Report No. 0218.1 rev 0
November 2013

PROPOSED DEVELOPMENT,
9-12 NEW COLLEGE PARADE, FINCHLEY ROAD, LONDON NW3

NOISE ASSESSMENT

DKN ACOUSTICS

Report prepared by:
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On behalf of:
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CONTENTS

1.0 INTRODUCTION

1.1 DKN Acoustics has been instructed by Brampton Investments Ltd to carry out an assessment of road traffic noise on the proposed residences at 9-12 New College Parade, Finchley Road, London NW3.

1.2 The site is affected by road traffic noise on the A41 Finchley Road. The assessment is required to accompany the planning application for the development of the site to form commercial space on the basement and ground floors and residential accommodation on the first to fourth floors.

1.3 The assessment has included:

- Review of site drawings;
- Site inspection and 24 hour noise measurement survey;
- PPG24 assessment of road traffic noise levels and suitability of the site for residential development; and
- Recommendations for appropriate outline noise control measures to proposed residential facades.

1.4 Noise levels referred to in the text of this report have been rounded to the nearest whole decibel (dB), as fractions of dBs are imperceptible. A description of the relevant noise units and noise characteristics is provided in Appendix I.

1.5 The noise survey and assessment has been carried out by Duncan Newhall, who is a Member of the Institute of Acoustics (IOA) and holder of the IOA Diploma in Acoustics and Noise Control. DKN Acoustics is an independent acoustic consultancy.

2.0 SITE DESCRIPTION

2.1 The existing two storey building is occupied by various retail and office uses, some of which are currently vacant.

2.2 The proposal is to demolish the existing buildings and form basement and ground floor commercial space, with residences above from first to fourth floor level.

2.3 The residential scheme will include habitable rooms overlooking the A41 Finchley Road. Finchley Road is a four lane dual carriageway and a main arterial route into central London.

2.4 A communal garden and private terraces are proposed on the rear elevation, remote from Finchley Road.

2.5 A sample of the proposed layout and elevation drawings are shown in Figures 2-4.

3.0 NOISE SURVEY

3.1 A 24-hour site noise survey was conducted from 07:00 hours on 16 October 2013. Noise levels were measured continuously over sequential 15 minute recordings.

3.2 The noise survey was undertaken to establish the levels of road traffic noise affecting the proposed development site.

3.3 Noise levels were measured at ground floor level on the elevation overlooking Finchley Road. As such, this location represented the area of the development exposed to the highest and worst-case road traffic noise levels

3.4 The approximate measurement position is shown on Figure 1.

3.5 The microphone of the sound level meter was mounted at high level on the ground floor, approximately 2.5m above pavement level. A windshield was fitted to the microphone at all times. The microphone was close to the existing building facade and was not therefore in free-field conditions.

3.6 Weather conditions were dry and calm which were good conditions for noise measurement.

3.7 Noise levels were recorded in terms of the overall A-weighted noise levels, including octave band frequency analysis. A glossary of the main noise descriptors measured in included in Appendix I.

3.8 The overall A-weighted measured noise levels are summarised in Table 1 below. The corrected levels (minus 3 dB) are also shown to consider for free-field conditions. The full set of measured levels is shown in Appendix II (note that these are shown as the 'as measured' values which were not in free-field conditions).

Table 1: Summary of mean measured noise levels, dB

Measurement period	Noise level			
	L_{Aeq}	L_{Amax}	L_{A10}	L_{A90}
Day (07:00-19:00 hrs)	76 (73)	94 (91)	79 (76)	63 (60)
Evening (19:00-23:00 hrs)	75 (72)	95 (92)	78 (75)	61 (58)
Night (23:00-07:00 hrs)	74 (71)	90 (87)	78 (75)	57 (54)

Note: Measured levels shown; corrected (minus 3 dB) free-field levels shown in brackets

3.9 Road traffic noise and aircraft noise were the main sources affecting the measured levels. Occasional emergency vehicle sirens are understood to have affected the measured L_{Amax} noise levels.

Noise measurement equipment

3.10 All noise measurements were undertaken using a fully-calibrated RION NA-28 Type 1 sound level meter (serial no. 00991176), including pre-amplifier model NH-23 (serial no. 81217) and microphone model UC-59 (serial no. 01421). The calibration of the meter was checked before and after the survey, using calibrator model NC-74 (serial no. 34794362) with no variation in level noted.

4.0 ACOUSTIC CRITERIA

4.1 The Camden Development Policies 2010-2025 Local Development Policy includes relevant policy to this application. *DP28: Noise & Vibration* is the specific policy and is shown in Appendix III.

4.2 Table A of DP28 states the noise levels (day, evening and night) on residential sites adjoining railways and roads above which planning permission will not be granted.

4.3 Table B of DP28 shows the noise levels above which attenuation measures will be required.

BS 8233: 1999

4.4 In addition to the LB Camden specific noise policy, appropriate guidance on acoustic design goals for residential development is set out in British Standard 8233: 1999 *'Sound insulation and noise reduction for buildings – Code of Practice'*. The World Health Organisation *'Guidelines for community noise'* generally concurs with the recommendations of BS8233: 1999. The criteria are summarised in Table 2.

Table 2: BS 8233 recommended acoustic design criteria

Location	Internal Noise Levels
Living Rooms	Good Standard 30 dB L_{Aeq} Reasonable Standard 40 dB L_{Aeq}
Bedrooms	Good Standard 30 dB L_{Aeq} Reasonable Standard 35 dB L_{Aeq} (Night-time L_{Amax} should not normally exceed 45 dB; WHO Guidelines recommend not for >10-15 occasions/night)
Gardens/balconies	Desirable not to exceed 50 dB L_{Aeq} daytime Upper limit 55 dB L_{Aeq} daytime

5.0 NOISE ASSESSMENT & RECOMMENDATIONS

5.1 The measured noise levels exceed the threshold levels shown in Table A of LB Camden's DP28 Noise & Vibration policy, above which it is stated that residential development will not be permitted.

5.2 However, appropriate noise control measures can be implemented to ensure that the recommendations of BS8233: 1999 inside habitable rooms will be met.

5.3 Further noise predictions have been undertaken to predict the noise level inside habitable rooms (bedrooms and living rooms) of proposed residences during the day and at night. This has been carried out with reference to the proposed layout drawing plans and elevations and the measured noise levels, including the octave band frequency content.

Outline noise control measures

Habitable rooms

5.4 To consider the worst-case, levels of noise break-in to habitable rooms have been predicted for those rooms with the largest proposed glazed areas, the living room and bedrooms of proposed Flat 2 (first floor) and proposed Flat 8 (fourth floor).

5.5 On the fourth floor, residential windows would be set back from the building line and a brickwork parapet wall would be included. These features would marginally reduce road traffic noise levels compared with the measurement position due to additional distance and screening attenuation.

5.6 To provide a robust assessment, the noise criteria adopted are to meet the mid-range of 30-40 dB L_{Aeq} in living rooms during the day, low end of 30-35 dB L_{Aeq} in bedrooms at night and not to exceed 45 dB L_{Amax} in bedrooms at night. Detailed

noise calculations will be provided upon request. Table 3 below shows the minimum recommended measures.

Table 3: Minimum recommended façade measures for most exposed rooms

Living rooms		Bedrooms	
Glazing	**Ventilation**	**Glazing**	**Ventilation**
6mm glazing plus 295mm air gap plus 4/12/4mm glazing	Silavent Freshflo Permanent Acoustic Vent Type A or similar	6mm glazing plus 295mm air gap plus 4/12/4mm glazing	Silavent Freshflo Permanent Acoustic Vent Type A or similar

Note: e.g. 4/12/4mm glazing means 4mm glazing/12mm cavity/4mm glazing

5.7 The noise control measures shown in the above Table would also be more than adequate in other areas of the development where percentage glazed areas are typically lower for the habitable rooms served.

5.8 It is further recommended that the perforated metal panel sections (fourth floor and bay areas on first to third floors) be installed on a masonry base construction to provide sufficient mass for the required sound insulation of external noise. For the same reason, the roof is recommended to be formed from at least 200mm concrete.

Outdoor spaces

5.9 All proposed outdoor amenity areas (communal garden and private terraces) would be located to the rear of the development.

5.10 They would therefore be very substantially screened by the intervening building and neighbouring buildings to the A41 Finchley Road. There would also be additional distance attenuation of the road traffic noise in these locations in comparison with the measurement position on the front facade.

5.11 The combined acoustic screening and additional distance attenuation might typically be expected to provide around at least 20 dB attenuation, compared with the measured levels to the front of the site.

5.12 The road traffic noise level from the A41 Finchley Road during the daytime within the proposed outdoor amenity areas would therefore be expected to not exceed the 55 dB upper limit recommended by BS8233: 1999.

5.13 It is therefore concluded that adequate noise control measures can be incorporated into the proposed scheme to ensure that appropriate conditions for residential amenity will be provided.

5.14 This matter may be adequately controlled by appropriate planning condition.

6.0 SUMMARY AND CONCLUSIONS

6.1 A noise assessment has been carried out of the proposed development at 9-12 New College Parade, London NW3.

6.2 A noise survey has been undertaken at the most exposed facade to assess road traffic noise levels from the A41 Finchley Road affecting the proposed residential part of the scheme.

6.3 The site is exposed to high levels of road traffic noise. However, it is possible to ensure appropriate noise levels for residential amenity within proposed residences with the installation of suitable noise control measures to facades of habitable rooms. These include the use of high specification glazing and acoustically-rated ventilation.

6.4 Proposed outdoor amenity areas would be located on the rear (remote) side of the proposed development building to the road traffic noise source. They would therefore be exposed to very significantly lower noise levels than the front of the building.

6.5 With all the above measures in place, it is predicted that the recommendations of BS8233: 1999 inside bedrooms and living rooms and within outdoor amenity areas would be achieved.

6.6 The development may be adequately controlled by appropriate planning condition.

6.7 It is therefore recommended that planning permission may be granted.

Appendix I – Noise units and indices

Sound Pressure Level and the decibel (dB)

A sound wave is a small fluctuation of atmospheric pressure. The human ear responds to these variations in pressure, producing the sensation of hearing. The ear can detect a very wide range of pressure variations. In order to cope with this wide range of pressure variations, a logarithmic scale is used to convert the values into manageable numbers. Although it might seem unusual to use a logarithmic scale to measure a physical phenomenon, it has been found that human hearing also responds to sound in an approximately logarithmic fashion. The dB (decibel) is the logarithmic unit used to describe sound (or noise) levels. The usual range of sound pressure levels is from 0 dB (threshold of hearing) to 120 dB (threshold of pain).
An increase in noise level of 10 dB(A) is roughly perceived as a doubling of the sound source. A 3 dB(A) change in noise level is generally the minimum perceptible difference.

Frequency and Hertz (Hz)

As well as the loudness of a sound, the frequency content of a sound is also very important. Frequency is a measure of the rate of fluctuation of a sound wave. The unit used is cycles per second, or Hertz (Hz). Sometimes large frequency values are written as kiloHertz (kHz), where 1 kHz = 1000 Hz.
Young people with normal hearing can hear frequencies in the range 20 Hz to 20,000 Hz. However, the upper frequency limit gradually reduces as a person gets older.

Glossary of Terms

When a noise level is constant and does not fluctuate over time, it can be described adequately by measuring the dB(A) level. However, when the noise level varies with time, the measured dB(A) level will vary as well. In this case it is therefore not possible to represent the noise climate with a simple dB(A) value. In order to describe noise where the level is continuously varying, a number of other indices, including statistical parameters, are used. The indices used in this report are described below.

L_{Aeq} The A-weighted 'equivalent continuous noise level' which is an average of the total sound energy measured over a specified time period. In other words, L_{Aeq} is the level of a continuous noise which has the same total (A-weighted) energy as the real fluctuating noise, measured over the same time period. It is increasingly being used as the preferred parameter for all forms of environmental noise.

L_{Amax} The maximum A-weighted noise level that was recorded during the monitoring period.

L_{A10} The A-weighted noise level exceeded for 10% of the time period. L_{A10} is commonly used as a descriptor of road traffic noise.

L_{A90} The A-weighted noise level exceeded for 90% of the time period. L_{A90} is used as a measure of background noise.

A-weighting

The human ear responds differently to different frequencies of sound. A-weighting is the method of adjusting measured sound pressure levels to take into account human hearing and our uneven frequency response. For example, an A-weighted Leq noise level of 95 dB can be written as either Leq of 95 dB(A) or LAeq of 95 dB.

Appendix II – Noise survey results

Measured noise levels (dB)

Dates: Wednesday 16 – Thursday 17 October 2013

Equipment: RION NA-28 Type 1 integrating sound level meter

Weather: Dry and calm with little or no wind

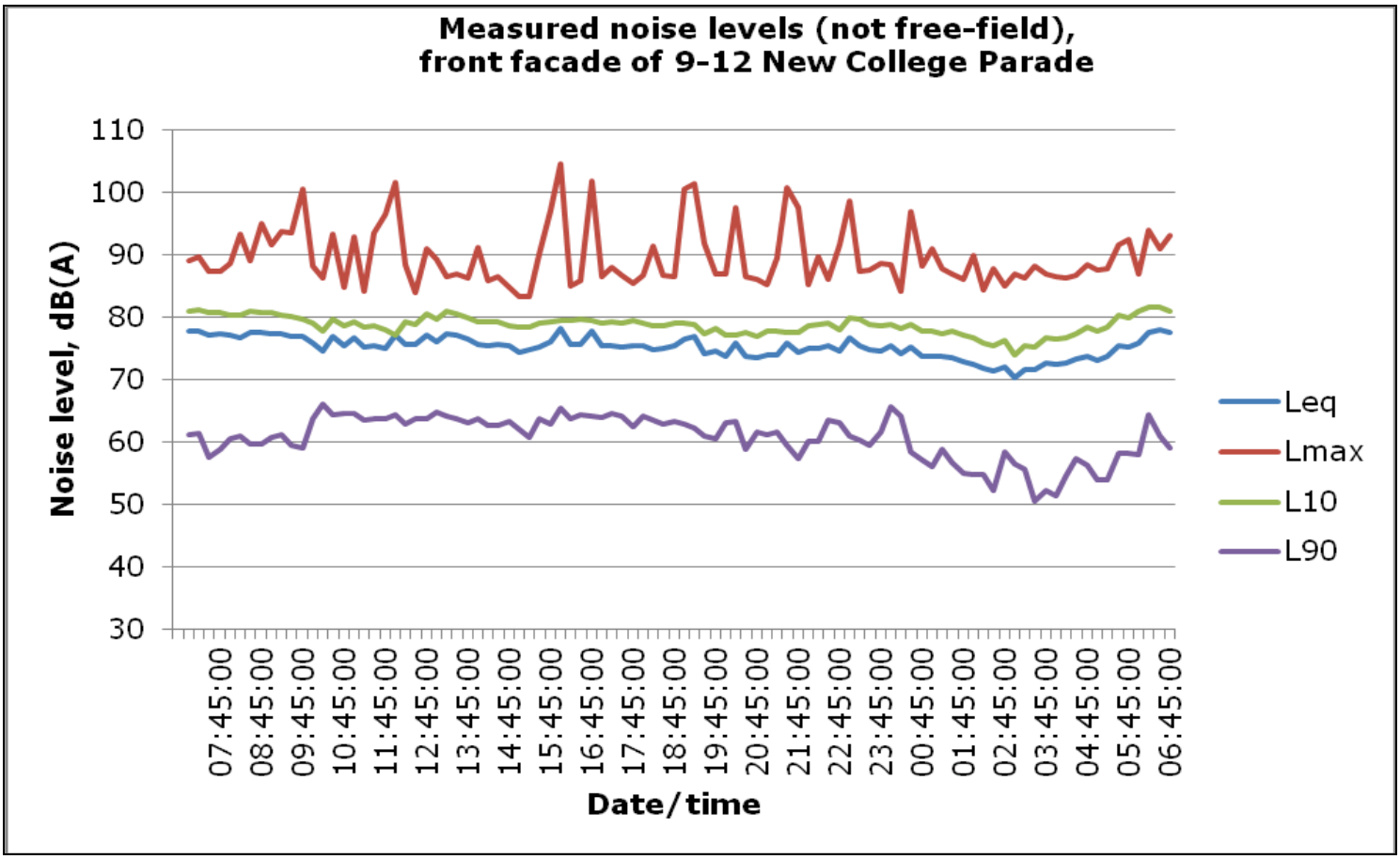
Table A1: Measured noise levels (<u>not</u> free-field)

Time start	Time end	Noise level, dB			
		L_{Aeq}	L_{Amax}	L_{A10}	L_{A90}
07:00	07:15	77.7	89.1	81.0	61.1
07:15	07:30	77.7	89.7	81.2	61.3
07:30	07:45	77.2	87.4	80.8	57.5
07:45	08:00	77.3	87.3	80.7	58.8
08:00	08:15	77.1	88.7	80.3	60.5
08:15	08:30	76.7	93.2	80.2	61.0
08:30	08:45	77.5	89.0	80.9	59.7
08:45	09:00	77.5	95.0	80.7	59.6
09:00	09:15	77.4	91.6	80.7	60.8
09:15	09:30	77.4	93.8	80.2	61.2
09:30	09:45	77.0	93.6	80.1	59.4
09:45	10:00	76.9	100.5	79.6	59.1
10:00	10:15	75.8	88.1	79.0	63.7
10:15	10:30	74.6	86.3	77.7	66.0
10:30	10:45	76.8	93.3	79.6	64.4
10:45	11:00	75.5	84.8	78.5	64.6
11:00	11:15	76.7	92.8	79.3	64.6
11:15	11:30	75.2	84.2	78.3	63.5
11:30	11:45	75.4	93.5	78.7	63.6
11:45	12:00	74.9	96.5	78.0	63.7
12:00	12:15	77.2	101.5	77.1	64.4
12:15	12:30	75.7	88.4	79.2	62.8
12:30	12:45	75.6	83.9	78.9	63.6
12:45	13:00	77.1	91.0	80.5	63.6
13:00	13:15	76.1	89.2	79.6	64.8
13:15	13:30	77.4	86.5	81.0	64.2
13:30	13:45	77.1	86.8	80.5	63.8

Time start	Time end	Noise level, dB			
		L_{Aeq}	L_{Amax}	L_{A10}	L_{A90}
13:45	14:00	76.4	86.3	79.8	63.0
14:00	14:15	75.6	91.2	79.2	63.8
14:15	14:30	75.3	85.9	79.2	62.7
14:30	14:45	75.7	86.4	79.2	62.6
14:45	15:00	75.3	84.7	78.6	63.2
15:00	15:15	74.4	83.2	78.4	61.9
15:15	15:30	74.7	83.3	78.3	60.8
15:30	15:45	75.2	90.1	79.0	63.7
15:45	16:00	76.1	97.1	79.3	62.8
16:00	16:15	78.1	104.5	79.4	65.3
16:15	16:30	75.6	84.9	79.4	63.8
16:30	16:45	75.6	85.9	79.6	64.3
16:45	17:00	77.7	101.7	79.4	64.1
17:00	17:15	75.5	86.4	79.1	64.0
17:15	17:30	75.5	87.9	79.2	64.5
17:30	17:45	75.2	86.7	79.0	64.1
17:45	18:00	75.4	85.4	79.4	62.5
18:00	18:15	75.3	86.7	79.0	64.2
18:15	18:30	74.8	91.4	78.6	63.4
18:30	18:45	74.9	86.6	78.7	62.9
18:45	19:00	75.3	86.4	79.0	63.2
19:00	19:15	76.5	100.5	79.1	62.8
19:15	19:30	76.8	101.3	78.9	62.2
19:30	19:45	74.2	91.8	77.3	60.9
19:45	20:00	74.6	87.0	78.1	60.4
20:00	20:15	73.8	86.8	77.2	63.0
20:15	20:30	75.9	97.6	77.2	63.3
20:30	20:45	73.8	86.5	77.6	58.7
20:45	21:00	73.4	86.1	76.9	61.5
21:00	21:15	73.9	85.2	77.7	61.1
21:15	21:30	74.0	89.5	77.7	61.5
21:30	21:45	75.9	100.7	77.5	59.4
21:45	22:00	74.3	97.6	77.5	57.4
22:00	22:15	74.9	85.3	78.7	60.0
22:15	22:30	75.0	89.6	78.8	60.0
22:30	22:45	75.3	86.1	79.0	63.5
22:45	23:00	74.5	91.6	78.0	63.0
23:00	23:15	76.7	98.6	79.8	60.9
23:15	23:30	75.4	87.4	79.6	60.2
23:30	23:45	74.8	87.6	78.8	59.4

Time start	Time end	Noise level, dB			
		L_{Aeq}	L_{Amax}	L_{A10}	L_{A90}
23:45	00:00	74.5	88.5	78.5	61.6
00:00	00:15	75.3	88.4	78.9	65.7
00:15	00:30	74.1	84.2	78.2	64.2
00:30	00:45	75.2	96.9	78.8	58.3
00:45	01:00	73.6	88.1	77.8	57.2
01:00	01:15	73.6	90.9	77.7	56.0
01:15	01:30	73.8	87.8	77.4	58.8
01:30	01:45	73.4	86.8	77.7	56.6
01:45	02:00	72.8	86.0	77.1	55.0
02:00	02:15	72.5	89.9	76.7	54.8
02:15	02:30	71.8	84.3	75.8	54.7
02:30	02:45	71.4	87.7	75.5	52.1
02:45	03:00	72.0	84.9	76.2	58.3
03:00	03:15	70.2	86.8	74.0	56.5
03:15	03:30	71.6	86.3	75.5	55.6
03:30	03:45	71.5	88.1	75.2	50.6
03:45	04:00	72.6	87.0	76.6	52.1
04:00	04:15	72.4	86.4	76.4	51.3
04:15	04:30	72.7	86.2	76.6	54.5
04:30	04:45	73.3	86.6	77.4	57.3
04:45	05:00	73.6	88.4	78.3	56.3
05:00	05:15	73.1	87.6	77.8	54.0
05:15	05:30	73.7	87.7	78.3	53.9
05:30	05:45	75.4	91.5	80.4	58.2
05:45	06:00	75.2	92.4	79.9	58.2
06:00	06:15	75.9	86.8	81.0	57.9
06:15	06:30	77.5	94.0	81.6	64.3
06:30	06:45	77.9	91.0	81.6	61.0
06:45	07:00	77.5	93.0	81.0	59.0

Chart A1: Measured noise levels 1 (<u>not</u> free-field)



Appendix III – LB Camden planning policy

DP28. Noise and vibration

28.1 Noise and vibration can have a major effect on amenity and health and therefore quality of life. Camden's high density and mixed-use nature means that disturbance from noise and vibration is a particularly important issue in the borough. Camden's Core Strategy recognises the importance of this issue for Camden's residents and policy DP28 contributes to implementing a number of Core Strategy policies, including CS5 – *Managing the impact of growth and development*, CS9 – *Achieving a successful Central London*, CS11 – *Promoting sustainable and efficient travel* and CS16 – *Improving Camden's health and well-being*.

POLICY

DP28 – Noise and vibration

The Council will seek to ensure that noise and vibration is controlled and managed and will not grant planning permission for:

a) development likely to generate noise pollution; or

b) development sensitive to noise in locations with noise pollution, unless appropriate attenuation measures are provided.

Development that exceeds Camden's Noise and Vibration Thresholds will not be permitted.

The Council will only grant permission for plant or machinery if it can be operated without cause harm to amenity and does not exceed our noise thresholds.

The Council will seek to minimise the impact on local amenity from the demolition and construction phases of development. Where these phases are likely to cause harm, conditions and planning obligations may be used to minimise the impact.

28.2 The effect of noise and vibration can be minimised by separating uses sensitive to noise from development that generates noise and by taking measures to reduce any impact. Noise sensitive development includes housing, schools and hospitals as well as offices, workshops and open spaces, while noise is generated by rail, road and air traffic, industry, entertainment (e.g. nightclubs, restaurants and bars) and other uses.

28.3 The Council will only grant planning permission for development sensitive to noise in locations that experience noise pollution, and for development likely to generate noise pollution, if appropriate attenuation measures are taken, such as double-glazing. Planning permission will not be granted for development sensitive to noise in locations that have unacceptable levels of noise. Where uses sensitive to noise are proposed close to an existing source of noise or when development that generates noise is proposed, the Council will require an acoustic report to ensure compliance with PPG24: *Planning and noise*. A condition will be imposed to require that the plant and equipment which may be a source of noise pollution is kept working efficiently and within the required noise limits and time restrictions. Conditions may also be imposed to ensure that attenuation measures are kept in place and effective throughout the life of the development.

28.4 In assessing applications, we will have regard to the Noise and Vibration Thresholds, set out below. These represent an interpretation of the standards in PPG24 and include an evening period in addition to the day and night standards contained in the PPG, which provide a greater degree of control over noise and vibration during a period when noise is often an issue in the borough.

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Camden Development Policies – Section 3

Table A: Noise levels on residential sites adjoining railways and roads at which planning permission will not be granted

Noise description and location of measurement	Period	Time	Sites adjoining railways	Sites adjoining roads
Noise at 1 metre external to a sensitive façade	Day	0700-1900	74 dB L_{Aeq} 12h	72 dB L_{Aeq} 12h
Noise at 1 metre external to a sensitive façade	Evening	1900-2300	74 dB L_{Aeq} 4h	72 dB L_{Aeq} 4h
Noise at 1 metre external to a sensitive façade	Night	2300-0700	66 dB L_{Aeq} 8h	66 dB L_{Aeq} 8h

Table B: Noise levels on residential streets adjoining railways and roads at and above which attenuation measures will be required

Noise description and location of measurement	Period	Time	Sites adjoining railways	Sites adjoining roads
Noise at 1 metre external to a sensitive façade	Day	0700-1900	65 dB L_{Aeq} 12h	62 dB L_{Aeq} 12h
Noise at 1 metre external to a sensitive façade	Evening	1900-2300	60 dB L_{Aeq} 4h	57 dB L_{Aeq} 4h
Noise at 1 metre external to a sensitive façade	Night	2300-0700	55 dB L_{Aeq} 1h	52 dB L_{Aeq} 1h
Individual noise events several times an hour	Night	2300-0700	>82 dB L_{Amax} (S time weighting)	>82 dB L_{AMAX} (S time weighting)

Table C: Vibration levels on residential sites adjoining railways and roads at which planning permission will not be granted

Vibration description and location of measurement	Period	Time	Vibration levels
Vibration inside critical areas such as a hospital operating theatre	Day, evening and night	0000-2400	0.1 VDV ms-1.75
Vibration inside dwellings	Day and evening	0700-2300	0.2 to 0.4 VDV ms-1.75
Vibration inside dwellings	Night	2300-0700	0.13 VDV ms-1.75
Vibration inside offices	Day, evening and night	0000-2400	0.4 VDV ms-1.75
Vibration inside workshops	Day, evening and night	0000-2400	0.8 VDV ms-1.75

Where dwellings may be affected by ground-borne regenerated noise internally from, for example, railways or underground trains within tunnels, noise levels within the rooms should not be greater than 35dB(A)max

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Table D: Noise levels from places of entertainment on adjoining residential sites at which planning permission will not be granted

Noise description and measurement location	Period	Time	Sites adjoining places of entertainment
Noise at 1 metre external to a sensitive façade	Day and evening	0700-2300	L_{Aeq} 5m shall not increase by more than 5dB*
Noise at 1 metre external to a sensitive façade	Night	2300-0700	L_{Aeq} 5m shall not increase by more than 3dB*
Noise inside any living room of any noise sensitive premises, with the windows open or closed	Night	2300-0700	L_{Aeq} 5m (in the 63Hz Octave band measured using the 'fast' time constant) should show no increase in dB*

* As compared to the same measure, from the same position, and over a comparable period, with no entertainment taking place

Table E: Noise levels from plant and machinery at which planning permission will not be granted

Noise description and location of measurement	Period	Time	Noise level
Noise at 1 metre external to a sensitive façade	Day, evening and night	0000-2400	5dB(A) <LA90
Noise that has a distinguishable discrete continuous note (whine, hiss, screech, hum) at 1 metre external to a sensitive façade.	Day, evening and night	0000-2400	10dB(A) <LA90
Noise that has distinct impulses (bangs, clicks, clatters, thumps) at 1 metre external to a sensitive façade.	Day, evening and night	0000-2400	10dB(A) <LA90
Noise at 1 metre external to sensitive façade where LA90>60dB	Day, evening and night	0000-2400	55dBL_{Aeq}

Key evidence and references

- Camden's Noise Strategy, 2002
- The London Plan (Consolidated with Alterations since 2004), 2008
- Planning Policy Guidance 24: Planning and noise

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Figure 1 – Existing street frontage

Street Frontage to Finchley Road ofexisting buildings at 9-12 New College Parade

Figure 2 – Proposed first floor

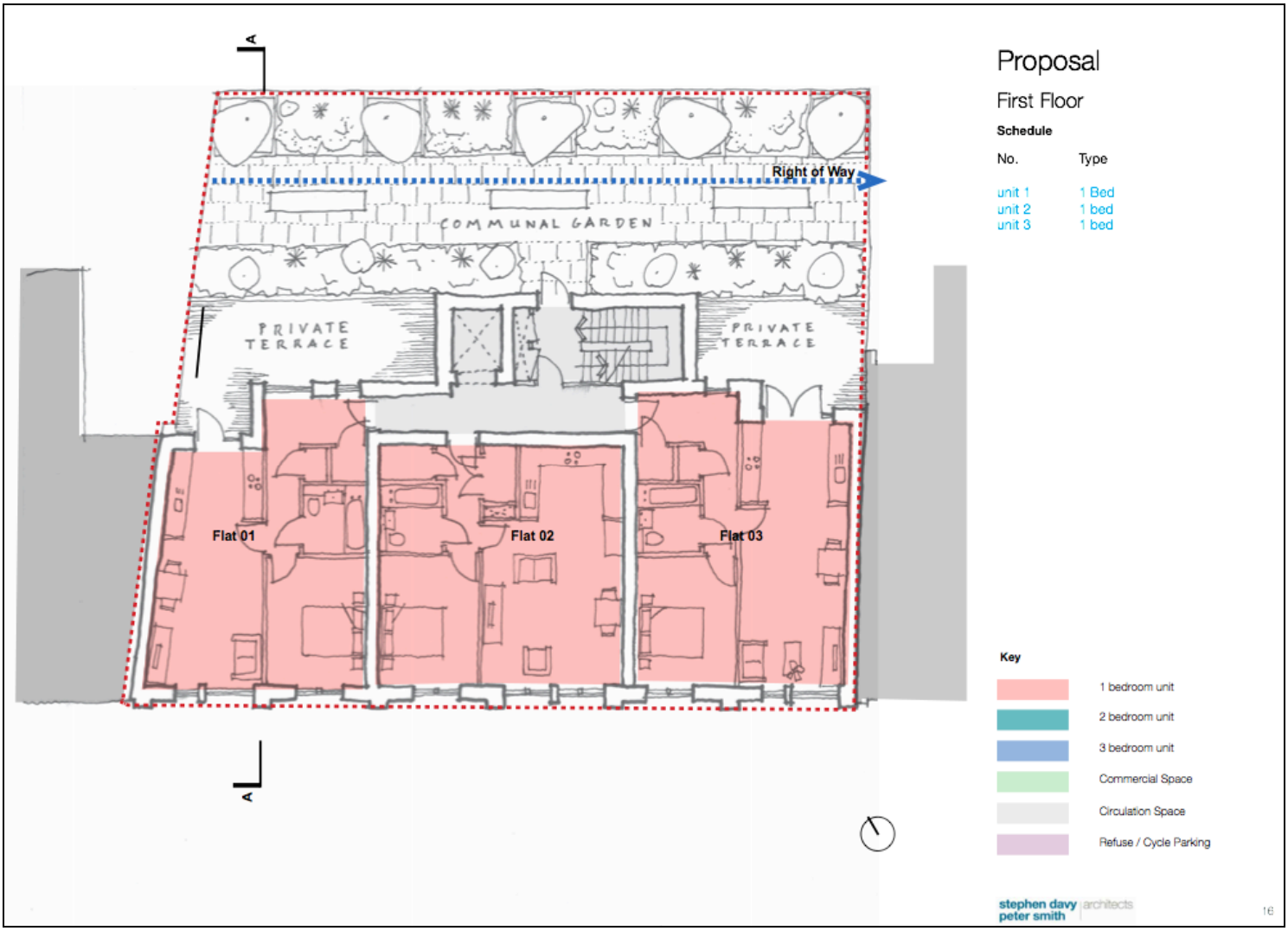

Figure 3 – Proposed fourth floor

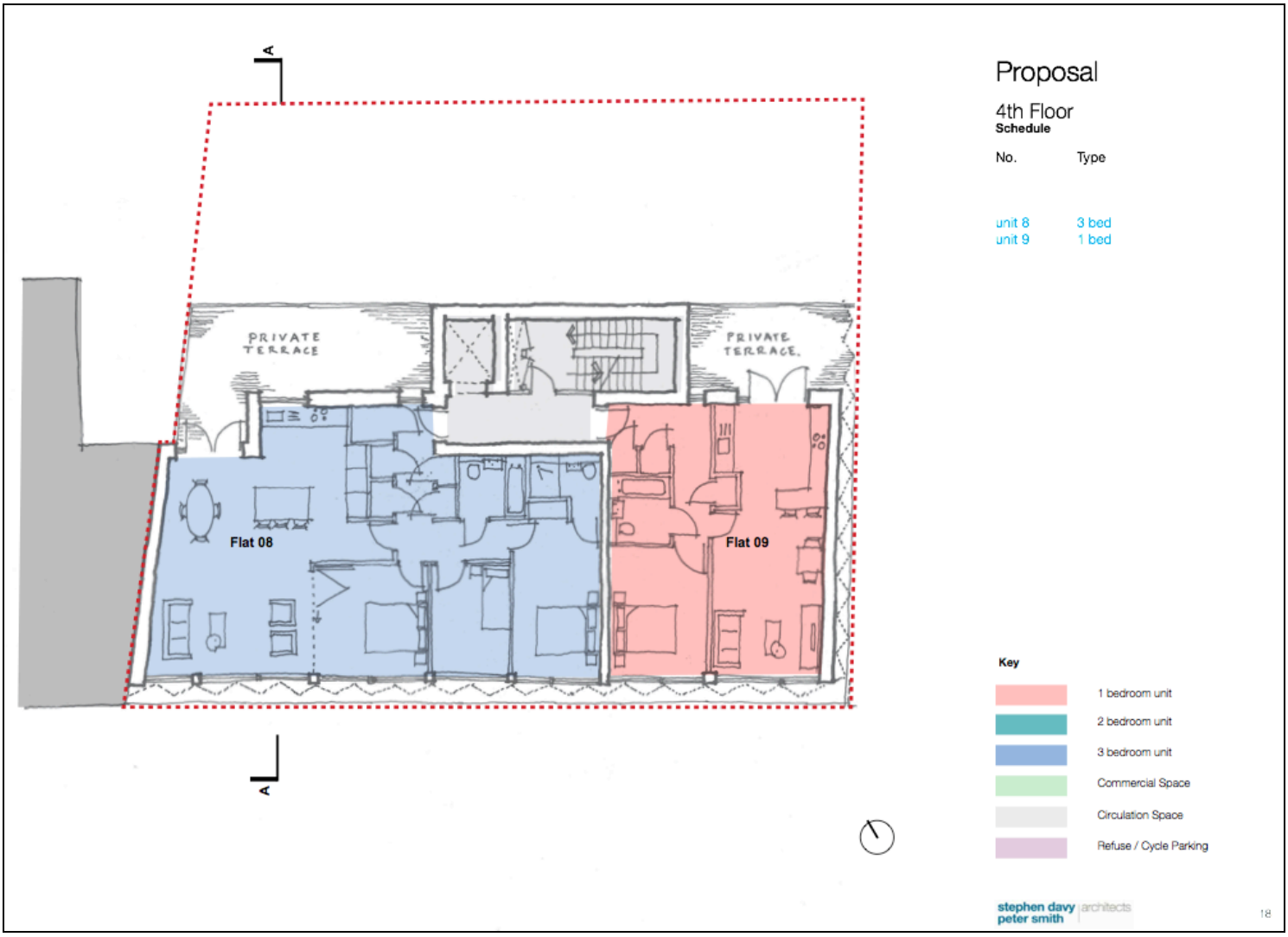

Figure 4 – Proposed elevation