

A LANDSCAPE OF GREAT CHANGE

// A VERY BRIEF SITE HISTORY



To understand the ecology of the Site we first need to understand the history of the Site. As can be seen the gravel workings with all their incumbent disturbance not only generated ecological value but the Colne Valley SSSI was designated whilst an operational quarry.

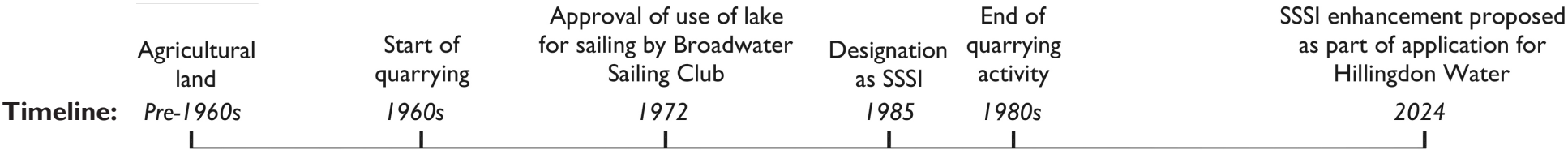
The first photograph below shows that prior to gravel extraction and processing the site was open and under agriculture.

Broadwater Lakes’ designation highlights the tolerance of water birds to visual and noise disturbance.

The currently visible and surveyed extent of concrete hard standing is a relic to these operations and anticipated to be of sufficient depth and strength for fully gravel loaded lorries.

The hardstanding area is used for the location of proposed buildings so as minimise any potential impacts on woodland on the peninsula.

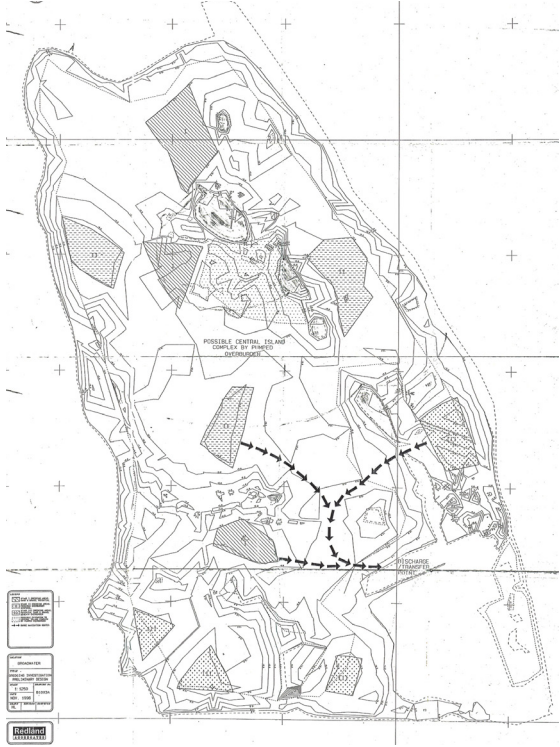
Due to the depth of concrete, colonisation by plants has been limited with predominately stunted and unstable growth of shrubs and trees.



View over peninsula during gravel extraction



1945 - before quarrying



1996 - quarry workings plan



1999 - after cessation of gravel processing



1999 - derelict peninsula



2024 - derelict peninsula

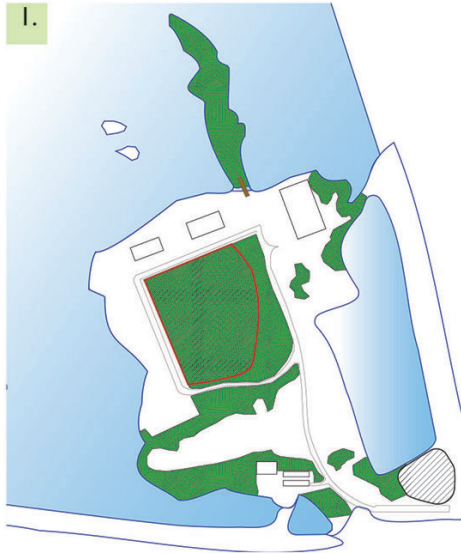




From initial inception at Broadwater Lakes, the masterplan has undergone a number of evolutionary steps, reducing its footprint and potential ecological impact with each iteration.

The current masterplan as guided by the responses to stakeholder comments and additional data can be seen to be significantly reduced in terms of the proposed interventions both on the peninsula and in the lake.

Adjacent plans show the previous iterations.



At concept design stage a masterplan was developed as a 'graphic brief' that set out all the required components of this facility including both HOAC and Broadwater Lakes sailing club.

This layout was mindfully prepared with the understanding that it would be developed with the availability of topographic, bathymetric, ecological and arboricultural information.



Once the first ecological surveys were completed, it was established that the wet woodland in the heart and to the west of the peninsula was of the greatest sensitivity and that a strategy should be developed whereby the required operation with the greatest land requirements should avoid any woodland and should be located on land reclaimed from the lake.

This reclaimed land could also be used to create new habitats to mitigate any potential habitat loss and work towards enhancing the overall ecological assets of the SSSI.



This evolved through with more detailed ecological survey information, a greater understanding of the degree of ecological disturbance that existing SSSI is subjected to, and the development of a mitigation strategy.

A full suite of ecological mitigation measures were developed with an overarching strategy of creating screened places of refuge around the lake (with the main zone to the southwest of Broadwater Lake), into which water birds would settle if disturbed in the main body of water. This relocated the reclaimed land from the west of the peninsula, away from the most sensitive wet woodland and lake refuge area, to the longer northern shore of the peninsula.



Responding to initial feedback from stakeholders, and an arboricultural condition report, buildings were moved north to avoid existing trees and 50m of open water sought to separate mainland and islands so as to minimise predation risks.



Response to AVR views to maintain the openness of the greenbelt through redesigning the extended peninsular to minimise the visual loss of open water.



Response to first runs of the BNG metric with a reduction in the area of made ground so to reduce the loss of open water.

Sight lines were created from the Old Orchard Inn viewpoint such that the view would maximise the visible open water and maintain the sense of openness of the Greenbelt.