



Technical Response

TR Reference	Project Number	Project Name	Client
TR1	04196	St Marys Butts	Warrant Investments Plc

Client Request

Contact Name	Date	Request Format
James Fasal	29/06/2023	Email

Reading Borough Council Principal Environmental Health Officer comments are as follows:

1. I am concerned about the potential for nuisance from plant noise at the rear, which BS8233 is not designed to cover as it is intended for anonymous sound sources such as traffic noise. It is not just about the noise level, but the type of noise. BS4142 should be used alongside it where plant noise impacts the new residents albeit we would not apply as stringent criteria as for installation of new plant.
2. As the development is relying on closed windows to achieve acceptable noise levels, further details are required re ventilation, not just for background ventilation but for overheating. i.e., will residents need to open their windows on warm nights and therefore be exposed to high noise levels?
3. The noise assessment should include specific comment on audibility of the ground floor use during the measurement period and should provide reassurance that the measurement period was typical of the normal use of the ground floor so we can be sure that the attenuation between the uses is sufficient.

LCP Response

Consultant Name	Date
Robert Martin	30/06/2023

In relation to comment 1. The external plant is pre-existing and not part of the planning application for the new development. As the mechanical plant was already installed prior to the residential development the plant is part of the existing ambient noise levels at the property. Any new additional mechanical plant installed by future tenants, however, should be assessed using BS4142 to ensure that the background noise levels are not increased at the nearest noise sensitive window.

Measurements were carried out internally over a weekend as a worst-case scenario while the restaurant below and adjacent restaurant/bar were in operation. Ambient noise levels L_{Aeq} and maximum noise level L_{Amax} were measured during this time period and the results showed that the criteria from BS8233 and WHO guidelines had been achieved in all rooms over the period.

It is correct that BS8233 did refer to anonymous noise, but it should be noted that other guidance such as WHO guidelines (from which the BS8233 levels are derived) and approved Document F refer to mechanical services noise and implement the same internal noise criteria as BS8233.

Technical Response

In relation to comment 2. Rooms will have openable windows for purging in hot weather conditions. However, it should be noted that due to the soundscape of the existing area it is likely that the occupant would expect a certain amount of noise when the windows are opened. This is accepted nationally in urbanised areas and in particular, town centre locations.

BS8233:2014 also states that where development is considered necessary or desirable, despite external noise levels above WHO guidelines, the internal target levels may be relaxed by up to 5 dB and reasonable internal conditions still achieved.

It is understood that the mechanical plant at the rear of the property is turned off at 10:30PM. It is therefore unlikely that the mechanical plant at the rear of the property will cause an issue when windows are opened during the night time period.

In relation to comment 3. The measurement periods were chosen and undertaken as a worst-case scenario, being over a weekend when both the adjoining restaurant/bar and ground floor restaurant were in operation.

As discussed in comment 1, both the ambient and maximum noise levels were measured during this period, and both sets of data showed that the criteria from BS8233 and WHO guidelines have not been exceeded.