

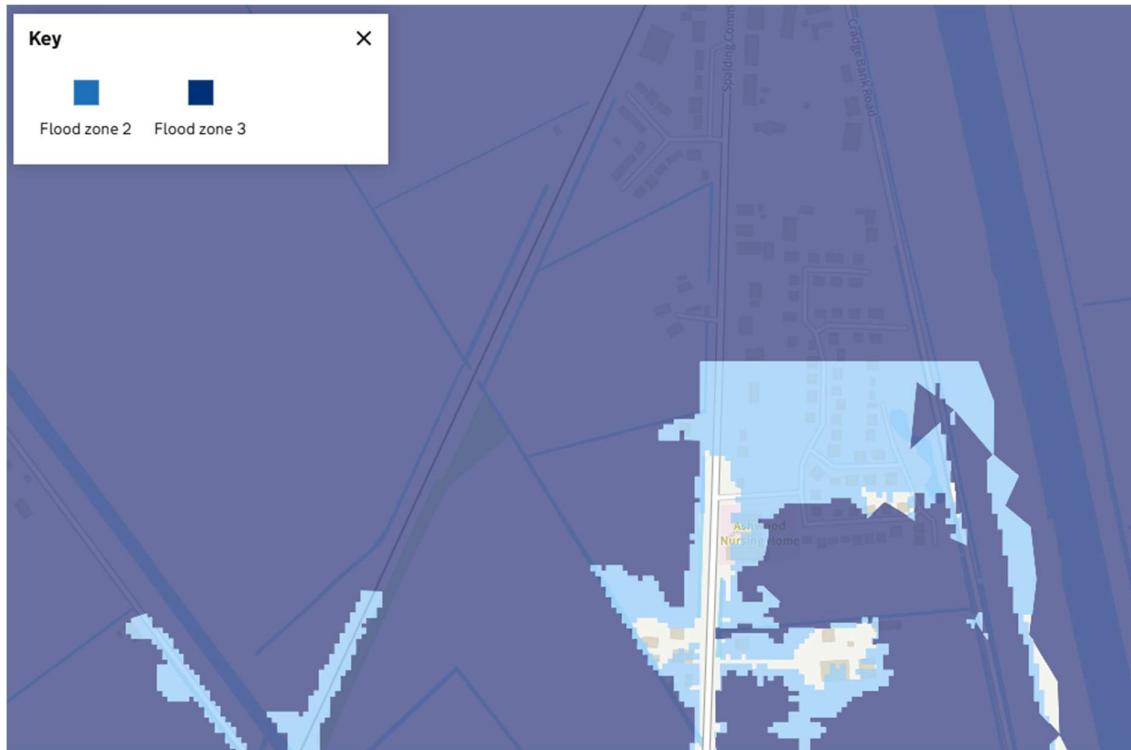
## FLOOD RISK ASSESSMENT – Moorhen Spalding - New pergola

### Introduction

The FRA has been prepared in support of a planning application submitted for a new pergola in the garden with approx. 5.76m<sup>2</sup> roof area built over a existing patio

It establishes the flood risk at the site, ascertains the impact of development of the site on that flood risk and its affect on others and determines any mitigation measures which may be required to take account of the flood risk.

### Site location



The site is within zone 2 and 3

### Proposal

A new pergola on a existing patio measuring 2.4 x 2.4m approx. , drawings have been supplied, the rainwater run off is to the existing lawn and bedding plant areas surrounding the pergola

- **Type of development:** Installation of a non-permanent, open-sided timber pergola
- **Area:** 5 square metres
- **Location:** Rear garden of an existing residential dwelling
- **Foundation:** None – its bolted to the patio
- **Use:** Domestic/leisure

According to the **Environment Agency's Flood Map for Planning**, postcode **PE11 7AD** falls within or close to **Flood Zone 3**, which indicates a **high probability** of flooding (greater than 1 in 100 annual probability of fluvial flooding).

However, this varies locally — exact flood risk may depend on proximity to the River Welland and local drainage systems.

### **Sources of Flood Risk**

- **Fluvial (river) flooding:** High risk, due to proximity to the River Welland
- **Surface water (pluvial) flooding:** Possible during heavy rainfall events
- **Groundwater flooding:** Low to moderate risk, depending on local soil saturation
- **Reservoir failure:** Very low risk, per Environment Agency mapping

### **Mitigation measures**

Given the minor nature of the development and the low vulnerability classification (non-habitable structure), the following measures are proportionate:

- Open structure: As the pergola is not enclosed, it will not impede overland flood flow or displace floodwaters.
- Minimal groundworks: Existing patio with permeable area surrounding it where the rainwater runs off
- Materials: Timber and galvanized fittings used will be water-tolerant and easily repairable/replaced if damaged.
- Drainage: No additional impermeable surface increase

### **Sequential and Exception Test**

This development is **classified as "Water-Compatible"** under the National Planning Policy Framework (NPPF) and does **not require a Sequential or Exception Test**.

### **Conclusion**

The proposed pergola:

- Is located in a potentially high-risk flood area (Flood Zone 3)
- Is of very low vulnerability
- Will have negligible impact on flood risk on- or off-site
- Does not introduce impermeable surface or drainage impact
- Requires no further mitigation beyond good design and maintenance

This Flood Risk Assessment confirms that the proposal is appropriate in flood risk terms and complies with national and local planning policy.

