

Flood Risk Assessment

Proposed erection of 10no dwellings.

Former Keston Nurseries, Mill Green Road, Pinchbeck, Spalding, Lincolnshire.



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Contents

1	Introduction	3
2	Existing site	4
3	Proposed scheme	5
4	The Sequential & Exceptions Test	6
5	Historic Flooding	6
6	Assessment of potential sources of flooding and mitigation measures	7
7	Conclusion	10

DOCUMENT HISTORY

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1 Introduction

1.1 This Statement has been prepared to accompany an outline planning application for the erection of 10no dwellings at Former Keston Nurseries, Mill Green Road, Pinchbeck, Spalding.

1.2 The Government has placed increasing priority on the need to take full account of the risks associated with flooding at all stages of the planning and development process. This course of action seeks to reduce the future damage to property and risk to life resulting from incidents of flooding. National Planning Policy does not prevent all development in flood risk areas and this would be unsustainable and result in economic stagnation, depriving existing communities of much needed homes, services, employment opportunities etc. It is in the essential interests of the vitality of settlements and for the wider economic and social wellbeing of the community, that development opportunities are not unnecessarily constrained. Accordingly, the aims of this site specific FRA will be as follows:

- Identify and address flood risk issues associated with the development.
- Assess if the project is likely to be affected by flooding from all relevant sources both now and in the future.
- Assess whether the project will increase the flood risk elsewhere.
- Demonstrate that the project is safe and where possible, reduces flood risk.
- Propose measures to deal with the identified effects and risks.

2 Existing Site

- 2.1 The application site is located to the south east of the village of Pinchbeck to the west of Mill Green Road. The site currently comprises 2ha of arable land. The grid reference is TF 23600 29404 (See Figure 1).
- 2.2 The site appears to be relatively flat sitting at levels between 3.1mAoD and 3.5mAoD. The northern and eastern boundaries are abutted by the partly completed new residential development. The southern boundary is defined by a hedgerow providing separation from a commercial site and associated grass paddock located to the south. Residential dwellings which front onto Mill Green Road are located to the west. The site is currently served by a vehicular access from Mill Green Road



Figure 1- Aerial photograph showing the location of the site (site shown by red dot)

- 2.3 The Environment Agency flood map for planning identifies the site as being within Flood Zone 3a.

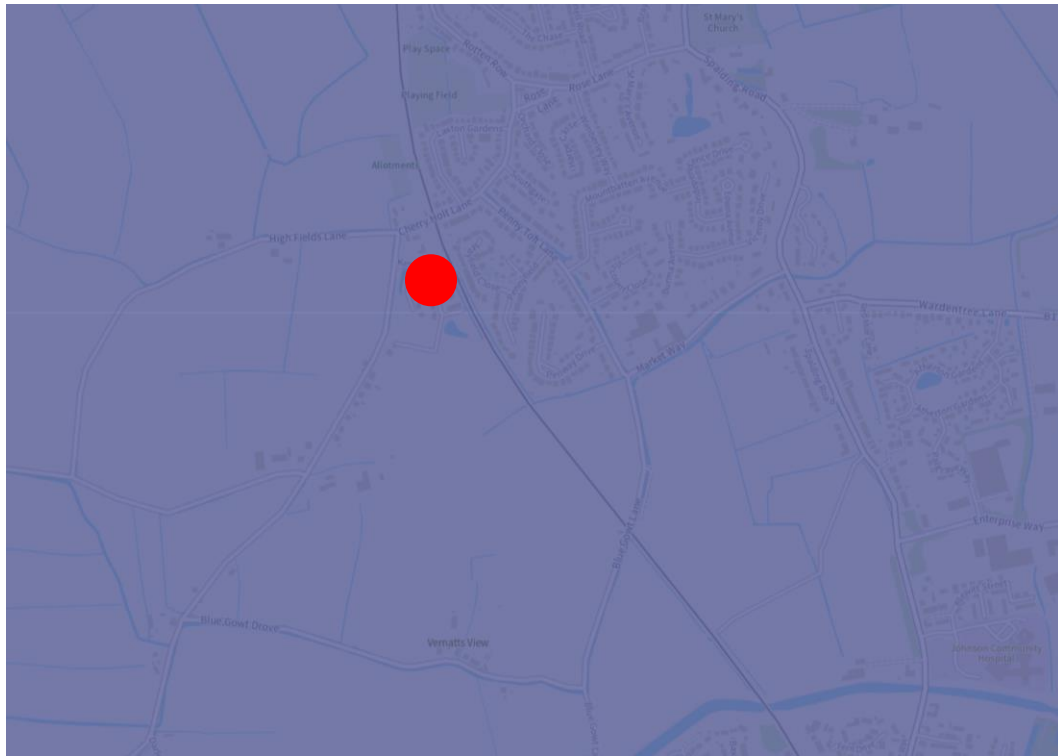


Figure 2- Extract from the Environment Agency flood map for planning showing the location of the site in relation to the flood zones

3 Proposed Scheme

- 3.1 The proposed application seeks outline approval for 10no dwellings with layout and access to be agreed.

4 The Sequential & Exceptions Test

- 4.1 The NPPF requires that proposals should be subject to the Sequential Test, and if necessary, the Exception Test at the planning application stage. The aim of the Sequential Test is to steer new development to areas with the lowest probability of flooding.
- 4.2 The Sequential and Exception Tests are not applicable as the site is subject to an extant planning permission for residential development which was approved in 2018 under outline permission H14-0355-17 and subsequent reserved matters application H14-1162-18. The development has been commenced onsite.

5 Historic Flooding

- 5.1 The Environment Agency have advised that do not have any records of flooding in this area.

6 Assessment of potential sources of flooding and possible impact

6.0 This section presents an assessment of Flood Risk to the development from

- a) external sources; and
- b) potential of the proposed development to cause flood risk elsewhere

a) Assessment of Flood Risk to Development from External Sources

6.1 Assessment of Flood Risk from Fluvial/Tidal Sources

6.1.1 The River Welland, River Glen and Vernatts Drain re all located within 2.5km of the site. These watercourses and large areas of Lincolnshire around The Wash are strongly influenced by coastal flooding. Pinchbeck benefits from a flood defence scheme. The Environment Agency have advised the risk should be judged against the flood risk mitigation required by the South Holland Strategic Flood Risk Assessment (SFRA), these include the sea, main rivers, Internal drainage Board Systems and flood defences.

6.1.2 The SFRA Residual Flood Hazard Maps for the 2115 1% Fluvial/0.5% Tidal event showing that there is no hazard at the proposed site (See Figure 3) as does the 2115 0.1% event (See Figure 4).

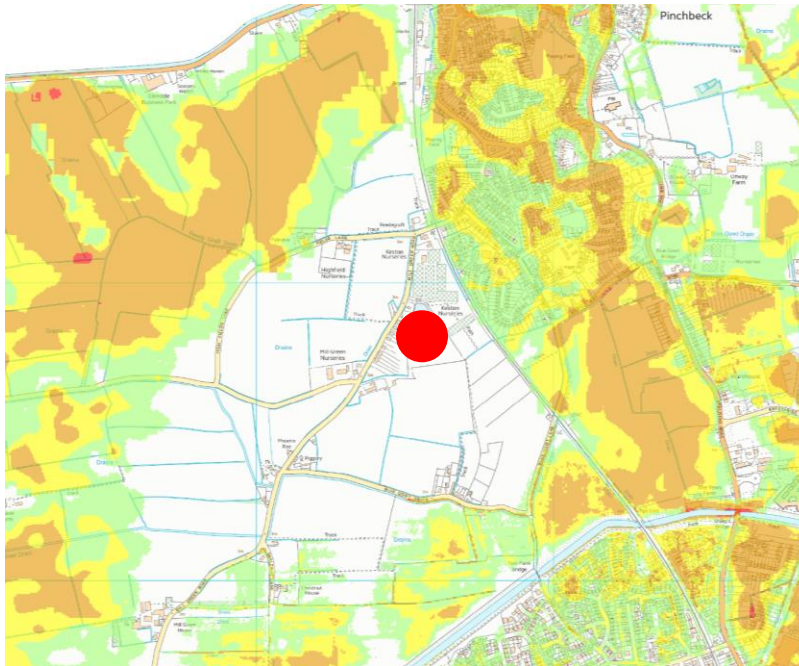


Figure 3- Extract from the SFRA 2115 1% Fluvial/0.5% Tidal event showing that there is no hazard at the proposed site

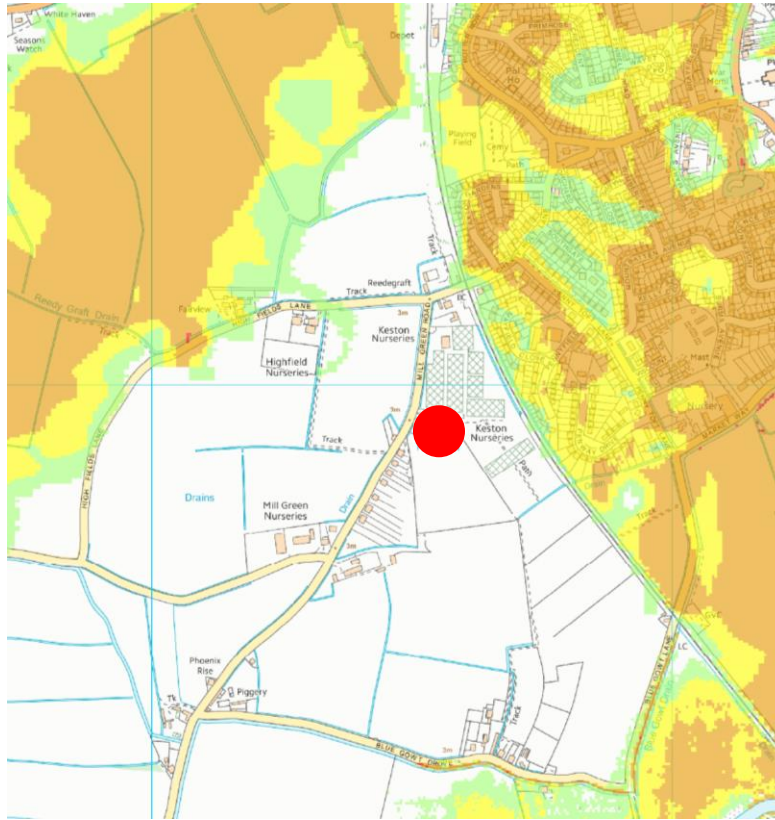


Figure 4- Extract from the SFRA 2115 0.1% event showing that there is no hazard at the proposed site

6.2 Assessment of Flood Risk from Overland Flow (Pluvial)

6.2.1 The Environment Agency Surface Water Flood Map shows that the site is not at risk of surface water flooding.

6.3 Assessment of Flood Risk from Ground Water

6.3.1 The area surrounding the site is not known to suffer from ground water problems.

6.4 Assessment of Flood Risk from Reservoirs

6.4.1 The Environment Agency Risk of Flooding from Reservoirs Map shows the site is not at risk from reservoir flooding.

B) Potential of the Proposed Development to Cause Flood Risk Elsewhere

6.5 In order to mitigate flood risk posed from the site post development adequate control measures have been considered for the site. The proposed development will increase the area of impermeable area within the site. In accordance with recognised guidance there is a hierarchy of surface water from new development should be discharges. This should be as follows

- Infiltration
- Water course
- Public sewer

6.6 A surface water drainage design has been prepared to accompany this application, see Appendix A. The surface water will be safely discharged to a local water course.

Mitigation Measures

6.7 Given that the SFRA identifies the site as not being at risk of flooding it is recommended that finished floor levels are set at least 150mm above esteeming ground level aligned with normal building practices.

6.8 The site will be registered with the Environment Agency's 'Warnings Direct' flood warning system. The Agency provides this flood warning service in England and Wales and supports the public taking action to prepare and respond when these warnings are issued. The warnings are provided for flooding from rivers and the sea but not for localised flash flooding that cannot be predicted, for example from blocked or overloaded sewers or local groundwater flooding. The Agency issues warnings through media on TV and radio weather bulletins and on its website (www.environment-agency.gov.uk/floodline). In areas of particular risk, the Agency can send a warning message direct to people at home or at work by telephone, fax or pager using an Automatic Voice Messaging (AVM) system.

7 Conclusion

7.1 The following conclusions, in relation to the questions posed at the start of this document, are as follows:

7.2 ***Identify and address flood risk issues associated with the proposed development;***

The potential sources of flood risk have been discussed within this report. It has been established that tidal and fluvial flooding is the dominant source of flood risk in the area.

7.3 ***Assess if the project is likely to be affected by flooding from all relevant sources both now and in the future:***

The SFRA hazard mapping shows that there is no risk to the site.

7.4 ***Assess whether the project will increase the flood risk elsewhere:***

A surface water design has been prepared to safely discharge surface water at the agreed rate to a local water course.

7.5 ***Demonstrate the project is safe and where possible reduces flood risk overall and proposes measures to deal with the identified effects and risks:***

Given that the SFRA hazard mapping shows that the site is not at risk from flooding physical mitigation measures are not required. The site should be registered Environment Agency's 'Warnings Direct' flood warning system.

7.6 This report demonstrates the proposed development is compliant with the requirements of the National Planning Policy Framework, and it is considered that planning permission should not be refused on flood risk grounds.