

50



acoustics energy vibration

Unit 1, 7Hills Business Park
37 Bankhead Crossway South
Edinburgh
EH11 4EP

T: 0345 062 0000
E: rmp@napier.ac.uk
www.rmp.biz

BRIEF FOR CONSULTANCY:

To carry out a noise impact assessment of the proposed new dog grooming parlour.

**NOISE IMPACT ASSESSMENT
37 HUTCHISON MEDWAY
EDINBURGH
EH14 1QQ**

23/01614/FUL

Technical Report No. R-9827-RGM-RRM
7th November 2023

PREPARED FOR:

Mrs M. Williams
39 Hutchison Medway,
Edinburgh
EH14 1QQ

Edinburgh Napier
UNIVERSITY





Contents

1.0 Introduction 3

2.0 Relevant planning guidance..... 6

3.0 Noise impact assessment 7

4.0 Conclusions 10

1.0 Introduction

- 1.1 We were instructed by Mr Patrick Black on behalf of the applicant Mrs M. Williams to undertake a noise impact assessment in relation to the proposed dog grooming parlour at 39 Hutchinson Medway, Edinburgh, EH14 1QQ, and to offer any acoustical advice necessary to facilitate compliance with the acoustic planning guidelines.
- 1.2 The development site location plan and the satellite view are presented in Figure 1 and 2 below. The applicant also owns the adjacent residential property at 37 Hutchinson Medway.

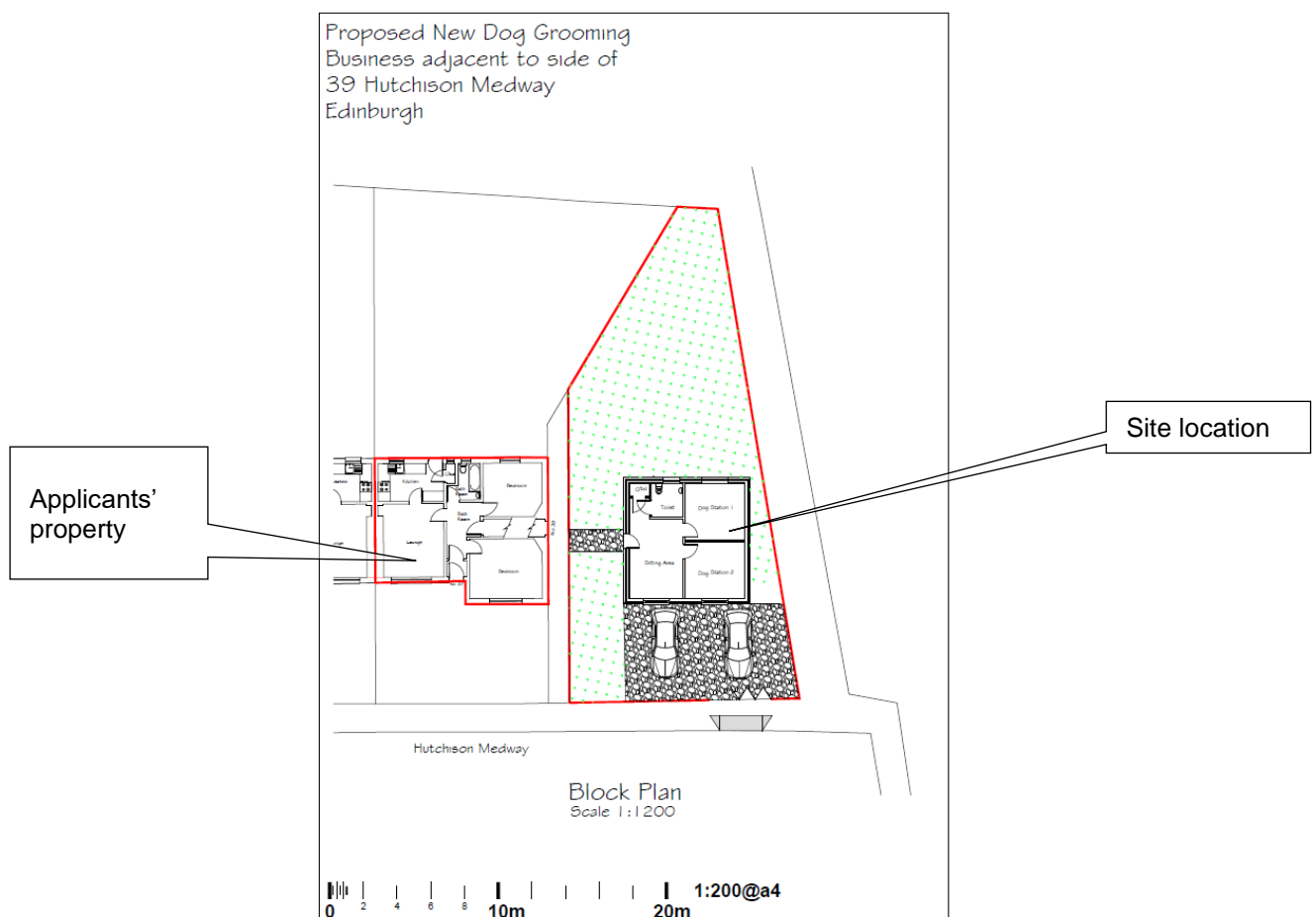


Figure 1. Site location plan



Figure 2. Development site and nearest noise sensitive locations

- 1.3 The proposals are to a dog grooming parlour with 2 treatment rooms and a sitting area. The proposal is submitted to City of Edinburgh Planning Portal, Ref: 23/01614/FUL. The proposed floor plan is shown in Figure 3.
- 1.4 The building will be constructed from cavity masonry, 100mm blockwork, 50mm cavity 100mm blockwork, finished on the inside with 15mm SoundBloc plasterboard.
- 1.5 The roof will be a pitched construction of slate tiles on felt and 19mm plywood. The ceiling will be sheathed with two layers of 15mm SoundBloc plasterboard, with overlapping joints. There will be 200mm mineral fibre insulation quilt between the roof joists.
- 1.6 The windows to the dog stations and sitting area will be double glazed with a specification of 10mm float glass, 12mm airspace, 8.4mm laminated glass with an acoustic rating of R_w 42dB. The sitting area external door will have an acoustic rating of R_w 35dB.

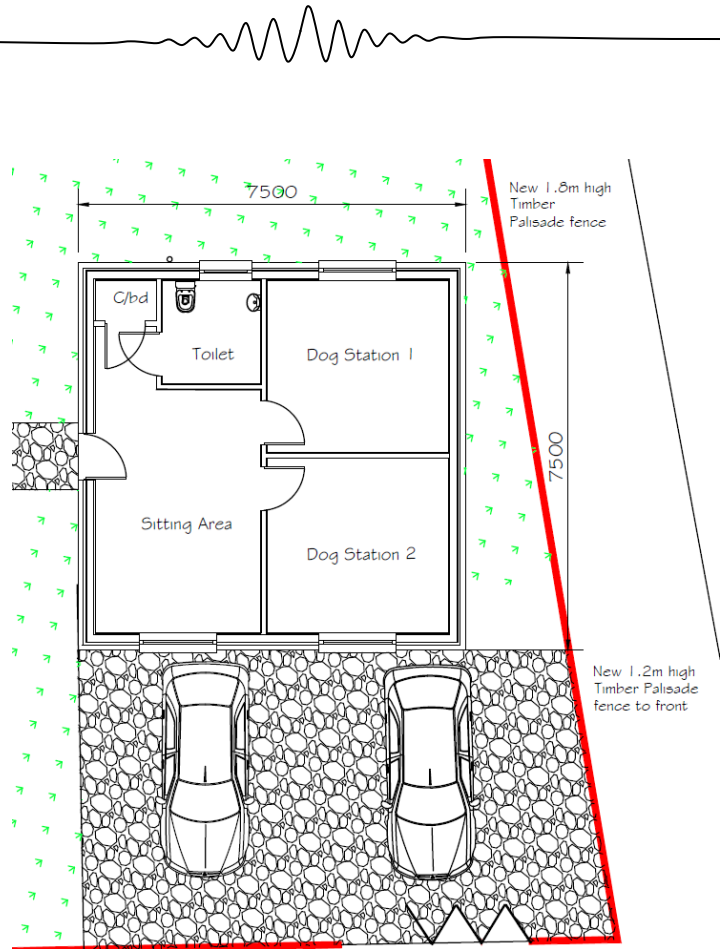


Figure 3. Proposed floor plan

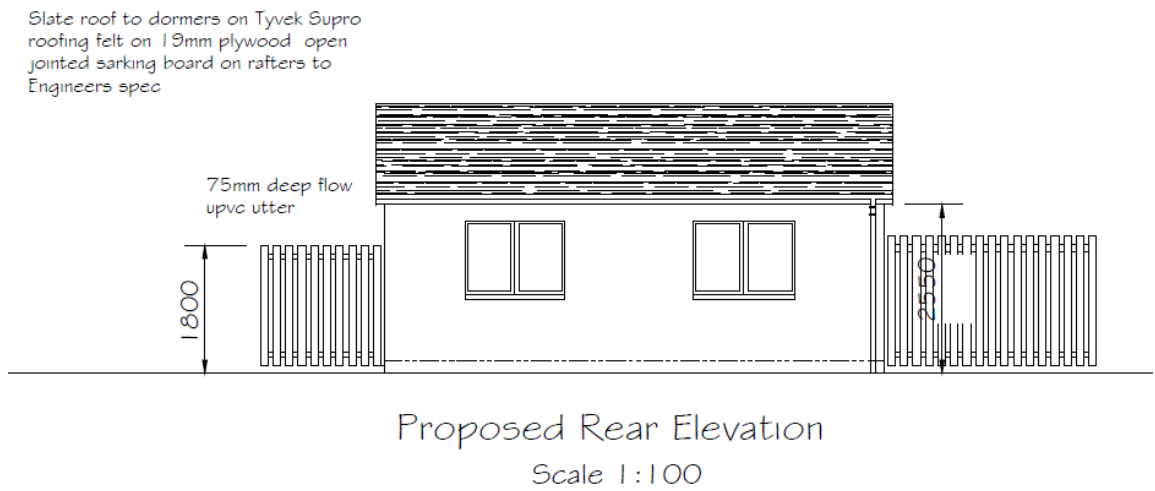


Figure 4. Proposed Elevation facing nearest housing

2.0 Relevant planning guidance

- 2.1 The following section outlines the design criteria used in the report to ensure there is no loss of amenity for residents due to excess noise from the development.
- 2.2 City of Edinburgh Council's typical requirement for the control of noise from barking dogs is based on the short term maximum peaks when barking occurs. The L_{max} criteria is used to represent the loudest barking.
- 2.3 Generally a criteria of L_{Amax} 45dB would be considered acceptable. L_{Amax} 45 dB would be audible but should not cause annoyance or sleep disturbance.
- 2.4 However as the application is for a fully enclosed new building, the applicant has the opportunity to design the building to achieve a significantly better performance to ensure there is not disturbance to the adjacent residents. The applicants proposal is therefore to achieve an L_{max} not exceeding NR25 within the nearest noise sensitive reception location. This equates to a L_{Amax} level of 35dB or below.
- 2.5 The NR25 criterion is spectrum-based criterion, which require that the maximum noise level at a range of frequencies should not be exceeded as indicated in Table 1.

Table 1: Proposed criterion - NR25 (L_{Amax} 35dB)							
Octave Band Centre Frequency							
	63 Hz	125 Hz	250 Hz	500 Hz	1kHz	2kHz	4kHz
NR 25	55	44	35	29	25	22	20

3.0 Noise impact assessment

- 3.1 The development will not have any external area for dogs and therefore there will be no external dog noise associated with the development. We have therefore assessed the noise breakout from dogs within the dog grooming parlour.
- 3.2 The east facade of the dog grooming parlour will be located approximately 16m from the closest residential properties at 24-28 Hutchison Medway. There will be a line of sight from the windows of the Sitting area and Dog Station 2 to the residential properties.
- 3.3 The dog grooming parlour will only operate during the typical working day. For the majority of the time 1-2 dogs will be on the premises in the Dog Stations. Grooming sessions typically last for 60 minutes each. Towards the change of clients there may be an additional 1-2 dogs in the Sitting area.
- 3.4 For the assessment we have assumed as a worst case that two large dogs are barking simultaneously, one in the sitting area and one in Dog Station 2.
- 3.5 In order to assess the potential noise impact, we have predicted the composite sound reduction of the wall, roof and windows facing the residential property, based on the proposed specification:
- 3.6 The building will be constructed from cavity masonry, 100mm blockwork, 50mm cavity 100mm blockwork, finished on the inside with 15mm SoundBloc plasterboard.
- 3.7 The roof will be a pitched construction of slate tiles on felt and 19mm plywood. The ceiling will be sheeted with two layers of 15mm SoundBloc plasterboard, with overlapping joints. There will be 200mm mineral fibre insulation quilt between the roof joists.



- 3.8 The windows to the dog stations and sitting area will be double glazed with a specification of 10mm float glass, 12mm airspace, 8.4mm laminated glass with an acoustic rating of R_w 42dB. The sitting area external door will have an acoustic rating of R_w 35dB.
- 3.9 The assessment has been undertaken using RMP data base measurements of a large dog barking at the Candidacasa dog kennels in Rosewell, Midlothian. Measurements were made by Richard Mackenzie, BSc, PGDip, MInstSCE, MIOA and recorded the barking at L_{Amax} 101dB.
- 3.10 The predictions of noise impact take into account that two dogs maybe barking at the same time.
- 3.11 The noise impact predictions are shown in Table 2 below set against the adopted assessment criteria.

Table 2. Predicted dog barking breakout noise levels, L_{Amax} dB								
	63 Hz	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	L_{AFmax}
Large dog barking	71	77	81	101	98	91	83	101.6
Correction for 2 dogs	3	3	3	3	3	3	3	
Composite sound insulation of façade/roof/windows of the dog grooming parlour	-25	-28	-30	-39	-44	-49	-56	
Distance attenuation to nearest residential property @15m	-24	-24	-24	-24	-24	-24	-24	
Open window sound insulation	-15	-15	-15	-15	-15	-15	-15	
Predicted dog barking level in nearest residential property	10	13	15	26	18	6	-9	24.3
NR 25 criteria	55.2	43.7	35.2	29.2	25	21.9	19.5	34.6
Excess above criteria	0	0	0	0	0	0	0	

-
- 3.12 The predictions shown in Table 2 confirm that provided the dog grooming parlour is constructed with the design specification set out in this report, the noise from barking will be very low and unlikely to cause any disturbance to the local housing.

4.0 Conclusions

- 4.1 We were instructed by Mr Patrick Black on behalf of the applicant Mrs M. Williams to undertake a noise impact assessment in relation to the proposed dog grooming parlour at 39 Hutchinson Medway, Edinburgh, EH14 1QQ, and to offer any acoustical advice necessary to facilitate compliance with the acoustic planning guidelines.
- 4.2 A noise impact assessment was carried out to determine the likely effect of the noise breaking out from the dog grooming parlour to the neighbouring residential properties through the external façade/roof.
- 4.3 The assessment shows that noise emanating from the dog grooming parlour is expected to comply a stringent NR25 (L_{AFmax} 35dB) criteria for the adjacent residential properties given the proposed building design.
- 4.4 The development will not have any external area for dogs and therefore there will be no external dog noise associated with the development.

Prepared by:

Approved by:

Richard Mackenzie

Russell Macdonald

Richard Mackenzie

Russell Macdonald

BSc, PGDip, MIOA

BSc(Hons), MPhil, MIOA

RMP works in partnership with Edinburgh Napier University's Institute for Sustainable Construction bringing together a wide range of specialist expertise in construction innovation.



**Institute
for
Sustainable
Construction**

**Construction technologies
for tomorrow's communities**

Our primary research and innovation support centres include:

Building Performance Centre

Centre for Geotechnics

Centre for Offsite Construction and Innovative Structures

Robin Mackenzie Partnership

Scottish Energy Centre

Centre for Sustainable Communities

www.napier.ac.uk/isc

OFFICES

Head Office Edinburgh

Unit 1, 7Hills Business Park
37 Bankhead Crossway South
Edinburgh
EH11 4EP
0345 062 0000

South West

17 Bishops Close
Torquay
Devon
TQ1 2PL
07908 144954

South East

The Officer's Mess
Royston Road
Duxford
Cambridge
CB22 4QH
07592 104564

rmp@napier.ac.uk

www.rmp.biz

www.soundtest.co.uk

www.airtest.org.uk



@RMPsoundtesting

