Waterlogged Late Medieval Pits and Post-Medieval Surfaces at Unit 8a, Queensgate Centre, Peterborough

S. Cooper and P. Spoerry

2001

Cambridgeshire County Council
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Waterlogged Late Medieval Pits and Post-Medieval Surfaces at
Unit 8a, Queensgate Centre, Peterborough

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2001

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SUMMARY

Between the 29th January and 5th February 2001 the Archaeological Field Unit of Cambridgeshire County Council carried out an archaeological evaluation on land opposite The Still public house and adjacent to Westgate Arcade Peterborough (TL54882658) before the proposed construction of a single shop unit. The work was commissioned by Lambert Scott & Innes, Architects on behalf of Norwich Union. The site currently exists as a small area (6m x 16m) covered by brick sets and open to the sky adjacent to the covered shopping areas of the Queensgate Centre and Westgate Arcade. The evaluation was undertaken in accordance with the Cambridgeshire County Council Archaeological Field Unit Specification drawn up by Paul Spoerry in response to a design brief issued by Ben Robinson of the Peterborough City Council Archaeological Service.

The evaluation revealed stratigraphy of up 1.6 m with at least three broad periods (Late Medieval, Post-Medieval and Modern). The earliest period revealed a group of pits which dated from the 15th century and produced a large assemblage of well-preserved leather. This leatherwork consisted of pieces of shoes including worked soles and uppers. These pits were sealed by a series of cobbled surfaces that can be interpreted as either yards within a property or more probably surfaces of the historic street known as Cumbergate. A number of modern service runs were also observed in both trenches.
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1 INTRODUCTION

Between the 29th January and 5th February 2001 the Archaeological Field Unit of Cambridgeshire County carried out an archaeological evaluation on land opposite The Still public house and adjacent to Westgate Arcade, Peterborough (TL54882658) before the proposed construction of a single shop unit. The work was commissioned by Lambert Scott & Innes, Architects on behalf of Norwich Union. The site currently exists as a small area (6m x 16m) covered by brick sets and open to the sky, and adjacent to the covered shopping areas of Queensgate Centre and Westgate Arcade. The evaluation was undertaken in accordance with the Cambridgeshire County Council Archaeological Field Unit Specification drawn up by Paul Spoerry in response to a design brief issued by Ben Robinson of the Peterborough City Council Archaeological Service.

The site lies within the historic core of Peterborough between the medieval market place to the south and Westgate to the north. From the outset it was hoped that this project may provide us with answers concerning the origins and development of the historic street known as Cumbergate.

2 TOPOGRAPHY AND GEOLOGY

Although it is not certain that layers seen at the base of the sequence were in fact natural, it is known that the geology of the site is likely to be weathered Cornbrash limestone rubble above more solid Cornbrash, possibly with some Kellaway clay deposits lying over the Cornbrash. The Cornbrash limestone was part of the Great Oolite group laid down the Jurassic period. The Cornbrash when weathered takes the form of a pale brown limestone rubble. The top of the Cornbrash is marked by a persistent argillaceous horizon. Clay deposits were revealed in trench 1.

The site is located 2km to the north-east of the River Nene and 0.5 km to the north west of the Cathedral and on the western periphery of the historic core of Peterborough.
ARCHAEOLOGICAL AND HISTORICAL BACKGROUND

3.1 General Background

Origins of Peterborough

Little early Saxon remains are known from within the town but in the middle Saxon period a monastery was established on the site where the cathedral lies today.

The date of this foundation is not certain, the only document to mention it being Bede's History of the English Church which suggests a foundation date of around 653-6AD (19 94). This may well have been located close to a Mercian Royal centre and is highly likely that this monastery became an important centre in both religious and secular life. The early church and some of its associated buildings were enclosed in the late Saxon period by the construction of a set of defences.

The exact location of any settlement associated with the late Saxon monastery and burgh has been the subject of debate. The street layout to the east of the monastic precinct around Boongate has been suggested as the position of an early medieval market place due to its trumpet shape in plan. The area to the west of the monastic precinct, defined to the north by Westgate and to the south by Priestgate, has been suggested as an area of planned settlement. This was in addition to the early church, market place and vill at Boongate. Two possible dates for the creation of this planned settlement have been suggested namely 1070 and 1145AD.

The burgh was abandoned in the 12th century, when a new monastic church, the present cathedral and its precincts were built. The focus of the contemporary town appears to have shifted from the area of the former vill to an open area to the west of the main gate into the precincts. At this time a number of streets were probably laid out including Cowgate, Westgate and possibly Cumbergate.

Cartographic Evidence Speed's map 1613, Eyre’s map 1721, Hill’s maps 1808 and Enclosure map of 1821.

The site lies within the historic core or Peterborough between the medieval market place to the south and Westgate to the north. It is within the post-conquest new town expansion and the site preserves part of the corner of Cumbergate at the point where it dog-legged to join Long Causeway. The site spans the position of Cumbergate on the 20th century OS maps and the street does not appear to have moved significantly since Speed's plan of 1613.
Figure 2a The site (in red) and surrounding area as shown on Speed's Map, 1613

Figure 2b The site (in red) and surrounding area as shown on Eyre's Map, 1721
Figure 3a  The site (in red) and surrounding area as shown on Hill's Map, 1808

Figure 3b  The site (in red) and surrounding area as shown on 1885 25 inch O.S. map
Nonetheless the pre 1613 street line is not known and it is very possible that it shifted or expanded and narrowed during successive building programmes during the medieval period. The site is equally likely to have lain within property frontages on the eastern side of Cumbergate as it is to have been wholly within the street line itself.

Speed’s map of 1613 shows Cumbergate lined with houses on the northern western and eastern sides although there are problems in using this map due to its pictorial nature.

Eyre’s map 1721 shows a similar density of buildings as depicted on Speed’s map, along the various frontages of Cumbergate. The most notable observation from Eyre’s map is that there are a number of open spaces along the Cumbergate frontage which may indicate that this part of the town was characterised by activities that required such space. Whether the spaces enabled or allowed activities, or the activities dictated that spaces were left is not known. On a more specific level in the western corner of Cumbergate on the dogleg there is an open space. The overall impression of Cumbergate from Eyre’s map is that it is not densely occupied and that the buildings on the Cumbergate frontage may represent post-medieval infill. On further consideration there is evidence which suggest that Cumbergate was part of an earlier medieval market place that experienced post-medieval infill including the shape of the Cumbergate block and the shorter length properties within it.

Hill’s map 1808 shows a greater level of building density of the Cumbergate area than depicted on Eyre’s map, but there are still open spaces which is a little unexpected considering its position within the historic core. By the time of 1820 Enclosure most of the Cumbergate frontage space was occupied with buildings.

**Documentary Survey**

An initial brief survey of the documentary evidence shows that there are not a great deal of specific references to Cumbergate. Cumbergate as a street name has been identified as ‘the street of the wool combers (Meadows 1994) but examination of the documentary sources has not produced evidence of a concentration of this craft within this area. A reference from 1548 to a dunghill that had to be removed from the Cumbergate (Mellows 1947) illustrates that this part of the town possessed spaces that were used for the disposal of refuse. Meadows (op. cit.) points out that this reference, coupled with several others in the 16th century which refer to cottages gardens and barns on Cumbergate, give the impression that this street was not very urban in character. Furthermore there is a lack of references within the historical record for commercial properties in Cumbergate during the same period. There is a reference in the Court Roll for 1599 to a plot of land on the western side of Cumbergate that mentions an orchard of a quarter of an acre (Mellows and Gifford 1956).
3.2 Previous Archaeological Excavations

Excavations five metres to the west of the subject site at the Still (Spoerry and Hinman 1998) confirmed the presence of quarrying and an oven or drier in the period before 1150. Other activities and structural evidence were identified from the 13th century onwards. These included ovens and driers and stone lined drains or cisterns. Traces of buildings from this period were recorded and the fabric of the current Still Public House is probably post-medieval in origins.

The most relevant area of the excavation is Area 4, which was located on the Cumbergate frontage. Here there was evidence for dense occupation including stone-built structures and refuse deposits which were truncated and damaged by recent intrusion. The earliest feature within Area 4 of the Still was a large quarry pit that was dated from 1000-1150AD. This quarry pit contained a great quantity of charred remains which may represent surviving materials that were derived from hearth cleaning. It is possible that the quarry pit may pre-date the foundation of the medieval town. In addition Area 4 had a high incidence of residual late Saxon pottery.

Between 1200 and 1350AD a sequence of activity started in Area 4 that included a possible oven and a stone-lined feature which may be a cistern or a drain. In addition structural remains in the form of a stone wall foundation, sill beam slots and earthen floors were revealed. The possible oven was constructed of Cornbrash fragments set in clay. There is some doubt over the exact function of this feature it may be the base of a container or vat. The cistern or drainage channel probably relates to some kind industrial process and acted as a channel for sewerage or industrial waste. The eastern end of the drain type feature was truncated by a cess pit. These features represent some kind of industrial activity on the Cumbergate frontage. A north-south footing using roughly hewn cornbrash was also recorded. This wall was heavily truncated and represents the replacement of the industrial activity.

In Phase 4 (1350-1450 AD) the Cumbergate frontage was characterised by the fragmentary remains of several temporary structures. There was also some evidence for the replacement of a possible domestic dwelling here.

In Phase 5 (1450 to Post-Medieval) a stone-lined drain was uncovered which ran on an east-west alignment. It was constructed using roughly hewn limestone slabs four courses high and capped by large limestone slabs. It is highly likely that this drain was associated with a major phase in the construction of the Still, perhaps in the 17th century.

3.3 Other excavations and archaeological observations in the historic core.

To the south of the subject site at Exchange St (TL 19149868 ) excavations revealed a building which seems to have been an industrial workshop for much
of its life in the 17th and 18th centuries. Bronze droplets and fragments of moulds for cauldrons or similar vessels were revealed.

A watching brief in 1988 at 37-38 Long Causeway to the east of the site produced evidence for the existence of a Late Saxon cultivation soil sealed beneath upcast believed to relate to the creation of the medieval monastic precincts (Meadows 1994).

Observations and machine dug trenches carried out during the large scale stripping necessary to construct the Queensgate Shopping centre identified no deep stratigraphy and only very few pits. This represents the areas immediately west and south of the Still and thus land believed to be mostly beyond the edge of the medieval town. One trench was excavated approximately 12m to the south of 15 Cumbergate revealing recent remains a 15th century pit and no earlier features whilst medieval and later pottery but no features were recovered from a trench a little to the north (Meadows 1994).

4 METHODOLOGY

Following background and documentary study two trenches in total 7m long was excavated using a mini digger with a toothless bucket. A total of 10% of development area was evaluated. The location of trenches is shown in Figure 1. It should be noted that the presence of service trenches in trench 1 and trench 2 was a significant constraint on the archaeology. After machining the trenches were photographed and recorded using the AFU standard archaeological recording system. The spoil heap was scanned for artefact retrieval. Trench 1 was stepped to follow safety procedures.

5 RESULTS (See Figures 4 and 5)

General

The evaluation revealed medieval pits 12 and 13 in Trench 1, which were rich in leather artefacts. Post-medieval pebble surfaces might represent an early line of Cumbergate or possibly yard surfaces relating to structures on the Cumbergate frontage. Trench 2 revealed a series of modern services trenches and a possible medieval surface.
Figure 4 Sections
5.1 **Trench 1** (Figure 4 upper and Figure 5)

Trench 1 was 4m long and 1.6m deep and was located in the northern part of the development site.

**West-Facing Section**

Two intercutting rubbish pits 12 and 13 were identified in the north west corner of Trench 1.

Pit 12 was 1.0 m wide and 0.7 0m deep and contained three fills 3,10 and 11.

The lowest fill 11 was a light greyish clay with a moderate amount of stone, 0.10m deep. This fill represents a clay lining to pit 12. Finds from this context included animal bone and tile.

Fill 10, a dark grey silty clay was 0.50m deep and was waterlogged and produced worked leather (including soles and off cuts of shoes) animal bone and Bourne D pottery dating from 1450-1650AD.

The upper fill 3 was a dark grey silty clay 0.5m deep. Finds from this context included animal bone and Ely Ware pottery dating from 1200-1400AD

Pit 12 was truncated by Pit 13.

Pit 13 was 0.60m wide and 0.60m deep and contained a single fill 6 a dark brown silty clay. This fill contained a large amount of leather artefacts and pottery dating from 1450-1650AD.

In the southern area of the site a cobbled surface 23 and a possible pit 22 were identified.

Cobbled surface 23 was 0.10m deep and consisted of compacted sub rounded pebbles. Cut by Pit 22.

Pit 22 was 0.41m deep and 0.75m wide. It had one fill 21, a dark grey silty clay with a moderate amount of stone.

Above the pits in Trench 1 were a sequence of stony layers.

**Northern Part**

Layer 37 was composed of a reddish brown compacted gravel and was 0.12m deep. This layer may represent a surface or possibly a make up layer. No artefacts were recovered from this context. Below layer 34.
Figure 5 Trench plan
Layer 34 was 0.09m deep and consisted of compacted rounded stones, which formed a pebble floor and contained no artefacts. Below layer 9.

Layer 9, was a reddish brown gravel, 0.20m deep and contained no artefacts. Below layer 8.

Layer 8 consisted of pebble and cornbrash floor and was 0.12m deep. Below layer 7.

Layer 7 was 0.15m deep and consisted of a pebble surface with compacted sub rounded stones. Below layer 5.

Layer 5 was a cornbrash stone surface and was 0.08m deep. Below layer 4.

Southern part

Layer 20 was composed of compacted sub-rounded stones and gravel and was 0.12m deep. Below Pit 22.

Layer 19 was a pebble floor 0.12m deep and contained no artefacts. Below layer 18.

Layer 18 was 0.10m deep and was a possible floor surface which consisted of compacted sub rounded pebbles. Below layer 17.

Layer 17 was a pebble floor which was 0.08m deep. Truncated by Cut 15.

Layers (5, 7, 8, 9, 34 and 37) observed in the northern part of the section might represent in part the same sequence as represented by layers 17, 18, 19 and 20 in the southern part of the section.

Cut 15 was 0.90m wide and 0.60m deep. It contained two fills 14 and 16. Upper Fill 14 was a brown clay with pebbles 0.40m deep. Lower fill 16 was a brown silty clay and was 0.20m deep.

Later sequence

Layer 4 was a concrete floor which was 0.10m deep. Below layer 2.

Layer 2 was a sandy mortar which was 0.15m deep. Below layer 1.

Layer 1 was a modern brick floor 0.10m deep
East-Facing Section

The east facing section revealed a similar type of stratigraphic sequence to the one observed in the west facing section. One or two possible medieval pits 29 and 31 were revealed in the southern part of the trench.

Pit 29 was not excavated by hand but was machined to a depth of 0.30m deep. It contained a fill 28, which was a dark brown silty clay.

A possible pit 31 was identified in the southern eastern corner of the site. The fill 30 was dark brown silty clay and was machined to a depth of 0.30m.

Layer 33 was a silty clay 0.10m deep that may represent a surface. Below layer 32.

Layer 32 was a surface 0.08m deep and composed sub-rounded pebbles. Layer 32 may represent a make up layer for a floor or a repair of a floor. Below layer 27.

Layer 27 was a cobbled surface which was 0.26m deep. Truncated by Pit 24.

Pit 24 was a modern cut which was 0.70m deep and 0.80m wide. It had a single fill 47 which was a dark grey silty clay which produced no artefacts. Below layer 4.

Layer 4 was a concrete floor which was 0.10m deep and below Layer 2, which represents make up material for a modern floor.

A large modern cut 26 (0.70m deep) for a storm drain was observed in the northern part of the trench that ran on a northwest–southeast alignment.

South-Facing Section

The stratigraphic sequence of the south facing section showed intercutting modern service trenches and a possible medieval pit.

A possible medieval pit 39 was revealed in the north eastern corner of Trench 1. It survived to 0.50m wide and 0.70m deep and contained a dark grey silty clay 38.

Service trench 36, 0.8m deep, ran on a north-south alignment across the centre of the trench. This trench 36 was truncated by service trench 26.

Cut 26, 0.70m deep ran on a NE-SW and was for sewerage or an overflow pipe.
5.2 Trench 2 (Figure 4 lower)

Trench 2 was located in the northern part of the development area. This trench measured 2.5m x 2.5 and was 1.20m deep. Most of the deposits encountered within this trench represent deposits associated with modern services and post-medieval disturbance. One possible medieval surface layer 46 was exposed at the base of the section. Layer 46 was a layer of compacted stones 0.15m deep and was observed in all sections of Trench 2. Other common layers were 1 and 2 which have been described in Trench 1.

South-Facing Section

This section revealed a medieval layer and modern deposits. Layer 46 again represents the earliest deposit observed within the section and maybe a yard or road surface.

Cut 49 1.0m deep, contained a single fill 48 which was a dark grey silty clay with modern brick and plastic. Cut 49 represents a modern service trench.

Layer 50 represents modern material related to a service trench, it was a dark grey brown silty clay which was 1.0m deep.

West-Facing Section

This section revealed a possible medieval road surface and deposits that represent modern service trenches. The earliest deposit within the section was layer 46 (description as previously discussed). Finds from this layer included pottery dating from 1350-1450AD and animal bone.

Layer 45 was 0.70m deep and consisted of a dark silty clay with modern brick. Below Layer 44.

Layer 44 was up to 0.2m deep and contained large fragments of concrete floor. Below Layer 43.

Layer 43 was modern gravel foundation which was 0.20m deep.

Context 42 was a wall of a modern building which was 0.40m wide and 0.20m deep.

Cut 41 was 0.90m deep and contained a single fill 40 which was composed of modern rubble. Below layer 2.

North-Facing Section

The earliest deposit within the sequence was again layer 46 which probably represents a medieval road or yard surface.
Layers 45-43 are described above.

Cut 49 was 0.91m deep and had a single fill 48 which contained modern plastic and rubble.

**East-Facing Section**

The earliest deposit within the sequence was again layer 46 (previously described) which probably represents a medieval road or yard surface.

Cut 52 was 0.60m deep and contained a single fill 50 which was composed of a silty clay and modern rubble.

Layer 48 has been described above.

### 5.3 Summary of Remains by Period

**Late Medieval**

Pits 12, 13, 22 and 39 Layer 23 - Trench 1.

Layer 46 - Trench 2

A number of rubbish pits in Trench 1 can be dated to the late medieval period. Two of these pits (12 and 13) are inter cutting implying that there may be a number of phases of pitting within this period. Around 30 fragments of worked leather representing remains of discarded shoes were recovered from pits 12 and 13. In addition a substantial waterlogged plant macrofossil assemblage and a group of Bourne D sherds were identified. Pit 21, which was observed in the west facing section of Trench 1, had a similar fill to Pit 13, as did Pit 29 which was not excavated. Layer 23 may represent a cobbled surface possibly contemporary with layer 46 in Trench 2 which produced pottery dating from 1350-1550 AD. Layer 46 may represent a road or yard surface.

**Post Medieval**

Layers 5, 7, 8, 9, 34, 37, 17, 18, 19, 20, 27, 32, 33 - Trench 1

No artefacts were recovered from these layers but the stratigraphic positions and relationships of these features would indicate that these layers are within this period. The earliest layer within the sequence (37) may represent make-up. Above this layer is a series of road or yard surfaces. It is difficult to ascertain whether these layers represent different phases of Cumbergate, but that would seem very likely.

**Modern**

Layers 1, 2, 4, cuts 15, 24, 26, 36
Layers 43, 44, 45, wall 42 and cuts 41, 49, 52, 54

Brick floor 1 and make up layer 3 were observed in both trenches. A number of modern service trenches were also identified in both trenches. Cuts 15 and 24 may represent modern trial trenches. Other cuts identified represent modern disturbance in the form of service trenches.

6 DISCUSSION

The evaluation has revealed at least three periods (late medieval, post-medieval and modern) of development within the two trenches. An assemblage of worked leather recovered from the inter-cutting 15th century pits in the north eastern corner of Trench 1 represents the most significant aspect of the project. This constitutes the largest assemblage of well-preserved medieval leather remains recovered from an excavation in the centre of Peterborough and probably from the Fenland towns as a whole. The leather assemblage includes sole and upper fragments of shoes that display evidence of re-use and repair. From this evidence it would appear that there was a cobbler shop in the vicinity of the site. Pottery recovered from the contexts containing the leather suggests a 15th century date. The leather remains consist of pieces that have been repaired; there are no off-cuts present to suggest the primary manufacture of shoes.

The same pits that produced the leather have provided a good assemblage of faunal remains that is urban in character and that suggests general deposition of mostly food and butchery waste material from a variety of sources. In addition these pits have produced a large assemblage of waterlogged plant remains that appear to represent straw, rye grains and weed seeds from a mainly arable environment plus charred seeds that indicate further cooking, drying or malting of processed grain. Rare items include cultivated brassicae and a fig seed.

Other probable medieval pits were encountered in Trench 1 that remain unexcavated.

At the base of the sequences in both Trenches 1 and 2 cobbled surfaces were exposed that imply earlier activity on the site. These may represent yards or road surfaces.

Above the pits were a series of cobble layers that are probably a post-medieval sequence of successive surfacings of Cumbergate.

The location of the site is interesting when considering the development of medieval Peterborough and in particular the origins of Cumbergate. Excavations at the Still undertaken in 1995 suggested that Cumbergate has 12th or 13th century origins, however the limited documentary and cartographic evidence detailed at the start of this report instead suggest that Cumbergate may be post-medieval in origin. The current evaluation would support the view that Cumbergate is at least 15th century in date if the later sequence of
layers are taken to represent the road itself. Prior to that the site, which lies in
the middle of where the post-medieval road should have been, was used for
refuse disposal and before that perhaps craft/industrial processing. The earliest
layers recorded are further stony surfaces that that might imply the road started
earlier, but are more likely to represent yard surfaces, pre-dating that. Further
work in this area will hopefully determine the origins of the Cumbergate.

The results from the Excavations of the Still 1995 can provide us with a bench
mark in answering questions about the subject site. The evidence of the 1995
excavation suggests that this area was devoted to craft specialisation in the
later medieval period. This would fit with the substantial amount leatherwork
recovered from pits 12 and 13 in Trench 1.

7 CONCLUSIONS

The evaluation has demonstrated the survival of late medieval pits that have
produced an assemblage of well-preserved leather remains. This shows that,
despite large scale disturbance caused by the construction of the Queensgate
Centre, islands of significant stratified archaeology survive within the
Cumbergate area.

Over 1.6m of stratigraphy was observed in Trench 1 revealing a basic
sequence of post-medieval surfaces sealing late medieval pits over another
surface.

Significant issues which need to be addressed in any further work
undertaken are as follows:-

1.-To determine the origins of Cumbergate and whether it represents post-
medieval infill or is associated with 12th century development.

2. To determine whether the Cumbergate area was an area devoted to craft
specialisation in the late medieval or medieval period.

3. An extensive environmental sampling programme will be necessary to
answer question regarding diet and economy of properties around the site
using in particular a rare waterlogged assemblage of plant remains.

4. The rest of what appears to be a major assemblage of late medieval leather
shoes need careful retrieval, conservation and investigation to develop but site
–specific activity chronologies, but also to provide the first part of a regional
typology of this material.
ACKNOWLEDGEMENTS

The authors would like to thank James Macdonald at Lambert, Scot and Innes for commissioning this work on behalf of Norwich Union, Chris Montague for his work on site, and the Specialists for their contributions. Thanks are also due to Caroline Malim for the illustrations and Ben Robinson from PCCAS for monitoring the work, assistance and valuable comment.

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Maps

Speeds' Map of Peterborough 1613 (copy held by Huntingdon Records Office)
Eyre's Map of Peterborough 1721 (copy held by Huntingdon Records Office)
Hill's map of 1801 (copy held by Huntingdon Records Office)
Inclosure Map of 1821 (copy held by Huntingdon Records Office)
## Appendix A

### Context list

<table>
<thead>
<tr>
<th>Context no</th>
<th>Description</th>
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<tbody>
<tr>
<td>01</td>
<td>Brick floor 0.10cm deep</td>
</tr>
<tr>
<td>02</td>
<td>Sandy mortar 0.15m deep</td>
</tr>
<tr>
<td>03</td>
<td>Fill of Cut 12 dark grey silty clay 0.12m deep</td>
</tr>
<tr>
<td>04</td>
<td>Concrete 0.10m deep</td>
</tr>
<tr>
<td>05</td>
<td>Cornbrash surface 0.08 m deep</td>
</tr>
<tr>
<td>06</td>
<td>Dark brown silty clay 0.60m deep</td>
</tr>
<tr>
<td>07</td>
<td>Pebble floor 0.15m deep</td>
</tr>
<tr>
<td>08</td>
<td>Pebble floor .0.12 m</td>
</tr>
<tr>
<td>09</td>
<td>Gravel foundation 0.20m</td>
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<td>10</td>
<td>Fill of Cut 12 dark grey silty clay 0.50m</td>
</tr>
<tr>
<td>11</td>
<td>Light grey sandy silt 0.10m</td>
</tr>
<tr>
<td>12</td>
<td>Cut for 3,10 and 11, 0.70m deep 1m wide</td>
</tr>
<tr>
<td>13</td>
<td>Cut for fill 6, 0.60m deep and 0.60m wide</td>
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<tr>
<td>14</td>
<td>Fill of modern pit 0.10m wide and 0.40m deep</td>
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<td>Cut of modern pit 0.60m deep</td>
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<td>16</td>
<td>Fill of modern pit 15 0.20m deep</td>
</tr>
<tr>
<td>17</td>
<td>Pebble floor 0.08m deep</td>
</tr>
<tr>
<td>18</td>
<td>Pebble floor 0.10m</td>
</tr>
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<td>19</td>
<td>Pebble floor 0.12m deep</td>
</tr>
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<td>20</td>
<td>Compacted rubble 0.12m</td>
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<tr>
<td>21</td>
<td>Dark grey silty clay 0.41 m deep</td>
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<td>22</td>
<td>Cut 22 for fill 21 0.41 deep</td>
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<td>23</td>
<td>Cobble floor 0.10m</td>
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<td>24</td>
<td>Modern cut 0.70m deep and 0.80m wide</td>
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<td>25</td>
<td>Fill of Cut 26 0.70m deep</td>
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<td>26</td>
<td>Modern Cut filled by 25 0.70m deep</td>
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<td>27</td>
<td>Layer 27 cobbled surface 0.26m deep</td>
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<td>Dark brown silty clay 0.30m deep</td>
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<td>Cut of unexcavated fill 28</td>
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<tr>
<td>30</td>
<td>Dark brown silty clay 0.40m deep</td>
</tr>
<tr>
<td>31</td>
<td>Cut of fill 30 0.40m deep</td>
</tr>
<tr>
<td>32</td>
<td>Pebbled floor 0.08m deep</td>
</tr>
<tr>
<td>33</td>
<td>Compacted sub rounded stones0.08m deep</td>
</tr>
<tr>
<td>34</td>
<td>Pebble floor 0.09m deep</td>
</tr>
<tr>
<td>35</td>
<td>Fill of service trench 0.80m deep</td>
</tr>
<tr>
<td>36</td>
<td>Cut of service 0.80m deep</td>
</tr>
<tr>
<td>37</td>
<td>Reddish gravel layer 0.12m</td>
</tr>
<tr>
<td>38</td>
<td>Dark grey silty clay 0.70m deep</td>
</tr>
<tr>
<td>39</td>
<td>Cut of pit 0.70m deep 0.05m wide</td>
</tr>
<tr>
<td>40</td>
<td>Fill of pit modern rubble 0.90m</td>
</tr>
<tr>
<td>41</td>
<td>Cut of pit 0.91m deep</td>
</tr>
<tr>
<td>42</td>
<td>Wall 0.40m wide and 0.20m deep</td>
</tr>
<tr>
<td>43</td>
<td>Sandy gravel foundation 0.20m deep</td>
</tr>
<tr>
<td>Context no</td>
<td>Description</td>
</tr>
<tr>
<td>------------</td>
<td>-------------</td>
</tr>
<tr>
<td>44</td>
<td>Concrete floor 0.18m deep</td>
</tr>
<tr>
<td>45</td>
<td>Layer with rubble 0.70m deep and 0.90m wide</td>
</tr>
<tr>
<td>46</td>
<td>Layer of compacted stone 0.10m deep</td>
</tr>
<tr>
<td>47</td>
<td>Fill of modern material 0.70m deep</td>
</tr>
<tr>
<td>48</td>
<td>Dark brown silty clay with modern material 0.80m</td>
</tr>
<tr>
<td>49</td>
<td>Modern Cut 0.60m deep</td>
</tr>
<tr>
<td>50</td>
<td>Fill of modern rubble 0.60m deep</td>
</tr>
<tr>
<td>51</td>
<td>Unstratified</td>
</tr>
<tr>
<td>52</td>
<td>Cut of Modern pit 52 0.60m deep 1.40m wide</td>
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<tr>
<td>53</td>
<td>Dark grey silty clay 1.0m deep</td>
</tr>
<tr>
<td>54</td>
<td>Cut of fill 53</td>
</tr>
<tr>
<td>55</td>
<td>Dark grey brown silty clay 1.0m deep</td>
</tr>
</tbody>
</table>
Appendix B

Pottery

Paul Spoerry

Pottery from two evaluation trenches was spot dated by the author

The assemblage is mostly composed of ceramics dating to the 15th century. The earliest pottery in the group is Ely Ware (1200-1400AD) which was recovered from the upper fill of Pit 12. Most of the dateable ceramics were recovered from two pits 12 and 13 within Trench 1. Context 6 contained a number of Bourne D sherds (1450-1650) and a Bourne B (1300-1450AD) sherd. A sherd of Lyveden D ware (1400-1500 AD) and Bourne D 1450-1650AD were recovered from Context 10. This small group is an everyday assemblage for the 15th century. The stratigraphically earlier layer 46 produced one sherd of late medieval reduced ware, of late 14th or 15th century date.

<table>
<thead>
<tr>
<th>Context</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>1 sherd of Ely Ware 1200-1400AD</td>
</tr>
<tr>
<td>6</td>
<td>3 sherds of Bourne D 1450-1650 AD</td>
</tr>
<tr>
<td>6</td>
<td>1 sherd of Bourne B 1300-1450 AD</td>
</tr>
<tr>
<td>10</td>
<td>1 sherd of Bourne D 1450-1650 AD</td>
</tr>
<tr>
<td>10</td>
<td>1 sherd of Lyveden D ware 1400-1500AD</td>
</tr>
<tr>
<td>46</td>
<td>1 sherd of Late Medieval Reduced 1350-1500AD</td>
</tr>
</tbody>
</table>
Appendix C

PET QC 01 Leather
Carole Fletcher BA

Complete soles and fragments of leather were recovered from two waterlogged contexts at the Peterborough, Queensgate site. Before the finds were examined the leather fragments were lightly cleaned with distilled water under the microscope, to remove some of the silt which adhered to their surfaces, only minimal cleaning was undertaken. The majority of the leather is in reasonable condition and the soles present could be examined more closely but the presence of uppers requires more careful handling, due to the fragility of the waterlogged material. Further cleaning under controlled conditions would reveal more detail than it has been possible to extract here. Conservation is also required to stabilise and preserve the leather.

Twenty-five small find numbers were given to the material recovered, these were given to individually identifiable pieces of leather where this was possible or to groups of fragments that form part of an identifiable form, or were grouped together by the excavator.

Small Find 1 Context 6
The fragment is probably a partial turn-shoe upper, the leather is thin/fine (1mm thick) and is part of the vamp or vamp wing. Stitching survives on the short surviving edge (35mm long), and the lasting margin has probably been cut away. The leather is in reasonable condition with the grain surviving; (this could be identified).

Small Find 2 Context 6
The fragment consists of a partial turn-shoe the thickness of the leather (2mm) suggests a sole. Damage is heaviest on the lateral side. No grain is visible.

Small Find 3 Context 6
Four bags containing fragments from a turn-shoe sole, very worn and in poor condition. Edge to flesh stitch holes can still be seen on the surviving edges.

Context 6 Small Find 4
Three bags containing an almost complete turnshoe sole and two fragments, probably from the same sole. The leather is in poor condition, the sole is 3-4mm thick and very worn along the left hand side.

Context 51 Small Find 5
Fragments of leather in poor condition from an unstratified context.

Context 10 Small Find 6
A complete or an almost complete upper from a turn-shoe, the leather is folded back on itself so it is difficult to identify the form and it has broken into two large fragments. The vamp is in good condition but the quarters are in poorer condition. Only a brief examination was made due to the difficulty in supporting the leather. This shoe needs specialist examination and conservation.
Small Find 7 Context 10
Almost complete turn-shoe sole (4-5mm thick) from a left shoe, in very good condition. Broken and cracked across the seat, but forepart is complete except for some post-depositional cracking across the tread.

Small Find 8 Context 10
Turn-shoe sole, cracked across the tread, probably post depositional damage. There is a hole worn in the forepart, the positioning may be diagnostic of a deformity of the hallux.

Small Find 9 Context 10
Turn-shoe sole from a right shoe (3-4mm thick), the forepart and tread are present but the sole is cut at an angle across the waist, stitch holes can be seen on the edge of the heal but it is unclear if this is part of a two part sole or due to a repair. The tread is worn at the approximate position of the toe joints and on the upper (medial) side of the forepart. This ware pattern may be diagnostic.

Small Find 10 Context 10
Turn-shoe sole (4mm thick), from a right shoe, the forepart is missing and the sole is broken and badly cracked across the tread, there is also ware on the lateral edge of the seat.

Small Find 11 Context 10
Six narrow fragments of leather of varying lengths all show some evidence of stitch holes and cut edges, the stitching appears to be grain/flesh suggesting these fragments are the lasting margins that have been removed from turn-shoe uppers to facilitate the reuse of the leather.

Small Find 12 Context 10
A piece of turn-shoe upper in good condition, which is shows two tie slots through which the leather thong is still threaded. The thong is one piece of leather, which has been slit to form two strips and threaded through the slots with the un-slit part remaining inside the upper, to prevent the thong from pulling through the holes. The grain survives on the thong and could be identified.

Small Find 13 Context 10
A complete heel seat 3-4mm thick, 61mm long, showing ware on the right side of the heel seat. Edge to flesh stitch holes can be seen around the edge of the heel seat but are not visible on the heel seat/waist edge. This suggests that the heel seat was cut from a one-piece sole possibly to facilitate a repair to the shoe or to allow the rest of the sole to be used for a repair.

Small Find 14 Context 10
Worn heal/seat (67mm long, 4mm thick) from a turn-shoe, worn on left side and broken along this edge, the end of the seat has also been lost. Edge to flesh stitch holes survive on the cut edge and can be seen along the waist/tread edge of the heel representing the but seam join on a two part sole.
**Small Find 15 Context 10**
A partial turn-shoe sole (4mm thick), the forepart, with point, survive but the sole is broken across the tread in a semi-circular pattern and if as the result of ware, may be diagnostic of hammer toe.

**Small Find 16 Context 10**
Four fragments of leather in poor condition, the largest fragment is from a turn-shoe sole (3-4mm thick) heavily worn and broken across seat, forepart and across the tread. The other three fragments are small and in poor condition and probably from the same sole.

**Small Find 17 Context 10**
One piece of fine/thin leather (1-1.5mm thick) in reasonable condition. May be part of a turn-shoe upper, cut edges are present and may represent the removal of the lasting margin, but this is unclear.

**Small Find 18 Context 10**
Very fragile fragments of leather probably from a turn-shoe upper. The leather is in poor condition and shows evidence of lamination.

**Small Find 19 Context 6**
Partial turn-shoe half sole (3-4mm thick), from a right shoe, in reasonable condition. The sole is damaged at the lateral edge of the waist/seat seam and there is ware at the tip of the forepart. There is also a hole in the tread, which forms a distinct ware pattern that may be diagnostic of a deformity of the hallux. Edge to flesh stitch holes are visible around the sole edge and on the waist-seat joint suggesting this is a two part sole and not a repair sole.

**Small Find 20 Context 6**
Piece of leather in reasonable condition that appears to be the lasting margin removed from an upper to allow the leather of the upper to be reused.

**Small Find 21 Context 6**
Fragment of leather in poor condition.

**Small Find 22 Context 6**
Sixteen leather fragments all in very poor condition, probably fragments of a sole.

**Small Find 23 Context 10**
Two fragments, one of fine/thin leather (1mm thick), with no cut edges 27mm wide by 35mm long, from a turn-shoe upper. The leather is in good condition and the grain survives (this could be identified). The second is thicker leather (2-3mm), with one cut edge. This fragment may have been cut from a sole.

**Small Find 24 Context 6**
Three fragments, one fragment of leather (1-2mm thick) with one cut edge and an irregular shape, poor condition and no surviving grain. Two small fragments of leather in reasonable condition one may possibly be from a strap.
Small Find 25 Context 51
A small fragment of fine/thin leather (approx. 1mm thick) from an upper, in good condition with the grain surviving, (this could be identified). There is a single cut edge (37mm long) set back from this edge is an oval hole (approx. 3-4mm in diameter) and 15mm away is a second, partial hole suggesting that these are tie holes and are from the quarters of a turn shoe.

Conclusion
The sole fragments and uppers are from different shoes. The soles appear to have been discarded due to ware. Other parts of the shoe appear to have been discarded as a result of cutting for reuse, reusing the leather to facilitate repairs to other shoes. Dating is achievable with the input of a specialist who would recognize the styles present. No rand, turn-welt were recognized in the assemblage to help with dating, a rand would confirm a post twelfth century date; a turn welt would mean a post fourteen-fifty date. Pottery recovered from the contexts containing the leather suggest a fifteenth century date, context 10 contained Bourne D pottery produced from 1450 to 1650 AD. and Lyveden D ware (1400-1500AD.) suggesting a 1450 to 1500 date range for the context. The scrap pieces indicate leather working in the form of repairs but there are no off-cuts to suggest the manufacture of new shoes was taking place.

Glossary:
Butted seam: Made by butting together the edges of two sections of leather and joined by an edge/flesh seam.
Edge/Flesh Seam: The stitching holes are pierced from the edge of the section to the flesh side; commonly used on the majority of medieval turn-shoes.
Flesh Side: The original inner face of the leather.
Forepart: The front of the shoe or sole.
Grain Side: The outer surface of a piece of leather originally bearing the hair, fur, wool, etc.
Heel: A component added to the rear or (seat) end of a sole.
Quarters: The sides of the shoe upper joining on to the vamp at the front and meeting each other at the back of the heel.
Rand: A long narrow strip of leather of roughly triangular in section, sewn between the upper and the sole to make the lasting-margin more watertight.
Seat or Heel Seat: The rear end of sole on which the heel of the foot rests.
Tie Holes: The holes in the quarters through which a thong is passed to hold the shoe on the foot.
Tie Slots: Slits around the ankle or leg, often in pairs to take a lace.
Tread: The widest part of a sole forepart in closest contact with the ground.
Turn-shoe: The shoe is constructed inside-out (normally with the flesh side outwards) and then reversed or turned so that the grain side of the leather is on the outside, and the seams and much of the stitching are on the inside.
Turn-welt: Strip of leather wider than a rand, with two parallel rows of grain/flesh stitches.
Upper: The portion of a shoe or boot which covers the top of the foot.
Vamp: The front section of a shoe upper covering the toes and part of the instep.
Waist: The part of the sole between forepart and heel.
Sources:
The Medieval Leather Industry in Leicester by Clare E. Allin.

Medieval finds From Excavations in London: 2
Shoes and Pattens by Francis Grew and Margrethe de Neergaard. 1998

Medieval Footwear From Coventry A Catalogue Of The Collection Of Coventry Museums
By Susan Thomas. 1980

Northampton Museum publication
Appendix D

Carole Fletcher

Finds Quantification

<table>
<thead>
<tr>
<th>Context number</th>
<th>Animal bone</th>
<th>Brick or tile</th>
<th>Metalwork Cu Alloy</th>
<th>Metalwork Fe</th>
<th>Pottery</th>
<th>Shell</th>
<th>Worked stone</th>
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<td></td>
<td>5</td>
<td></td>
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<td>216</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>6</td>
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</tbody>
</table>
Appendix E
Queensgate Centre, Peterborough (PET QC 01)

Assessment of the Animal Bones

Ian L. Baxter BA MIFA

The Site and its Excavation

An evaluation excavation was conducted between 29th January and 5th February 2001 by CCC AFU under the direction of Spencer Cooper on land opposite The Still, Peterborough. The features uncovered date from the late medieval period, c.15th century AD.

The Animal Bone Assemblage

Recovery: all the bones forming the basis of this assessment were collected by hand. It is probable, therefore, that there is a recovery bias against bones of the smaller species.

Residuality and contamination: there is no evidence of residuality or contamination. However, the bulk of the assemblage is not in primary context.

Context: most of the bones were found in a single clay-lined pit, which originally probably served an industrial function such as tanning.

Preservation: the bone was waterlogged and preservation is generally very good and ranges from excellent to fair.

Storage and quantity: the animal bones are stored in 1 cardboard box of the following size: 52x26.5x16.5cm. The box is ¾ full. The bones are washed and bagged by context.

The total weight of the hand-collected bone is 3 Kg. This assessment is based on all of the animal bones recovered during the evaluation.

Assessment

Methods: all of the bone recovered during the evaluation has been assessed. Estimated totals have been calculated on the basis of the proportion of the total site evaluated, i.e. approximately 10% (P. Spoerry and S. Cooper pers. comm.). Numbers of “countable” bones, ageable mandibles and measurable bones are recorded in Table 1. The counting system is based on a modified version of the system suggested by Davis (1992) and used by Albarella and Davis (1994).

Variety: the assemblage is heavily biased in favour of the domestic mammals, with cattle, sheep/goat, pig, and cat represented. Sheep fragments are half as frequent again than cattle fragments. One polled sheep cranium was seen and a proximal radius with “penning elbow”. This kind of injury is due to trauma when the animals are put
through races or pens (Baker and Brothwell 1980: 127). Several domestic cat bones were recovered, mostly immature and from at least two individuals. A large, probably male, fallow deer (Dama dama) distal humerus also forms part of the assemblage.

Potential and recommendations

**Potential**: the animal bones recovered from the evaluation excavation largely consist of refuse from butchery and food waste. They have no direct relation to the original function of the industrial clay-lined pit but have been incorporated in the backfill of that feature. The assemblage as a whole is similar to that recovered from The Still nearby (Roberts 1998). However, the site is located in what is thought to be an industrial area of medieval Peterborough and it is possible that further industrial pits and associated features may be uncovered in subsequent excavations containing animal bone waste more directly related to their original function. The nearby Cumbergate or “street of woolcombers” provides an indication of the kind of activities taking place in the vicinity during the medieval period. Woolcombing may have been an activity associated with the tanning or tawing of sheepskins where the wool was removed from the skins before further processing (Thomson 1981: 162-3, 171). Clay-lined pits and extensive deposits of sheep foot bones have been found together at several sites, e.g. Walmgate, York (O’Connor 1984) and Bonners Lane, Leicester (Baxter 1998). Also, during the medieval period cats were not generally kept as pets and there was a considerable trade in cat skins which were also exported to the continent (Luff and Moreno Garcia 1995).

**Recommendations**: the estimates for the full excavation of the site are based on the assemblage recovered from the evaluation excavation. However, it must be borne in mind that, given the potential of this site for large scale recovery of industrial bone waste associated with tanning and allied trades, the expected number and composition of the resultant assemblage may prove inaccurate. If deposits of sheep feet are encountered, for example, an adequate program of bulk sampling should be undertaken to ensure the recovery of the smaller elements. Also, although no fish bones were found during the evaluation this may not be the case during the excavation stage. These factors have significant time and cost implications both during the excavation and post-excitation stages.

References


Table 1. Queensgate Centre, Peterborough. Hand-collected assemblage. Number of “countable” bones (Davis 1992; Albarella and Davis 1994) used for assessment and estimates of their total. The estimated total is calculated on the basis of the proportion of the total site evaluated: approximately 5%.

<table>
<thead>
<tr>
<th>PERIOD</th>
<th>COUNTABLE BONES</th>
<th></th>
<th></th>
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<th>Fish</th>
<th>Comments</th>
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<tr>
<td></td>
<td>Cattle</td>
<td>Sheep/goat</td>
<td>Pig</td>
<td>Others</td>
<td>Bird</td>
<td>Total</td>
<td>Fish</td>
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<td>Late Medieval assessment</td>
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<td>24</td>
<td>5</td>
<td>6</td>
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<td>Late Medieval estimated total</td>
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<td>480</td>
<td>100</td>
<td>120</td>
<td>20</td>
<td>1020</td>
<td>0</td>
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</tbody>
</table>

| PERIOD                     | AGEABLE MANDIBLES | MEASUREMENTS |               |               |               |               |               |               |               |               |               |               |               |               |               |               |               |
|----------------------------|-------------------|--------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|
|                             | Cattle            | Sheep/Goat   | Pig           | Total         | Cattle        | Sheep/Goat   | Pig           | Other         | Bir           | Tot           |               |               |               |               |               |               |
| Late Medieval assessment    | 0                 | 7            | 1             | 8             | 4             | 15            | 2             | 4             | 1             | 26            |               |               |               |               |               |               |
| Late Medieval estimated total| 0                 | 140          | 20            | 160           | 80            | 300           | 40            | 80            | 20            | 520           |               |               |               |               |               |               |
The waterlogged sample from the Queensgate Centre, Peterborough (PETQC01)

A single waterlogged sample from an late Medieval pit was examined for the extraction of waterlogged and charred plant remains. The sample was first floated by the Cambridgeshire, County Council Archaeological Unit then further sieved through a stack comprising a 4mm, 2mm, 1mm, 0.5 mm, and 0.3 mm sieves. The resultant material was then scanned for waterlogged and charred material. The results for the waterlogged material are shown in Table 1. Approximate frequencies are given, apart from where less than five seeds of any single species were encountered where actual figures are given.

Charred Material
A quantity of charred material consisting of mainly cereal crop grains, and weed seeds was also encountered. This consisted of 25 grains of free-threshing wheat, Triticum aestivum sensu lato, and also a few grains of oats, Avena sp. In addition several seeds of Fallopia convolvulus were also encountered and a few of dock, Rumex crispus and one vetch/tare, Vicia sp.. Two grains of barley were also encountered. The sample seems to represent fairly clean grain from the presence of large seeds that are only removed by hand sorting, and probably relates to general domestic waste.

Waterlogged Material
The waterlogged material also contained some remains of crops, but of a different variety to those found charred, these were mainly of rye, Secale cereale although several culm nodes from staw may have been related to rye, wheat or barley. In addition a seed of fig, Ficus caria was also recovered. Given the colder climate around 14th to 15th century it would seem unlikely that fig could have grown in such conditions and as such was probably imported.

The sample contains a very high proportion of arable weed species, and almost certainly if not related to the bringing in of arable crops, may relate to a proximity of arable land. The presence of species of grassland and meadow land may also indicate such habitats also in the vicinity.

Although several fragments of wood and twigs were found in the samples the presence of only a few seeds of elder or hawthorn may indicate that such scrub was not well established, while the presence of several rose thorns probably indicates thorn waste/scrub. As with many sites close to or within the fen, fenland species are also present in the samples, such as water-plantain, bog-bean, and gypsy-wort.

Whilst vivianite was present in the sample, usually indicative of cess, their was little other indication of cess-material and so probably relates more to the presence of some phosphorous rich deposits and general rotting organics.

The sample showed a mix in the species present, some such as Anthemis cotula are associated with heavy-clay soils, while others such as common corn-salad, sheep sorrel and the campions are often associated with lighter sandier soils. The differences within these ecologies must undoubtedly reflect that some of these weeds arrived with arable crops grown in such areas.
Potential
Whilst some aspects of the sample, especially the presence of fen species and scrub species, is relatively routine the presence of both fig and such a large number of arable weed species may hold some further potential. Whether the species entirely relate to local environment or human activity is unclear. Whilst scrub elements were present, their were generally few seeds of nitrogen rich soils such as common nettle, indicative of scrub or wasteland on nitrogen-rich urban soils or well developed scrub.

The sample on the whole seems to relate to a large degree to human activities especially arable crops. While charred grain is present it should be noted that uncharred grain rarely survives in a waterlogged state. The charred grain would seem to represent either cleanings or accidentally charred material from crops stored in a clean state. As such the high proportion of seeds of both creeping buttercup and black-bindweed may relate to crop waste.

The seeds of *Brassica oleracea* were also associated with pod-fragments, it would seem probable that these are of the cultivated variety, although further identification would be needed.
<table>
<thead>
<tr>
<th>Species Name</th>
<th>common name</th>
<th>Habitat</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ranunculus repens</td>
<td>creeping buttercup</td>
<td>arables, grassland</td>
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</tr>
<tr>
<td>Thalictrum cf. flavum</td>
<td>meadow rue</td>
<td>meadows, fens, by streams</td>
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</tr>
<tr>
<td>Ficus carica</td>
<td>fig</td>
<td>cultigen</td>
<td>1</td>
</tr>
<tr>
<td>Urtica urens</td>
<td>Small-leaved nettle</td>
<td>arable, waste</td>
<td>2</td>
</tr>
<tr>
<td>Corylus avellana</td>
<td>hazel</td>
<td>hedgerows</td>
<td>2</td>
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<td>Chenopodium album</td>
<td>fat-hen</td>
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<td>Medium</td>
</tr>
<tr>
<td>Atriplex patula/prostrata</td>
<td>oranche</td>
<td>arable, manure, waste</td>
<td>Medium</td>
</tr>
<tr>
<td>Brassica oleracea (pods + seeds)</td>
<td>cabbage</td>
<td>Cultigen?</td>
<td>High</td>
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<tr>
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<td>common chickweed</td>
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<td>High</td>
</tr>
<tr>
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<td>Silene dioica</td>
<td>red campion</td>
<td>woods, peaty soils, hedgegrowers</td>
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<tr>
<td>Fallopia convolvulus</td>
<td>black bindweed</td>
<td>arable</td>
<td>Medium</td>
</tr>
<tr>
<td>Polygonum aviculare</td>
<td>knotgrass</td>
<td>arable, waste</td>
<td>Medium</td>
</tr>
<tr>
<td>Rumex sp. (bracts)</td>
<td>dock</td>
<td>grasslands, waysides, arable, waste</td>
<td>Medium</td>
</tr>
<tr>
<td>Rumex acetosella group</td>
<td>sheeps-sorrel</td>
<td>arable grass</td>
<td>1</td>
</tr>
<tr>
<td>Rumex crispus</td>
<td>curled-leaved dock</td>
<td>arable grass</td>
<td>High</td>
</tr>
<tr>
<td>Rumex crispus (with bracts)</td>
<td>curled-leaved dock</td>
<td>grasslands, arable</td>
<td>2</td>
</tr>
<tr>
<td>Rumex conglomeratus/obtusifolius/sanguineus</td>
<td>docks</td>
<td>arable, grasslands</td>
<td>2</td>
</tr>
<tr>
<td>Rumex maritimus (with bracts)</td>
<td>golden dock</td>
<td>muddy ground, beside</td>
<td>2</td>
</tr>
<tr>
<td>Plant Name</td>
<td>Common Name</td>
<td>Habitat</td>
<td>Year(s)</td>
</tr>
<tr>
<td>---------------------------------</td>
<td>--------------</td>
<td>-----------------------------------------------------------</td>
<td>---------</td>
</tr>
<tr>
<td>Brassica oleracea</td>
<td>cabbage</td>
<td>water, damp grass</td>
<td>High</td>
</tr>
<tr>
<td>Potentilla anserina</td>
<td>silverweed</td>
<td>waysides, pastures, sand-dunes</td>
<td>3</td>
</tr>
<tr>
<td>Rosa sp. (thorns)</td>
<td>Rose</td>
<td>waste</td>
<td>5</td>
</tr>
<tr>
<td>Crataegus monogyna</td>
<td>hawthorn</td>
<td>hedges</td>
<td>1</td>
</tr>
<tr>
<td>Crataegus monogyna (thorns)</td>
<td>hawthorn</td>
<td>hedges</td>
<td>2</td>
</tr>
<tr>
<td>Oenanthe fistulosus</td>
<td>tubular</td>
<td>marshy places, shallow water</td>
<td>1</td>
</tr>
<tr>
<td>Hydrocotyle vulgaris</td>
<td>marsh</td>
<td>bogs, fens, marshes</td>
<td>3</td>
</tr>
<tr>
<td>Menyanthes trifoliata</td>
<td>bog-bean</td>
<td>fenland, bog, marsh</td>
<td>1</td>
</tr>
<tr>
<td>Stachys palustris</td>
<td>marsh</td>
<td>streams, ditches, fens</td>
<td>1</td>
</tr>
<tr>
<td>Lycopus europaeus</td>
<td>gypsywort</td>
<td>fens, streams, rivers, ditches</td>
<td>Medium</td>
</tr>
<tr>
<td>Galium aparine</td>
<td>cleavers</td>
<td>arable, hedges, waste</td>
<td>1</td>
</tr>
<tr>
<td>Sambucus nigra</td>
<td>elder</td>
<td>hedges</td>
<td>2</td>
</tr>
<tr>
<td>Valerianella locusta</td>
<td>common</td>
<td>arable</td>
<td>1</td>
</tr>
<tr>
<td>Cirsiuim/Carduus sp.</td>
<td></td>
<td>arable, grassland</td>
<td>Medium</td>
</tr>
<tr>
<td>Centaurea cyanus</td>
<td>red star-thistle</td>
<td>arable weed</td>
<td>Medium</td>
</tr>
<tr>
<td>Lapsana communis</td>
<td>nipplewort</td>
<td>arables, hedgerows</td>
<td>High</td>
</tr>
<tr>
<td>Picris hieracioides</td>
<td>hawkweed</td>
<td>grasslands, waysides, esp. calcareous</td>
<td>2</td>
</tr>
<tr>
<td>Sonchus arvensis</td>
<td>milk sow-thistle</td>
<td>streams, arable</td>
<td>Medium</td>
</tr>
<tr>
<td>Sonchus oleraceus</td>
<td>sow-thistle</td>
<td>arable</td>
<td>Medium</td>
</tr>
<tr>
<td>Sonchus asper</td>
<td>prickly sow-thistle</td>
<td>arable</td>
<td>Medium</td>
</tr>
<tr>
<td>Lactuca serriola</td>
<td>prickly lettuce</td>
<td>waste places esp. walls</td>
<td>2</td>
</tr>
<tr>
<td>Anthemis cotula</td>
<td>stinking</td>
<td>arable - heavy soils</td>
<td>3</td>
</tr>
<tr>
<td>Alisma sp.</td>
<td>water-plantain</td>
<td>in or near ponds, ditches, slow rivers</td>
<td>3</td>
</tr>
<tr>
<td>Eleocharis palustris</td>
<td>common spike-rush</td>
<td>streams, fens</td>
<td>3</td>
</tr>
<tr>
<td>Scirpus sp.</td>
<td>club-rush</td>
<td>wetlands</td>
<td>2</td>
</tr>
<tr>
<td>Carex trig</td>
<td>sedges</td>
<td></td>
<td>Medium</td>
</tr>
<tr>
<td>buds species indet</td>
<td></td>
<td>hedges</td>
<td>Medium</td>
</tr>
<tr>
<td>Secale cereale (rachis frg.)</td>
<td>rye</td>
<td>cultigen</td>
<td>3</td>
</tr>
<tr>
<td>Cereals undiff. (culm nodes)</td>
<td></td>
<td></td>
<td>Medium</td>
</tr>
</tbody>
</table>