ARCHAEOLOGICAL EVALUATION AND MONITORING REPORT Sufformation and Monitoring Report Archaeological Sufforma

15-17 EASTGATE STREET, BURY ST BSE 292

A REPORT ON THE ARCHAEOLOGICAL MONITORING, 2007



A Tester. Suffolk C.C. Archaeological Service

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Acknowledgements

This project was funded by Phelan Group Ltd and was monitored by Robert Carr (Suffolk County Council Archaeological Service, Conservation Team). The fieldwork was carried out by Andrew Tester, John Duffy, Nick Taylor, Mike Green and Jonathan Van Jennians from Suffolk County Council Archaeological Service, Field Team. The project was directed and managed by Andrew Tester. Andrew Tester managed the post-excavation work and Gemma Adams processed the finds and produced the site plans and sections. Richenda Goffin compiled the Finds reports.

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Summary

The monitoring of excavations for a housing development was carried out on this site which lies alongside the River Lark outside of the East gate of the town. A short trench was also excavated in lieu of monitoring. Up to three wells were uncovered and the remains of five clay-lined ary Service

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Archaeological troughs towards the rear of the property that are interpreted as tanning pits. Supporting evidence included a large collection of animal horn cores, which are a waste product of tanning. The finds evidence suggests that at least one of the troughs is dated to the 17th century. A documentary search of the evidence confirms the presence of tanners in the area from medieval times.

SMR information

Planning application no. SE/06/2482

Date of fieldwork: April-May 2007

Grid Reference: TL 8587 6449

Funding body: Phelan Group Ltd

Oasis reference Suffolkc1-43516



This report combines the results from an archaeological evaluation and sample excavation at 15–17 Eastgate Street. The evaluation was carried out to a Brief and Specification by Robert Carr (Suffolk County Council Archaeological Service, Conservation Team, Appendix 3) in to planning application SE/06/2482. The development comprises four to n an area of 870 square metres that lie at c. 31m OD. The emporary buildings and a substantial concrete in the site is centred on the site of the second concrete in the site is centred on the site of the second concrete in the site is centred on the site of the second concrete in the site is centred on the site of the second concrete in the site is centred on the site of the second concrete in the site is centred on the site of the second concrete in the site is centred on the site of the second concrete in the site is centred on the site of the second concrete in the site is centred on the site of the second concrete in the site is centred on the site of the second concrete in the site is centred on the site of the second concrete in the site is centred on the site of the second concrete in the site is centred on the site of the second concrete in the site is centred on the site of the second concrete in the second concret the site of the east-gate and backs onto the River Lark, which also exits the town alongside the road. No excavation work has occurred in the immediate area; however, medieval buildings are still standing along the street front and suggest this may have been an important area in the economic life of the town. The Brief called for a trenched evaluation, a documentary search (Appendix 2) and an environmental study of the site (Appendix 3).

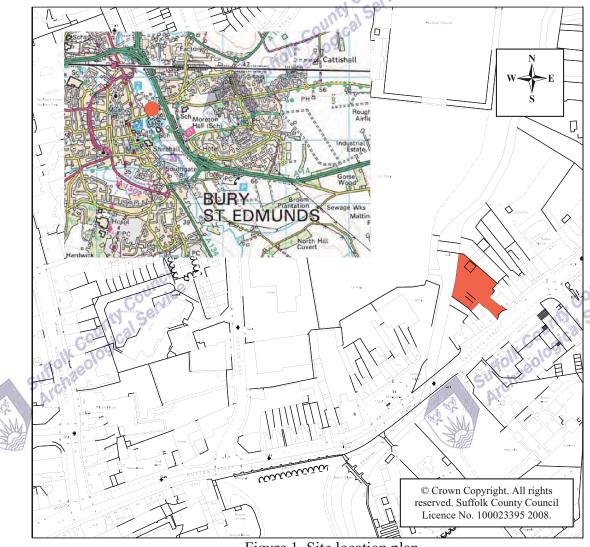


Figure 1. Site location plan

2. Methodology

During the evaluation a single trench C.18 long was excavated running N – S (Fig 2-5). The location of the trench was influenced by the position of standing buildings and underground services but it was felt likely to give a representative insight into the archaeological potential of the site. Mechanical excavation was carried out by a JCB with a 1.6m wide ditching bucket following the selective breaking of a substantial concrete slab. The trench was excavated from south to north with obviously recent material removed by the machine The exposed trench was cleaned, and planned at a scale of 1:50 and the east section drawn (Figures 5). Dr Tom Hill of Birmingham University examined the sediments at the base of the trench and submitted a report that is included as Appendix 3. Following the trenching and a preliminary examination of the finds it was agreed with the planning archaeologist and Mr Nicholas Phelan that an appropriate mitigation strategy should involve the excavation of a second trench at the north end of the site rather than the monitoring of ground-works during construction. This offered the best chance of establishing the character of the site. The site was recorded using a continuous numbering system starting from 0001. Site data was recorded under the County Sites and Monuments code BSE 292. The site archive is stored at Suffolk County Council Archaeological Service at Bury St Edmunds. An OASIS form has been completed for the project (reference no. suffolkc1-43516) and a digital copy of the report submitted for inclusion on the Archaeology Data Service database (http://ads.ahds.ac.uk/catalogue/library/greylit).

3. Results

Trench 1

(Figs. 5)

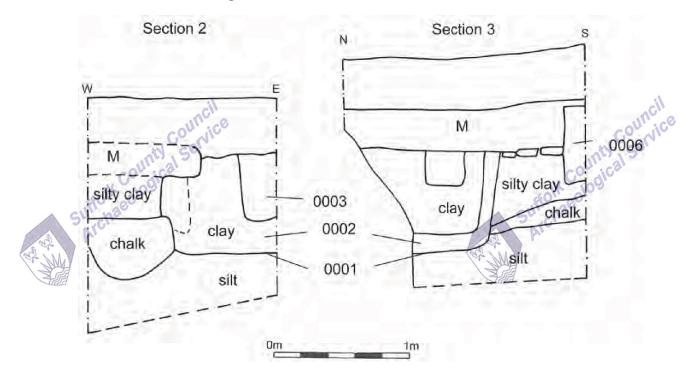
Trench 1 (section 1) was c.18m in length and 1.8m wide. It was aligned NE-SW and angled across the line of surrounding property boundaries (Figs. 2-4). A substantial slab of reinforced concrete thickened from 0.2m at the south-western end of the site to 0.4m at the eastern end where the ground dropped away towards the river. From the south end of the trench modern debris was removed from the first 3m which exposed a brick surface and the foundations of a wall. A brick sample was lifted from the surface and is identified as 16th century to the first part of the 17th century. The wall (0008) was c. 0.5m wide and aligned with the existing property boundary to No.18 Eastgate Street. Beyond this for the next c.11m of trench between 0.8m and 1m of spoil, including concrete was removed. Below the concrete was a layer of silt clay that overlay a crushed chalk surface (0010) for c.7m with the silty clay continuing to the end of the trench in the section. At the south-east end of the trench a second, thin, layer of chalk was exposed and a layer of gravel appeared; these seem to show a second laid surface albeit insubstantial. Six structures were identified within the trench: 0011 was a circular well that was lined with mortar. It only became visible at the base of the trench and appears to have been contemporary with gravel 0012 and chalk 0009. Within Section 1 the layers above the well of clay and a ceramic pipe slump into it. These factors suggest the well may have been used as a soakaway, it is unlikely to have any great depth given the same in a soakaway. soakaway, it is unlikely to have any great depth given the proximity of the river and the watertable. A second well or soakaway, 0013, was cut from below the concrete and is stratigraphically later than 0011. The walls comprised loosely laid bricks that did not continue below the bottom of the trench. It was filled with clay-silt but there was no sign of slumping (0013 straddles the break in section 1 in Figure 5). A third well 0014 was rectangular with walls of flint and mortar. The wall on the north side did not appear in the section but a chalk surface(?) that appeared within the fill approximates to the level of chalk surface 0010; and it is suggested that they may represent the same phase of activity. Considered together it is probable that the wells (or possible soakaway in the instance of 0013) run in the sequence beginning 0011, 0014 and 0013. Towards the end of the trench a sequence of brick and mortar appears within the section on the edge of a modern disturbance that was removed by the machine when a sondage was excavated. In plan this corresponds with a substantial wall built of large flints with occasional bricks, 0005, that projects into the trench from the north-east and appears on the edge of section 3. The investigative hole cut through a substantial clay feature, 0001. This feature appeared to be a clay packed pit c. 0.75m deep which extended as a quadrant into the corner of the trench. In sections 2 –3 it could be identified as a clay tank, dug from immediately below the concrete, infilled with a mixture of chalk and mortar. In section 2 there is evidence for an earlier phase of the tank as a join in the clay can be distinguished. The clay tank cuts through a band of crushed chalk in both sections 2 and 3. This represents an earlier surface separated from the clay

construction by an accumulated layer of silt. While this trench was open a series of environmental samples were taken and are included in the report as Appendix 3.





Figure 2. Trench 1 Figure 3. Section 2, Structure 0001 Following the trenching the results were examined and it was decided, after discussion with the curating archaeologist and Mr Nicholas Phelan the developer, that a small exploratory trench to the north of the site would offer a better chance to understand the archaeology than a general monitoring of ground-works. It was agreed to limit the excavations to an exploratory hole towards the rear of the development.



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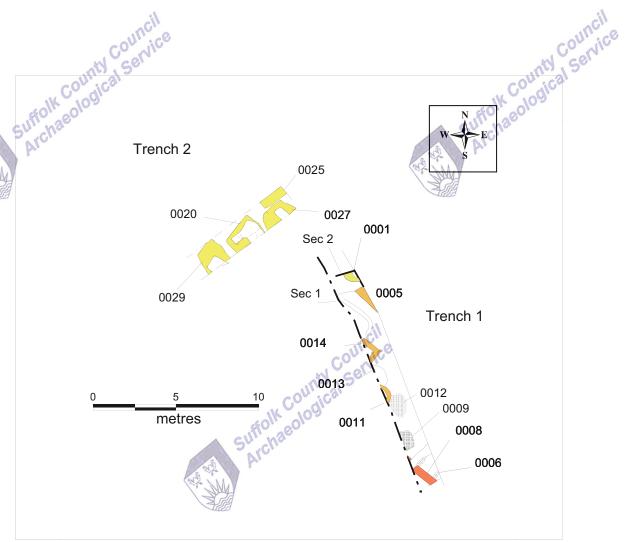


Figure 6. Features plan, trenches 1 and 2

Trench 2

(Figs.6-9)

Trench 2 was c.7m in length and aligned at a right angle to the evaluation trench. Prior to the trenching a small industrial unit had been removed and the concrete slab broken-up. Approximately 0.8m of spoil was removed by machine of which c.0.5m was modern. A sequence of clay structures was exposed excavated into homogenous fine grey silt, 0038 (Fig. 9). Only the south-east corner of structure 0025 was visible suggesting a rectangular shape that measured at least 0.5m x 1m with a sharp corner that was emphasised by a dark fibrous deposit, 0034. It is suggested that this may have been the remains of a rotted timber surround in which a clay structure was formed. The clay was a clean yellow boulder clay with no sign of any internal structure. Adjoining structure 0027 was less regular in shape measuring 2m x at least 1m (although it was certainly larger). There was evidence of two rebuilds of the clay and the central trough; the last of these was 0028, which comprised a rectangular shape measuring 0.5m wide and over 0.75m in length filled with grey silt. The feature was not excavated.

Clay structure 0020 was rectangular measuring 2.1m in x at least 1.5m wide. The corners were quite regular although there was no evidence for a timber surround. The central structure 0021 was large occupying most of the north-east part of 0021 with a narrower arm projecting south. A large section was excavated and was recorded in sections 0022 and 0023. The main fill comprised both chalk and clay mixed with charcoal and silt. A large fragment of a ceramic of pipkin was recovered and a significant quantity of animal bone – horse bones and particularly horn cores from contexts 0021 and 0024. A sample of 0021 was taken for charcoal and macrofossil analysis. The clay structure was not bottomed but was at least 0.35m deeper than the machined surface. Structure 0029 measured 1.5m x at least 1.5m. In this case the evidence was for at least three re-cuts and repairs of the central trough with successive layers of clay that were

mixed with charcoal and ash in varying quantities. The last trough, 0033, appeared to have been filled with chalk which may have collected at the base of the feature.

The evidence from the site at Eastgate Street offers significant pointers to its use as a tannery. Whilst there were no distinct features in the main body of the evaluation trench, feature 0001 at the south end would appear to mark the first of a series of clay troughs identified in the excavation. None of these were complete but dimensions in the range 2m x 2m would be consistent with evidence found elsewhere. From excavations in Northampton (Shaw 1996) both rectangular and circular pits were identified, the latter possible based around the use of barrels set in clay. There was evidence for a squared timber surround to Structure 0025. The troughs show evidence of having been re-cut and rebuilt, most obviously structure 0029 but also 0027 and 0020. These were all truncated but 0001 was the least affected and revealed a depth of at least 0.75m. The treated hides were normally transferred through a sequence of tubs or troughs through the various stages (alternatively the solution in the troughs might be changed). In this case the troughs may have contained different solutions as the hides were processed. Although only trough 0020 was excavated the ash within the fill of 0029 may have been used as an alkaline during tanning and the chalk found within 0033 may have been a lime additive also used during tanning.





Figure 7. Animal bone including horn cores



Figure 8. Structure 0020

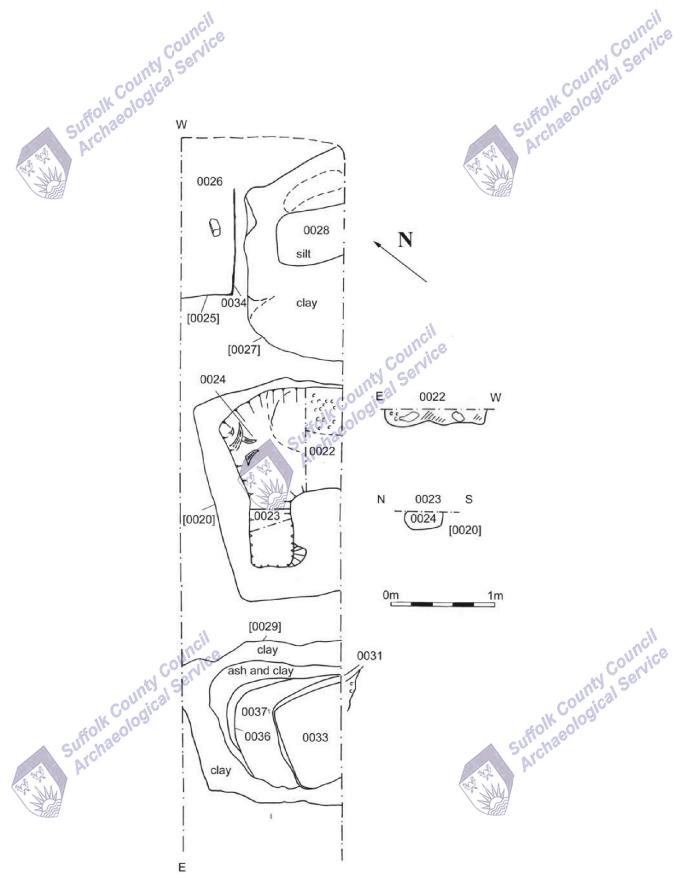
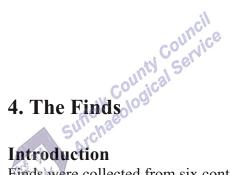


Figure 9. Trench 2 plan and sections



Finds were collected from six contexts, as shown in the table below.

120								-	Additional
OP	Pottery		CBM		Animal bone		Shell		Spotdate
	No.	Wt/g	No.	Wt/g	No.	Wt/g	No.	Wt/g	
0006			1	2269					16th-17th C
0015	2	31							16th C
0021	3	656			1	1	2	30	16th-E17th C
0024	1	11	6	1763	46	5078			15th-17th C
0026					1	560	1	14	
0030	1	43			1	8			15th-16th C
Total	7	741	7	4032	49	5647	3	44	·

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Table 1 Bulk finds

Pottery

Seven fragments of post-medieval pottery were recovered from the monitoring (0.741kg). A small sherd of Late medieval and transitional ware (LMT) and a fragment of Dutch-type redware were identified in 0015, a silty deposit below the wall 0005. A substantial part of a Glazed red earthenware tripod pipkin was found in 0021. This vessel has heavy horizontal grooving on the upper half, an angled hooked handle, and a small collared bifid rim. The pipkin has obviously been used, as it is sooted on the underside and on the sides. Such Glazed red earthenware pipkins are long-lived in their dating and without the benefit of accompanying clay pipes or other more narrowly dated artefacts can only be assigned to the period of the 16th-18th centuries. Two additional sherds of pottery were found in association with the pipkin. These consist of a fragment of a Rhenish stoneware cordonned jug, probably a Köln/Frechen product, dating to the sixteenth and early seventeenth century (Hurst 1986, 216-7) and part of the strap handle of a Raeren stoneware drinking vessel (L15th-16th C). A single fragment of a Dutch type red earthenware was found in fill 0024 (15th-17th C), and a sherd of Late medieval and Transitional ware from fill 0030 (15th-16th C).

Ceramic building material

A small quantity of ceramic building material was collected from two features (7 fragments @ 4.032kg). A complete post-medieval brick was retained from 0006, dating from the first half of the 16th century to the seventeenth (Drury 1993, 165). It is covered with two phases of mortar, the first a fine buff deposit, and a later coverage of an off-white mortar with moderate chalk, dark clinkery inclusions and sparse organic material. Four fragments of post-medieval rooftile were deposited into the fill 0024 of the clay feature 0020, two of which appear to have been burnt. Two brick fragments from the same feature (one burnt, and one of which has clearly been re-used) are likely to be of a similar date. It is possible that these are the fragmentary remains of floors and other constructional debris relating to the workshops for tanning or related processes.

Animal bone

A number of large fragments of animal bone were recovered from the fills of the clay-lined pit 0020. Several almost complete equine bones were collected, including a humerus, femur, tibia, and metapodial bones from 0024 and 0026. In addition thirteen horn cores or horn core fragments were recovered from 0024, and two fragments of a bovine pelvis. Some large examples of cores are present, most of which still have some of the upper part of the skull remaining.

Shell
Three fragments of oyster shell were collected from two contexts.

Discussion

Suffolk County Council
Archaeological Service The finds and animal bone recovered from the monitoring support the documentary evidence that tanning or other related processes were being undertaken in the vicinity of the site. Given the proximity of the River Lark and its location on the edge of the town the site would have been an ideal place for such anti-social activity, as the activities would have given off noxious smells as well as discharging unclean water into the river.

Several cattle horn cores were recovered from feature 0024, some of which seem to have been deliberately positioned in the lining, although not in any orderly alignment. The cores represent an element of the waste debris given to tanners as part of the process of curing cattle hides. After the animals had been butchered, tanners were usually given their hides with the horns and hooves still attached. In addition to the hide, the keratinaceous horn sheaf itself was also a valuable resource. This could be removed from the core through soaking in water in pits. After this it had to be further processed by horn workers, who boiled, split and compressed the horns to form flat sheets. The flattened translucent horn could then be put to good use to make household goods such as lanterns, window panes (a practice which was dying out by the sixteenth century), drinking vessels, inkwells and horn covers for books (MacGregor 1991, 374). The presence of the horse bones indicates that equine hides may also have been processed.

The precise purpose of the clay-lined pits identified during the monitoring is a matter of speculation. They may represent the remains of the tanning pits themselves, or they may be horner's pits, as the two related processes were often to be found in close proximity. It is also possible that the tanners undertook the first part of the horn-workers task themselves, ie separating the sheath from the core, as it would have been expensive and unnecessary to transport large quantities of intact horns to a horn-worker unless they were working nearby.

The documentary evidence indicates that tanning had been undertaken in the vicinity of the site. properties in this part of Eastgate Street. In addition it appears that there is evidence for related industries such as fellmongering taking place on the site although the working specifically.

The pottery and ceramic building material recovered from the site cannot be closely dated, but an overall date of the sixteenth to early seventeenth century is suggested. Although there are several possible tanners mentioned in the documentary evidence for this part of the street in the first half of the sixteenth century, there appears to be a gap in the records thereafter until the early years of the 18th century. In addition the documentary evidence does not record the precise location of the properties described in relation to the townscape that we see today.

5. Discussion

Introduction

The fieldwork has provided strong evidence that tanning or related industries were practised on this site. These observations are also consistent with the documentary search, which appears as Appendix 2 and is summarised below.

Tanning would probably have formed a significant component in the industry of most preindustrial towns. The following descriptions of the various processes are drawn from more extensive excavations in Northampton (Shaw.1997).

Tanning was one of a number of closely related trades including skinners and whitewayers. Whilst the former tended to work predominantly with cattle whitewayers would work with sheep, pigs, goats and horses producing a softer product. The primary processes were similar, however. In tanning the cattle hides that were taken straight from the butcher included hoofs, horns and often skulls, which were removed before the hide was washed in clean water. These were then soaked in a lime solution or one of wood-ash before the skin and hair could be scraped off. Further washing was followed by soaking in a solution of alkaline or acid, the former based on pigeon or dog droppings, the latter using ash bark or other vegetable matter in warm water but could include stale beer or urine. This process could take up to six months, and was a preliminary requirement for most leather working. The next step involved soaking the hides in tanning solutions, before layering them in tubs mixed with oak bark. This process could take up to 18 months before rinsing and slow drying. The whitewayers prepared their skins in a solution containing alum and oil among other ingredients. Skinners often used similar processes in preserving furs.

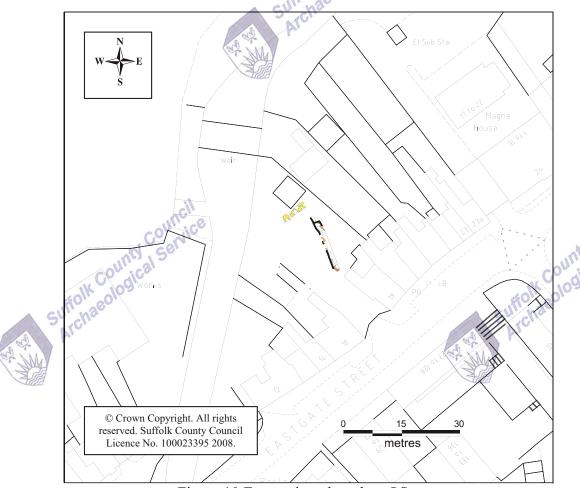
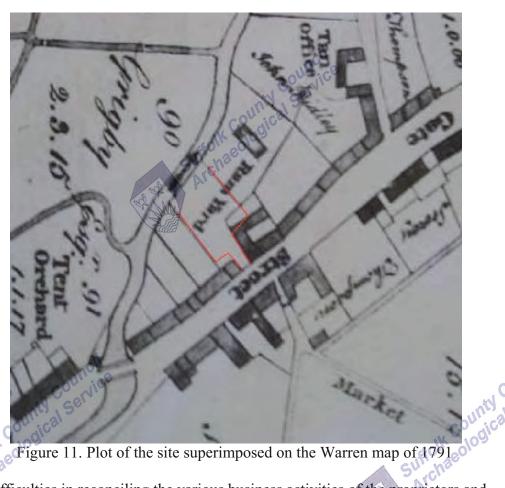


Figure 10 Excavation plotted on OS map

Documentary

This is a summary taken from the full report that is included as Appendix 2. The earliest records investigated for this report were the rental returns gathered for the Sacrist to the Abbey in 1433. The dominant industrial activity of this area was tanning with a least three 'barkers' mentioned

in 1433. One of these John Gowty and his family occupied the site later owned by John Ridley, which is shown on the Warren map of 1791, Fig.11. The earlier property owners or occupiers mentioned in the rental shows that this was a tannery site before that date. Others were located closer to the East gate although their exact locations are unknown. There are references to other trades including a cordwainer (shoemaker) and fellmongers buyer of hides and other animal skins. His role would be to sort the material suitable for the tanners from the skins sold to other trades. There were a range of crafts which used animal skins and it is quite possible that some trades such as curriers and parchment makers would have worked in other areas of the town. Butchers, who are recorded in the area, would also have been responsible for most of the slaughtering before the 20th century.



There are difficulties in reconciling the various business activities of the proprietors and occupiers of the houses in and around this site as described in the earlier records with the modern site boundaries and street numbering. In some cases land behind the street frontage was separated from the property and sold to a neighbouring proprietor. This is apparent through a simple comparison of the two early maps with the 'Ram Yard' extending to the boundary of this site in 1791 though restricted to the area behind the site of the Inn in 1833. The deeds mention that Joseph Maulkin sold off part of the Ram Orchard to the fellmonger Richard Neve Smith in 1788 and following the succession of the owners through to Joseph Gilbert it should be the case that this site should adjoin that of the Ram Inn. The 1833 particulars give the Ram Inn as number 20 and Joseph Gilbert's property as number 14 and therefore they were separated by another four properties with the butcher John Wright occupying 16-17. The only gated entrance with a building above it shown on the Ordnance Survey maps is the entrance to this site. The 1840 sale particulars of Joseph Gilbert's property specifically describe this gated entrance and other parts of his property. The exact property boundaries of the adjoining houses between this site and that

of the Ram Inn are uncertain. In the census of 1841 Edward Carey was the only fellmonger listed in Eastgate Street who according to the 1833 particulars was living at 12 Eastgate Street.

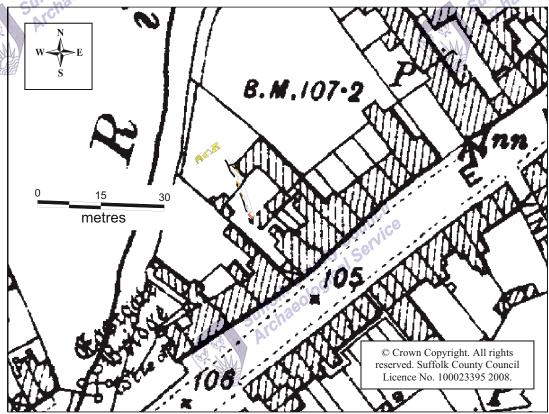


Figure 12. Trench plan superimposed on the OS map of 1890

The site

The proportion of the site that was examined by trenching formed a small part of the development. The location of the trenches in relation to the plot may be seen in figure 10. The building 0008 from the evaluation trench, which is roughly dated from the bricks to the 17th century, was extant on Warren map. What happens towards the room of the many. site has been roughly plotted against the Warren map of 1791 (Fig.11). It is suggested that conjectural as the exact position of the river before its canalisation and the limit of the property boundary is uncertain. It is noticeable on Warrens map that Rams Yard covers the limit several properties and the map places. It is shows the trenching plan superimposed (with some adjustments) onto the 1890 Ordnance survey. This shows the site of wall 0008 close to a standing building which is probably the building identified on the Warren map. The evaluation trench then crosses an open yard to a large 'L' shaped building of which the north east corner may be flint wall 0005. This building also appears on the 1880 map (not illustrated), which also shows that the land behind the building was all part of the same property and is referred to as Rams Yard on the Warren map. The first of the troughs, 0001 appears immediately behind wall 0005; the remainder is in close proximity in Trench 2. This may well indicate a significant boundary between the land, which overlooks the river and was dedicated to the tanning process and the more formal back yards to Eastgate Street properties. The tanning pits would have needed relative security from flooding; the Warren map reveals wet ditches beyond the west bank of the river and it may have been in this direction that flood water gathered leaving the industrial site relatively dry. The Environmental Survey (Appendix 2) identified c.2m of silts and clays that were poorly sorted to a depth of 2m (below this was organic grey brown sand with a small peat deposit at c. 0.25m at 2.9m). The period and process by which these deposits were laid down remains uncertain and, although they were almost certainly deposited while the Lark valley was settled, the excavated clay tanks were

stratigraphically later. There is insufficient evidence from which to establish the boundaries of the tanning site and they probably changed over the centuries. If we extrapolate from the pits in Trench 2 and at the end of Trench 1, however, we might expect somewhere in the region of 53 tanks in a stretch of riverfront 10m deep x 30m in length, only a small proportion of the potential site. Without further excavation on neighbouring sites this must remain speculation. Horn cores, identified with the tanning pits are a waste product of that industry but may have been a valuable resource in their own right (see finds discussion) although specific evidence of horn working is lacking. It may exist beyond the trenches as only a very small sample of this suitable site was seen.

Tanning within Suffolk

A search of the Suffolk HER revealed only one probable tannery found during fieldwork, which was identified by Basil Brown during the excavation of a sewer trench at Rickinghall Superior in 1906-61 (FML 027 –MSF19173). The recent monitoring of a site at Bridge Street, Framlingham failed to identify an industry that was suggested by a documentary search (Boulter. 2000, Meredith 2001). Documentary evidence offers a greater scope for comparing the tanning industry of Bury St Edmunds with Suffolk as a whole. A study of the probate records and marriage licence bonds (Evans in Dymond and Martin 1999) of persons preparing leather between 1500 and 1750 across the County identified 67 persons within Bury St Edmunds from a county total of 216 (The second highest total for a town was Ipswich with only 24). These figures are clearly not absolute but may accurately reflect the importance of Bury St Edmunds as the major supplier of leather within the County.

6. Conclusion

The limited excavations on Eastgate Street have identified elements of what was a major industry in pre-industrial Suffolk. Establishing the longevity and extent of these remains can be identified as a local and regional research aim along with inclusion in any synthetic publication on the town.

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BSE 292 Context List

		nty council gical BSE	292 Context List pit. clay lining of pit [0001]. second fill - mortar.
Appen	dix 1 co	nigal Ser	292 Context List
	0001	DOE	2)2 Context List
0001	50001	cut	pit.
0002	0001	1111	clay lining of pit [0001].
0003	0003	fill	
0004	0005	section	section of trench.
0005	0005	structure	wall - possible property boundary?
0006	0006	structure	brick sample - possibly steps?
0007	0007	surface	concrete with some reinforcers.
8000	8000	structure	wall.
0009	0009	surface	chalk surface.
0010	0010	spread	chalk spread.
0011	0011	structure	well - yellow mortar and flint sealed by ditch 0010.
0012	0012	surface	flint and stone surface spread, same level as well 0011.
0013	0013		soakaway?
0014	0014		not used
0015	0015	fill	deep silt below wall with some pottery.
0020	0020	structure	clay structure.
0021	0020	fill	main fill of clay structure 0020 of ash and charcoal with much animal bone, oyster shells and horn cores pressed into clay.
0022	0020	section	section of clay structure 0020
0023	0020	section	section of clay structure 0020
0024	0020	fill	fill of clay structure 0020 at south end with distinct fill of ash and occasional pieces of charcoal. Soil sample taken.
0025	0025	cut	out of feature that contains brick and lining debris, parallel edge to 0027. Edge of rotted material possibly of timber?
0026	0025	fill	fill of brick and ash debris, purple in colour with some white bricks.
0027	0027	structure	clay structure.
0028	0028	cut	not investigated but appears to have a base of grey clay/silt fill of cut within 0027.
0029	0029		area of clay and bricks, cuts structure.
0030	0030	fill	mixture of chalk and clay on top.
0031	0031	structure	structure cut.
0032	0032	surface	square of clay .03m thick.
0033	0033	surface	structure cut. square of clay .03m thick. mixture of chalk - clunch? Laid wet and hardened? perhaps - 0.20m deep. dark rotted material, possibly timber lining? Mixture of clay and ash, a phase of 0029 Mixture of ash and clay, a phase of 0029 Mixture of ash and clay, a phase of 0029 Grey fine silt into which clay tanks were cut
0034	0025	lining	dark rotted material, possibly timber lining?
0035	0029	्रशी	Mixture of clay and ash, a phase of 0029
0036	0029	9° fill	Mixture of ash and clay, a phase of 0029
0037	0029	fill	Mixture of ash and clay, a phase of 0029
0038	0038	layer	Grey fine silt into which clay tanks were cut







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Documentary Report

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Archaeological Service The Suffolk Archaeological Unit has commissioned this report as part of the archaeological assessment of this site. The research for this report has been carried out at the Suffolk Record Office in Bury St Edmunds. The site is located near to a former tannery. The process of tanning leather required a permanent production site with access to both clean water and a point of discharge for effluent. Only certain types of animal skins were suitable for tanning. The process involved the immersion of the heavy parts of hides in various solutions of tanning extracted from oak bark to produce finished leather. It was prolonged taking several years to produce specific types of finished leather. It was skilled work and required a well-trained labour force. Once a tannery was established on a particular site it would have remained in use for several centuries. There is documentary evidence for a tannery that formerly stood close to this site from the 14th century onwards. Though not part of the tannery itself this site has been the focus for a number of allied leather trades, such as that of the fellmonger.

Maps

The archaeological unit have supplied a copy of the modern Ordnance Survey map together with copies of the first three editions of the 1:2500 Ordnance Survey maps of this site for the purposes of this report. On the modern map the site entrance is located between numbers 16 & 18 Eastgate Street on the northern side of the street with the property backing onto the River Lark to the northwest. To the southwest the site of the former medieval Eastgate Bridge is marked on the earlier maps. On the earlier maps a building is shown over the gated entrance to the site. A little to the northeast of the site close to the present Magna House an inn is marked on the first two editions of the not shown on the third edition of this map published in 1926. It should be noted that the river flows to the northeast away from the town

There are various early detailed maps of Bury. On these maps the most important for the purposes of this report are Richard Payne's 1833 (ref. 586/2) and Thomas Warren's 1791 map of the borough (M555/938, Figure 14) as both offer information that can be used to identify the property owners in and around this site.





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Figure 14. Later edition of Thomas Warrens map dated 1791 (east at the top).



Figure 15. East Gate Bridge before it was rebuilt in 1840

The plot numbers given on Richard Payne's 1833 'Map of the Parishes of Saint Mary and Saint James, Bury St Edmunds' (ref. 586/2) are listed in separate manuscript volumes (ref. E8/2/1/(4)). In the volume describing the lands the plots adjoining this site are listed as:

June describing the

102	k County Councile			Occupier Suffork County Councile
Nos 1	Name of Pieces	Pasture	Owner	Occupier Sulling
90 (91) 91 (92) 93 H	House, Offices etc Garden, House etc The Ram Inn, Offices etc Garden Eastgate Bridge Meadow ditto Garden ditto ditto	1 a 1 r 1 r 20 p 3 r 15 p 1 r 25 p 1 a 1 r 30p 15 p 16 p 3 p	J.Ridley & Son Mrs Palmer R. Maulkin R. Maulkin R. Maulkin R. Maulkin R. Maulkin G.H. Feoffment	in hand Thomas Steckles William Middleditch Thomas Clarke William Middleditch Walter Burroughs George Cawston George Cawston

Table. 2. Extract of plots adjoining the site from Richard Paynes 1833 map

There is a separate volume giving the 'Particulars of a Survey of the Town of Bury St Edmunds: Parish of St James 1833' that lists the occupiers and owners of all the houses in this parish. The various meadows are listed as number 8 in this volume and it should be emphasised that these are not the modern house numbers for this street.

10015

Description of the Property	Owners
colk dios	
House, Bake Office & Garden	Thomas Harrold
House & part of yard	George Winn
House, shed and yard	ditto
House, shop & Garden	ditto
House Workshop, Mill, Stable & yard	Himself
Queen's Head, Public House	Robert Burroughs
and Brewhouse	
House, Butcher's Shop, pigsties & Garden	Himself
House and Yard	George Cawston
House, Shop, Coal-house, Stable & yard	Himself
Ram Inn, Brew ho, Lodges, Stables,	
Yards and Gardens	Robert Maulkin
Meadows 4 a 1 r 16 p	ditto
A garden 1 r 25 p	ditto
House	John Ray
House	ditto
House	Himself
House, sheds, Ch: ho, yard & garden	John Ridley
	House, Bake Office & Garden House & part of yard House, shed and yard House, shop & Garden House Workshop, Mill, Stable & yard Queen's Head, Public House and Brewhouse House, Butcher's Shop, pigsties & Garden House and Yard House, Shop, Coal-house, Stable & yard Ram Inn, Brew ho, Lodges, Stables, Yards and Gardens Meadows 4 a 1 r 16 p A garden 1 r 25 p House House House

Table. 3. Extract from the list of the occupiers and owners from Richard Paynes 1833 map.

The next three properties were in the ownership of John Ridley and described as houses and gardens. John Ridley and son 'House, Tan Offices, Chaise House, Stables, Cart Lodge, yard and garden' are listed under number 29. In the 1851 census John Ridley described himself as a tanner employing four men. These were his own son Arthur Ridley, George Hazlewood, John Wells and Thomas Robinson all of whom lived in houses adjoining the tannery itself. The area between the bridge and the tannery was then notable for the high number of paupers living in the houses along the street frontage. Some of these paupers such as William Galley 'watch maker pauper' may have simply been temporarily unemployed. James Sawyer is listed as a butcher living at 17 Eastgate Street and 14 & 15 was then in the occupation of Susan Winn a widow described in the census as a 'grocer and beer seller'. A number of the residents listed in Payne's 'Particulars' are listed in the 1841 census Edward Carey was a fellmonger and George Winn a grocer. Also there were a number of leather working craftsmen such as shoemakers and binders, a glover and a harness maker.

Thomas Warren's 1791 map (ref. M555/938) marks the positions of both the Tan Office and the name of its owner John Ridley and the position of the 'Ram Yard' then stretching to the southwest beyond the site of the tavern.

Property Deeds

The term 'Public House' was first use in relation to the Liqueur Licensing laws in the 1828 Licensing Act. Before that date public houses were variously described as inns, taverns or alehouses. There are some collections of documents relating to public houses in Bury St Edmunds. In his typed notes and copies of documents covering the years 1714 to 1731 gathered from the Sun Fire Insurance Policies held at the Guildhall Library Derek McLeod has recorded the names of various early 18th century inns and taverns in Bury (ref P741/1, 2). Unfortunately there are no references to either the Queen's Head in Eastgate Street or the Ram. A collection of 20th century pencil notes on Bury Inns and Taverns compiled by E. R. Burdon include references to the Angel, the Castle on Cornhill, the Bell on Cornhill, the Marlborough Head, The Queen's Head in Churchgate Street, The White Bear and the Three Pidgeons but again no references to either of the public houses in Eastgate Street (ref. 311/4). There is a list of the inns in Bury in 1707 copied from the Egerton Manuscripts (ref. 755/42).

Though these various lists fail to provide a reference to the 'Ram' it was in use as an inn from the early 18th century onwards. It is mentioned in a lease dated 1 September 1729 'between Thomas Taylor of Bury St Edmunds ... malster ... and Robert Boggas ... Innholder' (ref. 756). The property is described in general legal terms as 'All that messuage, tenement or mancion house and scite of the said messuage or mancion house scituate and being in the Eastgate Street in Bury St Edmunds aforesaid Over against the Vine Field Gate commonly called or known by the Sign of the Ram as the same formerly was in the tenure or occupation of Margaret Taylor widow afterwards of Henry Spalding and now of Robert Wyars his undertennant or undertennants yards, gardens, backside, passages, ways, waters, easements, profits, rights, members, in anyway annurtaining or accented verset. assignee or assignes together with all the houses, outhouses, buildings, barns, stables, member thereof which said premises are scituate and being in the Eastgate Street aforesaid between a messuage or tenement of the said Thomas Taylor wholly or in part towards the East and a messuage or tenement and yard in the occupation of Robert Wyars wholly or in part towards the West and abutting upon a garden or orchard late of John Warren Tanner now of Jane Warren widow towards the North and upon the street called the Eastgate Street towards the South'. The property was intended to be hereby bargained and sold' to Robert Boggas. Unfortunately the lease is in a miscellaneous collection of deeds and there are no additional documents in this collection that could be used to trace the earlier history of the site.

A far more important collection is a bundle of deeds dating from 1745 to 1841 (ref. E4/12) describing part of this site. The earliest documents in the bundle are deeds of lease and release dated 13 and 14 September 1745 between John Lyng of Bury St Edmunds, grocer and Samuel Smith, glover. The property is described as 'all that messuage or tenement with the houses edifices shops cellars yards gardens grounds and appurtenances to the same messuage or tenement belonging or appertaining situate and being in Bury Saint Edmunds aforesaid in a street there called the Eastgate Street between the messuage of Thomas Taylor on the East part and the

messuage of Martha Press on the west part the North head thereof abutteth upon the water course leading towards Babwell and the South head thereof upon the said street called Eastgate Street which said messuage or tenement and premises are now in the occupation of Samuel Smith A moyety of which said premises Peter Lyng deceased the father of the said John Lyng purchased to him and his heirs of Edward Spilman and Margaret his wife one of the daughters and coheirs of Luke Maynew deceased by deed of feoffment bearing the date on or about the Third Day of February which was in the year of our Lord One Thousand Six Hundred and Seventy and eight'. The moiety is a half share in a property and this had been left to John Lyng in his father's will dated 27 August 1716. The other moiety came to John Lyng 'as eldest son and heir of Grace Lyng who was the other daughter and coheir of the said Luke Mayhew'. This deed reunited both half shares and the property was sold to Samuel Smith.

In another deed in the same bundle dated 25 January 1788, Mr Joseph Maulkin 'Gentleman' sold a 'piece of ground part of the Ram Inn Orchard in the Eastgate Street' to Mr Richard Neve Smith 'fellmonger'. A fellmonger is a dealer in animal skins. The property in 1788 is described as 'All that piece of ground containing by estimation sixteen perches lying and being divided from the other part of the said Orchard or piece of pasture ground by a brick and stone wall towards the east abutting upon the yard or ground of the said Richard Neve Smith west the River North and the yard or ground of Samuel Smith south with the appurtenances which said piece of Ground hereby granted together with the messuage tenement or Common Inn called the Ram Inn and the other part of the said Orchard or piece of pasture ground with the appurtenances in and by certain indentures of Lease and Release bearing the date respectively the eleventh and twelfth days of October now last past and made or mentioned to be made between John Spink of Bury Saint Edmunds aforesaid Esquire and William Dalton of the same place Grocer executors and devisees named in the last will and testament of William Walker then late of Bury Saint Edmunds aforesaid Innkeeper deceased of the one part and the said Joseph Maulkin and Robert Maulkin

Under the terms of the will of Richard Neve Smith dated 21 August 1795 his properties passed to his son-in-law John Bradbrooke. Previously in M. Samuel Smith, a glover with Will. Samuel Smith, a glover with William Adkins an innholder had acquired an interest in another property in Eastgate Street. A mortgage was raised on all the properties on 20 June 1812, and the property description included the properties described in the deeds of 1745 and 1788 together with that acquired in 1779. The third property was 'All that messuage tenement or dwelling house part of a certain messuage or tenement formerly used as a common inn and known by the name of the Three Bells but for many years last past divided and used separately and apart ... being ... in a street called Eastgate Street that is to say between the messuage or tenement formerly in the occupation of John Deeks afterwards of Philip Nunn and now of Mark Brand other part of the aforesaid messuage or tenement formerly called the Three Bells on the east part and the messuage or tenement late Richard Neve Smith and now in the occupation of John Bradbrook ... on the west part fronting and abutting the street ... towards the South'. Further sums of money were raised on the properties in 1821 and 1823 before the death of John Bradbrook in 1823. Under the terms of his will he left his property in Bury St Edmunds to Jonathon Adams a grocer and 'Cornelius Eleven the younger ... Leather Cutter' for them to sell on behalf of John's daughter Eliza Bradbrook. In 1831 she sold her interest in the estate then in the occupation of Archaeol

'Joseph Gilbert, George Smith, Benjamin Norman, William Corey and Edward Brown' to a John Hurley. Of these only Joseph Gilbert is mentioned in Richard Payne's 'Particulars'. This deed was intended to empower John Hurley to clear all the entails on the estate notably the interests created by the mortgage and loans. Once these had been cleared the properties were sold to George Oliver a grocer and George Winn a stonemason. These details are given in the 18 pages of the 'Abstract of Title'.

In one of the last documents in the bundle relates to Joseph Gilbert who had purchased the estate with the assistance of another mortgage from a Charles Denton Leech. The mortgage was raised not only on the property itself but on a steam engine mill seed and dressing machines.

The property is described in some detail in 'Particulars and Conditions of Sale of Freehold Property near New Eastgate Bridge' dated 5 October 1840. Joseph Gilbert was described as an 'Engineer and Millwright'. Apart from house there were a 'large yard approached by a pair of broad gates in which are a capital Bake office and loft over, a smith's shop with Brass and Iron Foundry and Lofts over with Blowing machine to the same, an excellent stable for 3 horses with loft over, a building including a Corn Mill house with pair of French Stones, jumper and gears complete, seed drawing Mill-House and machine with apparatus complete, a flour mill a steam engine house, with 6 horse high-pressure steam-engine complete with boiler house, The above building is 3 stories high'. The property and fittings was sold by a private contract to John Cooke. The 1840 description suggests that there had been very recent changes to the property.

Early Rentals and Wills

It would be possible to discover the names of earlier owners and occupiers of the site using tax returns, rate lists, and probate records. As an example Peter Ling is listed under the parish of St James in the 1674 Hearth Tax returns.

As with many of the properties in Bury St Edmunds some of the houses in Eastgate Street are listed in documents relating to the Sacrist's estate. The sacrist was one of the officials of the former monastery and drew income from various properties in the town to finance the duties of his office. Another official was the cellarer whose estate included Eastgate Barns sometimes also known as Holderness Barns or Grange Farm. At the dissolution of the monastery these properties passed to the crown and the names of their occupiers appear in rentals of the 1540's.

There is a Photostat copy of the Sacrist's rental of 1433 (ref. Ac 1055) at the Record Office in Bury the original of which is at the British Library. The quality of the reproduction makes it difficult to read all the names that appear superscript recording a succession of later owners. These names link this document to another Sacrist's rental of 1526 and a town rental of 1547 both of which have been published (Breen 2000).

In 1433 the Sacrist's properties are listed in the Latin text from the upper end of the street to the bridge. The properties nearest to the bridge were:

'Item Thomas Vale dyer for a tenement late Thomas Lamble and formerly Robert Inglond and William Lord lying next to the stone bridge between the tenement of Robert Toly cordwainer on the part of the east and the common river on the part of the west and abuts towards the south on the King's Highway rent p, a,12d

Item Stephen Gardener for a tenement late Thomas Gardener and formerly William Gardener lying between the common river and the meadow of the cellarer of St Edmunds on the east and the tenement of Simon Clerk on the part of the west and abuts towards the south on the King's Highway rent p.a. 15d

Item Simon Clerk launderer for a tenement late the said Thomas Gardener and formerly William Gardener lying between the tenement of Stephen Gardener on the part of the east and the tenement of Roger Gardener on the part of the west and abuts towards the south on the King's Highway rent p. a. 15d

A cordwainer was a shoemaker the name is derived from Cordova in Spain.

There are ten properties listed in 1433 on this side of the street including three properties in the occupation of John Gowty 'barker' and another in the occupation of John Clerk, 'barker'. Another 'barker' Richard Toly lived on the opposite side of the street near 'the gate called *Le Venyfeldegate*'. A barker was another earlier name for a tanner. One of John Gowty's properties is listed as

'Item John Gowty barker for a tenement situated in the corner late Edward Redgrave, barker and formerly Thomas Lucas, barker lying between the lane called Holderneslane on the part of the east and the tenement of John Clerk in the part of the west ... 2 d'.

This tenement is in the same position as John Ridley's tannery 450 years later and clearly it had been a tannery for some years before 1433.

In 1526 the same property is listed as 'Of Walter Hoo for a tenement late John Gowty between the tenement of the said Walter on the est and the tenement of Robert Wakryle on the west parte iid'. Walter Hoo also owned a property in Southgate Street and the entry in the rental for that property describes him as a tanner. In this 1526 rental the properties nearest to the bridge as listed in 1433 were then in the occupation of Roger Reve and Thomas Whitemouth. The river was then described in the English text as 'The Grett Common Dyke'.

In an unpublished rental dated to c. 1542 now at the National Archives, (ref. SC6/HenVIII/3434) a William Chiston appears amongst those living in Eastgate Street. In his will proved at the prerogative court of Canterbury on 26 April 1557 he is described as a tanner. He was probably the son of Thomas Chestyn, tanner whose will is recorded in the Sacrist's Peculiar Court records and dated 24 September 1513. Amongst his various gifts to ecclesiastical bodies he left money 6s 8d for the repair of 'Our Ladyes Chapell at the Estgate Bregge'. He had purchased his tenement in Eastgate Street from a Robert Allotts and asked his executors to 'make a walle bytwen my tenement' the 'wall shall stande from the tyled house of the tenement that was Allots down to the water at the neder ende next the water the wall to go VI fete from the garden pale' (ref. R2/5/26).

Amongst the records of the same court there are the wills of Alice Gowty dated 6
February 1493 in which she left her son John Gowty the younger 'barker' her 'tenement in Estgate street by the tenement of Edmond Ingold', a Pall mentioned in the 1433 rental as occupying a property of sidescribed as a tanner in his will dated 14. county council council county a service of the harv

By comparing the details of the rentals with the various wills it is apparent that more that one tannery was in operation in the area of this site at this period.

Conclusion

From the evidence of various sources it appears to be the case that individual houses in this part of Bury were both united with adjoining properties and later separated from them and it is probable that the boundaries of each property have not remain the same.

In some cases land behind the street frontage was separated from the property and sold to a neighbouring proprietor. This is apparent through a simple comparison of the two early maps with the 'Ram Yard' extending to the boundary of this site in 1791 though restricted to the area behind the site of the Inn in 1833. The deeds mention that Joseph Maulkin sold of part of the Ram Orchard to the fellmonger Richard Neve Smith in 1788 and following the succession of the owners through to Joseph Gilbert it should be the case that this site should adjoin that of the Ram Inn. The 1833 particulars give the Ram Inn as number 20 and Joseph Gilbert's property as number 14 and therefore they were separated by another four properties with the butcher John Wright occupying 16-17. The only gated entrance with a building above it shown on the Ordnance Survey maps is the entrance to this site. The 1840 sale particulars of Joseph Gilbert's property specifically describe this gated entrance and other parts of

Previously the premises had been owned by Richard Neve Smith described as a fellmonger in his will of 1795. In the census 1841 Edward Carev was the fellmonger listed in Eastgate Street who according at 12 Eastgate Street. at 12 Eastgate Street. He is not mentioned in the deeds though a William Corey is named as an occupier of one of the properties in 1831.

There are difficulties in reconciling the various business activities of the proprietors and occupiers of the houses in and around this site as described in the earlier records with the modern site boundaries and street numbering and this problem cannot be entirely resolved in this report.

The dominant industrial activity of this area was tanning with a least three 'barkers' mentioned in 1433. One of these John Gowty and his family occupied the site the tannery later owned by John Ridley. The earlier property owners or occupiers mentioned in the 1433 rental shows that this was a tannery site before that date. The position of the other tanneries is uncertain, though it is clear that they were much closer to the Eastgate Bridge. Apart from the tanneries, there are references to the trade of fellmonger, a buyer of hides and other animal skins. His role would be to sort the material suitable for the tanners from the skins sold to other trades. It is not possible in this brief report to fully discuss other work of other craftsmen who used animal skins and it is quite possible that some trades such as curriers and parchment makers would have worked in other areas of the town. The role of butchers should not be entirely ignored as the specialization of the roles of slaughters and butchers is a relatively modern concept. It is certain that in an early period butchers both killed animals and sold the meat.

The area of this site was made up of separate but interacting industrial and commercial enterprises exploiting the access to clean water and the advantage of being able to discharge the effluent of their work back into the river without injury to the health of the towns' people.

Suffolk Record Office, Bury St Edmunds & County Service

Maps

1:250 1:2500 Ordnance Survey Map, sheet number XLIV.7 1926 1:2500 Ordnance Survey Map, sheet number XLIV.7 1904 1:2500 Ordnance Survey Map, sheet number XLIV.7 1883 - 84

586/2 Richard Payne, surveyor "A Map of the Parishes of Saint Mary and Saint James, Bury St Edmunds" 1833

E8/2/1/(4) Particulars of a Survey of Bury St Edmunds 1833 E8/2/1/(4) Particulars of a Survey of Bury St Edmunds, Parish of St James 1833

M555/938 Thomas Warren's "Survey of Bury St Edmunds" 1791 Thomas Warren's Map of Bury St Edmunds

Archdeaconry of Sudbury Wills (Court of the Sacrist of St Edmunds Abbey for the Peculiar of Bury St Edmunds)

R2/4/23 Alice Gowty 1493 R2/2/26 Thomas Chestyn, Tanner 1513 R2/6/133 John Gowty, Tanner 1527

Miscellaneous Deeds

756 Lease of the Ram Inn 1729 E4/12 Deeds for Property near the Ram Inn 1745-1841

Photostats and Copies

Acc1055. Photostat, BM Harley 58 "Rental of the Sacrist for the Town of Bury, 1433".

755/42 List of Inns in Bury St Edmunds 1707 (Egerton Manuscripts)

P741/1, 2 Copies of Sun Fie Insurance Policies of Inns in Bury St Edmunds 1714-1731

Printed Sources

Breen, A. M.,2000, The Bury Rentals 1526&15247. Before the Parish Registers Series, Suffolk Family History Society.



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Appendix 3

Environmental Survey

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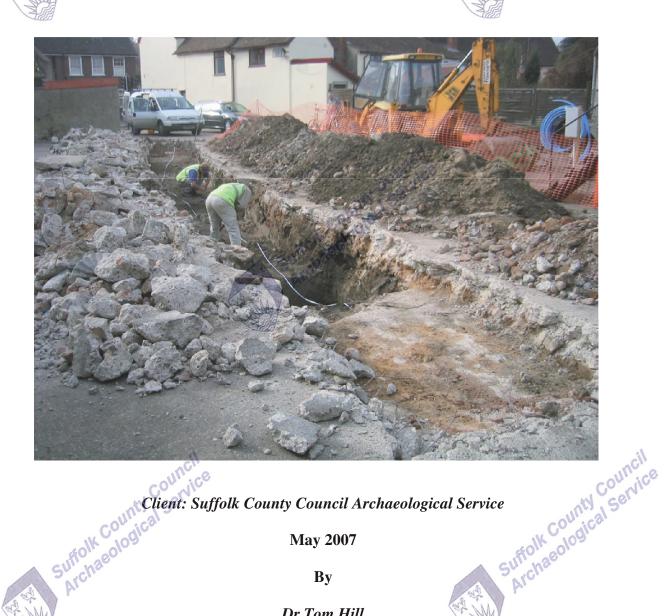
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Eastgate Street, Bury St Edmunds: a palaeoenvironmental assessment of deposits encountered during ground investigations County Council



Dr Tom Hill

SCCAS-33-07

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BIRMINGHAM ARCHAEO-ENVIRONMENTAL





uffolk County aservice NTRC 1. INTRODUCTION

Planning consent has been granted for the construction of residential properties on Eastgate Street, Bury St Edmunds (GR 585910 264503; Figure 1). An archaeological evaluation of the application area was however required before development is to commence. Palaeoenvironmental assessment was included as part of the archaeological monitoring. This was due to the site being located on the floodplain of the River Lark, which is an area known to have considerable potential for the preservation of deposits of palaeoenvironmental significance. As a consequence, Birmingham Archaeo-Environmental were sub-contracted to undertake the coring and subsequent stratigraphic and palaeoenvironmental assessments.

This report presents the results of palaeoenvironmental investigations (manual coring, stratigraphic recording, sampling and palaeoenvironmental assessment) associated with this scheme of work.

- The aim of the work was twofold:
 To identify, record, characteristical in the second characteristics. To identify, record, characterise and sample organic deposits and where applicable, assess this material for biological preservation and if applicable, identify suitable samples for radiocarbon dating.
- To provide an understanding of the subsurface stratigraphy of the deposits encountered to aid in the development of future archaeological prospection strategies.

At the time of ground investigations, the site was used for parking and contained possible storage units. There was a c. 0.10m cap of concrete across the site Fieldwarf took place on Thursday 12th April A single and varying in depth from 0.30m to 1.70m, traversed the site (Figure 2). During the assessment of the exposed deposits within the trial trench, no peat units or organicrich units with palaeoenvironmental potential were encountered. Coring however was also undertaken using a manual gauge 'Eijkelcamp' corer along the floor of the trial trench. Coring was continued until basal gravels were encountered. A total of four cores were extracted, at c. 5m intervals, to assess the palaeoenvironmental potential of the underlying stratigraphic archive.

Sediments were recorded using the Troels-Smith (1955) classification scheme. The scheme breaks down a sediment sample into four main components and allows the inclusion of extra components that are also present, but that are not dominant. Key physical properties of the sediment layers are also identified according to darkness (Da), stratification (St), elasticity (El), dryness of the sediment (Dr) and the sharpness of the upper sediment boundary (UB). A summary of the sedimentary and physical properties classified by Troels-Smith (1955) and the nomenclature used is provided in Table 1.

3. PRELIMINARY RESULTS OF FIELDWORK

ered wing Whilst no deposits of palaeoenvironmental significance were encountered within the exposed trench sides, subsurface sediments extracted during coring along the base of the trench revealed organic deposits. Cores were taken along a single transect running along the length of the trial trench, with Core 1 positioned to the south of the trench (located furthest away from the River Lark). Core 4 was positioned towards the north within the deepest section of the trench (see Figure 4). All cores initially encountered yellow-brown clays and silts with occasional chalk clasts within. The silts and clays were commonly present to a depth of c. 1.40m, although the unit thickness increased northwards towards the River Lark (present at c. 2.00m depth in Core 4). Charcoal fragments were also occasionally encountered. Below the silts and clays, a layer of grey-brown organic gravelly sand is present, again increasing in thickness towards the River Lark. The gravel component comprised chalk, occasional quartz and fragments of charcoal. In Cores 1 and 3, orange-brown basal sands and gravels were encountered underlying the grey-brown gravelly sand unit. However, in Core 2, a 0.20m thick peat unit was present overlying the basal sands and gravels (at c. 2.22-2.42m depth). In addition, in Core 4, a slightly thicker peat unit was present, although encountered at a greater depth (2.92-3.55m depth). The depth at which basal sands and gravels were encountered therefore increased with distance towards the River Lark.

Due to the presence of peat within Cores 2 and 4, material suitable for further palaeoenvironmental assessment has been identified at the Eastgate Street site. The greater abundance of peat within Core 4 suggested that this core location contained the greater palaeoenvironmental potential of the two core sites. Consequently, a sample core was taken proximal to the original location of Core 4.

4. CONCLUSIONS

are likely to be reworked natural floodplain deposits, into which chalk had been added possibly for agricultural purposes. As comparate to the possibly for agricultural purposes. As commonly encountered in lowland river environs, the thickness of the floodplain deposits as well as the depth of a line in the line in the depth of a line in the depth of a line in the depth sands and gravels are encountered, increases with distance towards the River Lark. The grey-brown gravelly sand present under the clay and silt unit is suggested to be a possible (anthropogenic) ditch fill. This is supported by the unit's poorly sorted nature, the presence of humified organic remains and the relative abundance of charcoal fragments. The thickness of this unit is also shown to increase with distance north towards the River Lark, which may be indicative of a drainage ditch that has become infilled over time.

The peat encountered within Cores 2 and 4 was very well humified with varying minerogenic content. The peat unit is therefore suggested to be indicative of in-situ organic accumulation on the floodplain of the River Lark. The saturated nature of the floodplain environment would have enabled the accumulation of organic remains on the waterlogged palaeolandsurface. Although it cannot be discounted that the organic unit may in fact be a relict infilled palaeochannel, the well humified nature of the deposit, combined with the relative abundance of silts and sands is suggestive of the influence of both floodplain minerogenic sedimentation and in-situ organic floodplain accumulation.

The basal sands and gravels are likely to be relict river terrace gravels dating to between the end of the last Ice Age (the Late Devensian, c. 18-13,000 yrs BP) and the early Holocene period (c. 13,000-8,000 yrs BP). Due to poor sample extraction during coring however, it was not possible to determine whether these sands and gravels are of Devensian or early Holocene age.

5. RECOMMENDATIONS FOR FURTHER ANALYSIS

The peat unit identified within Core 4 should be considered for palaeoenvironmental analysis. To obtain an understanding of the palaeoenvironmental conditions responsible for the development of the peat unit, the following assessment is suggested:

- Pollen analysis of four samples from the peat unit, in order to assess the palaeoecological conditions present at the time of deposition. It is recommended that samples from within the peat unit at 2.93m (top), 3.13m, 3.33m and 3.54m depth (bottom) are assessed.
- Pollen analysis of two samples from within the overlying gravelly sand to assess the changing environmental conditions responsible for the shift in depositional regime. Samples to be assessed from 2.68m and 2.91m depth.

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Troels-Smith, J. (1955). Karakterisering af lose jordater (characterisation of unconsolidated sediments). Denmarks Geologiske Undersogelse, Series IV/3, 10, 73.

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Archaeological Service nig.4 black nig.3 nig.2

> nig.1 nig.0

white

Degree of Stratification				
strf.4	well stratified			
strf.3				
strf.2				
strf.1				
strf.0	no stratification			

1600: Eastgate Street, Bury St Edmunds						
Degree of Elasticity	Degree of Dryness					
elas.4 very elastic	sicc.4 very dry					
elas.3	sicc.3					
elas.2	sicc.2					
elas.1	sicc.1					
elas.0 no elasticity	sicc.0 water					

Degree	Degree of Dryness			
sicc.4	very dry			
sicc.3				
sicc.2				
sicc.1				
sicc.0	water			

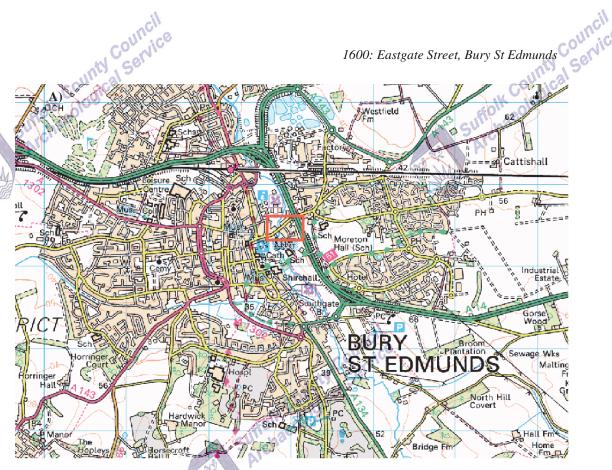
	Sharpness of Upper Boundary
lim.4	< 0.5mm
lim.3	< 1.0 & > 0.5mm
lim.2	< 2.0 & > 1.0mm
lim_1	< 10.0 & > 2.0mm
lim.0	> 10.0mm
Cat M	Y

	01		
	Sh	Substantia humosa	Humous substance, homogeneous microscopic structure
	Tb	T. bryophytica	Mosses +/- humous substance
I Turfa	TI	T. lignosa	Stumps, roots, intertwined rootlets, of ligneous plants
	Th	T. herbacea	Roots, intertwined rootlets, rhizomes of herbaceous plants
	DI	D. lignosus	Fragments of ligneous plants >2mm
II Detritus	Dh oci	D. herbosus	Fragments of herbaceous plants >2mm
	Dg N	D. granosus	Fragments of ligneous and herbaceous plants <2mm >0.1mm
III Limus	21	L. ferrugineus	Fragments of ligneous and herbaceous plants <2mm >0.1mm Rust, non-hardened. Particles <0.1mm Particles of clay Particles of silt
K ologi	As	A.steatodes	Particles of clay
IV Argilla	Ag	A. granosa	Particles of silt
	Ga	G. arenosa	Mineral particles 0.6 to 0.2mm
V Grana	Gs	G. saburralia	Mineral particles 2.0 to 0.6mm
	Gg(min)	G. glareosa minora	Mineral particles 6.0 to 2.0mm
	Gg(maj)	G. glareosa majora	Mineral particles 20.0 to 6.0mm
	Ptm	Particulae testae molloscorum	Fragments of calcareous shells

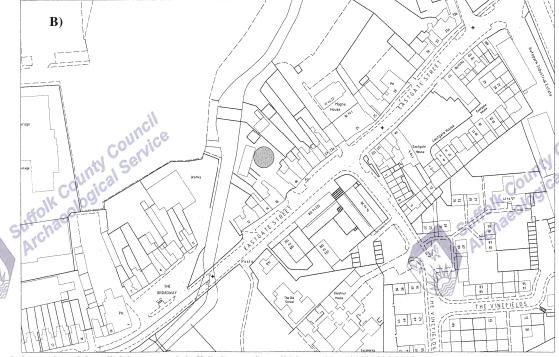
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Figure 1: A) Map of Bury St Edmunds, Suffolk, with site location highlighted in red box and B) enlarged map of Eastgate Street site. Provided by Suffolk County Council Archaeological Service.



Figure 2: Trial trench running approximately north-south across the site. The River Lark, now channelised, is located behind the garages at the top of the picture (see Figure 3).



Figure 3: The River Lark, located immediately north of the Eastgate Street site.







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CORE STRATIGRAPHY

Core 1 (TL 85877 64491):

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0.00-0.89m Depth to base of trial trench

0.89-1.44m UB St El Dr 0 Ag2, As2, Ga+, Ggmin+, Ggmaj+

Light yellow-brown silts and clays with occasional chalk clasts

1.44-1.79m Da St El Dr **UB** 3 2 Ga2, Ag2, As+, Ggmin+, Ggmaj+

Grey-brown sandy silt with occasional gravel of chalk, charcoal, quartz

1.79-1.90m Da St Dr UB 3

Ggmaj2, Ggmin1, Ga1, Ag+

Orange-brown sands and gravels of predominantly quartz and flint

Core terminated within gravels at 1.90m depth

Core 2 (TL 85876 64499):

0.00-0.82m Depth to base of trial trench

UB 0.82-1.42m Da Dr 2 Ag2, As1, Ggmin1, Ggmaj+, Ga+

Suffolk County Council
Archaeological Service Light yellow-brown clays and silts with chalk, charcoal and quartz clasts

1.42-2.22m O^{UI} Da St El Dr UB 1

Ga2, Ag1, Ggmin1, Ggmaj+

Grey-brown gravely sand with charcoal and chalk clasts

2.22-2.42m St UB Da Εl Dr 3+ 2

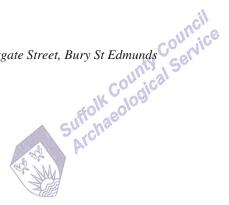
Sh2, Ga1, Dg1, Ag+, Dh+

Dark brown slightly sandy well-humified peat

2.42-2.60m Da St El Dr UB 2

Ggmin2, Ggmaj1, Ga1, Ag+ Orange brown sands and gravels

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Archaeological Service Core terminated within sands and gravels at 2.60m depth



Depth to base of trial trench

Core 3 (TL 85872 64503):
1.00-0.71m Depth
71-1.41m El Dr UB 2

Ag2, As1, Ga1, Ggmin+, Ggmaj+ Light yellow-brown sandy clayey silts

UB 1.41-1.62m Da St El Dr 2 2 1

Ag2, As2, Ga+, Ggmin+ Yellow brown clays and silts

1.62-2.30m Da Εl Dr UB St

Ga2, Ag1, As1, Ggmin+

Grey-brown silty sand with gravel of chalk, flint and charcoal

2.30-2.40m Da St El Dr 3 0 Ag2, As1, Sh1, Ga+, Lf+

Grey-brown organic clayey silt

Core terminated within sands and gravels at 2.40m depth

Core 4 (TL 85872 64503):

0.00-1.70m Depth to base of trial trench

1.70-1.98m Da St El Dr UB 2 2

Ag2, As2, Ga+, Ggmin+

Light yellow-brown clays and silts with occasional chalk clasts

Da 2+ 1.98-2.70m Εl Dr UB 2

Ga2, Ag1, Ggmin1, Ggmaj+, As+

Grey-brown silty pebbly sand with occasional organic mottling

St UB El Dr

Ga1, Ag1, Sh1, Ggmin1, Ggmaj+, As+

Dark grey-brown organic pebbly silts and sands

2.92-3.35m UB Da St El Dr 2

Sh3, Ag1, As+, Ga+

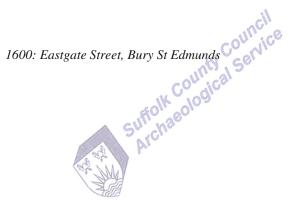
Dark brown very well humified silty peat

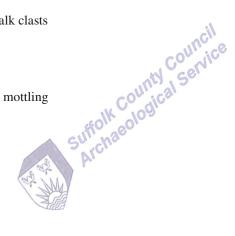
3.35-3.55m Εl Dr UB Da St 0 2 1

Sh2, Ag1, Ga1, As+

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Archaeological Service Dark brown sandy silty very well humified peat

Core terminated within sands and gravels at 3.55m depth









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Appendix 4 SUFFOLK COUNTY COUNCIL ARCHAEOLOGICAL SERVICE - CONSERVATION

Brief and Specification for an Archaeological Evaluation

15-17 EASTGATE STREET, BURY ST EDMUNDS

The commissioning body should be aware that it may have Health & Safety and other responsibilities, see paragraphs 1.7 & 1.8.

1. **Background**

This is the brief for the first part of a programme of archaeological work. There is likely to be a requirement for additional work, this will be the subject of another brief.

- 1.1 Planning consent [SE/06/2482] has been granted for four town houses and two flats at this location.
- The planning consent contains a condition requiring the implementation of a 1.2 programme of archaeological work before development begins (Planning Policy Guidance 16, paragraph 30 condition). An archaeological evaluation of the application area is required as the first part of such a programme of archaeological work; decisions on the need for, and scope of, any further work will be based upon the results of the evaluation and will be the subject of additional briefs..
- 1.3 The development area is within the Area of Archaeological Importance defined in the Local Plan. It lies outside the walled town but is known to be a suburban settlement area on one of the main early routes into Bury, close to the crossing point of the River Lark. Late medieval and 16th century buildings adjacent. There is high potential for dwellings on the road frontage (site access) and occupation deposits in the backyard area (main development area).
 - There is likely to be generalised ground disturbance over the site area of c.300mm. The main development is likely to be piled with ground beams up to 750mm deep.
- All arrangements for the field evaluation of the site, the timing of the work, access to the site, the definition of the precise area of landholding and area for proposed development are to be defined and negotiated with the commissioning body.
- 1.5 Detailed standards, information and advice to supplement this brief are to be found in Suffolk County Council
 Suffolk County Service
 Archaeological Standards for Field Archaeology in the East of England, East Anglian Archaeology Occasional Papers 14, 2003.



- In accordance with the standards and guidance produced by the Institute of Field 1.6 Archaeologists this brief should not be considered sufficient to enable the total execution of the project. A Project Design or Written Scheme of Investigation (PD/WSI) based upon this brief and the accompanying outline specification of minimum requirements, is an essential requirement. This must be submitted by the developers, or their agent, to the Conservation Team of the Archaeological Service of Suffolk County Council (Shire Hall, Bury St Edmunds IP33 2AR; telephone/fax: 01284 352443) for approval. The work must not commence until this office has approved both the archaeological contractor as suitable to undertake the work, and the PD/WSI as satisfactory. The PD/WSI will provide the basis for measurable standards and will be used to establish whether the requirements of the planning condition will be adequately met.
- Before any archaeological site work can commence it is the responsibility of the 1.7 developer to provide the archaeological contractor with either the contaminated land report for the site or a written statement that there is no contamination. The developer should be aware that investigative sampling to test for contamination is likely to have an impact on any archaeological deposit which exists; proposals for sampling should be discussed with this office before execution.
- The responsibility for identifying any restraints on field-work (e.g. Scheduled 1.8 Monument status, Listed Building status, public utilities or other services, tree preservation orders, SSSIs, wildlife sites &c.) rests with the commissioning body and its archaeological contractor. The existence and content of the archaeological brief does not over-ride such restraints or imply that the target area is freely available.

Brief for the Archaeological Evaluation 2.

- 2.1 Establish whether any archaeological deposit exists in the area, with particular regard to any which are of sufficient importance to merit preservation in situ [at the discretion] of the developer].
- 2.2 Identify the date, approximate form and purpose of any archaeological deposit within the application area, together with its likely extent, localised depth and quality of preservation.
- Evaluate the likely impact of past land uses and natural soil processes. Define the potential for existing damage to archaeological deposits. Define the potential for colluvial/alluvial deposits, their impact and potential to mask any archaeological deposit. Define the potential for artificial soil deposits and their impact on any archaeological deposit.

- Suffork County Council
 Service
 Establ:
 the Establish the potential for waterlogged organic deposits in the proposal area. Define the location and level of such deposits and their vulnerability to damage by development where this is defined.

 Provide sufficient information to construct an arrival lealing with preservation, the recordinate and orders of
- 2.5
- 2.6 This project will be carried through in a manner broadly consistent with English Heritage's Management of Archaeological Projects, 1991 (MAP2), all stages will follow a process of assessment and justification before proceeding to the next phase of the project. Field evaluation is to be followed by the preparation of a full archive, and an assessment of potential. Any further excavation required as mitigation is to be followed by the preparation of a full archive, and an assessment of potential, analysis and final report preparation may follow. Each stage will be the subject of a further brief and updated project design, this document covers only the evaluation stage.
- The developer or his archaeologist will give the Conservation Team of the 2.7 Archaeological Service of Suffolk County Council (address as above) five working days notice of the commencement of ground works on the site, in order that the work of the archaeological contractor may be monitored.
- 2.8 If the approved evaluation design is not carried through in its entirety (particularly in the instance of trenching being incomplete) the evaluation report may be rejected. Alternatively the presence of an archaeological deposit may be presumed, and untested areas included on this basis when defining the final mitigation strategy.
- 2.9 An outline specification, which defines certain minimum criteria, is set out below.
- 3. Specification A: Desk-Based Assessment
- Consult the County Sites and Monuments Record (SMR), both the computerised 3.1 record and any backup files.
- Examine all the readily available cartographic sources (e.g. those available in the County Record Office). Record any evidence for historic or archaeological sites (e.g. buildings, settlements, field names) and history of previous land uses. Where permitted by the Record Office make either digital photographs, photocopies or traced copies of the document for inclusion in the report.
- 3.3 Assess the potential for documentary research that would contribute to the archaeological investigation of the site.

Specification B: Field Evaluation

- Suffork County Council
 Archaeological Strice Trial trenches are to be excavated to cover a minimum 5% by area of the entire site and shall be positioned to sample all parts of the site. Linear trenches are thought to be the most appropriate sampling method. Trenches are to be a minimum of 1.8m wide unless special circumstances can be demonstrated. If excavation is mechanised a toothless 'ditching bucket' must be used. A scale plan showing the proposed locations of the trial trenches should be included in the Project Design and the detailed trench design must be approved by the Conservation Team of the Archaeological Service before field work begins.
- 4.2 The topsoil may be mechanically removed using an appropriate machine fitted with toothless bucket and other equipment. All machine excavation is to be under the direct control and supervision of an archaeologist. The topsoil should be examined for archaeological material.
- The top of the first archaeological deposit may be cleared by machine, but must then 4.3 be cleaned off by hand. There is a presumption that excavation of all archaeological deposits will be done by hand unless it can be shown there will not be a loss of evidence by using a machine. The decision as to the proper method of further excavation will be made by the senior project archaeologist with regard to the nature of the deposit.
- 4.4 In all evaluation excavation there is a presumption of the need to cause the minimum disturbance to the site consistent with adequate evaluation; that significant archaeological features, e.g. solid or bonded structural remains, building slots or postholes, should be preserved intact even if fills are sampled.
- 4.5 There must be sufficient excavation to give clear evidence for the period, depth and nature of any archaeological deposit. The depth and nature of colluvial or other masking deposits must be established across the site.
- 4.6 Archaeological contexts should, where possible, be sampled for palaeoenvironmental Best practice should allow for sampling of interpretable and datable archaeological deposits and provision should be made for this. The contractor shall show what provision has been made for environmental assessment of the site and must provide details of the sampling strategies for retrieving artefacts, biological remains (for palaeoenvironmental and palaeoeconomic investigations), and samples of sediments and/or soils (for micromorphological and pedological/sedimentological analyses. Advice on the appropriateness of the proposed strategies will be sought from J Heathcote, English Heritage Regional Adviser for Archaeological Science (East of England). A guide to sampling archaeological deposits (Murphy and Wiltshire 1994) is available.
- 4.7 Any natural subsoil surface revealed should be hand cleaned and examined for Sample excavation of any archaeological archaeological deposits and artefacts. features revealed may be necessary in order to gauge their date and character.

- 4.8 Metal detector searches must take place at all stages of the excavation by an experienced metal detector user.
- All finds will be collected and processed (unless variations in this principle are agreed with the Conservation Team of SCC Archaeological Service during the course of the evaluation).
 - 4.10 Human remains must be left *in situ* except in those cases where damage or desecration are to be expected, or in the event that analysis of the remains is shown to be a requirement of satisfactory evaluation of the site. However, the excavator should be aware of, and comply with, the provisions of Section 25 of the Burial Act 1857. "Guidance for best practice for treatment of human remains excavated from Christian burial grounds in England" English Heritage and the Church of England 2005 provides advice and defines a level of practice which should be followed whatever the likely belief of the buried individuals.
 - 4.11 Plans of any archaeological features on the site are to be drawn at 1:20 or 1:50, depending on the complexity of the data to be recorded. Sections should be drawn at 1:10 or 1:20 again depending on the complexity to be recorded. Any variations from this must be agreed with the Conservation Team.
- 4.12 A photographic record of the work is to be made, consisting of both monochrome photographs and colour transparencies.
- 4.13 Topsoil, subsoil and archaeological deposit to be kept separate during excavation to allow sequential backfilling of excavations.

5. General Management

- 5.1 A timetable for all stages of the project must be agreed before the first stage of work commences, including monitoring by the Conservation Team of SCC Archaeological Service.
- 5.2 The composition of the project staff must be detailed and agreed (this is to include any subcontractors).
- 5.3 It is the archaeological contractor's responsibility to ensure that adequate resources are available to fulfil the brief.
- A general Health and Safety Policy must be provided, with detailed risk assessment and management strategy for this particular site.
- 5.5 No initial survey to detect public utility or other services has taken place. The responsibility for this rests with the archaeological contractor.
- 5.6 The Institute of Field Archaeologists' Standard and Guidance for Archaeological Desk-based Assessments and for Field Evaluations should be used for additional guidance in the execution of the project and in drawing up the report.

Report Requirements 6.

- Suffork County Council
 The the princip An archive of all records and finds must be prepared consistent with the principles of English Heritage's Management of Archaeological Projects, 1991 (particularly Appendix 3.1 and Appendix 4.1).
- The data recording methods and conventions used must be consistent with, and 6.2 approved by, the County Sites and Monuments Record.
- 6.3 The objective account of the archaeological evidence must be clearly distinguished from its archaeological interpretation.
- 6.4 An opinion as to the necessity for further evaluation and its scope may be given. No further site work should be embarked upon until the primary fieldwork results are assessed and the need for further work is established
- 6.5 Reports on specific areas of specialist study must include sufficient detail to permit assessment of potential for analysis, including tabulation of data by context, and must include non-technical summaries.
- The Report must include a discussion and an assessment of the archaeological 6.6 evidence. Its conclusions must include a clear statement of the archaeological potential of the site, and the significance of that potential in the context of the Regional Research Framework (East Anglian Archaeology, Occasional Papers 3 & 8, 1997 and 2000).
- 6.7 Finds must be appropriately conserved and stored in accordance with UK Institute of Conservators Guidelines. The finds, as an indissoluble part of the site archive, should be deposited with the County SMR if the landowner can be persuaded to agree to this. If this is not possible for all or any part of the finds archive, then provision must be made for additional recording (e.g. photography, illustration, analysis) as appropriate. Account must be taken of any requirements the County SMR may have regarding the conservation, ordering, organisation, labelling, marking and storage of excavated material.
- The site archive is to be deposited with the County SMR within three months of the completion of fieldwork. It will then become publicly accessible.
 - Where positive conclusions are drawn from a project (whether it be evaluation or excavation) a summary report, in the established format, suitable for inclusion in the annual 'Archaeology in Suffolk' section of the Proceedings of the Suffolk Institute for Archaeology, must be prepared. It should be included in the project report, or submitted to the Conservation Team, by the end of the calendar year in which the evaluation work takes place, whichever is the sooner.