dBx Acoustics Ltd, Tower House, 269 Walmersley Road, Bury BL9 6NZ

0161 711 0320

23046-L05-SW

Paul Virdi

BAM Construction Ltd

07/06/2026

Dear Paul,

WITHINGTON CDC – BUILDING SERVICES EMISSIONS VERIFICATION TESTING

dBx Acoustics Ltd attended site on 3rd June 2026 to undertake verification measurements of noise emissions from building services at Withington CDC in accordance with the requirements of BREEAM credit POL 05 and the requirements of Manchester City Council.

Performance Criteria

Condition 19 of planning permission 137537/FO/2023 is reproduced as Figure 1, below. Compliance with this criterion also achieves compliance with BREEAM POL 05.

Figure 1: Condition 19

19) a) Any externally mounted ancillary plant, equipment and servicing to be installed shall be selected and/or acoustically treated in accordance with the approved Noise Impact Assessment prepared by dbx acoustics reference 23046-R01A-SW as received by the City Council as local planning authority on the 7th November 2023 so as to achieve a rating level of 5dB (LAeq) below the typical background (LA90) level at the nearest noise sensitive location. Prior to its installation, the scheme, including any necessary mitigation, shall be submitted to and approved in writing by the City Council as Local Planning Authority in order to secure a reduction in the level of noise emanating from the site.

b) Prior to any externally mounted ancillary plant, equipment and servicing to be installed becoming operational, an approved verification report shall be submitted to and approved in writing by the City Council as Local Planning authority to validate that the work undertaken throughout the development conforms to the recommendations and requirements in the approved acoustic report. The report shall also undertake post completion testing to confirm that the noise criteria have been met. Any instances of non - conformity with the recommendations in the report shall be detailed along with any measures required to ensure compliance with the agreed noise criteria.

Reason - To minimise the impact of the development and to prevent a general increase in pre-existing background noise levels around the site, pursuant to saved policy DC26 of the Unitary Development Plan for the City of Manchester and policies DM1 and SP1 of the Manchester Core Strategy.

A noise impact assessment, including environmental noise survey, was submitted in support of planning by dBx Acoustics Ltd (report reference *23046-R03-SW* dated 28th August 2023).

The agreed noise emission limits for building services are reproduced as Table 1, below.

Table 1: Building Services Noise Emission Limits

Receptor	Period	Lowest Measured Background Noise Level, $dBL_{A90,T}$	BS4142 Rating Limit, $dBL_{Ar,Tr}$
Fielden Road	Daytime	41	36
	Night Time	32	27
Burton Road	Daytime	44	39
	Night Time	39	34

Verification Noise Survey

Subjectively, noise from building services plant was not audible at ground level on Burton Road, Fielden Road, or at the perimeter of the site / building. The noise climate was dominated by road traffic on Burton Road.

The two roof-mounted condensers were not operational at the time of the survey, however, given their specification, and location and screening provided by the building construction, these would not be expected to contribute to overall noise levels at the noise sensitive receptors. The condensing units operate as needed during the daytime period only.

In the submitted noise impact assessment, it was assumed that there would be open louvres to the Burton Road and Fielden Road facades of the plantroom. Observations on site indicated that these are, in fact, blanked off internally. The submitted noise impact assessment indicated that as a worst case, noise from the plant room including ducted external connections would not exceed $28dBL_{Aeq,T}$ at the residential receptors. This would therefore not be audible or measurable, which tallies with on-site observations.

This assessment is therefore focused on noise from the 4no. air source heat pumps (ASHP) mounted on the roof, and noise emissions from the first-floor plant room. These were noted during the noise impact assessment as the most significant noise source affecting the noise sensitive receptors.

As a worst-case, during the daytime three ASHP units may operate simultaneously, with two ASHP units operating overnight. The fourth ASHP is a standby unit.

Three ASHP units were in operation during the verification noise survey.

A sound pressure level of $59dBL_{Aeq,T}$ at 1m from a single ASHP unit was measured, with no tonal components.

There was no direct line of sight from the ASHP to the receptor locations. This has been treated conservatively in the assessment presented below. The nearest residential receptors at Fielden Road (also subject to the most stringent noise emission limits) are at circa 50m from the ASHP units.

A calculation of the resultant sound pressure level at Fielden Road is presented as Table 2, below.

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Table 2: ASHP Noise Emissions to Fielden Road

Item	Sound Pressure Level, $dBL_{Aeq,T}$	Correction, dB
Sound pressure level at 1m from ASHP	59 $dBL_{Aeq,}$	
Distance correction - 50m (20 log r)		-34dB
Correction for 2no units (10 log 2) – night time operation		+3dB
Partial Screening		-5dB
Resultant Sound Pressure Level at Receptor	23$dBL_{Aeq,}$	

It can therefore be seen that noise emissions from the ASHP affecting the nearest noise sensitive receptors at Fielden Road are compliant with the night-time noise emission limits set by Manchester City Council.

On the basis of the measured ASHP noise level as described above, and subjective observations made on site, noise from building services is not audible at the noise sensitive receptors on Fielden Road or Burton Road and is compliant with the requirements of Planning Condition 19, the requirements of the Local Authority, and the project design criteria.

Yours Sincerely,

[redacted]

Susan Witterick

Director, dBx Acoustics Ltd

dBx Acoustics Ltd, Tower House, 269 Walmersley Road, Bury BL9 6NZ

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