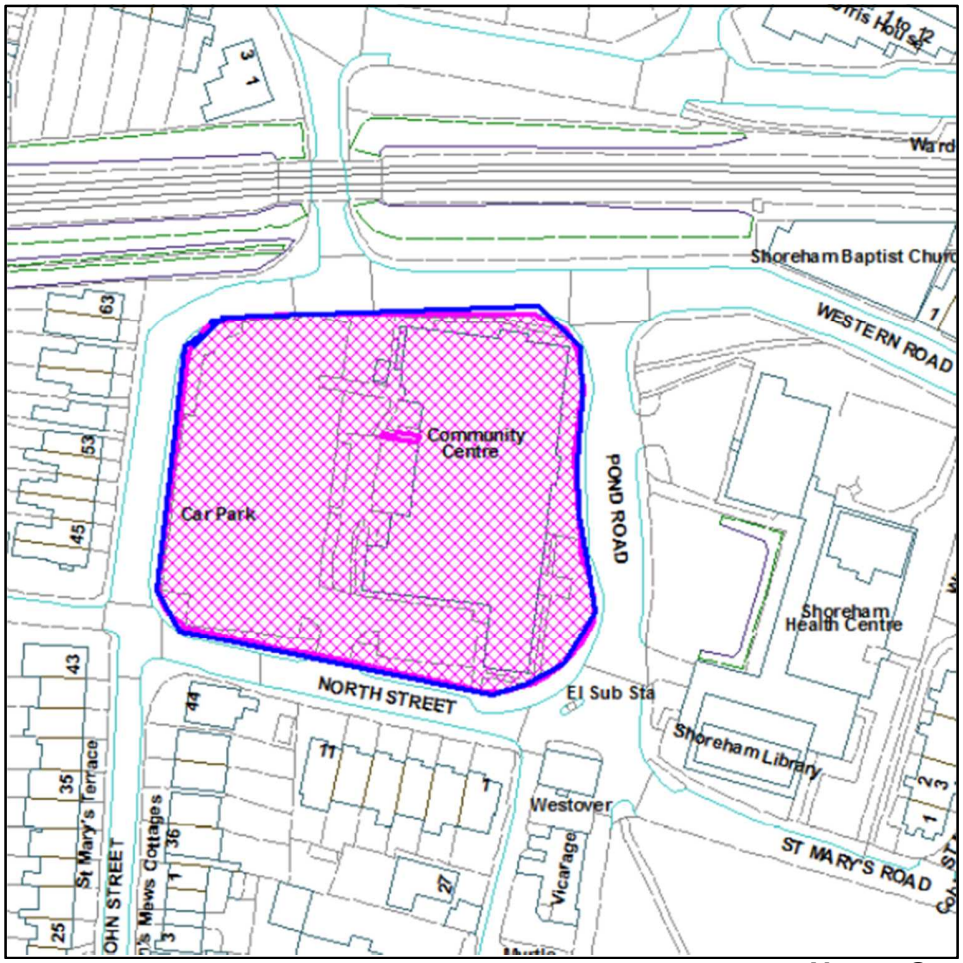
Application Number:	**AWDM/2208/21**	**Recommendation - Approve**
Site:	**The Shoreham Centre, Pond Road, Shoreham-By-Sea**	
Proposal:	**Installation of 6no. external air source heat pump units within fenced enclosure at ground level at rear (west) of The Shoreham Centre**	
Applicant:	Adur District Council	Ward: St Mary's
Agent:	Mr Dan Goodchild	
Case Officer:	Peter Barnett	



Not to Scale

Reproduced from OS Mapping with the permission of HMSO © Crown Copyright Licence number LA100024321

Proposal, Site and Surroundings

This application seeks permission to install 6no. 43kw monobloc air source heat pumps within an external ground floor enclosure at the rear of the Shoreham Centre. This follows permission last year for the siting of the air source heat pumps on the upper section of flat roof at the rear of the building (AWDM/0790/21). Since permission was granted the siting of the pumps has been reconsidered and the current scheme is considered to be less intrusive and will improve maintenance access.

The pumps will be within a fenced enclosure, 2.2m high, positioned adjacent to the rear entrance doors in the NW corner of the building. The enclosure measures 4.5m by 10.4m.

The application has been submitted by Adur District Council as part of the commitment to reduce carbon emissions from their properties. Grant funding has been secured to provide and install Air Source Heat Pumps which will serve a significant proportion of the Shoreham Centre's energy demand for heating and hot water, instead of solely being served by the existing gas-fired boilers.

The site lies within the Shoreham Conservation Area.

Relevant Planning History

AWDM/0790/21 - Installation of 8no. air source heat pumps on roof - approved

Consultations

West Sussex County Council: The ***Highways*** Officer has no objection, provided the plant equipment will not be placed in positions that will prejudice any existing access, parking or turning arrangements.

Adur & Worthing Councils: The ***Environmental Health*** officer advises that she is satisfied that noise from the ASHP will not cause significant noise disturbance to the surrounding residential dwellings, but recommends a condition limiting the use to 4 ASHPs between the hours of 23:00hrs - 07:00hrs.

This advice follows clarification from the applicant as follows:

"The current set-up of heating for the building is 2 plant rooms (one for the new side of the building and one for the old side) plus one boiler in the cafe area. The new set-up will be 2 ASHPs feeding the new plant room and 4 ASHPs feeding the old plant room and cafe. The new side of the building covers the council offices and Citizens Advice Bureau which close at 5pm whereas the old side of the building is the Community Trust side who have advised that the building is sometimes open until 12.30am at weekends. Therefore it was considered that only 4 of the 6 ASHPs would be operating during nighttime hours past 11pm."

Adur District Conservation Advisory Group: Approve.

Representations

None received

Relevant Planning Policies and Guidance

Adur Local Plan 2017 Policy 1, 15, 17, 18, 19, 34
Sustainable Energy SPD (August 2019)
CarbonNeutralPlan (Adur & Worthing Dec 2019))
Carbon Neutral Study for Adur & Worthing June 2020
Shoreham by Sea Conservation Area Character Appraisal & Management Strategy (ADC 2008)
National Planning Policy Framework (July 2021)

Relevant Legislation

The Committee should consider the planning application in accordance with:

Section 70 of the Town and Country Planning Act 1990 (as amended) that provides the application may be granted either unconditionally or subject to relevant conditions, or refused. Regard shall be given to relevant development plan policies, any relevant local finance considerations, and other material considerations; and

Section 38(6) Planning and Compulsory Purchase Act 2004 that requires the decision to be made in accordance with the development plan unless material considerations indicate otherwise.

The Committee should consider the application in accordance with Section 72 Planning (Listed Buildings and Conservation Areas) Act 1990 (as amended) and pay special attention to the desirability of preserving or enhancing the character or appearance of the Conservation Area.

Planning Assessment

Principle

One of the main visions and objectives of the Adur Local Plan is to make progress "*towards a low carbon, sustainable community through sustainable construction, energy efficiency, the use of renewable energy, water efficiency measures, waste reduction measures and appropriate location of development and transport infrastructure to reduce air pollution and noise; and to make a significant contribution to low and zero carbon energy production*."

Policy 19 encourages the use of "*low carbon energy, renewable energy and residual heat/ cooling for both domestic and non-domestic developments.*"

At a local level, Adur District Council has declared a Climate Emergency and committed

to being carbon neutral as a council by 2030. The council has also made the UK100 Cities Pledge to achieve 100% clean energy by 2050. The council has committed to work with partners to ensure all energy use be delivered through zero carbon sources. To help meet these objectives, the development of renewable, low carbon, or decentralised energy schemes should be supported through the planning system and those based on fossil fuel combustion should not be supported.

The Council has produced its own Carbon Neutral Plan for the council decarbonisation. This has a strong focus on moving away from gas fired heating systems towards renewable and low carbon alternatives, in particular heat pumps. This approach is aligned with national policy approaches to move away from gas based systems towards non-fossil fuel alternatives as set out in the Clean Growth Strategy.

The proposed air source heat pumps are therefore supported in principle.

Visual amenity and impact on Conservation Area

The proposed pumps are to be sited at ground level at the rear of the building. The fenced enclosure will be visible from the car park and will be glimpsed from outside of the site, although the impact will be reduced by distance, the backdrop of the Shoreham Centre and the boundary wall around the car park. It is not considered that it will be unduly intrusive and the character and appearance of the Conservation Area will be preserved.

Residential amenity

The nearest dwellings are 55m away to the west and 70m to the south. With regard to noise, a noise assessment has been submitted which concludes that:

"*Daytime rating levels calculated at the receptor locations fall below the corresponding background sound level by at least 12 dB. This provides an indication that the proposed operation of the ASHPs should have a low noise impact during daytime operating hours. Night-time rating levels calculated at the receptor locations fall below the corresponding background sound level by at least 3 dB, which also indicates that the proposed operation of the ASHPs should have a low noise impact- during night-time operating hours*."

The applicant has explained that the system is designed as a bi-valent system meaning that the existing gas system will remain. There will also be insulated buffer vessels installed which will allow for some heat to be retained overnight in preparation for the next day's heating requirements. On particularly cold days, the gas system is likely to do the bulk of the heating and the combination of this and the buffer vessels means that all 6 ASHPs working from 7am for a centre opening time of 9am should be sufficient. The applicant does not expect the 4 ASHPs on during nighttime hours to be working at full power as they will just be operating to maintain the temperature in the buffer vessels.

On this basis it is not expected that the units will cause harm to residential amenity. Only four of the units will be in operation at night and the Environmental Health Officer has no objection on this basis subject to a restriction on the hours of use.

Sustainability

As mentioned previously, the system is designed as a bi-valent system meaning that the existing gas system will remain. Nevertheless, the proposal is much more sustainable than the existing heating system. The applicant has explained that:

"*The air source heat pumps are generally designed to reach a maximum of 55 degrees flow temperature as above this temperature they become significantly less efficient. The ASHPs are most efficient down to external temperatures of approx 8 degrees. Typical weather data for Shoreham shows that approximately only 15% of working time hours annually are below this temperature. We considered two options of how to heat the building below this temperature: option 1 was for a bi-valent system with the existing gas system, or option 2 to install larger ASHPs and replace all the existing pipework and radiators to provide sufficient heat at lower external temperatures.*

The bi-valent system was chosen as it was considered to be the least disruptive to the building users as we could retain the existing gas boilers and heating system. The bi-valent system uses the ASHPs linked to a thermal store to bring the LPHW (low pressure hot water) up to 55 degrees then the existing gas boilers are used to raise the LPHW from the thermal store to the final flow temperature of 80 degrees (which is the flow temperature for the existing system).

The bi-valent system will lead to a reduction in carbon emissions through reducing gas usage and reducing overall energy consumption due to the efficiency of ASHPs versus a gas boiler; grid electricity has lower carbon emissions than gas, with these projected to reduce year on year as the electricity grid continues to be decarbonised."

It is clear that the proposal will have significant environmental benefits in terms of reducing carbon emissions whilst at the sametime limiting the impact of the works on the community uses of the building.

Recommendation

Approve

Subject to conditions:

1. Approved Plans
2. Standard time limit
3. A maximum of 4no. air source heat pumps only shall be in operation between the hours of 23:00hrs - 07:00hrs.