

From: Katy McMullen <katy.mcmullen@lichfields.uk>

Sent: 14 September 2026 16:15

To: Jones, Becky <Becky.Jones@wiltshire.gov.uk>

Cc

Subject: RE: Public Protection comments for DASH - Full application Application ref PL/2026/04559 [LICH-DMS.FID762233]

Good afternoon Becky,

Please find below response from Mott MacDonald in relation to the comments raised by the Public Protection Officer, specifically in regards to noise.

In relation to the request for a Construction Management Plan (CMP), this is currently in hand and we hope to provide this by the end of this week.

We trust that the information provided below addresses the additional information requested by the Public Protection Officer and we would be grateful if you could forward the below to Nadine for their consideration. Please do let us know if you have any further comments or require any additional information.

Kind regards,

Katy

Response from Mott MacDonald

In relation to the points raised by council on the noise assessment for the proposed Salisbury DASH, our proposed response is as follows:

- The assessed arrangement presented in the planning application is no longer the proposed arrangement (There are now no CHP plant and the ASHPs have been relocated to ground level and east of the plant building). Predicted noise levels will therefore be lower.
- The absolute noise levels at residential receptors remain very low.

- Predicted internal bedroom noise levels are substantially below BS8233 criteria.
- Any Tonality in mechanical plant noise is unlikely to be meet tonality criteria at the receptor.
- The assessment adopts conservative assumptions and is likely to overpredict rather than underpredict noise levels.
- The generator testing regime results in very low predicted noise levels at the nearest receptor.

These are discussed in more detail below:

General Comment

It should firstly be noted that the Noise Assessment submitted to Council was based on a plant arrangement comprising three Air Source Heat Pumps (ASHPs) located on the plant building roof and three 500kW Generator/Combined Heat and Power (CHP) units located to the east of the building.

The proposals have subsequently been revised. CHP units are no longer proposed and the ASHPs are now intended to be located at ground level to the east of the plant building. As a result, operational noise levels are expected to be lower than those reported within the submitted assessment and the assessment should therefore be regarded as representing a conservative scenario.

Acceptability of Predicted Noise Levels

The assessment predicts a rating level of 32 dB $L_{A,T,r}$ at the nearest residential receptor, 2 Odstock View.

Whilst this exceeds the measured background sound levels, BS4142 specifically recognises that where both the rating level and background sound level are low, the absolute level of noise may be as important, or more important, than the numerical difference between them.

In this case, both the measured background sound levels and the predicted rating levels are exceptionally low. The measured background levels at 2 Odstock View were 27 dB L_{A90} during the day and 23 dB L_{A90} at night.

For context, these measured external background levels are below the recommended internal night-time criterion of 30 dB contained within BS8233:2014 for bedrooms.

The predicted rating level at 2 Odstock View is 32 dB $L_{A,T,r}$. Applying a typical attenuation of approximately 15 dB for a partially open window, this would equate to an internal noise level of approximately 17 dB within a bedroom.

This is substantially below the 30 dB internal night-time criterion recommended by BS8233:2014 and indicates that adverse effects on sleep are unlikely.

BS4142 also provides examples where rating levels around 30 dB are considered to have little impact on residential receptors despite being distinguishable from the residual acoustic environment.

Furthermore, the assessed scenario included CHP units which are no longer proposed. Based on the current proposal, operational noise levels would be expected to be lower than those presented in the submitted assessment. External noise levels at 2 Odstock View are likely to be closer to 30 dB(A), equating to approximately 15 dB(A) internally.

Acoustic Character Corrections

The potential need for acoustic character corrections has been considered.

Whilst Air Source Heat Pumps may exhibit tonal characteristics at source, BS4142 requires character corrections to be assessed on the basis of the noise as perceived at the receptor rather than at the source.

The nearest residential receptor is approximately 270 m from the proposed plant area. At this distance, the specific plant noise would be perceived in combination with the existing ambient sound environment and any tonal characteristics would be significantly reduced.

Experience with similar installations indicates that noise from ASHP plant at this separation distance is unlikely to exhibit tonal characteristics that would satisfy the criteria set out in ISO 1996-2 for the identification of perceptible tones.

The noise is also not expected to be impulsive or intermittent in nature.

On this basis, no acoustic character correction was applied within the assessment.

Assessment Uncertainty

As with any predictive assessment, there is an inherent degree of uncertainty. The calculations are generally considered accurate to within approximately ± 3 dB.

However, it should be noted that a number of conservative assumptions were adopted within the assessment. No allowance was made for ground absorption or atmospheric attenuation, both of which would further reduce noise propagation between the source and receptor.

Accordingly, the assessment is considered likely to overpredict rather than underpredict actual operational noise levels, and the conclusions should therefore be regarded as precautionary.

Emergency Diesel Generator

The emergency diesel generator will operate only during emergency situations and routine testing.

Routine testing is anticipated to occur weekly during daytime hours for approximately 30 minutes.

The generator will be housed within a building and designed to achieve a façade noise level of approximately 75 dB(A) at 1 m.

Based on this arrangement, the predicted rating level at the nearest residential receptor would be approximately 16 dB $L_{A,r,T,r}$.

This is substantially below the measured background sound level at the receptor and significantly below the relevant assessment criteria. The generator is therefore not expected to give rise to adverse noise effects during either routine testing or emergency operation.

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