SHARPS REDMORE
ACOUSTIC CONSULTANTS

Reference: 2012/5552/P – Maiden Lane Estate Redevelopment

Project No: 1213234

Technical Note

Information submitted to discharge Condition 12.

1 We are instructed to advise Egg London on the technical aspects of the noise assessment which accompanied the application to discharge conditions 11 to 18 of the above planning permission, in particular the information relating to Condition 12. Egg had previously objected to the development proposals, for several reasons, including the increased risk to Egg from noise complaints from residents should the development, in close proximity to the nightclub, be allowed to go ahead. I have read the Spectrum Acoustic Consultants Report PJB6893/12368, dated July 2013 and would make the following observations.

2 It is noted that an internal criterion of NR15 has been applied for music noise, with 30 dB L_{Aeq} and 45 dB L_{AMAX} being applied for all other sources. It is noted that the NR criterion for music noise is based only on L_{eq} noise levels, and is set at a level designed to be "masked" by a higher level (NR25) of internal mechanical services noise. It is accepted that the NR25 level can be achieved by the mechanical services system. However, the achievement of that NR level is likely to be dictated by mid to high frequencies, with significantly less energy at the lower frequencies of concern in relation to music noise.

3 The use of mechanical services noise to "mask" intrusive noise is, therefore, unlikely to be effective for music noise from a nightclub. Whilst the overall level of music noise may well be below the mechanical services noise, it is likely that music noise at lower frequencies will be higher, and potentially significantly above the mechanical services noise level at those frequencies, as mechanical services systems do not produce significant levels of noise at low frequencies. This will increase the likelihood that music noise will be audible and disturbing inside the apartments.

4 Furthermore, it is not known (nor is it clear from the report) what contribution music noise makes to the "all sources" L_{AMAX} level (designed to achieve 45 dB internally). This information ought to be easily available from the noise models employed in the report. The calculations, as currently presented, only show an overall L_{eq} level from music, and overall L_{eq} and "peak" L_{AMAX} levels from "all sources", with no information as to L_{MAX} levels specifically from music. This is a significant omission and the information should be presented in order for the mitigation measures to be properly assessed.

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5 It is noted in the survey results that, at various measurement positions, music is “audible”, “more prominent” and “very audible.” It is critical to know, therefore, in order to assess future internal audibility and the likelihood of complaint regarding music noise, by how much (if at all), music noise (L_{MAX}) alone will exceed the underlying mechanical services noise design level (i.e. NR25).

6 Depending on the contribution of music noise to the overall L_{MAX} levels, it is highly likely, based on the levels presented in the report so far, that music from Egg will be audible above the underlying internal background levels, and this needs to be addressed. We are not convinced, from the information presented so far, that the current proposed mitigation measures will offer adequate protection against regular peaks of noise from music, which can be highly disturbing. The risk of complaint, therefore, remains unacceptably high to Egg.

7 It may be that the L_{eq} levels from music are, in reality, very similar to the L_{MAX} levels, but that conclusion cannot be drawn in the absence of any information to that effect in the report. The application of the NR15 criterion as a L_{eq} value does not go far enough to protect future residents from disturbance from music noise and that criterion should, in our view, be related to a L_{MAX} value, and further information as to the effectiveness of the proposed façade specifications to achieve this should be submitted.

8 A further point relates to balconies. It is noted that the majority of balconies on the York Way frontage will exceed World Health Organisation guidelines for amenity space. It is not proposed to offer any acoustic mitigation measures to those balconies.

9 Part of the noise climate causing the exceedance of WHO guidelines will relate to noise from Egg (in the form of music noise and patron noise). Egg operates, in particular at weekends, on an almost continuous basis (11pm on Saturday through to mid-day on a Sunday, for example).

10 It is acknowledged that there are otherwise high levels of noise from road traffic and railway noise. However, residents experiencing noise on their balcony will focus on noise from the nightclub, because a complaint can be lodged against such a use, whereas it cannot be so against road traffic or railway uses. There is no protection for Egg against these complaints and this risk in unacceptable to Egg. Acoustic protection for balcony spaces is, therefore, inadequate and should be reviewed.

11 In summary, the noise assessment in relation to the discharge of Condition 12 does not provide the Council with enough information in order to be satisfied that the condition can be discharged without exposing future residents to unacceptable noise levels and Egg to unacceptable risk of complaint. The acoustic mitigation proposed, to protect both internal spaces and balconies, is inadequate and should be reviewed.

12 Condition 12 requires the Council to confirm in writing *"their satisfaction with proposed mitigation being appropriate to reasonably ameliorate the likely impacts."* There is, in our view, insufficient information for the Council to be properly satisfied on this point. It is considered that the following additional information needs to be provided before any decision can be taken on the robustness of the proposed noise mitigation strategy:

- Confirmation of the predicted internal L_{MAX} music noise levels
- Spectral data for the mechanical services system used to achieve the NR25 "masking" noise level
- Comparison of that spectrum to the intrusive music noise spectrum (L_{eq} and L_{MAX})
- Confirmation that the music noise level will be at least 10 dB below the masking noise level in every octave. If this cannot be met, improved specifications to the glazing must be required.
- Review of acoustic protection for balconies exposed to noise from Egg

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