JB/JP/3561/2007

30th November 2007

Mr Tim Cronin
Development Control
London Borough of Camden
Argyle Street
London
WC1H 8EQ

Dear Mr Cronin

RE: THE REDEVELOPMENT OF CHICHESTER HOUSE AND DAYLIGHT AND SUNLIGHT

As discussed at the Committee Meeting on November 29th 2007, I write to inform you of our updated results for the daylight and sunlight assessments carried out on 12-15 Great Turnstile.

When reading this letter one should consider that the effects of changes in lighting levels (daylight and sunlight) to the residents to 12-15 Great Turnstile will not be instantly apparent or discernable to the human eye but are non-discernable changes to the daylight and sunlight that the residents currently enjoy. It should be further noted that only two rooms in totality will be adversely affected as a result of this proposal

With the benefit of more accurate internal layout arrangement drawings of 12-15 Great Turnstile our computer model has since been updated to ensure the highest degree of accuracy in the data. These have been attached to this letter and form the basis of our advice.

The BRE Guidelines 'Site Layout Planning for Daylight and Sunlight – A Guide to Good Practice' forms the basis of our methodology. These guidelines stipulate three methodologies for understanding daylight within a room and the alteration experienced as a consequence of implementing a neighbouring development. The industry method for determining the adequacy of daylight would consider (in order) the assessments of the VSC, ADF and NSL. A full computer analysis including all three methods of daylight assessment has been undertaken to understand the real changes in light levels. Whilst quite technical, I think it important to explain each method briefly.

In a City centre and in particular in a location such as Chichester House, it is common to affect daylight and sunlight to a higher degree than the criteria suggested within the BRE guidelines. This is because the guidelines were originally drafted for suburban residential environments and it is therefore recognised that the BRE targets cannot be expected to be achieved in City centre locations. It is therefore of paramount importance to bear in mind that the standards are given as guidelines and that the numerical values involved are purely advisory and must be considered in the context of matters such as, for example, site layout constraints. This point is clearly referred to on page 1 of the BRE document.

Vertical Sky Component (VSC)

The Vertical Sky Component (VSC) method calculates the amount of visible sky on a vertical face (normally a window) at a given point. This is normally the central point of a window except at ground floor level where it is taken 2 metres above the ground. This method of measurement is limited because it only records the potential for light by reference to visible sky. It does not take into account the size of windows, the number of windows serving a room and the room layout and use. Thus it only measures light reaching the outside plane of the window and not the actual light in a room

Within a suburban context for which this test was devised the VSC is very helpful, however, within a densely developed urban context it is not particularly helpful. The reason for saying this is that where buildings are built close to one another, as is the case in Great Turnstile, the existing levels of VSC are very low. Consequently a modest level of development at such proximity can result in large percentage changes in VSC which in real terms are little more than a few percent. For a real understanding of the light behind those windows then two other methods of assessment are available.

No-Sky Line (NSL)

The No-Sky Contour method seeks to determine the internal distribution of light by reference to the extent of light penetration into a room at the working plane level (approximately desk height). It is more accurate than the Vertical Sky Component method because it does take account of the window sizes and room plan but still only considers sky visibility and disregards room use. It helps as a guide but can sometimes be misleading, because if a substantial part of the room falls behind the no skyline contour, the distribution of light within the room may look worse than truly the case.

The BRE Guidelines suggest that where the NSL is altered by more than 20% this may become noticeable to the occupant. On the basis of which all but 2 rooms out of 11 tested (which face the proposed site) will experience satisfactory and BRE compliant daylight by reference to this methodology.

In relation to the two rooms that fall below the suggested guidelines (i.e reductions above 20%) i.e. room R2/111 within Flat 13 on the 1st Floor, and room R2/112 within Flat 23 on the Second floor further detailed consideration is given below in relation to the most accurate of the three methods of daylight analysis, namely the Average Daylight Factor.

Average Daylight Factor (ADF)

The Average Daylight Factor (ADF) considers the average amount of light in a room based upon sky visibility and reflectivity of internal surfaces. It thus incorporates the Vertical Sky Component but takes into account the quality of light in the room (albeit averaged) based upon room size and volume and use. The British Standard BS8206 Part II provides different criteria for different room uses. These are also set out within the BRE document in Appendix C on page 58. In essence, the minimum levels of Average Daylight Factor that are suggested are as follows:

Kitchens: 2%

Living rooms: 1.5%

Bedrooms: 1%

Room R2/111 within Flat 13 on the 1st Floor is used as a living room and the ADF is currently 1.07% a level below the general threshold by reference to the BRE Guidelines and British Standard BS8206: Part2. This will be reduced to 0.68% once the proposed scheme is implemented. Room R2/112 within Flat 23 on the Second floor is used as a bedroom/ study and the ADF is currently 1.18% a level considered acceptable for a bedroom by reference to the BRE and will be 0.81% as a consequence of the proposed scheme, slightly below the British standard. Whilst the light enjoyed by these 2 rooms is reduced slightly, the changes in light levels would not alter the way in which the space is materially being used, supplementary electric lighting would still continue to be required at the same levels/periods, as it is currently utilised.

The modest level of change proposed has been considered acceptable in relation to other developments at various locations within London, notably the, Middlesex Hospital site, St Giles Court, Osnaburgh Street. In addition they are driven by a very tight urban site in which any small increase in massing will result in fluctuations in light levels to neighbouring properties. This is something which the BRE Guidelines acknowledge when they state that they should not be read in a mandatory way, but should be applied flexibly particularly in historic or urban city centres precisely such as this. In addition to which the scheme has been designed in such a way to step back from the aforementioned properties and create a greater sense of openness than the existing building offers.

In conclusion only two rooms are affected by this proposal; one to a slightly greater degree than the other. In both cases the levels of light appear to be acceptable and the reductions to be non discernible to the human eye.

Yours sincerely

JUSTIN BOLTON

Encl.

Project No: 3561
Existing v Proposed

Princeton Chichester House
Scheme Dated 3/8/07
DAYLIGHT ANALYSIS

NOV 2007

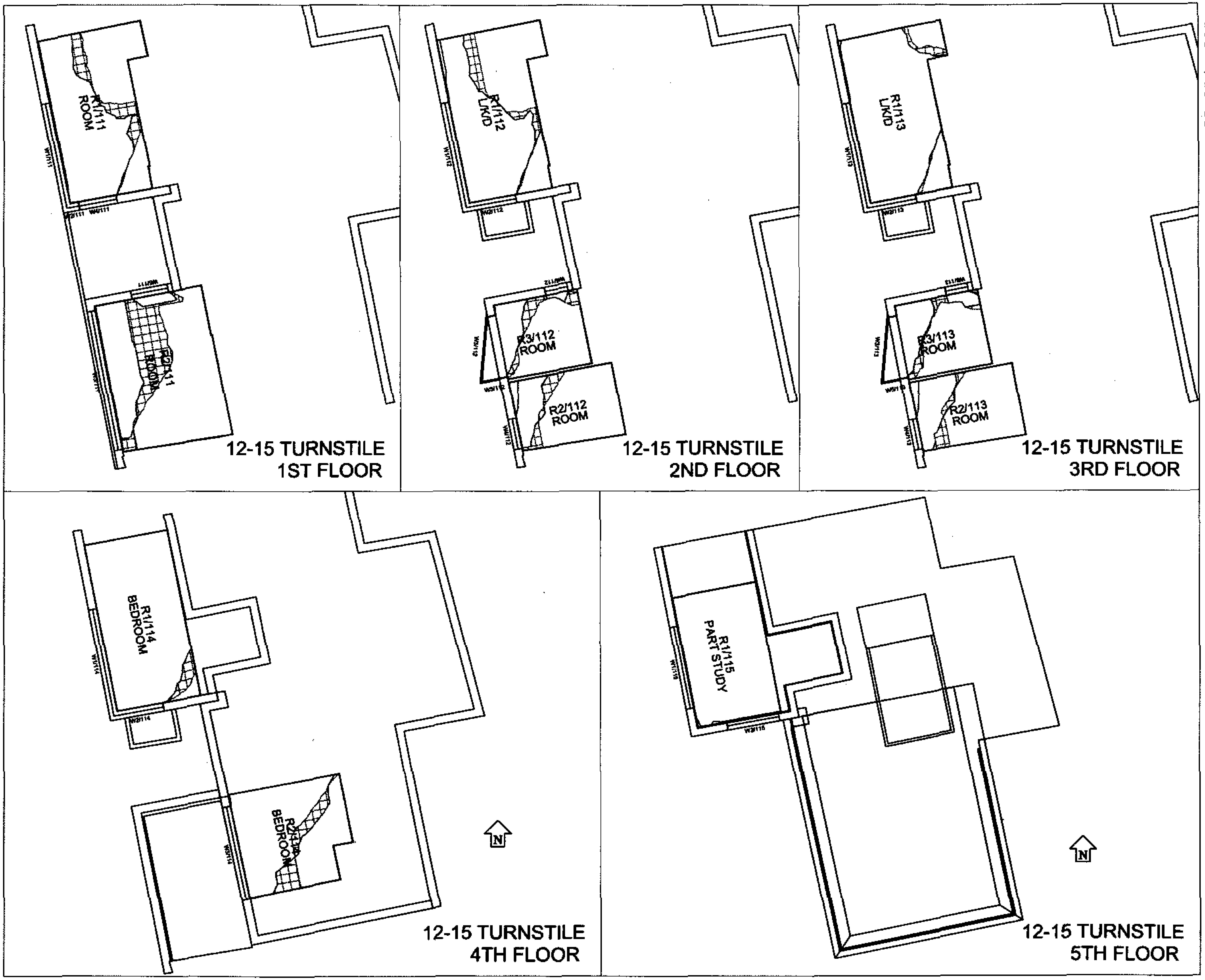
Vertical Sky Component						Average Daylight Factor								
									Existing		Proposed			
Room	Window	Existing	Proposed	Loss	%	Room	Window	Room Use	ADF	Total	ADF	Total	Loss	%
12-15 Great Turnstile						**12-15 Great Turnstile**								
R1/111	**W1/111**	4.39	2.10	2.29	52.16	**R1/111**	**W1/111**	ROOM	1.05		0.52			
R1/111	**W2/111**	6.55	5.18	1.37	20.92	**R1/111**	**W2/111**	ROOM	0.18		0.17			
R1/111	**W4/111**	2.29	1.38	0.91	39.74	**R1/111**	**W4/111**	ROOM	0.52	1.76	0.40	1.09	0.67	37.96
R2/111	**W3/111**	4.50	2.93	1.57	34.89	**R2/111**	**W3/111**	ROOM	0.90		0.61			
R2/111	**W5/111**	0.85	0.39	0.46	54.12	**R2/111**	**W5/111**	ROOM	0.16	1.07	0.07	0.68	0.39	36.24
R1/112	**W1/112**	5.45	2.59	2.86	52.48	**R1/112**	**W1/112**	L/K/D	1.68		0.91			
R1/112	**W2/112**	4.13	2.74	1.39	33.66	**R1/112**	**W2/112**	L/K/D	0.76	2.44	0.63	1.54	0.91	37.07
R2/112	**W4/112**	8.02	4.98	3.04	37.91	**R2/112**	**W4/112**	ROOM	1.18	1.18	0.81	0.81	0.37	31.29
R3/112	**W3/112**	5.98	2.84	3.14	52.51	**R3/112**	**W3/112**	ROOM	1.18		0.80			
R3/112	**W5/112**	11.65	10.68	0.97	8.33	**R3/112**	**W5/112**	ROOM	0.35		0.34			
R3/112	**W6/112**	1.17	0.60	0.57	48.72	**R3/112**	**W6/112**	ROOM	0.24	1.76	0.16	1.29	0.47	26.55
R1/113	**W1/113**	7.24	3.45	3.79	52.35	**R1/113**	**W1/113**	L/K/D	2.57		1.57			
R1/113	**W2/113**	6.49	4.88	1.61	24.81	**R1/113**	**W2/113**	L/K/D	1.15	3.72	0.98	2.55	1.16	31.31
R2/113	**W4/113**	10.49	6.73	3.76	35.84	**R2/113**	**W4/113**	ROOM	1.37	1.37	0.98	0.98	0.40	28.81
R3/113	**W3/113**	8.02	3.93	4.09	51.00	**R3/113**	**W3/113**	ROOM	1.38		0.94			
R3/113	**W5/113**	13.23	12.30	0.93	7.03	**R3/113**	**W5/113**	ROOM	0.37		0.37			
R3/113	**W6/113**	1.88	1.10	0.78	41.49	**R3/113**	**W6/113**	ROOM	0.35	2.10	0.28	1.59	0.52	24.48
R1/114	**W1/114**	9.79	4.74	5.05	51.58	**R1/114**	**W1/114**	BEDROOM	3.04		1.91			
R1/114	**W2/114**	20.30	18.41	1.89	9.31	**R1/114**	**W2/114**	BEDROOM	2.24	5.28	2.11	4.03	1.25	23.69
R2/114	**W3/114**	16.37	11.59	4.78	29.20	**R2/114**	**W3/114**	BEDROOM	4.29	4.29	3.45	3.45	0.84	19.61
R1/115	**W1/115**	13.89	6.91	6.98	50.25	**R1/115**	**W1/115**	PART STUDY	3.52		2.25			
R1/115	**W2/115**	25.95	23.93	2.02	7.78	**R1/115**	**W2/115**	PART STUDY	1.61	5.13	1.53	3.78	1.34	26.19

Project No: 3561
Existing v Proposed

Princeton Chichester House
Scheme Dated 3/8/07
DAYLIGHT DISTRIBUTION ANALYSIS

NOV 2007

Room/ Floor	Room Use	Whole Room	Prev sq ft	New sq ft	Loss sq ft	%Loss
12-15 Great Turnstile						
R1/111	ROOM	209.2	138.1	119.4	18.8	13.6
R2/111	ROOM	231.0	100.4	55.9	44.5	44.3
R1/112	L/K/D	209.2	128.7	114.4	14.3	11.1
R2/112	ROOM	104.3	27.8	20.7	7.1	25.5
R3/112	ROOM	103.8	44.3	35.5	8.8	19.9
R1/113	L/K/D	209.2	182.6	177.6	5.1	2.8
R2/113	ROOM	104.3	30.7	27.2	3.5	11.4
R3/113	ROOM	103.8	48.6	43.3	5.3	10.9
R1/114	BEDROOM	199.8	195.6	189.1	6.5	3.3
R2/114	BEDROOM	160.4	102.5	103.2	-0.7	-0.7
R1/115	PART STUDY	155.8	154.7	154.4	0.3	0.2



SOURCES
GMW ARCHITECTS
Proposed Scheme Dated 16/07/07
3829_TP01-21 070802 [Rev B].dwg

THE GORDON TOMALIN PARTNERSHIP
Site Survey
8434-01.dwg to 8434-07.dwg

MARY THUM ASSOCIATES
Plans & Elevations for 12-15 Great Turnstile

Key

EXISTING No-Sky Line Contour

PROPOSED No-Sky Line Contour

REGION OF LOSS / GAIN

Rev Description Date

Project
PRINCETON & CHICHESTER HOUSE
LONDON, WC1

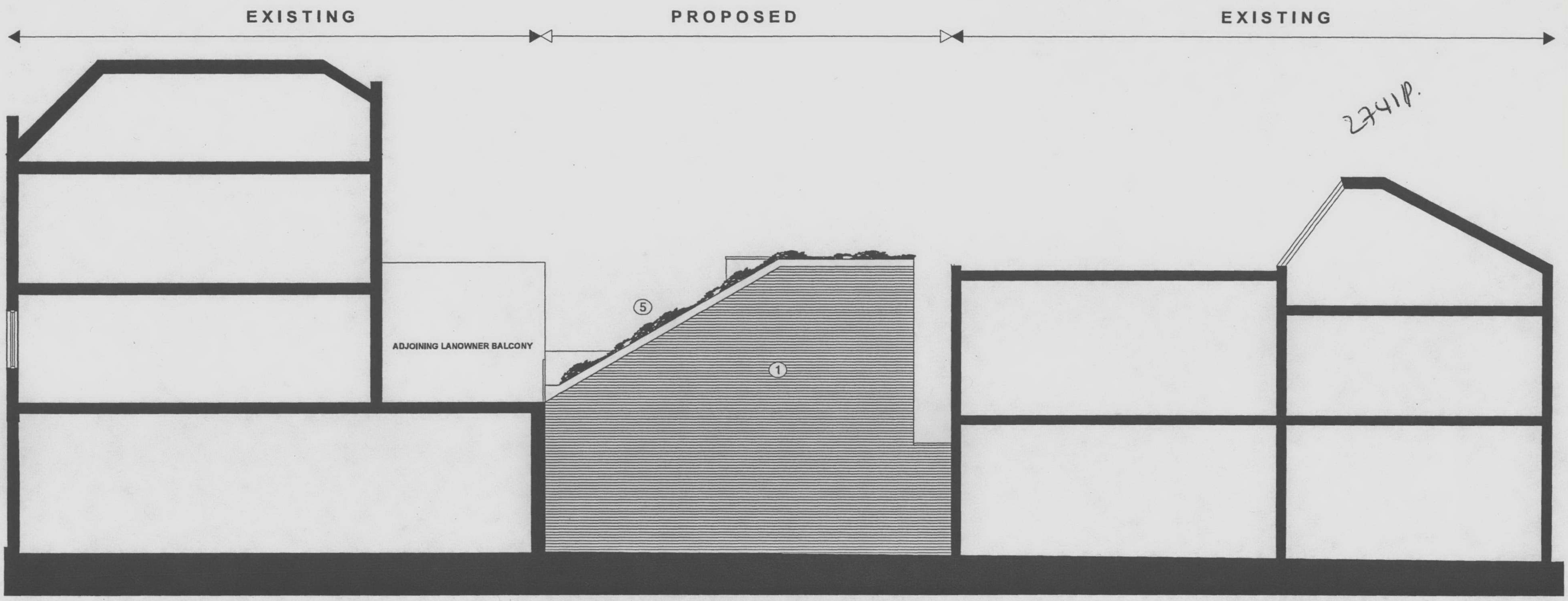
Title
ROOM LAYOUTS & DAYLIGHT DISTRIBUTION CONTOURS

Scale	Date
1:125	NOV 07
Drawn	Checked
MG	-
Drawing No	Revision
3561/25	-

gia

2007/2741/P

(R1)



MATERIALS SCHEDULE

1. BRICK - SAMPLE TO BE AGREED
2. STEEL/TIMBER WINDOW FRAMES - COLOUR TO BE CONFIRMED
3. STEEL HANDRAIL WITH GLASS PANEL
4. PERFORATED METAL DOOR- COLOUR TO BE CONFIRMED
5. GREEN ROOF

R1 - 010

YURKY CROSS CHARTERED ARCHITECTS	PROJECT	DRAWING TITLE	DRAWING NUMBER		
167a York Way LONDON N7 9LN T 020 7267 0481 F 020 7267 1248 E-mail: info@yurkycross.co.uk	Land to Rear 169 York Way London, N7 9LN	Proposed Elevations South-West Flank	06915/PL/010		
			SCALE	DATE	REVISION
			1:100	Sept 2007	A

ALL DIMENSIONS TO BE CHECKED ON SITE AND ANY DISCREPANCIES REPORTED IMMEDIATELEY. THIS DRAWING MUST NOT BE SCALED.

MATERIALS SCHEDULE

1. BRICK - SAMPLE TO BE AGREED
2. STEEL/TIMBER WINDOW FRAMES - COLOUR TO BE CONFIRMED
3. STEEL HANDRAIL WITH GLASS PANEL
4. PERFORATED METAL DOOR- COLOUR TO BE CONFIRMED
5. GREEN ROOF

RI 07

YURKY CROSS
CHARTERED ARCHITECTS
167a York Way LONDON N7 9LN
T 020 7267 0481 F 020 7267 1248 E-mail: info@yurkycross.co.uk

PROJECT	DRAWING TITLE	DRAWING NUMBER		
Land to Rear 169 York Way London, N7 9LN	Proposed Elevations South-East Front	06915/PL/009		
		SCALE	DATE	REVISION
		1:100	Sept 2007	A

ALL DIMENSIONS TO BE CHECKED ON SITE AND ANY DISCREPANCIES REPORTED IMMEDIATELEY. THIS DRAWING MUST NOT BE SCALED.

MATERIALS SCHEDULE

1. BRICK - SAMPLE TO BE AGREED
2. STEEL/TIMBER WINDOW FRAMES - COLOUR TO BE CONFIRMED
3. STEEL HANDRAIL WITH GLASS PANEL
4. PERFORATED METAL DOOR- COLOUR TO BE CONFIRMED
5. GREEN ROOF

R1

011

YURKY CROSS
CHARTERED ARCHITECTS
167a York Way LONDON N7 9LN
T 020 7267 0481 F 020 7267 1248 E-mail: info@yurkycross.co.uk

PROJECT	DRAWING TITLE	DRAWING NUMBER		
Land to Rear 169 York Way London, N7 9LN	Proposed Elevations South-West Flank	06915/PL/011		
		SCALE	DATE	REVISION
		1:100	Sept 2007	A

ALL DIMENSIONS TO BE CHECKED ON SITE AND ANY DISCREPANCIES REPORTED IMMEDIATELEY. THIS DRAWING MUST NOT BE SCALED.

MATERIALS SCHEDULE

1. BRICK - SAMPLE TO BE AGREED
2. STEEL/TIMBER WINDOW FRAMES - COLOUR TO BE CONFIRMED
3. STEEL HANDRAIL WITH GLASS PANEL
4. PERFORATED METAL DOOR- COLOUR TO BE CONFIRMED
5. GREEN ROOF

R4 OU9.

YURKY CROSS
CHARTERED ARCHITECTS
167a York Way LONDON N7 9LN
T 020 7267 0481 F 020 7267 1248 E-mail: info@yurkycross.co.uk

PROJECT	DRAWING TITLE	DRAWING NUMBER		
Land to Rear 169 York Way London, N7 9LN	Proposed Elevations South-East Front	06915/PL/009		
		SCALE	DATE	REVISION
		1:100	Sept 2007	A

ALL DIMENSIONS TO BE CHECKED ON SITE AND ANY DISCREPANCIES REPORTED IMMEDIATELEY. THIS DRAWING MUST NOT BE SCALED.