

# FLOOD RISK ASSESSMENT

Project Title: Land adjacent to Red House Farm, Framsden  
Project Number: PW1394  
Date/Revision: 09.04.2024/first issue

## 1.0 Introduction

This statement has been prepared to assist with the understanding of proposals for the above site, which are currently submitted to Babergh Mid Suffolk District Council for determination under a full planning application reference: DC/24/01476/FUL. The application is for the erection of a barn for storage of farm equipment, upgrading and existing access and relaying a new track. This follows an invalidation notice whereby BMSDC have requested a Flood Risk Assessment, evaluating all types of flood risk.

This statement should be read in conjunction with the drawings submitted with the application, PW1394\_PL01, PL02revA and PL03.

## 2.0. The Development Site

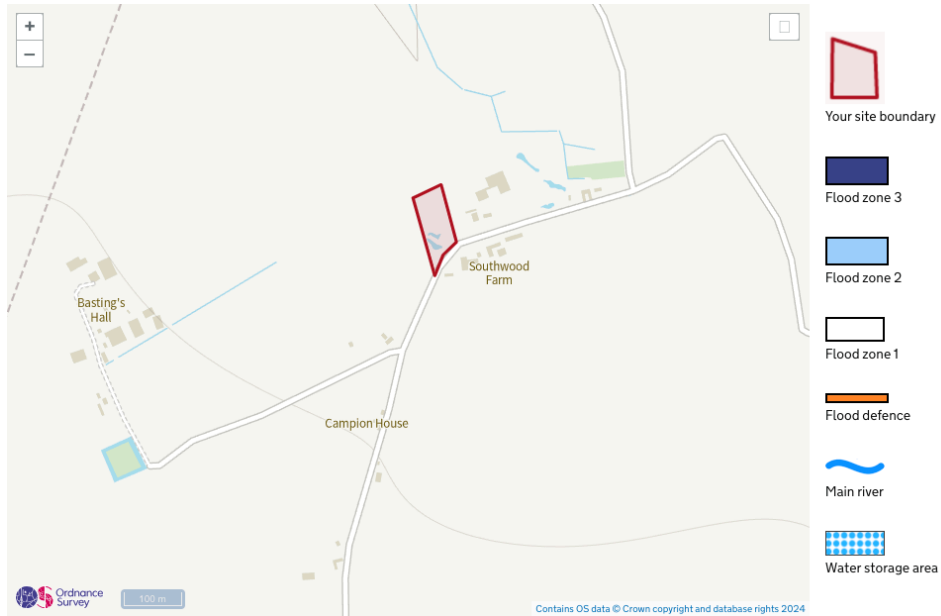
The proposals relate to a parcel of land which comprises an open area of patchy, closely mown grass/ruderal vegetation and bare earth, with two ponds in the south western corner of the field and surrounded to the north and east by a native hedgerow and seasonally wet ditch. The site is identified in red on the site/location plan PW1394\_PL01, and picture 1 below.



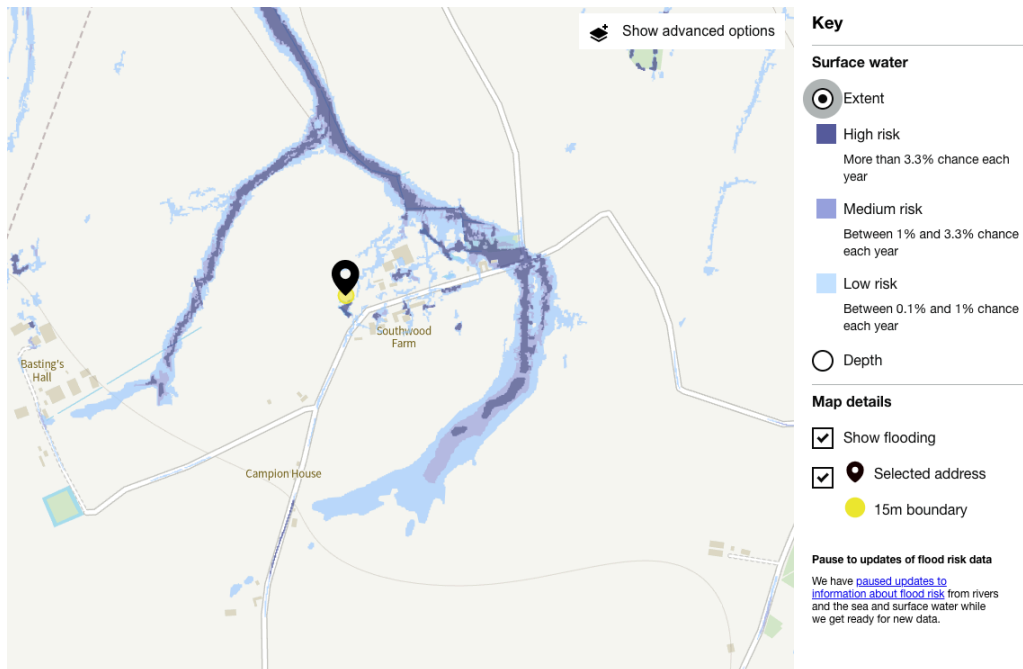
Picture 1 – Aerial view of the site (red arrow)

### 3.0. Flood Risk Maps

The Environment Agency Flood Risk Maps show the whole site being in Flood Zone 1, denoting a negligible risk of flooding – see picture 2 below. The site lies within the Deben catchment area which is approximately 2.8km to the northeast. The proposed building has a low risk of surface water flooding (between 0.1% and 1% chance each year) – see picture 3 below, and the Environment Agency have no record of fluvial flooding in this location.

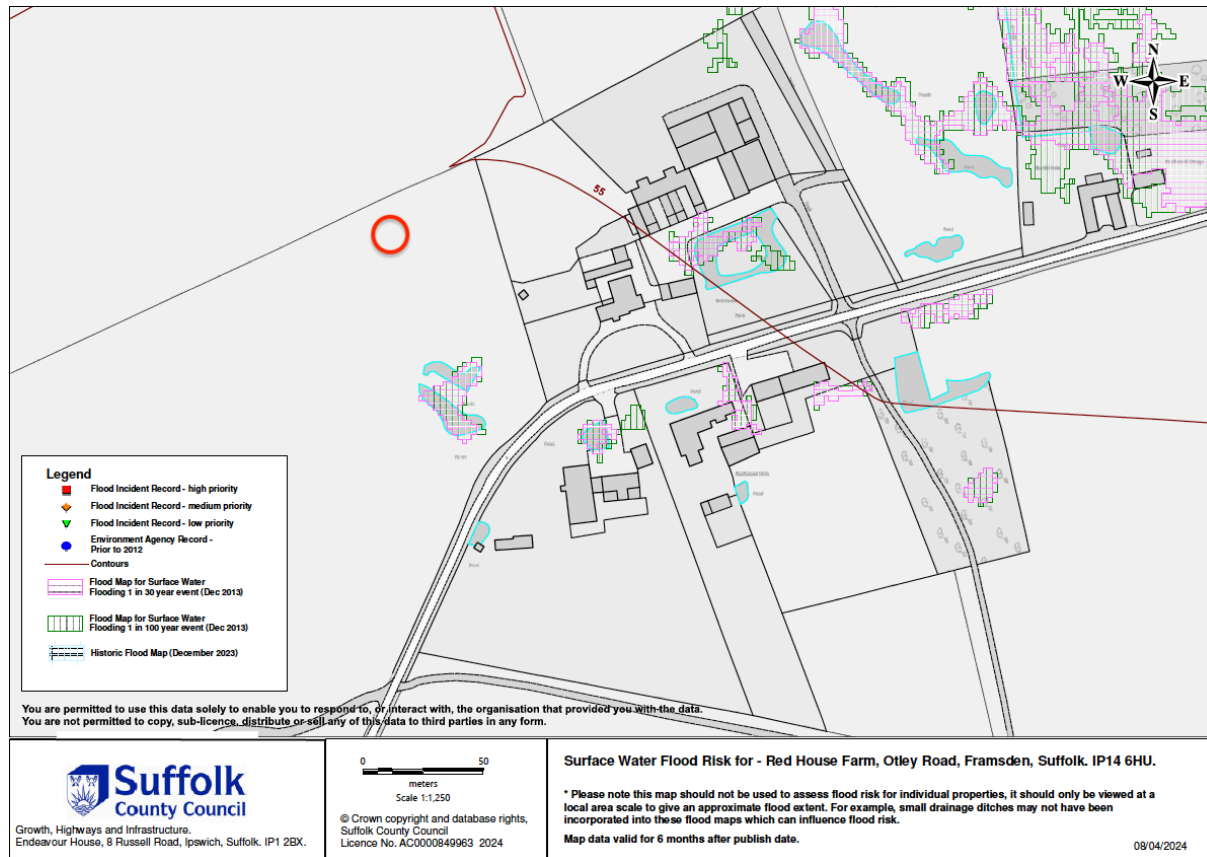


Picture 2 – Extract from the EA Flood Risk Map showing the site in Flood Zone 1.



Picture 3 – Extract from the EA flood map showing the site at low risk of surface water flooding

A flood map has been obtained from Suffolk County Council Flood & Water Management (see picture 4 below). The flood map indicates that there are no historic flood incidents recorded on the site.



**Picture 4 – Flood Map from SCC Flood & Water Management (proposed location of barn indicated by red circle).**

#### 4.0 Development Proposal

The proposal is to erect a metal storage barn in the north-west corner of the site, that will be used to store machinery/equipment that is used in conjunction with the maintenance of the land. The proposed floor plan and elevations of the barn are indicated on drawing PW1394\_PL03, that was submitted with the full application.

Developments are classified on their sensitivity to flood risk. The vulnerability of the proposed development (storage barn) is considered to be 'less vulnerable'.

#### 5.0. Sequential Test

The NPPF advises Local Authorities, developers and consultants to follow a sequential, risk-based approach to identifying land suitable for development. The proposal comprises the erection of a storage barn, alterations to existing access and a new track. The storage barn is classified as 'less vulnerable' which is considered appropriate in Flood Zone 1. Thus the Sequential Test has been passed and the Exception Test need not be applied.

## 6.0. Potential Sources of Flooding

In line with the recommendations contained in the NPPF, we have explored the various potential sources of flooding, which could potentially impact the site both before and after the proposed development.

### 6.1. Tidal/Fluvial flooding

The EA indicative flood mapping shows the site lies in Flood Zone 1 and is therefore considered to be at **very low** risk of river or sea flooding.

### 6.2. Surface Water (Pluvial) Flooding

Pluvial flooding typically occurs when excessive rainfall occurs within a catchment to such an extent that it is unable to be absorbed by the underlying soils. There is an area of Medium to High risk of pluvial flooding to the northeast of the site, which follows the topography of the area and a tributary of the River Deben, but the site itself is not within an area of surface water flooding. The risk of surface water flooding is therefore **low risk**.

### 6.3. Groundwater flooding

Groundwater flooding occurs when water levels in the underlying soil rise, after prolonged rainfall. The areas most at risk are often low-lying areas where the water table is more likely to be at a shallow depth and flooding can be experienced through water rising up from the underlying aquifer or from water flowing from springs.

The site is underlain by superficial deposits comprising Lowestoft Formation (Diamicton) overlying bedrock geology comprising Lewes Nodular Chalk Formation. As the proposal comprises solely above ground construction and the geology is cohesive, we consider the overall risk of groundwater flooding to be **negligible**.

### 6.4. Reservoir/Artificial Flooding

Non-natural sources of flooding include reservoirs, canals and lakes where water is retained above natural ground level and industrial processes such as quarrying.

The 'extent of flooding from reservoirs' mapping provided by the Environment Agency confirms that the site does not lie within an area known to be at risk from reservoir flooding. We therefore consider the overall risk from this source to be **negligible**.

### 6.5. Sewer Flooding

Research of the site indicates that there are no recorded public sewers either onsite or in close proximity to it and there is no known risk of sewer flooding onsite. We therefore consider the risk of sewer flooding to be **negligible**.

## **7.0 Conclusion**

The proposals on land adjacent to Red House Farm in Framsdon include the erection of a barn for storage of farm equipment, upgrading and existing access and relaying a new track.

The risk of tidal or fluvial flooding onsite is considered to be very low as the site is located within flood zone 1. The proposed development is classified as Less Vulnerable and has therefore passed the sequential test and is considered to be a suitable land use for this site.

The risk of pluvial flooding onsite is considered to be low, and the risk of groundwater, sewer and/or reservoir flooding is considered to be negligible.

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