

Flood Risk Scoping Report (Flood Risk Assessment)

Rewiliding Project Including Provision of Woodland,
Construction of a wetland lake and angling lake
and erection of maintenance building

Land adj. Valley Lane
Great Finborough
Stowmarket
Suffolk
IP14 3BD

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Ref: 529 – FRA



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1.0 Introduction

SJB Designs (EA) Ltd has been instructed to prepare a flood risk assessment for the proposed development at Valley Lane Great Finborough on behalf of Mr & Mrs A. Hart.

This report accompanies the full planning application for the proposed works on the site and to consider the impact that flooding may have on the proposed development site.

Following submission of the full planning application the Mid Suffolk planning validation team requested a site specific flood risk assessment as part of the site is impacted by sections that fall within flood zones 2/3. Records indicate that there is a flooding risk along the extreme Easterly boundary of the site. As such planning validation requirements require the relevant site-specific flood risk assessment to be prepared.

The following assessment has been prepared in accordance with the requirements of the National Planning Policy Frameworks (2021) along with other relevant documents such as...

- Communities and Local Government 2007. *Improving the Flood Performance of New Buildings*. HMSO
- National Planning Practice Guidance – Flood Risk and Coastal Change.
- UK Government's climate change allowances guidance.
- Suffolk Local Flood Risk Management Plan dated 2012.
- Suffolk County Council Preliminary Flood Risk Assessment dated 2011.
- Babergh and Mid Suffolk Level 1 Strategic Flood Risk Assessment (SFRA) dated 2020.

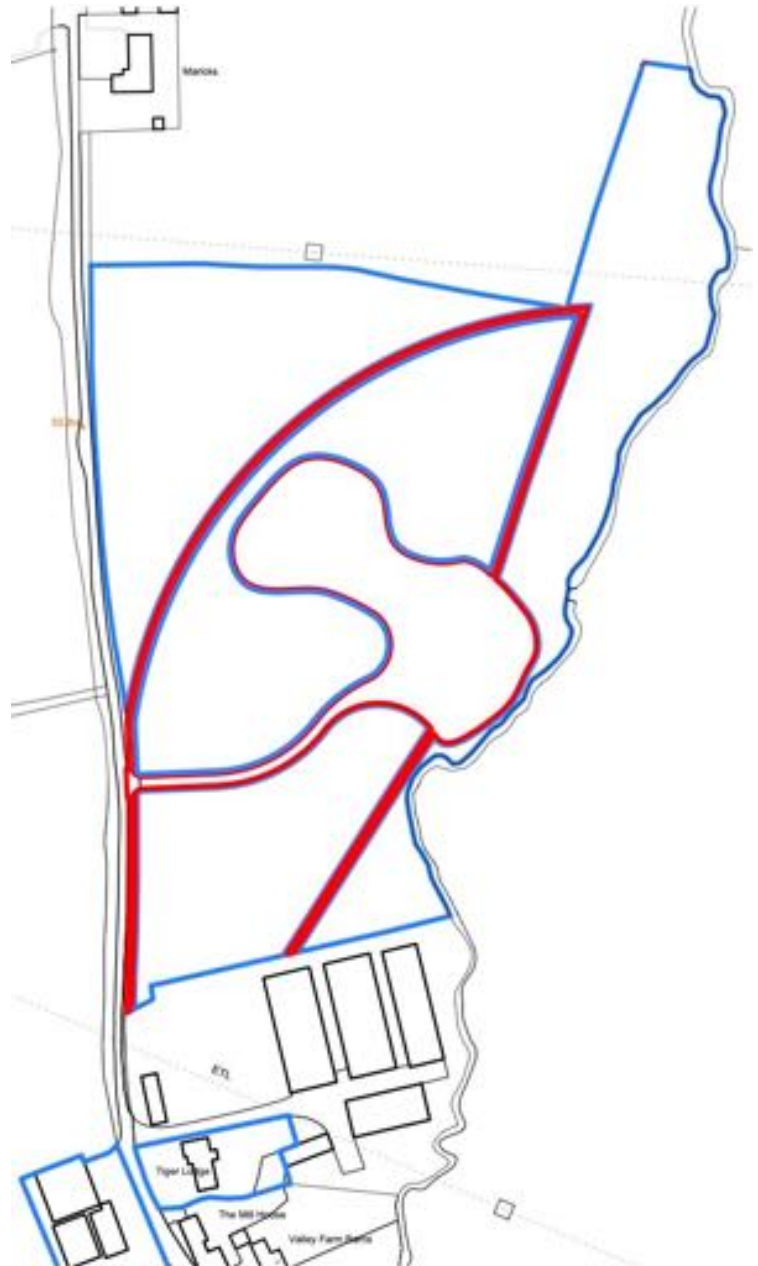
2.0 Proposed Development

The site is located to the East of Valley Lane to the South of the built-up settlement of Great Finborough.

The site is currently vacant land with a previous arable farmland use. This land has been redundant for the past 12 months.

The site has a sloping gradient with ground levels reducing from North to South and from West to East. The levels generally reduce from the road (Valley Lane) level down to the watercourse which runs along the Eastern boundary.

The development proposal is to re-wild the existing land at Valley Lane and to provide a diverse range of habitat for biodiversity consisting of woodland, wild flower meadows, wet land and an angling lake. The scheme also proposes a boat house building that will provide basic welfare facilities and a storage barn for the required maintenance plant.



The planning application red line boundary proposes works localized to the development with other proposed works (not requiring planning approval) being located outside of the red line boundary (set within the blue line).

To facilitate the proposed development an existing footpath will need to be diverted. This is clearly illustrated within the submitted planning application documents.

3.0 Policy

3.1 National Planning Policy Framework (NPPF)

The NPPF sets out the government's national policies on different aspects of land use planning in England in relation to flood risk.

Paragraph 155 - Inappropriate development in areas at risk of flooding should be avoided by directing development away from areas at highest risk (whether existing or future). Where development is necessary in such areas, the development should be made safe for its lifetime without increasing flood risk elsewhere.

Paragraph 159 - If it is not possible for development to be located in zones with a lower risk of flooding (taking into account wider sustainable development objectives), the exception test may have to be applied. The need for the exception test will depend on the potential vulnerability of the site and of the development proposed, in line with the Flood Risk Vulnerability Classification set out in national planning guidance.

3.2 Flood Risk Vulnerability

Flood policy is designed to divert development away from areas at risk of flooding, this is achieved through identifying areas vulnerable to flooding and to establish the severity of the risk with various use classes being more sensitive. Where end use is less vulnerable to flooding and/or the severity of the risk is lower, development may be considered appropriate with means of mitigation.

The NPPF advises *inappropriate development in areas at risk of flooding should be avoided by directing development away from areas at highest risk, but where development is necessary, making it safe without increasing flood risk elsewhere. For these purposes:*

- *“areas at risk of flooding” means land within Flood Zones 2 and 3; or land within Flood Zone 1 which has critical drainage problems and which has been notified to the local planning authority by the Environment Agency;*

- *“flood risk” means risk from all sources of flooding - including from rivers and the sea, directly from rainfall on the ground surface and rising groundwater, overwhelmed sewers and drainage systems, and from reservoirs, canals and lakes and other artificial sources*

The Babergh Mid Suffolk Strategic Flood Risk Assessment has identified that there is a flooding risk on the land at Valley Lane. The risk identified on the land is from surface water. There is no identified flooding risk application site albeit that there is no risk from river/sea, reservoir, groundwater or foul. Appendix A of the SFRA illustrates the areas local to the development site that are at risk of surface water flooding (RoFSW) and specifically Onehouse Ward, there are areas within the owned and immediately adjacent land that fall within each of the relevant categories (30yr, 100yr & 1000yr).

The Environment Agency flood risk offers illustrative tools relative to risk/depth & velocity. The mapping indicates that there are areas of the proposed development site (red line boundary) that fall within the 1 in 1000 year risk of flooding. The modelling data advises that a maximum depth within the application site would be 300mm and between 300 & 900mm elsewhere on the land (not within the red line boundary). This area encroaches further than other flood risk maps indicate however, this does still not have any effect on the proposed development with the built structure and access routes being located further to the West and circa 3m above the water course level and 1.5m above the levels indicated by the 1 in 1000 year model.

The Environment Agency and local authority do not identify any risk within the proposed development site (red line boundary) identified within the submitted documentation by the site location plan although risk is identified within other land owned (blue line boundary), the risk identified within this blue line ownership is both flood zone 2 & 3. There is no development forming part of this application within this area and therefore this constraint is not applicable.



Environment Agency Flood Zone Map (Source: Environment Agency Flood Map for Planning)

As noted above the NPPF (Para. 155) advises that development should not increase flood risk elsewhere. The proposed development proposes 2 no. lakes with differing sizes, depths and uses. Each of these lakes will be man-made with the use of specific liners due to the ground conditions. The British Geological Survey and on site investigations have concluded that the natural ground conditions are NOT conducive for water retention and as such appropriate liners will be required to form the lakes. The proposed lakes are protected by an earth bund surrounding the lower section of the lower lake (eastern most) ensuring that there is no risk of any water escaping from the lakes into the adjacent watercourse. The lakes have been designed with a maximum water level below that of the existing ground level and the earth bund ensuring that there is protection facilitating and increase in water level of over 1.5m.

As noted previously, the site has a sloping gradient falling towards the Eastern most boundary towards the existing watercourse. The slope varies greatly with a cross fall of just over 3m at the southern end increasing to 11m at the northern end. The site in its existing form does not have any means of drainage (other than historic land drains) with the former arable field acting as the main receptor naturally slowing the surface water run-off. The proposals include planting of many trees and wild flower meadows

all of which will act as improved receptors for any potential surface water run off and mitigate against any current risk improving the current situation.

The sloping site ensures that the development site is not at risk of flooding other than the extreme Easterly points where there is no development proposed and this would all fall outside of the red line boundary on the application documents.

The proposed building will be designed to drain to surface water soakaway(s) and therefore this will not increase the risk of flooding elsewhere.

3.3 Planning History

The application site has never been subject to any previous applications with historic mapping indicating continuous use as arable farm land.

4.0 Conclusion

The national planning policy framework definition for 'areas at risk of flooding' relates to areas defined within flood zones 2 or 3 or those within flood zones 1 with critical drainage problems identified by the Environment Agency. The development (red line) does not fall within either flood zone 2 or 3.

The site has a significant cross fall away from the road to the watercourse. Whilst risk has been identified on the land (not the application site) this is limited to the Easterly edge of the site and will have no adverse effect on the proposed development.

The 1 in 1000 year Environment Agency model indicates that a portion of the application site is at risk of flooding (Low Risk: Depth). The negligible risk to this area of the site does not impose any risk to the proposed development with all development proposed in this area not affected by flood waters.

The creation of the 2 lakes will not increase the risk of flooding elsewhere, the proposed bunding to the Eastern most edge will ensure that the lake level can rise significantly above the designed water level (1.5m).

To conclude the proposed development will not cause any potential flooding risk elsewhere and nor will the proposed development be at risk from flooding.

5.0 Appendix A

SFRA Onehouse Ward RoFSW (Risk of Flood – Surface Water)

