

# Barton to New Holland Tidal Flood Alleviation Scheme

## Ecology, Biodiversity, and the Natural Environment



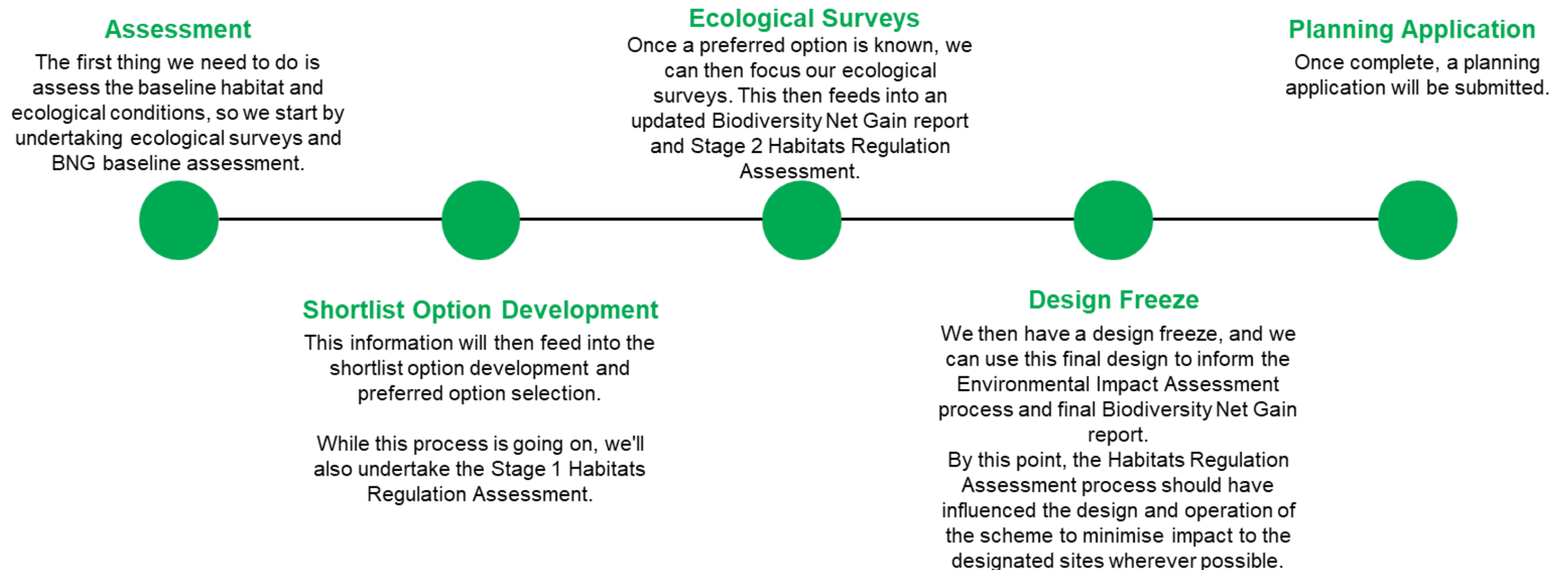
Since the start of our project, we have been committed to having minimal impact on habitats biodiversity in the Barton to New Holland area, especially given its rich natural environment. The area falls within four designated sites including the Humber Estuary Special Area of Conservation (SAC), the Humber Estuary Special Protection Area (SPA), the Humber Estuary Ramsar and the Humber Estuary Site of Special Scientific Interest (SSSI), all of which are home to numerous habitats and protected species.

To ensure the protection and preservation of the area's biodiversity, our teams have undertaken several steps- including conducting ecological surveys and exploring unique techniques that can help us design options that could contribute to increased biodiversity net gain.

## Ecological Surveys

Our environmental surveys have been instrumental in helping us identify environmental constraints which, along with other factors, including affordability, adaptability, and modelling results, help inform our short list of options. Some of the surveys we have conducted include bird surveys, bat surveys, and intertidal botanical and waterbody surveys. These surveys are used to identify any key species living and breeding within the project area. The data from these surveys will help us identify areas of sensitivity, better understand how potential options may impact/interact with the local wildlife and how we could adapt our options to protect their habitats.

### Our Process:





**Some of our aims through these surveys include:**

- To provide baseline data on the gatherings, numbers, and distribution of breeding and non-breeding (including wintering and passage) birds within the site.
- To provide data on the use of the site by qualifying species of designated sites.
- To highlight any key species of value that may influence the design of the project.

**What did we find during our Bird Surveys?**

Over the course of our bird surveys, we identified 53 target species, 9 of which are red listed and endangered in the UK and 28 are amber listed! Some truly remarkable finds include:



14 Bittern Territories



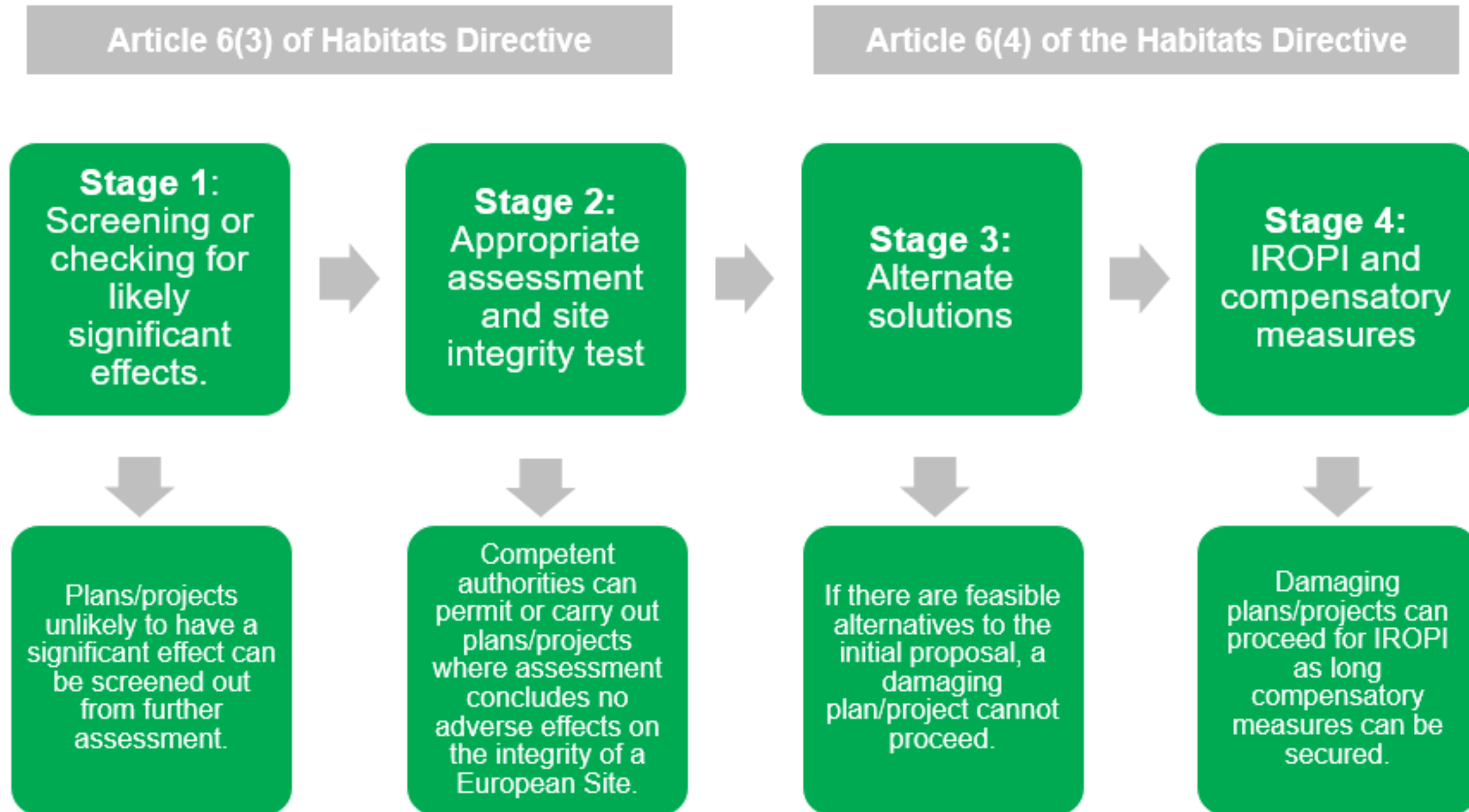
4 Marsh Harrier nests



83 Cetti's Warbler territories

# Habitats Regulations Assessment

A Habitats Regulations Assessment (HRA) is a process that determines whether a development could negatively impact a designated site. Stage 1, or the 'screening' stage is a filter intended to identify whether a development requires further assessment, whereas stage 2, the 'appropriate assessment' looks to identify suitable actions to avoid, reduce or mitigate potential impacts.





# Biodiversity Net Gain

Biodiversity Net Gain or BNG is a government strategy, developed to ensure that natural habitats are left in a measurably better state than they were before development. This strategy was brought in to counteract any loss or degradation of habitat caused by development and requires all developers to deliver 10% BNG. The Environment Agency has committed to deliver at least 20% Biodiversity Net Gain on all our projects and schemes from 2023.

There are several ways that we can deliver Biodiversity Net Gain, through the delivery of new habitats, including green spaces, planting trees and restoring damaged or lost habitats. At our September 2023 Resilience Advisory Group, we asked members to use maps of the local area to identify potential approaches and areas suitable for habitat development. The group identified over 36 areas which are now being reviewed by our natural environment and sustainability team.



Intertidal flats



Woodland



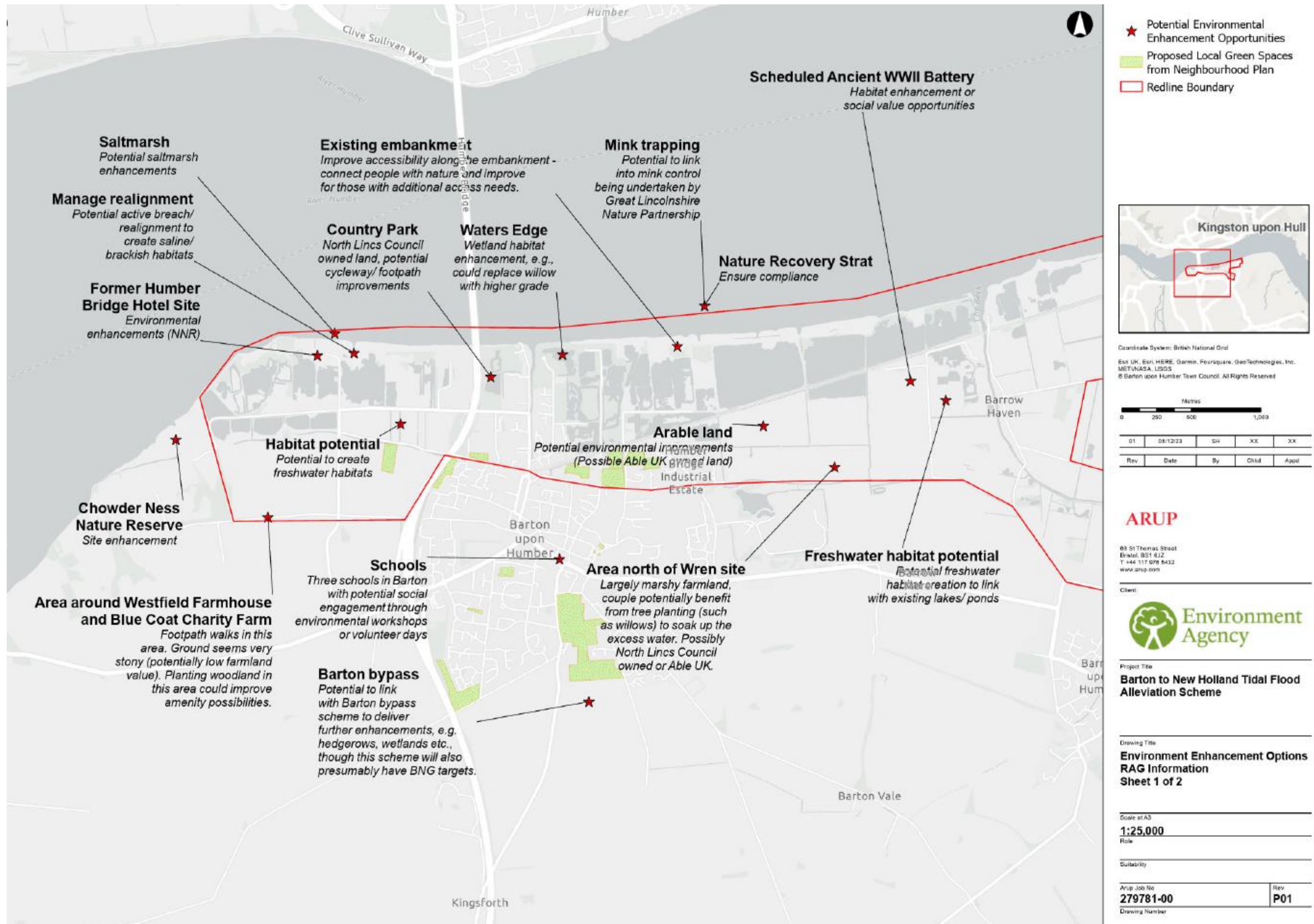
Wetlands

Our Biodiversity Net Gain assessment, the activities undertaken in our Resident Advisory Group meetings and the ecological surveys that we have undertaken not only allow us to mitigate any impacts on the environment, but also allow us to identify strategic environmental enhancement opportunities. These are recorded and captured in our strategic environmental opportunities' matrix, which we will continue to update throughout design and construction, to take forward environmental enhancements whenever possible.

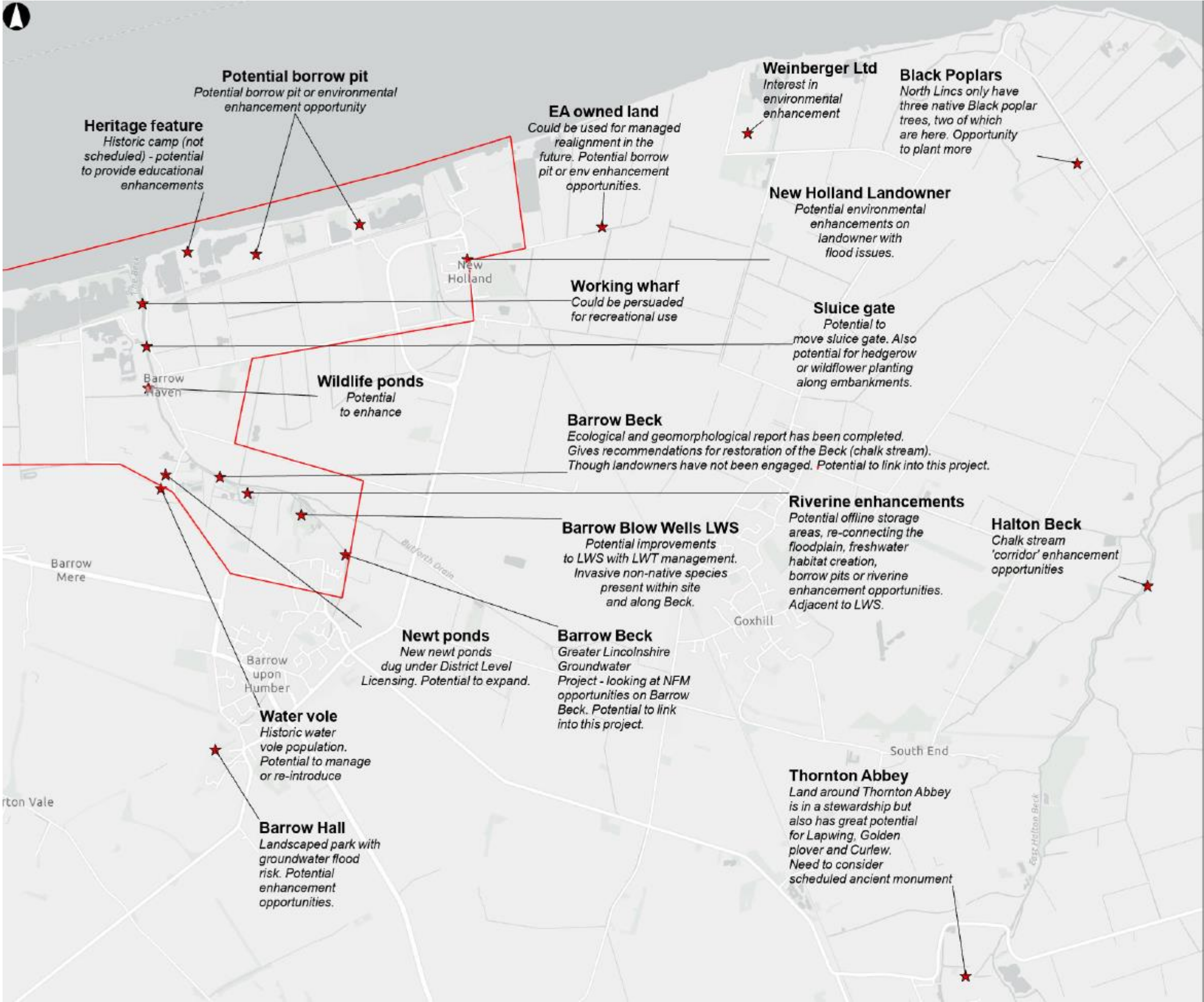
Our Potential Environmental Enhancement Opportunities maps show a range of potential environmental enhancement opportunities which could be delivered as part of this project. These opportunities have been developed through discussions with local stakeholders, Natural England and North Lincolnshire Council, as well as our own survey results.



# Potential Environmental Enhancement Opportunities







- ★ Potential Environmental Enhancement Opportunities
- Proposed Local Green Spaces from Neighbourhood Plan
- Redline Boundary



Coordinate System: British National Grid  
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Rev	Date	By	Chkd	Appd
01	05/12/23	SH	XX	XX

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**Barton to New Holland Tidal Flood Alleviation Scheme**

Drawing Title:  
**Environment Enhancement Options  
 RAG Information  
 Sheet 2 of 2**

Scale at A3:  
**1:25,000**  
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