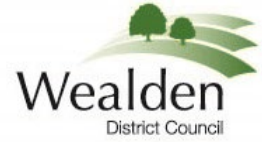


OUR REF: 36179
DATE: 28 April 2023
YOUR REF: WD/2022/3222/MAO

Environmental Health - a shared service for:



Head of Development and Building
Control
Wealden District Council
Vicarage Lane
Hailsham
East Sussex BN27 2AX

Richard Parker-Harding
Head of Environmental Health

Dear Sir/Madam,

WD/2022/3222/MAO LAND TO THE SOUTH OF THE A271 AND EAST OF THE A22, LOWER HORSEBRIDGE, HAILSHAM

DEVELOPMENT OF UP TO 124 NO. RESIDENTIAL DWELLINGS, ASSOCIATED INFRASTRUCTURE (INCLUDING A NEW ACCESS JUNCTION ONTO THE A271) AND OPEN SPACE.

Thank you for consulting with Environmental Health.

Air Quality

This is a significantly sized development which could result in an impact to local air quality due to an increase in traffic in the local area.

As such, the Air Quality Assessment undertaken by Stantec, Project Ref: 332110699/1300, dated December 2022 has been considered.

Overall, the assessment is considered satisfactory. From Environmental Health's perspective, the most important aspects of the assessment were the emissions cost calculations and the proposed mitigation methods.

The emissions cost calculation derived a value of £23,670 (as a result of emissions of NOx and PM2.5 associated with traffic during the operational stage of the scheme).

It was noted that the current plans to offset air quality impacts are outlined in section 6.2 but are yet to be finalised. To ensure that such measures are introduced a condition is recommended below.

A Construction Environment Management Plan is also recommended as a condition. This will require the developers to consider how they will manage any dust generated on site during construction.

Potentially Contaminated Land

This development is proposed to be built on farmland. Farming can result in localised land contamination (bonfires, fly tipping, fuel leaks, deposits of waste materials etc). Therefore, the Ground Condition Assessment (Phase 1), Project Ref: 332110699 - Rev: 01, dated March 2022, undertaken by Stantec has been considered.

This assessment is acceptable and a contaminated land discovery strategy condition is recommended below. This condition covers the scenario whereby, if during development, materials are discovered which could be contaminants of concern, they are investigated, risk assessed and mitigated against as necessary.

Acoustics, Ventilation and Overheating

Traffic noise

The proposed development is adjacent to the A22 and A271 both of which are busy roads. This indicates that traffic noise could have an impact on future occupiers.

The noise impact assessment, undertaken by Stantec, dated December 2022, reference 332110699/1200 has been considered.

The 24 hour monitoring period is a bit short in duration, but overall, the assessment is satisfactory for this outline planning application. In short and unsurprisingly, properties away from the roads and closer to the centre of the site will probably reside in an acceptable noise environment.

However, properties closer to the roads will be more impacted by noise. Therefore, as per PPG-Noise, it is expected that good acoustic design (GAD) shall be integrated into this development. Only after all GAD options have been exhausted, should acoustic mitigation in the form of enhanced glazing; closed windows and mechanical ventilation etc, be considered.

A suitable condition is recommended below.

The developers should note that if GAD is not integrated into this development then Environmental Health will recommend refusal for any requests to discharge the recommended condition below.

With respect to noise and ventilation and consequently, compliance with Approved Document O (overheating), the design of the properties closest to the road could also determine whether they will comply with the simplified methods of ADO to prevent overheating (the simplified methods are also the most sustainable). It is strongly advisable that the acousticians, ventilation/overheating experts and architects work on the design of the properties together.

As noise, ventilation and overheating are inherently linked, the condition below covers each of these concerns.

Overall, it is recommended that as early as possible in the design stage, the developers integrate GAD and the cooling hierarchy into their properties to ensure that suitable internal and external noise levels are achieved, even during periods of overheating.

If, for some properties it is determined that the simplified methods to prevent overheating cannot be used, then dynamic thermal modelling for all such properties (as required by ADO) must be undertaken.

Air Source Heat Pumps (ASHPs)

The Energy Statement outlines that ASHPs will be used on this development.

This is welcomed by Environmental Health, but with a note of caution. ASHPs have the potential to cause nuisance issues and a potential detriment to amenity. As such, they should be installed with as much consideration and care as possible with respect to noise.

It is noted that the noise assessment showed that even next to the two busy roads, background sound levels can drop to approximately 30dB(A) at night. Sound levels may drop even further in the middle of the development and away from the road.

As the permitted development, MCS calculation method uses a 'blanket' background sound level of 40dB(A) whatever the location, Environmental Health strongly recommends that even for this planning application, a more stringent standard is applied.

Environmental Health recommends that the new guidance from the Chartered Institute of Environmental Health and the Institute of Acoustics is applied to this development rather than the MCS method. This new guidance recommends a rating level of 35dB(A) $L_{eq,15min}$ or less at the nearest sensitive receptor. A suitable condition is recommended below.

The developers should note that compliance with this guidance is neither a guarantee that noise complaints won't be made by future occupiers of the development nor that a Statutory Noise Nuisance won't be identified. However, the use of the new guidance should hopefully reduce the risk of this occurring.

Recommendation

Approval with conditions

Air Quality

Prior to commencement, a report shall be submitted in writing for approval to the Local Authority, showing that the costs of air quality mitigation methods integrated into the development shall match or exceed the combined air quality damage cost calculation of £23,670.

Contaminated Land

CL04

Construction Environment Management Plan

C04(M)

Acoustics, ventilation and overheating

No development shall commence until a scheme that addresses the issues of acoustics, ventilation and overheating (AVO) has been submitted to and agreed in writing by the Local Planning Authority.

Good acoustic design, as per ProPG, shall be fully integrated into the scheme. This is to ensure that future residents shall not be exposed to unacceptable levels of noise exposure, even during periods of overheating. The hierarchy of good acoustic design (GAD) shall be applied in descending order and the methods utilised shall be clearly outlined in an Acoustic Design Statement (ADS). The ADS shall be incorporated into the overall AVO scheme and GAD shall include as many of the following methods as possible:

- i. Maximising the spatial separation of noise source(s) and receptor(s).
- ii. Investigating the necessity and feasibility of reducing existing noise levels and relocating existing noise sources
- iii. Using existing topography and existing structures (that are likely to last the expected life of the noise-sensitive scheme) to screen the proposed development site from significant sources of noise
- iv. Incorporating noise barriers as part of the scheme to screen the proposed development site from significant sources of noise
- v. Using the layout of the scheme to reduce noise propagation across the site
- vi. Using the orientation of buildings to reduce the noise exposure of noise sensitive rooms
- vii. Using façade design eg façade barriers, balconies and winter gardens to minimise exposure to noise
- viii. Using the building envelope to mitigate noise to acceptable levels

For the purposes of this condition the scheme shall a) outline the level of noise exposure for each property and how the noise level within any (unoccupied) domestic living room or bedroom, with windows open for normal ventilation, shall comply with the desirable internal noise levels as outlined in Table 2.1 of BS8233:2014 and b) outline how the noise level within any (unoccupied) domestic bedroom, with windows open, shall not normally exceed 42 dB(A) LAFmax between 23:00 and 07:00, in line with WHO NNGL 2007.

Where the standards in (a) or (b) above cannot be achieved following GAD and with windows open, only then shall the scheme show how those standards will be met with windows closed and how adequate ventilation and cooling will be provided.

In order to prevent overheating, the cooling hierarchy below, combined with GAD shall be applied to the scheme with an aim to ensure that properties can comply with the simplified method to prevent overheating as outlined in Approved Document O:

1. Minimise internal heat generation through energy efficient design
2. Reduce the amount of heat entering a building in summer through orientation, shading, albedo, fenestration, insulation and green roofs and walls
3. Design the properties to enable passive ventilation (e.g. cross ventilation);

The methods integrated into the design to prevent overheating shall be fully outlined in the AVO scheme and no dwelling hereby permitted shall be occupied until the approved scheme has been implemented in full for that dwelling.

If, after applying GAD and the cooling hierarchy it is determined that for some properties the simplified methods to prevent overheating cannot be applied, then for such properties, thermal dynamic modelling shall be submitted with the AVO scheme to show compliance with ADO for each of those properties.

Prior to occupation, a study confirming the effectiveness of the AVO scheme for a representative selection of different properties in different locations (10% of the development) shall be undertaken not less than one month after completion. The survey shall identify the level of compliance with the scheme and shall be submitted to the LPA within one month of the survey completion as a written report. No part of the development shall be occupied where compliance has not been achieved in full.

Any amendments to the scheme or alterations to it must be agreed in writing with the Local Planning Authority in advance.

All acoustic reports submitted in relation to the scheme shall include characterisation of uncertainty and shall demonstrate the adoption of good practice to minimise uncertainty.

Air Source Heat Pumps

Prior to commencement an Air Source Heat Pump acoustic report shall be submitted to the Local Planning Authority for approval. This report shall show that the installation of every heat pump across the development site shall comply with the Chartered Institute of Environmental Health and Institute of Acoustic's guidance: 'Heat Pumps, Professional Advice note.'

The report shall outline that the rating level from ASHPs, including the cumulative impact of multiple ASHPs if relevant, shall not exceed 35dB $L_{Aeq,15min}$ at any noise sensitive façade of a neighbouring residential premises.

If it is not practical to achieve this value for any of the heat pumps, and the local context supports a relaxation, then a report providing a full justification as to why such a relaxation in rating level is required, shall be submitted in writing to the Local Authority for approval.

Following installation of ASHPs across the development site, post-installation noise monitoring shall be undertaken by the applicant at the reasonable request of the Local Planning Authority.

Yours sincerely,

Greg Minns
Senior Environmental Health Officer