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Jenni Greenwood
ID Manchester Renold Building
Bruntwood / ID Manchester

sol
acoustics

Unit 11, Brunel Court, Gadbrook Park, CW9 7LP
tel 01565 632535
email info@solacoustics.co.uk
web www.solacoustics.co.uk

Renold Building

Planning Condition 7a Discarge Note

1.0 Planning Condition

Planning permission for the scheme has been granted subject to conditions (ref 139124/FO/2024). Condition 7 pertains to internal noise transfer and states the following:

"…7) a) Prior to the first use of the development hereby approved, the scheme to acoustically insulate the internal areas of the premises shall be implemented fully and only in accordance with the Technical note: Renolds Building, ID Manchester prepared by BWB received by the City Council as local planning authority on 16 February 2024.

7) b) Upon completion of the development and before the use hereby approved becomes operational, a verification report shall be undertaken to validate that the work undertaken throughout the development conforms to the recommendations and requirements in the approved acoustic consultant's report. The report shall also undertake post completion testing to confirm that above criteria is 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 noise criteria. This report shall be submitted to and approved in writing by the City Council as local planning authority before the use becomes operational along with a timescale that confirms when any necessary changes will be implemented.

Reason - To ensure an acceptable development in the interests of residential amenity, pursuant to policies DM1 and SP1 of the Core Strategy and saved policy DC26 of the Unitary Development Plan…"

2.0 BWB Technical Note

The BWB Technical Note: Renolds Building, ID Manchester presents an assessment and subsequent guidance on the control of noise transfer from the upper ground floor kitchen to the co-working area and flexible events space, and the café within the flexible events space to the flexible events space.

Based on the assessment therein the BWB Technical Note concludes with several proposed mitigation measures in order to minimise the potential disruption to users of the co-working and flexible event spaces whilst the kitchen and café are in operation:

1. Inspect the existing doors separating the kitchen and co-working/flexible event spaces, in particular checking for any defects with seals.
2. Remedial works to concrete partitions including skim both sides, and sealing of deflections heads with mineral wool 'fire-bat' and non-hardening acoustic mastic.
3. Offering alternative spaces.
4. Applying acoustic treatment within the flexible event space to reduce the overall sound level within the space.
5. Effective management of the café and flexible event space.
6. Providing a physical barrier between the café and flexible event space.

3.0 Implemented Mitigation

The following table summarises the various elements of mitigation implemented through the design and fit-out stage of the project in accordance with the overview of suggested mitigation measures given in the BWB Technical Note.

BWB Suggested Mitigation Measure	**Design Implementation**
Inspect existing doors	Door seals to existing kitchen doors checked and replacement door UG.D26 specified with acoustic performance rating of 28 dB R_w in line with the assumed minimum performance in BWBs transfer assessment.
Remedial works to concrete partitions	Existing concrete partitions freshly plastered and painted with penetrations kept to a minimum and guidance given on suitable treatments to seal acoustically.
Offering alternative spaces	As discussed in the BWB Technical Note the Lecture Theatre within the Renold Building acts as mitigation as users will be able to use a dedicated space less effected by extraneous noise from the café.
Acoustic treatment in flexible event space	Ultimately no dedicated acoustic treatment has been included in the flexible event space at the request of the client that wishes to maintain maximum flexibility in this space. When the space is well occupied it is anticipated that an acceptable acoustic experience will be provided by means of low-level absorption and scattering through soft furnishings and the presence of the occupants themselves.
Effective management of the café and flexible event space	Building management issue, not applicable to design implementation.
Providing a physical barrier between the café and flexible event space	Inclusion of a fixed partition as suggested has been omitted, primarily due to the Client's intention to maintain maximum flexibility in the arrangement and use of the flexible event space.

As can be seen above, the high-level mitigation measures provided by BWB have been largely captured and implemented during the design process .The exceptions regarding acoustically absorbent treatment and a solid partition within the flexible event space have been omitted due to the Client's need to keep the space as flexible as possible with regards to layout and can be installed retroactively should the space be found to be difficult to operate in the intended manner due to excessive noise transfer from the café space.

Yours sincerely
For and on behalf of Sol Acoustics Limited



Joe Sinker MIOA
Executive Consultant

APPENDIX A

GLOSSARY OF ACOUSTIC TERMS

Term	Abbreviation	Description
Decibel	dB	A scale for comparing the ratios of two quantities, including sound pressure and sound power.
A-weighting	dB(A)	The unit of sound level, weighted according to the A-scale, which considers the change in sensitivity of the human ear at varying frequencies.
Sound Pressure Level	L_{pA}	A measure of the sound pressure at a particular location. Typically expressed in dB(A) referenced to $2x10^{-5}$ Pascals.
Equivalent Continuous Sound Level	$L_{Aeq,T}$	The steady level of sound over a prescribed period of time which would contain the same total sound energy as the actual fluctuating noise under consideration in the same period of time.
Statistical Sound Levels	L_{A10} and L_{A90}	The level of noise exceeded for a percentage of the time period being sampled, namely 10% or 90% respectively.
Background Sound Level	$L_{A90,T}$	The A-weighted sound pressure level of the residual noise at the assessment position that is exceeded for 90% of the time period being sampled.
Maximum Sound Level	L_{Amax}	The maximum sound or noise level determined with instrumentation set to either a fast time weighting, L_{AFmax}, or a slow time weighting, L_{Asmax}, as occurring during the time period being sampled.
Sound Power Level	L_{wA}	A measure of the total sound energy radiated from a source. Like sound pressure levels, this is also expressed in dB(A) terms, but it is referenced to 1×10^{-12} W.
Broadband		Sound sampled over a wide range of frequencies.
Narrow band		Sound sampled over a specific, restricted frequency range. Used to ascertain the amplitude and significant of individual, audible tones, and to assist in identifying particular sources of noise within a complex, multi-source soundscape environment.
Ambient Sound	$L_{eq,T}$	Totally encompassing sound in a given situation at a given time, usually composed of sound from many sources, both near and far.
Specific Sound Level	$L_{eq,T}$	The Equivalent Continuous A-Weighted Sound Level at an assessment position produced by a specific sound over a given reference time interval, *Tr*
Rating Level	$L_{Ar,Tr}$	The Specific Sound Level plus any adjustment for the acoustic characteristic features of the noise (e.g. intermittency, tones etc.).
Residual Noise	$L_{Aeq,T}$	The ambient sound remaining at given position in a given situation, when the specific sound source is suppressed to such an extent that it no longer contributes to the ambient sound.
Sound Reduction Index	*SRI*	The reduction in sound energy when transmitted through a panel or similar planar element, typically used in relation to single octave or one-third octave frequency band values.
Weighted Sound Reduction Index	R_w	The Sound Reduction Index expressed as a single figure, as expressed against a reference curve.
Dynamic Insertion Loss	*DIL*	Reduction in acoustic energy resulting from the insertion of a noise control element (e.g. an attenuator, acoustic enclosure etc.).
Free Field		Noise measuring location that is free from the presence of sound reflecting objects (except the ground), usually taken to mean being at least 3.5 metres distance from reflective surface(s) or greater.