

8th June 2026

Mr Philip Fletcher
302 New Road
Staincross
Barnsley
S75 6GP



Dear Sir,

NOISE IMPACT ASSESSMENT FOR THE PROPOSED CHANGE OF USE OF UPPER FLOOR TO 3 NO. DWELLING FLATS (USE CLASS C3) AT 296 BRADFORD ROAD, BATLEY, WF17 5PW

1.00 INTRODUCTION

- 1.01 RP Acoustics Limited has been commissioned by Mr Philip Fletcher to carry out a noise impact assessment for the proposed change of use of upper floor to 3 no. dwelling flats at 296 Bradford Road, Batley, WF17 5PW (hereafter referred to as the application site). The assessment has been undertaken to accompany a planning application to be submitted to Kirklees Council.
- 1.02 The objectives of the noise impact assessment were to:
- Determine the ambient noise levels at the application site
 - Provide recommendations for mitigation measures to protect residential amenity
- 1.03 This report sets out the methodology and findings of the assessment. It has been prepared on behalf of Mr Philip Fletcher for the sole purpose described above and no extended duty of care to any third party is implied or offered. Third parties making reference to the report should consult Mr Philip Fletcher and RP Acoustics Limited.
- 1.04 A glossary of acoustic terms is contained in Appendix 1 for reference.

2.00 APPLICATION SITE SETTING AND PROPOSED CHANGE OF USE

- 2.01 The application site is located above a former Afghan and Persian restaurant (ground floor now vacant and derelict) to the east of Batley town centre adjacent to the A652 Bradford Road. An aerial image (Google Earth) of the application site is reproduced in Appendix 2 for reference.
- 2.02 The proposed change of use consists of the formation of 3 no. dwelling flats (Use Class c3) at first floor. The proposed floor plans are reproduced in Appendix 3 for reference.
- 2.03 The dominant noise source is that of road traffic.

3.00 BASELINE NOISE SURVEY

- 3.01 A 24-hour baseline noise survey was carried out on Tuesday 28th April 2026. For the purpose of the assessment, the following noise monitoring positions were adopted in free field positions:
- NMP1 was located at first floor level overlooking the A652 Bradford Road
 - NMP2 was located at ground floor level at the rear (screened from the road)

- 3.02 Baseline noise measurements were undertaken using NTi Audio XL2 Type 1 integrating sound level meters with a 90 mm windshield. The measurement system calibration was verified before and after measurement sessions with no drift in level noted.
- 3.03 The following table contains a summary of the baseline noise measurement data rounded to the nearest decibel (and include a – 3 decibel façade enhancement correction in order to establish free field levels).

Table 3.1 – Baseline Noise Measurement Data

NMP	Date	Time	L _{Aeq} (dB)	L _{A10} (dB)	L _{A1} (dB)	Comments
1	Wednesday 29/04	0700–1600	67	70	75	Traffic (Ctr spectrum)
	Tuesday 28/04	1600–2300	67	70	74	
	Tuesday 28/04	2300–0700	62	66	72	
Daytime ambient noise level 67 dB L _{Aeq} (0700–2300)						
Night time ambient noise level 62 dB L _{Aeq} (2300–0700)						
11 th Highest Night time maximum noise level 79 dB L _{AFMax} (2300–0700, 1 minute logging)						
2	Wednesday 29/04	1615–1715	48	51	64	Screened traffic
Circa 19 decibels lower than the A652 Bradford Road façade						

- 3.04 The ambient noise levels are wholly commensurate with the application site setting and the proximity to the A652 Wakefield Road. The dominant noise source was road traffic (Ctr spectrum).
- 3.05 For reference, the existing windows at the application site are standard double glazing (4 mm glass / 20 mm cavity / 4 mm glass; weighted sound reduction index 25 dB Rw + Ctr).
- 4.00 BRITISH STANDARD 8233:2014 GUIDANCE ON SOUND INSULATION AND NOISE REDUCTION FOR BUILDINGS (BS 8233)**
- 4.01 BS 8233 sets guideline indoor noise levels for dwellings for road traffic noise as shown in the following table.

Table 4.1 – BS 8233:2014 Indoor Ambient Noise Levels in Dwellings

Activity	Location	0700–2300 hours	2300–0700 hours
Resting	Living Room	35 dB L _{Aeq}	—
Dining	Dining Room	40 dB L _{Aeq}	—
Sleeping (daytime resting)	Bedroom	35 dB L _{Aeq}	30 dB L _{Aeq} ¹

¹ 11th highest night-time maxima (based on 1 minute sampling rate) not to exceed 45 dB L_{AFMax}

- 4.02 Note 5 to the above table states *'If relying on closed windows to meet the guide values, there needs to be an appropriate alternative ventilation that does not compromise the façade insulation or the resulting noise level. If applicable, any room should have adequate ventilation (e.g. trickle ventilators should be open) during assessment.'*

5.00 BUILDING REGULATIONS APPROVED DOCUMENT O 'OVERHEATING' (BRADO)

- 5.01 BRADO is applicable to new build residential developments and requires that reasonable provision must be made in respect of limit unwanted solar gains in summer and provide an adequate means of ventilate to remove heat from the indoor environment. BRADO is not applicable to residential developments formed by a material change of use. Notwithstanding this, it does present an indication of the likely acoustic and ventilation requirements of a development in terms of thermal comfort.
- 5.02 BRADO states '*In locations where external noise may be an issue (for example, where the Local Planning Authority considered external noise to be an issue at the planning stage), the overheating mitigation strategy should take account of the likelihood that windows will be closed during sleeping hours (11 pm to 7 am). Windows are likely to be closed during sleeping hours if noise within bedrooms exceeds the following limits: a) 40 dB $L_{Aeq,T}$ averaged over 8 hours (between 11 pm and 7 am); and b) 55 dB L_{AFMax} more than 10 times a night (between 11 pm and 7 am).*'
- 5.03 BRADO therefore objectively defines when relying on opening windows to remove excess heat does not comply with the requirement to take account of noise at night. Where an open window for the removal of excess heat will result in the aforementioned noise levels being exceeded, the overheating mitigation strategy should adopt an alternative means.
- 5.04 In accordance with BRADO, it therefore follows that, based on 15 decibels attenuation for a partially open window for thermal comfort, where external noise levels are above 55 dB L_{Aeq} (2300–0700) and 70 dB L_{AFMax} (2300–0700) (11th highest), an alternative means of (mechanical) ventilation is justified.
- 5.05 For reference, the night time noise levels at the application site on the A652 Bradford Road facade are 62 dB L_{Aeq} (2300–0700) and 80 dB L_{AFMax} (2300–0700, 11th highest, 1 minute logging). Bedrooms on the A652 Bradford Road façade would therefore benefit from the provision of an alternative means of (mechanical) ventilation (such as the Sonair 3 which is compliant with the Noise Insulation Regulations 1975 and provides both passive background and mechanical input ventilation).

6.00 SCHEME OF NOISE MITIGATION

- 6.01 The sound insulation (glazing and ventilation) requirements have been calculated using the methodology advocated in BS 8233:2014 and are set out in the following table:

Table 6.1 – Scheme of Noise Mitigation

Facade	External Level	Noise Mitigation Measures
Front	67 dB L_{Aeq} (0700–2300) 62 dB L_{Aeq} (2300–0700) 79 dB L_{AFMax} (2300–0700)	Secondary glazing $\geq$ 150 mm from windows (see Appendix 4) Mechanical ventilator to bedrooms (see Appendix 5)
Rear	48 dB L_{Aeq} (0700–2300) 43 dB L_{Aeq} (2300–0700) 60 dB L_{AFMax} (2300–0700)	No mitigation required

- 6.02 The separating floor to the underlying commercial use (currently vacant and derelict with ground floor ceiling removed) must be compliant with Building Regulations Approved Document E 'Resistance to the Passage of Sound'.

7.00 CONCLUSIONS

- 7.01 A noise impact assessment has been undertaken for a proposed change of use of upper floor to 3 no. dwelling flats at 296 Bradford Road, Batley, WF17 5PW.
- 7.02 The dominant noise source is road traffic on the A652 Bradford Road.
- 7.03 A scheme of noise mitigation consisting of secondary glazing to habitable rooms and mechanical ventilation to bedrooms on the A652 Bradford Road façade has been specified.
- 7.04 In conclusion, noise does not pose a material constraint to the granting of planning permission.

We trust the foregoing is to your satisfaction. Should you have any queries, please do not hesitate to contact us.

Yours sincerely

Richard Pennell
Member of the Institute of Acoustics
For and on behalf of RP Acoustics Ltd

APPENDIX 1 GLOSSARY OF ACOUSTIC TERMS

Sound Pressure Level (L_p)

The basic unit of sound measurement is the sound pressure level. As the pressures to which the human ear responds can range from 20 μPa to 200 Pa, a linear measurement of sound levels would involve many orders of magnitude. Consequently, the pressures are converted to a logarithmic scale and expressed in decibels (dB) as follows:

$$L_p = 20 \log_{10}(p/p_0)$$

Where L_p = sound pressure level in dB; p = rms sound pressure in Pa; and p_0 = reference sound pressure (20 μPa).

A-weighting Network

A frequency filtering system in a sound level meter, which approximates under defined conditions the frequency response of the human ear. The A-weighted sound pressure level, expressed in dB(A), has been shown to correlate well with subjective response to noise.

Equivalent continuous A-weighted sound pressure level, $L_{Aeq, T}$

The value of the A-weighted sound pressure level in decibels of continuous steady sound that within a specified time interval, T , has the same mean-square sound pressure as a sound that varies with time. $L_{Aeq, 16h}$ (07:00 to 23:00 hours) and $L_{Aeq, 8h}$ (23:00 to 07:00 hours) are used to qualify daytime and night time noise levels.

$L_{A10, T}$

The A-weighted sound pressure level in decibels exceeded for 10% of the measurement period, T . $L_{A10, 18h}$ is the arithmetic mean of the 18 hourly values from 06:00 to 24:00 hours.

$L_{A90, T}$

The A-weighted sound pressure level of the residual noise in decibels exceeded 90% of a given time interval, T . L_{A90} is typically taken as representative of background noise.

$L_{AF \max}$

The maximum A-weighted noise level recorded during the measurement period. The subscript 'F' denotes fast time weighting, slow time weighting 'S' is also used.

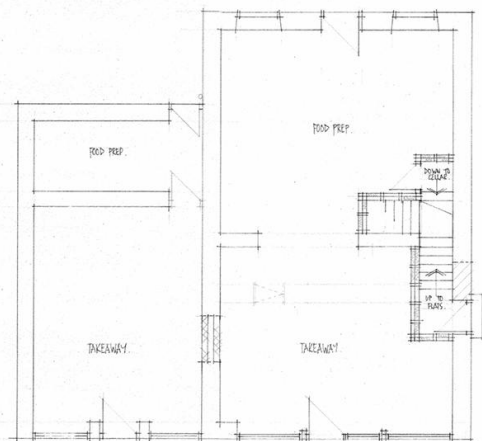
Sound Exposure Level (SEL or L_{AE})

The energy produced by a discrete noise event averaged over one second, no matter how long the event actually took. This allows for comparison between different noise events that occur over different lengths of time.

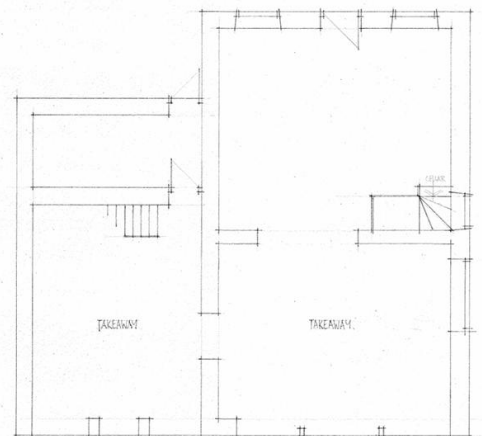
APPENDIX 2 APPLICATION SITE LOCATION PLAN



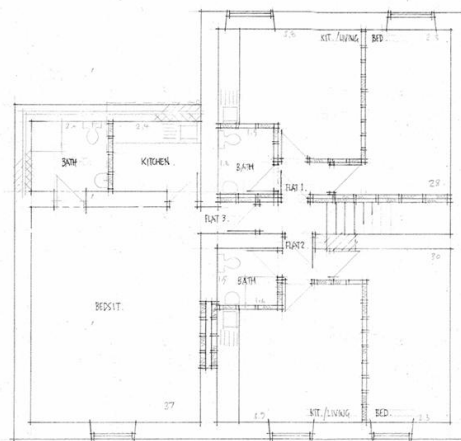
APPENDIX 3 PROPOSED FLOOR PLANS



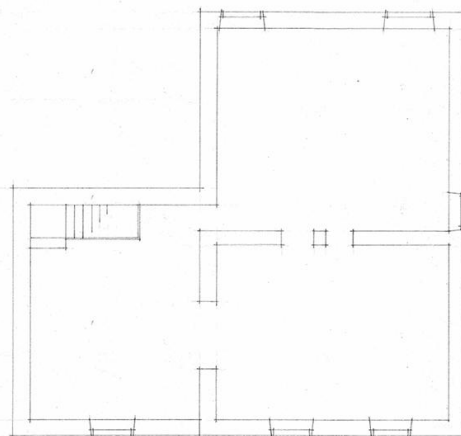
PROPOSED GROUND FLOOR PLAN.



EXISTING GROUND FLOOR PLAN.



PROPOSED FIRST FLOOR PLAN.



EXISTING FIRST FLOOR PLAN.

STAIRCASE -
PROVIDE NEW DOOR OPENING WITHIN EXISTING (REAR)
WINDOW OPENING. FIT NEW DOOR AND FRAME.
NEW TIMBER STAIRCASE TO BE INSTALLED. TOTAL RISE TO
BE CHECKED ON SITE TOOR TO DETERMINE.
3.0m FLOOR TO FLOOR TO BE REQUIRED. IS 8 RISERS OF
200 MM. REARS TO BE 250 MM. ROUNG 1.2.0.
NAIL HEADBOARD FROM PITCH LINE OF STAIRS.
MAKE SUE 2.0m NAIL HEADBOARD THE CEILING JOBS
(CEILING) TO 1/4 IN. BY NEW STAIRS. HEADBOARD TO BE
900 MM NAIL ABOVE PITCH LINE AND STAIRS. POOL
STAIRWELL USING 2x2 20x50 MM C.M. TRIMMER JOBS
STAIRS TO BE 900 MM WIDE.

'PRIM' WALLS - STOPS ENCLOSURE.
WALLS TO BE CONJUNCTIVE WITH ME TYPE 4-1 DIA 2:37
HETAL OR SW STUD PARTITIONING, 75X50MM STIPING
WITH NOGLASS AT 400MM/MS. PARTITIONS THEN UP
TO 4/5 OF CEILING, AND THEIR PLANT AND ARE SHOWN.
PROVIDE 75MM THK. RIGIDISED SOUND INSULATION TO
EACH LEAF PROVIDE 12.5MM PLASTERBOARD AND SEAL
TO BOTH SIDES.
ALL DOORS INTO CORRIDORS TO BE F800 FIRE
DOORS AND FRAMES FITTED WITH SELF CLOSING DEVICE
THINGS WILL ESCAPE LOCKING DEVICE TO EACH PLANT
END. DOOR FRAMES TO HAVE SMOKE SEALS AND
INTIMESCREET STUDS.

FLAT INTERNAL WALLS -
75x90 mm S.W. OR METAL STUDS, JOISTS AT
400 MM C. 75mm ROCKWOL (SOUND INSULATION) BETWEEN
JOISTS. 12.5mm PLASTERBOND WITH SCUM FINISH
TO BOTH SIDES.

CEILINGS -
GROUND FLOOR CEILING TO BE FINISHED WITH
PLASTER. SKIM FINISH ON 12.5 MM PLASTERBOARD.
2ND LAYERS OF SOUNDPROOF INSULATION FIXED TO
EXISTING FLOOR JOISTS PROVIDE 100 MM GILT (GILD
INSULATION) BETWEEN FLOOR JOISTS. FLOOR TO
ACHIEVE 1/2 HR FIRE PROTECTION. SEAL ALL JOINTS
TO BRICKS.

WALL CONSTRUCTION:-
EXTEND ABOVE EXISTING GROUND FLOOR,
200 mm STONE AND BED TO MATCH EXISTING, 100 mm
CAULITY WITH 30 mm ROUGHCAST TERRAZZO WALL K106
RIGID INSULATION 100 mm CEILING TO FLOOR
PLASTER FINISH INTERIALLY. WALL TO ACHIEVE
"U" VALUE N.E. 0.19 W/M²K. STAIRWELLS BUILT WALL
THAT WITH INSUL. RETAINING WALLS. OPS. AT 750 C
WITH A 450 C VERTICALLY.

ROOF:
FOAM PRIMERED ROOF. SLATE ROOF FIXED TO
38x25 MM S.W. THINLISED BATTLES ON BREATHABLE FELT.
150x50 MM C/B RAFTERS AT 400MM/C. PROUSE
127 MM POL BACKED PLASTERD & SKIA. 2ND LAYERS
OF 250 MM QUIET INSULATION.

FIRST FLOOR CEILING TO BE FINISHED WITH PLASTER SKIN FINISH TO 12.5mm PLASTERBOARD fixed to 4% OF CEILING JOIST. PROVIDE 2N° LAYERS OF 200 MM GULLT INSULATION. 1 LAYER OF 200 MM GULLT BETWEEN JOISTS AND 1 LAYER Laid IN OPPOSITE DIRECTION CROSS.

BATHOTHERMOPHILIC
LINE BACTERIUM. WHOLE WITH ESPECIALLY WBP BY
PORE TO 9.5 NM. RADIATION AND SOLID
PROVIDE PROOF FOR SENSITIVE GEL.
WC TO HAVE 100 NM WATER WITH 10° TRAP.
SHOWER A FEEL TO HAVE 40 NM WASTES WITH
75 NM WATER SENSITIVE TRAPS.
ALL WASTES INTO EXISTING 100 NM SOLID VENT
PILE
PROVIDE MECHANICAL EXTRACTION TO LIGHT
BATHOTHERMOPHILIC. EXTRACT ACTIVATED BY IONIC SURFAC-
TANT TO PROVIDE ON LINE CHANGES & TO OVER RUN
BY 20 MIN. EXTRACT TO BE EQUIVALENT TO
40% OF EXTRACTION. DOOR TO BE UNDERCUT BY
100 NM FROM F.F.I.

KITCHEN-
KITCHEN TO HAVE SINK WITH 40 MM WASTE FITTED
WITH 75 MM DEEP SEAL TRAP, ALL WASTES INTO 100A
SUP. MECHANICAL EXTRACTION EQUIVALENT TO 60%

SMOKE ALARMS -
EACH FLET TO BE INDIVIDUALLY ALARMED.
HARD WIRED SMOKE + FIRE ALARMS WITH BATTERY
BACK UP. ALARMS HARD WIRED BACK TO MAINLY
SYSTEM COMPLIANT WITH BS 5896 PART 1.
SMOKE DETECTORS TO BS 5896 PART 4. HEAT
DETECTOR TO KITCHEN AREA TO RE 300 MA MIN. AND
BROWN LIGHT FITTINGS

GENERAL -
ALL WORKS TO COMPLY WITH CURRENT BUILDING
REGULATIONS.
ALL ELECTRICAL WORKS ARE TO COMPLY WITH
ELECTRICAL SAFETY PART P.
ALL ELECTRICAL WORKS ARE TO COMPLY WITH LATEST
IEE A NICEIC REGULATIONS.
ALL ELEC WORKS TO BE CARRIED OUT BY
CERTIFIED ELECTRICIAN.
ALL NEW LIGHT FITTINGS TO BE LED.
ALL NEW ELEC SOCKETS TO BE 450MM AND ABOVE
P.F.L.

CONVERSION TO FORM 3N^o FLATS.
BRADFORD RD.
BATLEY.

1:50 APR '23 JNF
07725 446 585
fletcher.jonathan@gmail.com

APPENDIX 4 GLAZING SPECIFICATION (HABITABLE ROOMS ON A652 BRADFORD ROAD FACADE)

info.glass@nichollsandclarke.com 0845 6051350



COMPARISON CHART

The charts below show comparisons between various types of glass and insulated glass units and also between the Rw, Rw+C & Rw+Ctr indices.

Single Glass	Rw	Rw+C	Rw+Ctr
6.4mm Laminated Safety Glass	32 dB	31 dB	29 dB
6.8mm Laminated Safety Glass	33 dB	31 dB	29 dB
10.8mm Laminated Safety Glass	34 dB	33 dB	31 dB
6.8mm Acoustic Laminated	35 dB	34 dB	32 dB
8.8mm Acoustic Laminated	37 dB	36 dB	33 dB
10.8mm Acoustic Laminated	38 dB	37 dB	36 dB
12.8mm Acoustic Laminated	39 dB	39 dB	37 dB
16.8mm Acoustic Laminated	40 dB	40 dB	38 dB

Double Glazed Units	Rw	Rw+C	Rw+Ctr
4mm / 20 spacer / 4mm IGU	31 dB	30 dB	25 dB
6mm / 16 spacer / 6mm IGU	31 dB	30 dB	27 dB
8mm / 16 spacer / 6mm IGU	35 dB	33 dB	29 dB
10mm / 16 spacer / 6mm IGU	40 dB	38 dB	35 dB
6.8mm Acoustic / 16 spacer / 6mm IGU	38 dB	36 dB	33 dB
8.8mm Acoustic / 16 spacer / 6mm IGU	41 dB	38 dB	34 dB
10.8mm Acoustic / 16 spacer / 6mm IGU	41 dB	39 dB	35 dB
12.8mm Acoustic / 16 spacer / 6mm IGU	41 dB	40 dB	36 dB
16.8mm Acoustic / 16mm spacer / 16.8mm Acoustic	48 dB	46 dB	42 dB

Triple Glazed Units	Rw	Rw+C	Rw+Ctr
4mm / 8mm spacer / 4mm / 8mm spacer / 4mm	31 dB	30 dB	27 dB
4mm / 10mm spacer / 4mm / 10mm spacer / 4mm	32 dB	31 dB	26 dB

Secondary Glazing	Rw	Rw+C	Rw+Ctr
6 / 100 / 4	46 dB		37 dB
6 / 150 / 4	47 dB		39 dB
10 / 200 / 6	49 dB		45 dB

Sound insulation data measured in accordance with BS EN ISO 140-3 and indices derived in accordance with BS EN ISO 717-1

APPENDIX 5

MECHANICAL VENTILATOR (SONAIR 3)

(BEDROOMS ON A652 BRADFORD ROAD FACADE)

Sonair 3

Acoustic (sound attenuating) filtered air supply units

For use fitted through walls

Sonair 3 provides mechanical input ventilation when switched on, when switched off provides background trickle ventilation which includes a controllable shutter.

It is designed with sound attenuating features to reduce noise transferring from outside to inside the home

Sonair 3 is a wall mounted input fan featuring a detachable remote control with an LED speed indicator.

- Sonair 3 ventilates and filters the air
- Independently tested for acoustic performance
- Exceptional sound attenuation (up to 58dB)
- Air cleaning
- Low energy

Sonair 3



Features & Benefits

- Meets guidelines for occupant accessibility
- Increase occupant awareness of system operation
- Discreet design
- power lead is 1.8m long and fitted with a 3 pin plug
- Supplied with a flexible 1.8m long cable with a 13 amp 3 pin plug fitted with a 3 amp fuse

Performance

Approximate input airflow rate (m³/h) – 20-150m³/h

Acoustic Dn,e,w (-1/-) – Dn,e,w (C;Ctr) 58(-1;-2)dB*

Tested to the 'Noise Insulation Regulations.'

Background ventilation rate of 2400EA when the unit is switched off, recirculation flap closed and with the shutter open

*Sound insulating tube D100 required

Product	Product Code
Sonair 3 including G4/ISO Coarse 60%	352004
Sonair 3 Filter G4/ISO Coarse 60%	535083
Sonair 3 Sound Insulating Tube D100	110361
100mm dia (non-sound insulating) duct 350mm long	8960097
White external grille	8960105
Brown external grille	8960102
Beige external grille	8960103

All items supplied separately

Control

The Sonair 3's portable remote control lets you control the amount of freshly supplied outdoor air. The Sonair 3 has 10 ventilation settings.