

Design statement for Backwater Creation next to the River Gipping at Grindle Farm, Sproughton

General statement of design:

A new backwater habitat will be created at Grindle Farm as part of a habitat restoration project, funded by the Environment Agency.

A small backwater will be created at TM 12333 45465, which will cover an area of approximately 0.02ha. The backwater will be connected to the River Gipping at approximately TM 12341 45458 via a channel. However, the exact position of the connection may need to change slightly subject to a water vole survey prior to works.

The ground levels at the point where the channel will join the river will be lowered by a maximum of 50cm. The backwater will be created in an already existing depression. The backwater will be dug to be a maximum of 1m deep with varying depths and a gentle gradient. The resulting spoil will be spread thinly in the surrounding area.

Sheep fencing will be installed around the perimeter of the backwater, which will protect the habitat from grazing livestock. One section of the backwater will be left clear of fencing to provide an access point.

A bespoke flood risk activity permit has been granted from the Environment Agency to do this work.

Indicative design images:

The images below give an indication of the design of the proposed backwater at Grindle Farm, showing the size, shape, and varying depths.



Figure 1. A map showing the proposed backwater at Grindle Farm

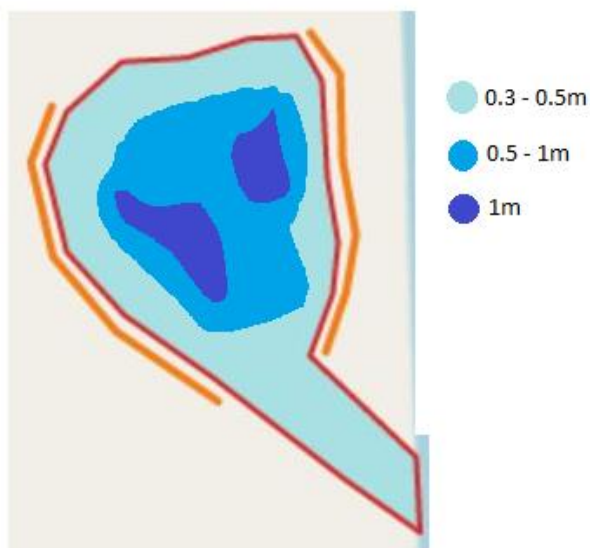


Figure 2. The proposed design of the backwater at Grindle Farm.

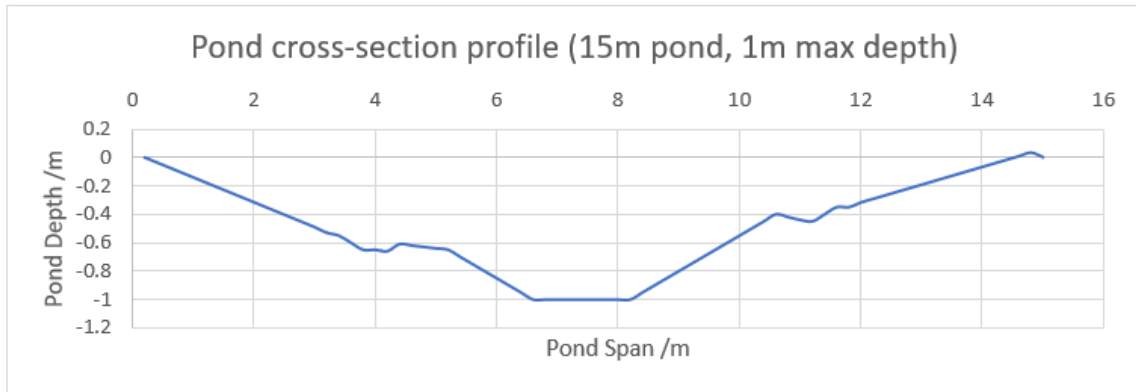


Figure 3. The proposed cross section of the pond area of the backwater at Grindle Farm.

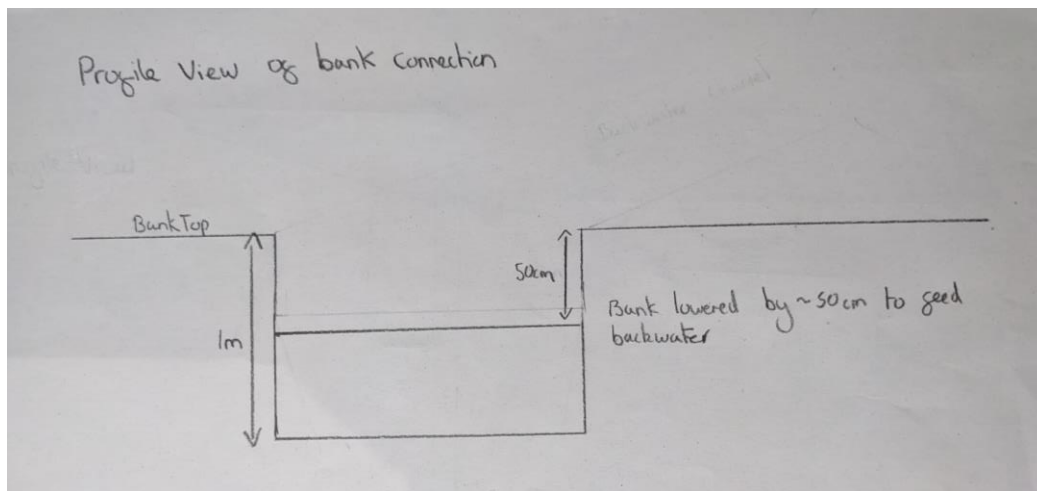


Figure 4. A profile view of the point at which the backwater channel will join with the River Gipping.

Morphology and Flood Risk

Information provided from the Environment Agency webpages indicates that most of the project site, including the proposed area for the new backwater, is within Flood Zone 3 (see map below). Therefore, we have provided a flood risk assessment (FRA) with this application.

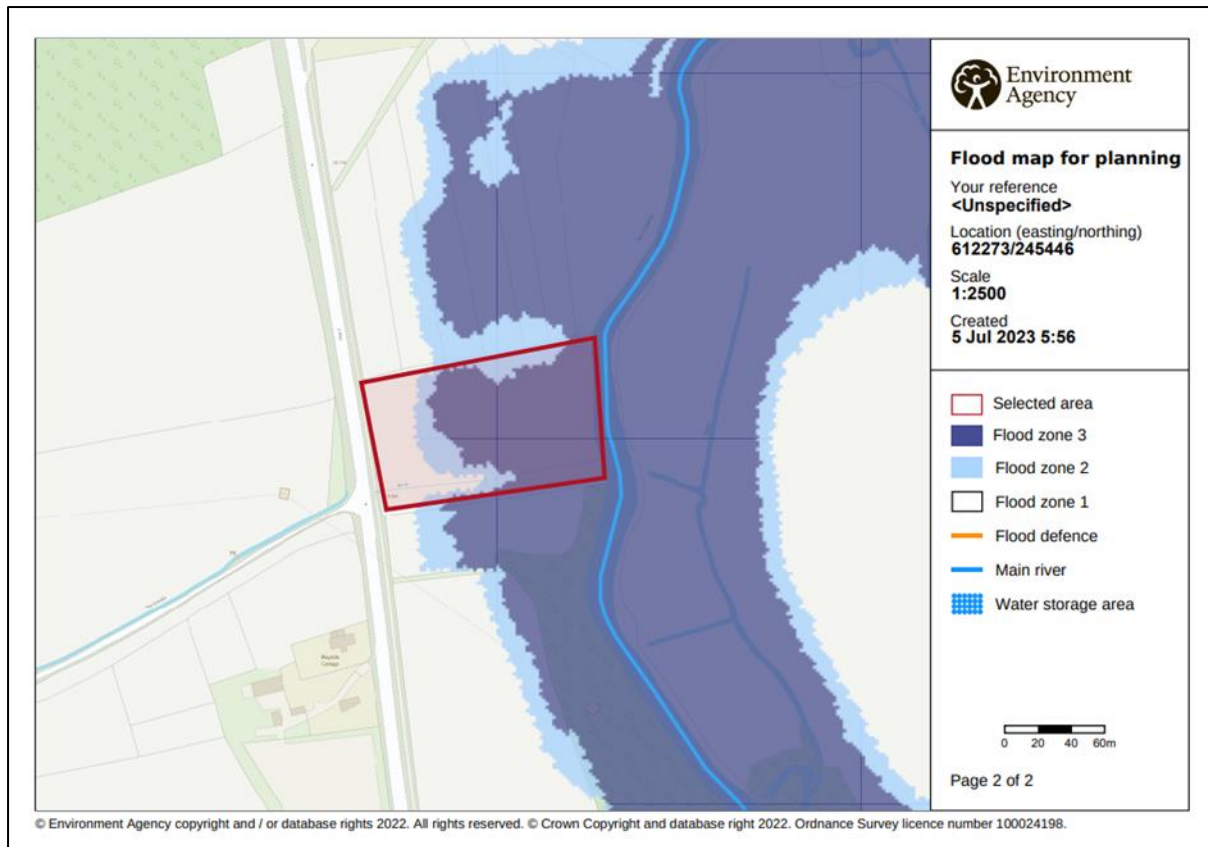


Figure 5. Environment Agency flood map of Grindle Farm and surrounding area. The red outline shows the project site.

Ecological gain

The creation of a backwater habitat will be a significant contribution to the flora and fauna of the area, and it is likely that the newly created habitat will quickly colonize. This project will significantly enhance the ecological value of the site and improve the habitat for fish, flora, invertebrates, and key species such as the water vole.

Method

- Prior to works a water vole survey will be carried out by SWT ecologists and any water vole burrows will be marked. If burrows are found within 5m of where the backwater will join the River Gipping, the location of this point will be moved by 5m up or downstream.
- The backwater will be dug using a tracked excavator.
- The pond area of the backwater will be dug first, followed by the connection to the River Gipping.

- The resulting spoil will be spread thinly in the surrounding area.
- Fencing will be erected after the backwater is created.
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Aerial photo showing the proposed backwater.



For any further information on the design intent for these ponds, please contact Alice Wickman at the Suffolk Wildlife Trust.

Alice Wickman

Wilder Rivers Adviser

Alice.wickman@suffolkwildlifetrust.org

07826897009