

FLOOD RISK ASSESSMENT

Date

18/12/2020

Site Location

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

Proposal

Installation of an air source heat pump to the side
elevation

Site Location

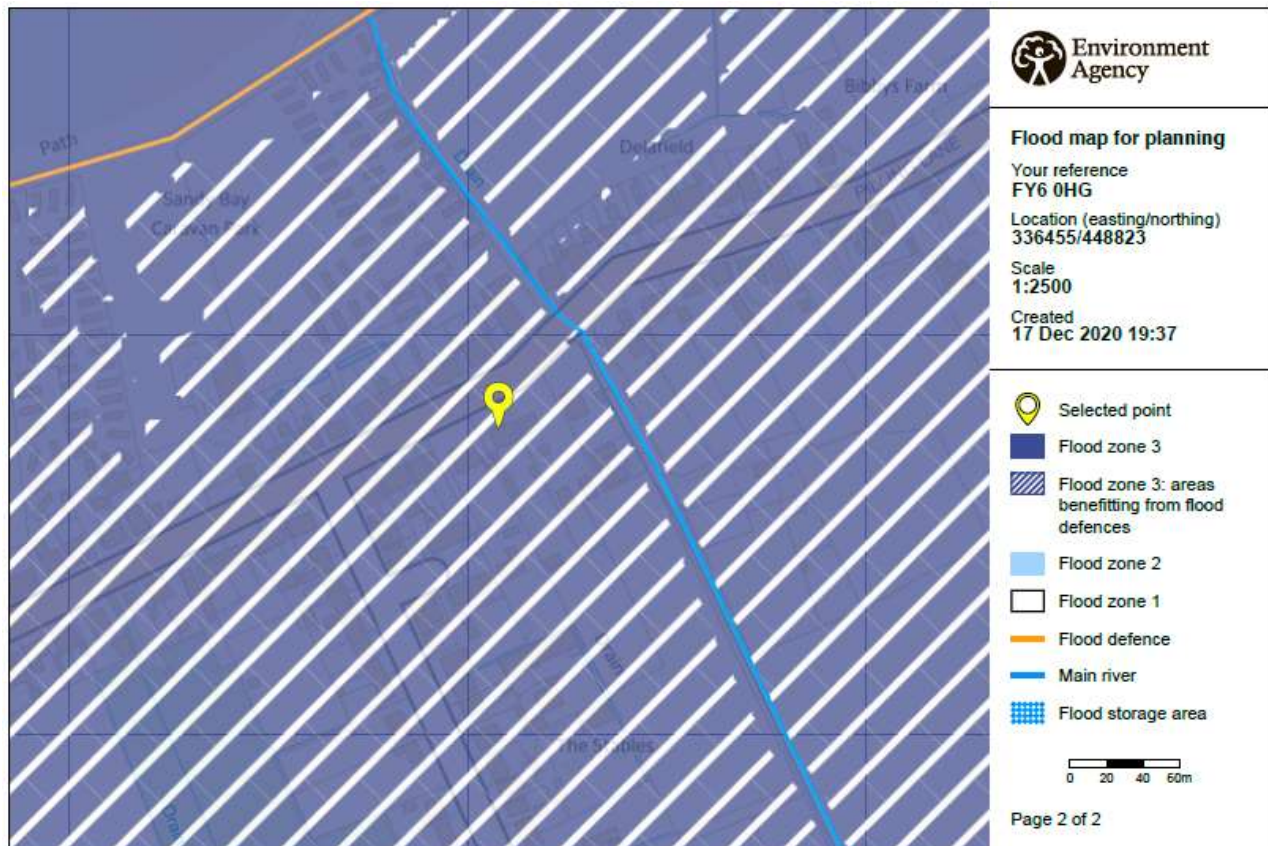


The site location (denoted by the red pin) is located 1.9km to the east of the River Wyre and approximately 0.25km south of the sea retaining wall at Preesall Sands.

The sea retaining wall running from Knott End to Pilling was constructed approximately 25 years ago as part of the coastline sea defences. There are no known incidents of the sea wall being breached.

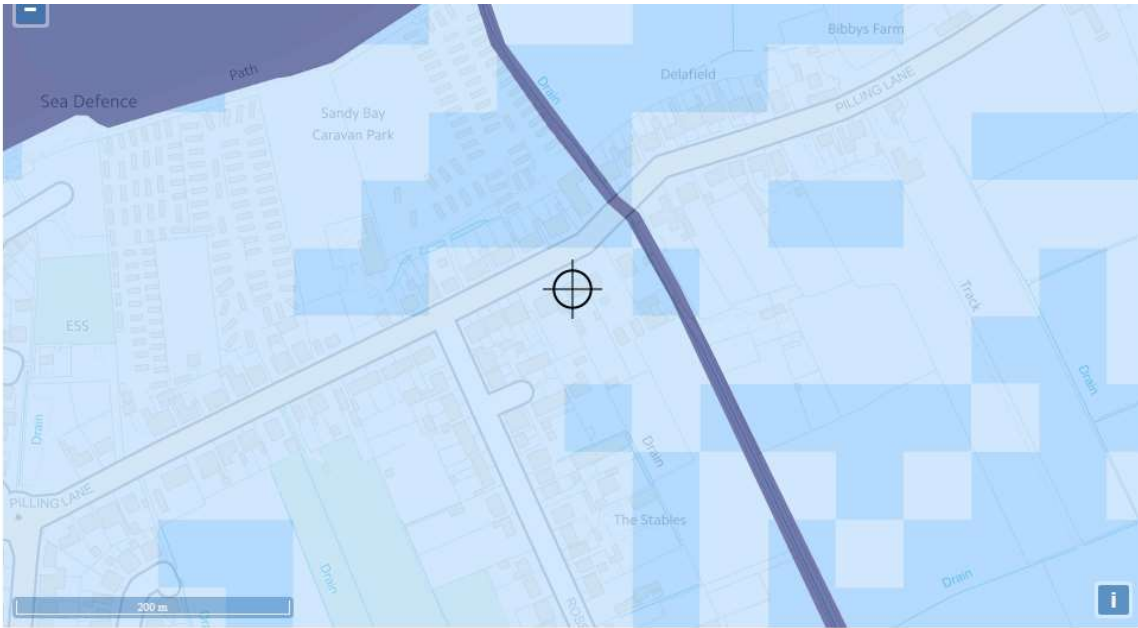
Flooding Issues

The application site is within flood zone 3 (defended.) Flood zone 3 is a high risk area with an annual probability of being flooded of 1% or greater from rivers and 0.5% or greater from the sea (if no defences are in place.)



However this map shows that the property is in an area benefiting from sea defences as indicated by the blue hatched markings.

These defences offer protection from a 1 in 200 year storm event.



Extent of flooding from rivers or the sea

High
 Medium
 Low
 Very low
 Location you selected

Therefore the overall risk of flood from sea or river at this location is very low.

Another consideration with regard to flooding is from surface water however this application site is at very low risk of this.



Extent of flooding from surface water

High
 Medium
 Low
 Very low
 Location you selected

Proposed Development

This application is for an air source heat pump (ASHP) to be installed to the side elevation at the property. This work is classed as a 'minor development' and in line with the NPPF, does not require the Sequential Test to be applied.

Due to the application relating to piece of machinery rather than a habitable building, considerations like floor levels and escape routes do not need to be factored.

The ASHP unit being proposed has an extremely small footprint (0.49m²) and in comparison to a conventional application for a building, there will be no effects caused by water run off. The unit is being placed on a concrete pad surrounded by gravel so the negligible amount of rain that does run off the unit will be naturally soaked in to the ground. This will have no effect on the risk of any surface flooding or the risk to any properties.

The site has never been affected by flooding.

As a mitigation measure for electrical safety, any required isolation switches should be installed no less than 600mm above ground level.

Conclusions

The site address falls within flood zone 3 and is protected by sea defences. It has a **very low** risk of flooding from the sea and rivers.

- ❖ Very low risk means that each year this area has a chance of flooding of less than 0.1%. This takes into account the effect of any flood defences in the area. These defences reduce but do not completely stop the chance of flooding as they can be overtopped, or fail.

The site address is at **very low** risk of flooding from surface water.

- ❖ Very low risk means that each year this area has a chance of flooding of less than 0.1%. Flooding from surface water is difficult to predict as rainfall location and volume are difficult to forecast. In addition, local features can greatly affect the chance and severity of flooding.

There is no risk of flooding from reservoir.

The applicant is registered with the Environment Agency to receive advanced flood warnings allowing time to isolate the heat pump from an electrical supply in the event of a forecast catastrophic flood event.

The installation of this air source heat pump will not affect surface water or the flood risk to any properties.