## **FLOOD RISK ASSESMENT**

Application to determine if prior approval required for change of use of an agricultural building to flexible business use (Class E) as per Schedule 2 Part 3 Class R.

**Glen Holt Gainsborough Road Girton Newark On Trent** 



SITE



# Flood Risk

The site is partially located within Flood Zone 2 as shown on the Environment Agency's Indicative Flood Map for Planning.

The application for business use is not subject to the Sequential Test.

The application is also not subject to the Exception Test. Dwellings are classed as a 'more vulnerable' use as set out in Table 2 of the 'Flood risk and coastal change' chapter of the NPG which is an appropriate form of development in Flood Zone 2.

## ASSESSMENT OF POTENTIAL SOURCES OF FLOODING

TABLE A: POSSIBLE FLOODING

Source	Risk	Comment	
Fluvial	Yes	The site lies within flood zone 2 of the River	
		Trent according to the Environment Agency	
		flood maps	
Tidal/Coastal	None	Site a distance from the sea.	
Pluvial	None	Roof Rain water	
Ground Water	None	None assessed	
Overland Flow	None	Ground levels fall naturally to the River Trent	
Blockage	None	No infrastructure present	
Infrastructure Failure	None	As above	
Rainfall Ponding	None	None	

The main source of flooding to the site are considered to be fluvial flooding within the functional floodplain of the River Trent

However the site is shown in the Environment Agency's flood map as Flood Zone 2. Table 2: Flood Risk Vulnerability Classification

## **Essential Infrastructure**

- Essential transport infrastructure (including mass evacuation routes) which has to cross the area at risk.
- Essential utility infrastructure which has to be located in a flood risk area for operational reasons, including electricity generating power stations and grid and primary substations; and water treatment works that need to remain operational in times of flood.
- Wind turbines.

## Highly Vulnerable

- Police and ambulance stations; fire stations and command centres;
   telecommunications installations required to be operational during flooding.
- · Emergency dispersal points.
- Basement dwellings.
- Caravans, mobile homes and park homes intended for permanent residential use.
- Installations requiring hazardous substances consent. (Where there is a demonstrable need to locate such installations for bulk storage of materials with port or other similar facilities, or such installations with energy infrastructure or carbon capture and storage installations, that require coastal or water-side locations, or need to be located in other high flood risk areas, in these instances the facilities should be classified as 'Essential Infrastructure').

#### More Vulnerable

- Hospitals
- Residential institutions such as residential care homes, children's homes, social services homes, prisons and hostels.
- Buildings used for dwelling houses, student halls of residence, drinking establishments, nightclubs and hotels.
- Non-residential uses for health services, nurseries and educational establishments.
- Landfill\* and sites used for waste management facilities for hazardous waste.
- Sites used for holiday or short-let caravans and camping, subject to a specific warning and evacuation plan.

#### Less Vulnerable

- Police, ambulance and fire stations which are not required to be operational during flooding.
- Buildings used for shops; financial, professional and other services; restaurants, cafes
  and hot food takeaways; offices; general industry, storage and distribution; nonresidential institutions not included in the 'More Vulnerable' class; and assembly and
  leisure.

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Flood Zones	Flood Risk Vulnerability Classification						
	Essential infrastructure	Highly vulnerable	More vulnerable	Less vulnerable	Water compatible		
Zone 1	✓	✓	<b>√</b>	✓	✓		
Zone 2	✓	Exception Test required	✓	<b>√</b>	<b>√</b>		
Zone 3a	Exception Test required †	X	Exception Test required	✓	<b>√</b>		
Zone 3b	Exception Test required *	X	X	X	<b>√</b> *		

## Key:

- √ Development is appropriate
- X Development should not be permitted.

Taken from the table above the "More vulnerable" sites in "Flood Zone 2" are "Suitable for development.

FOUL DRAINAGE STRATEGY No foul drains are required

## **ACCESS & EGRESS.**

Access and egress to and from the proposal site will be via the access road shown on the attached drawing.

The existing access does not require alteration.

All external parking areas and driveways to be paved with permeable construction to allow any top water to soakaway into the soil.

There is no effect on the floodplain, and that the amount of surface run off would not be increased due to use of permeable hardsurfacing and landscaping.

Furthermore, there is requirement for the provision for subscription to flood warning services to assist evacuation if flooding were to occur.



Historic satellite image showing the past agricultural use of the site.