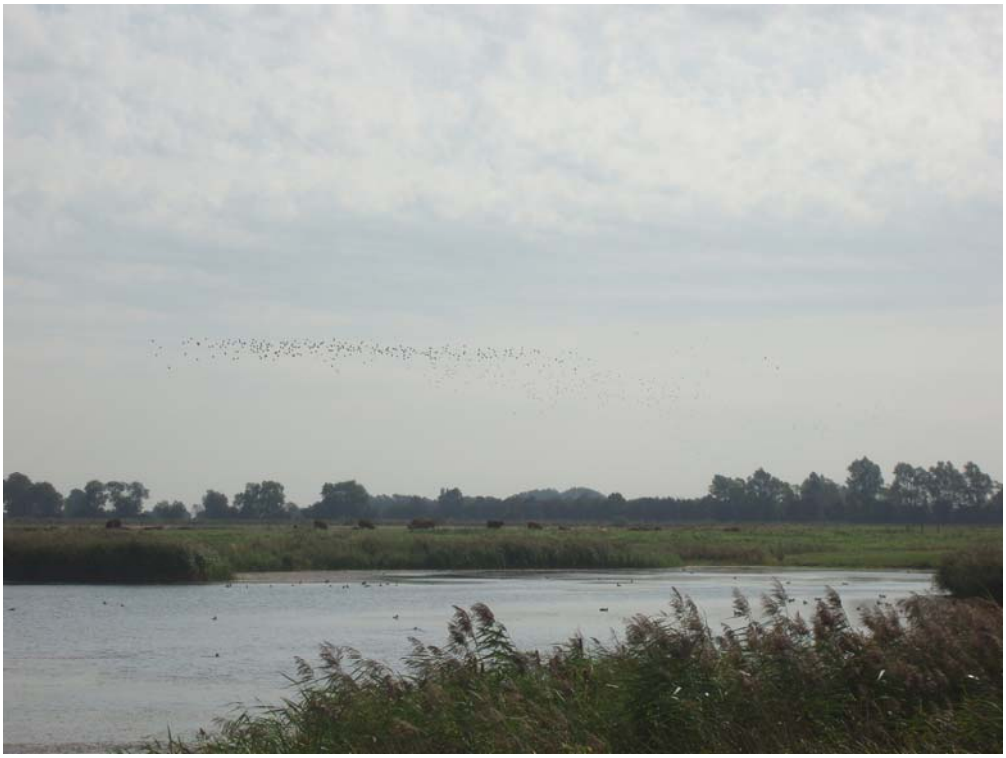
Needingworth

Site Biodiversity Action Plan

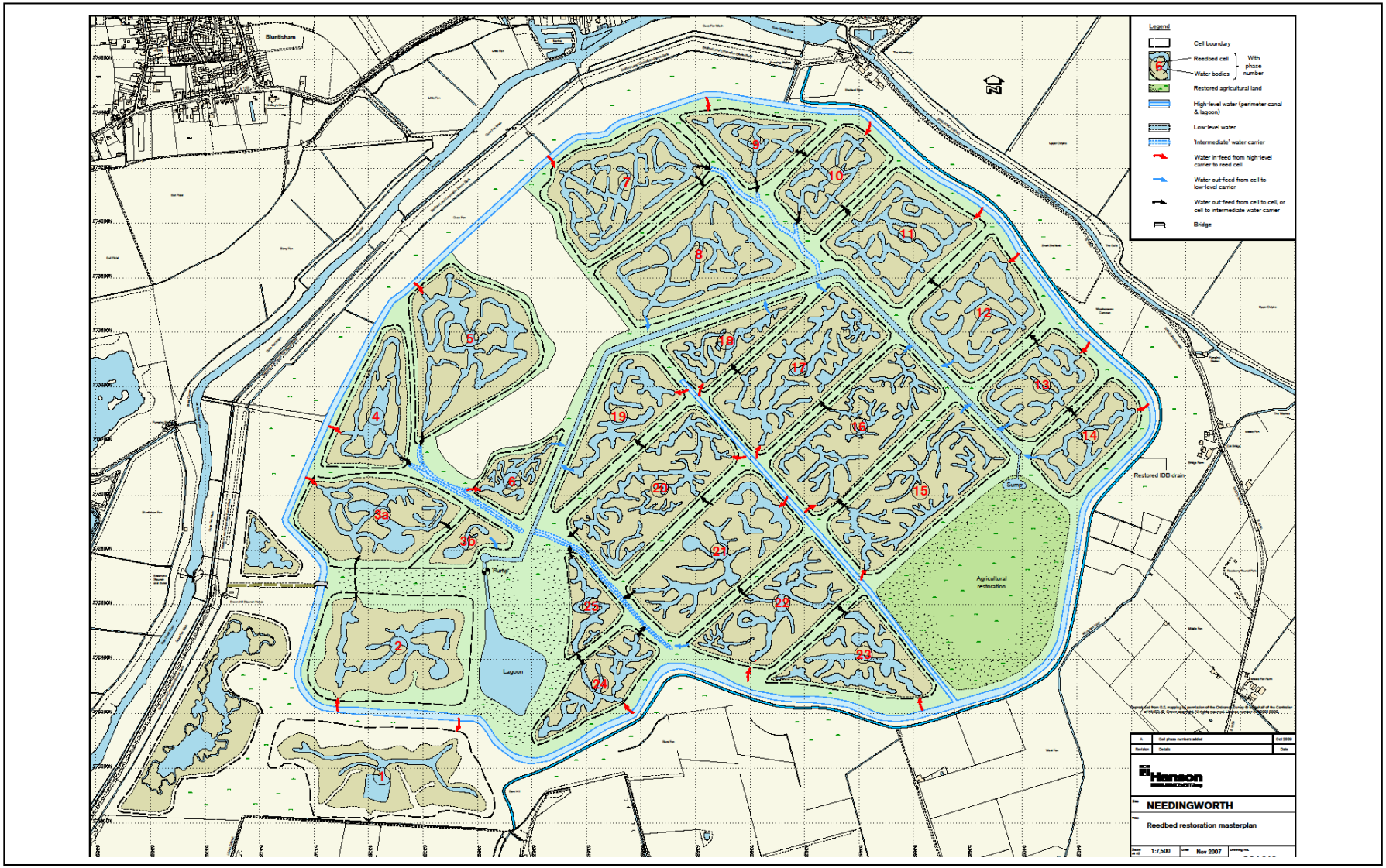


Prepared: 2009	Updated: 2013

Site Information- Needingworth

Site Name and Location (Grid Ref.)	Needingworth Quarry, Cambridgeshire (TL 349730)
Hanson Company	HANSON AGGREGATES – CENTRAL
BAP(s) that will be targeted	National BAP Cambridgeshire BAP
Habitat(s) to be developed	Reedbed Standing open water and canals Wetlands (Fen, grazing marsh, reedswamp) Broadleaved Woodland
BAP species to be encouraged	Bittern Water Vole
Designated Natural Area	West Anglian Plain
Background and site description	Needingworth Quarry is the largest quarry in East Anglia, working a fluvial sand and gravel deposit in the Great Ouse valley. The mineral extraction site is on the eastern side of the river and mineral is transported across to a processing plant on the western side of the river by conveyor. The site is being restored to create a 700 hectare wetland nature reserve in partnership with the RSPB, which will include 460 hectares of new reedbed, constructed in phases as the quarrying of the site progresses. As restoration phases are completed the land is sold to the RSPB for their on-going management. The remaining areas of the nature reserve will comprise a matrix of high-grade agriculture, broadleaved woodland, scrub and wetland habitats including fen, reedswamp and grazing marsh. The site is home to a number of protected species including badger, bat, water vole and barn owl.
National Designations (SSSI, SAC, SPAs, RAMSARs and NPs) within 500m	None within 500m. Berry fen SSSI and Ouse Washes Ramsar site lie within 3kms.
Resource Requirements- comment on cost if appropriate	Partnership working with RSPB including annual meetings. Pre-strip ecological surveys and protection of existing habitats are a requirement of planning conditions and legislation. Restoration works are part of an approved scheme.
Contribution to biodiversity	The site will create the largest reedbed site in the UK – a national priority habitat and will hopefully attract a population of breeding bittern. The other areas of restoration will create habitat capable of supporting other BAP target and non-target species including Water Vole, Otter, Bearded Tit, Cetti's Warbler and Barn Owl.
Partners and Local initiatives	RSPB
Other documents supporting the site BAP	Hanson – RSPB Wetland Project Agreement

Site Layout


Legend
Cell boundary
Reedbed cell
Water bodies
With phase number
Restored agricultural land
High level water (perimeter canal & lagoon)
Low-level water
'Intermediate' water carrier
Water in-feed from high level carrier to reed cell
Water out-feed from cell to low level carrier
Water out-feed from cell to cell, or cell to intermediate water carrier
Bridge
Bluntisham
Lagoon
Agricultural restoration
Restored IDB drain
Sump
Hurst
Hanson
NEEDINGWORTH
Reedbed restoration masterplan
1:7,500
Nov 2007

Action Plan

Item No.	Objective	Biodiversity Feature	Targets	Tasks	Assessing Indicator	Responsible Person	Timescale (Completion)
1	Restore important habitats.	(A) Reedbed.	Create 460 ha of reedbed.	Design and construct reedbeds with overburden and soils from stripping operations. Reedbeds to be constructed as inter-linked cells of approx. 25 ha each with reed edge, reed area and open water designed and constructed in agreement with RSPB. Cells to be inoculated with reeds by planting, rhizome spreading or other approved establishment method.	Area of reedbed handed across to RSPB.	Landscape Architect.	Report land area handed across annually for life of site (18 years).
2	Restore important habitats.	(B) Standing open water and canals.	Create 17 km of water channels and 50 ha open water.	Design and construct reedbed water management channels including high and low-level carriers and associated feeder channels, all in accordance with approved scheme and incorporating design features to improve biodiversity value where possible.	Length of water channels constructed (m). Area of open water created (ha).	Landscape Architect.	Report annually for life of site.
3	Restore important habitats.	(C) Wetland (Fen, Grazing Marsh, Reedswamp).	Create 60 ha of marginal wetland around reedbeds and water bodies.	Design and restore reedbed marginal areas (“blue zone”). Landforming and levels to allow seasonal inundation by water to allow natural wetland habitat development. Grazing areas to be restored	Wetland margins created – land area (ha).	Landscape Architect.	Report annually for life of site.

				by cultivation and seeding.			
4	Restore important habitats.	(D) Broadleaved woodland	Plant 4 ha new broadleaved woodland.	In accordance with outline restoration scheme, design and plant woodland.	Woodland area planted (ha).	Landscape Architect.	1ha every 5 years.
5	Consult with BAP partner organisations.	Reedbed and whole wetland site restoration.	Maintain regular contact with RSPB. Two meetings per year.	Continue design, implementation and aftercare consultation with RSPB.	Number of meetings between Hanson and RSPB per year.	Landscape Architect.	Two per year for life of site (18 years).
6	Encourage rare species.	Bittern.	Attract booming males and nesting pairs to site.	Through construction and establishment of reedbed (target 1A), and associated open water features (target 1B), create conditions suitable for colonisation by Bittern. RSPB Site Manager to monitor Bittern numbers on site annually.	Number of booming males. Number of nesting pairs.	RSPB Site Manager, Landscape Architect.	Annual report for life of site.
7	Encourage rare species	Water Vole and Otter	Species noted on site either by site staff, RSPB site staff or third parties.	Through construction and establishment of wetland features, channels and open water, as per target item 1, create suitable conditions for colonisation of site by water vole and otter, as indicators of general wetland restoration success.	Individuals spotted on site.	RSPB Site Manager, Hanson Site Staff, Landscape Architect.	Annual report for life of site.
8	Protect species.	Bat, Barn Owl	Maintain existing owl and bat boxes.	Monitor condition of owl and bat boxes on site and replace/repair as necessary. Consider opportunities for additional features during site development.	Boxes monitored annually.	Hanson Site Manager, RSPB Site Manager, Landscape Architect.	Annual report for life of site.