# Design and Access Statement

## Shore View House, 100 Pilling Lane, Preesall FY6 0HG

### Contents:

- 1. Introductions
- 2. Assessment/Evaluation
- 3. Design
- 4. Access
- 5. Consultation
- 6. Conclusion

#### 1. Introduction

This is a householder planning application, seeking consent for the installation of an air source heat pump (ASHP) at Shore View House, 100 Pilling Lane, Preesall FY6 0HG. This is in replacement of the existing solid multi-fuel stove with back boiler, that was being used to provide heating and hot water until it suffered a serious mechanical failure in September 2020 and has been removed from the property.

An air source heat pump is a far greener way to provide central heating and hot water to a property in comparison to the existing installation. It works by an outdoor unit absorbing warmth from the air in to a refrigerant. This refrigerant is then compressed using electricity to raise the temperature. This is then transferred to the property's central heating system.

The installation of ASHP's has been considered permitted development since 2011 providing certain conditions are met. One

of those conditions is that the outdoor housing containing the compressor unit does not exceed 0.6 cubic metres. Heat loss and heat requirement calculations have been carried out at the property by an independent MCS registered engineer and a Vaillant 12kw air source heat pump has been specified as being required for this property. This heat pump cannot be installed under permitted development rules due to the outer housing of the compressor unit measuring 0.84 cubic metres, thus requiring planning consent.

This application meets all other conditions of permitted development.

## 2. Assessment/Evaluation

The ASHP will sit behind an existing fence on the west side of the property. This is to the right hand side of the property when viewed from the roadway. This fence is parallel to the road and will completely screen the ASHP from all passing traffic and pedestrians. The fence is 1.75m tall and 1.7m wide. The location of the air source heat pump is over 5.5m from the property boundary to the west, where it is separated from the grounds of 98 Pilling Lane by a 6ft fence and substantial hedge line. This location for the ASHP was assessed by the MCS engineer to be the only suitable location around the property due to required clearances from drainage and opening windows.

## 3. Design

The proposed ASHP is a VAILLANT AROTHERM PLUS 12KW. The unit is 1100mm wide, 1595mm tall and 490mm deep including grill and feet. The noise rating of the ASHP is only 46db at a distance of 1m from the unit. Other new components of the system including hot water cylinder will be installed in the property and not subject to planning consent.

#### 4. Access

Access to the installation will be via the property's private driveway, which runs along the west side of the property.

### 5. Consultation

The immediate neighbours to the side and the front of the property have been consulted, including being shown the proposed renderings and technical information. There are no objections to the proposals.

## 7. Conclusions

The location of the air source heat pump will not detract from the appearance of the property by virtue of it being fully hidden from the road by an existing fence. The installation of this type of heating system will significantly lower carbon emissions than the current solid fuel boiler stove system.

Mr M Davidson