

ARCHAEOLOGICAL EXCAVATION REPORT

Land off Cotton Lane, Bury St. Edmunds BSE 204

A REPORT ON THE ARCHAEOLOGICAL EXCAVATIONS, 2004
(Planning app. no. SE/02/2977/P)

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© December 2005

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Contents

List of figures

List of tables

List of contributors

Acknowledgements

SMR information

Summary

Introduction

Historical Background

Archaeological Background

Methodology

Results

Test Pits

Area Excavation

Phase 1 - Drainage ditches

Phase 2 - Banks

Phase 3 - Early drain and wall

Phase 4 - Later drain and wall

Phase 5 - Post-medieval

Trenches

The Finds and Environmental Evidence (Sue Anderson)

Introduction

Pottery

Building materials

Miscellaneous

Wooden objects by Carole Morris

Small finds

Biological evidence

Animal bone by Julie Curl

Plant macrofossils by Val Fryer

Wood by Rowena Gale

Discussion of the finds evidence

Discussion

References

Appendices

1. Context list

2. Site matrix

3. Finds quantities by context

4. Pottery by context

5. Ceramic Building Material by context

6. Animal bone by context

7. Plant macrofossils and other remains

List of figures

1. Site location plan
2. Historic maps
3. Areas of archaeological potential
4. Site plan
5. Test pit 0051
6. Test pit 0054
7. Test pit 0057
8. Area excavation plan
9. Phase 1 plan
10. Section 0155
11. Wooden object 0169
12. Section 0078 and 0082
13. Phase 2 plan
14. Section 0156
15. Phase 3 plan
16. Phase 4 plan
17. Drain 0105 plan
18. Sections
19. Phase 5 plan
20. Plan of Trenches 9 and 10
21. 1886 OS Map of Bury St Edmunds

List of tables

1. Test pit 0051 context summary
2. Test pit 0054 context summary
3. Test pit 0057 context summary
4. Phase 1 context summary
5. Phase 2 context summary
6. Phase 3 context summary
7. Phase 4 context summary
8. Phase 5 context summary
9. Finds quantities
10. Pottery quantification by fabric
11. Pottery by phase
12. Pottery by context group
13. Pottery from the squares by layer and period
14. CBM quantities (count) by fabric and form
15. Species fragment counts by spotdate
16. Taxa identified from wooden components

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This project was funded by Hopkins Homes Ltd. and was monitored by Robert Carr (Suffolk County Council Archaeological Service, Conservation Team).

The test pitting was carried out by Andrew Tester, Duncan Allan, Tim Browne and Phil Camps (all Suffolk County Council Archaeological Service, Field Team). The area excavation was undertaken by Andrew Tester, John Duffy, Duncan Allen, Rob Brooks, Tim Browne, Phil Camps, John Craven, James Rolfe and Jonathan Van Jennians (all Suffolk County Council Archaeological Service, Field Team). The trenching was carried out by Andrew Tester and John Duffy.

The project was directed by Andrew Tester and managed by Tom Loader, both of whom also provided advice during the production of the report.

Finds processing was carried out by Sue Anderson and Kelly Powell, both of whom contributed to the specialist finds and environmental assessment reports. Other specialist identification and advice was provided by Carole Morris, Julie Curl, Val Fryer, Rowena Gale. Kelly Powell produced all section figures for this report. The wooden object (0169 – Figure 11) was drawn by Donna Wreathall.

SMR information

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Summary

A programme of archaeological work was carried out at the former Grampian Food Factory off Cotton Lane ahead of a housing development on the site. The development site lies to the east of Cotton Lane and extends east towards the River Lark. The site lies outside of the 11th century grid layout and is aligned with the earlier linear settlement along Northgate Street.

Evaluation work had previously identified an area of medieval quarrying in the south-west corner of the development site along with a network of drainage ditches across the eastern half of the site, some of which are still visible today. Flint and mortar structural remains were also identified in the centre of the site.

A programme of archaeological work, using open area excavation, test pitting and trenching, was undertaken to further investigate these features. The test pitting allowed further analysis of the material remains deposited in the former quarry pits in the south-west corner of the development area. The recovered finds indicated a fairly wealthy deposit likely to be clearance from the town centre. The open area excavation and trenching allowed further investigation of the drainage ditches and the flint and mortar structural remains. The results suggest the network of drainage ditches, one of which contained the waterlogged remains of a wooden revetment, drained the area of the River Lark floodplain. This network varied over time with visible recutting and infilling of the ditches. Within the open area excavation the ditches were replaced by a series of banks followed by a flint and mortar wall and drain suggesting more intensive use on the western half of the site.

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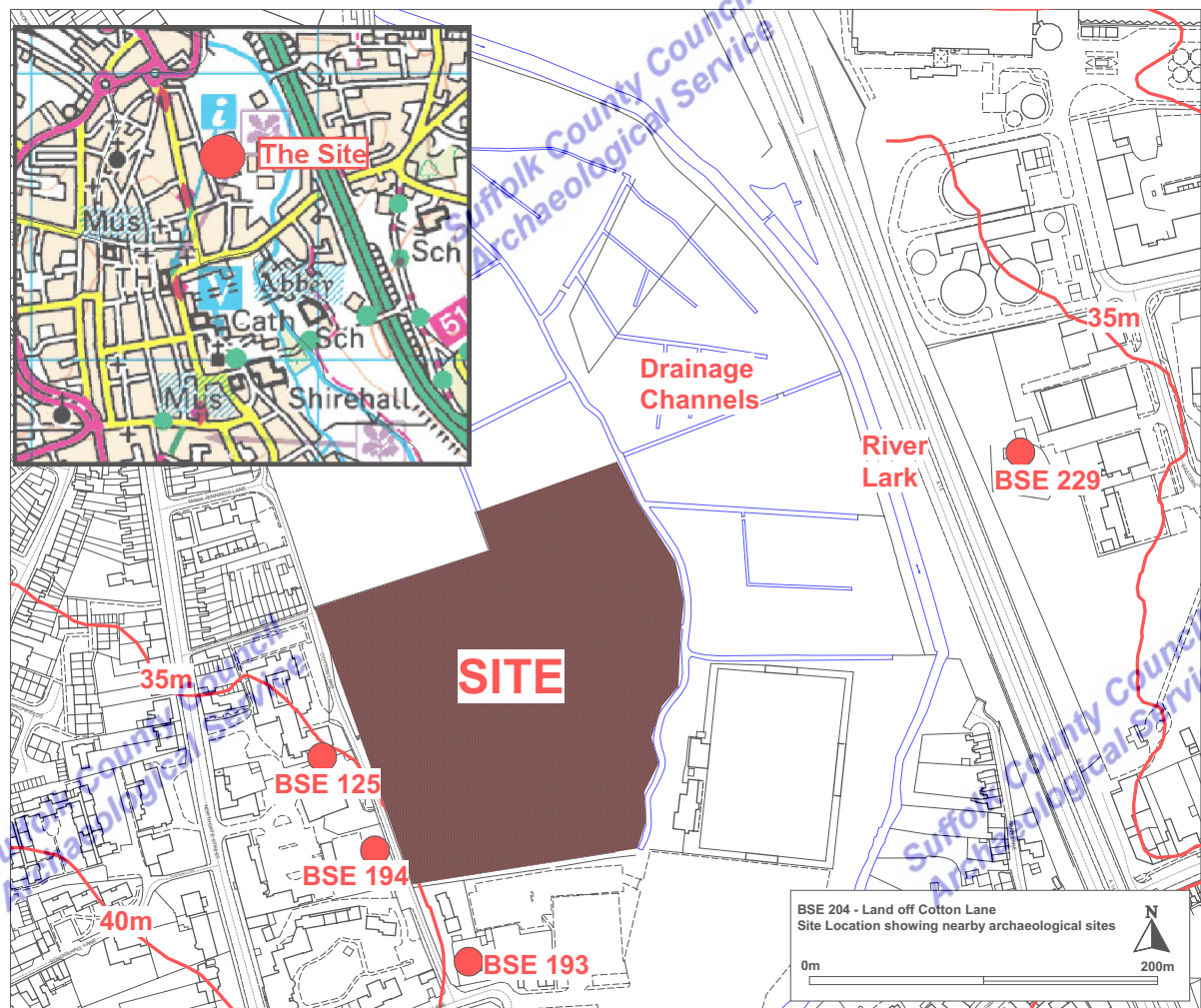
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Introduction

A programme of archaeological work was carried out on the site of the former Grampian Food Factory along Cotton Lane, Bury St. Edmunds. The work was monitored by R. Carr (Suffolk County Council Archaeological Service, Conservation Team). This followed on from an archaeological evaluation across the site (Tester 2002), which highlighted the need for further work on the site.

The development site is located within the Lark Valley, extending across the transition of raised terrace at its western (Cotton Lane) limit to the valley floor and the River Lark floodplain to the east, although the development area does not extend as far as the Lark itself. The area of study lies between the 35m contour line (along Cotton Lane) and the 30m contour line (along the River Lark).

The development area is located between the River Lark, which forms the eastern boundary of the medieval and pre-medieval town of Bury St. Edmunds, and Cotton Lane, which runs parallel to Northgate Street. The site is situated to the north of the Abbey and is beyond the extent of the 11th century grid layout of the town centre. Instead Cotton Lane forms part of the more linear settlement along the route of the main north to south axial road of Northgate Street. Both of these roads follow the edge of the Lark Valley.



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Figure 1. Site location plan

Historical Background

There is limited historical information readily available for the land to the east of Cotton Lane with only a few secondary source references and a series of post-medieval maps. A more thorough record search would provide a more comprehensive historical background than can be presented here.

The main reference to the site is in Margaret Statham's work (1998) in which she refers to The Chronicle of Jocelin of Brakelond and Herman the Archdeacon's *De Miraculis Sancti Eadmundi* (composed c. 1100). Statham makes reference to *Scurun's Well* close to which the cellarer had a messuage and barns at which he held his court. This is then relocated to a new site on the eastern bank of the River Lark at Eastgate Barns. The name *Scurun* is thought to be the same as *Skoron*, an early name for Cotton Lane, suggesting the messuage and barns were nearby.

The historical maps provide more detailed information but are much later in date with the earliest being Downing's Map of 1741.

Two 18th century maps were consulted during this study, Downing (1741) and Warren (1746). Downing's Map showed no detail of the site with the scale bar covering a large part of the area in question. Warren's Map, however, showed much more detail of the area with a network of ditches, enclosures and structures across the site. Similar ditch networks can be seen to the south at No Man's Meadows, along the River Lark south of the Abbey, and Great Sexton's Meadows, along the River Linnet. Cotton Lane is known as Scurfe Lane and appears to form purely a back lane to Northgate Street as it runs along the back of the properties fronting Northgate Street. Little development appears to have occurred along Cotton Lane apart from a few small structures within the site area. The map also shows the location of Eastgate Barns manor, formerly a medieval Abbey grange site.

From the mid 19th century Payne's Map (1834) indicates a very similar picture of an undeveloped back lane. The network of ditches is still visible but slightly altered but no structures or enclosures are recorded. Cotton Lane is still recorded as Scurfe Lane except at its southern limit where it is recorded as Cotton Lane. The 1886 OS map indicates a similar picture with no development on the site but the continuation of the network of ditches. This network of ditches again appears slightly different from Payne's Map.

The historic maps indicate variations across the site with the ditch network changing through the 18th and 19th centuries. However, overall the character of the site remains essentially the same, being that of a meadow along the flood plain of the River Lark. This consistency of use is likely to stem from its location and wet condition making it undesirable as a development area. Similar meadows can be seen elsewhere, forming the north, south and east limits of the medieval town. These include Holywater and Great Saxton's Meadows along the River Linnet to the south, No Man's Meadows where the River Linnet joins the River Lark to the south-east of the Abbey and Tayfen Meadows to the north of the town.

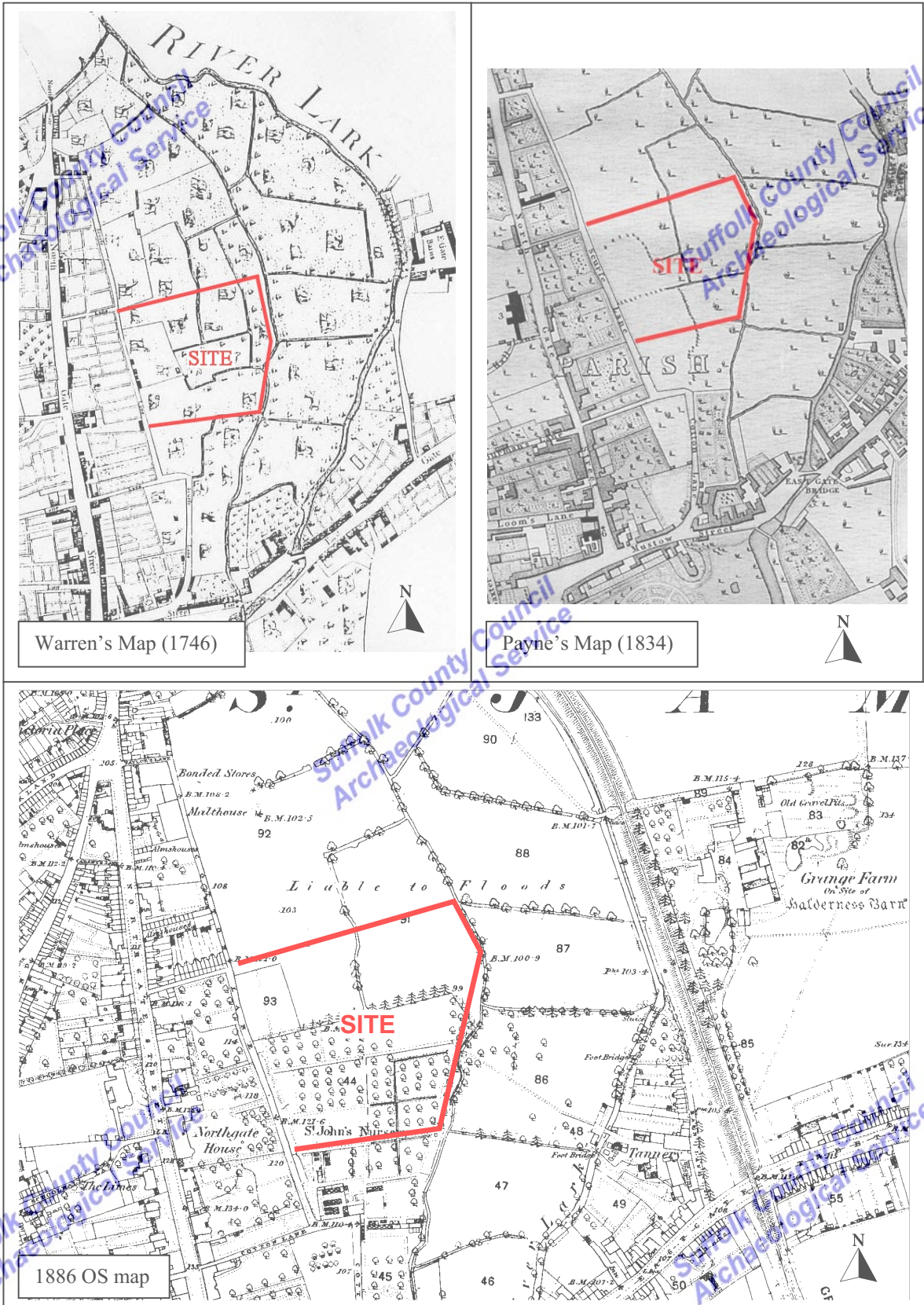


Figure 2. Historic maps.

Archaeological Background

Previous archaeological work

Previous archaeological work within the immediate vicinity of the site has been limited (Figure 1). An archaeological watching brief (BSE 193 - Gill 2001) to the south of the site produced evidence of gravel extraction pits filled with 13th to 16th century debris. Two monitorings to the west produced rubbish pits with 16th and 17th century debris (BSE 125) and 18th century or later finds (BSE 194 - Caruth 2001). To the north medieval pottery has been uncovered in the allotments. To the east is the site of Eastgate Barns, a former grange and manor house, which may have had a direct influence on this site. Recent archaeological work has also been undertaken on this site, but post-excavation is still in progress (Duffy forthcoming).

BSE 204 evaluation results (from Tester 2002)

Evaluation on the former site of Grampian Foods Factory was undertaken in August 2002 in order to establish any preserved archaeological remains, their present condition and to assess the potential damage to the remains during development. The results of this evaluation were used to inform on the strategy for this project.

A total of eight trenches were excavated across the development site. The locations of these trenches were designed to recover the most data in the area available as factory buildings were still standing at this stage. The evaluation was undertaken by the Suffolk County Council Archaeological Service Filed Team under the direction of Andrew Tester who also produced the report on the findings (Tester 2002).

The results of the trenching were heavily affected by any buildings or associated structures which constituted the former Grampian Food Factory. Trench 1 lay in an open area within the middle of the buildings. Although ground disturbance was fairly high the remains of a flint and mortar built wall were identified and thought to be the corner footings of a medieval building.

Trenches 2, 3 and 4 were excavated at the southern end of the development site in an area largely undisturbed by the factory development. These trenches provided evidence for substantial dumping of material possibly within gravel extraction pits. This evidence is similar to that recorded during the watching brief to the south (BSE 193 – Gill 2001).

At the eastern end of Trench 4 a large ditch was identified which was similar to one found at the eastern end of Trench 7 and in Trench 8. These ditches appeared to be part of a ditch network which had been filled in within the development area but were still open further to the east. These ditches were also identifiable on historic maps such as Warren's Map (1741).

Trenches 5 and 6 were excavated in the north-west corner of the site and no identifiable archaeological remains were present. This area of the site appears heavily truncated with the existing groundworks cut into the natural slope. A similar level of disturbance was visible in the western half of Trench 7.

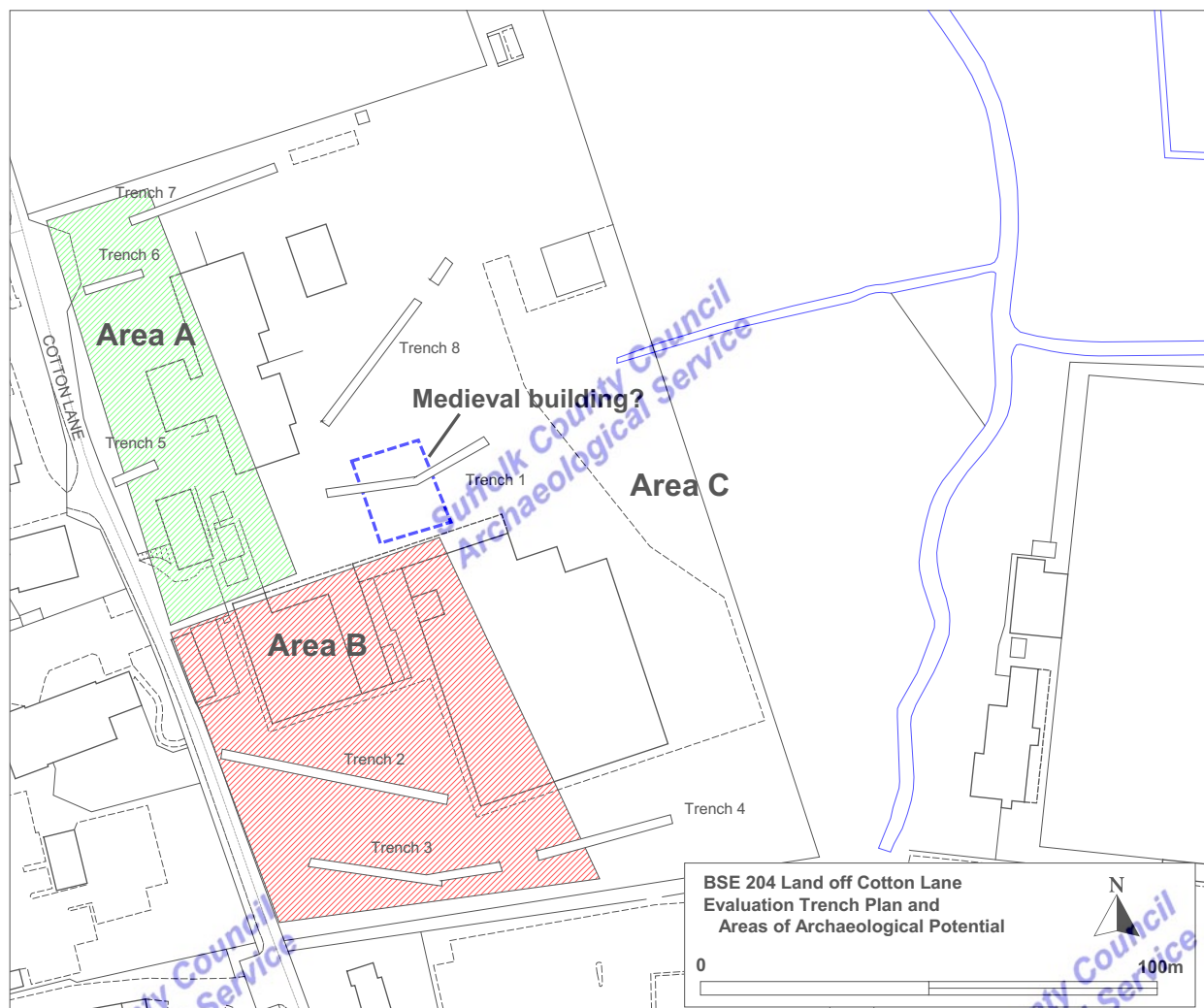
Proposals

An outline of the archaeological potential of the site was made in the evaluation report (Tester 2002), which are illustrated in Figure 3. Area A was identified as having low potential due to the heavy ground disturbance. Area B was identified as having good potential for preserved archaeology in the form of gravel pits with a large collection of later material deposited in these pits. Area C was also identified as having good potential with surviving ditches forming part of a

complex ditch network. Also within this area were the preserved structural remains identified in Trench 1 which were seen a potentially very important remains.

Recommendations for further work were also outlined in the report. These included further investigation in Area B to characterise the nature of the dumped material within the area of quarrying. The archaeological material recovered from this area would provide dates, and possibly the source, of the dumped material.

Recommendations for Area C included looking further into the ditch network identified in Trenches 4, 7 and 8 as well as the historic maps. Also further investigation of the structural remains identified in Trench 1 were recommended to understand and date the structural remains and to place them into their context.



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Figure 3. Areas of archaeological potential (as defined by Tester 2002)

Methodology

Test Pits

Three 2m by 2m test pits were dug by hand (Figure 4). The soil was 100% sieved through a 10mm mesh and all finds were retained. The test pits were recorded in section at 1:20 and in plan if required at 1:50 and digitally photographed. Each test pit was individually numbered and all identifiable layers were also given unique context numbers. Contexts started at 0050 following on from the evaluation. Context numbers 0050 to 0067 were used for the test pits. Each test pit was located onto the OS map using a Total Station Theodolite (TST).

Excavation

An area measuring approximately 12m by 13m, approximately 0.5% of the development site, was excavated using a 360 degree machine fitted with a 2m wide toothless bucket to remove the modern overburden. The archaeological features were then excavated by hand and all finds were retained. All features were drawn in plan and section at a scale of 1:20. Context numbers continued on from the test pits starting from 0068. All features were photographed using digital, colour slide and monochrome film. The site was recorded and located onto the OS map using a TST. Further excavation by machine was carried out after all feasible hand excavation was complete allowing full sections through the deeper features.

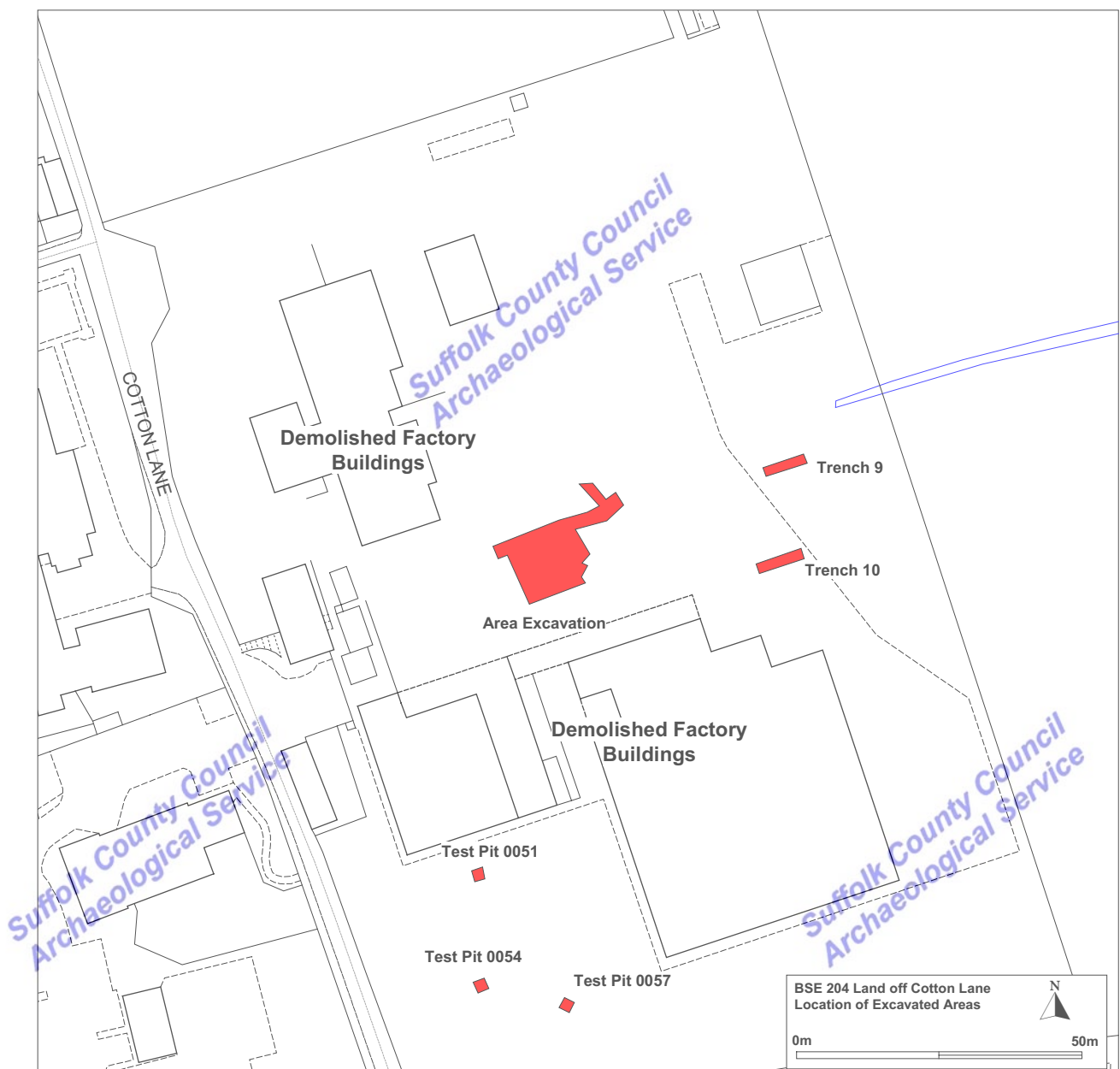
Trenching

Two trenches were excavated to varying depths using a 360 degree machine fitted with a 2m wide toothless bucket. The trenches were numbered 9 and 10 following on from the evaluation trenches. Recording of the trenches was difficult due to their depth and instability. Digital photographs were taken but section drawing was impossible on safety grounds. The trenches were recorded in plan using a TST and then located on to the OS map.

The site archive is kept at the County Council Store at Shire Hall, Bury St. Edmunds under the code BSE 204.

Results

The fieldwork consisted of three different types of archaeological investigation designed to best understand the archaeological remains identified during the evaluation work (Figure 4). The first area investigated was the south-west corner of the development site where three test pits were excavated (numbered 00051, 0054 and 0057). Based on the evaluation results this area contained the remains of quarry pits dug along the gravel river terrace with later dumping of waste material. An open area excavation was undertaken in the centre of the development site allowing further investigation of the structure identified in the evaluation Trench 1. The open area would allow the extent of the building to be examined in more detail along with any related archaeological deposits. To the east of the open area two trenches were excavated to further investigate the network of ditches identified in the evaluation and on the historic maps (Trenches 9 and 10).



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Figure 4. Site plan (shows location of test pits, area excavation and trenches)

Test Pits

Three test pits (0051, 0054 and 0057) each measuring 2m by 2m were excavated in the south-west corner of the development site. The test pits were dug in this area to allow complete finds recovery from the layers of dumped material over the former quarry pits identified in the evaluation. The recovered material from these layers gives a start date for the dumping and therefore an end date for the quarrying. All three test pits were excavated to varying depths and both 0051 and 0054 were excavated down on to natural, undisturbed, subsoil. All three test pits were 100 per cent sieved allowing recovery of all finds.

Test Pit 0051

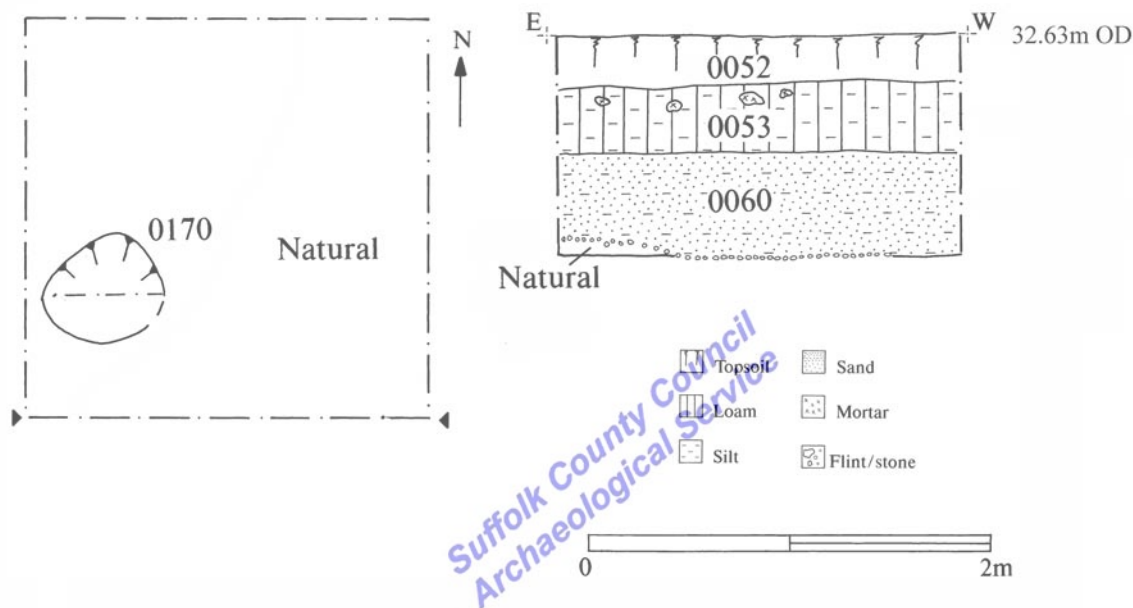


Figure 5. Test pit 0051 (plan and section)

Context	Identifier	Description	Spotdate
0051	Test Pit	2m x 2m test pit. Excavated using shovel. 100% sieved.	
0052	Layer	Topsoil of dark brown loam. Few finds. 0.25m deep	19-20th century
0053	Layer	Brown loam with many fragments of cream mortar, some kept within sieved sample. 0.34m deep	19-20th century
0060	Layer	Orange/brown silty sand. 0.53m deep.	13th? century
0170	Pit	Possible pit located in base of test pit 0051. Oval in plan measuring 0.55m (N-S), 0.65m (E-W), depth no recorded. Cut into a yellow silt. Filled by a brown silt. No finds.	

Table 1. Test pit 0051 context summary

Test pit 0051 was excavated to a depth of 1.1m and recorded in plan and section (Figure 5 and Table 1). The upper layer 0052 within the test pit was a dark brown loam topsoil. A brown loam layer with mortar fragments 0053 was immediately beneath the topsoil layer 0052. Layer 0060, an orange/brown silty sand, was below 0053. A possible oval pit 0170, filled by a brown silt with no finds, was excavated at the bottom of test pit 0051 below layer 0060 and was cut into an unexcavated yellow silt natural.

The finds from the test pit show some degree of mixing especially between the upper two layers (0052 and 0053). The pottery from the upper layer 0052 is mainly modern, while layer 0053 is

dominated by medieval wares with some modern and post-medieval fabrics. The lowest layer 0060 has only medieval pottery present with one early medieval sherd also recovered. Six fragments of clay pipe were also present in the upper layers (0052 and 0053). Layer 0053 also contained a late medieval lead boy bishop token (SF 1003).

Test Pit 0054

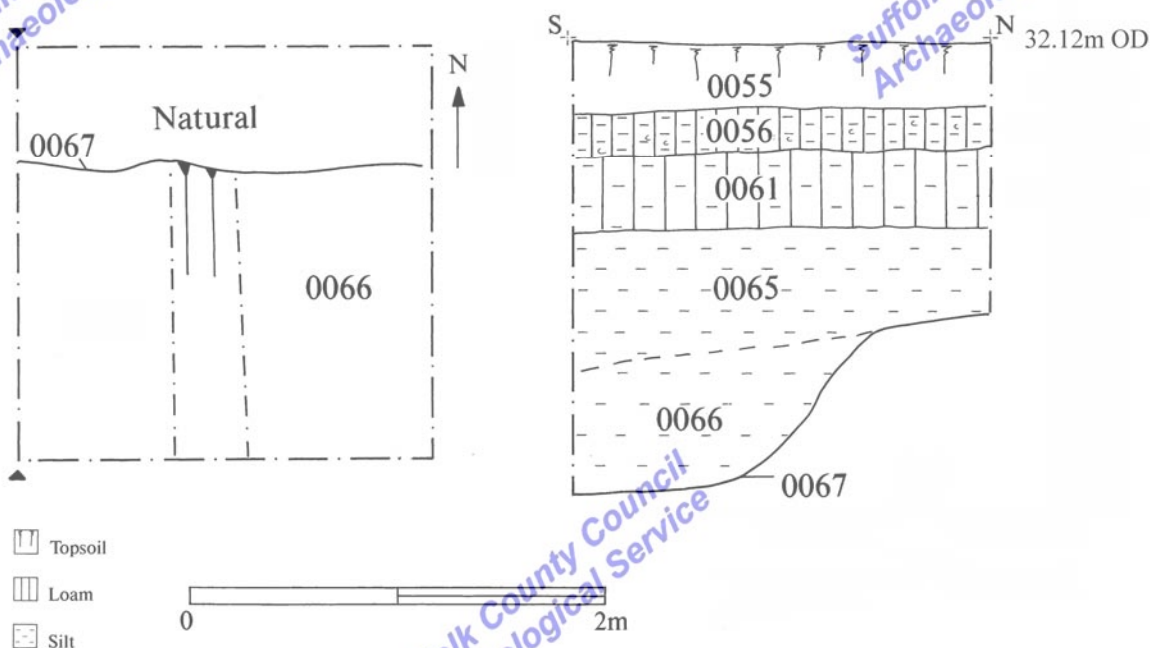


Figure 6. Test pit 0054 (plan and section)

Context	Identifier	Description	Spotdate
0054	Test Pit	2m x 2m test pit. Excavated using shovel. 100% sieved.	
0055	Layer	Topsoil fill of square 0054. Dark brown loam. 0.29m deep.	19-20th century
0056	Layer	Dark brown silty loam with some patchy mortar and brick fragments. 0.21m deep.	20th century
0061	Layer	Dark brown loam. 0.38m deep.	LMed?
0065	Layer	Slightly brown/orange silt. 0.66m deep.	13-14th century
0066	Pit Fill	Fill of pit [0067] in bottom of sieved square 0054. Very pale orange silt but with occasional flecks of charcoal and animal bone. 0.62m deep.	
0067	Pit Cut	Suggested pit although only one edge of cut visible therefore could be a linear feature.	

Table 2. Test pit 0054 context summary

Test pit 0054 was excavated to a depth of 2.5m and recorded in both plan and section (Figure 6 and Table 2). The upper topsoil layer 0055 was a dark brown loam. Layer 0056, a dark brown silty loam with some mortar and brick fragments, was immediately below the topsoil 0055. Below layer 0056 was a dark brown loam layer 0061 similar to 0056 but without the mortar. Layer 0065, a brown/orange silt, was below 0061. A narrow (0.4m wide) slot was excavated through the bottom layer 0066 within the test pit. Layer 0066, a pale orange silt with charcoal and five fragments of animal bone (1 equid and 4 mammal), appeared to be the fill of feature 0067. Feature 0067 appears to be the edge of a possible pit but it is impossible to be certain as

little of the feature was visible in plan due to the limited nature of excavation. This feature may be one of the quarry pits excavated in the evaluation (Tester 2002) and at Alandale (Gill 2001).

The pottery from the test pit followed a similar pattern to Test Pit 0051 with a large degree of mixing between the layers. Again the upper layers were dominated by modern wares (layer 0055) while much more medieval pottery was present in the lower layers (0061 and 0065). Layer 0056 also contained a Victorian penny.

Test Pit 0057

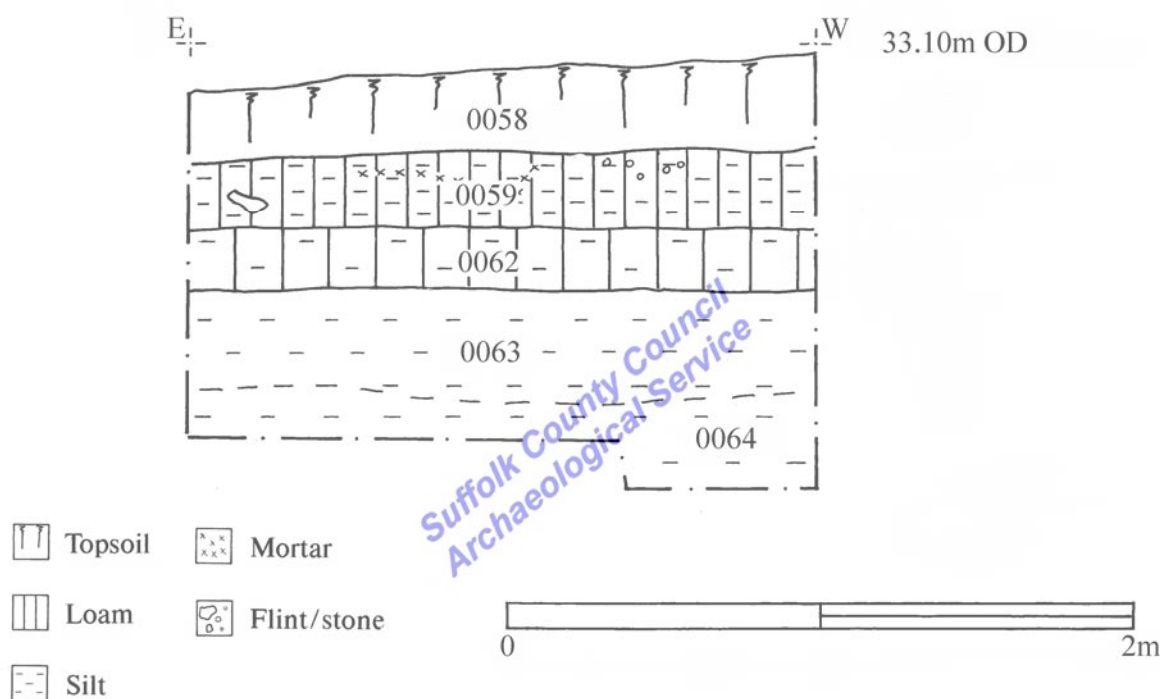


Figure 7. Test pit 0057 (section only)

Context	Identifier	Description	Spotdate
0057	Test Pit	2m x 2m test pit. Excavated using shovel. 100% sieved.	
0058	Layer	Topsoil layer of test pit 0057. 0.3m deep.	19-20th century
0059	Layer	Dark brown silty loam. 0.26m deep.	19-20th century
0062	Layer	Lighter brown silty/sand loam. 0.2m deep.	19-20th? century
0063	Layer	Orange brown silt. 0.36m deep.	14th? century
0064	Layer	Orange silt beneath 0063. 0.28m deep (not fully excavated).	

Table 3. Test pit 0057 context summary

Test pit 0057 was excavated to a depth of 1.4m and recorded in section (Figure 7 and Table 3). The upper topsoil layer 0058 was a dark brown loam. Below 0058 was a dark brown silty loam 0059. Layer 0062, a light brown silty/sand loam, was immediately below 0059 and above 0063. Layer 0063, an orange/brown silt, is a possible redeposited natural coming down onto 0064, an undisturbed orange silt, a possible *in situ* natural.

Like Test Pits 0051 and 0054, the pottery assemblage from the test pit was mixed. Again the upper layers were dominated by modern wares 0058 and the lower layers dominated by medieval wares (0059 and 0062). The lowest layer 0063 only had medieval and one sherd of late medieval pottery present. Also recovered was a large post-medieval iron buckle from layer 0059 (SF 1005) and a late medieval bronze jetton from layer 0062 (SF 1006).

Area Excavation

An area was opened in the centre of the development site which focused on the structure identified in Trench 1 of the evaluation. The excavated area measured a total of 360 square metres and the archaeological deposits were sampled within this area. The aim of the open area excavation was to define and understand the flint and mortar structure and its archaeological context. The open area also allowed detailed investigation of the ditch network identified in the evaluation and on the historic maps.

Unfortunately the excavation was limited as various constraints became apparent only after the initial stripping and cleaning of the site. The site was heavily disturbed by a modern pipe running north-east to south-west and a Victorian culvert running north-west to south-east. The depth of the archaeological deposits also restricted the work as safety and time both became an issue. This led to limited excavation of the deeper deposits in segments 0076, 0079 and 0080 supplemented by later machine excavation. Adverse weather and ground conditions also affected the archaeological work done, especially when examining the deeper deposits which were below the water table.

The results of the excavation were divided into five phases and are presented in this report by phase. The first phase consisted of two large drainage ditches (0167 and 0143) forming part of the drainage ditch network identified during the evaluation and on the historic maps. Ditch 0143 appeared to be later than ditch 0167 and, based on the available evidence, 0143 was a realignment of the earlier ditch 0167. Overall, little was excavated of Phase 1 due to the depth of deposits and later disturbances.

The second phase showed the first change of use on the site with the construction of a north to south aligned bank 0173 over the two ditches. This bank was heavily disturbed and was only identified in section not in plan.

The third phase showed the further development of the site with a realigned bank 0135 now running north-west to south-east. A tile, flint and mortar wall was constructed on top of this wall 0071 and a drain appeared to be cut through it (0104). Phase 3 was visible in both plan and section but was heavily disturbed by later features.

The fourth phase showed substantial development with the construction of a flint and mortar built drain 0087 and associated walls forming the north-east corner of an enclosure. Although some disturbance had been created by later features this phase was clear in both plan and section.

The fifth phase consisted of a large post-medieval pit sealed by later and more modern deposits.

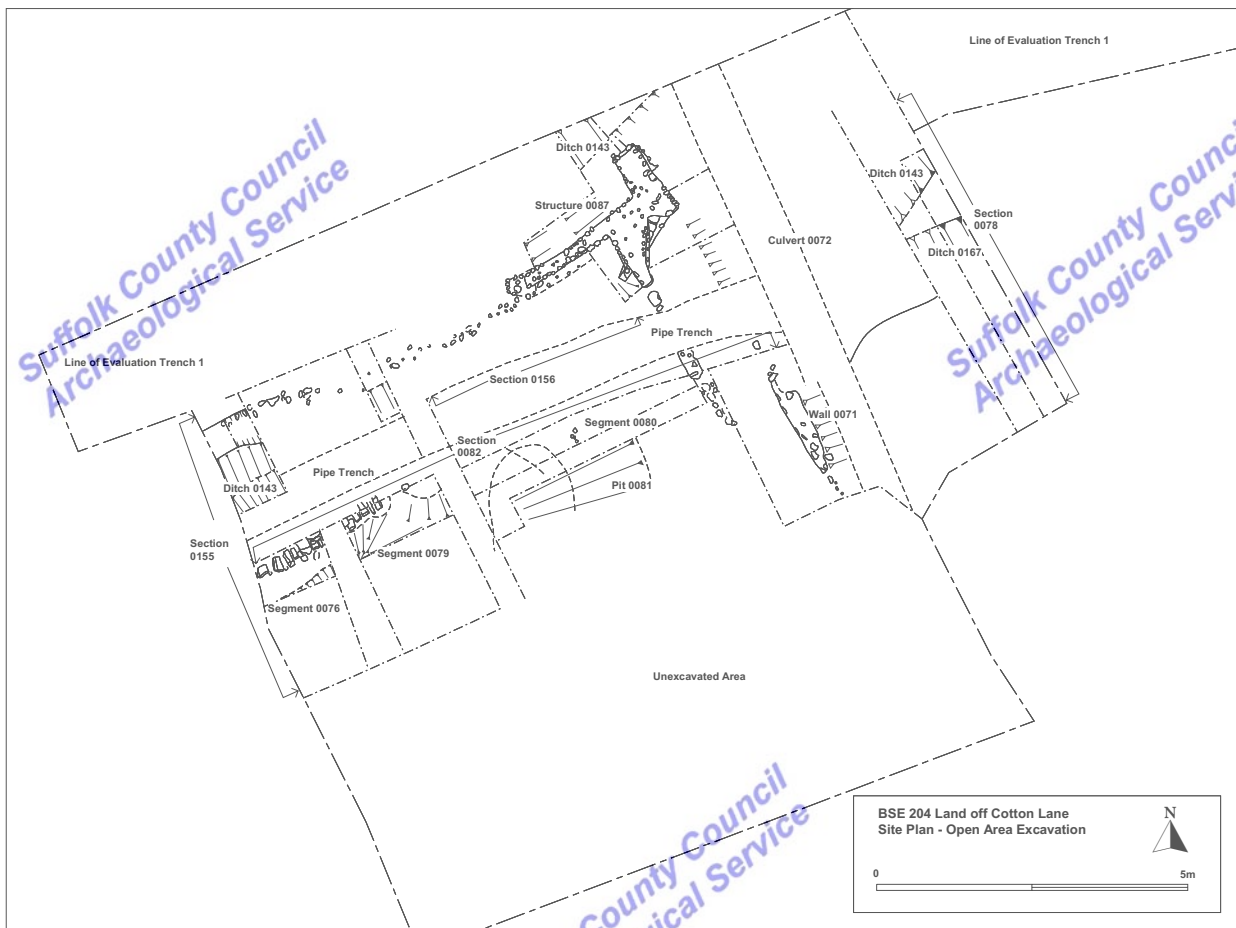


Figure 8. Area excavation plan (showing main features, segments and sections)

Phase 1 - Drainage ditches (Figure 9)

Context	Identifier	Description	Spotdate
0073	Layer	Light orangey brown clayey silty sand.	
0074	Layer	Light pinky brown clayey silty sand. Pottery found.	13th century
0075	Layer	Mid grey clayey sandy silt. Contained bone.	
0077	Layer	Light orangey brown clayey silty sand.	
0099	Wood Structure	Pieces of wood (possible sides of channel?) near base of deeper part of segment 0076. Appears to consist of flat wall-type pieces and what appear to be various supporting struts. Wood appears to have some wattling remains associated with it. Wood was below water table.	
0102	Fill	One of lower fills of pit 0081 in segment 0079. Overlies a layer of dark brown clay mixed with bands of charcoally peat. Excavated finds may be mixed with upper layers.	PMed
0103	Wood	Several pieces of timber located in base of segment 0079. Appear to be set in line, corresponding to wood 0099 in segment 0076. Below water table level.	
0114 to 0120	Wood	Individual stakes/pieces from 0103.	
0121 to 0127	Wood	Pieces of wood from group 0099.	
0129	Wood	Wood from group 0099.	
0138 to 0142	Wood	Wood from group 0099.	
0143	Ditch Cut	Cut of ditch (water channel). Visible in lower level of section 0086.	

0144	Ditch Fill	Fill of 0143. Dark grey brown silty clay. No finds.
0145	Layer	Light grey clayey silt. Appears to be silting of E-W channel 0143. Visible in sections 0107 & 0108.
0148	Layer	Layer visible in section 0108. Gravel. Mid brown red silty sand with 90% mixed gravel and flint. Possibly mirrors shape and direction of early E-W channel 0143
0167	Ditch Cut	Ditch visible in machine dug section along western site edge adjacent to and cut by ditch 0143.
0168	Ditch Fill	Fill 0168. Pale brown silt.
0169	Wood	Wood recovered from fill of ditch 0167 in machine dug section.
0178	Ditch Fill	Light orangey brown silty sand. Fill of ditch 0143 in section 0078.

Table 4. Phase 1 context summary

The earliest feature on the site was a nearly east west aligned linear ditch, 0167, thought to be part of the network of drainage ditches across the development site (Figure 9). The ditch was excavated in two sections along the western and eastern edges of the site, sections 0155 and 0078. At the western edge of the site the hand excavated segment 0076 was extended south using a machine to expose ditch 0167 which was then recorded in section 0155 (Figure 10). The ditch was heavily truncated by a large post-medieval/modern pit, 0081, and little of the cut was visible. The full extent of the ditch was not identified during the excavation. Only the lowest fill, a pale brown silt 0168, of ditch 0167 was visible. Finds recovered from the fill of ditch 0167 included three fragments of animal bone and a wooden object 0169 (Figure 11). This appears to be a reused oak barrel stave with over thirty drilled holes in it, possibly for its reuse as a filter or as part of a sluice, see the Finds and environment evidence section of this report for a detailed description of the object by Carole Morris. A similar wooden artefact, though slightly larger was found during monitoring work at Framlingham mere (FML 021 - Boulter 1999) and was interpreted as late medieval and possibly part of fish tank or the end of a sluice or inlet.

Hand excavation of ditch 0167 was undertaken at the eastern edge of the site and recorded in section 0078 (Figure 12). Unfortunately due to adverse ground conditions excavation was limited in this area. Little of the cut was exposed but the suggested angle of slope for the ditch was approximately 45 degrees. Four separate fills were identified showing little sign of disturbance. The lowest excavated fill, 0077, was light orangey brown clayey silty sand with no finds.

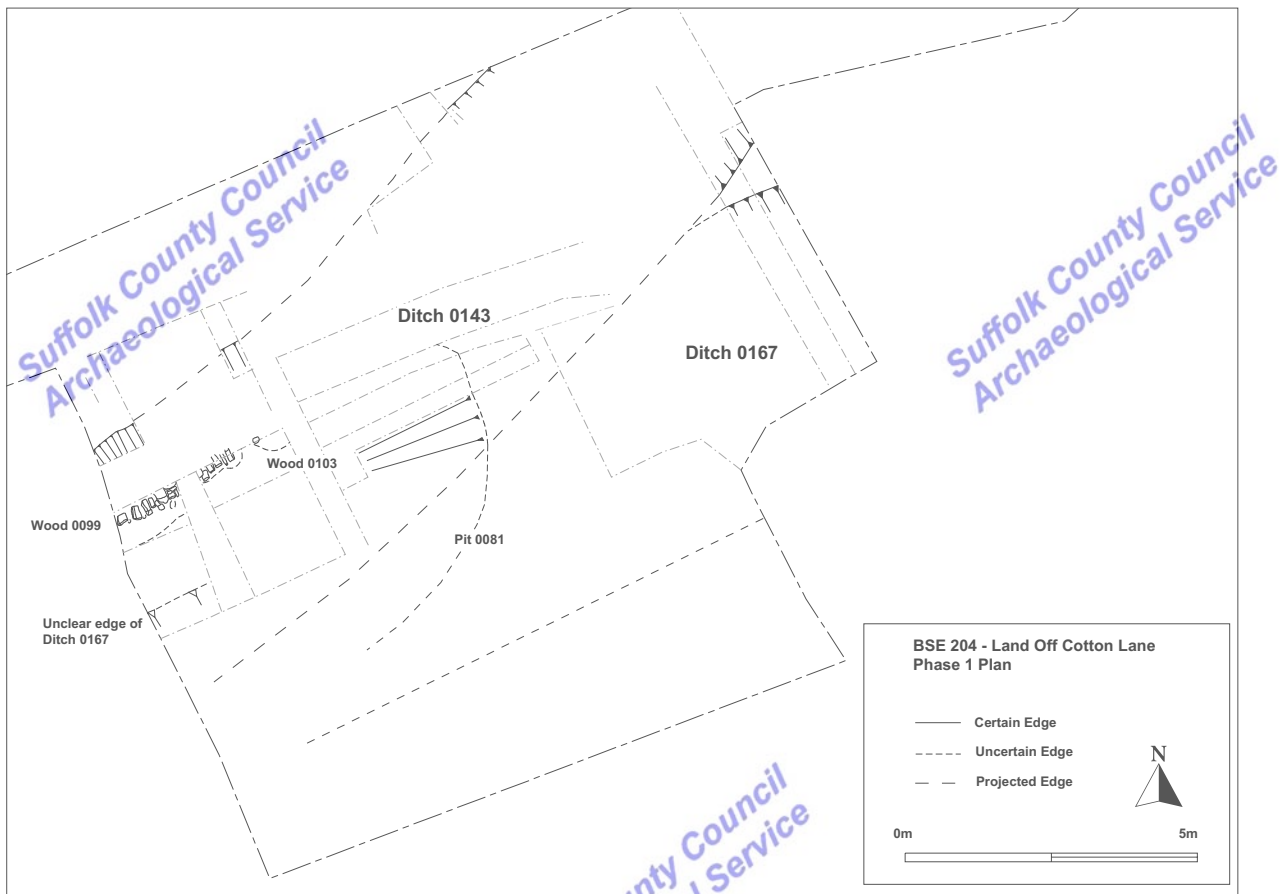


Figure 9. Phase 1 plan showing ditch alignments and excavated sections.

Overlying fill 0077 was a 0.5m deep mid grey clayey silty sand, 0075, with two fragments of mammal bone. Two samples (008 and 009) were taken from this fill and they indicated at least a semi-permanently water filled ditch running through shrub and weed covered wasteland. Directly above fill 0075 was a 1m deep light pinky brown clayey silty sand 0074 with one sherd of 13th century Grimston ware and a chopped fragment of sheep/goat radius. The uppermost fill of ditch 0167 in section 0078 was a light orangey brown clayey silty sand with no finds.

A second large linear ditch, 0143, ran in a north-east south-west direction and cut ditch 0167. As with 0167 this ditch also appears to be part of the network of large drainage ditches and may well indicate a later realignment of ditch 0167 (Figure 9). The ditch was identified in several areas across the site but most of the excavation of the feature was conducted in segments 0076 and 0079. The ditch and its fills are recorded in sections 0078, 0082, 0086, 0107, 0108 and 0155.

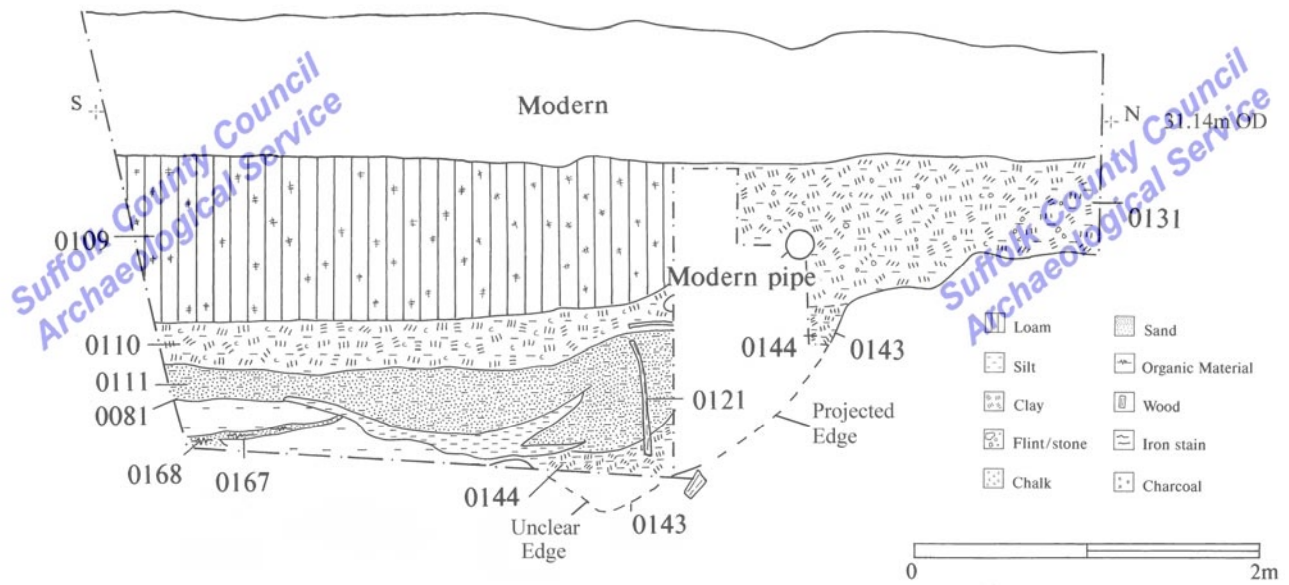


Figure 10. Section 0155

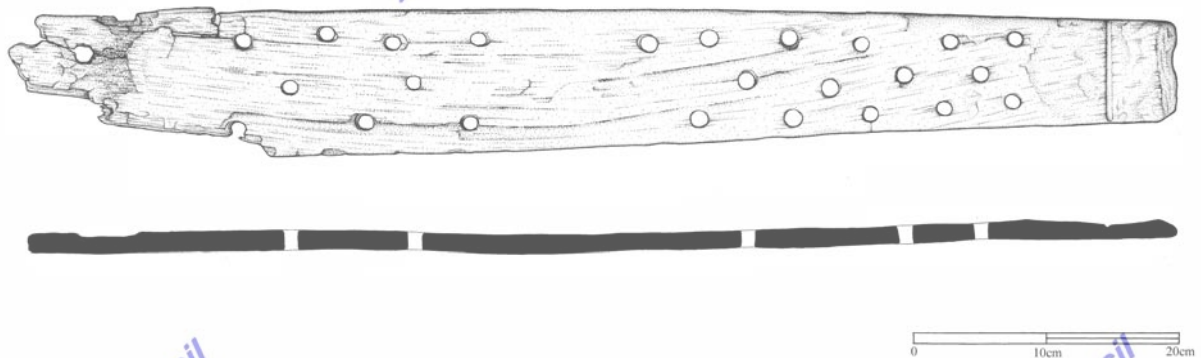
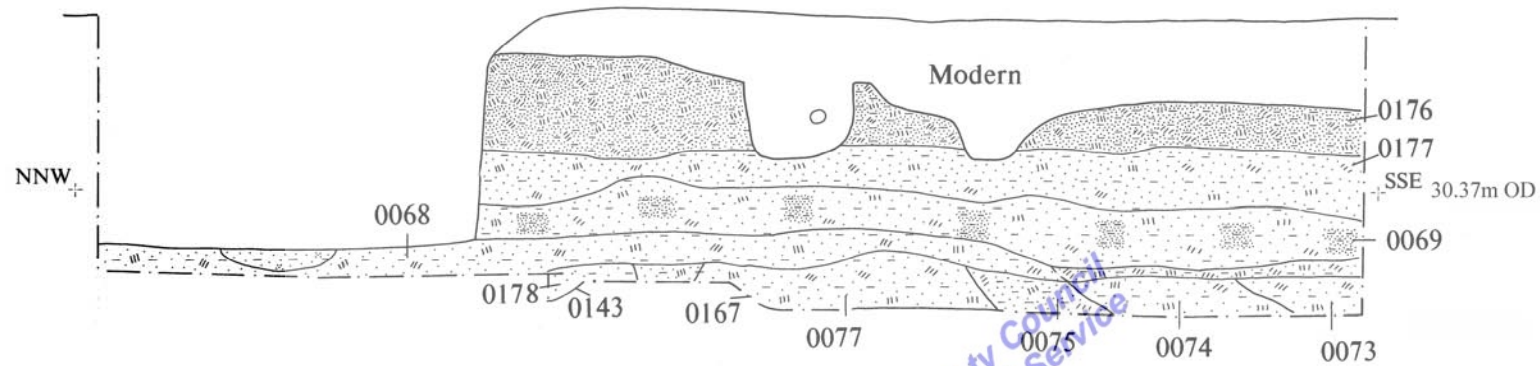


Figure 11. Wooden object 0169

Section 0078



- | | |
|-------------|------------------|
| Topsoil | Sand |
| Loam | Mortar |
| Silt | Brick |
| Clay | Tile |
| Flint/stone | Organic Material |
| Chalk | Wood |
| Charcoal | Iron stain |

Section 0082

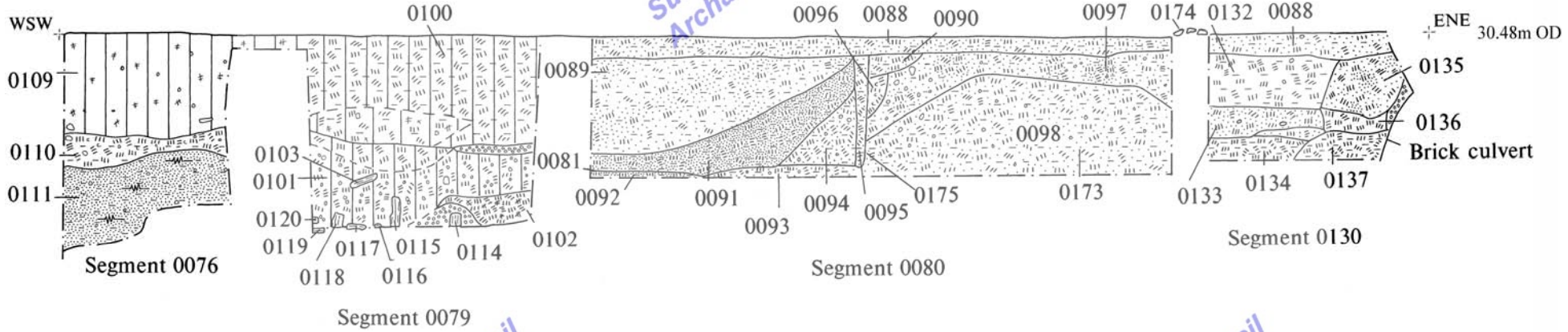


Figure 12. Sections 0078 and 0082

In segments 0076 and 0079 ditch 0143 was heavily disturbed by the later pit 0081 and the majority of the segments were filled by pit rather than ditch fills. However, the remains of the ditch were excavated at the base of the two segments and recorded in sections 0082 (Figure 12) and 0155 (Figure 10). The lowest fill excavated in ditch 0143 was a dark grey/brown silty clay 0144 into which several pieces of wood, forming a linear structure, were inserted. The wood structure, Group 0099 in segment 0076 and 0103 in segment 0079, was arranged in a distinct line along the northern edge of the ditch near to its base. The wood structure consisted of a series of vertical planks, mainly elm but also willow and oak, in segments 0076 and 0079, supported by angled round wooden props, a mixture of ash, willow and oak in segments 0079 and 0076. Only a sample of the wood recovered was sent for identification purposes. The wooden structure appeared to form a revetment for the ditch edge or a wood-lined channel at the base of the ditch. No wood was identified along the southern side of the ditch. It looks as though the wooden revetment was constructed later in the ditch's use as the ditch had already partly silted up before the wooden structure was built. Fill 0102 in segment 0079 appears to respect the timbers and may represent the earliest silting after the erection of the wooden structure. A sample was taken from the fill (sample 001) and the results were broadly similar to samples 008 and 009 from fill 0075 of the earlier ditch 0167. The results indicate the ditch ran through a similar shrub and weed covered wasteland with the ditch now being damp rather than regularly water-filled. However, the fill contained four fragments of post-medieval roof tile but these may be intrusive from pit 0081.

Unfortunately, due to the conditions, it was difficult to identify a clear edge between the fill of ditch 0143 and the fills of the later pit, 0081, within segments 0076 and 0079. It is possible that the lowest fill of pit 0081 in segment 0076 (fill 0111) may in part be the fill of ditch 0143. However, it appears that the cut for the pit may extend below the top of the wood and fill 0101 of pit 0081 contained wood disturbed from the structure.

Ditch 0143 was also partly excavated under the flint and mortar structure 0087 in the north-east corner of the excavation area. A single light grey clayey silt fill 0145 was identified but very little was excavated. Ditch 0143 and fill 0145, under structure 0087, was recorded in sections 0107 and 0108 (Figure 18).

The upper fill of ditch 0143 was also excavated along the eastern edge of the site to the north of 0167 in section 0078. Again, as with ditch 0167 in section 0078, only the upper fill was excavated due to adverse conditions on site. In section 0078 ditch 0143 was filled by a light orangey brown silty sand, 0178, and sealed by a modern layer, 0068 (Figure 12).

Phase 2 – Bank (Figure 13)

Context	Identifier	Description	Spotdate
0093	Fill	Orangey/gritty silty sandy clay.	
0098	Bank	Mid grey silty sandy clay.	
0133	Fill	Grey brown sandy clay.	
0134	Fill	Dark grey silty clay.	
0136	Bank/Fill	Blue/grey clay.	
0137	Bank?/Fill	Dark blue/grey clay with silt.	
0160	Bank/Layer	Dark grey/brown silty sand layer in section 0156.	
0173	Bank Component	Component number for western bank visible in sections 0082 and 0156.	

Table 5. Phase 2 context summary



Figure 13. Phase 2 plan

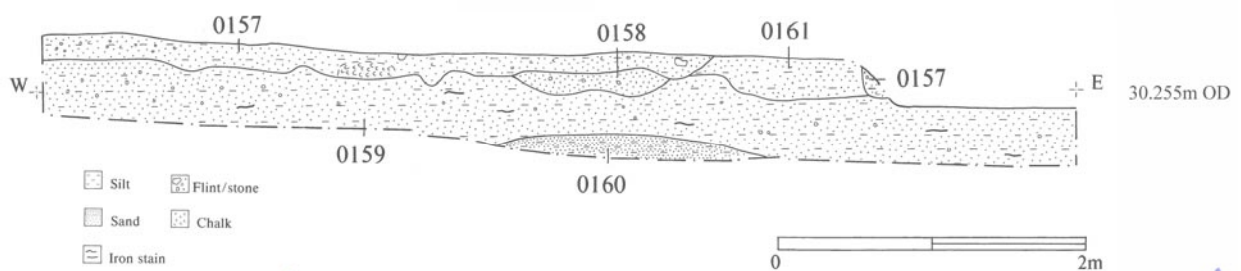


Figure 14. Section 0156

A linear bank 0173, running north south, was identified during the area excavation in segments 0080 and 0130. The bank was recorded in sections 0082 and 0156. Bank 0173 was the earliest and most westerly of two banks, the second 0135 forms part of Phase 3 of the site. The bank was made up of a mid grey silty sandy clay, 0098, in section 0082 (Figure 12) becoming darker and less clayey, 0160, in section 0156 (Figure 14). The full length of the bank was not established, as it was not visible in plan, the width was 2.5m and the depth was at least 0.7m though the base was not identified.

Any associated fills to the west of the bank were not identifiable due to the heavy disturbance by pit 0081, though fill 0093, an orange silty sandy clay, may be the remains of a layer but too little survives to be certain (Figure 12).

However, to the east of the bank there appears to be evidence of silting up and possible levelling. The bank ran across the top of the filled-in Phase 1 drainage ditches. Layers 0134, a dark grey silty clay, and 0137, dark blue/grey clay with silt, suggest possible build-up or silting to the east of bank 0173 (Figure 12). The soil matrix suggests deposits laid through water action either through drainage channels, in this case a north to south running channel, or flood-laid deposits up to the bank. Both fills were at least 0.2m deep but the base was not reached on either.

Two further deposits, 0133 and 0136, may have been similar to 0134 and 0137, which they overlay (Figure 12). However, 0133, a grey brown sandy clay, 0.2m in depth, with one piece of chopped sheep/goat bone, and 0136, a 0.15m deep blue/grey clay, both appear to be more deliberately laid layers forming a level surface. These two layers may have sealed the possible north to south running channel in front of bank 0173 to allow the construction of the second bank 0135 directly over layer 0136.

Phase 3 – Levelling, drain 0104 and wall 0071 (Figure 15)

Context	Identifier	Description	Spotdate
0071	Wall	Length of wall cut by culvert 0072. Yellow mortar construction and including peg tiles. Lying at angle- unclear whether pushed over or subsided. Sample 007 taken.	LMed+
0093	Fill	Silty orangey/gritty silty sandy clay.	
0094	Layer	Orangey mottled silty stony sandy clay.	
0097	Layer	Orangey rusty mottled brown silty sand clay.	
0104	Drain	Early drain (shown in section 0107). Constructed of brick and tile with some flint for construction (wall?) over top of culvert: partially dismantled and filled in with flint and mortar; it is then used as foundation for later (higher) drain 0105 which appears to be made up of reused material from 0104.	
0131	Layer	Layer visible in section 0086 at western edge of site. Mid brown silty clay with moderate flint. Overlies orange clay/gravel. Cut by ditch/trench 0084.	18th century
0132	Fill	Orange/brown mottled silty clay.	
0135	Bank/Fill	Mottled blue grey clay and orange sand. Possible bank with wall 0071 sitting on top of it.	
0146	Layer	Red brown silty clay. 5% mixed gravel and flint. Overlaying layer area of site. Visible in various sections across site 0107 & 0113.	13-14th century
0147	Cut	Original cut for drain 0104: cuts through 0146 and not through 0145. Slopes 45° then steps to 90° when drain construction starts. Base flat.	
0149	Fill	Fill visible in section 0107. Mid grey clayey silt. 2% gravel, 1% large flint.	
0150	Fill	Fill visible in section 0107. Mid light silty clay. 1% mortar, 3% gravel mixed. Silting of 0104.	
0159	Layer	Layer in section 0156. Mid brown silty sand with varying degrees of Fe staining.	
0164	Brick	Brick from earliest drain in section 0107.	13-15th century

Table 6. Phase 3 context summary

A second north to south aligned bank, 0135, was located to the east of bank 0173. The bank was also laid on top of layers 0136 and 0134 which were built up against the earlier bank, 0173 (Figure 12). Bank 0135 was 0.6m wide and 0.4m deep and consisted of a mottled blue grey clay with orange sand. The bank is recorded in sections 0082 (Figure 12), 0154 and 0171 (Figure 18). The bank is heavily disturbed to the east by a Victorian culvert, 0072, but may have functioned in a similar way to bank 0173 with a north to south aligned drainage ditch to the east of it.

To the west of bank 0135 a series of layers were built up against it. Layer 0132, a 0.4m deep orange/brown mottled silty clay, was excavated in segment 0130 and continued as 0097 and 0094, though more sandy than 0132, in segment 0080 (Figure 12). These layers butt up against 0135 and seal bank 0173 and its associated layers. This build-up/levelling was visible in other excavated sections across the site, including section 0156 (Figure 14) where layer 0159, a 0.3m deep mid brown silty sand, sealed bank 0173. Layer 0146, a 0.6m deep red/brown silty clay was a continuation of these layers and extended under structure 0087, this is recorded in section 0107 (Figure 18). Layer 0146 contained two sherds of early medieval pottery (one medieval coarseware and one Grimston ware) providing the only dating evidence for the build-up layers.

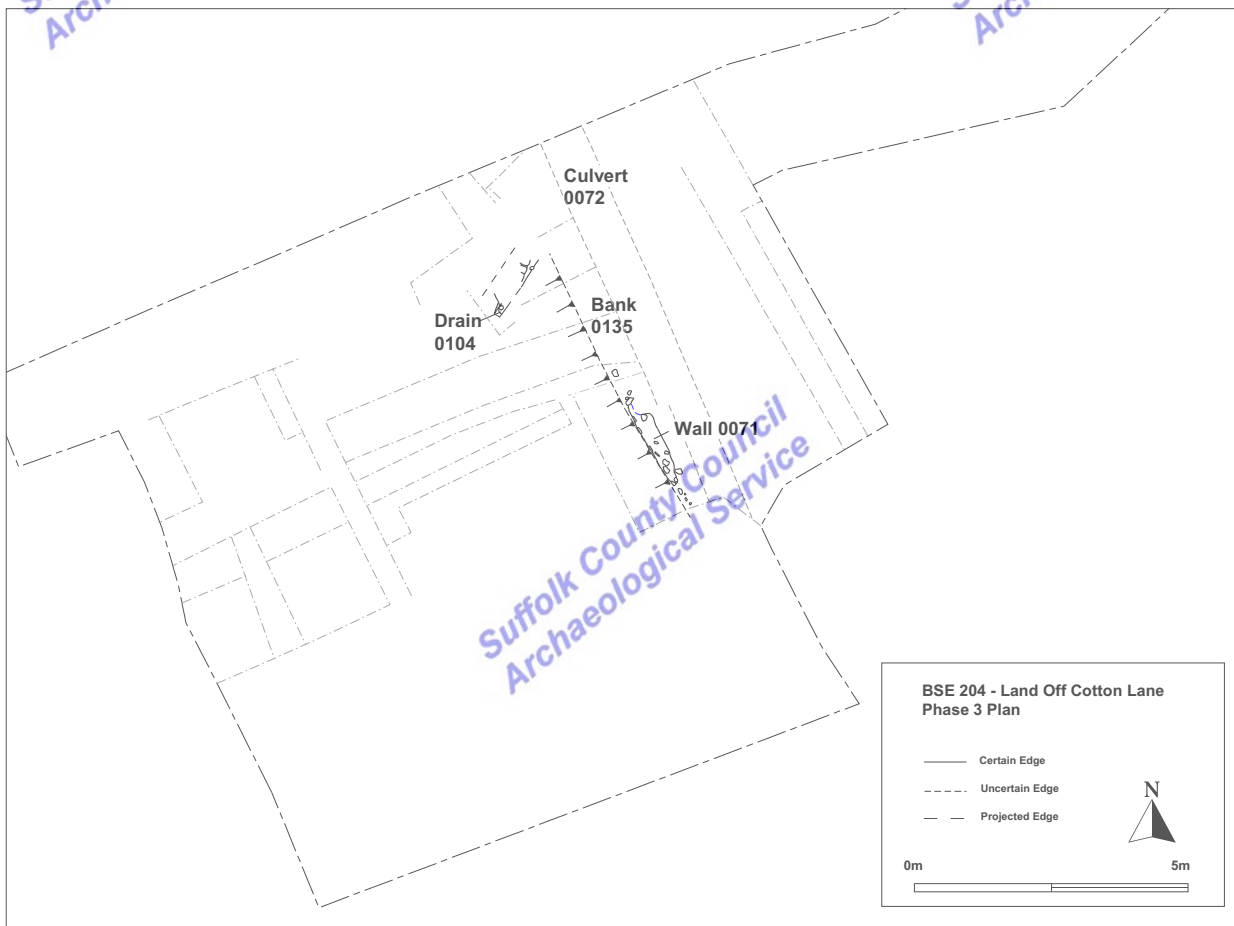


Figure 15. Phase 3 plan

Drain 0104 ran in a north-east to south-west direction and was constructed of brick and tile, supported to the south by an external layer of flint and mortar. This was probably also the case on the northern side but it was heavily disturbed by the later overlying structure (0087) which appeared to reuse some of the drain lining material. The drain survived to a length of 1.6m and a width of 0.4m and appears to sit in a channel 0147 cut into layer 0146. The channel had a flat base with a 45 degree angle to the sides becoming vertical where drain 0104 sits in it. The channel is filled by a mid grey clayey silt 0149 under a mid/light grey silty clay 0150. A recovered brick from the drain lining suggested a 14th-15th century date. Although no direct link was visible on site, due to the disturbance caused by structure 0087, drain 0104 appears related to bank 0135 and wall 0071 and appears to be draining from the levelled area to the west into a possible drainage channel to the east. However it must be noted that the drain cuts into layer 0146 suggesting the build-up/levelling behind bank 0135 occurred first.

Sitting directly on bank 0135 was a short length of late medieval wall, 0071. The wall was constructed using alternate layers of peg tiles and flint bonded by a yellow mortar. The wall survived to a length of 2m but was heavily truncated by later features including culvert 0072. The wall appears to be fairly late in Phase 3 and then appears to have fallen, or been pushed down, to the west on top of layer 0132. This may have occurred during the construction of Phase 4 features.

Phase 4 - Drain 0105 and wall 0087 (Figure 16)

Context	Identifier	Description	Spotdate
0070	Structure	Same as 0087.	
0083	Wall	Remains of E-W running wall located at western edge of excavation. Flint and mortar construction. Very disturbed single course surviving. Lying over a chalk and clay filled trench 0084/0085.	
0084	Ditch Cut	Cut of ditch/trench under wall 0083. Linear running approx. E-W. Filled by 0085. Steep sided with flat base. Possible construction trench for wall 0083.	
0085	Ditch Fill	Fill of ditch/trench 0084. Mixed clay and chalk fill with occasional medium flint.	
0087	Structure	Component number used for associated wall remnants within excavated area. Same as 0070.	
0105	Drain	Drain visible in sections 0107, 0108, 0113. Later drain; tile, brick, flint and mortar construction: brick and tile appears to be reused material robbed from earlier drain 0104. Probably built due to silting to W.	
0106	Wall	Wall E-W. Flint and mortar. Is part of rebuild of drain. This E-W wall is roughly on the edge of the earlier channel. Wall becomes shallower to the west.	
0151	Cut	Cut for robbing of 0104 & construct cut for 0105.	
0152	Layer	Mid grey slight orange brown staining visible in section 0108. Clayey silt.	
0153	Layer	Mid red brown silty clay visible in section 0107. 3% small gravel. Latest silting actions.	
0163	Mortar	Samples taken of mortar 002, 003, 004 and 005.	
0166	Fill	Mid pale brown silt. Fill of drain 0105.	
0174	Wall	Course of loose flint and mortar visible in section 0082. Part of wall component 0087.	

Table 7. Phase 4 context summary

Phase 4 was focused around a series of flint and mortar built walls, structure 0087 (Figures 16, 17 and 18). The main part of the structure was an L-shaped flint and mortar built wall 0106 in the north-east corner of the excavation area. The wall was 1.2m in length, 0.5m wide and 0.7m deep and was built around a brick and tile lined drain 0105 constructed directly on top of the earlier Phase 3 drain 0104. The drain runs in a south-west to north-east direction, with a total length of 1.2m, draining from west to east. As with the earlier drain 0104 this later feature appears to drain into a north south drainage ditch immediately to the east. The opening of the western end of the drain was 0.25m wide by 0.15m deep (section 0107 - Figure 18) and it narrowed to 0.1m at the east opening (section 0113 – Figure 18).

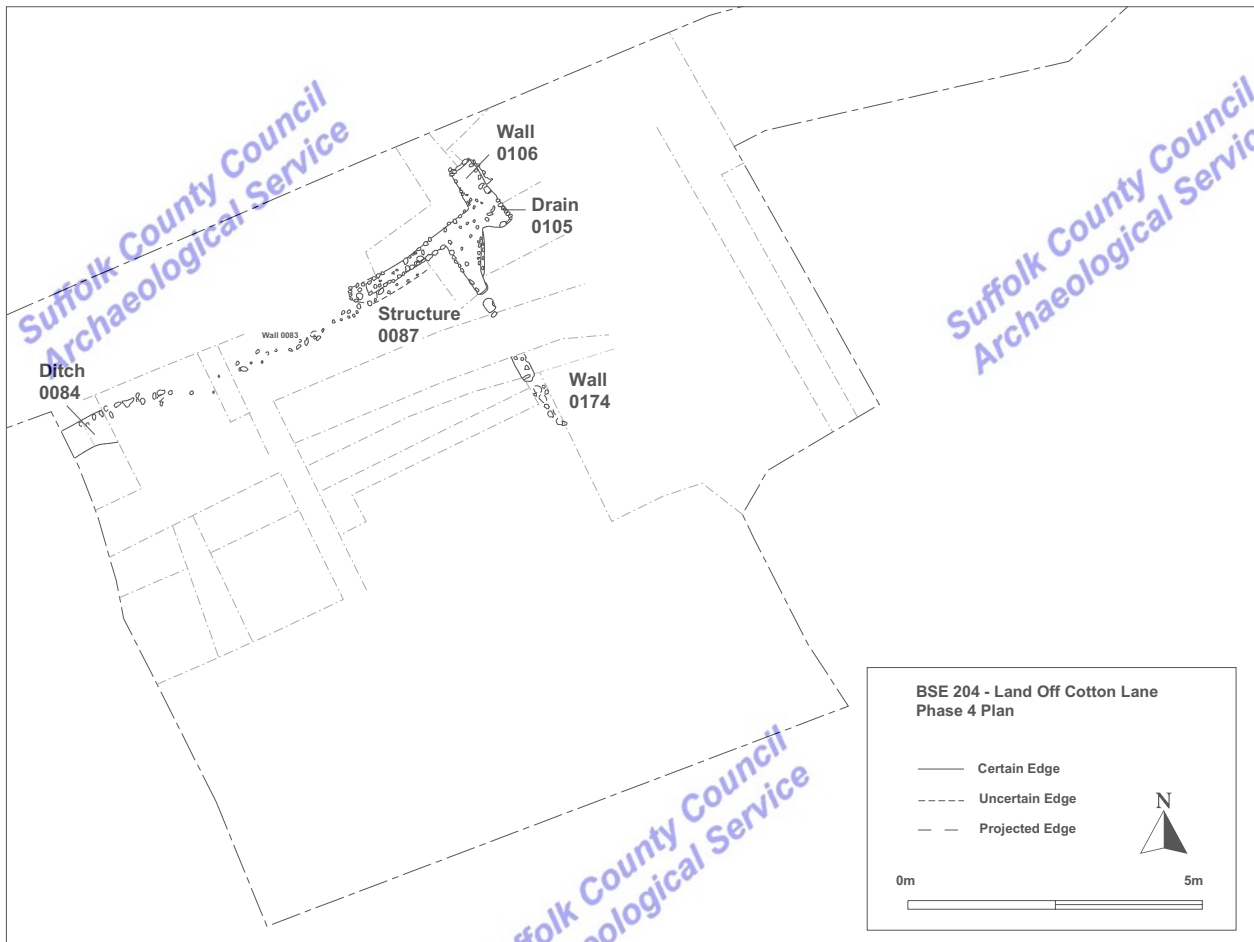


Figure 16. Phase 4 plan

The drain was filled by a mid/pale brown silt 0166 from which a single environmental sample was taken. The sample showed an absence of plant macrofossils and the mollusc shell assemblage was dominated by open country and shade loving species. This appears to indicate that the area was now largely cleared of weeds and shrub.

The drain and surrounding wall are located in the north-east corner of an enclosure. This enclosed area is marked by the remains of 0.2m wide flint walling extending 7.4m to the west 0083 and 3.2m to the south 0174 of the drain (Figure 16). Upon excavation these walls were only a single course deep and overlay, in section 0086, an earlier trench (Figure 18). The trench cut 0084 was steep sided with a flat base and was filled by a mixed clay and chalk with occasional flint 0085 and continued beyond the limit of excavation to the west. This trench may be a footing trench for a fence line with the flint and mortar acting as a supporting base.

Within the enclosed area a single build-up layer 0153 was clearly related to structure 0087. 0153, a 0.25m deep mid red brown silty clay, was located to the south and west of wall 0106 (section 0107 – Figure 18). This layer appeared to respect the enclosure boundaries as defined by structure 0087 suggesting the structure was still standing as opposed to the later, Phase 5, build-up which extends across the structure. A similar layer, a 0.4m deep mid grey clayey silt 0152, is visible to the north-west of wall 0106 (section 0113 – Figure 18). This layer appears to be an external build-up to the enclosure but still respects the limits of the enclosure as defined by wall 0106.

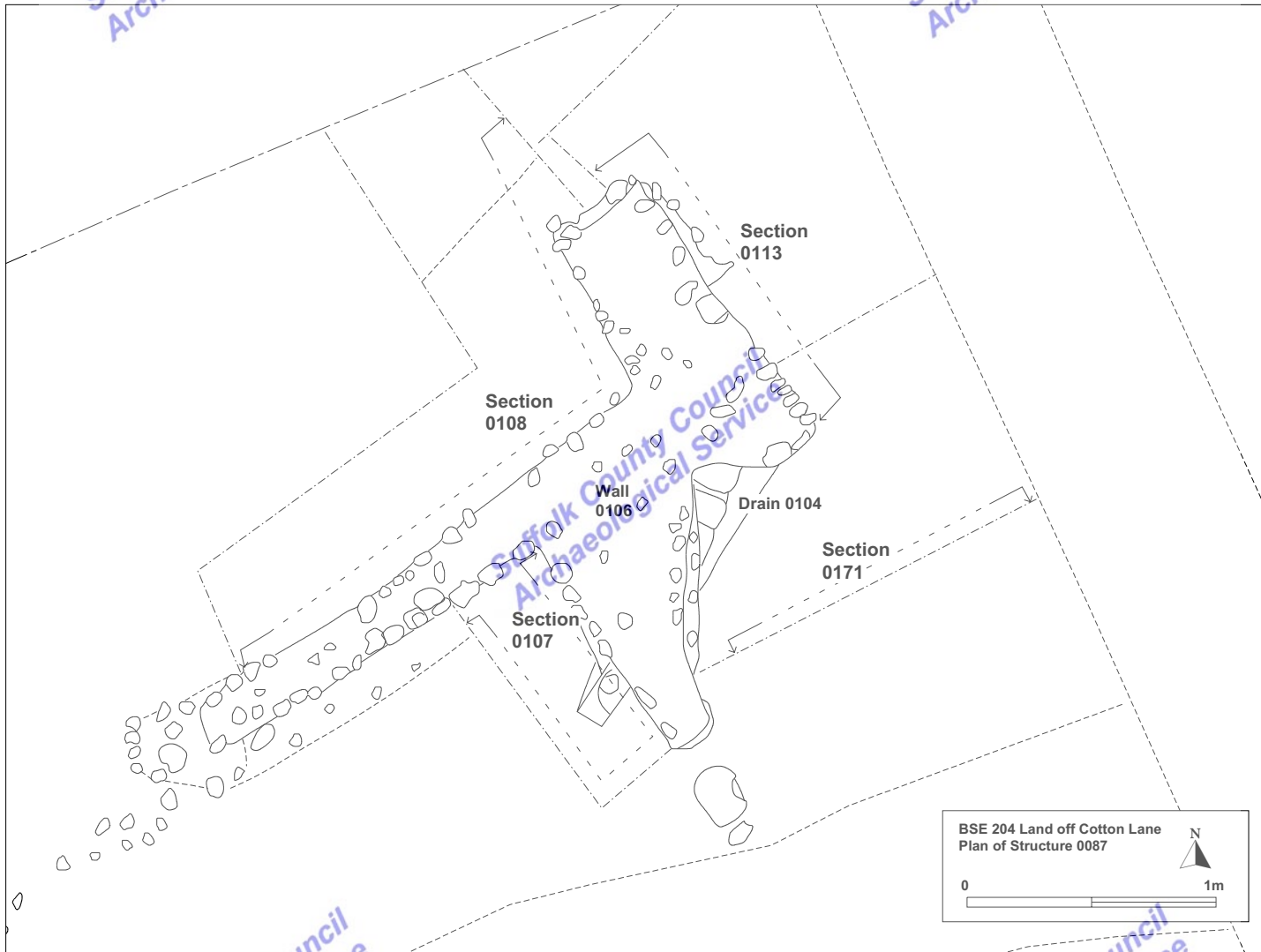


Figure 17. Drain 0105 plan

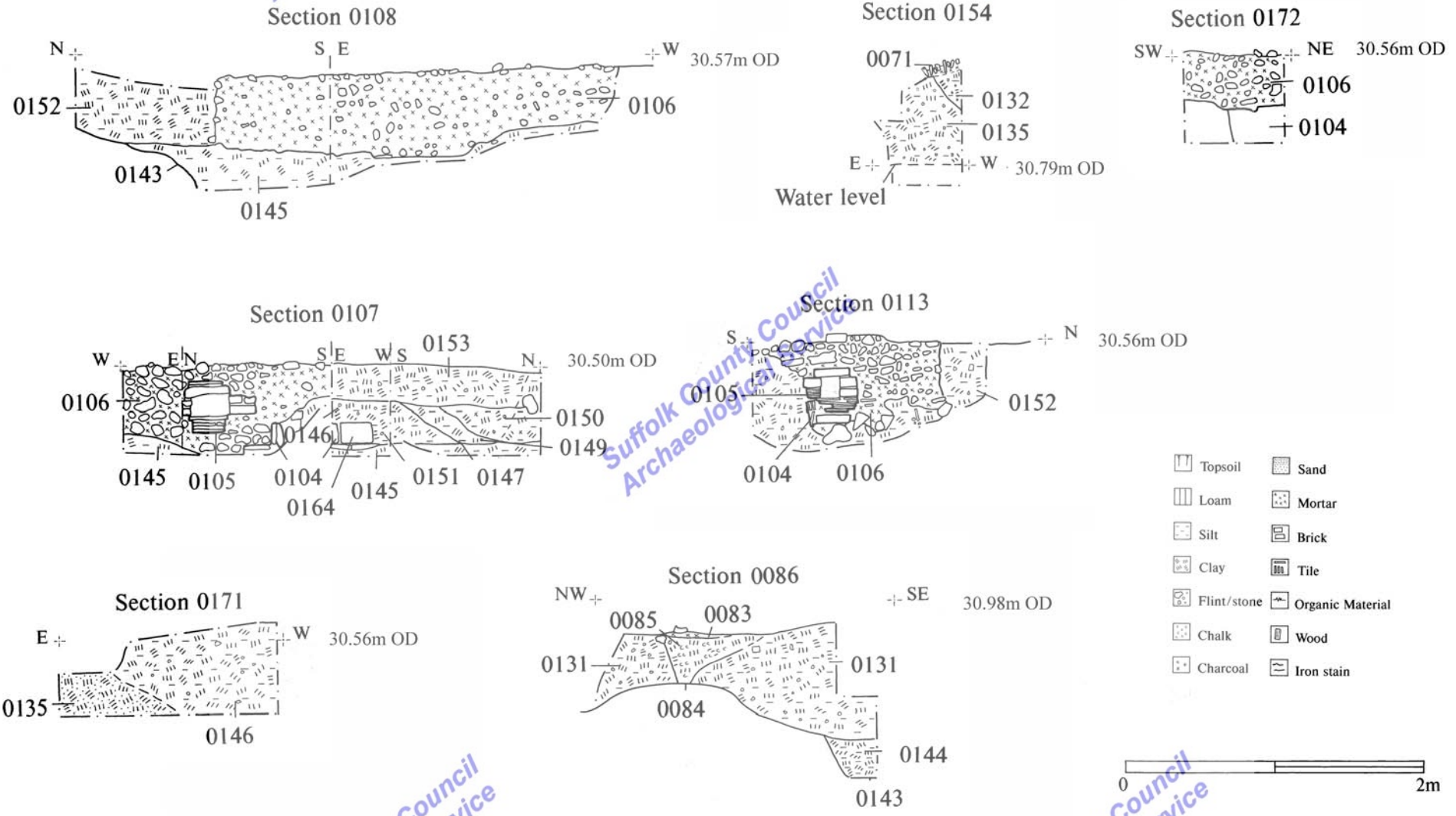


Figure 18. Sections

Phase 5 – Late post-medieval and modern (Figure 19)

Context	Identifier	Description	Spotdate
0068	Layer	Light grey clayey, silty sand. Layer consisting of grey silt with gravel.	19-20th century
0069	Layer	Light grey clayey silty sand heavily flecked with dark orange silty sand.	20th century
0072	Culvert	Brick culvert running roughly N-S across site.	
0081	Pit Cut	Possibly a large post-medieval pit/depression. Only E side located. E edge- wooden stakes are revetments? 3 segments excavated - 0076, 0079 and 0080. Section 0082.	
0088	Layer	Mid brown silty clayey sand.	
0089	Fill	Orangey/ brown silty sand.	
0090	Fill	Orangey/rusty brown silty sandy clay.	
0091	Fill	Dark grey silty, clayey sand.	
0092	Fill	Black silty sandy clay, with lots of charcoal.	PMed
0095	Fill	Mid grey silty sandy clay	
0096	Fill	Orangey/white chalky clay.	
0100	Fill	Fill of possible large pit (possible silted up depression?). Mid brown clay/silt loam. Frequent charcoal flecks.	20th century
0101	Fill	One of lower fills of pit 0081 in segment 0079. Mixed mid brown gravel/clay loam with flints. Patches of orange gravel, mid brown clay etc.	
0109	Fill	Upper fill in segment 0076. Mid-dark grey loamy fill. Lots of charcoal lump and fleck inclusion. Fill of pit 0081.	
0110	Fill	Fill visible in deeper part of segment 0076. Grey/orangey-brown fill. Quite high compaction. Silty/clay texture with a lot of chalk.	
0111	Fill	Dark grey/brown/black silty sand fill in bottom of excavated extent of 0076. Some wattling- associated with wooden structure 0099.	
0112	Wood	4(?) stakes in segment 0080. 3(?) removed for sampling. Possibly located within 0095.	
0157	Layer	Mid brown silty sand layer in section 0156. Moderate stone inclusion. Occasional chalk lumps.	
0158	Layer	Mid brown sand layer in section 0156. Occasional stones.	
0161	Layer	Brown silty sand layer in section 0156.	
0162	Finds	Pottery removed from fill south of 0076 & 0079. Excavated by machine when E-W channels were being excavated.	18th century
0165	Finds	Brick found in machined out soil from near segment 0076.	19-20th century
0175	Ditch Cut	Cut of possible trench for post 0112. Filled by 0095. Visible in section 0082. Steep sided narrow cut with curved base.	
0176	Layer	Dark grey clayey silty sand.	
0177	Layer	Light grey/brown clayey silty sand.	

Table 8. Phase 5 context summary



Figure 19. Phase 5 plan

A large pit, 0081, was excavated in three segments (0076, 0079 and 0080) and recorded in sections 0082 and 0155. The pit was located in the centre of the excavated area though its edges were not clear in plan and its eastern edge only became defined when further excavation took place. The northern edge of the pit was not visible as it was cut by an east to west running modern pipe trench and the limits to the west and south were not identified. The sides slope at about 50 degrees and the base, where identified, appears uneven. The pit also provided the majority of artefactual evidence from the area excavation.

Several fills were recorded during the excavation of the three segments through the pit. In segment 0076, recorded in sections 0155 (Figure 10) and 0082 (Figure 12), three separate fills were identified. The upper fill, 0109, was a 0.7m deep mid to dark grey loam with frequent charcoal. Several finds were recovered from fill 0109 but were mixed with finds from the fill below and recorded under the segment number 0076. Fill 0110, a 0.2m deep grey/orangey brown silty clay, was the middle fill in segment 0076 and the finds were mixed with those from the upper fill 0109 and recorded under the segment number 0076. Finds recovered from these two layers include sheep/goat and cattle bone, early post-medieval pottery, fragments of roof tile and three post-medieval bronze artefacts (a buckle, a token and a button). The lowest fill in segment 0076 was a 0.55m deep dark grey/brown/black silty sand 0111 which contained one fragment of mammal bone. Due to difficult on site conditions the exact limits of fill 0111 were not clear and it may in part be two fills including a fill of the earlier Phase 1 ditch 0143.

Within segment 0079 two separate fills were identified and recorded in section 0082 (Figure 12). The upper fill 0100 was a 0.8m deep mid brown clay/silt loam. The finds were heavily mixed

including early medieval and post-medieval pottery, glass, animal bone, a post-medieval horseshoe and a small piece of modern plastic. Fill 0101 was immediately below fill 0100 and was a 0.6m deep mixed mid brown gravel/clay loam. No finds were recovered from this fill.

Within segment 0080 three separate pit fills were identified and recorded in section 0082 (Figure 12). The upper fill 0089 was a 0.6m deep orangey brown silty sand which contained no finds. Below 0089 was a 0.3m deep dark grey silty clayey sand 0091 with no finds. The lowest fill in segment 0080 was a black silty sandy clay with frequent charcoal. Which was not fully excavated. Fragments of post-medieval brick as well as mortar, oyster shell and mammal bone fragments were recovered from the fill.

Several post-medieval finds were recovered during the machine extension of segments 0076 and 0079 and are recorded using the numbers 0162 and 0165.

Located on the eastern edge of pit 0081 was a linear trench with near vertical sides 0175. The trench was not obvious during excavation but was visible in section 0082 (Figure 12). The trench is filled by a mid grey silty sandy clay 0095 and a small group of four posts, 0112 (Figure 19). The posts 0112 were round with a radius of c.45mm and have been identified as oak. They may have been the remains of a fence along the top of pit 0081 marking the limits of the feature. Two other fills, 0090 and 0096, appear to be associated with trench 0175. Fill 0090, a 0.15m deep orangey brown silty clay, is directly above fill 0096, a 0.2m deep orangey white chalky clay. Both fills are recorded in section 0082 (Figure 12).

The most prominent Phase 5 feature was a linear brick culvert 0072 running north-west to south-east across the site. The culvert appeared circular though very little was excavated around it as it was still water filled. The culvert cut through many of the earlier phases on the site though Phase 3's bank 0135 and wall 0071 were the most heavily disturbed. A later ceramic drain ran north-east south-west across the site and ran into the culvert 0072. As with the culvert the pipe trench cut through many of the earlier phases. Both of the more recent drains appear to follow the earlier phases of drainage ditches running east west and north south.

Modern build-up layers

Several build-up layers were identified and excavated, largely by machine, across the site and section 0078 (Figure 12) clearly showed this sequence of build-up. The lowest build-up layer, a 0.2m deep light grey clayey silty sand, 0068 lay directly over the Phase 1 ditches (0167 and 0143) and contained a sherd of Late Post Medieval Earthenware, a spindle whorl (SF1007) and thirty fragments of animal bone including cattle and horse. Directly above layer 0068 was layer 0069, a 0.3m deep light grey clayey silty sand heavily flecked with dark orange silty sand with heavily mixed finds which included early and late medieval pottery, roof tile, mammal bone, shell and a piece of asbestos. Directly above layer 0069 was a 0.35m deep light grey/brown clayey silty sand 0177 under a 0.65m deep dark grey clayey silty sand 0176. No finds were recovered from these upper layers.

Further build-up layers were recorded across the site. Layer 0088, a 0.15m deep mid brown silty clayey sand, was identified in segment 0080 and recorded in section 0082 (Figure 12). Layer 0088 overlies pit 0081 and no finds were recovered. A similar layer 0157 was identified in section 0156 and was a 0.2m deep mid brown silty sand with no finds (Figure 14). Two further layers were identified in section 0156 (0158 and 0161). Layer 0158 was a 0.1m deep mid brown sand under layer 0157 while layer 0161 was a 0.25m deep brown silty sand also under layer 0157. No finds were recovered from either layer 0158 or 0161.

Trenches

Two trenches were excavated to the east of the open excavation area. The trenches were numbered 9 and 10 continuing on the sequence from the evaluation. Their purpose was to identify the existence of and further characterise the ditch network on the historic maps. Unfortunately due to the depth of the trenches, both over 2m deep, it was impossible to retrieve any artefactual evidence or produce drawn sections of the ditches.

Trench 9

The trench, measuring 7.5m long, was located to the east of the area excavation and ran on a north-east south-west alignment. It was heavily disturbed at the western end by a concrete structure possibly containing a modern drain running approximately north south. To the east of the concrete the eastern edge of an underlying drainage ditch was identified with a visible width of 0.64m from the concrete edge. This ditch was heavily disturbed and the base of it was not identified in the trench. No archaeological features were identified to the east of the drainage ditch.

Trench 10

The trench was excavated approximately 15m to the south of Trench 9 on the same alignment, and extended to a length of approximately 8.5m. Within the trench a north-south linear ditch was identified. The ditch was 1.9m wide though the base was not identified. This ditch appears to be part of the network of drainage ditches running across the development site. However, the position and alignment of the ditches identified within Trenches 9 and 10 do not match and so may indicate different phases within the drainage ditch network.

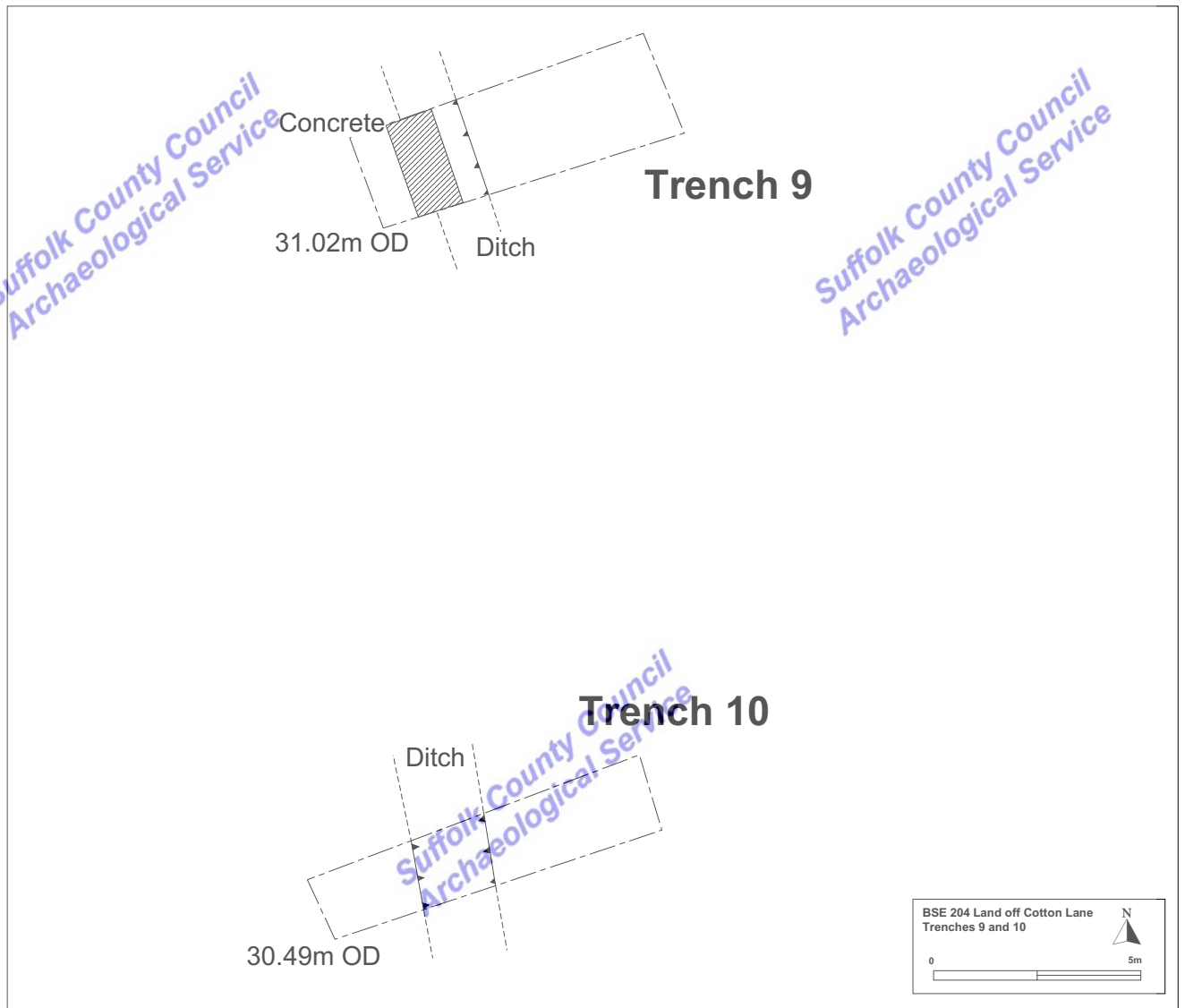


Figure 20. Plan of Trenches 9 and 10

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Finds and environmental evidence

Sue Anderson

Introduction

Table 9 shows the quantities of finds collected during the excavation. A full quantification by context is included as Appendix 3.

Find type	No.	Wt/g
Pottery	393	3745
CBM	401	18710
Fired clay	5	120
Stone*	6	2416
Mortar/plaster	29	2296
Glass	16	563
Clay pipe	29	89
Lava quern	1	409
Worked flint	3	7
Burnt flint/stone	2	29
Slag	5	161
Iron*	98	1117
Copper alloy*	7	32
Lead*	2	12
Modern materials	3	18
Animal bone	321	5324
Shell: oyster	92	756
Shell: other	11	20
Coal	7	87

Table 9. Finds quantities (*includes small finds).

Pottery

Introduction

A total of 393 sherds weighing 3745g, ranging in date from the early medieval period to the 20th century, was collected from the site. Table 10 shows the quantities by fabric, and a full quantification is included in Appendix 4.

Methodology

Quantification was carried out using sherd count, weight and estimated vessel equivalent (eve). A full quantification by fabric, context and feature is available in the archive. All fabric and form codes were assigned from the Suffolk post-Roman fabric series, which includes Norfolk, Essex, Cambridgeshire and Midlands fabrics, as well as imported wares. Imports were identified from Jennings (1981). Non-local ware identifications are based on McCarthy and Brooks (1988). A $\times 20$ microscope was used for fabric identification and characterisation. Form terminology follows MPRG (1998). Recording uses a system of letters for fabric codes together with number codes for ease of sorting in database format. SCCAS pottery quantification forms were used and the results were input onto an Access 97 database.

Pottery by period

Early medieval wares

Six body sherds of early medieval ware in a medium sandy fabric were recovered, and there were two gritty sherds, one decorated with combed wavy lines.

Medieval wares

Pottery belonging to the high medieval period made up 60% of this assemblage by count. The group was dominated by the typical local 'Bury wares', particularly BMCW, with fewer of the coarser and finer sherds present at this site, and only one sherd of shell-dusted ware. The range seems to indicate that activity was focussed more towards the second half of the period, with

fewer earlier fabrics and forms evident in the assemblage. The same is true of the glazed wares, with Grimston ware more common than Hedingham ware.

Fabric	Code	No.	%No.	Wt/g	%Wt	ave
Early Medieval Ware	EMW	3.10	6	20		
Early Medieval Ware Gritty	EMWG	3.11	2	7		
<i>Total early medieval</i>			8	27	0.7	0
Medieval Coarse Wares	MCW	3.20	6	44		0.05
Bury Sandy Fine Ware	BSFW	3.31	20	132		0.08
Bury Coarse Sandy Ware	BCSW	3.32	12	73		0.10
Bury Medieval Coarse Ware	BMCW	3.33	144	683		0.58
Bury Medieval Shelly Ware	BMSW	3.53	1	12		
Unprovenanced Glazed	UPG	4.00	1	2		
Grimston-type Ware	GRIM	4.10	31	319		0.10
Mill Green Ware	MGW	4.22	1	2		
Hedingham Fine Ware	HF1	4.23	22	109		0.15
<i>Total medieval</i>			238	1376	36.7	1.06
Late Medieval and Transitional	LMT	5.10	11	154		
Cistercian type Ware	CTW	5.20	2	4		
Late Hedingham Ware	HF2	5.62	1	5		
Raeran/Aachen Stoneware	GSW3	7.13	1	8		
<i>Total late medieval</i>			15	171	4.6	0
Iron Glazed Black Wares	IGBW	6.11	18	812		0.15
Glazed Red Earthenware	GRE	6.12	34	622		0.32
Local Early Post Medieval wares	LEPM	6.13	1	44		0.18
Speckle-glazed Ware	SPEC	6.15	3	66		
Tin Glazed Earthenwares	TGE	6.30	2	11		
Metropolitan Slipware	METS	6.42	1	37		0.10
Cologne/Frechen Stoneware	GSW4	7.14	4	58		
<i>Total post-medieval</i>			63	1650	44.1	0.75
Late Post Medieval Earthenwares	LPME	8.01	40	268		
Refined White Earthenwares	REEW	8.03	12	72		0.40
Yellow Ware	YELW	8.13	1	5		
English Stoneware	ESW	8.20	2	9		
Porcelain	PORC	8.30	9	53		0.22
Late Slipped Redware	LSRW	8.51	5	114		0.03
<i>Total modern</i>			69	521	13.9	0.65
Total			393	3745		2.46

Table 10. Pottery quantification by fabric.

The coarsewares included ten identifiable vessels: six jars, three jugs and a bowl. No decorated sherds were present. Rim types, particularly amongst the BMCW group, were largely developed, including flat-topped everted F1 and thickened everted E1. One Essex type rim of late 13th to mid 14th century date was found in layer 0146.

Glazed wares make up 23% of the medieval group by count. This is a relatively high figure, comparable with sites in the centre of town rather than those at the periphery. Sources of the majority of glazed wares were the normal ones for the town, i.e. Essex and Norfolk kilns. Two jug rims were present, and there was a fragment of a face from a Grimston face jug, but otherwise no identifiable vessels were found. Decoration and glaze colour was typical for the industries. One unprovenanced whiteware sherd (fine matrix tempered with coarse red grog) may be an import, possibly French, and was glazed with copper green glaze externally.

Late medieval wares

Only a small quantity of late medieval pottery was found. The group was dominated by LMT, a pottery type produced in the Waveney Valley and around Hopton in North Suffolk. There were also two body sherds of Cistercian-type ware and a sherd of possible late Hedingham ware with

green glaze on both surfaces. One sherd of Raeren stoneware was the only import of this date. There were no identifiable vessels.

Post-medieval wares

Local redwares dominated this group (IGBW, GRE, SPEC and LEPM). Vessel types in these fabrics included a tankard, a mug, two jugs, two bowls and a dish. A base from a possible skillet or pipkin had a short pulled tripod foot. A horizontal handle from a large speckle-glazed ware storage jar was also present. Fragments of tin-glazed earthenware consisted of a possible plate rim and a piece of a purple manganese-speckled mug. A Metropolitan slipware dish rim, decorated with white slip dot clusters and wavy lines, and with burning at the rim, was found in 0080. Four sherds of Frechen stoneware were all pieces of Bellarmine-type bottles.

Modern wares

Most sherds in this group were pieces of plantpot (eves not measured). There were also refined whitewares decorated with transfer printing, flow blue and tortoiseshell decoration, fragments of hand-painted porcelain, and pieces of more utilitarian vessels in yellow ware, English stoneware, and late slipped redware.

Pottery by site phase

Table 11 shows the quantification of pottery by site phase. The majority of pottery was unphased because it was collected from layers in the sieved squares of topsoil and subsoil which overlay the site. Only 58 sherds could be phased.

Phase	No.	Wt/g
1	1	115
3	7	245
5	50	1292
Un	335	2093

Table 11. Pottery by phase.

Table 12 shows how the pottery was distributed by context group. The single sherd from Phase 1 was a piece of Grimston Ware from context 0074 in section 0078. Two sherds from Phase 3 layer 0146 were of medieval date, and there were five late and post-medieval sherds from Phase 3 layer 0131. Contexts 0068 and 0069 in section 0078 were allocated to Phase 5 and contained two medieval sherds, a large sherd of GRE and a piece of plantpot. The remainder of the sherds from this phase came from contexts within pit 0081 and finds 0162. The pit contained several residual sherds, but fills 0080 and 0100 produced sherds of 19th/20th-century date. Even if these were intrusive, the pit is unlikely to be any earlier than 18th century.

The sieved squares produced a wide range of pottery of all dates. Table 13 shows the counts by layer and period. This seems to indicate a degree of mixing. In general, however, the pattern appears to be that early medieval and medieval wares were most common in the lowest layers, with post-medieval and modern wares generally not occurring below the second layer. The exception to this is context 0062, which did contain one 19th/20th century sherd, presumably intrusive. In general, medieval sherds were common in all three squares and the quantities of later material do not indicate a high level of dumping after the 16th century.

Fabric		Squares		Section	Pit	Layers		Finds
		0051	0054	0057	0078	0081	0131	0146
EMW	3.10		6					
EMWG	3.11	1		1				
MCW	3.20		2	3			1	
BSFW	3.31	7	5	8				
BCSW	3.32	1	5	4	1	1		
BMCW	3.33	8	69	64		3		
BMSW	3.53		1					
UPG	4.00		1					
GRIM	4.10		15	12	2	1		
MGW	4.22	1						
HFW1	4.23	2	8	12				
LMT	5.10	1	1	4		4	1	
CTW	5.20		1	1				
HFW2	5.62			1				
IGBW	6.11					5	1	12
GRE	6.12	8	8	4	1	10	3	
LEPM	6.13					1		
SPEC	6.15	1		1		1		
TGE	6.30			1		1		
METS	6.42					1		
GSW3	7.13	1						
GSW4	7.14			3		1		
LPME	8.01	16	12	10	1	1		
REFW	8.03		5	5		2		
YELW	8.13			1				
ESW	8.20			2				
PORC	8.30		6	1		2		
LSRW	8.51		1	4				

Table 12. Pottery by context group.

Square	Layer	EMed	Med	LMed	PMed	Modern
0051	0052		2		2	12
	0053		13	2	7	4
	0060	1	4			
0054	0055					8
	0056	4	34	1	8	16
	0061	2	67	1		
	0065		5			
0057	0058		1		3	12
	0059		31	3	6	10
	0062	1	43	2		1
	0063		28	1		

Table 13. Pottery from the squares by layer and period (by count).

Building materials

Ceramic Building Material (CBM)

A total of 401 fragments of ceramic building material was collected from 21 contexts. Table 14 shows the quantities (count) by form and fabric group. A full catalogue by context is included as Appendix 5.

Fabric	Code	Walling			Flooring			Roofing			RBT
		EB	LB	CB	FB	FT/B	FT	RT	RID	PAN	
Estuarine clays, coarse sandy	est	2						42			
Coarse sandy, few other inclusions	cs							12			
Medium sandy, few other inclusions	ms		8					92			
Medium sandy with flint	msf		1	1					2		
Medium sandy with ferrous pieces	msfe		4					180		2	
Medium sandy with grog	msg		31					3			
Medium sandy, ferrous and grog	msfg							1			
Medium sandy micaceous	msm							3			
Fine sandy, few other inclusions	fs							2			
Fine sandy with ferrous pieces	fsfe							1			
Fine sandy micaceous	fsm		4								
White, medium sandy with grog	wsg				4	1	4				
Total		2	48	1	4	1	4	336	2	2	1

Table 14. CBM quantities (count) by fabric and form.

The majority of pieces consisted of plain roof tile (RT) in red medium sandy fabrics. The type with ferrous inclusions is generally fully oxidised and probably of post-medieval date, whilst the medium sandy fabric with few other inclusions tends to have a reduced core and is likely to be late medieval or earlier. A few of these latter were glazed. Some estuarine fabrics occurred on this site; these tiles are generally associated with higher status buildings of 13th-14th century date in the town. The majority of peg holes were round, but some were square. Only one peg tile (from wall 0071) was measurable in two dimensions; it was 173mm wide and 14mm thick. Two fragments of ridge tile (RID) were also present, and there were two pieces of late machine-pressed pantile (PAN).

Two early bricks (EB) were collected. One was a fragment from square 0053, and the other was a complete brick from drain 0104 (0164). The latter measured 236 × 122 × 52mm and had a strawed base, suggesting a 14th-15th century date (Drury 1993, type EB7). Most late bricks (LB) were small fragments, but thicknesses were measurable for five pieces, varying from 49 to 57mm, and suggesting a range of dates from the 16th century onwards. One piece from 0055 was only 39mm thick and could be Roman, and another fragment measuring 20mm thick (0062) was recorded as possibly Roman (RBT). These were probably re-used, but both had been deposited in layers excavated in squares. A fragment of coping brick (CB), representing approximately a quarter of a curving type, was collected from machine spoil 0165. It is likely to be 19th century in date. These bricks were used to cap garden walls, but were also sometimes employed to make drains. An extant example of this can be seen in the rear garden of the Guildhall.

Fragments of 18th/19th century white floor bricks/tiles (FB/T) were all recovered from the upper layers of the excavated squares.

Fired clay

Only three fragments of fired clay were recovered from this site. The pieces were all from 0061 and were chalk-tempered. Pieces like this are often associated with oven domes, although they could be fragments of daub. There were no distinguishing features or impressions.

Mortar and render

Twenty-nine fragments of mortar and render were recovered from seven contexts. One fragment from 0076 was cementitious and probably late. The rest consisted of pale cream lime mortar with varying amounts of medium to coarse sand and flint inclusions. Fragments collected from

0052 and 0053 had comb impressed decoration of a type which can still be seen in the town centre today. A large fragment from 0092 had a circular impression in one surface.

Stone

A fragment of very fine-grained limestone covered in mortar was recovered from 0053. Two worked coarse shelly fragments and one fine oolitic piece (probably Barnack and Ketton stone respectively, R.D. Carr pers. comm.) were found in 0056. A small coarse shelly fragment came from 0061.

Structural metalwork

Eleven contexts produced 88 iron nails and a copper alloy tack/nail. None is intrinsically datable. The majority came from fills within the squares and pit 0081, and were associated with post-medieval and earlier finds. An iron staple was found in square 0056.

Miscellaneous

Seven contexts produced fragments of clay pipes. Twenty fragments were from squares, and these were all stems. The remaining nine stems were from segments of pit 0081.

Glass was collected from eight contexts. Again the fragments were all from the squares and pit 0081. Twelve fragments were from bottles, and four were pieces of window glass.

One fragment of lava quern was found in 0063. It was a piece of flat quern, 38mm thick, roughly dressed on the non-grinding surface and pecked on the grinding surface (C. Tester, pers. comm.). It is likely to be medieval.

Several fragments of ferrous slag of uncertain type were recovered from the squares (0053, 0056, 0062), and a piece of lead waste from 0061 was also found.

Three worked flints were found in 0061, two flakes and a short blade. There were also two burnt flints from 0056 and 0061.

A few modern materials were present. A fragment of white moulded plastic came from square 0056, and a fragment of orange sheet plastic was found in fill 0100. There was a piece of asbestos in layer 0069. These were discarded after recording.

Wooden objects

Carole Morris

Introduction

This report concerns two wooden objects which were recovered from ditches running east-west across the site which were part of a network of drainage ditches.

Methodology

The objects are identified below in terms of conversion and possible functions. The former refers to how the timber was converted from roundwood raw material into a finished product, and uses the terminology outlined in English Heritage's guidelines for recording waterlogged wood (Morris 1990, 12-14, fig. 2). Conversion is discussed in greater detail elsewhere (Morris 2000, 2102-4 and fig 973). Species are included in the individual entries.

Catalogue

Wood fragment 0141 (excavated as part of a wood lining, group 0099, of ditch 0143, which was the later of two drainage ditches running E-W across the site). Post-medieval

L(surviv) = 550mm; W(surviv) = 102mm; Th = 8-15mm. *Quercus* sp. Oak

Radially split plank or board. Very worn, broken and abraded, but a length of one long side is intact and has a rounded/squared edge in cross section. Possible intact corner which is curved, thinned and worn. The board tapers in cross-section from the broken long edge, a feature typical of radially-split planks which have not necessarily been shaved and shaped to have an even cross-section.

Wood fragment 0169 (recovered from ditch 0167, the earlier of two drainage ditches running E-W across the site). Late Medieval?

Larger fragment: L(surviv) = 875mm; W = 110mm; Th = 10-15mm. *Quercus* sp. Oak (with slightly spiralling grain).

Smaller fragment: L(surviv) = 40mm; W = 40mm; Th = 16mm. *Quercus* sp. Oak

Stave from coopered stave-built cask, made from radially split board, one end and two long edges intact, the other end broken (Figure 11). Listed and tapered towards both ends. Intact end has chamfered chime and is hollowed on the internal surface with a shallow squared croze-cut groove for the original caskhead (not extant).

There are three groups of augered holes completely perforating the stave:

- (i) Group of 15 holes (near the intact end)
- (ii) Group of 13 holes (set in the approximate middle of the stave separated from Group (i) by an unperforated section
- (iii) Group of four surviving holes, two incomplete, (starting towards the other end of the stave separated from Group (ii) by an unperforated section. There is a complete and an incomplete hole on the smaller fragment which comes from this end of the stave. Originally the quantity of holes in this group may have been similar to (i) or (ii).

The diameters of the holes vary between 12–15mm. They are straight-sided and were cut with a straight-sided rather than a tapering auger.

Discussion

Although 0141 could be part of a stave from a stave-built large bucket or tub with part of the upper rim edge surviving, there are no other features (such as traces of a basal groove) to confirm this, and it is just as possible (especially considering the markedly tapering cross-section) that it is just a radially-split plank. If it were a stave, it was being re-used as part of a plank-built lining of a drainage channel. Other parts of the wooden lining group 0099 (not recovered but the approximate position is marked on plan Figures 9 and 12) are two other planks (0140 and 0142) and two supporting struts (0138 and 1039) for the plank lining.

Although it was also recovered from a drainage channel, 0169 is definitely an incomplete stave from a stave-built cask and so was either discarded in the drainage ditch, or was being re-used there for a particular purpose.

Casks were double-ended enclosed 'packing cases' with staves bound together in most instances in medieval England by wooden bands, and sealed by caskheads set in grooves at each end. Casks were most widely used commercially, but many would also have had domestic uses. They were strong, hardwearing, variable in size, could be watertight if necessary and were easily moveable by rolling. Archaeological evidence from various British sites survives either in the form of single staves (such as 0169) or parts of caskheads, or as more or less complete vessels without their caskheads used as well or latrine linings.

The features on 0169 which are part of its original manufacture as a composite stave-built vessel are the listed ends (shaped to taper towards each end to allow the complete cask to have a wider girth diameter than the ends), the chamfer on the end made with a chiming adze (Kilby 1971, 28–9), the hollowing on the internal surface at the end (to allow the caskhead to be snapped into position more easily from above the groove) and the groove for the caskhead which was cut with a cooper's croze (Kilby 1971, fig 12). A possible medieval example of such a tool was found at Meols, Merseyside (Morris 1984a, fig 166, W150).

The features on 0169 which are enigmatic, in that they may have very little to do with the original cask's use as a watertight container, are the three groups of augered holes. Holes are often found on cask staves, but in small numbers. They can be a vent- or bung-hole to allow air to enter the cask to facilitate the removal of liquid via a tap in the caskhead, such as have been found on medieval staves from Carlisle (Morris 1984a, fig 108, C237b) or Waltham Abbey (Huggins and Huggins 1973, fig 16) and on casks illustrated in a late medieval manuscript in the British Library (Morris 2000, fig 1087). They can also be small nail or peg-holes to attach the hoops which bind the cask, but these are never found in such large groups as those on 0169.

The holes in 0169 have been augered in what appears to be regular slanting lines of three and probably have no relation to the use of the cask as a watertight vessel. It is more probable that these holes were created when the stave (or cask) was re-used either in the drainage ditch, or nearby. There are many examples of stave-built vessels sunk into the ground in the medieval period and connected with water or drainage systems, most as well-linings in cities such as Cambridge, London, Canterbury, York, Carlisle, Perth, Exeter, Hull and Norwich (e.g. Morris 2000, 2241, table 218). There was also a pit or cistern lining at Kings Lynn (Clarke and Carter 1977, 68, fig 30B), and a tub set upright in the ground at the edge of a river channel in Oxford, possibly as a fish store (Morris 1984b, XX). 0169 may have come from a cask re-used in any of these ways and only this stave survives; most of them require the wooden lining to be firm, but to allow seepage of water in, through or past the staves, and extra augered holes in the side of one or more staves would have helped this function. Another possible use of 0169, especially if it was not used *in situ* in a cask, may have been as a sluice or filtering mechanism in the drainage channel, set up to allow water, but not large detritus through. This was the suggested use of a large wooden panel with 42 augered holes found in a 15th century context in York (Morris 2000, fig 1173, 9061).

Small Finds

Coins, tokens and jettons

1. Ae coin. Victorian penny, 1863 (square fill 0056).
2. Ae jetton, 21mm diameter, fake legend, chequerboard on one side, ?scene on other, unidentified type, LMed? (SF 1006, square fill 0062).
3. Ae token?, c.20mm diameter, flat sheet with no obvious markings, PMed (pit segment 0076).
4. Pb boy bishop token, 20mm diameter, type C (Rigold 1978) LMed (SF 1003, square fill 0053).

Dress accessories

5. Ae buckle, rectangular double-loop and pin, PMed (pit segment 0076).
6. Fe large rectangular buckle, 52 × 44mm, sheet roller and wire pin, PMed (SF 1005, square fill 0059).
7. Ae button, flat, tinned, with integral loop, 25mm diameter, PMed (pit segment 0076).

Equestrian objects

8. Fe horseshoe, 110mm wide, 120mm long, PMed (pit fill 0100).

Textile working objects

9. Stone spindle whorl, 21g, Med? (SF 1007, layer 0068).

Miscellaneous fittings

10. Fe binding ring, 26mm diameter externally, c.8mm deep, plano-convex section to band (SF 1001, square fill 0053).
11. Fe chain link? (or staple?), oval, 30 × 17mm (square fill 0065).
12. Ae small wire ring, machine made? 12mm diameter (SF 1004, square fill 0053).

Unidentified

13. Fe, heart-shaped sheet attached to thick ring fragment (SF 1002, square fill 0053).
14. Fe, horseshoe or sickle blade? (pit segment 0076).
15. Fe, thick sheet fragment (square fill 0059).
16. Fe, sheet fragment (square fill 0061).
17. Fe, lump/sheet? (pit segment 0076).

Biological evidence

Animal bone

by Julie Curl

Introduction

A total of 5.324kg of bone, consisting of 311 pieces, was recovered from the excavation. Although this is a small assemblage it produced a good range of butchered remains of the main domesticated mammals and birds. Several cut bones were also recovered from equids and canid, suggesting that these animals had been skinned.

Methodology

All information was recorded on faunal remains record sheets. Each context was recorded individually, along with the total weight and quantity for each context along with quantities for each species and the number of 'countable' elements for each species. The 'countable' elements are recorded following modified guidelines devised by the Ancient Monuments Laboratory/English Heritage (Davis 1992). A catalogue of the information is listed in context number order in Appendix 6 and a summary by spotdate is presented in Table 15. The catalogue includes a summary of the butchering and waste type (for example: secondary waste).

Species	13-14	LMed?	16-18	18-20	Un
equid	2			2	2
cattle	3	4	2	22	2
sheep/goat	4			20	1
pig		1		8	
canid				6	
rabbit				1	
rat	1				
mammal	43	21	6	161	16
goose				1	
galliformes		1		2	

Table 15. Species fragment counts by spotdate.

Results and conclusions

Most of the bone recovered during the excavations was produced from fills of late to post-medieval or 18th to 20th century date; less than two percent of the faunal assemblage (by weight) was yielded from contexts of a pre-14th century date. Bone was mostly recovered from a variety of layers and pit fills.

The most frequently identified species was cattle, and sheep/goat were recovered in slightly lower numbers. Pig, equid and canid elements were recorded and there were single bones from rabbit and rat. Bird bones were found, but remains were sparse with only four bones from galliformes and goose identified. Much of the bone had been butchered to some degree, including some canid and equid bones. Few measureable elements are present in this assemblage, too few for any meaningful analysis of the data. Both adult and juvenile animals of the main domestic food animals were present, suggesting that the animals were probably reared close to the site.

Generally the bone was in good condition, although fragmentary due to butchering and wear. Some canid gnawing was observed in 0062, otherwise no scavenger activity was noted.

13th to 14th century fills

Only 88g of bone was recovered from fills of this date and it accounted for just 1.6% of the faunal assemblage. Most remains from this period were only identifiable as 'mammal'; sheep/goat bones were recovered from 0063 and 0074, a chopped fragment of cattle pelvis was produced from 0063 and a juvenile rat femur was also found in 0063. The majority of the bone from this period is waste from secondary butchering and food waste, the rat bone in 0063 could be a scavenger or possibly intrusive as these animals will burrow and use existing holes.

Late medieval to modern fills

The majority of the bone was recovered from late to post-medieval contexts, most of which was from layers and pits dated to the 18th to 20th centuries. The butchered remains of cattle and sheep were the most frequent and much of this consisted of secondary butchering and food waste from bones such as pelvis, humeri, femora and scapulae, which produce good quality cuts of meat. Some primary butchering elements were found including possible evidence of hornworking, with a chopped cattle horncore in 0062, and a suggestion of skinning waste from the metapodials from cattle, sheep and pig. One cattle femur from 0061 was quite interesting, the ball-joint at the proximal end of the bone had been cleanly chopped, removing approximately 1.5 to 2cm of the end of the ball. It is possible that this femur was simply chopped as part of the dismembering of the cow, but equally this part of the ball-joint could have been removed to use as a spindle-whorl, as this part of the bone is often used for that purpose.

Pig was the third most frequent species in this assemblage. The elements were from both primary and secondary butchering. It is probable during these later periods that pigs would have been kept and processed on site. Bird remains were found, galliforme bones were retrieved from 0061 and 0062; a goose bone was recovered from 0059. Birds would have probably been kept on site to provide a supply of eggs as well as meat, geese would have also provided feathers and quills.

Equid bones were recovered from four contexts, the remains from three of these contexts, 0066, 0068 and 0148, had been butchered. The butchered equid bones consist of a tibia and a metatarsal which show fine cuts and scrapes along the bones; the talus from 0066 has a small area of cuts on the proximal part of the bone. All of the equid butchering would be consistent with skinning, but it is possible that the animal was also eaten, although horse meat has never been popular in this country at any time.

Canid bones were produced from four fills, 0059, 0062, 0080 and 0100. Butchering, which is unusual on canid bones, was noted on a small dog/fox humerus from 0059; this bone showed a cut mark on the shaft that probably resulted from skinning. A humerus and tibia belonging to a much larger species of canid (dog/wolf) was recovered from 0100 which had been both cut and possibly chopped; again this animal was probably skinned. Occasionally dog flesh is given as food to other dogs, but rarely, if ever, eaten by people. Skinned dogs have been recorded on

many sites in Norfolk, particularly Norwich; several cut dog bones were found in a 17th to 18th century cellar fill at Millennium Plain in the centre of Norwich, along with other skinned animals (Curl 2002).

A single rabbit bone was found in the fill of the 19th to 20th century context 0059; the rabbit humerus still has visible fusion lines that show that the rabbit was approximately a year old at death.

Overall conclusions

The majority of the assemblage was derived from the primary and secondary butchering and food waste of the main domesticated mammals, cattle, sheep and pigs. For the main food animals, there are more of the secondary butchering and food elements that would have produced good cuts of meat, which could suggest that the faunal waste here was produced primarily from domestic waste. Skinning of animals at this site is also indicated from the presence of cut equid and canid bones, also from the relatively numerous metapodials from cattle, sheep and pigs. Skinning and tanning of these skins would be expected at a site close to a river.

Plant macrofossils

Val Fryer

Introduction

Excavations located a series of drainage channels of probable early medieval and later date, and a flint and mortar wall, the latter associated with a further two drains, one of which was tile lined. Samples for the extraction of the plant macrofossil assemblages were taken from three of the ditch fills, and four samples were submitted for assessment.

Methods

The samples were processed by manual water flotation/washover. As waterlogged macrofossils were present within the assemblages the flots were retained in a 250 micron mesh sieve and stored in water prior to sorting. The wet retents were scanned under a binocular microscope at magnifications up to x 16, and the plant macrofossils and other remains noted are listed Appendix 7. Nomenclature within the table follows Stace (1997). With the exception of charcoal fragments, all plant remains were waterlogged. As further analysis of this material was not recommended after assessment, the wet retents were air dried to facilitate long term storage. The non-floating residues were collected in a 1mm mesh sieve and sorted when dry. Artefacts were not present, but mollusc shells were reasonably common and are listed on the table.

Results of assessment

Plant macrofossils

Waterlogged seeds/fruits of dry-land herbs, wetland and aquatic plants and tree/shrub species were recorded at varying densities from all but sample 006. Preservation of the material within sample 009 was excellent, but the macrofossils within samples 001 and 008 were degraded and fragmented.

Seeds/fruits of dry land herbs were common or abundant in samples 001 and 009 and present in sample 008. Ruderal taxa were predominant and included thistle (*Cirsium* sp.), willow herb (*Epilobium* sp.), dock (*Rumex* sp.), sow-thistle (*Sonchus asper* and *S. oleraceus*) and stinging nettles (*Urtica dioica*). Wetland/aquatic plant macrofossils were moderately common in all three assemblages and included seeds of water plantain (*Alisma plantago-aquatica*), wild celery (*Apium graveolens*), gypsy wort (*Lycopus europaeus*) and celery-leaved crowfoot (*Ranunculus sceleratus*) and nutlets of sedge (*Carex* sp.). Tree/shrub macrofossils were rare, but did include fragmentary willow (*Salix* sp.) fruits, elderberry (*Sambucus nigra*) seeds and bramble (*Rubus* sect. *Glandulosus*) 'pips'.

Waterlogged root/stem fragments were abundant in all but sample 006, and pieces of charcoal were recorded from all but sample 009. Other plant macrofossils included indeterminate buds, leaf fragments, moss and twigs. Phragmites type nodes were noted in sample 008.

Molluscs

Mollusc shells, including specimens of both terrestrial and freshwater taxa, were recovered from all four samples. All four ecological groups of terrestrial species were present, with open country and woodland/shade loving taxa being predominant. Shells of *Armiger crista* and *Planorbis planorbis* were abundant within the freshwater mollusc assemblages; both are common species within small bodies of water.

Other materials

With the exception of waterlogged arthropod remains, other materials were rare. Other animal macrofossils included caddis larval cases, Cladoceran ephippia, ostracods and small mammal/amphibian bones. Small coal fragments were common in sample 006, and copper alloy concretions were noted in sample 001.

Discussion

Samples 008 and 009 were taken from fill 0075 from the earliest drainage ditch recorded on the site. Seeds of aquatic plants and freshwater mollusc shells are common in both assemblages, probably indicating that the ditch was at least semi-permanently water filled. Low-velocity water conditions over a muddy ditch bottom are indicated. The composition of the dry land herb assemblages appears to indicate that the ditch passed through an area of waste ground overgrown by weeds and colonising trees and shrubs. With the possible exception of a small number of flax (*Linum usitatissimum*) seeds, which may be derived either from dietary refuse or retting waste, there appears to be very little evidence for regular human intervention in the area of this feature.

Sample 001 (context 0102) was taken from the fill one of the later drainage ditches. Although the assemblage is broadly similar to those from the earlier ditch, wetland taxa are more common than aquatic plant remains, and shells from terrestrial molluscs (particularly shade loving species) were also recorded. This ditch would appear to have been damp rather than regularly water filled, but the surrounding area was still essentially the same with a variety of weeds, colonising plants and scrub.

Sample 006 is from the fill of one of the later ditches associated with the wall. With the exception of charcoal fragments and pieces of root or stem, plant macrofossils are absent. However mollusc shells are abundant. While some freshwater species are still present, terrestrial taxa are now predominant, particularly shade loving species (which presumably inhabited the ditch itself) and open country species, the latter possibly indicating that the area through which the ditch passed was now largely cleared of weeds and scrub.

Conclusions and recommendations for further work

In summary, both the plant macrofossil and mollusc assemblages indicate that all three ditches were intended for the drainage of water, although the quantity and velocity of water appears to have varied with time. The earlier ditches probably passed through little used areas of weed and scrub covered waste ground, although by the time the later ditch was in use, this may have been at least partially cleared.

Although the assemblages do contain a variety of both plant and mollusc remains, the density of material present is not particularly high. As quantitative analysis of these assemblages would

probably add little to the overall interpretation of the site or its component features, no further work is recommended at this time.

Wood

Rowena Gale

Introduction

This report includes the identification of thirteen pieces of waterlogged wood from structural components.

Methods

The samples were prepared using standard methods (Gale and Cutler 2000). The anatomical structures were examined using transmitted-light on a Nikon Labophot-2 compound microscope at magnifications up to x400. The taxa identified were matched to prepared reference slides of modern wood.

Results

The results are presented in Table 16.

Sample	Feature	Comp	Description	Taxon	Comments
0103	0079	0081	Wood	Oak (<i>Quercus</i> sp.)	Roundwood
0112	0080	0175	Wooden stake	Oak (<i>Quercus</i> sp.)	Roundwood, radius c. 45mm
0114	-	-	-	Oak (<i>Quercus</i> sp.)	Roundwood, radius 50mm
0115	-	-	-	Oak (<i>Quercus</i> sp.)	Roundwood, Radius 70mm
0116	-	0103	Wood/stake	Willow (<i>Salix</i> sp.) or poplar (<i>Populus</i> sp.)	Roundwood, diameter 45mm
0121	0076	0099	Wood pieces	Elm (<i>Ulmus</i> sp.)	-
0122	0076	0099	Wood	Elm (<i>Ulmus</i> sp.)	-
0123	0076	0099	Wood	Elm (<i>Ulmus</i> sp.)	-
0124	0076	0099	Wood	Elm (<i>Ulmus</i> sp.)	-
0125	0076	0099	Wood	Elm (<i>Ulmus</i> sp.)	-
0138	0076	0099	Wooden strut	Ash (<i>Fraxinus excelsior</i>)	Roundwood, radius c. 50mm
0139	0076	0099	Wooden strut	Ash (<i>Fraxinus excelsior</i>)	Roundwood, radius c. 40mm
0140	076	0099	Wood plank	Willow (<i>Salix</i> sp.) or poplar (<i>Populus</i> sp.)	Very degraded

Table 16. Taxa identified from wooden components

Shell

Thirteen contexts produced oyster shells, most of which were collected from squares and pit 0081. Other shells included mussel, whelk, razor and land snails (*Helix aspersa* and *Cepaea nemoralis*).

Coal

Fragments of burnt and unburnt coal were collected from three contexts, all squares.

Discussion of the finds evidence

The majority of finds from this site were collected from layers within the sample squares. Dates of pottery and other finds from these contexts suggests a degree of mixing, although overall the material appears to have been deposited in chronological order with the majority of later finds

occurring in the upper levels of the sequence. Some material may be intrusive in earlier layers however.

The types and variety of artefacts present in the assemblage are not unusual for the town. However, it is interesting that the high proportion of medieval glazed wares suggests relatively high status. This may indicate that the layers represent middening from a high status dwelling in the vicinity, but they could simply be a result of dumping of town centre waste on the outskirts of the urban area.

Medieval finds generally belonged to the second half of the period i.e. 13th/14th centuries, although a few earlier finds were noted. If the material does represent dumping of refuse from the town centre at this date, presumably it was stockpiled before removal and some of the early finds could have been incorporated as residual waste. Plant macrofossils indicate that the area was probably waste ground at this time.

As the quantities of later material are generally small they do not appear to indicate that organised dumping continued into the post-medieval and modern periods. Finds of these dates must therefore have reached the site during post-middening activity. Plant macrofossil evidence may show that the area had been cleared after the medieval phase. The animal bone appears to include evidence for skinning, tanning and tawing, so perhaps some of the other finds may relate to these activities. If the pierced barrel stave was intended as a kind of sieve, this too could be connected to a non-agricultural activity. However, if part of the site was simply open fields with drainage channels at this date, then the post-medieval material may simply have been deposited through low-level manuring activity. Whether wood linings for the channels would have been necessary simply for agricultural use is debatable however.

Discussion

The programme of archaeological works across the site has confirmed and expanded some of the conclusions reached after the evaluation of the site. This includes the quarrying in the south-west corner of the site and the network of drainage ditches across the river floodplain. However, the structure found in Trench 1 of the evaluation (Tester 2002) was shown to be a drain and enclosure as opposed to an actual building. The evidence recovered from the test pits, area excavation and trenching has allowed a more detailed archaeological interpretation of the development site.

The earliest archaeology on the site consists of a network of drainage ditches across the floodplain of the River Lark extending west towards Cotton Lane. The ditches were identified in the evaluation and the excavation as well as on historic maps with some ditches still remaining open to the present day. The ditches appear medieval in origin but very few securely stratified finds were recovered from the limited excavations. A fill of the earlier of the two ditches 0167 was the only dateable context producing 13th century finds. The recovered environmental evidence indicated the site to be a weed and shrub covered wasteland with the earlier ditch 0167 being semi-permanently water filled and the realigned ditch, 0143, being damp rather than water-filled. The irregular pattern of the ditches appears to reflect the topography of the river valley rather than any other features such as the quarrying which sits further up the slope above the floodplain and beyond the ditch network.

A similar pattern of ditches can be seen elsewhere around Bury St Edmunds on modern maps as well as historic maps such as the 1886 OS map (Figure 21). To the south of the town are Holywater and Great Sexton's Meadows and Haberden with No Mans Meadows to the south-east, and to the north of the town is Tayfen with Babwell Fen further to the north. Together with the land east of Cotton Lane these meadows form the eastern, northern and southern limits of the town and all lie between the 30m and 31m contour line. These areas seem to have been used at a low intensity and all seem to require drainage suggesting at least periodical flooding. The northern areas, Tayfen and Babwell Fen, also appear to have been deliberately flooded for the use of the mill located further to the north (Abbot's or Babwell Mill). It is unclear whether this flooding would have continued as far up stream as the Cotton Lane site.

Gravel and sand extraction on the slightly higher gravel terrace just above the River Lark floodplain was also part of the medieval archaeology of this site. The material extracted from the site could provide gravel for constructions such as roads, and sand for the use in building mortar. This would be an invaluable source of raw materials within the town. Although some edges were present in the evaluation trenches and the test pits no definite pits were identified suggesting open quarrying into the natural slope rather than the digging of extraction pits. This contrasts with the site to the south, BSE 193, where the evidence suggests that some pits had been deliberately dug.

The area used for extraction then became a prime local site for the dumping of waste material from the town. The earliest layers of dumped material contain finds from the 13th century giving a date for the start of dumping and therefore the end of extraction from this area of the site. The limited amount of space within the town limits for the disposal of waste material probably meant that this was a prime site. The unusually high concentration of high status material on this site is suggestive of clearance from the town centre and not just local residences.

The site appears to remain fairly undeveloped even with the construction of banks and walled enclosures across the western half of the site. The finds and environmental evidence gives no indication of a major change of use though the site is becoming drier and the weeds and shrub

appear to have been cleared possibly indicating clearance for pasture. Although some of the recovered animal bone suggests more industrial activity, especially tanning, this material may be just dumped from elsewhere within the town.

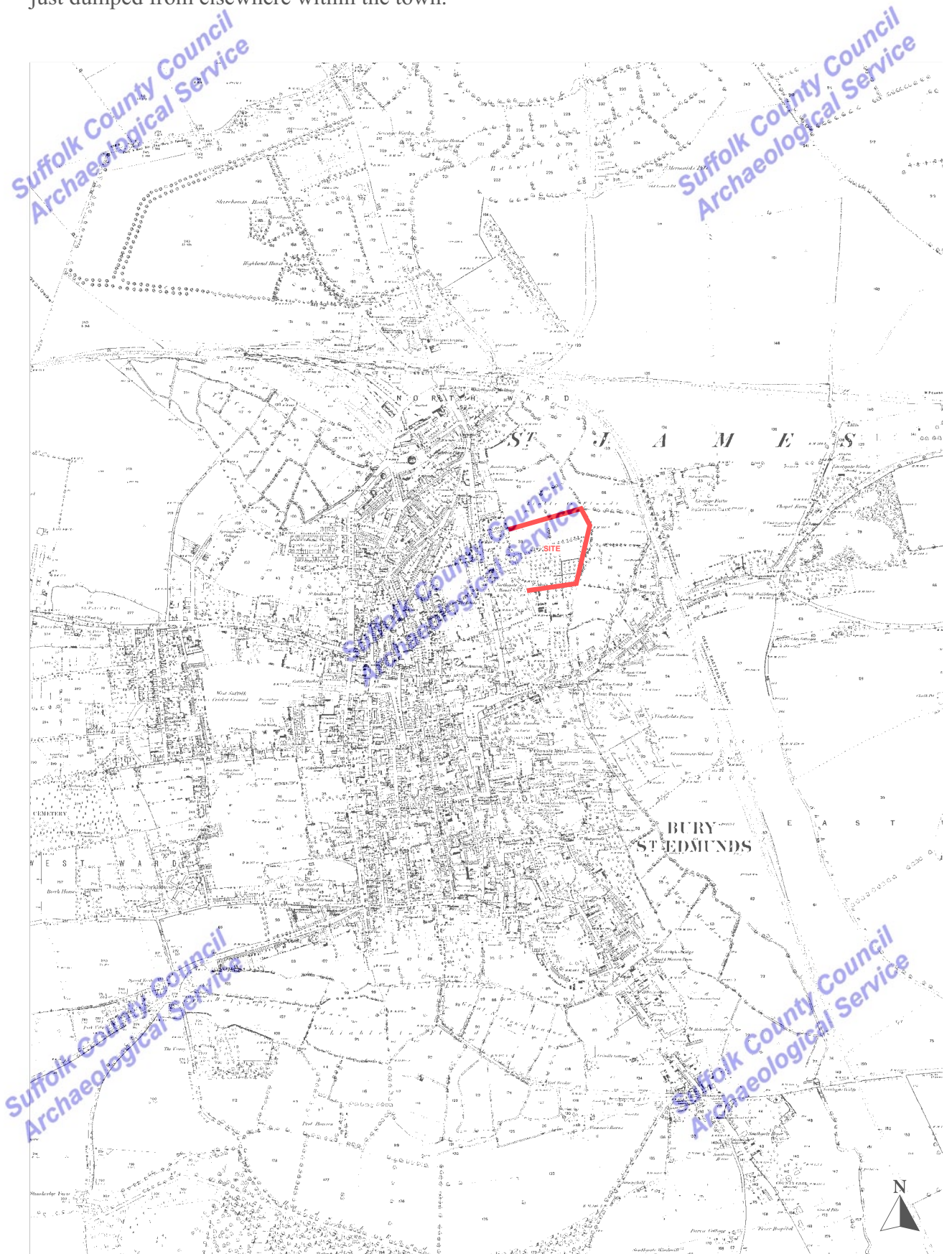


Figure 21. 1886 OS Map of Bury St. Edmunds

Conclusions

Throughout the medieval and post-medieval periods the site, based on the available evidence, remained relatively unchanged. The open area excavation indicated that this area of the site was becoming drier, as a direct result of the construction of the walls, banks and drains. This area also becomes cleared of the weed and shrub covering moving possibly to more open pasture. Industrial activity on the site remains unproven.

The main influence on the site is the water management system consisting of an irregular network of ditches still present to the modern day. Unfortunately, with such limited excavation on the site it is impossible to understand fully and date the development of the ditch network. The other main activity on the site was the quarrying along the gravel terrace in the south-west corner of the site. This was followed by the dumping of waste material from the town dating from at least the 13th century. A similar pattern may have occurred elsewhere around the edge of the medieval and post-medieval town. Further, more detailed, investigation of these areas would allow a more detailed understanding of how these floodplain meadows were used and how they developed.

Unfortunately the archaeological work undertaken on the land to the east of Cotton Lane was, for a variety of reasons outlined earlier in this report, severely limited in scope and only managed a glimpse at the potential for this kind of site in Bury St Edmunds.

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References

- Allen, S.J., 1995, 'Medieval Coopered Vessels', Finds Research Group 700-1700 Datasheet 19.
- Boulter, S., 1999, *Framlingham Mere, (FML 021). Record of Archaeological Monitoring of Phase I & II Silt Removal*, S.C.C.A.S. Report No. 98/14.
- Caruth, J., 2001, *Northgate Business Park, Bury St. Edmunds BSE 194*, Archaeological Monitoring Report, S.C.C.A.S. Report No. 2001/25.
- Clarke, H. and Carter, A., 1977, *Excavations in Kings Lynn, 1963-70*, Soc. Med. Arch. Monogr. 7.
- Curl, J., 2002, *The faunal remains from Millennium Plain, Norwich*. Norfolk Archaeological Unit report No.700.
- Davis, S., 1992, *A rapid method for recording information about mammal bones from archaeological sites*. English Heritage AML report 71/92.
- Drury, P., 1993, 'Ceramic Building Materials', in Margeson, S., *Norwich Households*. East Anglian Archaeology 58, Norwich Survey.
- Duffy, J., forthcoming, *Eastgate Barns Area A, Eastern Way, Bury St. Edmunds (BSE 229)*, Archaeological Excavation Report, S.C.C.A.S. Report No. 2005/38.
- Gale, R. and Cutler, D., 2000, *Plants in Archaeology*. Westbury and Royal Botanic Gardens, Kew.
- Gill, D., 2001, *Watching Brief at 'Alandale', Cotton Lane, Bury St. Edmunds BSE 193*.
- Huggins, P.J. and Huggins, R.M., 1973, 'Excavation of a Monastic Forge and Saxo-Norman Enclosure, Waltham Abbey, Essex, 1972-3' *Essex Archaeol. & Hist. Soc.* 5, 127-84.
- Jennings, S., 1981, *Eighteen Centuries of pottery from Norwich*. EAA 13, Norwich Survey/NMS.
- Kilby, K., 1971, *The Cooper and his Trade*. W & J Mackay Ltd, London.
- McCarthy, M. and Brooks, C., 1988, *Medieval Pottery in Britain AD900-1600*. Leicester University Press.
- Morris, C.A., 1984a, *Anglo-Saxon and Medieval Woodworking Crafts: the Manufacture and Use of Domestic and Utilitarian Wooden Artifacts in the British Isles 400-1500AD*. Unpublished Ph.D Thesis, University of Cambridge.
- Morris, C.A., 1984b, 'The Wooden Objects' in Durham, B. (ed.) 'The Thames Crossing at Oxford: Archaeological Studies 1979-82' *Oxoniensia* 49, 74-76 Microfiche E04.
- Morris C.A., 1990, 'Recording Ancient Timbers: the Technologist's View' in Coles, J. et al (eds) 'Waterlogged Wood. The Recording, Sampling, Conservation and Curation of Structural Timber' *Wetland Arch Res Project (WARP) Occasional Paper* 3, 9-15.
- Morris, C.A., 2000, *Craft, Industry and Everyday Life: Wood and Woodworking in Anglo-Scandinavian and Medieval York* Archaeology of York Fascicule 17/13, CBA, York.
- MPRG, 1998, *A Guide to the Classification of Medieval Ceramic Forms*. Medieval Pottery Research Group Occasional Paper 1.
- Rigold, S.E., 1978, 'The St. Nicholas or 'Boy Bishop' tokens,' *Procs. Suffolk Inst. Archaeol. Hist.* 34 (2), 87-152.
- Statham, M., 1998, 'The Medieval Town of Bury St. Edmunds', in *Bury St. Edmunds Medieval Art, Architecture, Archaeology and Economy*, (ed.) A. Gransden.

Tester, A., 2002, *Land off Cotton Lane, Bury St. Edmunds BSE 204*, S.C.C.A.S. Report No. 2002/92.

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Appendix 1: Context List

OP No	Feature	Identifier	Description	Under	Over	Finds	Spotdate
0050	0001	Unstratified find					
0051		Sieved square	2m x 2m box. Excavated by sieving topsoil. Excavated using shovel. Squares 0054 and 0057 excavated in same manner. See sketch plan on context sheet for approximate positions.				
0052		Square fill	Topsoil of dark brown loam. Few finds.		0053	Y	19-20
0053		Square fill	Brown loam with many fragments of cream mortar, some kept within sieved sample.	0052	0060		19-20
0054		Sieved square	2m x 2m sieved square. Fills= 0055/56/61/65. Comes down on to pit [0067] with fill (0066).				
0055		Square fill	Topsoil fill of square 0054. Dark brown loam.		0056		19-20
0056		Square fill	Fill of square 0054. Dark brown silty loam- some patchy mortar and brick fragments.	0055	0061		20
0057		Sieved square	2m x 2m sieved square. Contains fills 0058/59/62/63/64.				
0058		Square fill	Topsoil layer of box 0057.		0060		19-20
0059		Square fill	Dark brown silty loam.	0058	0062		19-20
0060		Layer	Orange/brown silty sand.	0053			13?
0061		Layer	Dark brown loam- similar to 0056 but without the mortar. Also less stones than 0056.	0056	0065		LMed?
0062		Layer	Lighter brown silty/sand loam.	0059	0063		19-20?
0063		Layer	Layer below 0062. Orange brown silty. Possibly top of natural or redeposited natural- but did produce more finds.	0062	0064	Y	14?
0064		Layer	Orange silt beneath 0063. From base of trench comes down to a very hard layer which was clearly undisturbed.	0063			
0065		Layer	Slightly brown/orange silt.	0061	0066		13-14
0066	0067	Pit fill	Fill of pit [0067] in bottom of sieved square 0054. Very naturally pale orange silt but with occasional flecks of charcoal and animal bone. Excavated using trowel and shovel. Interpretation- suggested quarry pit where cobbles have been removed?	0065	0067		
0067	0067	Pit cut	Suggested pit although only one edge of cut visible therefore could be ditch. Gradual slope. 0.8m deep. Interpretation- possible quarry pit.	0066			
0068		Layer	Light grey clayey, silty sand. Layer consisting of grey silt with gravel- not established whether proof of ditch. Pottery and bone found. Excavated using shovel. See reverse of context sheet for for sketch plan.	0069		Y	19-20
0069		Layer	Light grey clayey silty sand heavily flecked with dark orange silty sand. Similar to 0068 but orange due to iron concretions. NEXT PART OF CONTEXT SHEET UNCLEAR!!! Although close to 0068 their relationship is not quite clear. Pottery, bone and tile/brick found. Excavated using shovel.		0068		20

OP No	Feature	Identifier	Description	Under	Over	Finds	Spotdate
0070		Building	Building with mortar and tile foundations. Later thought to possibly be low walls/foundations for fences that were marking boundaries. Same as 0087.				
0071	0071	Wall	Length of wall cut by culvert 0072. Yellow mortar construction and including peg tiles. Lying at angle- unclear whether pushed over or subsided. Sample 007 taken.				LMed+
0072	0072	Culvert	Brick culvert running roughly N-S across site.				
0073		Layer	Light orangey brown clayey silty sand.	0068			
0074		Layer	Light pinky brown clayey silty sand. Pottery found.			Y	13
0075		Layer	Mid grey clayey sandy silt. Contained bone. Level taken.	0068		Y	
0076		Pit segment	Western segment out of three: 0076; 0079; 0080. Is located on western edge of site. Contained wood 0099. Not initially bottomed when excavated by hand (using trowel, shovel and fork) as was too deep. Mixed finds from fills 0109-11 of brick/tile, pottery and bone- some pieces appearing to be relatively modern, were all brought back under number 0076. When machine excavated to base what appeared to be the remains of two channels emerged- the most northerly of which appears to have had its southern bank supported by wood 0099. 2 bags of samples taken from fill 0102 at base of segment-sample 001. See context sheet for sketch plan. Interpretation- could be part of large feature 0081 which is supposedly a large pit on western side of site.		0099	Y	18
0077		Layer	Light orangey brown clayey silty sand.	0068			
0078		Section	Section of northeast side of site. Section photo's numbered 0068/0069 (fill No.s). Section lowered after photo's so 0073/74/75 & 0077 not on photos. Level- BS 1.60, FS 1.51.				
0079	0081	Pit segment	Segment to E of 0076. Part of 0082 section. Water table reached at approx. 1m depth!!!??? Which roughly coincides with a change in fills. Contained timber group 0103. Excavated and recorded to 1.34m but then dug beyond that to remove timbers. Unstrat finds recorded under this Number. Interpretation- could be part of large feature 0081 which is supposedly a large pit on western side of site.				16-18
0080	0081	Pit segment	Segment of supposed feature 0081. Approx. 1m deep and 4.24m wide. Contained wooden stakes 0112.				18-19
0081	0081	Pit(?) cut	Possibly a massive post med pit/depression. Only E side located. E edge- wooden stakes are revetments? 3 segments excavated- 0076, 0079 and 0080. Section 0082. Interpretation- large pit overlying water channel or could just be a long running silting up in the general depression over where the two suggested channels may have run and left a depression that would naturally have filled up!?			Y	
0082	0081	Section	W-E setion of possible pit 0081- formed from segments 0076/79/80.				

OP No	Feature	Identifier	Description	Under	Over	Finds	Spotdate
0083	0083	Wall	Remains of E-W running wall located at western edge of excavation. Flint and mortar construction. Very disturbed single course surviving. Lying over a chalk and clay filled trench [0084]/(0085). Recorded in section 0086. 0.4m wide, c. 1.5m long, 0.08m deep. Excavated using trowel and shovel.		0084		
0084	0084	Ditch Cut	Cut of ditch/trench under wall 0083. Linear running approx. E-W. Filled by (0085). Steep sided with flat base. Possible construction trench for wall 0083. 0.6m wide, 0.3m deep. Excavated using trowel and shovel.				
0085	0084	Ditch Fill	Fill of ditch/trench [0084]. Mixed clay and chalk fill with occasional medium flint. 0.6m wide, 0.3m deep. Contained 'Other'.				Y
0086		Section	Section excavated through wall 0083 and ditch/trench 0084. W facing section drawn-runs N-S. 1.5m wide, 0.35m deep.				
0087		Wall component	Component number used for wall remnants within excavated area. A series of digital photo's taken during excavation- no number attached. See plan 1. Includes wall 0083 at western edge of site.				
0088	0080	Layer	Mid brown silty clayey sand. In section appears to be layer over pit 0081 though may be upper fill.				
0089	0080	Possible pit fill	MOLTED?!?!? Orangey/ brown silty sand.				
0090	0080	Possible pit fill	Orangey/rusty brown silty sandy clay.				
0091	0080	Possible pit fill	Dark grey silty, clayey sand.				
0092	0080	Possible pit fill	Black silty sandy clay, with lots of charcoal.				PMed
0093	0080	Possible pit fill	Silty orangey/gritty silty sandy clay.				
0094	0080	Layer	Orangey mottled silty stoney sandy clay.				
0095	0080	Possible pit fill	Mid grey silty sandy clay- hardly any big stones in this.				
0096	0080	Possible pit fill	Mottled orangey/white chalky clay.				
0097	0080	Layer	Orangey rusty mottled brown silty sand clay.				
0098	0080	Layer	Mid grey silty sandy clay.				
0099	0076	Wood structure	Pieces of wood (possible sides of channel?) near base of deeper part of segment 0076. Appears to consist of flat wall-type pieces and what appear to be various supporting struts. See reverse of context sheet for sketch plan. Individual timber numbers= 0121-0129 & 0138-0142. A total of ten pieces of the wood were retrievable after machine excavation of segment 0076, five of which were brought back under this overall component number. Wood appears to have some wattling remains associated with it- see plan. Levels taken on individual pieces of wood. Wood was below water table. All dimensions only represent exposed sizes at time of measurement. Same as 0103 in segment 0079.				Y

OP No	Feature	Identifier	Description	Under	Over	Finds	Spotdate
0100	0079	Fill	See section 0082 in segment 0079. Fill of possible large pit (possible silted up depression?). Mid brown clay/silt loam. Frequent charcoal flecks. Contains mortar and occasional brick/tile rubble, as well as pottery, bone and 'other'. Post medieval.			Y	20
0101	0079	Fill	One of lower fills of water channel in segment 0079. Mixed mid brown gravel/clay loam with flints. Patches of orange gravel, mid brown clay etc. Surrounds 0103 timber. Water level reached around base of this fill.				
0102	0079	Fill	One of lower fills of water channel in segment 0079. Overlies a layer of dark brown clay mixed with bands of charcoally peat. Under this, in E corner of segment, pure orange gravel natural was found. 0102 is only on S side of 0103 timbers. On other side is natural. Suggests inside fill of possible water channel? Two bags of sample taken from this layer but in segment 0076- sample number 001. Excavated finds may be mixed with upper layers. Unclear if this is a pit fill of 0081 or ditch fill of 0143.				PMed
0103	0079	Wood	Several pieces of timber located in base of 0079 segment of feature 0081. Appear to be cut through layer 0102 and set in under postholes, filled with mid grey silt. Subsequently covered/surrounded by 0101. Appear to be set in line, corresponding to wood 0099 in segment 0076. Below water table level. Individually numbered 0114-0120. Interpretation- possible lining/revetment of a drainage channel.				
0104	0107	Drain	Early drain (shown in section 0107). Constructed of brick and tile with some flint for construction (wall?) over top of culvert: partially dismantled and filled in with flint and mortar; it is then used as foundation for later (higher) drain (0105) which appears to be made up of reused material from 0104. This feature is constructed within a partially silted up earlier channel: E/W and also a N/S channel. Sample taken- 002.	0105	0147		
0105	0107 0	Drain	Drain visible in sections 0107, 0108, 0113. Later drain; tile, brick, flint and mortar construction: brick and tile appears to be reused material robbed from earlier drain 0104. Probably built due to silting to W. Bricks approx. 230mm x 55mm x 120mm. Samples 003 and 004.	0106	0104		
0106	0108	Wall	Wall E-W. Flint and mortar. Some construction as 0107, is part of some rebuild of drain. This E-W wall is roughly on the edge of the earlier natural channel which was partially silted up. Wall becomes shallower to the west, suggestive of rising land to W. Sample 005 taken.	0149	0105		
0107		Section	NW-SE section of drains 0104 & 0105.				
0108		Section	Section of back of wall 0106 and drain 0105.				
0109	0076	Segment fill	Upper fill in segment 0076. Mid-dark grey loamy fill. Lots of charcoal lump and fleck inclusion. Moist and quite compacted. Relatively modern or at least mixed fill containing pottery, bone, brick (some fairly modern) and what appears to be a machine cut buckle! Finds mixed with lower fills and put as 0076. 1m deep. Excavated using trowel and shovel.		0110		

OP No	Feature	Identifier	Description	Under	Over	Finds	Spotdate
0110	0076	Segment fill	Fill visible in deeper part of segment 0076. Grey/orangey-brown fill. Quite high compaction. Silty/clay texture with a lot of chalk. Contained tile/brick and bone- mixed under segment number 0076. Depth varies but is approx. 23cm in section. Excavated using trowel and shovel.	0109	0111		
0111	0076	Segment fill	Dark grey/brown/black silty, sandy fill in bottom of excavated extent of 0076. Level of top of fill varies greatly, as does the colour of the fill which seems to change due to organic content. Contained bone and tile/brick as well as some wattling- associated with wooden structure 0099? Depth varies but approx. 45cm in section. Excavated using trowel and shovel.	0110	0102	Y	
0112	0080	Wooden stakes	4(?) stakes in segment 0080. 3(?) removed for sampling. Possibly located within 0095.			Y	
0113		Wall east elevati					
0114		Stake/wood	Individual stake/piece from 0103. See plan. Near vertical stake, tilted to N. Largely within section. Possible revetting natural gravel which rises on N side.				
0115		Stake/wood	Individual stake/piece from 0103. See plan. Adjacent and very similar to 0114.				
0116		Wood/stake	Individual stake/piece from 0103. See plan. Complete branch. 5cm in diameter approximately. Only 50% recovered. Aligned N-S, heading down to N at 30° angle.				
0117		Wood/stake	Individual stake/piece from 0103. See plan. Cut plank, heading down to N at 60°.				
0118		Wood/stake	Individual stake/piece from 0103. See plan. Squared timber heading down to S at 70°.				
0119		Wood/stake	Individual stake/piece from 0103. See plan.				
0120		Stake/wood	Individual stake/piece from 0103. Level- BS. 1.74, FS. 2.52 on tip.				
0121	0076	Wood pieces- 0	Pieces of wood from group 0099. Numbers from 0121-29. H= height and demonstrates exposed length of timbers from ground at time of recording. L= length and is a record of the diameter of the wood from E-W at its tip. W= width and also records diameter but in N-S direction. Level of 0121- BS 1.74, FS 2.14, H=55cm, L=18cm, W=5cm. Excavated by machine and retrieved.				
0122	0076	Wood	Wood from group 0099. H= height and demonstrates exposed length of timbers from ground at time of recording. L= length and is a record of the diameter of the wood from E-W at its tip. W= width and also records diameter but in N-S direction. H= 50cm x L= 13cm x W= 5cm. Level BS- 1.73, FS- 2.24.				
0123	0076	Wood	Wood from group 0099. H= height and demonstrates exposed length of timbers from ground at time of recording. L= length and is a record of the diameter of the wood from E-W at its tip. W= width and also records diameter but in N-S direction. H= 40cm x L= 11cm x W= 8cm. Excavated by machine and brought back under 0123.				
0124	0076	Wood	Wood from group 0099. H= height and demonstrates exposed length of timbers from ground at time of recording. L= length and is a record of the diameter of the wood from E-W at its tip. W= width and also records diameter but in N-S direction. H= 28cm x L= 7cm x W= 9cm. Excavated by machine and brought back under 0124.				

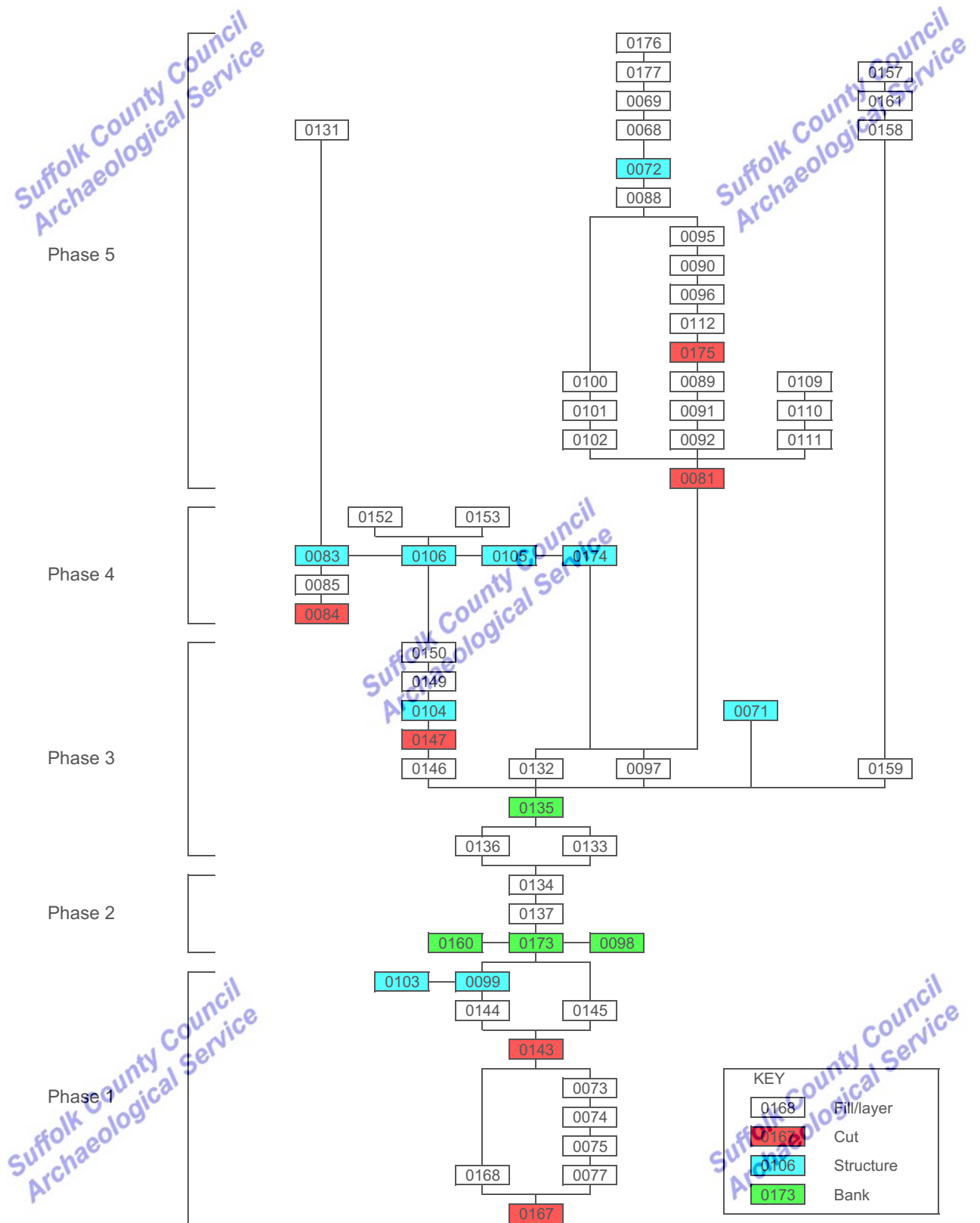
OP No	Feature	Identifier	Description	Under	Over	Finds	Spotdate
0125	0076	Wood	Wood from group 0099. H= height and demonstrates exposed length of timbers from ground at time of recording. L= length and is a record of the diameter of the wood from E-W at its tip. W= width and also records diameter but in N-S direction. H= 23cm x L= 17cm x W= 5cm. Level- BS 1.73, FS 2.31. Excavated by machine and brought back under 0125.				
0126	0076	Wood	Wood from group 0099. H= height and demonstrates exposed length of timbers from ground at time of recording. L= length and is a record of the diameter of the wood from E-W at its tip. W= width and also records diameter but in N-S direction. H= 13cm x L= 5cm x W= 3cm.				
0127	0076	Wood	Wood from group 0099. H= height and demonstrates exposed length of timbers from ground at time of recording. L= length and is a record of the diameter of the wood from E-W at its tip. W= width and also records diameter but in N-S direction. H= 13cm x L= 5cm x W= 3cm. Level- BS 1.73, FS 2.41.				
0128		Not used	Not used				
0129	0076	Wood	Wood from group 0099. H= height and demonstrates exposed length of timbers from ground at time of recording. L= length and is a record of the diameter of the wood from E-W at its tip. W= width and also records diameter but in N-S direction. H= 13cm x L= 13cm x W= 5cm.				
0130	0082	Segment	Segment east of segment 0080- east end of section 0082.				
0131	0086	Layer	Layer visible in section 0086 at western edge of site. Mid brown silty clay with moderate flint. Overlies orange clay/gravel. Cut by ditch/trench [0084]. Contained pottery, bone and 'other'. Excavated using shovel.			Y	18
0132	0130	Fill	Orange/brown molted silty clay. Filled up against it with wall 0071 then pushed on to it- see section 0154. Level taken.	0071 0088	0133		
0133	0130	Fill	Grey brown sandy clay. Level taken.	0132			
0134	0130	Fill	Dark grey silty clay. Level taken.	0133			
0135	0130	Fill	Mottled blue grey clay and orange sand. Possible bank with wall 0071 sitting on top of it. Level taken. Contained bone and shell.	0088	0136		
0136	0130	Fill	Blue/grey clay. Level taken.	0135	0137		
0137	0130	Fill	Dark blue/grey clay with silt. Level taken.	0136			
0138	0076	Wooden strut	Wood from group 0099 in segment 0076. Wooden strut 0138, west of 0121. Only appeared at a very low level of excavation and in too bad a condition to be excavated properly. Therefore not planned/measured properly. Approximate position marked on plan. Intrepretation- appeared to be supporting stake/strut for plank.wall pieces of channel.				

OP No	Feature	Identifier	Description	Under	Over	Finds	Spotdate
0139	0076	Wooden strut	Wood from group 0099 in segment 0076. Wooden strut 0139, west of 0122. Only appeared at a very low level of excavation and in too bad a condition to be excavated properly. Therefore not planned/measured properly. Approximate position marked on plan. Interpretation- appeared to be supporting stake/strut for plank.wall pieces of channel.				
0140	0076	Wood plank.	Wood plank in segment 0076. Part of group/structure 0099. H= height and demonstrates exposed length of timbers from ground at time of recording. L= length and is a record of the diameter of the wood from E-W at its tip. W= width and also records diameter but in N-S direction. H= 3cm x W= 3cm x L= 18cm.				
0141	0076	Wood plank	Wood plank in segment 0076. Part of group/structure 0099. H= height and demonstrates exposed length of timbers from ground at time of recording. L= length and is a record of the diameter of the wood from E-W at its tip. W= width and also records diameter but in N-S direction. H= 25cm x W= 8cm x L= 10cm. Excavated by machine and brought back under 0141.				
0142	0076	Wood plank	Wood plank in segment 0076. Part of group/structure 0099. H= height and demonstrates exposed length of timbers from ground at time of recording. L= length and is a record of the diameter of the wood from E-W at its tip. W= width and also records diameter but in N-S direction. H= 7cm x W= 8cm x L= 3cm.				
0143		Ditch cut	Cut of ditch (water channel). Visible in lower level of section 0086. Width and depth and depth not fully excavated.				
0144	0143	Ditch fill	Fill of [0143]. Dark grey brown silty clay. No finds.				N
0145	0107 0	Layer	Light grey clayey silt. Appears to be silting of E-W channel. Visible in sections 0107 & 0108. Possibly related to wood revetment. This is later silting layer. 4m wide as excavated E-W, 10m long as excavated N-S, depth unknown as only top of layer visible.	0146	0148		
0146	0107 0	Layer	Red brown silty clay. 5% mixed gravel and flint. Overlaying layer area of site. Bank?? Visible in various sections across site- 0107 & 0113. 0.4m wide as excavated, 0.4m long as excavated, 0.3m deep.		0145		13-14
0147	0107 0	Cut	Original cut for drain 0104: cuts through 0146 and not through 0145. Slopes 45° then steps to 90° when drain construction starts. Base flat. Visible in sections 0107 & 0113.	0104			
0148	0108	Layer	Layer visible in section 0108. Gravel. Mid brown red silty sand with 90% mixed gravel and flint. Possibly mirrors shape and direction of early E-W channel with wood. Contains bone. Dimensions unknown.	0145			Y
0149	0107	Fill	Fill visible in section 0107. Mid grey clayey silt. "Tenacious". 2% gravel, 1% large flint. Interpretation- silting up of 0104. No finds. 0.2m wide, 0.4m long, 0.4m deep.		0104		N
0150	0107	Fill	Fill visible in section 0107. Mid light silty clay. 1% mortar, 3% gravel mixed. Silting of 0104.				
0151		Cut	Cut for robbing of 0104 & construct cut for 0105.				

OP No	Feature	Identifier	Description	Under	Over	Finds	Spotdate
0152	0108	Layer	Mid grey slight orange brown staining visible in section 0108. Clayey silt. 0.9m wide as excavated N-S, 1m long as excavated E-W, 0.4m deep.	0105	0145		
0153	0107	Layer	Mid red brown silty clay visible in section 0107. 3% small gravel. Latest silting actions. 1m wide as excavated, 0.4m long as excavated, 0.3m deep. No finds.		0106	N	
0154		Section	Section opposite 0082 section- in segment 0130. Through layers 0132 & 0135 and wall 0071. In this section 0135 appears to be a possible bank on which wall 0071 was sitting- layer 0132 appears to have backfilled against this bank and wall 0071 is pushed down on top of layer 0132.				
0155		Section	Section along western edge of site. Opposite section 0086. Goes through 0109, 0110, 0111, 0131 & [0143] (0144). Includes western segment of 0076.				
0156		Section	Roughly ENE-WSW section that faces NNW. Section is that on northern side of pipe trench and refers to the most easterly length- see reverse of context sheet for plan. Section is made up of mid brown/grey loam and fairly regular flints and is interspersed with banks and lenses of orange/brown sandy gravel. Disturbed by modern. Length 5.9m, depth 72cm.				
0157	0156	Layer	Mid brown silty sand layer in section 0156. Moderate stone inclusion. Occasional chalk lumps. Large grey chalk deposit marked on section. Layer exposed in pipe trench so may be disturbed by trench. Excavated using trowel and shovel. 18cm deep.		0161		
0158	0156	Layer	Mid brown sand layer in section 0156. Occasional stones. Similar to 0157 but seems more compacted. 14cm deep. Slightly disturbed by pipe trench.	0157	0159		
0159	0156	Layer	Layer in section 0156. Mid brown silty sand with varying degrees of Fe staining. Varying gravel inclusion- more towards western end of section. Slightly disturbed by pipe trench and brick culvert. 45cm deep.	0158 0161	0160		
0160	0156	Layer	Dark grey/brown silty sand layer in section 0156. Quite disturbed by pipe trench and culvert. Similar layer shows elsewhere on site but with more Fe staining.	0159			
0161	0156	Layer	Brown silty sand layer in section 0156. Similar to 0157 but with a slight orange discolouration. Very small amounts of Fe staining and moderate flint. Probably slightly disturbed by wall, pipe and culvert.	0157	0159		
0162		Finds	Pottery removed from fill of channel south of 0076 & 0079. Excavated by machine when E-W channels were being excavated.				18
0163		Mortar samples	Samples of mortar 002, 003, 004 and 005.				
0164	0104	Brick	Brick: from earliest drain in section 0107.				13-15
0165		Finds	Brick found in machined out soil from around structure 0099.				19-20
0166		Fill	Mid pale brown silt. Fill of drain 0105. Sample 006.				
0167	0167	Ditch cut	Ditch visible in machine dug section along western site edge adjacent to and cut by ditch 0144.				

OP No	Feature	Identifier	Description	Under	Over	Finds	Spotdate
0168	0167	Ditch fill	Fill 0168. Pale brown silt.				
0169	0167	Wood	Wood plank(?) recovered from fill of ditch [0167] in machine dug section.				
0170		Pit	Possible pit located in base of test pit 0051. Oval in plan measuring 0.55m (N-S), 0.65m (E-W), depth unknown. Half sectioned but not drawn in profile. Planned at 1:50 on section sheet 2. Cut into a yellow silt. Filled by a brown silt. No finds.	0060			N
0171	0135 0	Section	Section drawn through layers 0135 and 0146. Running east-west.				
0172		Section	Section drawn of wall comp. 0087. Running SW-NE.				
0173		Bank Compone	Component number for western bank visible in sections 0082 and 0156.	0097 0159	0143		
0174	0082	Wall	Course of loose flint and mortar visible in section 0082. Part of wall component 0087.				
0175	0082	Ditch cut	Cut of possible trench for post 0112. Filled by 0095. Visible in section 0082. Steep sided narrow cut with curved base. 0.8m deep and 0.1m wide. Identified in section and not visible in plan. Cuts pit 0081. Under layer 0088.	0088			
0176		Layer	Dark grey clayey silty sand.		0177		
0177		Layer	Light grey/brown clayey silty sand.	0176	0069		
0178		Ditch Fill	Light orangey brown silty sand. Fill of ditch 0143 in section 0078.	0068	0143		

APPENDIX 2 - Site Matrix



Appendix 3: Finds quantities by context

OP No	Pottery		CBM		Mortar		Clay pipe		Glass		Iron		Animal bone		Oyster		Miscellaneous	Spotdate
	No	Wt/g	No	Wt/g	No	Wt/g	No	Wt/g	No	Wt/g	No	Wt/g	No	Wt/g	No	Wt/g		
0052	16	0.119	4	0.069	1	0.184	3	0.008			2	0.007	2	0.019	1	0.018		19-20
0053	26	0.127	80	2.468	17	1.372	3	0.010			22	0.141	40	0.208			1 slag (0.047), 1 stone (0.305), 1 Ae (0.002), 5 coal (0.080), SF1001-1004	19-20
0055	8	0.048	6	0.390					1	0.021								19-20
0056	63	0.363	84	2.649	5	0.255	9	0.020	5	0.059	15	0.183	32	0.182	11	0.085	3 stone (1.907), 1 burnt flint (0.027), 3 slag (0.089), 1 Ae (0.008), 1 Pb (0.007), 2 other shell (0.002), 1 coal (0.002), 1 plastic (0.009)	20
0058	16	0.164	6	0.191			1	0.008	1	0.004								19-20
0059	50	0.339	97	2.234	3	0.050	4	0.009	4	0.007	22	0.128	33	0.317	9	0.058	1 coal (0.005), SF 1005	19-20
0060	5	0.016	1	0.011							2	0.005	5	0.021	1	0.007		13?
0061	70	0.507	34	1.148							9	0.061	27	0.330	8	0.049	3 fired clay (0.042), 1 stone (0.183), 3 flint (0.007), 1 burnt flint (0.002), 1 Pb (0.010)	LMed?
0062	47	0.190	28	0.654					1	0.001	10	0.055	52	0.343	29	0.193	2 fired clay (0.078), 1 slag (0.025), 5 other shell (0.010), SF 1006	19-20?
0063	29	0.194	3	0.051	1	0.056					2	0.005	22	0.059	6	0.041	1 lava quern (0.409), 1 other shell (0.001)	14?
0065	5	0.026	1	0.015							2	0.007	3	0.014				13-14
0066													5	0.080				
0068	1	0.006											30	0.541			SF 1007	19-20
0069	1	0.008	4	0.013									1	0.004			2 other shell (0.004), 1 asbestos (0.005)	20
0071			1	0.520														LMed+
0074	1	0.115											1	0.007				13
0075													2	0.006			1 other shell (0.003)	
0076	17	0.207	14	0.581	1	0.112	8	0.032	1	0.001	5	0.095	17	0.654	13	0.110	3 Ae (0.018)	18
0079	2	0.038	3	0.146									5	0.294				16-18
0080	10	0.137	11	0.447			1	0.002	1	0.022	2	0.109	12	0.373	9	0.150		18-19
0092			4	0.736	1	0.267							3	0.033	1	0.008		PMed
0100	7	0.125							2	0.448	1	0.232	6	0.537			2 Ae (0.007), 1 plastic (0.004)	20
0102			4	0.268														PMed
0111													1	0.021				
0131	5	0.235	14	0.619									6	0.123	1	0.006		18

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OP No	Pottery		CBM		Mortar		Clay pipe		Glass		Iron		Animal bone		Oyster		Miscellaneous	Spotdate
	No	Wt/g	No	Wt/g	No	Wt/g	No	Wt/g	No	Wt/g	No	Wt/g	No	Wt/g	No	Wt/g		
0133												1	0.023					
0135												8	0.335	2	0.017			
0146	2	0.010									1	0.016	1	0.017	1	0.014		13-14
0148												3	0.334					
0162	12	0.771																18
0164			1	2.540														13-15
0165			1	2.960														19-20
0168												3	0.449					
Total	393	3.745	401	18.710	29	2.296	29	0.089	16	0.563	95	1.044	321	5.324	92	0.756		

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Context	Fabric	Fab No	Type	Form	Rim	Base	No.	Wt/g	Rim diam	Rim %	Decoration	Glaze int/ext	Ab.	Soot	Wear	Lime/Res	Draw?	Also in	Notes
0058	REFW	8.03	R	PL	F6		1	20											scalloped rim
	REFW	8.03	D				1	2			blue TP								
	ESW	8.20	D				2	9				C	B						
	PORC	8.30	B		EGG C	FR	1	18											
	LSRW	8.51	R				1	23	380	3	SLW int	C	C						
0059	MCW	3.20	U				3	19											
	BSFW	3.31	U				2	7											
	BSFW	3.31	R	JG	A2		1	6	100	8									
	BCSW	3.32	U				2	9											
	BMCW	3.33	U				14	43											
	BMCW	3.33	B			S	1	4											
	GRIM	4.10	D				2	3											
	GRIM	4.10	R	JG	A2		1	8	120	10	SG								
	HFW1	4.23	B				1	16			SG								
	HFW1	4.23	D				3	12			1 with SLLB								
	HFW1	4.23	D				1	5											
	LMT	5.10	H				1	25											circular section
	LMT	5.10	B			S	1	15											
	CTW	5.20	D				1	1					DG	DG					
	GRE	6.12	D				3	26					O/B	O/B					
	TGE	6.30	R	PL?	F6		1	2					W	W					
	GSW4	7.14	D				2	30			tiger ware			C	B				
	LPME	8.01	U	PP			3	10											
	REFW	8.03	D				1	1			floral dec			C	C				flow blue
	REFW	8.03	R	MG?	A1		1	2	80	5	moulded dec below rim			B	B				
REFW	8.03	B			FR	1	8						C/B	C/B				tortoiseshell ware	
YELW	8.13	B				1	5						Y	Y				stamped on base	
LSRW	8.51	D				3	82			SLW int			C	C					
0060	EMWG	3.11	D				1	4			COWL								
	BSFW	3.31	U				2	5											
	BMCW	3.33	U				1	4											
	HFW1	4.23	D				1	3			SLLB			C					
0061	EMW	3.10	U				2	6											
	BSFW	3.31	B			S	3	70											
	BSFW	3.31	U				2	5											
	BCSW	3.32	R	JR	D3		1	15	120	10									
	BCSW	3.32	U				4	26											
	BMCW	3.33	U				36	172											
	BMCW	3.33	B			S	4	62											
	BMCW	3.33	R	JR	E1		1	26	210	11									
	BMCW	3.33	R	JR	F1		1	12	170	15									
	UPG	4.00	D				1	2											
GRIM	4.10	H				1	36						CUG					whiteware with very coarse red grog WS handle	

Context	Fabric	Fab No	Type	Form	Rim	Base	No.	Wt/g	Rim diam	Rim %	Decoration	Glaze int/ext	Ab.	Soot	Wear	Lime/Res	Draw?	Also in	Notes
0076	GRE	6.12	D				2	20				B	B						
	GRE	6.12	B				2	50				B							
	LEPM	6.13	R	JG			1	44	120	18		G	G		+				
0080	BMCW	3.33	U				1	4											
	LMT	5.10	D				2	33				G							
	GRE	6.12	D				1	13				O	O						
	SPEC	6.15	D				1	21				B	B						
	TGE	6.30	R	MG			1	9				W	P						
	METS	6.42	R	DS			1	37	200	10	SLLW SLDW	C			+				burnt at rim
	GSW4	7.14	D				1	15					DB						burnt?
	PORC	8.30	RD	CU?			2	5	90	5	blue floral painted								
0100	GRIM	4.10	D				1	4					G						
	GRE	6.12	B			F	1	71				DB	DB						prob burnt, reduced
	GRE	6.12	D				2	22				O	O						1 vessel
	LPME	8.01	R	PP			1	11											
	REFW	8.03	R				2	17	70	35									
0131	LMT	5.10	B				1	21			SG		G						
	IGBW	6.11	H	MG?			1	17				DB	DB						
	GRE	6.12	B			F	2	99				O/B							
	GRE	6.12	R	BL	C3		1	98	380	10		B							
0146	MCW	3.20	R	JR	F3		1	6	180	5					+				Essex type?
	GRIM	4.10	D				1	4					G						
0162	IGBW	6.11	DB	JG		F	12	771											cf EAA13 Nos 1056, 1060, neck and rim lost
							393	3745			246								

Appendix 6: Animal bone by context

Ctxt	Species	Frag	Count	Butchering	Type	Ages	Comments	Spotdate
0052							not seen	19-20
0053	cattle	2	1	chopped	secondary	adult+juv	adult tibia, DP4	19-20
	sheep/goat	4	3	chopped	secondary	adult	humerus, scapula, femur, pelvis	19-20
	pig	1	1		secondary	juv	tibia	19-20
	mammal	33		butchered				19-20
0056	cattle	1	1	chopped	primary	adult	metacarpal	20
	equid	1				adult	molar, well worn	20
	sheep/goat	4	1	cut	primary	adult	jaw, teeth	20
	pig	1	0.5			juv	proximal phalange	20
	mammal	25						20
0059	cattle	2	1.5	chopped	secondary	juv+adult		19-20
	sheep/goat	2	1	cut/chopped	secondary	adult	metatarsal, cut pelvis	19-20
	pig	3	2	chopped	secondary	adult	radii, tusk	19-20
	canid	2	1	cut	primary	adult	small humerus with cut, fox/small dog	19-20
	rabbit	1	1			subadult	humerus, fusion line visible, small rabbit	19-20
	goose	1	1	chopped	primary	adult	radius	19-20
	mammal	22						19-20
0060	mammal	5						13?
0061	cattle	4	3	cut/chopped	secondary	adult	radius, femur (part of head chopped), MC+	LMed?
	pig	1	0.5		primary	juv	metapodial	LMed?
	galliformes	1	1		secondary	adult	femur	LMed?
	mammal	21						LMed?
0062	cattle	8	2.5	cut/chopped	primary	adult	chopped horn, metapodials, phalange+	19-20?
	sheep/goat	2	2	chopped	secondary	adult	humerus, metacarpal	19-20?
	canid	1				adult	metapodial; gnawing on other bone	19-20?
	galliformes	2	2		primary	adult	humerus, tibiotarsus	19-20?
	pig	1	0.5			juv	phalange	19-20?
	mammal	38						19-20?
0063	cattle	1	1	chopped	secondary	adult	pelvis	14?
	sheep/goat	2	1	chopped	secondary	adult	tibia	14?
	rat	1	1			juv	femur	14?
	mammal	18						14?
0065	mammal	3						13-14
0066	equid	1	1	cut	primary	adult	talus with small area of cuts	
	mammal	4						
0068	cattle	1	1	chopped	secondary	adult	humerus	19-20
	equid	1	1	scrapped/cut	primary	adult	tibia, small to medium sized horse	19-20
	mammal	28						19-20
0069	mammal	1						20
0074	sheep/goat	1	1	chopped	secondary	adult	radius	13
0075	mammal	2						
0076	cattle	3	3	chopped	secondary	adult	femurs and radius	18
	sheep/goat	6	4	cut/chopped	range	adult	small metapodials, humerus, scapula	18
0079	cattle	2	1	cut/chopped	secondary	adult	pelvis and scapula	16-18
	mammal	3						16-18

Ctxt	Species	Frag	Count	Butchering	Type	Ages	Comments	Spotdate
0080	cattle	2	2	chopped	secondary	adult	tibia, humerus	18-19
	sheep/goat	1	1	chopped	secondary	adult	tibia	18-19
	pig	2	2	chopped	secondary	juv	humerus, tibia	18-19
	canid	1				adult	large metapodial	18-19
	mammal	6						18-19
0092	mammal	3					PMed	
0100	cattle	2	2	chopped	secondary	adult	humerus and pelvis	20
	sheep/goat	1	1	chopped	secondary	adult	tibia	20
	canid	2	2	cut/chopped	primary	adult	humerus, tibia, both cut/chopped	20
	mammal	3						20
0111	mammal	1						
0131	cattle	1	1	chopped	secondary	adult	scapula	18
	mammal	5						18
0133	sheep/goat	1	1	chopped	primary	adult	metatarsal, chopped into condyle	
0135	cattle	1	1	cut	primary	adult	metacarpal, small adult cow	
	mammal	7						
0146	mammal	1						13-14
0148	equid	1	1	cut	primary	adult	metatarsal with scrapes and cuts	
	mammal		2					
0168	cattle	1	1			adult	humerus	
	mammal	2						

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Appendix 7: Plant macrofossils and other remains

Sample No. Context No.	001 0102	006 0166	008 0075	009 0075
Dry land herbs				
<i>Aethusa cynapium</i> L.				x
Apiaceae indet.	x			x
<i>Barbarea</i> sp.				x
Brassicaceae indet.				xx
Chenopodiaceae indet.				x
<i>Cirsium</i> sp.			x	x
<i>Conium maculatum</i> L.	xcf			
<i>Epilobium</i> sp.	xx			x
<i>Galeopsis</i> sp.	x			
<i>Lamium</i> sp.			x	
<i>Lapsana communis</i> L.				x
<i>Linum usitatissimum</i> L.				x
<i>Persicaria maculosa/lapathifolia</i>				x
Small Poaceae indet.	x			
<i>Polygonum aviculare</i> L.	x			
Polygonaceae indet.	x			
<i>Ranunculus acris/repens/bulbosus</i>	x			x
<i>Reseda</i> sp.	xcf			
<i>Rumex</i> sp.	xx		x	x
<i>R. acetosella</i> L.	xcf			
<i>Silene</i> sp.				x
<i>Solanum nigrum</i> L.	x			
<i>Sonchus asper</i> (L.)Hill	xx			x
<i>S. oleraceus</i> L.	x		x	x
<i>Stellaria</i> sp.				x
<i>S. media</i> (L.)Vill	x		x	x
<i>Taraxacum</i> sp.				x
<i>Urtica dioica</i> L.	xx		x	x
<i>U. urens</i> L.				x
<i>Verbena</i> sp.	x			
Wetland/aquatic plants				
<i>Alisma plantago-aquatica</i> L.			x	x
<i>Apium graveolens</i> L.	x		x	xx
<i>Carex</i> sp.	x		x	x
<i>Ceratophyllum</i> sp.				xcf
<i>Eleocharis</i> sp.	xcf			
<i>Lemna</i> sp.			x	x
<i>Lycopus europaeus</i> L.	xx		x	x
<i>Menyanthes trifoliata</i> L.			xcf	x
<i>Ranunculus sceleratus</i> L.	x			x
<i>Rorippa nasturtium-aquaticum</i> (L.)Hayek			xcf	xcf
<i>R. palustris</i> (L.)Besser			xcf	
<i>Scrophularia</i> sp.	x			
<i>S. nodosa</i> L.	x			
Tree/shrub macrofossils				
<i>Rubus</i> sp.	x			
<i>R. sect Glandulosus</i> Wimmer & Grab	x			
<i>Salix</i> sp. (fruit frags.)			x	x
<i>Sambucus nigra</i> L.	x			x
Other plant macrofossils				
Charcoal <2mm	xx	xx	x	
Waterlogged root/rhizome/stem	xxx	x	xxx	xxx
<i>Phragmites</i> type stem			x	
Indet.buds/bud scales	x		x	xx

Sample No.	001	006	008	009
Context No.	0102	0166	0075	0075
Indet.inflorescence frags.	x			
Indet.leaf frags.			x	xx
Indet.moss	x		x	x
Indet.seeds	x		x	x
Indet.thorns (Prunus type)	x			
(Rosa type)	x			
Indet.twig frags.	x		x	x
Wood frags.>5mm			x	x
Molluscs: Terrestrial species				
<i>Aegopinella</i> sp.		x		
<i>Carychium</i> sp.	x	x		
<i>Cepaea</i> sp.	xcf	xcf		
<i>Clausilia bidentata</i>		x		
<i>Cochlicopa</i> sp.	x	x		
<i>Discus rotundatus</i>	x	xx		
<i>Helicella</i> sp.	x			
Helicidae indet.	x			
<i>Pupilla muscorum</i>		x		
<i>Trichia hispida</i> group	x	x		
<i>T. striolata</i>	xcf	xcf		
<i>Vallonia</i> sp.	x	xx	x	
<i>V. costata</i>	x	x		
<i>V. pulchella</i>		x		
Molluscs: Freshwater species				
<i>Anisus leucostoma</i>			x	x
<i>Armiger crista</i>	x	x	xx	xx
<i>Bithynia</i> sp.	x			
<i>Gyraulus albus</i>			xcf	x
<i>Lymnaea</i> sp.	xcf	x		x
<i>L. peregra</i>		x	x	x
<i>Planorbis</i> sp.				xx
<i>P. planorbis</i>	xx	xx	x	x
<i>Valvata cristata</i>		x		
Other materials				
Black porous 'cokey' material		x		
Black tarry material		x		
Caddis larval cases	x			x
Cleodoceran ephippia	xx			x
Copper alloy concretions	x			
Ostracods				x
Small coal frags.		xx		
Small mammal/amphibian bones		x		
Waterlogged arthropods	xx		xx	xx
Sample volume (litres)	8	6	8ss	8ss
Volume of flot (litres)	0.2	<0.1	0.3	0.2
% flot sorted	25%	100%	25%	25%