

1 Reed Beds

Reed beds are wet habitats dominated by Common reed, a perennial and flood tolerant grass that grows to over 2m in height. Reedbeds provide valuable habitat for birds in the UK and would also help to prevent bank-side erosion whilst aiding filtration of water run-off from adjacent land.

- Reedbeds require the following criteria**
- Reliable water supply with some flow, up to 300m depth in spring
 - Sufficient low level ground with very shallow gradients
 - Access for management such as harvesting/cutting
 - An available, vigorous reed source

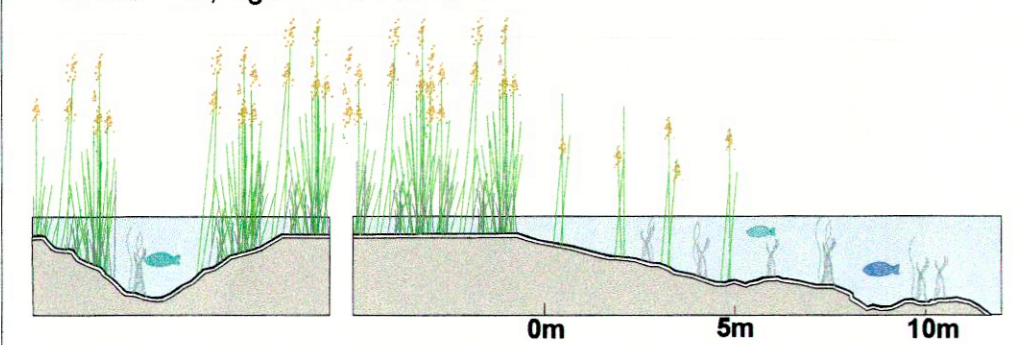
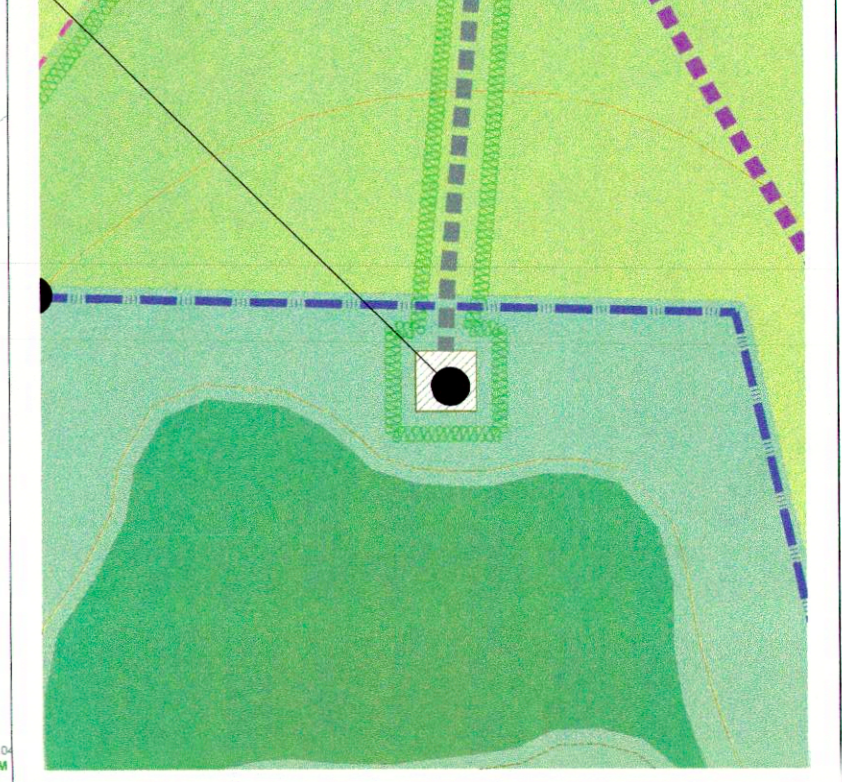


Image 1, above, illustrates gentle gradients between open water and wet reed zones (1:10 to 1:15)

Management
Reedbed management should be aimed at increasing structure and diversity and preventing the invasion of scrub. Reedbeds in deep water need no management but in most cases, a reed bed needs cutting, grazing or management each year to maintain a mosaic of vegetation at different stages of growth.

2 Bird Watching Area

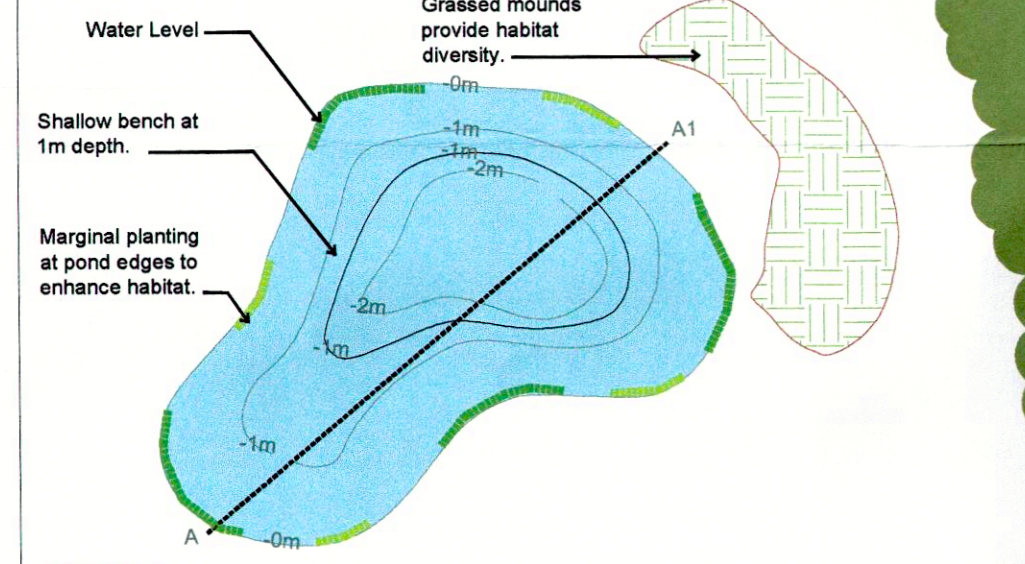
Proposed viewing area and surrounding hedgerow.
Scale 1:1000



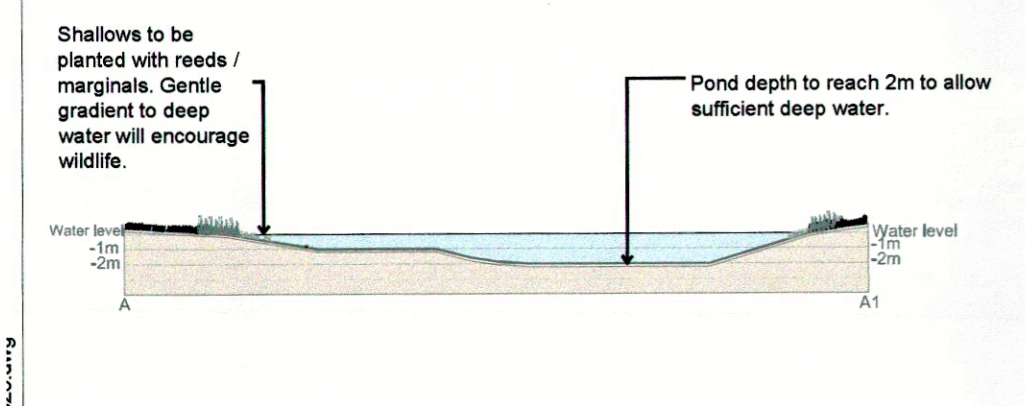
4 Ponds

- Ponds should have at least one shallow profile at the edge to allow for growth of marginal vegetation and to create a varied profile.
- The total pond depth should be 2m to ensure year round water and sufficient breeding opportunities.
- Terrestrial (on land) habitat features such as hibernaculae are important habitat features that can be provided adjacent to the ponds.

Typical Plan of Wildlife Pond and Terrestrial Habitat. Scale 1:500.



Typical Section Through Pond. Scale 1:500

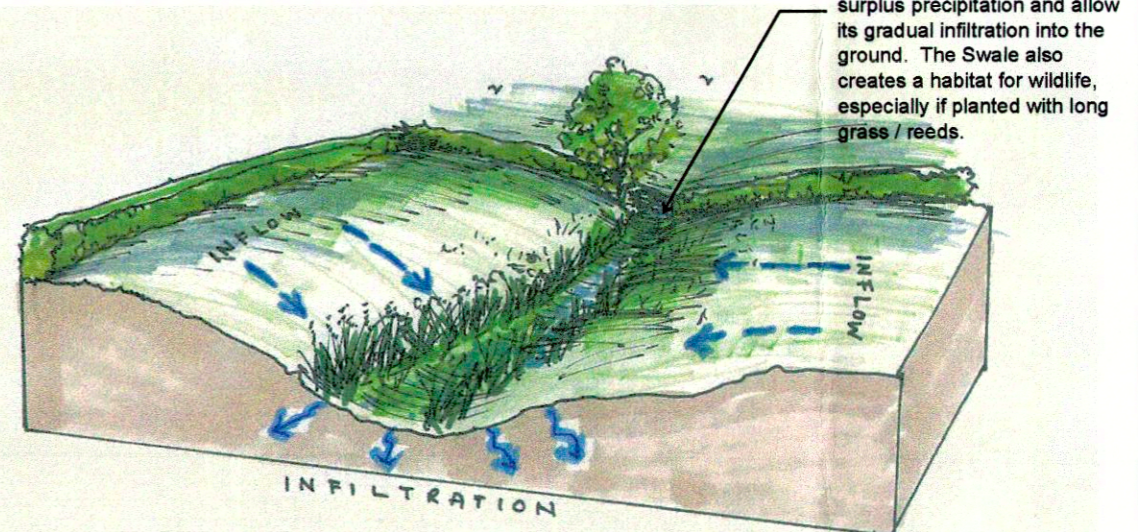


3 Swales and Ditches

Swales and ditches are important drainage features and also provide opportunities for wildlife. The images below help to illustrate how swales could be accommodated within the restored quarry landscape. See Image 5 and 6.



Illustration of a Swale within a rural landscape



LEGEND

APPLICATION BOUNDARY	EXISTING PONDS REINSTATED (2 OFF-SITE & 1 ON-SITE)	PROPOSED REEDBED	RESTORED MG9 GRASSLAND	PROPOSED PUBLIC FOOTPATH DIVERSION ROUTE
PROPOSED NEW HEDGEROWS AND TREES	LOCATIONS OF NEW PONDS FOR ECOLOGICAL BENEFIT	EXISTING DITCH LINE	EXISTING AGRICULTURAL LAND	EXISTING CONTOUR (m AOD)
REINSTATED HEDGELINE & PROPOSED TREES	PROPOSED LAKE (WATER <1.0m DEEP/>1.0m DEEP)	REINSTATED DITCH LINE/ PROPOSED DITCH	RESTORED AGRICULTURAL LAND	PROPOSED CONTOUR (m AOD)
EXISTING POND RETAINED (1 NO. POND WITHIN RED LINE)	PROPOSED SCRAPE/ WET MG4 GRASSLAND	PROPOSED SWALE	EXISTING PUBLIC FOOTPATHS & BRIDLEWAYS TO BE RETAINED	FOOTPRINT OF SOIL BUND/ OVERBURDEN STORAGE

Scale: 1:2,500 @ A1 Date: FEBRUARY 2015

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