

## Site Selection criteria

The rationale for choosing the river valleys on which to focus the project was largely defined by the distribution of current extraction, and also by the protection afforded to a number of rivers (e.g. the river Stour) by the Dedham Vale and Suffolk Coasts and Heath AONB's (see section xxxx). This meant that only the rivers in the north and west of the county were subject to current or future applications. Within the broader framework of the county, smaller areas had to be chosen for the characterisation study, and each sample area was selected using a number of criteria. The sites were chosen for suitability based on the availability of archive resources, access to the floodplains, the presence of previous palaeoenvironmental evidence, and the nearness to current, recent or past gravel extraction.

Resources include the availability of Lidar tiles for river valley areas of Suffolk and this was checked against a Map provided by the Environment Agency through their role as a project stake holder. Once the lidar tiles had been identified, these were then assessed against coverage of current Aerial Photographs and past Aerial Photographs. Suffolk County Council for example has a near total coverage of vertical colour high resolution AP's from 1999, however the black and white series dating from 1945 provides only partial coverage. Having both was important for providing temporal depth to the study of floodplain change and for the mapping of potential palaeochannels.

The access question was considered important when allowing for the short timeframe of the project. Reliable and easily approachable landowner targets were required to allow for the fieldwork to be undertaken. Suffolk County Council Archaeology Service was able to supply some contact information, as part of their commitment using information held for the purpose of providing countryside and archaeological advice. This included landowners such as the County Farm Estates, the Suffolk Wildlife Trust, other conservation organisations, and single owner estates and holdings. The Suffolk branch of the Farming and Wildlife Advisory Group were also consulted with regards to access, because of the extensive knowledge of the individual advisors, and because the nature of their work takes them across the county as a whole.

As part of the commitment to the core ALSF objectives and the aims of the project design relating this project to the extraction of aggregates in Suffolk, the areas were selected based on the closeness of extraction sites. The type of aggregates and extractive industries in the region are varied, and in the past have included turbaries on the coast, marl (a chalky-clay used for fertiliser), crag (a sand and shell based material used as a field dressing) brick earth, clay, and flints. More recently this has included larger scale aggregates quarries, focusing on chalk, sand and gravel. Using information provided by the Aggregates Landscape of Suffolk Project (ALSF pnumXXXX) (See figure 1) current permission and active quarries were plotted alongside sites previously targeted for extraction. Targets were identified close to these areas, however not so close so that palaeoenvironmental deposits could have become disturbed or adversely affected by water table fluctuation and draw down. Areas of previous past extraction were plotted by the Aggregates landscape project using map regression analysis and focus of the industry on river valley locations is clear. The selection criteria are shown in brief below.

Site Location	River	AP coverage		LiDAR	Previous palaeoenvironmental Work	Aggregates History	Typical archaeology from the river valley	Access
		B & W	Colour					
Beccles	Waveney	✓ (1945 series)	✓ (1999 series)	✓	<ol style="list-style-type: none"> <li>1) Beccles Iron Age post alignment, on site coring and master sequence taken in April 2006, just prior to the beginning of the SRV Project</li> <li>2) Palaeoenvironmental assessment of Waveney Valley, focused to the east between Lowestoft and Great Yarmouth (Alderton, 1983)</li> </ol>	<ol style="list-style-type: none"> <li>1) C19 Sand quarrying from Beccles Common, and Worlingham, with in 1.5 m of the site</li> <li>2) In Norfolk large quarries worked between 1940 –45 existed at Broome Common Broome, and Ditchingham (7 – 10 km)</li> <li>3) Flixton quarry Nr Bungay, is one of the largest active quarries in Suffolk (c. 12 km)</li> </ol>	<ol style="list-style-type: none"> <li>1) Well preserved Iron Age timber post alignment from floodplain at Beccles, and possible Roman post alignment at Barsham Marshes</li> <li>2) Multi-period settlement from Flixton quarry, from rare Neolithic Long barrow type monument to IA/RB fields systems</li> </ol>	<ol style="list-style-type: none"> <li>1) Beccles Town Council land</li> <li>2) Private Land owner</li> </ol>
Brandon	Little Ouse	✓ (1945 series)	✓ (1999 series)	✓	<ol style="list-style-type: none"> <li>1) Sequences were taken as part of the excavation of the middle Saxon settlement at Staunch Meadow, Brandon, due to be published in 2008</li> <li>2) Fenland Project (Martin pers. Comm) identified extensive fen peat sequences and archaeological sites in the Little Ouse</li> </ol>	<ol style="list-style-type: none"> <li>1) Peat and gravel extracted prior to the extension of the Lignacite works in Brandon c 1.5 km to the East</li> <li>2) Extensive Gravel extraction from Nunnery lakes ion the little Ouse at Thetford and Barnham (c. 10km east</li> <li>3) Historic Flint Mining From Neolithic to C19</li> <li>4) Chalk extracted for lime kilns from valley sides from C18 and C19</li> </ol>	<ol style="list-style-type: none"> <li>1) Staunch Meadow - Saxon village with church and burial ground</li> <li>2) Extensive riverside IA/RB settlement</li> <li>3) Deposited Metal work from river, e.g. double edges Saxon sword, IA and RB votive figurines</li> </ol>	<ol style="list-style-type: none"> <li>1) Brandon Hall Estate, access approved by Mr Giles de Lotbiniere</li> </ol>

Hengrave	Lark	✓ (1945 series)	✓ (1999 series)	✓	<ol style="list-style-type: none"> <li>1) Fen peat overlying early to mid-Holocene gravels identified within the Lark Valley by Hunt <i>et al.</i> (1991)</li> <li>2) No other previous palaeoenvironmental studies were identified during assessment of grey and published literature</li> </ol>	<ol style="list-style-type: none"> <li>1) Site chosen was ear marked for extraction under permissions granted in the 1960's. Work never undertaken</li> <li>2) Extensive quarrying at West Stow and Lackford Bridge, part excavated c. 1960, now part of Country Park and County Wildlife site</li> </ol>	<ol style="list-style-type: none"> <li>1) Cursus monument, with causewayed enclosure and related monuments from on first terrace gravel adjacent to the site</li> <li>2) IA/Saxon settlement excavated at West Stow and Lackford Bridge prior to gravel extraction</li> <li>3) Long history of finds recorded from the Lark, Human skull, bones, metal work etc</li> </ol>	<ol style="list-style-type: none"> <li>1) Mill Farm, access approved by Mr Philip Aitken</li> <li>2) St Edmundsbury District Council</li> </ol>
Hoxne	Dove	✓ (1945 series)	✓ (1999 series)	✓	<ol style="list-style-type: none"> <li>1) Palaeoenvironmental work undertaken on gravel deposits relating to the pre- and early Anglian glacial sequences</li> <li>2) Palaeochannel identified during excavations for A143 Scole bypass, (Ashwin and Tester, <i>forthcoming</i>)</li> </ol>	<ol style="list-style-type: none"> <li>1) Hoxne brick works - using brick earth quarried locally (less than 1 km)</li> <li>2) Sand excavated from Stuston common c. C18 and C19, and gravel from Broome Common (c. 3 km west)</li> <li>3) Mendham Marshes – Large gravel quarry from Waveney (c. 7km to the east)</li> </ol>	<ol style="list-style-type: none"> <li>1) Palaeolithic finds</li> <li>2) Human Skulls and other metal work from dredging</li> <li>3) Preserved timbers from Scole bypass</li> <li>4) Possible Hurdle trackway site from lower Dove valley</li> </ol>	<ol style="list-style-type: none"> <li>1) Oakly Park Estate, access approved by Mr David Lewis</li> </ol>
Ixworth	Black Bourne	✓ (1945 series)	✓ (1999 series)	✓	<ol style="list-style-type: none"> <li>1) Sequence taken from Mickle Mere during A143 improvements, unpublished</li> <li>2) No other previous palaeoenvironmental studies were identified during assessment of grey and published literature</li> </ol>	<ol style="list-style-type: none"> <li>1) Extensive gravel quarrying from Grimstone end c. 1950 (300 m to the south)</li> <li>2) Large chalk quarry (c. 1.5 km east), also site of geological importance as one of the only studied regional chalk sequences</li> <li>3) Gravel pits from Black Bourne at Ixworth Thorpe (c. 2.5 km north west)</li> </ol>	<ol style="list-style-type: none"> <li>1) Grimston end produced important multi-period site including ring ditches, a barrow and several Roman and Saxon pottery kilns, mainly excavated by Basil Brown</li> <li>2) Small Roman town, bridge crossing and associated Roman Villa estate from Ixworth, adjacent to site</li> </ol>	<ol style="list-style-type: none"> <li>1) Private Land owner</li> <li>2) Suffolk Wildlife Trust</li> </ol>