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11/05/2026

Reliance RG Ltd
Rowley Mills
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By email only: c/o Matthew Sheppard –

Dear Sirs

**Site:** **Rowley Mills, Penistone Road, Huddersfield**
**Re:** **Planning ref. 2025/93394 – New building extensions and associated works**
**Document ref.** **03780-590300**

Introduction

Further to review of recent feedback from Kirklees Council relating to the above-mentioned planning submission, please see our comments set out below.

A consultation response was provided by Kirklees Council (responding ref. WK202540791 dated 20/01/2026). This response provided comments on Blue Tree Acoustics (BTA) document ref. 03780-130202 dated 05/12/2025, which was prepared for the planning submission for the proposed new extensions.

We understand from the consultation response that the Council are satisfied with the predicted noise impact at the new Homes by Honey development to the north of the Rowley Mills site, and are satisfied that the BS8233 criteria defined for impact at new dwellings in this development will be met.

With regard to the predicted impact on existing nearby residential receptors (the nearest being dwellings at Ashford Manor to the south of the site, and Woodsome Park to the northeast of the site), the report concluded that daytime operations were of suitably low impact, but that there was some potential for adverse impact resulting from nighttime operation of the existing extract fan in the northern elevation of the workshop building and forklift trucks in external areas.

The consultation response has requested further information with regard to mitigation of these noise sources. Additionally, detailed information for a proposed new ASHP installation as part of the Rowley Mills extension work is now available, and this is also considered below.

Forklift truck (FLT)

Predicted FLT nighttime noise impact set out in the above-referenced BTA document resulted in a BS4142 impact of +2dB at Ashford Manor and +1dB at Woodsome Park.

As outlined in the BTA document, we understand that site operations only have FLTs externally between 0800-1700 hours (i.e. when deliveries or shipments occur), and that FLTs are not required for the nighttime production operation. On this basis, nighttime noise impact from FLTs will be mitigated and management

controls can be implemented to ensure nighttime operation is suitably restricted. Similarly, HGV access does not occur during nighttime hours.

Extract fan

Predicted nighttime noise impact of the existing extract fan in the northern elevation of the workshop building set out in the above-referenced BTA document resulted in a BS4142 impact of -19dB at Ashford Manor and +4dB at Woodsome Park.

The predicted outcome of +4dB at Woodsome Park is around the threshold likely to be an indication of an adverse impact in BS4142 terms, and therefore measures to reduce the fan noise were recommended.

Possible options to reduce noise emission from this fan termination include provision of an acoustic louvre to the termination, or a physical barrier positioned to screen sound emission towards the receptor (e.g. a vertical baffle panel positioned to the side of the vent). The mitigation should be designed to provide at least 5dB(A) sound attenuation of the extract fan.

Updated acoustic modelling has been undertaken to reflect these proposals, and the model output plots are presented in Appendix 1 below. The extract fan mitigation in the model assumes a barrier panel positioned immediately to the east of the fan. The panel should be designed to extend at least 1m above and below the fan termination and to be at least 500mm deep. Alternatively, the existing wall termination can be replaced with an acoustic louvre of suitable specification, i.e. reducing extract fan noise to no more than 17dB(A) at Woodsome Park.

Air source heat pump (ASHP)

A Mitsubishi CAHV-R450YA ASHP is proposed as part of the development works, and we understand that this will replace most of the existing external DX condensers serving the building.

We have been provided with manufacturer's source sound level data for the ASHP, as well as for a specialist acoustic enclosure that is available for this unit, as summarised in the following table.

**Table 1: ASHP source sound levels**

| Item | dB @ Octave band centre frequency (Hz) | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | **63** | **125** | **250** | **500** | **1k** | **2k** | **4k** | **8k** |
| Mitsubishi CAHV-R450YA, $L_w$ | 80 | 86 | 83 | 81 | 74 | 72 | 74 | 66 |
| Ambient Acoustics Ltd acoustics kit, sound reduction | -3 | -4 | -6 | -8 | -9 | -9 | -10 | -7 |

The ASHP has been included in the acoustic model plots shown in Appendix 1. As seen in Table AT1, the ASHP is of greater potential impact at Woodsome Park than at Ashford Manor, as the Ashford Manor dwellings are more shielded from the ASHP location. It can also be seen that the proprietary acoustic kit provides beneficial sound attenuation of up to 7dB(A).

It is also noted that the new ASHP installation will replace existing equipment and that there will be a consequential reduction in existing mechanical services noise emissions from Rowley Mills as a result, although at present we do not have data to accurately quantify the reduction.

Summary

The mitigation measures discussed above are capable of providing a significant reduction in noise impact at the existing nearest residential receptors, and therefore should be implemented.

In BS4142 terms, the nighttime operational impact from Rowley Mills is predicted to be of negligible magnitude at the existing residential properties at Ashford Manor, and of low impact at Woodsome Park. The previous predicted impact during nighttime was up to +6dB at Woodsome Park, and therefore implementation of the mitigation measures provides a meaningful reduction in BS4142 impact from 'adverse' to 'low' at this location.

It should also be noted that this is based on a BS4142 acoustic feature correction of +6dB, which could be considered pessimistic given that the predicted specific sound levels are lower than the prevailing residual and background sound levels – i.e. subjectively much less prominent in comparison with the general environmental soundscape.

Please do not hesitate to email us if you require anything further.

Yours faithfully

Owen Downey BSc(Hons) MIOA
Senior Consultant

## APPENDIX 1 – ACOUSTIC MODEL PLOTS OF PREDICTED SOUND LEVEL SCENARIOS

AP1.1 CadnaA acoustic modelling software has been used to create a noise model of the proposed development.

AP1.2 The example model plots presented below show dB $L_{Aeq}$ levels plotted at 4.0m height above local ground level for nighttime operation and include the new ASHP and mitigation of existing sources in place, i.e. an acoustic barrier panel positioned adjacent to the extract fan in the northern end of the existing workshop building and no FLT operation. A height of 4.0m is representative of sound levels at bedroom window height, and levels plotted at 1.5m height are lower due to greater sound attenuation effects at that height.

AP1.3 The sound level boxes at each residential receptor building on the plots show the calculated sound levels at a point 4.0m from the building façade for each receptor, i.e. unaffected by reflections and representative of the sound level expected at the building facade.

AP1.4 The model outputs for the ASHP at both 1.5m height above local ground level and 4.0m height above local ground level are summarised in Table AT1 below, showing the highest ASHP sound level predicted at the existing residential receptors for each scenario.

**Table AT1: ASHP operational sound levels predicted at nearest proposed new dwelling**

| Acoustic model scenario | | Acoustic model plot height | Ashford Manor, dB $L_{Aeq,T}$ | Woodsome Park, dB $L_{Aeq,T}$ |
|---|---|---|---|---|
| **Ref.** | **Description** | | | |
| A | ASHP operation | 1.5m | 14 | 22 |
| | | 4.0m | 14 | 25 |
| B | ASHP operation with acoustic kit added | 1.5m | 7 | 16 |
| | | 4.0m | 8 | 18 |

AP1.5 In terms of BS4142 impact, Table AT2 below summarises the indicative BS4142:2014 outcome for the nighttime operation presented in Plot 3 below. For consistency with previous assessments for this proposal, an acoustic feature correction of +6dB has been included to allow for characteristic acoustic features in the industrial specific sound. The table considers the BS4142 impact with regard to the nighttime background sound levels at Ashford Manor and Woodsome Park (defined in our previous documents as 49dB $L_{A90}$ and 30dB $L_{A90}$, respectively).

**Table AT2: Total nighttime BS4142 operational sound level impact at nearest noise-sensitive receptor – 4.0m acoustic model plot height**

| Description | Ashford Manor | Woodsome Park |
|---|---|---|
| Nighttime operation including attenuated extract fan and ASHP with acoustic kit, and no FLT, dB $L_{Aeq}$ | 21 | 25 |
| BS4142 Rating Level, dB $L_{Ar,Tr}$ | 27 | 31 |
| Difference to background sound level, dB | -22 | +1 |

AP1.6 It can be seen from Table AT2 that the magnitude of nighttime operational impact at Ashford Manor is considered to be negligible. The outcome at Woodsome Park in BS4142 terms is +1dB above the background sound level, which the standard equates to 'low impact'.

Plot 1: Nighttime ASHP – $L_{Aeq,T}$ – 4.0m plot height

Plot 2: Nighttime ASHP with acoustic kit fitted – $L_{Aeq,T}$ – 4.0m plot height

Plot 3: Nighttime operation including ASHP with acoustic kit fitted, attenuated extract fan, no FLT operation – $L_{Aeq,T}$ – 4.0m plot height

## DISCLAIMER

a) This document is limited to addressing the specific acoustic issues contained herein, and its content is based on drawings and information provided to date by our Client/their Design Team.

b) All findings, comments, recommendations, etc., in this document are for acoustic purposes only; any and all other considerations and requirements, e.g. structural, airflow, thermal, fire safety, CDM compliance, determination of whether materials are dangerous, hazardous, deleterious, etc. (non-exhaustively), are the responsibility of other such suitably qualified specialists to check and advise on.

c) All findings, comments, recommendations, etc., in this document have been prepared with reasonable skill and care by BTA, within the scope of our Client's brief and timescales. Calculations and estimates upon which BTA's findings are elaborated are based on reasonable assumptions and industry practice that, by their nature, involve uncertainties that could cause future onsite results to differ materially from those predicted. BTA does not guarantee or warrant any calculation or estimate made, especially those based on data measured by third parties or information provided by third parties to BTA or otherwise relied upon by third parties. Any third-party information required and/or provided for the purpose of completing this document should not be considered as verified by BTA.

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e) Products and materials that perform well acoustically tend to be heavier than standard products. Use of these products and materials may increase the weight of the element, and the CDM Principal Designer, Client, etc. must take care to ensure that this risk is mitigated as far as possible with appropriate changes to their design, and the Client, Principal Contractor, Contractor, Installer, Fitter, etc. must ensure that appropriate and safe lifting and installation techniques, maintenance, etc. are used to reduce any remaining risk. Wherever BTA advises that works such as acoustic barriers are desirable to attenuate noise, care must be taken by the CDM Principal Designer, Client, etc. to ensure that the risks associated with constructing and maintaining bunds, walls, fences, etc. are mitigated as far as possible with appropriate changes to their design, and the Client, Principal Contractor, Contractor, Installer, Fitter, etc. must ensure that appropriate and safe construction and installation techniques, maintenance, etc. are used to reduce any remaining risk.

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