28th November 2023

your reference PL/2021/11645
our reference 23-547

Sent by Email: hannah@hcplanning.co.uk

Hannah Cameron
HC Planning Limited

Dear Hannah,

RE: Planning Permission Reference PL/2021/11645. Change of use to 1 no. Gypsy pitch including 2 no. touring caravans, 1 no. dayroom, 1 no. barn, and associated works (part retrospective) at The Old Chalk Pit, Gypsy Lane, Petersfinger, Salisbury, SP5 3DA.
Technical Noise Matters.

Introduction

Planning Permission for the development described above was approved on 23rd November 2022, with the following planning condition attached:

Condition 13:

Within three months of the date of this decision a scheme of acoustic glazing and mechanical ventilation shall be submitted to and approved in writing by the Local Planning Authority. The scheme shall meet the standards set out in section 5 of the Noise Impact Assessment dated 4th December 2017, reference; VA2044.171204.NIA. Within one month of written approved of the Local Planning Authority, the approved scheme shall be implemented in full and maintained in perpetuity.

REASON: To ensure the creation/retention of an environment free from intrusive levels of noise and activity in the interests of the amenity of the area.

In terms of the relevance of this condition to the development at the site, it should be noted that the scheme includes an acoustic screen, which has been installed and this serves to ensure appropriate levels of acoustic amenity of the residential area of the scheme, which, in terms of habitation, includes two caravans and a day room.

For context, it should be noted that a day room, by definition, is not occupied at night and that caravans are the intended location for sleeping/night-time occupation. A caravan is a purchased complete product, which is not constructed by the Applicant, thus meaning that the Applicant does not have the opportunity to install acoustic glazing or mechanical ventilation. Furthermore, as the planning permission is for two touring vans, it must be assumed that these may be changed over time and that the planning system does not extend its reach to governing specific makes or models.

Consequently, the requirements of Condition 13 would only apply to the elements of the Development, either built by or to be built by the Applicant.

Findings of the Noise Report

The Planning Application was supported by a Noise Impact Assessment (Ref: VA2044.171204.NIA), dated 4th December 2017 and prepared by Venta Acoustics.

The noise assessment comprised measurements of environmental noise at the location of the closest (then) proposed touring caravan pitch and (then) proposed single-storey day room, without the benefit of the 2.6-metre high acoustic barrier/screen that was recommended as a mitigation measure within the report.

On that basis, the measured sound levels were as follows:

- Daytime (07:00-23:00) L_{Aeq} - 51 dB
- Night-time (23:00-07:00) L_{Aeq} - 45 dB
- Night-time (23:00-07:00) L_{Amax} - 76 dB

It should be noted that the L_{Aeq} noise levels, even in the absence of mitigation, are reasonably low and would not warrant any acoustic mitigation. The night-time L_{Amax} level is what justifies the acoustic screen that is recommended within the report, as this is elevated as a result of occasionally passing rail traffic.

Internal Acoustic Amenity Criteria

BS 8233:2014 draws on the results of research and experience to provide information on achieving internal acoustic environments appropriate to their functions. The guideline values provided are in terms of an average (L_{Aeq}) level.

The standard advises that, for steady external noise sources, it is desirable for internal ambient noise levels to not exceed the guidance values, as detailed below in Table 1.

TABLE 1: BS8233:2014 AMBIENT NOISE LEVELS

Activity	Location	07:00 to 23:00	23:00 to 07:00
Resting	Living room	35 dB $L_{Aeq,16hour}$	-
Dining	Dining room	40 dB $L_{Aeq,16hour}$	-
Sleeping	Bedroom	35 dB $L_{Aeq,16hour}$	30 dB $L_{Aeq,8hour}$

BS8233:2014 goes on to suggest that where development is considered necessary or desirable, the internal target levels may be relaxed by up to 5 dB and reasonable internal conditions will still be achieved.

Discussion

The screening effects of the 2.6-metre high acoustic screen are not quantified or discussed within the original planning report and the glazing specifications are presented on the basis of the measured sound levels. Consequently, this element will be over-specified as a result, which is presumably why it has drawn attention and a consequent planning condition.

The closest caravan pitch is located immediately behind this barrier, so will be entirely within its shadow zone, as would be the case for the day room. The additional caravan pitch is also screened by the built form of the day room and utility building. Consequently, the noise levels incident upon these elements of the site will be considerably below the levels quoted within the report and repeated above.

In terms of acoustic façade performance, noise typically attenuates across a window that is partially open for ventilation at a rate of circa 15 dB. Consequently, when considering the measured sound levels set out within this document and this rate of attenuation, the internal $L_{Aeq,T}$ amenity criteria are broadly met with windows open, in the absence of the barrier mitigation reductions.

Our data archive suggests that a touring caravan façade/shell with windows closed offers a typical rate of attenuation ($R_w + C_{tr}$) of 26 dB. This performance would result in a slight exceedence of the internal night-time L_{Amax} requirements; however, the screening afforded by the acoustic screen/barrier and massing of the development would offer much more than the additional -5 dB required to achieve this, meaning that a typical caravan construction would perform adequately in this location.

The night-time requirements would not apply to the day room, which, by definition is not provided for the purposes of night-time accommodation and is the only part of the development where façade mitigation requirements are relevant. This component of the development would comply with the BS8233 daytime requirements with windows partially open for ventilation, without the presence of the acoustic screen/barrier, so with this mitigating feature in place, compliance would comfortably be achieved during both the day and night, with standard thermally insulating façade components and a daytime openable window ventilation strategy.

Summary

To summarise, no supporting information beyond that set out within the planning stage noise report, as expanded upon within this technical note, is considered necessary to discharge the requirements of Condition 13.

Yours sincerely,

Neil Morgan MSc MIOA
Director
T: 0117 325 3949
M:
E: neil@inacoustic.co.uk