

Technical Memorandum



To: Mr M Shahzeb

From: Mike Potts (Echo Acoustics)

CC:

Date: 20 November 2025

Re: 132 Yorkshire Street, Rochdale OL16 1LA: Noise

Introduction and site description

This technical memorandum has been prepared by Mike Potts of Echo Acoustics; Mr Potts is a Member of the Institute of Acoustics (MIOA) and is an Acoustic Consultant with over 24 years' experience in environmental noise assessment, within both regulatory and private industry roles at a senior level and including experience in the provision of Expert Witness evidence at Public Inquiry.

This document provides a review of the potential noise aspects affecting the proposed residential use of the above building, in response to a request from the Local Planning Authority for a noise assessment.

The property is located close to Rochdale town centre in a largely commercial area comprising offices and shops. The property is an end-terrace building, set over 3 floors, with its front aspect overlooking Yorkshire Street and its rear aspect overlooking an adjacent office building and associated car parking. The gable end façade has an entrance door at ground floor level and overlooks the vehicle access road to the offices at the rear.

The ambient noise situation is dominated by general urban and traffic noise from the A58 St Mary's Gate with occasional low speed vehicle movements on Yorkshire Street itself and the surrounding streets.

Proposals

The proposals, presented in Figure 1 at Appendix A, are for the retention of commercial use at ground floor and conversion of the upper storeys to residential use, comprising 2 self-contained 1-bed apartments; these will have bedrooms to the front and living/dining rooms at the rear.

The ground floor use will be office or retail space of some description, yet to be decided.

Regulatory guidance and requirements

With respect to noise, the Application is subject to the provisions of **The Town and Country Planning (General Permitted Development) (England) Order 2015** (as amended).

Specifically, the development falls under Class MA of the Order, which requires that:

"Before beginning development under Class MA, the developer must apply to the local planning authority for a determination as to whether the prior approval of the authority will be required as to—

.....

(d) impacts of noise from commercial premises on the intended occupiers of the development".

The Local Authority cannot require assessment of noise from general urban or transportation infrastructure etc, for which BS 8233 would be the applicable Guidance.

Commercial noise sources will include general operational activity noise from commercial premises, delivery noise and noise from fixed plant equipment such as air handling units or commercial kitchen extraction systems. These would, typically, be assessed in accordance with the guidance provided in **British Standard 4142:2014 + A1:2019 Methods for rating and assessing industrial and commercial sound**. The Standard "...describes methods for rating and assessing sound of an industrial and/or commercial nature, which includes:

- a) sound from industrial and manufacturing processes;
- b) sound from fixed installations which comprise mechanical and electrical plant and equipment;
- c) sound from the loading and unloading of goods and materials at industrial and/or commercial premises;
- and
- d) sound from mobile plant and vehicles that is an intrinsic part of the overall sound emanating from premises or processes, such as that from fork-lift trucks, or that from train or ship movements on or around an industrial and/or commercial site.

The methods described in this British Standard use outdoor sound levels to assess the likely effects of sound on people who might be inside or outside a dwelling or premises used for residential purposes upon which sound is incident".

The Standard notes those aspects to which it is not applicable:

"Sound of an industrial and/or commercial nature does not include sound from the passage of vehicles on public roads and railway systems.

The standard is not intended to be applied to the rating and assessment of sound from:

- a) recreational activities, including all forms of motorsport;
- b) music and other entertainment;
- c) shooting grounds;
- d) construction and demolition;
- e) domestic animals;
- f) people;
- g) public address systems for speech; and
- h) other sources falling within the scopes of other standards or guidance.

....

The standard is not intended to be applied to the assessment of indoor sound levels".

With respect to transmission of noise internally between the ground floor commercial use and first floor residential premises, this is subject to the requirements of **Approved Document E "Resistance to the passage of sound"** of the Building Regulations 2010 ("ADE").

This requires that, in residential premises formed by a change of use, separating floors must achieve a minimum sound insulation performance of $43 \text{ dB } D_{n,T,w} + C_{tr}$.

Assessment methodology

A site visit was undertaken on the morning of Wednesday 12 November at which time sound level meters were installed at second storey level at the front of the building and at the rear, as indicated in Figures 20 to 4 at Appendix A. The survey utilised two Class 1 (IEC 61672:2013) integrating averaging sound level meters, placed in locked cases with the microphones extended out through the windows; the data gathered were 'façade' levels. The meters were collected during a second site visit on Friday 14 November 2025.

Both meters gathered continuous, consecutive 1-second and 5-minute broadband and 1/3 octave acoustic frequency data between 11:05am on Wednesday 12 November and 10:00am on Friday 14 November 2025. Additionally, the meter to the rear gathered a continuous audio recording throughout the survey.

The weather during the survey included rainfall on Wednesday and Friday but dry conditions, with low wind speeds, during Thursday.

The assessment considered both external noise and internal noise transmission between the ground floor commercial use and first floor residential premises.

Results and assessment

External noise aspects

During the site visit, the nature of the surroundings, at both the front and rear of the premises was examined. There are no premises immediately adjacent which might generate significant levels of noise during the day or night time; all the adjacent premises are office space or retail uses. There are no restaurants or take away food outlets nearby and none of the adjacent buildings have any fixed plant equipment or noise-generating outlets such as kitchen extraction ducts etc.

The data, particularly the 1/3 octave frequency data, were examined and there was no evidence of any tonal noise; the audio recording was examined and there was no audible commercial noise evident to the rear of the premises.

Internal noise

The acoustic performance of the separating floor between ground and first floor was not tested. The construction is believed to comprise a plaster ceiling affixed to joists with wooden floor boards above.

Whilst the proposed ground floor use, whatever it may eventually be, is unlikely to generate significant levels of adverse noise and is likely to operate during the daytime and, possibly evenings. However, there is the potential for low levels of noise associated with voices or the playing of radios etc. to be audible in the first floor residential property.

Consequently, it is recommended that an independent suspended ceiling be installed in the commercial use; Paragraph 4.27 of ADE provides guidance on a suitable construction:

“Independent ceiling with absorbent material

- *At least 2 layers of plasterboard with staggered joints, minimum total mass per units area 20kg/m²;*
- *An absorbent layer of mineral wool laid on the ceiling, minimum thickness 100mm, minimum density 10kg/m³.*

The ceiling should be supported by one of the following methods:

- *Independent joists fixed only to the surrounding walls. A clearance of at least 25mm should be left between the top of the independent ceiling joists and the underside of the existing floor construction;*
or
- *Independent joists fixed to the surrounding walls with additional support provided by resilient hangers attached directly to the existing floor base”.*

The existing ceiling should be retained as this adds additional sound insulation on top of that provided by the suspended ceiling.

Such a construction will readily provide the necessary sound attenuation (43 dB $D_{n,T,w} + C_{tr}$) required by ADE.

Conclusion

This document has assessed the potential noise affecting the proposed change of use of a former commercial building at 132 Yorkshire Street, Rochdale, for residential use at first and second floor level.

The assessment shows that there is no evidence of any significant commercial noise, externally, affecting the Application Premises.

The assessment also provides details of a construction for the separating floor, between the ground floor commercial and first floor residential uses, sufficient to achieve an airborne sound insulation performance of at least 43 dB $D_{n,T,w} + C_{tr}$, as required by Approved Document E of the Building Regulations 2010.

The assessment concludes, therefore, that proposed change of use may be permitted, subject to suitable upgrade of the ground floor commercial premises' ceiling, and that noise need not be a reason for refusal of planning permission.

Figure 1: Existing and proposed building layout and elevations (drawing: Proposed change of use of 1st and 2nd floor from offices to 2 x 1 bedroom flats at 132 Yorkshire Street, Rochdale. Drawing No. 01, Rev 0)

