

EX JB

M4/16

The Old Bakery, Ayscough Avenue, Spalding, Lincolnshire

-An Archaeological Evaluation -



Ricky Patten

CAMBRIDGE ARCHAEOLOGICAL UNIT
UNIVERSITY OF CAMBRIDGE



EVENT L15306

SOURCE L19578
L19579

NEGATIVE

**The Old Bakery, Ayscough Avenue, Spalding
Lincolnshire**

-An Archaeological Evaluation-

Site Code: AAS04

Accession Number: 2004.167

Ricky Patten

With contributions by Steve Boreham

Cambridge Archaeological Unit
University of Cambridge

September 2004

Report Number 642

Conservation
Services

04 OCT 2004

Highways & Planning
Directorate

Summary

An archaeological evaluation was undertaken on the site of the Old Bakery, Ayscough Avenue, Spalding (AAS04) ahead of redevelopment. Eleven trenches were excavated to assess the potential for any archaeological evidence. The trenches revealed traces of the more recent industrial activities along with evidence that the environs would have been wet and un-inhabitable until recent times.

Introduction

Between the 3rd of August 2004 and the 6th of August 2004 an archaeological evaluation was undertaken on behalf of Lincolnshire Developments Limited by a team from the Cambridge Archaeological Unit (CAU). This was in response to an archaeological specification set out by the CAU (Standing 2004) and agreed by Jim Bonner (County Archaeologist, Lincolnshire County Council). The Proposed Development Area (PDA) comprised of 0.52 hectares of land at the southern end of Ayscough Avenue and Johnson Avenue (NGR 524900 321950).

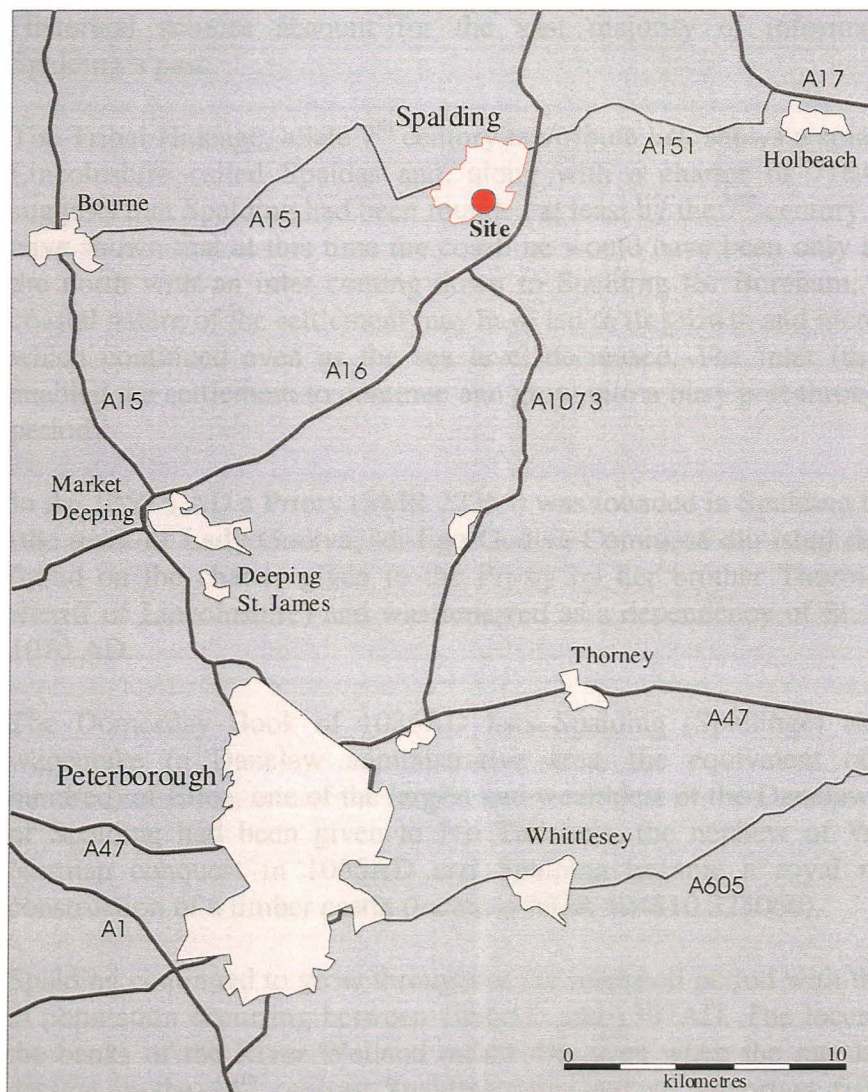


Figure 1: Site Location

Topography and Geology

The site is situated at 2.77m OD within a residential area. The southern boundary of the site is bordered by a cycle route and footpath (formerly the route of the Midland and Great Northern rail line) and private homes surrounding. The underlying geology comprised of Jurassic Kimmeridge and Ampthill clays; overlain by Barroway Drove Beds and Terrington Beds deposits.

Archaeological and Historical Background

The earliest activity recorded in the county Sites and Monuments Records (SMR) dates to the Romano-British period and represents agricultural evidence in the form of enclosures, droves and a track way (SMR 23597) recorded in association with a Roman coin. Evidence from crop marks suggests that a settlement existed c.2km southeast of the site at NGR 525900 321700 and evidence from individual finds in the Clay Lake area of Spalding and south of Coronation Channel at Four Ashes suggests this settlement may have extended to the southern boundary of modern Spalding.

Historical sources account for the vast majority of information pertaining to Spalding's past.

The Tribal Hideage, a late 7th century tax/tribute list, shows a small lordship in south Lincolnshire called Spaldas and, along with a charter of 716AD (SMR 23603), suggests that Spalding had been founded at least by the 7th century. Geological studies have shown that at this time the coastline would have been only a few kilometres to the north with an inlet coming down to Spalding (S. Boreham, pers comm.). This coastal nature of the settlement may have led to its growth and increase in importance, which continued even as the sea level decreased. The inlet (the River Welland?) enabled the settlement to continue and grow into a busy port throughout the medieval period.

In the 1050's AD a Priory (SMR 22355) was founded in Spalding by the Benedictines (the mark of Lady Godiva, "di Ego Godiva Comitissa diu istud desideravi" has been found on the charter given to the Priory by her brother Thorold of Bucknall, the sheriff of Lincolnshire) and was renewed as a dependency of St. Nicolas, Angers in 1070 AD.

The Domesday Book of 1086AD lists Spalding (Spallinge) as being within the wapentake (a Danelaw administrative area, the equivalent of an Anglo-Saxon hundred) of Elloe, one of the largest and wealthiest of the Danelaw centres. The lands of Spalding had been given to Ivo Taillebois, the nephew of William I, after the Norman conquest in 1066AD and Spalding became a royal residence with the construction of a timber castle (located at NGR 524810 323060).

Spalding continued to grow throughout the medieval period with the greatest increase in population occurring between 1086AD and 1307AD. The location of Spalding on the banks of the River Welland meant that even when the rate of growth began to decline in the 14th century Spalding remained an important fishing town able to accommodate large ships.

In the 17th century the river was widened to help with the draining of Deeping Fen and as a result Spalding grew into a busy port with barges being able to navigate as far as Stamford and sea-going vessels as far as Spalding's High Bridge. In the 19th century the Great Northern Railway opened in Spalding and the port started to fall in to decline.

Historic maps of Spalding located in the Lincolnshire Archives show that the PDA was located outside the limit of the town until the last century. The county map of 1732 shows the PDA lying within an area of open fields. The 1889 OS map shows the boundaries of the site as existing today with fields to the north, east and west, and a railway to the south. It is not until the survey of 1904 that any signs of development on the site are visible with two small structures shown in the western portion of the PDA. By 1968, the Ordnance Survey maps show the construction of a bakery, a depot and a sewage pumping station.

Methodology

Eleven trenches totalling 185m were opened using a 360°-tracked machine with a toothless ditching bucket down to an archaeological level. This comprises a 7% sample of the site area. Each trench was recorded on CAU trench sheets and photographed on digital medium; all features were planned at a scale of 1:50.

Excavation Results

The eleven trenches excavated provided evidence of post-medieval activity associated with the development of the site over the last one hundred years. Evidence for geological channels and an area of salt marsh were recorded within the trenches.

Trench 1

Trench 1 was orientated north-south for a distance of 15m; it was cut to a depth of 0.92m through 0.26m of rubble made ground, 0.25m of silty sub-soil and 0.43m of silty clay to an organic clay layer. This clay layer contained organic rootlets that represented a salt marsh. These deposits and underlying layers were sampled by geological borehole and were described by S. Boreham (see Appendix 1).

A modern ditch cut through the trench orientated northwest-southeast. At 3m from the southern end of the trench and at right angles Trench 4 was cut orientated east-west.

Trench 2

Trench 2 was orientated east-west for a distance of 28m; it was cut to a depth of 1.05m through 0.30m of rubble made ground, 0.16m of silty sub-soil and 0.59m of a mixed clay silt to an organic clay layer. This clay layer was the salt marsh recorded in Trench 1 and stopped at the eastern end of the trench where the silt beds were



Figure 2: Trench locations

encountered. At the western end of the trench a test pit was cut through the clay to ascertain its depth and the silt beds were encountered at 1.60m.

Trench 3

Trench 3 was orientated north-south for a distance of 14m and was cut through a large amount of modern disturbance including a demolition pit at the northern end which exceeded 1.20m in depth. The trench was cut down to the level of the organic clay which represented the salt marsh and evidence for a geological channel cutting through this was recorded. However, the trench was heavily contaminated and in the absence of any pertinent archaeology no work was undertaken on the trench.

Trench 4

Trench 4 was orientated east-west for a distance of 29m; it was cut to a depth of 0.92m through 0.26m of rubble made ground, 0.23m of silty sub-soil and 0.43m of silt. Orientated northwest-southeast through the length of the trench was a modern ditch, which carried on through to Trench 1. At the western end of the trench Trench 1 was cut at right angles, orientated north-south, and at this end of the trench was evidence for the edge of the salt marsh recorded in Trench 1.

Trench 5

Trench 5 was orientated north-west for a distance of 10m; it was cut to a depth of 1.14m through 0.39m of hardcore made ground, 0.20m of sub-soil and 0.55m of silt.

Trench 6

Trench 6 was orientated east-west for a distance of 23m; it was cut to a depth of 77m through 0.10m of topsoil, 0.22m of a clayey sub-soil and 0.45m of silt.

Trench 7

Trench 7 was orientated north-south for a distance of 13m; it was cut to a depth of 0.84m through 0.20m of made ground, 0.24m of silty sub-soil and 0.40m of silt. In the centre of the trench was an area of oil or diesel contamination.

Trench 8

Trench 8 was orientated north-south for a distance of 11m; it was cut to a depth of 0.57m through 0.07m of tarmac, 0.18m of hardcore packing and 0.32m of a clay sub-soil. Orientated northwest-southeast through the trench was a geological channel which was traced through trenches 9 and 11. At the southern end of the trench was a single modern posthole.

Trench 9

Trench 9 was orientated east-west for a distance of 16m; it was cut to a depth of 0.66m through 0.46m of rubble made ground and 0.20m of silt. Orientated northwest-southeast along much of the trench was a geological channel, which was further

traced through Trenches 8 and 11. At right angles to the trench orientated north-south was a brick culvert or storm drain.

Trench 10

Trench 10 was orientated north-south for a distance of 13m; it was cut to a depth of 0.62m through 0.30m of made ground, 0.12m of a silty sub-soil and 0.20m of a clay layer to the silt. Evidence of a geological channel orientated northwest-southeast was recorded along with five square cut postholes 0.15m by 0.15m associated with the modern buildings previously on site and an area of oil or diesel contamination at the southern end of the trench.

Trench 11

Trench 11 was orientated east-west for a distance of 13m; it was cut to a depth of 0.70m through 0.35m of rubble made ground and 0.35m of silt. Orientated northwest-southeast along the trench was a geological channel, which was further traced through Trenches 8 and 9.

Discussion

The negative evidence from the evaluation would suggest that until recently this area of Spalding would have been too wet for inhabitation. The British Geological Survey geology map shows that the area is underlain by salt marsh, tidal creek and floodplain deposits which were laid down by the marine inundations which occurred from the late Iron Age onwards. This is certainly confirmed by the results of on-site environmental assessment and borehole characterisation of the deposits (see Boreham, Appendix 1). Silt encountered within each trench attest to an area of sand banks and mud flats. Trenches 3, 8, 9, 10 and 11 produced evidence of a natural channel cutting through the sand banks and mud flats, while within Trenches 1, 2, 3 and 4 evidence for an area of salt marsh was evident. These silt beds (Terrington Beds) were between 1m and 2m in depth and sealed marine sands of Barroway Drove Beds which were deposited during the Neolithic and Bronze Age, and can extend to a depth of 14m. Although later drainage would have enabled medieval and Post-Medieval activity, no evidence for this was recorded and the area would most likely have been open fields. The PDA appeared to remain unsettled until 1904 when Ordnance Survey maps show two unidentified structures in the field, activity which is presumably associated with the adjacent rail line.

Acknowledgements

Lincolnshire Developments Limited funded the excavation and thanks are due to Dennis of G.C.E Ltd. for his careful machining of the site. Thanks must also go to those who recorded, excavated, discussed and interpreted the site, Dominique Bruno and Iain Forbes and to Steve Boreham (Department of Geography, University of Cambridge). Iain Forbes surveyed the site and provided the computer and digital illustrations. Robin Standring was the project manager and along with Victoria Donnelly and Jim Bonner (Lincolnshire County Archaeologist, Lincolnshire County Council) provided valuable support.



Figure 3: Geological Interpretation

Appendix 1: Report on the Geological Conditions

Steve Boreham

Introduction

This report describes a geological investigation at Ayscough Avenue, Spalding Lincolnshire. The deposits investigated were exposed in a series of trenches in an old industrial area located at the southern end of Ayscough Avenue and Johnson Avenue (NGR 524900 321950). The basal part of the trenches exposed a light orange/brown silt with fine sand laminae, which included clay-filled palaeochannels (interpreted as tidal creeks). This material was overlain in part by organic silty clay 'saltmarsh' deposits with abundant rootlets and organic remains. An upper layer of grey/brown silt with occasional small clay-filled palaeochannels covered the whole site, and was cut into by Made Ground. A single borehole was sunk at the northern end of Trench 1 to investigate the stratigraphy below the base of the trench. The borehole revealed a sequence of brown sand with shell debris below the upper silty units, stretching down to at least 5.15m below ground surface (see below).

Geology of the Spalding Area

The British Geological Survey (BGS) geology map of the Spalding area (Sheet 144) shows that much of the area surrounding Spalding and the Ayscough Avenue Site is directly underlain by saltmarsh, tidal creek and floodplain deposits attributed to the Terrington Beds, dating from a late Iron Age marine inundation of Fenland at c.2500 years BP. Even in Saxon times, it is known that Spalding had a direct connection to the sea. It should be noted that all dates given here are approximate due to the diachronous (time transgressive) nature of the deposits. The Terrington Beds in this area are 1-2m thick and overlie marine sands of the Barroway Drove Beds. The Barroway Drove Beds have been dated at between c.6000 and 3000 years BP in this area, and are up to 12m thick. The Barroway Drove Beds have two distinct facies. To the southwest of Spalding they are represented by silty saltmarsh deposits, which in the field can only be separated from the overlying Terrington Beds by the presence of a thin 'leaf' of Nordelph Peat, representing freshwater conditions between c.3000 and 2500 years BP. In the Spalding area the Barroway Drove Beds are represented by inter-tidal and sub-tidal shelly sands indicating more open marine conditions. These overlie the Crowland Bed (cold-stage soliflucted material), various glacial sands and gravels and Jurassic Oxford Clay bedrock at depth.

For much of the Holocene, human occupation of this area seems to have been restricted to better-drained gravel terrace sites at the edge of Fenland. It appears that during the late Iron Age marine regression (c.2500 years BP) there was human occupation of sites on the slightly more elevated silt roddons of the Barroway Drove Beds. The remains of salterns from this period are known to the northeast of Spalding. The marine transgression of the Terrington Beds flooded some of these sites, but by late Roman times the retreating marine influence allowed renewed occupation of well-drained areas. Extensive medieval saltern silt mounds are known from Surfleet Seas End 5km northeast of Spalding.

Interpretation of the Ayscough Avenue Sequence

The sandy sediments in borehole BH1 were not bottomed because saturated 'running' sand was contacted at 5.15m depth, making further hand augering impossible. These sediments probably continued to 10-12m depth. It appears that the brown sand with shell debris described between 1.50m and 5.15m represents the sub-tidal facies of the Barroway Drove Beds. Similar sediments are being deposited today in The Wash offshore of Hunstanton, Norfolk. The top surface of these sediments probably dates from c.3000 years BP. It is worth noting that the Terrington Beds – Barroway Drove Beds interface was probably reached at the base of most of the archaeological trenches. The basal part of the Terrington Beds here probably dates from c.2500 years BP. Four distinct environments of deposition are indicated. The light brown silt with sand laminae appears to represent inter-tidal mudflat conditions, and the clay-rich channel-fills are interpreted as tidal creek deposits. The organic silty clay clearly represents the overgrowth of saltmarsh associated with retreating marine influence. It is not easy to assign a date to the saltmarsh formation, but it is presumably Roman, and certainly pre-Saxon. The containment of the marine influence to the north of the site in Saxon times suggests that the overlying grey/brown silt is for the most part floodplain alluvium of the River Welland. It appears that the site may have remained as open water meadow until its eventual industrial use in Victorian times.

Borehole description

(Described top down)

0-0.14m	Made ground
0.14-0.31m	Brown/black silty clay with brick, pottery & pipe
0.31-0.45m	Grey silt
0.45-0.83m	Grey/brown silt
0.83-0.88m	Grey/brown organic silt
0.88-1.18m	Blue/brown silty clay
1.18-1.50m	Orange/brown mottled silt with fine sand laminae
1.50-1.90m	Brown fine sand
1.90-2.35m	Brown medium sand with shell debris
2.35-4.00m	Brown medium to coarse sand with bands of shell debris
4.00-5.15m	Brown fine sand
5.15m	Hole stopped on running sand

Bibliography

Ferrante Di Ruffano, L. 2002. *Final Report for an Archaeological Watching Brief at The Vines, 3 Love Lane, Spalding, Lincolnshire*. Soke Archaeological Services Limited SAS02/17.

M and M Archaeological Services. 2002. *Results of an archaeological trial trench evaluation: Ayscoughfee Hall School, Welland Hall, London Road, Spalding, Lincolnshire*.

Standring, R. 2004. *The Old Bakery, Ayscough Avenue, Spalding. Project Design Specification for Archaeological Evaluation*. CAU.