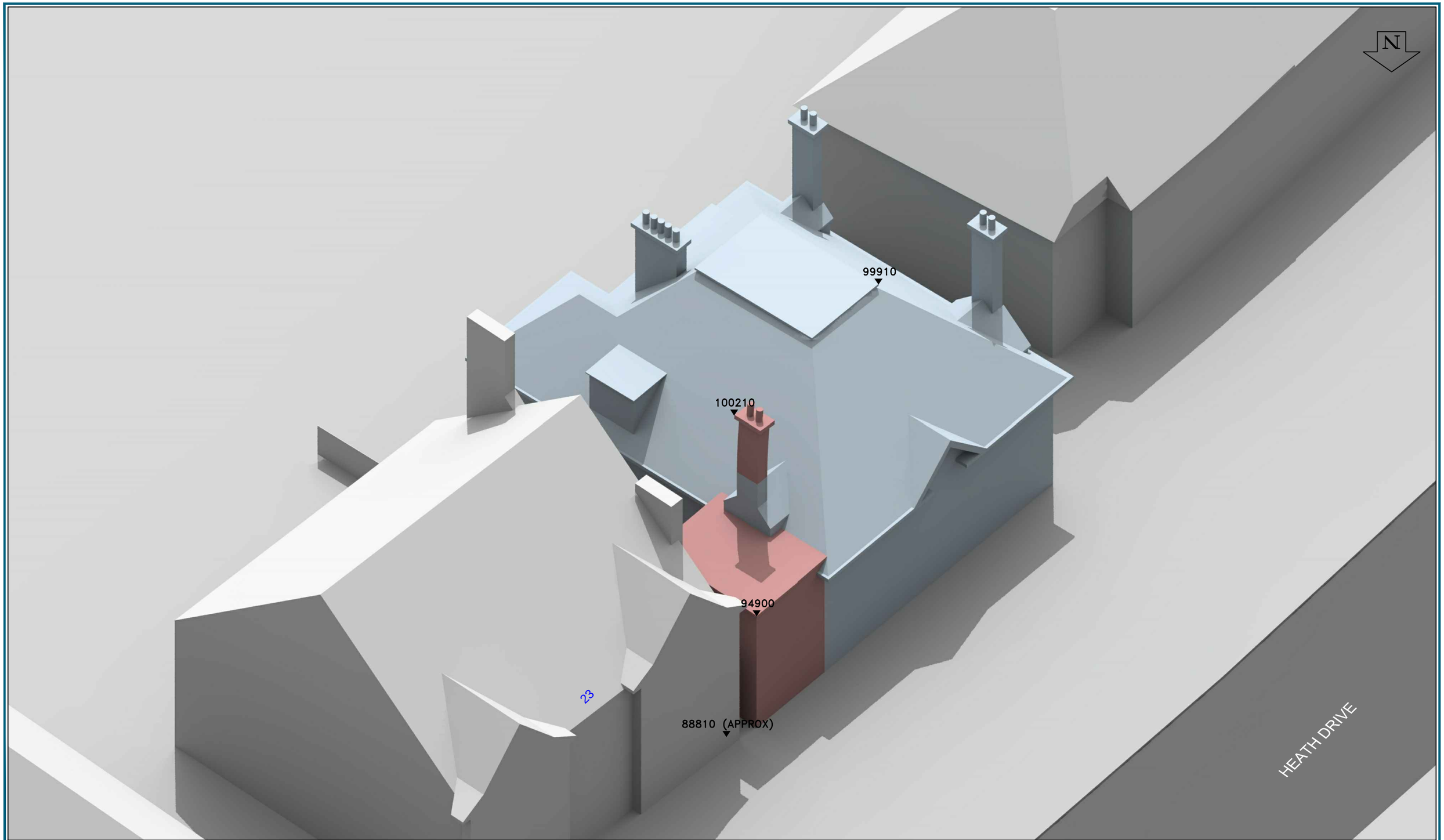

Sources: Point 2 Surveyors
Site measurements and photographs

Gleeds Building Survey LTD
Existing building survey drawings
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Kyson Architects
Proposed scheme drawings (received 16/04/18)
Proposed Elevations.dwg, Proposed Landscape Design.dwg, Proposed Plans.dwg, Proposed Section.dwg

Key: Existing Building
Proposed Scheme
Retained Building
All Heights in mm AOD

Scheme Confirmed: - Date : -

Project: 24 Heath Drive
Camden
London

Drawn By: SDJ | Scale: NTS @ A3 | Date: Apr 18

Title: 3D View
Existing Buildings

Dwg No: **P1763/03** | Rel: 01

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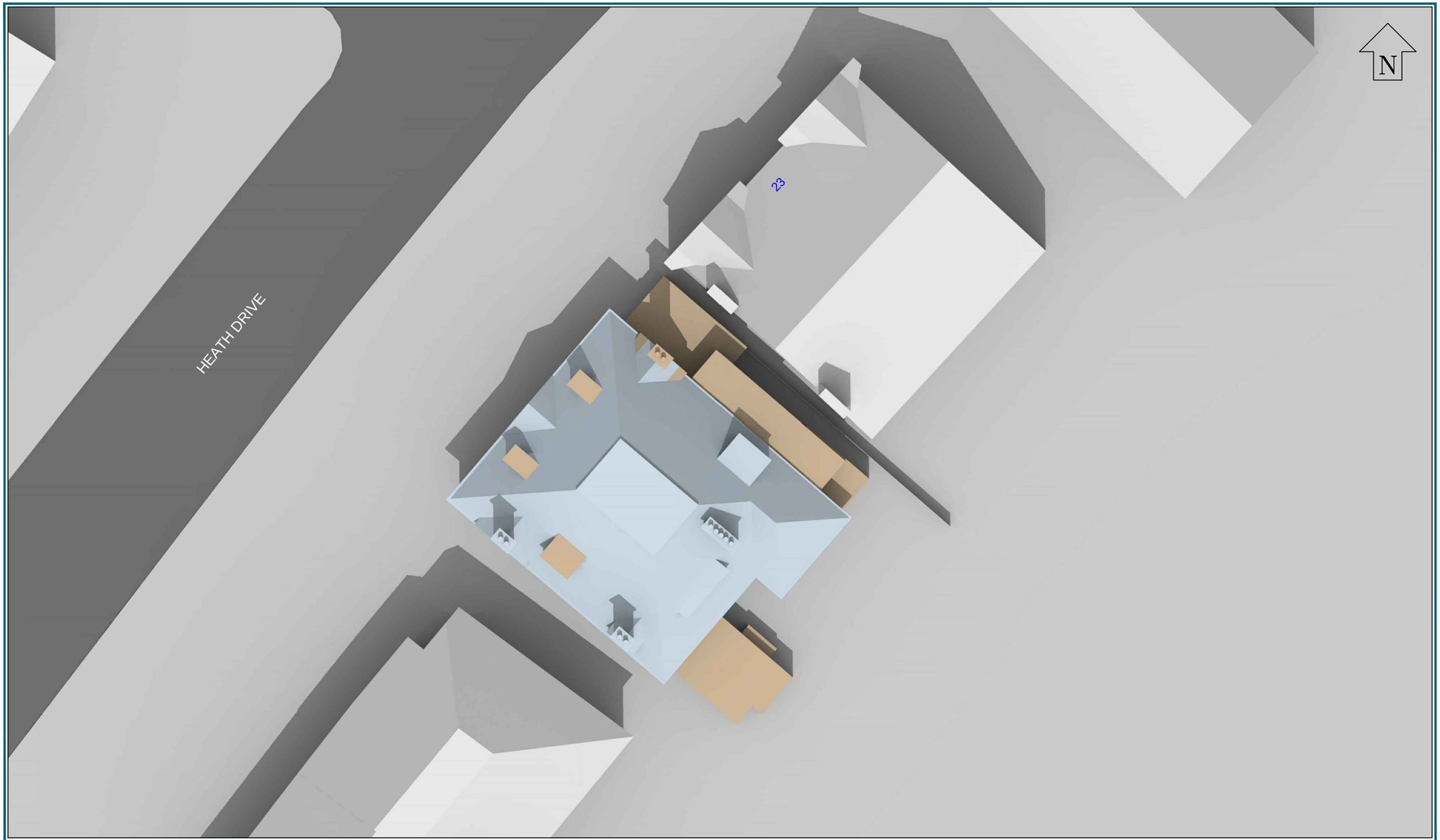

Sources: Point 2 Surveyors
Site measurements and photographs

Gleeds Building Survey LTD
Existing building survey drawings
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Kyson Architects
Proposed scheme drawings (received 16/04/18)
Proposed Elevations.dwg, Proposed Landscape Design.dwg, Proposed Plans.dwg, Proposed Section.dwg

Key: Existing Building
Proposed Scheme
Retained Building

Project: 24 Heath Drive
Camden
London

Title: Plan View
Proposed Scheme

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Scheme Confirmed: - Date : -

Drawn By: SDJ | Scale: 1:200 @ A3 | Date: Apr 18 | Dwg No: **P1763/04** | Rel: 01

Sources: Point 2 Surveyors
Site measurements and photographs

Gleeds Building Survey LTD
Existing building survey drawings
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Kyson Architects
Proposed scheme drawings (received 16/04/18)
Proposed Elevations.dwg, Proposed Landscape Design.dwg, Proposed Plans.dwg, Proposed Section.dwg

Key: Existing Building
Proposed Scheme
Retained Building
All Heights in mm AOD

Project: 24 Heath Drive
Camden
London

Title: 3D View
Proposed Scheme

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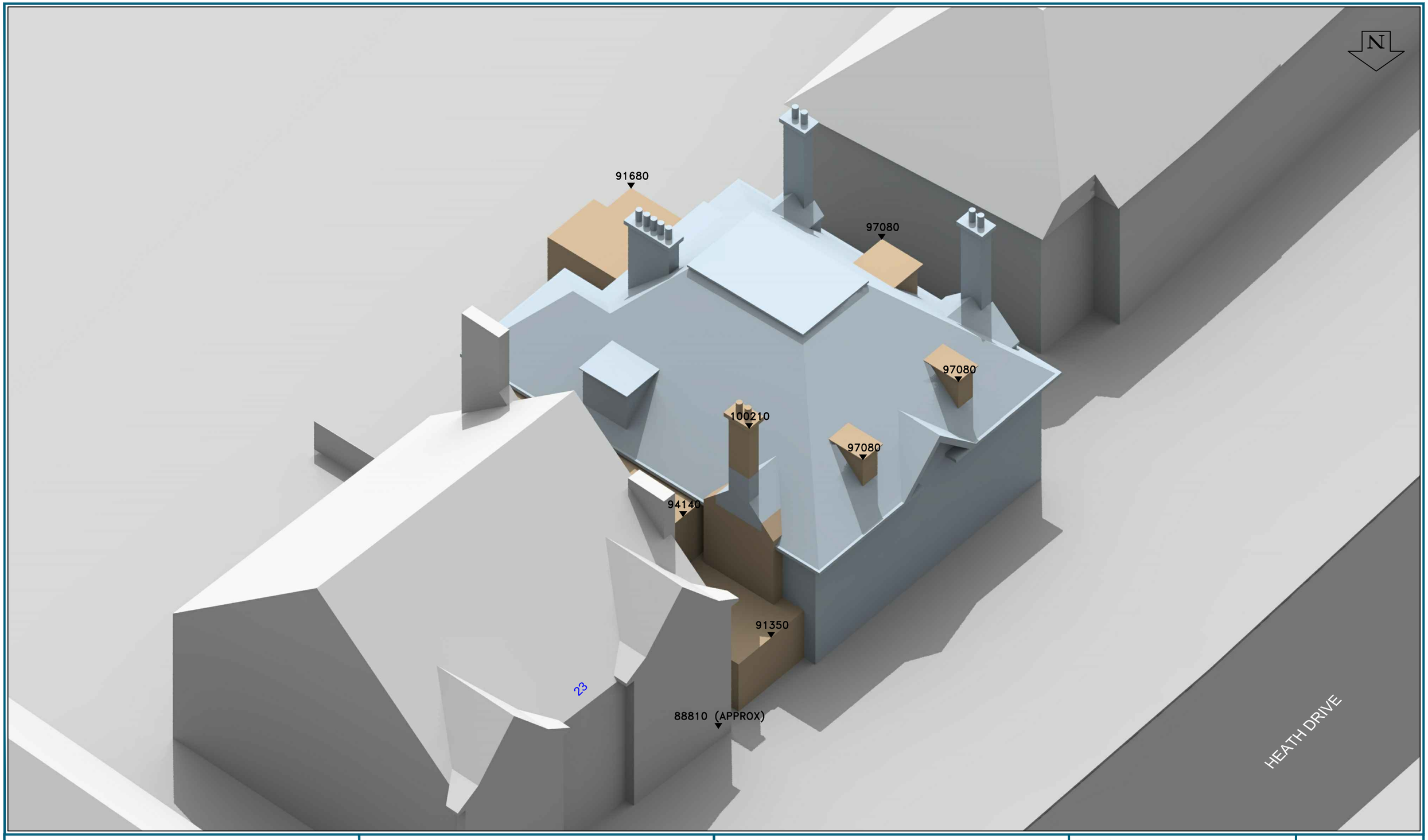
Scheme Confirmed: - Date : -

Drawn By: SDJ | Scale: NTS @ A3 | Date: Apr 18 | Dwg No: **P1763/05** | Rel: 01



Sources: Point 2 Surveyors
Site measurements and photographs

Gleeds Building Survey LTD
Existing building survey drawings
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Kyson Architects
Proposed scheme drawings (received 16/04/18)
Proposed Elevations.dwg, Proposed Landscape Design.dwg, Proposed Plans.dwg, Proposed Section.dwg

Key: Existing Building
Proposed Scheme
Retained Building
All Heights in mm AOD

Project: 24 Heath Drive
Camden
London

Title: 3D View
Proposed Scheme

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Scheme Confirmed: - Date : -

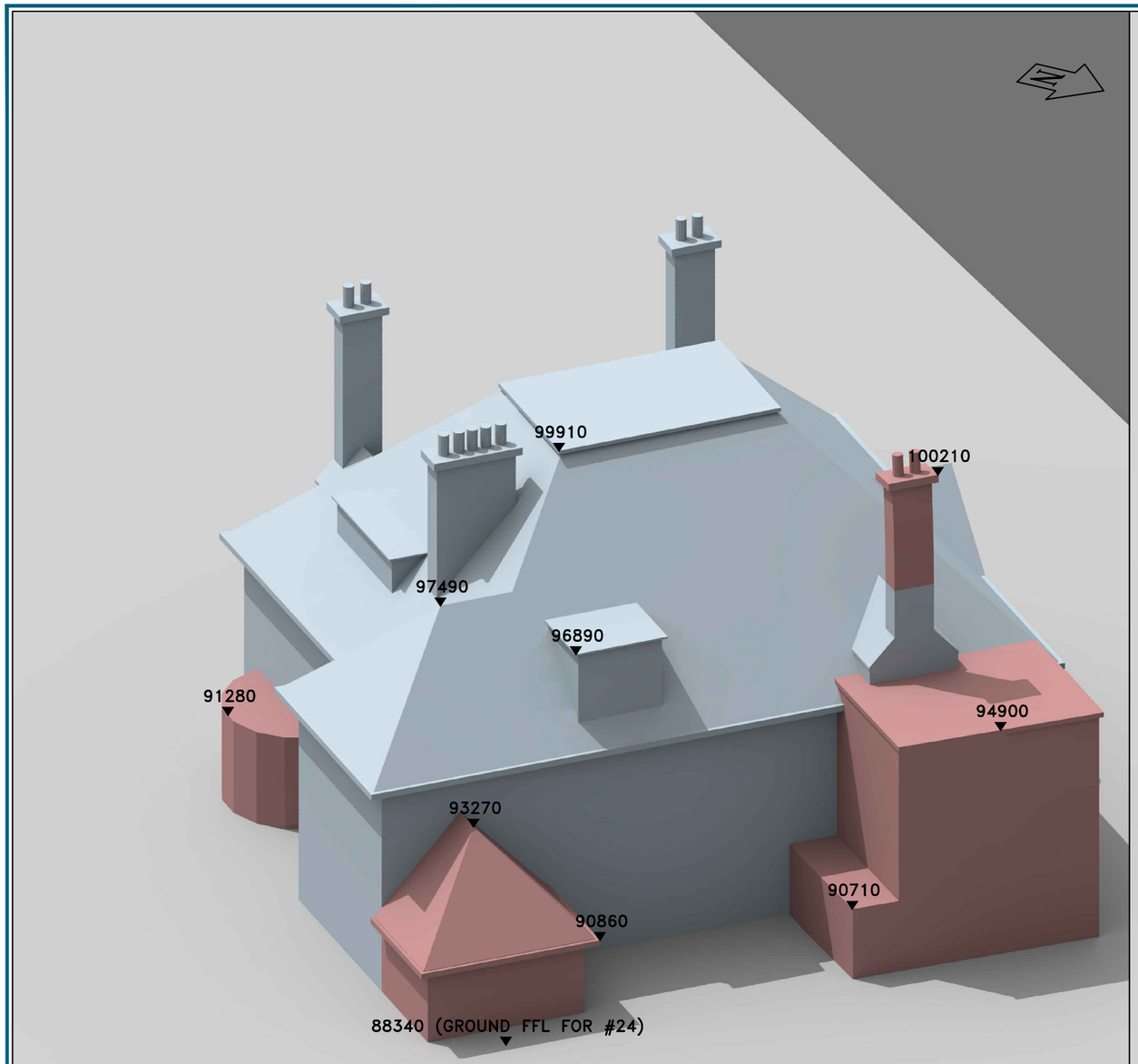
Drawn By: SDJ

Scale: NTS @ A3

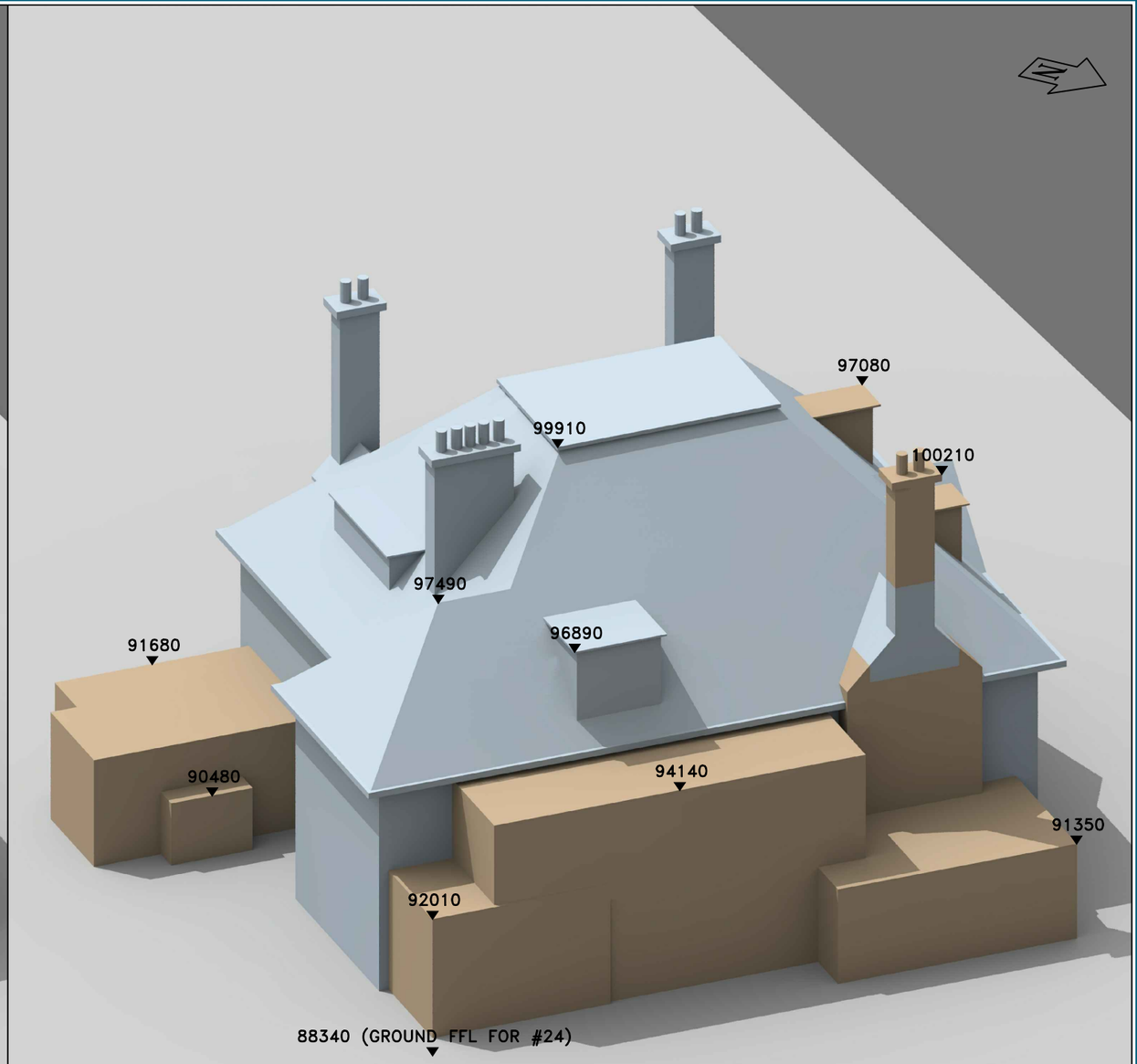
Date: Apr 18

Dwg No: **P1763/06**

Rel: 01



EXISTING



PROPOSED

Sources: Point 2 Surveyors
Site measurements and photographs

Gleeds Building Survey LTD
Existing building survey drawings
LNB0490_E02.dwg, LNBS0490_E01.dwg, LNBS0490_FP00.dwg, LNBS0490_FP01.dwg, LNBS0490_FP02.dwg, LNBS0490_FPB.dwg, LNBS0490_FPR.dwg, LNBS0490_S01.dwg

Kyson Architects
Proposed scheme drawings (received 16/04/18)
Proposed Elevations.dwg, Proposed Landscape Design.dwg, Proposed Plans.dwg, Proposed Section.dwg

Key: Existing Building
Proposed Scheme
Retained Building
All Heights in mm AOD

Scheme Confirmed: -

Date : -

Project: 24 Heath Drive
Camden
London

Drawn By: SDJ

Scale: NTS @ A3

Date: Apr 18

Title: 3D View
Existing Building and Proposed Scheme
(Shown In Isolation For Clarity)

Dwg No: **P1763/07**

Rel: 01

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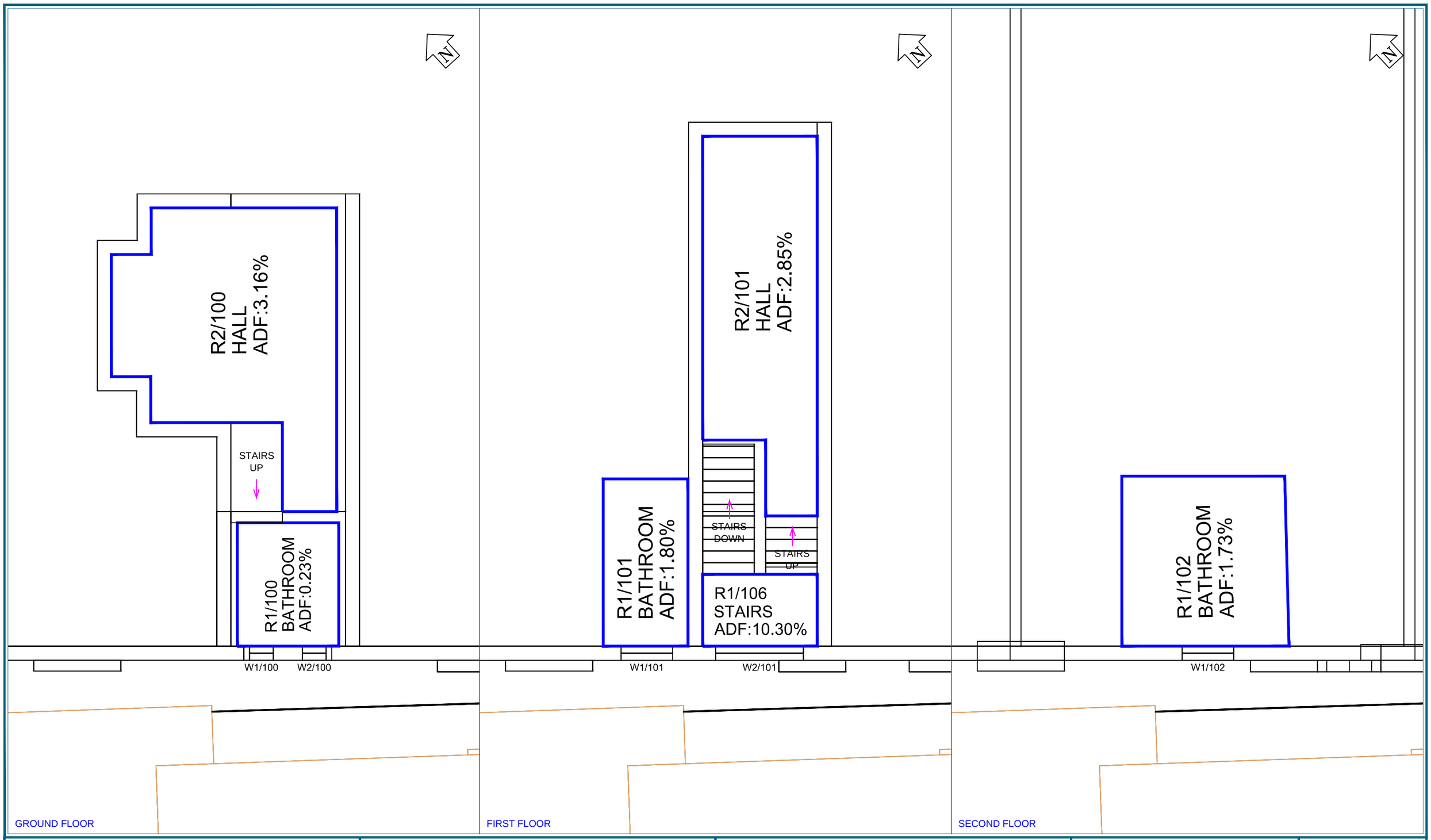
ENCLOSURE B – TECHNICAL ANALYSIS



Sources: Point 2 Surveyors
Site measurements and photographs

Gleeds Building Survey LTD
Existing building survey drawings
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Kyson Architects
Proposed scheme drawings (received 16/04/18)
Proposed Elevations.dwg, Proposed Landscape Design.dwg, Proposed Plans.dwg, Proposed Section.dwg

Key:

Project: 24 Heath Drive
Camden
London

Title: ADF Results
Proposed Scheme

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Scheme Confirmed: - Date : -

Drawn By: SDJ | Scale: 1:75 @ A3 | Date: Apr 18 | Dwg No: **P1763/09** | Rel: 01

24 HEATH DRIVE
CAMDEN
LONDON

DAYLIGHT ANALYSIS
EXISTING vs PROPOSED SCHEME 16/04/18

APR 2018

Room	Room Use	Window	EXISTING VSC	PROPOSED VSC	LOSS VSC	%LOSS VSC	Room	Room Use	Window	EXISTING ADF	EXISTING TOTAL	PROPOSED ADF	PROPOSED TOTAL	TOTAL LOSS	%LOSS ADF
23 HEATH DRIVE							**23 HEATH DRIVE**								
R1/100	BATHROOM	W1/100	12.74	10.20	2.54	19.94	**R1/100**	BATHROOM	W1/100	0.32		0.12			
R1/100	BATHROOM	W2/100	13.70	9.62	4.08	29.78	**R1/100**	BATHROOM	W2/100	0.33	0.65	0.11	0.23	0.42	64.41
R2/100	HALL	W2/101	22.47	22.98	-0.51	-2.27	**R2/100**	HALL	W2/101	3.12	3.12	3.16	3.16	-0.04	-1.15
R1/101	BATHROOM	W1/101	21.51	23.67	-2.16	-10.04	**R1/101**	BATHROOM	W1/101	1.70	1.70	1.80	1.80	-0.10	-6.01
R2/101	HALL	W2/101	22.47	22.98	-0.51	-2.27	**R2/101**	HALL	W2/101	2.83	2.83	2.85	2.85	-0.02	-0.56
R1/102	BATHROOM	W1/102	34.24	34.15	0.09	0.26	**R1/102**	BATHROOM	W1/102	1.74	1.74	1.73	1.73	0.00	0.12
R1/106	STAIRS	W2/101	22.47	22.98	-0.51	-2.27	**R1/106**	STAIRS	W2/101	10.20	10.20	10.30	10.30	-0.10	-1.01

Room/ Floor	Room Use	Whole Room	Prev sq ft	New sq ft	Loss sq ft	%Loss
23 HEATH DRIVE						
R1/100	BATHROOM	61.0	22.0	13.3	8.8	40.0
R2/100	HALL	241.3	119.3	119.3	0.0	0.0
R1/101	BATHROOM	69.0	42.7	42.7	0.0	0.0
R2/101	HALL	188.4	10.7	10.7	0.0	0.0
R1/102	BATHROOM	136.5	130.5	130.5	0.0	0.0
R1/106	STAIRS	40.1	40.0	40.0	0.0	0.0

			Window						Room					
			Existing		Proposed				Existing		Proposed			
Room	Window	Room Use	Winter APSH	Annual APSH	Winter APSH	Annual APSH	Winter %Loss	Annual %Loss	Winter APSH	Annual APSH	Winter APSH	Annual APSH	Winter %Loss	Annual %Loss
23 HEATH DRIVE														
R1/100	**W1/100**	BATHROOM	6	31	3	18	50.0	41.9						
R1/100	**W2/100**	BATHROOM	5	26	2	14	60.0	46.2	6	33	3	18	50.0	45.5
R2/100	**W2/101**	HALL	13	48	13	50	0.0	-4.2	13	48	13	50	0.0	-4.2
R1/101	**W1/101**	BATHROOM	12	43	12	52	0.0	-20.9	12	43	12	52	0.0	-20.9
R2/101	**W2/101**	HALL	13	48	13	50	0.0	-4.2	13	48	13	50	0.0	-4.2
R1/102	**W1/102**	BATHROOM	22	69	22	69	0.0	0.0	22	69	22	69	0.0	0.0
R1/106	**W2/101**		13	48	13	50	0.0	-4.2	13	48	13	50	0.0	-4.2