

SANDY BROWN

Consultants in Acoustics, Noise & Vibration

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Treehouse Hotel

External plant noise egress assessment

This memo reviews the external plant proposals for the Treehouse hotel in relation to achieving the local authority requirements for external building services noise.

Guidance is provided on mitigation measures to achieve these limits.

Local authority requirements

Planning condition 13 states the following in relation to external plant noise:

“Prior to occupation of the refurbished hotel a scheme for the acoustic insulation of any plant or externally mounted ancillary equipment for , to ensure that it achieves a background noise level of 5dB below the existing background (La90) in each octave band at the nearest noise sensitive location 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 equipment. The approved scheme shall be completed before the premises is occupied and a verification report submitted for approval by the City Council as local planning authority and any non compliance suitably mitigated in accordance with an agreed scheme prior to occupation. The approved scheme shall remain operational thereafter.”

Plant noise limits

An environmental noise survey was undertaken to establish representative background noise levels for the site. The survey results and methodologies are detailed in the report ‘21055-R01-A Environmental noise survey’

Based on the criteria outlined in planning condition 13 and the survey results, the cumulative noise level from the operation of all new plant should not exceed the limits set out in Table 1.

The limits apply at 1 m from the worst affected windows of the nearest noise sensitive premises and are presented as facade levels.