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REPORT

of

SOUND MEASUREMENTS AND RECOMMENDATIONS

at

CORD BAR,
8 DORSEY STREET,
MANCHESTER.

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1.0 Summary and Conclusions

The objective of this report is to predict the sound levels which would result from outdoor front and rear areas at Cord Bar, 8 Dorsey Street, Manchester. The outdoor areas are proposed with seating at the frontage onto Cord Street and standing space only at the rear. The applicant has commissioned this report to accompany the planning application.

1.1 Sound levels have been predicted outdoors at the first floor flats above the bar and at the nearest apartments opposite the premises.

1.2 It is not possible to measure the sound levels generated in the outdoor areas since they are still in the planning stage and for this reason the predictions are based on the likely levels of conversation above music played as a background feature inside the bar.

1.3 On this basis the outdoor sound levels at the windows of flats are predicted at

58 to 70 LA_{eq} at windows onto Dorsey Street when the proposed folding frontage to the bar is open,

43 to 55 LA_{eq} at windows onto Dorsey Street when the proposed folding frontage to the bar is closed,

50 LA_{eq} at windows to the rear of the premises.

1.4 It is anticipated that limits on the levels of music emitted from the outdoor areas will follow the recommendations of the current acceptance criteria. These are described in the report but cannot be measured at this planning stage since they do not currently exist. However there is no proposal to generate music in the outdoor areas; any music reaching outdoors will be from background music played inside the existing bar.

2.0 Acceptance Standards on Noise

2.1 Good Practice Guide

The most relevant guidance for noise criteria is quantified in the 'Good Practice Guide on the Control of Noise from Pubs and Clubs, March 2003'. This document had been widely discussed and accepted when in draft form and is regarded by many Local Authorities as the acceptance standard. It suggests:

"For premises where entertainment takes place on a regular basis, music and associated sources should not be audible inside noise-sensitive property at any time."

2.2 Sound Levels

Annex A2.3 of the Good Practice Guide quantifies the sound levels which should be applied at venues where entertainment takes place more than once per week or continues beyond 2300 hours. The following criteria apply for both external and internal assessments at noise-sensitive properties:

> "The LA_{eq} of the entertainment noise should not exceed the representative background noise level LA_{90} (without entertainment noise), and
>
> The L_{10} of the entertainment noise should not exceed the representative background noise level L_{90} (without entertainment noise) in any 1/3rd octave band between 40 Hz and 160 Hz."

By adopting these requirements the Good Practice Guide makes two comparisons between the sound levels of music and background:

- Firstly it examines overall dBA sound levels with no analysis of their sound frequencies. The time-averaged level of the music (LA_{eq}) is not to exceed the background (LA_{90}).
- Secondly it makes detailed requirements in the low frequency region of bass music between 40 Hz and 160 Hz. These two musical octaves are divided into seven bands for analysis. The more emphasised music level of L_{10} is not to exceed the background L_{90}.

3.0 Sound from Proposed Bar

3.1 Sound Sources

The ground floor bar will have recorded music as a background feature to normal conversation, played through a low-power sound system. There will be no dance floor, DJ's or live music performances. The premises will offer food and drink in an atmosphere intended for social discourse, not driven by music for listening and / or dancing as in larger city-centre pubs.

3.2 Sound Transmission Paths

Noise-sensitive properties are located as residential flats on the first and upper floors of the same building as Cord Bar and in other buildings at the opposite side of Dorsey Street.

The dominant path from the bar to the first floor apartments is through the dividing floor. Sound predictions on this path were submitted with our report dated 10th January 2001. There will be no change to this path through the dividing floor if the current application is granted and for this reason it is not considered here.

The sound paths to the flats above Cord Bar which would be altered by the proposal are those from the outdoor areas at the front and rear transmitted as airborne sound to the windows of the flats, also that from the bar interior through the frontage of the premises when it is open. The proposal includes folding doors in the frontage which would be opened during suitable weather conditions.

The sound path to flats at the opposite side of Dorsey Street would be altered in a similar manner by direct transmission from the outdoor seated area at the front and by transmission through the folding doors when open.

3.3 Source Sound Levels

We do not have measured data on sound levels at these premises. As a starting point for the predictions of this report it is assumed that the overall sound level inside the bar caused by conversation above a relatively low level of background music will not exceed 90 dBA L_{eq}. In

the front outdoor area the sound level is expected to be only slightly lower than this value at times when the folding doors are open and the sound from the bar interior will provide some background music and influence the loudness of conversation in the front open area. When the folding doors are closed the outdoor sound level would be expected to fall to around 5 dBA higher than the normal ambient level from other outdoor sources, as conversation levels adjust to being heard without shouting. It is expected that the overall sound level in the rear outdoor area would be relatively low since there will be no background music and conversation levels would normally adjust to being audible above the background.

In the absence of measurement data the predictions are based upon outdoor sound levels of:

front area with doors open	80 LA_{eq}
front area with doors closed	65 LA_{eq}
rear area	60 LA_{eq}

4.0 Sound Transmission to Flats

The outdoor distances to flats are 3m to those above Cord Bar and 12m to those at the opposite side of Dorsey Street. The sound decay is predicted from the formula:

sound decay = 20 log (distance ratio)

since the sources will act essentially from a point as being 10 dB to the flats above Cord bar and 22 dB to those opposite.

The overall sound levels outdoors at the windows of flats are thereby predicted at:

front windows of flats above Cord Bar, doors open	70 LA_{eq}
front windows of flats above Cord Bar, doors closed	55 LA_{eq}
windows of flats opposite Cord Bar, doors open	58 LA_{eq}
windows of flats opposite Cord Bar, doors closed	43 LA_{eq}
rear windows of flats above Cord Bar	50 LA_{eq}

5.0 Assessment for Planning Purposes

The sound predictions given in 4.0 are based on normal expectations of sound levels in the types of indoor and outdoor licensed areas being proposed in this planning application. At the windows of flats facing Cord Street the sound levels from the premises are predicted in the range 58-70 LA_{eq} when the folding doors are open and 43-55 LA_{eq} when the doors are closed. The prediction at flat windows to the rear is 50 LA_{eq} at all times.

If permission is granted for the outdoor areas then their acceptance criteria is expected to be the Good Practice Guide as summarised in section 2.0 of this report. Implementation of this would need onsite sound measurements and sound frequency spectra of the sound levels generated by the licensed premises for comparison with the background. Since the outdoor areas do not currently exist such measurements cannot be made at this stage but would dictate the limits to operational sound levels on commissioning the outdoor areas.
