Development Management - Delegated Officer Report

Application Number: AWDM/0903/24 Recommendation – REFUSE

Site: 5 Upper Kingston Lane, Shoreham

Proposal: Installation of Air Source Heat Pump at the rear of the house.

Date of site visit: 12/7

Neighbours checked: Y

Additional neighbour notifications: N

Proposal, Site and Surroundings

This application relates to a detached two storey house on the west side of Upper Kingston Lane close to the junction with the Upper Shoreham Road. On the north side the property shares a driveway with No. 3 and both these houses have garages behind their rear walls. No. 7 is less deep than the application site.

The site is not in a conservation area and is not a listed building. There are no TPO's on the site.

It is proposed to position an ASHP alongside the outside of a rear garden wall adjoining the shared driveway. The unit has dimensions of 870mm(h) 1380mm (w) 460mm (d).

The application form confirms the following:

Installation of an MCS-compliant 9kW Daikin Altherma 3 domestic air source heat pump at the rear of the house.

The proposed location is more than 1 metre from neighbouring properties, as per MCS requirements. However the calculated noise (according to the MCS methodology) is 47dBA, which is greater than the threshold of 42dBA specified by MCS.

Relevant Planning History

SU/89/82 – Bay window to front. Granted.

SU/115/80 - Two-storey rear extension comprising kitchen, porch, toilet and bedroom. Granted

Consultations

Health:

Summarised as follows:

Step 1	SWL dBA	62	
Step 2	Directivity (Q)	8	in corner of two walls and ground
Step 3	Distance from heat pump to assessment position (m)	6	
Step 4	dB distance reduction	-18	*note using formulae not table
Step 5	Barrier correction (-10dB, -5dB, 0dB)	0	Visible from receiver
Step X	Character adjustment dB	6	
Step 6	Calculate SPL	50	

It's the bedroom I am worried about as the ASHP will be on during night time hours in summer months so there is hot water in the morning. In the proposed position It is likely to be > +5dB above background at night which is an indication of an adverse impact. I would have to object to this.

Turning the ASHP around could help as noise is being mainly projected towards the garage and away from the neighbouring house and it allows for a barrier to be positioned next to it. It's a bit tricky with the foul drain there, but you could erect a L shape barrier to the side of it. Not sure whether this would obstruct vehicle access to the garage, but if the applicant can get it to work for them and to your satisfaction we could bring the calculated noise levels down to 40dB(A)

For example, the barrier is in red. It could either be rendered blockwork to match the house or a robust close boarded fence. The barrier will need to be high enough to remove any line of site from the ASHP to the bedroom. '

'I have used the IOA assessment method, see attached guidance. Also see the attached Sussex guidance which covers ASHPs.

LA90 Refers to the A-weighted noise levels in the lower 90 percentile of the sampling interval.it is the level which is exceeded for 90% of the measurement period. It is used to describe the background noise level and this parameter is the one used in the MCS guidance. The traffic data uses LAeq noise data, which is a measurement of all noise over a period of time. If you consider noise levels fluctuate throughout the day, the LAeq irons out that fluctuation and present it as an equivalent noise level over a period of time. The LAeq is averaging the sound level over the time period. LA90 and LAeq are two different noise parameters and are not interchangeable. We have the same DEFRA traffic data overlaid on our GIS mapping system and the modelled DEFRA data does not reach the property in question.

The MCS assessment guidance for the ASHP requires the SWL (Sound Power Level) provided in the ASHP manufacturers brochure to be used in the assessment. The guidance nor the manufacturers brochures provide noise data for different operational conditions. So we have to rely on the data provided by the manufacturer.

To save the applicant the cost of an acoustic report, I tried to consider alternative solutions but if they insist that this is the only location for the ASHP then we will need to see an acoustic report for the proposed application that includes the actual measured background noise levels in this location. See the attached Sussex Guidance for this. '

'The onus is on the applicant to demonstrate it is acceptable.'

Representations

None received.

Relevant Planning Policies

Adur Local Plan 2017 Policies 2, 15, 19 and 34
Sustainable Energy SPD Aug 2024
National Planning Policy Framework (December 2024)

Planning Assessment

Principle

The proposal involves upgrading the existing housing stock and moving towards a more sustainable way of providing energy to this house. It is supported in principle. The relevant issues are the effects on the amenities of neighbouring residential occupiers and the effect on the character and appearance of the dwelling and its surroundings.

Sustainability

The National Planning Policy Framework requires that the planning system should support the transition to a low carbon future in a changing climate.

Local Plan Policy 34 states:

Development should not result in pollution …
New development in Adur will be located in areas most suitable to the use of that development to avoid risks from noise, air, odour or light pollution. Mitigation measures will need to be implemented for developments that could increase levels of pollution.
Where there are significant levels of increased pollution that cannot be mitigated, development will be refused.
Where appropriate, air quality assessments and/or noise assessments will be required in conjunction with development proposals.

Local Plan Policy 15 states:

Make a positive contribution to the sense of place, local character and distinctiveness of an area; and not have an unacceptable impact on adjacent properties, particularly residential dwellings.

Residential amenity

The rear wall of No. 7, the adjoining property the other side of the shared drive, is closer to the road than the application site and the rear garden was open to the drive way at the time of the site visit. It has a rear facing first floor bedroom window with kitchen below. There is a side bathroom window with what appears to be a secondary kitchen window below.

The concern is the potential for noise nuisance to the bedroom at No.7, particularly at night time as the submitted noise details advise that the expected noise output will exceed 42 dB(A), the current PD limit, by at least 5 dB (A), i.e. 47 dB(A).

In an effort to make it more acceptable the applicant was encouraged to rotate the ASHP 90 degrees to face the garage and to provide a screen/barrier. Alternatively, it was suggested that it be relocated to the applicant's patio side of the wall. In response the applicant said:

'We have considered various alternative positions. Thank you for your suggestion of rotating the heat pump. We would not want to do this as it would block the driveway, not only for us but for our neighbours (and would break covenants as it's a shared driveway).

Locating the pump further away in the garden would adversely impact efficiency due to the long run of pipework needed, which would defeat the point of installing the heat pump (as well as breaching the manufacturer's guidelines, FWIW). Locating it the other side of the wall would block access to our kitchen. We also considered the northern wall in front of the garage but then the heat pump would be less than a metre from the property boundary, which would breach MCS rules.
We came to the conclusion that the location proposed is the only viable location, provided of course planning permission could be granted (on the basis that the MCS assumption of background noise level is not correct in this case).'

In the meantime, the Government is proposing changes to Permitted Development for ASHP's which would create an overall limit of 37 dB(A), 10dB(A) below the minimum noise limit anticipated in the applicant's calculations.

In the circumstances it has been concluded that an acoustic report that includes the actual measured background noise levels in this location is required to properly understand noise levels and noise exposure for neighbours. The applicant does not wish to go to this expense. In the circumstances it is considered necessary to refuse this application on the basis that it has not been proven that noise nuisance to the neighbour at No. 7 will not occur.

It is open to the applicant to make a future application with the missing information, or for a less noisy ASHP, or for one in a less sensitive location. Alternatively, the applicant should explore ASHP comply with PD limits.

Visual amenity

The ASHP is positioned towards the end of the drive recessed behind the flank wall. It will not be readily visible not cause any significant visual harm.

Recommendation

REFUSE for the following reason:

On the information submitted the Council is not satisfied that the proposed ASHP will not result in a noise nuisance to the neighbour at 7 Upper Kingston Lane. The proposal is therefore contrary to Policies 15 and 34 of the Adur Local Plan and the relevant paragraphs of the National Planning Policy Framework.

Is recommendation contrary to letter(s) of representation? N

The Local Planning Authority has acted positively and proactively in determining this application by identifying matters of concern with the proposal and discussing those with the Applicant. However, the issues are so fundamental to the proposal that it has not been possible to negotiate a satisfactory way forward and due to the harm which has been clearly identified within the reason for the refusal, approval has not been possible.

Case Officer:	MOK	Date: 17/12/24
Authorised by:	Peter Barnett	Date: 17 December 2024