

Proposed Gypsy and Traveller Site, Oak Grove Farm, Portskewett

Site Description

The site is currently agricultural fields on the north side of the B5245 road, Nr Crick. The A48 road lies 130m north of northern boundary of the site. The noise environment at the southern end of the site is dominated by road traffic on the B4245 road whilst the northern end of the site is dominated by road traffic noise from the B4245 road and also the A48 road.

The nearest neighbouring residential property is 20m to the south east of the site with agricultural holdings to the south east, north and north west.



Clarification on methodology

12 days of unattended 'long-term' monitoring was conducted between 9th and 21st December 2023 and further 'short-term' attended monitoring between 13:45 and 16:00 on 5th January 2024. Variation in noise levels across the site has been assessed by calculating the average difference between results at the long-term monitoring position and short-term monitoring positions. The methodology described is acceptable in principle and assessments conducted in line with relevant standards, however appendix B LT1 columns are incorrectly labelled and the assessed noise levels across the site should be better presented by means of zonal mapping.

Standards And Summary of the Site

TAN11

	Noise Exposure Category			
Source: road traffic	A	B	C	D
0700-2300 Day time	<55	55-63	63-72	>72
2300-0700 Nighttime	<45	45-57	57-66	>66

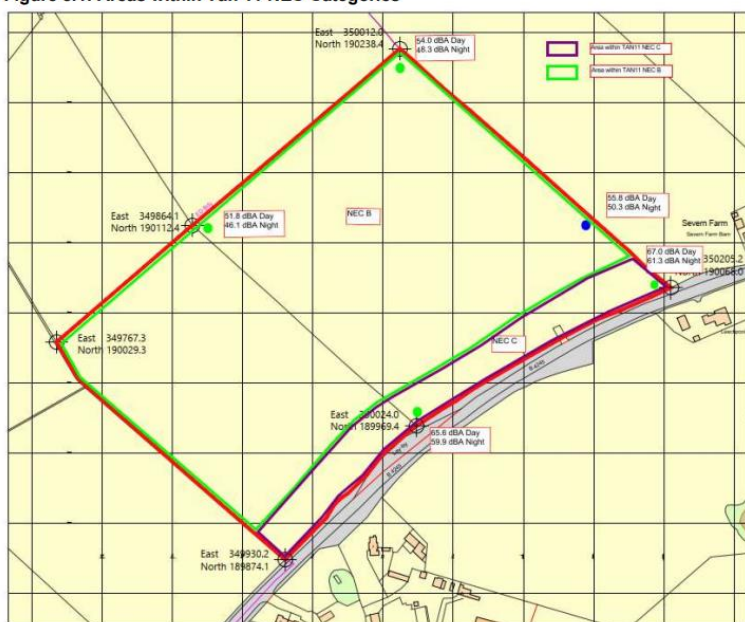
Source: Taken from Table 2: Recommended Noise Exposure Categories For New Dwellings Near Existing Noise Sources
<https://www.gov.wales/sites/default/files/publications/2018-09/tan11-noise.pdf>

NEC B. Noise should be taken into account when determining planning applications and where appropriate, conditions imposed to ensure an adequate level of protection.

NEC C. Planning permission should not normally be granted. Where it is considered that permission should be given, for example because there are no alternative quieter sites available, conditions should be imposed to ensure a commensurate level of protection against noise.

Comments: The report indicates that the majority of the site falls within NEC B with the exception of a strip of land closest to the B5245 road (shown below) which falls within NEC C. Therefore, in line with TAN 11, the area shown as NEC C should not be granted permission for the proposed use.

Figure 5.1: Areas within Tan 11 NEC Categories



Source: Mott MacDonald

BS8233 Internal Noise Criteria are as follows:

In general, for steady external noise sources, it is desirable that the internal ambient noise level of a dwelling does not exceed the following guideline values:

Activity	Location	07:00 to 23:00	23:00 to 07:00
Resting	Living room	35dB LAeq, 16hrs	-
Dining	Dining room/area	40dB LAeq, 16 hrs	-
Sleeping (daytime resting)	Bedroom	35 dB LAeq, 16 hrs	30dB LAeq, 8 hrs

Source: Taken from BS8233:2014 'Sound insulation and noise reduction for buildings – Code of Practice'

The internal and external noise guidance of BS 8233:2014 is based on research by the World Health Organisation.

The report states that it is estimated that a mobile home may provide a sound insulation value of around 15dB to 20dB with windows closed.

Taking account of a 15dB attenuation of a mobile home with closed windows the predicted internal noise levels at:

- 95m from the B5245 road were found to be 41dBLAeq,16hr during daytime and 35dBLAeq,8hr at night. **These are above the internal noise level recommendations provided by BS 8233.**
- The Northern most point, furthest from the B5245 are predicted to be 39dB LAeq,16hr daytime and 33dB LAeq,8hr at night. **These levels still exceed the internal recommendations of BS8233.**

NOTE 7 of BS8233 provides 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.'

The BS8233 External Noise Criteria are as follows:

In the case of gardens and external amenity areas, BS 8233 advises that it is desirable that the external noise level does not exceed 50 dB LAeq,T, **with an upper guideline value of 55 dB LAeq,T which would be acceptable in noisier environments.**

Average daytime noise levels were found to be 55.8dB LAeq at 95m from the B4245. Further assessment could be undertaken to give a better indication of average noise levels closer to the road and across the site as a whole.

World Health Organisation Guidelines For Community Noise 1999

The report explains that 'The World Health Organization (WHO) Guidelines for Community Noise and Night Noise Guidelines provides guidance on maximum noise levels within residential dwellings during nighttime periods which can cause sleep disturbance. Guidance advises that internal noise levels should not exceed 45dB LAMax,f (not to be exceeded 10 to 15 times a night) due to individual events.' However, whilst figure 4.1 of the report provides a graph of the LAMax the report does not provide sufficient analysis of individual night-time noise events such as the noise impact of individual vehicles driving passed the site.

Proposed Mitigation and Further Mitigation

The report indicates that interior and external noise levels would exceed the recommended noise levels given in BS 8233 across the whole site. The report suggests that an earth bund or solid noise barrier constructed along the southern edge of the site may help achieve the internal noise criteria within mobile homes and external noise guidelines of BS 8233 in the NEC B area of the site, or localised noise screening for the outdoor amenity areas to help achieve exterior noise levels.

Error noted: The report recommends 'If planning permission is granted, a Stage 2 Acoustic Assessment should be conducted in which the landscape design of the proposed site should be developed to incorporate acoustic screening for the plots closest to the north-eastern corner.' This is incorrect, as the predominant noise source is on the southern edge.

On this basis of the report, it is considered that the northern NEC B part of the site may be suitable for development as a Gypsy and Traveler Site provided mitigation measures are implemented.

Officers View

Whilst at this stage exceedances of noise criteria are indicated across the whole site, some of the exceedances could be considered marginal. At this stage, I would recommend further investigation into potential mitigation measures be conducted as part of the application process, including the design and effectiveness of an earth bund, solid barrier to the southern edge of the site or localised screening in achieving desired noise levels in line with the criteria described above. Such investigation should report on noise modelling and noise zonal mapping across the whole site.