

ARCHAEOLOGICAL EVALUATION OF LAND AT SOUTH GATES PARK, KING'S LYNN, NORFOLK (ENF 122804)

Work Undertaken For King's Lynn and West Norfolk Borough Council

October 2009

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ARCHAEOLOGICAL PROJECT SERVICES





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CONTENTS

List of Figures

List of Plates

1.	SUMMAKY
2.	INTRODUCTION
2.1	DEFINITION OF AN EVALUATION
	PLANNING BACKGROUND
	TOPOGRAPHY AND GEOLOGY
	ARCHAEOLOGICAL SETTING
3.	AIMS
4.	METHODS
5.	RESULTS
6.	DISCUSSION
7.	CONCLUSIONS
8.	ACKNOWLEDGEMENTS
9.	PERSONNEL
10.	BIBLIOGRAPHY
11.	ABBREVIATIONS
Appei	ndices
1	Specification for archaeological evaluation
2	Context descriptions
3	The Finds by Dr Anne Boyle, Paul Cope-Faulkner and Gary Taylor
4	The Environmental Data by Val Fryer and James Rackham
5	Glossary
6	The Archive

List of Figures

- Figure 1 General location plan
- Figure 2 Site location plan
- Figure 3 Trench location plan
- Figure 4 Trench 1: Plan and sections
- Figure 5 Trench 2: Plan
- Figure 6 Trench 2: Sections
- Figure 7 Trench 3: Plan
- Figure 8 Trench 3: Sections

List of Plates

- Plate 1 View of South Gates Park during excavation
- Plate 2 Trench 1 prior to excavation
- Plate 3 Trench 1 showing the mortar structure (052)
- Plate 4 Trench 2 prior to excavation
- Plate 5 Trench 2, Section 2 showing feature (013)
- Plate 6 Trench 2, Section 5 showing ditch (037)
- Plate 7 Trench 3 prior to excavation
- Plate 8 Trench 3, Section 1 showing pit (002)
- Plate 9 Trench 3, Section 4 showing pit (020)
- Plate 10 Trench 3, Section 7 showing pit (049)
- Plate 11 Trench 3, Victorian cellar (060)
- Plate 12 Clay pipe bowl from (058)

1. SUMMARY

An archaeological evaluation was undertaken on land at South Gates Park, King's Lynn, Norfolk. The evaluation was undertaken in advance of proposed road widening in the vicinity of the site.

The site lies at the southern end of the medieval (AD 1066-1540) walled town close to the extant South Gates which date to 1437-1440, although the defences were first established in the 13th century. The defences were embellished during the Civil War (1642-5) with outworks and other features added outside the gates. The defences were partially renewed during the Jacobite Rising (1744) and again during the Peninsular War (1807-14), although the extent of these works in unknown. The defences in the vicinity of South Gates had been demolished by the 1880s when early maps show that the site was occupied by the Crown Inn.

The evaluation identified a sequence of natural, undated, medieval, post-medieval and recent deposits. Natural deposits were only encountered through augering and there is a hint of a natural bank. This bank was artificially heightened, presumably during the construction of the medieval town defences, which sealed earlier ditches. A late medieval mortar built structure may have been a cellar, either within the earth bank or associated with a building for which no other remains survived.

A pit is closely contemporary with the Civil War refortification of the town defences. It may have originated as a borrow pit for strengthening the wall or as a refuse pit for the garrison. A 19th century cellar was also recorded which relates to the Crown Inn.

Finds retrieved from the investigation comprised local and regionally produced

medieval pottery and a wide range of postmedieval types. A significant collection of clay pipes was recovered, particularly types of 17th century date. Other finds include, brick, tile, glass and metalwork.

The animal bone assemblage was quite varied with a number of species present that would have contributed to the local diet. Snails indicate that the site lay in open ground with plant fossils mainly derived from hearth waste.

2. INTRODUCTION

2.1 Definition of an Evaluation

An archaeological evaluation is defined as, 'a limited programme of non-intrusive intrusive fieldwork and/or determines the presence or absence of archaeological features, structures, deposits, artefacts or ecofacts within a specified area or site. If such archaeological remains are present Field Evaluation defines their character and extent, quality and preservation, and it enables an assessment of their worth in a local, regional, national or international context as appropriate '(IFA 1999).

2.2 Planning Background

Archaeological Project Services was commissioned by King's Lynn and West Norfolk Borough Council to undertake an archaeological evaluation of land at South Gates Park, King's Lynn, Norfolk, in advance of proposed development at the site. The work was undertaken between the 3rd and 13th July 2009 in accordance with a specification prepared by Archaeological Project Services (Appendix 1) approved by the Development Control Archaeologist, Norfolk Landscape Archaeology.

2.3 Topography and Geology

King's Lynn is located 36km west of East Dereham and 17km north of Downham Market alongside the River Great Ouse, Norfolk (Fig. 1).

The site lies 780m southeast of the centre of King's Lynn as defined by the parish church of St Margaret at National Grid Reference TF 6223 1917 (Fig. 2). The site lies east of the South gates thoroughfare on land that slopes down towards the Middleton Stop Drain/town ditch.

King's Lynn lies on marine and freshwater silts which overlay the Kimmeridge Clay of the Fen basin (GSGB 1978). As the site lies within an urban area, local soils have not been mapped.

2.4 Archaeological Setting

The site lies at the southern end of the medieval town of Lynn within the former parish of South Lynn which remained independent from the larger development until the mid 16th century. South Lynn probably remained a semi-rural area throughout the medieval period.

During the 13th century Lynn developed a system of fortifications surrounding the town. Most defences utilised existing banks and occasionally the waste siltmounds derived from salt-making (Cope-Faulkner 2003, 6). Adjacent to the site are the South Gates, which were built between 1437 and 1440 and replaced an earlier wooden bretask (Smith 1970, 62). The defences east of the gates are believed to have utilised earthen banks with no evidence for masonry walls (ibid. 73), the only sections that were constructed of stone lay along the northeast circuit of the defences. However, it is likely that a short length of wall extended eastwards from the South Gates as a 14th century reference specifies payment for 'mending the earthen wall at the end of the stone wall near the South Close' (Creighton and Higham 2005, 89).

During the English Civil War (1643-45) the town defences were refortified by the Royalist garrison in 1643 but this was unfinished by the time of the Parliamentary siege in August of that year (Clarke and Carter 1977, 437). South Gates was provided with an outwork to assist in its defence. South Gate was also strengthened during the Jacobite rebellion of 1745, though as the rebels retreated the work was abandoned (Kent 1988, 232).

In 1800, Maxey Allen, one of the town's largest brewers, leased land from the corporation at South Gates and rebuilt the Crown Inn specifically to tap the trade of the road hauliers (Richards 1997, 38). There was a Crown Inn in Southgate Ward as early as 1744, though it is not known if it occupied the same site.

An archaeological investigation undertaken at the junction of South Gates and Southgate Street revealed channel like features perhaps associated with drainage of the town defences and a late-medieval to post-medieval brick culvert (Percival 2005).

3. AIMS

The aim of the evaluation, as detailed in the specification (Appendix 1), was to gather information to establish the presence or absence, extent, condition, character, quality and date of any archaeological deposits in order to enable Norfolk Landscape Archaeology to formulate a policy for the management of archaeological resources present on the site.

4. METHODS

Three trenches were placed to provide sample coverage within the proposed development area (Fig. 3). These were excavated by machine to the upper surface of archaeological deposits. Following excavation, the base and sides of the trenches were cleaned and rendered vertical. Archaeological deposits were then examined by hand to determine their nature and to retrieve artefactual material. Each deposit exposed during evaluation was allocated a unique reference number (context number) with an individual written description. A list of all contexts and interpretations appears as Appendix 2. Sections were drawn at a scale of 1:10 and plans at 1:20. A photographic record was also compiled. Recording of the deposits encountered was undertaken based on the single context approach developed by the Museum of London (MoLAS 1994) with minor modifications by Archaeological Project Services.

The excavated trenches were located by measuring their position in relation to standing buildings.

Environmental samples were taken at the discretion of the site supervisor using guidelines established by English Heritage (2002). The methodology for the subsequent processing of the samples is outlined in the environmental report (Appendix 4).

Following excavation, all records were checked and ordered to ensure that they constituted a complete MAP II (English Heritage 1991) archive and a stratigraphic matrix of all identified deposits was produced. Phasing was based on the nature of the deposits and recognisable relationships between them and supplemented by artefact dating.

5. RESULTS

Archaeological contexts are listed and described below. The numbers in brackets are the context numbers assigned in the field.

Trench 1

The earliest deposits encountered within this trench were layers of greyish brown sandy silt (003), greyish brown silt (006) and brownish grey clayey silt (062). Layer (006) measured at least 0.7m thick. Pottery of $13^{th} - 15^{th}$ century date was recovered from (003).

Within these layers was a mortar structure (052 and 063), three sides of which were recorded within the trench. The extent of this structure measured 3.04m wide by over 2.98m long with mortar walls that were 100mm thick and standing 0.65m high. Within this structure, at the base, was a mortar surface (055).

Within the mortar structure were deposits relating to its demolition. The lowest comprised a 0.58m thick layer of grey mortar (054) with brick and tile. Above this was brown silt and mortar (056) and (005). Brick and tile from these demolition layers was broadly dated to the $13^{th} - 16^{th}$ centuries.

This was sealed by a further demolition layer of greyish brown silt (004) that was 0.45m thick. This was in turn overlain by a deposit of yellowish brown silt (051), measuring 0.48m thick. Sealing this was the present topsoil of brownish grey silt with brick/tile and chalk fragments (050).

Trench 2

Natural was identified by auger survey as a layer of bluish grey silt (091) that was over 0.55m thick. This was overlain by brown laminated silt (043), measuring 1.04m thick, followed by brown silt (042). Pottery of $13^{th} - 15^{th}$ century date was

retrieved from the latter layer.

Cut into (042) was an east-west aligned shallow ditch (041). This measured approximately 2m wide and was 0.16m deep (Fig. 6, Sections 5 and 14). A single fill of brown and grey silt (040) was identified. Sealing the ditch were deposits of greyish brown silt (039), that contained a piece of iron smithing slag, and brown silt (038) that had $13^{th} - 15^{th}$ century pottery. The greyish brown silt extended northwards as deposits (029) and (076).

Deposit (038) was cut by a second ditch (037) that was 2.47m wide and 0.88m deep. The ditch contained a fill of greyish brown silt (036) from which pottery of 13th – 15th century date was recovered.

Towards the north of the trench was an indeterminate feature, possibly a pit (016). It measured over 0.38m long and wide and was over 0.45m deep. Fills comprised reddish brown clayey silt (015 and 026), red fired clay fragments (024), brown silt (014, 025 and 027) and bluish grey silt (028). Deposits of brownish grey sandy silt (009) and brown silt (010) overlay this feature. Early medieval hand-made pottery and Grimston ware, together with a quantity of roof tile, was retrieved from (010) and indicate a 13th – 15th century date.

These deposits were in turn cut by a large feature, possibly a ditch terminus (013/075), that was aligned northwest-southeast. This measured over 5.5m long, was about 2m wide and 1.2m deep. The feature contained fills of brown silt (012), yellowish brown silt (073) and grey clayey silt (074). Two sherds of $13^{th} - 15^{th}$ century pottery were collected from (012).

Cutting feature (013/075) was a subrectangular pit (023). This was longer than 4m, wider than 0.85m and 0.89m deep. Three fills were recorded, a basal deposit of brown silt (077) over which lay brown sandy mortar (022) and greyish brown silt (021). Pottery from the uppermost fills was dated to the $12^{th} - 15^{th}$ century.

Overlying the ditch (037) and pit (023) was a sequence of dumped deposits. These comprised grey sandy silt (032), brown sandy silt (033 and 034), greyish brown silt (082), brown silt (083), brownish grey clayey silt (084), greyish brown clayey silt (085), reddish grey sandy silt (089) and grey silt with ash and charcoal (090).

Towards the southern end of the trench, the dumped deposits were overlain by a discrete layer of yellow sand and gravel (086), possibly a former path. Cutting this was a flat bottomed trench (087) that was 0.7m wide and 0.4m deep. This was filled with greyish brown silt (088).

At the northern end of the trench a subsoil of brown silt (008) was recorded. Sealing all deposits was a topsoil comprising brownish grey (007) to grey (031) sandy silt. This measured up to 0.31m thick.

Trench 3

Deposits of yellowish brown sand (065 and 066), measuring over 1m thick, were the earliest layers encountered within this trench. Pottery dating to the 13th – 15th century was retrieved from this layer

Cut into the sand was a sub-circular pit (002) that measured 1.05m long, over 0.88m wide and 0.23m deep (Fig. 8, Section 1). A single fill of brown silty sand (001) was recorded from which medieval pottery and possibly intrusive clay pipe was retrieved.

Located south of this was an irregularly shaped second pit (020). This was 2.75m long, over 1.6m wide and 0.49m deep (Fig. 8, Section 4). Three fills were recorded, the lowest comprising brown silty sand (019), which was sealed by grey sand and

cinders (018) followed by yellowish brown silty sand (017). Pottery of the $16^{th} - 17^{th}$ centuries was recovered together with a large quantity of clay pipe of 1630-60 date.

A third pit (049) lay 3.5m to the south and measured 2.3m long, was wider than 1.55m and 0.89m deep (Fig. 8, Section 7). The pit contained five fills, brown silty sand (047 and 048), overlain by mixed greenish grey clay and brown silty sand (046), brown with red mottling silty sand (045) and sealed by yellowish brown silty sand (044). Finds from this feature comprised medieval pottery along with post-medieval brick.

Overlying the sand (066) was a deposit of brown silty sand (069) that measured 0.2m thick.

Cutting this and pit (020) was a rectangular feature (064) measuring 3.24m long, over 0.8m wide and 0.9m deep. Within this was the brick wall (060) of a former cellar and its corresponding brick floor (059).

Disuse of the cellar is indicated by a backfill deposit of greyish brown silty sand (058) that contained frequent pottery, dating to the late 19th century. Other finds from this layer include clay pipe and glass of the late 19th – early 20th centuries. Also backfilling this was a brown silt and clay layer (057) and yellowish brown silty sand (070).

Overlying (066) at the southern end of the trench were dumped deposits of brown silty sand (071) and yellow/white mortar (072).

Truncating all deposits within the trench was a clearance cut (068), presumably created when the park was landscaped. Above this was the current topsoil comprising a 0.17m thick layer of grey silty sand (067).

6. DISCUSSION

Natural deposits comprise silts of the underlying drift geology of marine and freshwater alluvium. Above these are further silt and sand deposits, some of which may have originated as alluvium.

The earliest deposits in Trenches 1 and 3 may also belong to a natural bank, although it is more likely that these deposits represent artificial heightening by deliberate dumping. As such, they may date to the 13th century. In Trench 2, a number of ditches and pits were cut into these layers which may represent boundaries prior to the creation of the town defences.

Previous examinations of the defensive circuit have been undertaken. A natural bank was revealed during excavation 400m northeast of the site (Clarke and Carter 1977, 177). Further north, the banks of the town walls utilised the silt-mounds that represents waste from salt-making activities (Cope-Faulkner 2003, 6).

There was no evidence forthcoming for a masonry wall extending east from the gates to be replaced by an earthen bank. The Ordnance Survey has shown the line of defences to leave from South Gates at quite an oblique angle when it is more probable that any wall was carried east before turning to the north. It is possible, therefore, that any wall may remain between Trenches 1 and 2.

The function of the mortar structure situated within Trench 1 is not clear, though may be a cellar. Dating evidence has placed this within the $13^{th} - 16^{th}$ centuries. It could, therefore, be related to the town walls, though is more possibly associated with a late medieval building.

One pit in Trench 3 is of a mid 17th century date and may be related to the Civil War

period. The defences were strengthened in this part of the town in 1643 and the pit may have been dug to provide material for these works or as a result of garrisoning of the same. Bore dating of the large collection of clay pipes from the pit suggests a date of 1642-3 (Appendix 3). A second pit may also have served a similar function though the pottery suggests a slightly earlier date.

A number of features, comprising ditches and pits, were located within Trench 2 and date to the $13^{th} - 15^{th}$ centuries. The function of these features is not clear and their alignment, perpendicular to the town defences would suggest they pre-date their construction in the later 13^{th} century.

The brick-built cellar encountered in Trench 3 corresponds well to the position of the former Crown Inn, which was constructed about 1800 and closed in 1918. Finds from the backfill suggest the cellar was abandoned in the late 19th – early 20th century.

Finds retrieved from the evaluation comprise a wide range of pottery. Medieval types are predominantly locally produced wares, although regional imports from Lincolnshire are present. Postmedieval pottery is dominated by earthenwares, though includes a Martincamp flask imported from France.

Bricks, roof tiles and a single floor tile were also present and dominate the finds assemblage. Glass was also quite common, most of it derived from the late 19th century cellar backfill. Industrial activities are represented by iron smithing slag and a hearth bottom.

A significant collection of clay pipe was recovered. Amongst this was a large group of 17th century types that may well be associated with the Civil War refortification of Lynn. A figural clay pipe

(Plate 12) perhaps denotes trade with the continent.

Animal bone was dominated by cattle and sheep/goat with pig also present. Horse may also have contributed to the diet, particularly in the context of the Civil War period pit. Fish, both small and large varieties, were also identified.

The environmental samples indicate that the site was largely open ground during the medieval and later periods. Plant remains, including cereals, are likely to have derived from hearth waste.

7. CONCLUSIONS

Archaeological evaluation was undertaken at South Gates Park, King's Lynn, in order to determine the range of archaeological deposits prior to development as the site lies in an area of known archaeological remains of medieval and later date, principally the defences of the town.

The evaluation identified natural. post-medieval medieval, and recent deposits. Medieval deposits comprised ditches and pits, which were probably superseded by the construction of an earthen bank for the town defences, and a mortar structure, possibly a cellar. A pit, testifying to activity perhaps associated with the Civil War, and a 19th century cellar were also recorded.

Finds include medieval and later pottery, brick and tile. Other finds include clay pipe, glass and metalwork. Animal bone was also retrieved.

8. ACKNOWLEDGEMENTS

Archaeological Project Services wishes to acknowledge the assistance of Ms Jemma Girdlestone, Growth Point Project Officer, and David Hardy, Regeneration Programme Manager, Borough Council of King's Lynn and West Norfolk for commissioning the fieldwork and post-excavation analysis. The work was coordinated by Gary Taylor who edited this report along with Tom Lane. Dave Start kindly allowed access to the parish files and library maintained by Heritage Lincolnshire.

9. PERSONNEL

Project Coordinator: Gary Taylor Site Supervisor: Paul Cope-Faulkner

Site Staff: Bob Garlant, Ross Kendall,

Chris Moulis, Jon Smith Volunteer: Leonie Harris

Photographic reproduction: Sue Unsworth Illustration: Paul Cope-Faulkner, Ross

Kendall

Post-excavation Analyst: Paul Cope-

Faulkner

10. BIBLIOGRAPHY

Clarke, H and Carter, A, 1977 *Excavations* in King's Lynn 1963-1970, The Society for Medieval Archaeology Monograph Series 7

Cope-Faulkner, P, 2003 Archaeological evaluation on land adjacent to the former Queen Mary's Nursing Home, King's Lynn, Norfolk (37404KLY), unpublished APS report 216/02

Creighton, O and Higham, R, 2005 Medieval Town Walls. An Archaeological and Social History of Urban defence

English Heritage, 1991 Management of Archaeological Projects

English Heritage, 2002 Environmental Archaeology. A guide to the theory and practice of methods from sampling and

recovery to post-excavation

GSGB, 1978 King's Lynn and the Wash; Solid and Drift edition, 1:50 000 map sheet **145** with part of **129**

IFA, 1999 Standard and Guidance for Archaeological Field Evaluations.

Kent, P, 1988 Fortifications of East Anglia

MoLAS, 1994 Archaeological Site Manual

Percival, JW, 2005 An Archaeological Evaluation at the Former John Grose Garage, Southgate Street, King's Lynn, Norfolk, unpublished NAU Report 1015

Richards, P, 1997 King's Lynn

Smith, TP, 1970 'The Medieval Town Defences of King's Lynn', *Journal of the British Archaeological Association*, 3rd Series, **XXXIII**

11. ABBREVIATIONS

APS Archaeological Project Services

GSGB Geological Survey of Great Britain

IFA Institute of Field Archaeologists

MoLAS Museum of London Archaeology Service

NAU Norfolk Archaeological Unit



Figure 1 - General Location Plan

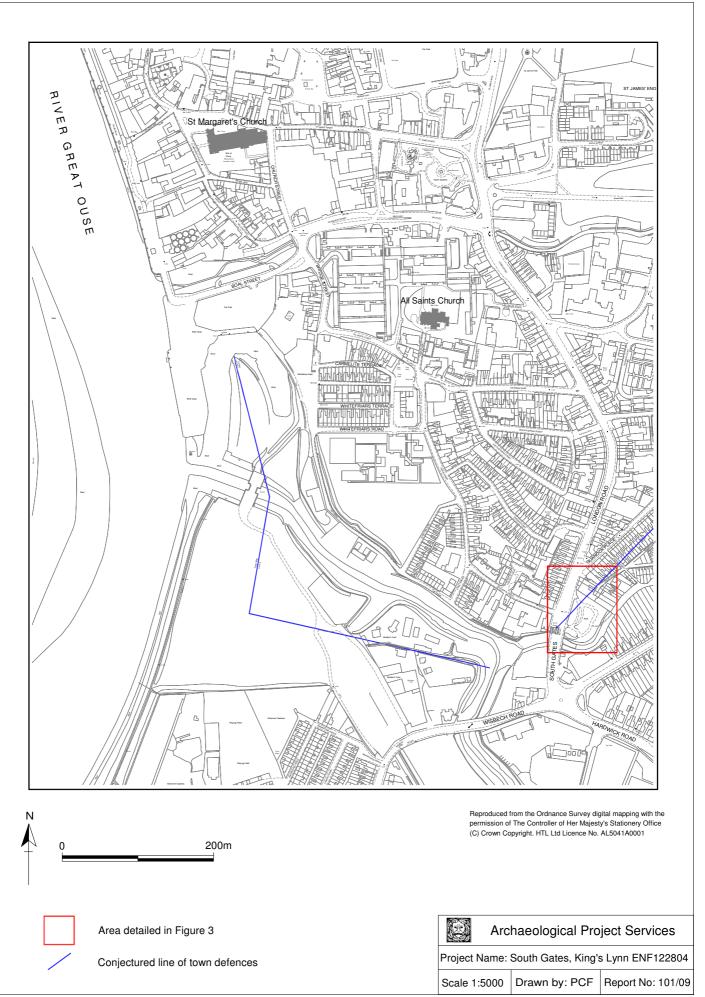


Figure 2 - Site location plan

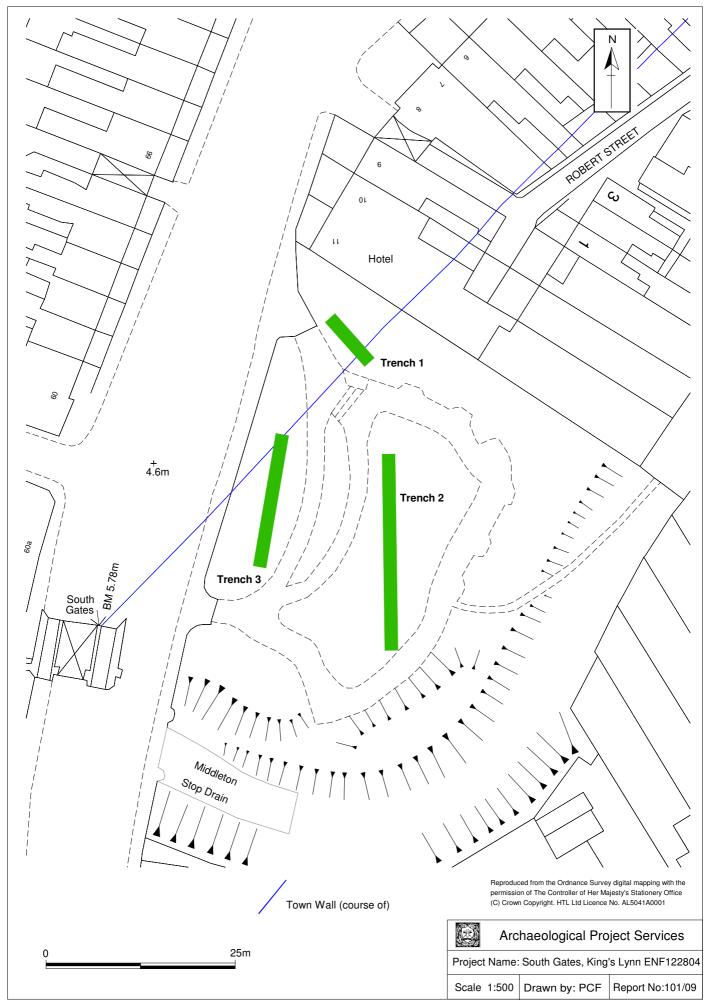


Figure 3 - Trench location plan

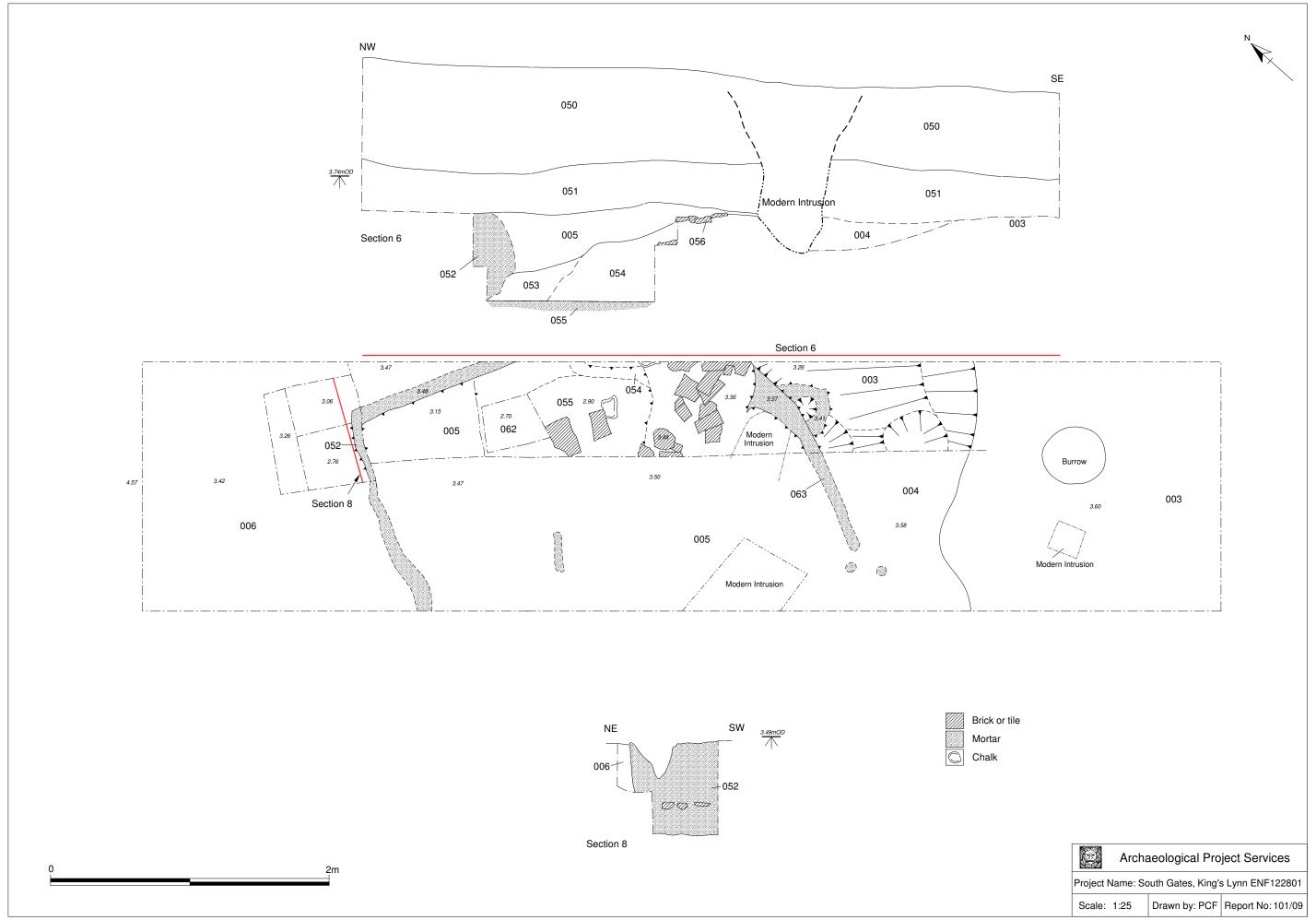


Figure 4 - Trench 1: Plan and sections

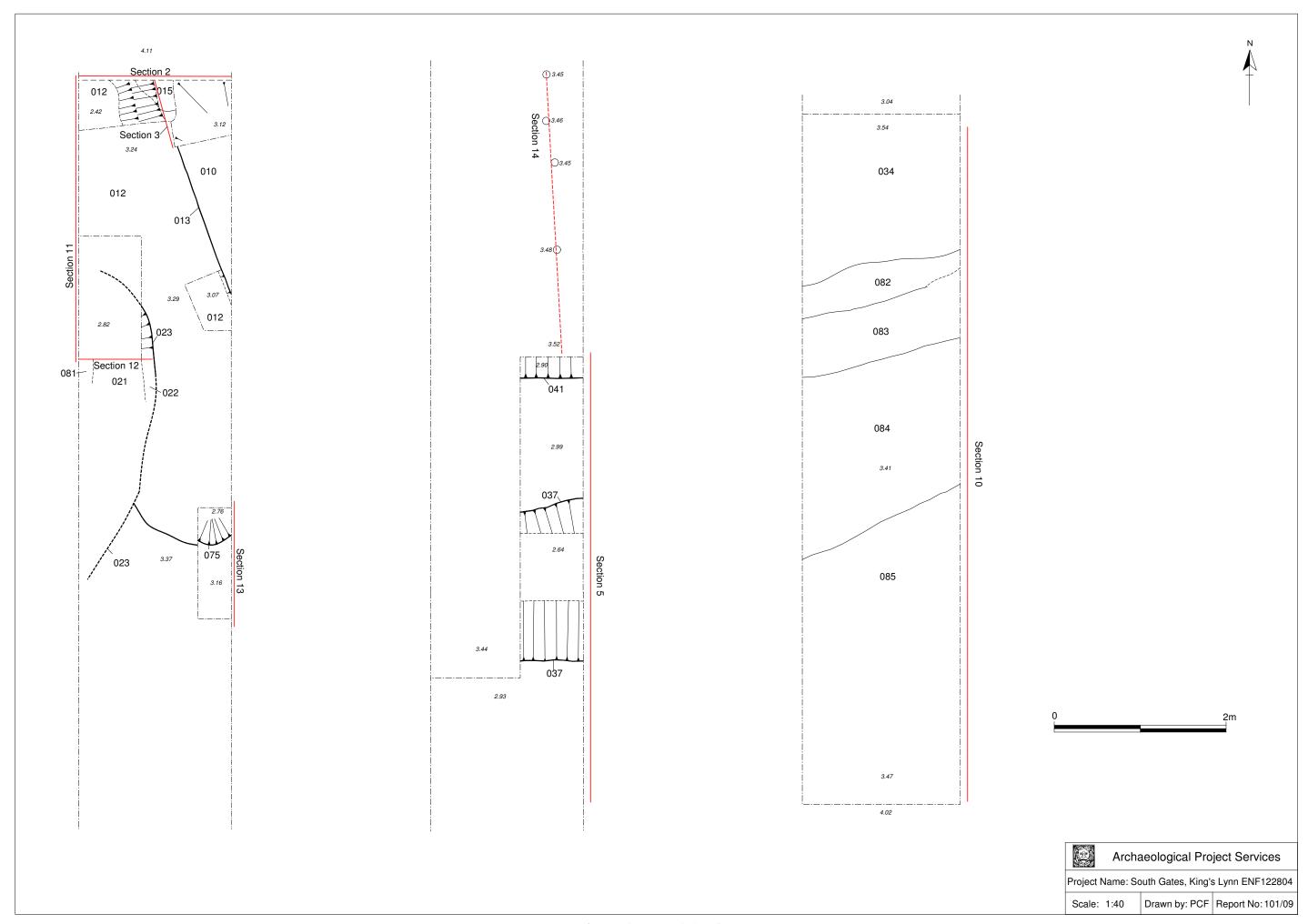


Figure 5 - Trench 2: Plan

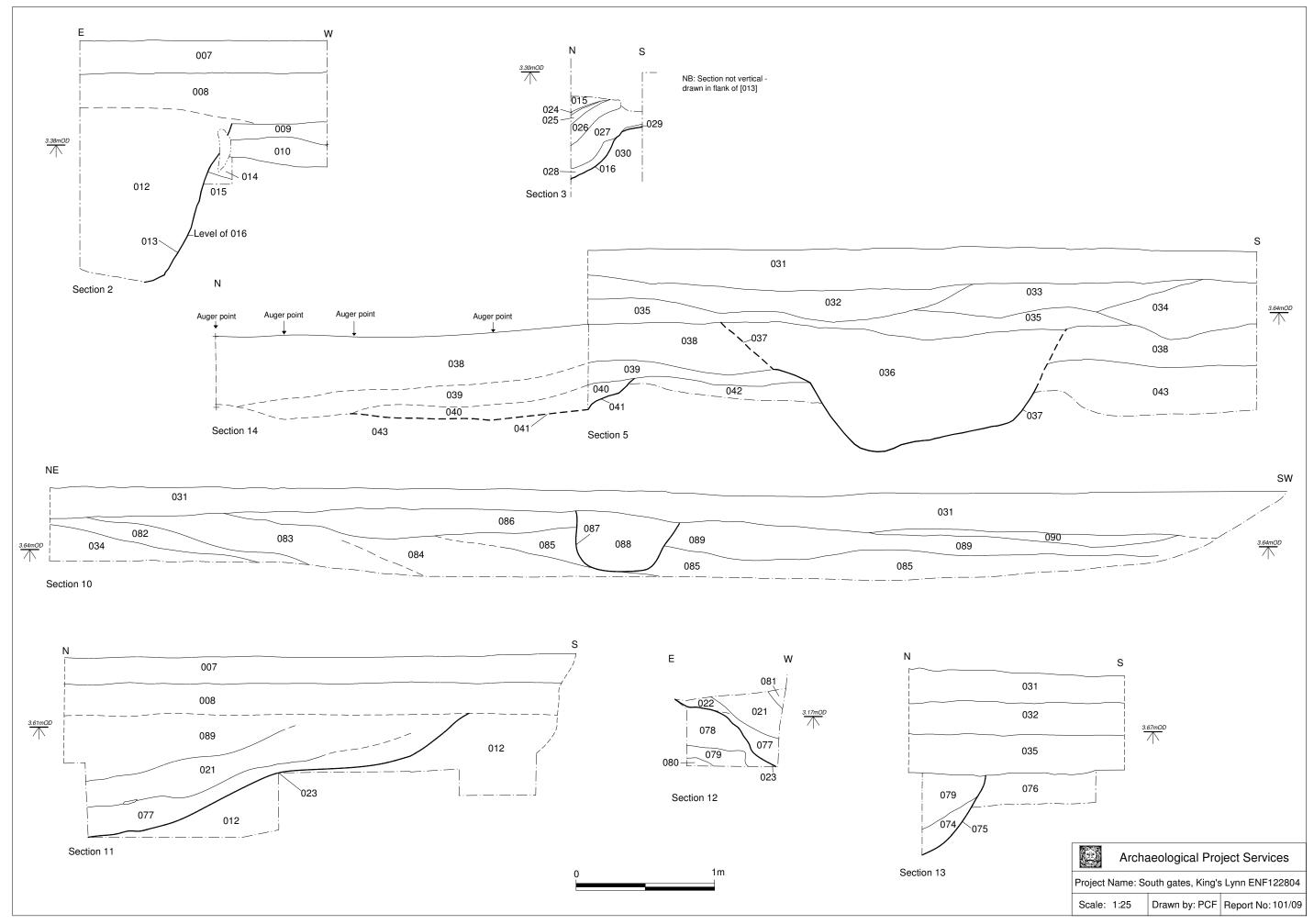


Figure 6 - Trench 2: Sections

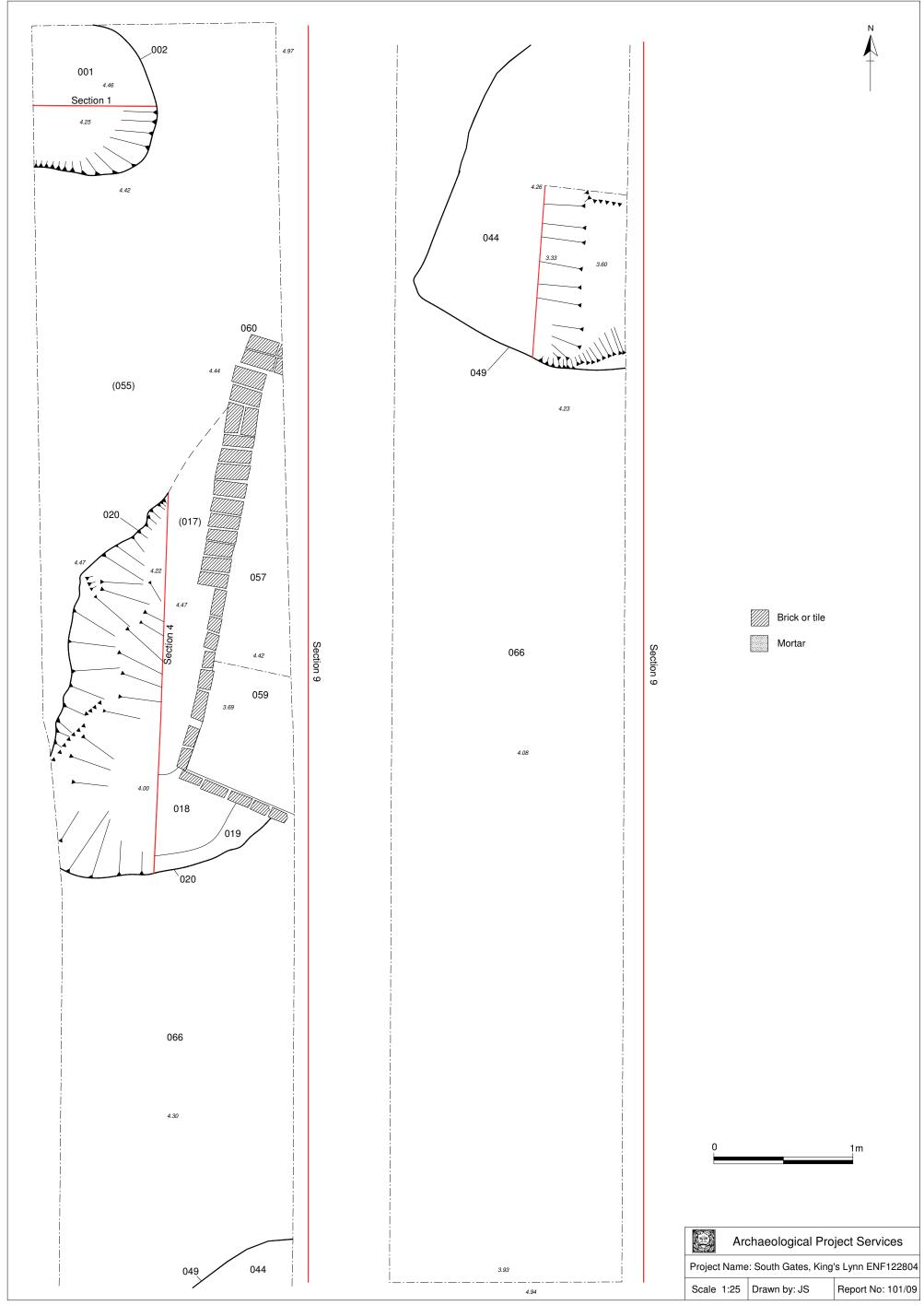


Figure 7 - Trench 3: Plan

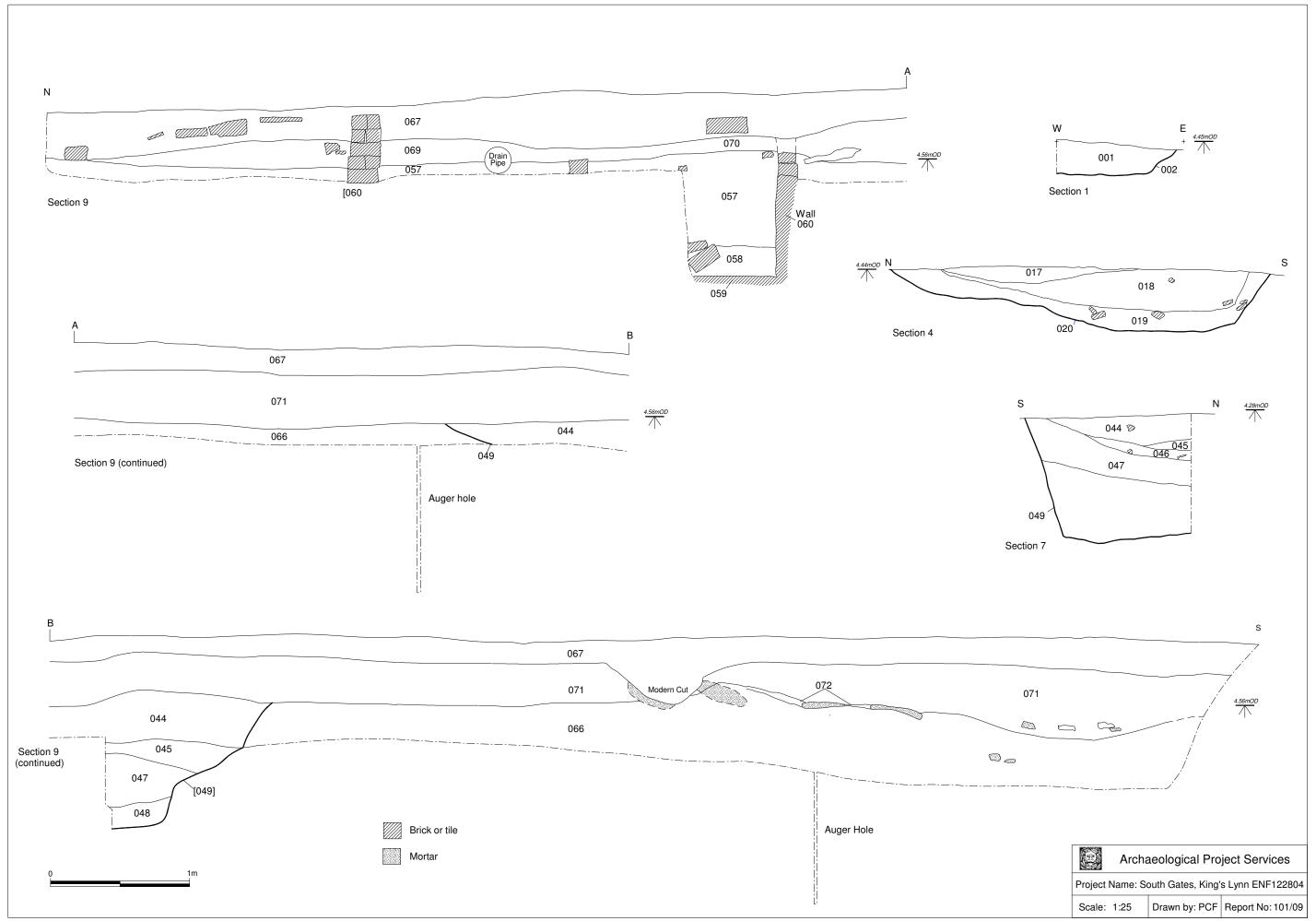


Figure 8 - Trench 3: Sections



Plate 1 – View of South Gates Park during excavation, looking northeast



Plate 2 – Trench 1 prior to excavation, looking northwest



Plate 3 – Trench 1 showing the mortar structure (052), looking northwest



Plate 4 – Trench 2 prior to excavation, looking south



Plate 5 – Trench 2, Section 2 showing feature (013), looking north



Plate 6 – Trench 1, Section 5 showing ditch (037), looking east



Plate 7 – Trench 3 prior to excavation, looking south



Plate 8 – Trench 3, Section 1 showing pit (002), looking north



Plate 9 – Trench 3, Section 4 showing pit (020), looking southeast



Plate 10 – Trench 3, Section 7 showing pit (049), looking northwest



Plate 11 – Trench 3, Victorian cellar (060), looking east



Plate 12 –Clay pipe bowl from (058)

Appendix 1

LAND AT SOUTH GATES PARK, KING'S LYNN, NORFOLK - SPECIFICATION FOR ARCHAEOLOGICAL EVALUATION

1 **SUMMARY**

- 1.1 This document comprises a specification for the archaeological field evaluation of land at South Gates Park, part of the Nar-Ouse Regeneration Area at King's Lynn, Norfolk.
- 1.2 The area is archaeologically sensitive, located immediately adjacent to the medieval South Gate and is crossed by the Civil War defences. These defences were partially refortified in the 18th and early 19th centuries, and demolished sometime later in the 19th century.
- 1.3 A programme of archaeological evaluation by trial trenching is required at the site.
- 1.4 On completion of the fieldwork a report will be prepared detailing the findings of the investigation. The report will consist of a text describing the nature of the archaeological deposits located and will be supported by illustrations and photographs. The investigation will assess the impact of the development on archaeological remains and consider measures to mitigate that impact if necessary.

2 **INTRODUCTION**

- 2.1 This document comprises a specification for the archaeological field evaluation of land at South Gates Park, as part of the Nar-Ouse Regeneration Area, at King's Lynn, Norfolk.
- 2.2 The document contains the following parts:
 - 2.2.1 Overview
 - 2.2.2 The archaeological and natural setting
 - 2.2.3 Stages of work and methodologies to be used
 - 2.2.4 List of specialists
 - 2.2.5 Programme of works and staffing structure of the project

3 **SITE LOCATION**

3.1 King's Lynn is located at the western edge of Norfolk, at the southeastern corner of The Wash. The investigation site is located on the southwestern side of the town, on the east side of London Road, at TF 6224 1917.

4 PLANNING BACKGROUND

4.1 The site is the subject of a pre-application enquiry for regeneration of the area. Norfolk Landscape Archaeology has advised that an archaeological evaluation by trial trenching is required to inform decisions on any planning application that might be submitted, and provided a brief for investigations.

5 SOILS AND TOPOGRAPHY

5.1 The site is on a gentle slope down to the east at c. 4m OD. Local soils have not been mapped as the area is urban. The town sits on deep marine and freshwater silts that overlie Kimmeridge Clay (GSGB 1978).

6 ARCHAEOLOGICAL OVERVIEW

6.1 The site is located just within the defended medieval town of King's Lynn, alongside the South Gate. Built between 1437 and 1440, the gate was the main medieval entrance to the

town from the south and is a Scheduled Ancient Monument and Listed Building. The Middleton Stop Drain, which flows around the south and east sides of the site, perhaps served as a section of defensive town ditch in this area, obviating the need for a constructed one, as used for the defensive circuit elsewhere around the town. During the Civil War of the 1640s the defences were renewed and linked to the South Gate. The projected line of the Civil War defences crosses the northern corner of the site. Works to refortify the South Gate were commenced in 1745 but not completed, and also in the early 1800s. The defences in this area had been demolished by the 1880s when the site was occupied by the Crown Inn.

7 AIMS AND OBJECTIVES

- 7.1 The aim of the work will be to gather sufficient information for the archaeological curator to be able to formulate a policy for the management of the archaeological resources present on the site
- 7.2 The objectives of the work will be to:
 - 7.2.1 Establish the type of archaeological activity that may be present within the site.
 - 7.2.2 Determine the likely extent of archaeological activity present within the site.
 - 7.2.3 Determine the date and function of the archaeological features present on the site.
 - 7.2.4 Determine the state of preservation of the archaeological features present on the site.
 - 7.2.5 Determine the spatial arrangement of the archaeological features present within the site.
 - 7.2.6 Determine the extent to which the surrounding archaeological features extend into the application area.
 - 7.2.7 Establish the way in which the archaeological features identified fit into the pattern of occupation and land-use in the surrounding landscape.

8 LIAISON WITH THE ARCHAEOLOGICAL CURATOR

8.1 Close contact will be maintained with the archaeological curator throughout the investigation to ensure that the scheme of works fulfils their requirements.

9 TRIAL TRENCHING

9.1 Reasoning for this technique

- 9.1.1 Trial trenching enables the *in situ* determination of the sequence, date, nature, depth, environmental potential and density of archaeological features present on the site.
- 9.1.2 The trial trenching arrangement has been specified as a 5% sample of the area, with at least one trench across the projected line of the town defences. This amounts to 3 trenches each 20m x 2m in area.

9.2 General Considerations

- 9.2.1 All work will be undertaken following statutory Health and Safety requirements in operation at the time of the investigation.
- 9.2.2 The work will be undertaken according to the relevant codes of practice issued by the Institute for Archaeologists (IfA). *Archaeological Project Services* is an IFA Registered Archaeological Organisation (No. 21) managed by a member (MIfA) of the institute.
- 9.2.3 All work will be carried out in accordance with accordance with *Standards for Field Archaeology in the East of England* (Gurney 2003) and any revisions of such received

- up to the acceptance of this specification. Additionally, the work will be undertaken in consideration of, and with reference to, the regional research agenda (Glazebrook 1997; Brown and Glazebrook 2000).
- 9.2.4 Any artefacts found during the investigation and thought to be 'treasure', as defined by the Treasure Act 1996, will be removed from site to a secure store and the discovery promptly reported to the appropriate coroner's office.
- 9.2.5 Excavation of the archaeological features exposed will only be undertaken as far as is required to determine their date, sequence, density and nature. Not all archaeological features exposed will necessarily be excavated. However, the investigation will, as far as is reasonably practicable, determine the level of the natural deposits to ensure that the depth of the archaeological sequence present on the site is established.
- 9.2.6 Open trenches will be enclosed by HERAS fencing. Subject to the consent of the archaeological curator, and following the appropriate recording, the trenches, particularly those of excessive depth, will be backfilled as soon as possible to minimise any health and safety risks.

9.3 <u>Methodology</u>

- 9.3.1 Removal of the topsoil and any other overburden will be undertaken by mechanical excavator using a toothless ditching bucket. To ensure that the correct amount of material is removed and that no archaeological deposits are damaged, this work will be supervised by Archaeological Project Services. Should excavations extend below a safe depth (nominally 1.2m but dependent on the nature of the soil conditions) then the trenches will be shored.
- 9.3.2 On completion of the removal of the overburden, the nature of the underlying deposits will be assessed by hand excavation before any further mechanical excavation that may be required. Thereafter, the trenches will be cleaned by hand to enable the identification and analysis of the archaeological features exposed. Investigation of the features will be undertaken only as far as required to determine their date, form and function. The work will consist of half- or quarter-sectioning of features as required and, where appropriate, the removal of layers. Should features be located which may be worthy of preservation *in situ*, excavation will be limited to the absolute minimum, (*ie* the minimum disturbance) necessary to interpret the form, function and date of the features.
- 9.3.2 The archaeological features encountered will be recorded on Archaeological Project Services pro-forma context record sheets. The system used is the single context method by which individual archaeological units of stratigraphy are assigned a unique record number and are individually described and drawn.
- 9.3.3 Plans of features will be drawn at a scale of 1:20 and sections at a scale of 1:10. Should individual features merit it, they will be drawn at a larger scale.
- 9.3.4 Throughout the duration of the trial trenching a photographic record consisting of black and white prints (reproduced as contact sheets) and colour slides will be compiled. The photographic record will consist of:
 - 9.3.4.1 the site before the commencement of field operations.
 - 9.3.4.2 the site during work to show specific stages of work, and the layout of the archaeology within individual trenches.
 - 9.3.4.3 individual features and, where appropriate, their sections.
 - 9.3.4.4 groups of features where their relationship is important.
 - 9.3.4.5 the site on completion of fieldwork
- 9.3.5 Should human remains be encountered, they will be left in situ with excavation being

limited to the identification and recording of such remains. If removal of the remains is necessary the appropriate Home Office licences will be obtained and the local environmental health department informed. If relevant, the coroner and the police will be notified.

- 9.3.6 Finds collected during the fieldwork will be bagged and labelled according to the individual deposit from which they were recovered ready for later washing and analysis.
- 9.3.7 The spoil generated during the investigation will be mounded along the edges of the trial trenches with the topsoil being kept separate from the other material excavated for subsequent backfilling.
- 9.3.8 The precise location of the trenches within the site and the location of site recording grid will be established by a GPS and/or EDM survey.

10 ENVIRONMENTAL ASSESSMENT

10.1 If appropriate, during the investigation specialist advice will be obtained from an environmental archaeologist. The specialist will visit the site and will prepare a report detailing the nature of the environmental material present on the site and its potential for additional analysis should further stages of archaeological work be required. The results of the specialist's assessment will be incorporated into the final report.

11 POST-EXCAVATION AND REPORT

11.1 <u>Stage 1</u>

- 11.1.1 On completion of site operations, the records and schedules produced during the trial trenching will be checked and ordered to ensure that they form a uniform sequence constituting a level II archive. A stratigraphic matrix of the archaeological deposits and features present on the site will be prepared. All photographic material will be catalogued: the colour slides will be labelled and mounted on appropriate hangers and the black and white contact prints will be labelled, in both cases the labelling will refer to schedules identifying the subject/s photographed.
- 11.1.2 All finds recovered during the trial trenching will be washed, marked, bagged and labelled according to the individual deposit from which they were recovered. Any finds requiring specialist treatment and conservation will be sent to the Conservation Laboratory at Lincoln.

11.2 Stage 2

- 11.2.1 Detailed examination of the stratigraphic matrix to enable the determination of the various phases of activity on the site.
- 11.2.2 Finds will be sent to specialists for identification and dating.

11.3 Stage 3

- 11.3.1 On completion of stage 2, a report detailing the findings of the investigation will be prepared. This will consist of:
 - 11.3.1.1 A non-technical summary of the results of the investigation.
 - 11.3.1.2 A description of the archaeological setting of the site.
 - 11.3.1.3 Description of the topography and geology of the investigation area.
 - 11.3.1.4 Description of the methodologies used during the investigation and discussion of their effectiveness in the light of the results.

- 11.3.1.5 A text describing the findings of the investigation.
- 11.3.1.6 Plans of the trenches showing the archaeological features exposed. If a sequence of archaeological deposits is encountered, separate plans for each phase will be produced.
- 11.3.1.7 Sections of the trenches and archaeological features.
- 11.3.1.8 Interpretation of the archaeological features exposed and their context within the surrounding landscape.
- 11.3.1.9 Specialist reports on the finds from the site.
- 11.3.1.10 Appropriate photographs of the site and specific archaeological features or groups of features.
- 11.3.1.11 A consideration of the significance of the remains found, in local, regional, national and international terms, using recognised evaluation criteria.

12 **ARCHIVE**

- 12.1 The documentation, finds, photographs and other records and materials generated during the evaluation will be sorted and ordered in accordance with the procedures in the Society of Museum Archaeologists' document *Transfer of Archaeological Archives to Museums* (1994), and any additional local requirements, for long-term storage and curation. This work will be undertaken by the Finds Supervisor, an Archaeological Assistant and the Conservator (if relevant). The archive will be deposited with the receiving museum as soon as possible after completion of the project, and within 12 months of that completion date.
- 12.2 The archive will be microfilmed. The silver master will be transferred to the RCHME and a diazo copy will be deposited with the Norfolk Historic Environment Record.
- 12.3 Prior to the project commencing, Norfolk Museums Service will be contacted to obtain their agreement to receipt of the project archive and to establish their requirements with regards to labelling, ordering, storage, conservation and organisation of the archive.
- 12.4 Upon completion and submission of the evaluation report, the landowner will be contacted to arrange legal transfer of title to the archaeological objects retained during the investigation from themself to the receiving museum. The transfer of title will be effected by a standard letter supplied to the landowner for signature.

13 **REPORT DEPOSITION**

13.1 Copies of the evaluation report will be sent to: the client, to Norfolk Landscape Archaeology (3 hard copies and 1 digital on CD); two copies for Norfolk Historic Environment Record and one for the local planning authority; and the English Heritage Regional Advisor for Archaeological Science.

14 **PUBLICATION**

- Details of the investigation will be input to the Online Access to the Index of Archaeological Investigations (OASIS).
- 14.2 A note will also be submitted for publication to the journal *Norfolk Archaeology*.
- 14.3 Notes or articles describing the results of the investigation will also be submitted for publication in the appropriate national journals: *Medieval Archaeology* and *Journal of the Medieval Settlement Research Group* for medieval and later remains, and *Britannia* for discoveries of Roman date.

15 CURATORIAL MONITORING

15.1 Curatorial responsibility for the archaeological work undertaken on the site lies with Norfolk Landscape Archaeology. They will be given written notice of the commencement of the project to enable them to make monitoring arrangements.

16 VARIATIONS TO THE PROPOSED SCHEME OF WORKS

- Variations to the scheme of works will only be made following written confirmation from the archaeological curator, the client and their consultant.
- 16.2 Should the archaeological curator require any additional investigation beyond the scope of the brief for works, or this specification, then the cost and duration of those supplementary examinations will be negotiated between the client and the contractor.

17 STAFF TO BE USED DURING THE PROJECT

- 17.1 The work will be directed by Tom Lane MIfA, Senior Archaeologist, Archaeological Project Services. The on-site works will be supervised by an Archaeological Supervisor with knowledge of archaeological evaluations of this type. Archaeological excavation will be carried out by Archaeological Technicians, experienced in projects of this type.
- 17.2 The following organisations/persons will, in principle and if necessary, be used as subcontractors to provide the relevant specialist work and reports in respect of any objects or material recovered during the investigation that require their expert knowledge and input. Engagement of any particular specialist subcontractor is also dependent on their availability and ability to meet programming requirements.

<u>Task</u> <u>Body to be undertaking the work</u>

Conservation Conservation Laboratory, City and County Museum, Lincoln.

Pottery Analysis Prehistoric: Dr D Knight/D Trimble, APS

Roman: B Precious, independent specialist/Dr A Boyle, APS

Post-Roman: Dr A Boyle, APS

Other Artefacts J Cowgill, independent specialist/G Taylor, APS

Human Remains Analysis J Kitch, independent specialist

Animal Remains Analysis J Kitch, independent specialist/P Cope-Faulkner APS

Environmental Analysis Environmental Archaeology Consultancy/V Fryer, independent

specialist

Radiocarbon dating Beta Analytic Inc., Florida, USA

Dendrochronology dating

University of Sheffield Dendrochronology Laboratory

18 PROGRAMME OF WORKS AND STAFFING LEVELS

- 18.1 Fieldwork will be undertaken by appropriate staff, including supervisors and assistants, and to take about 5 days if shoring is NOT needed, or 10 days if shoring is required.
- 18.2 Post-excavation analysis and report production will take about 10 days if the trenches are shallow and unshored, or 15 days if they are deep and shored. A project officer or supervisor will undertake most of the analysis, with assistance from the finds supervisor, CAD illustrator and external specialists.

19 INSURANCES

19.1 Archaeological Project Services, as part of the Heritage Trust of Lincolnshire, maintains

Employers Liability insurance to £10,000,000. Additionally, the company maintains Public and Products Liability insurances, each with indemnity of £5,000,000. Copies of insurance documentation are enclosed.

20 **COPYRIGHT**

- 20.1 Archaeological Project Services shall retain full copyright of any commissioned reports under the *Copyright, Designs and Patents Act* 1988 with all rights reserved; excepting that it hereby provides an exclusive licence to the client for the use of such documents by the client in all matters directly relating to the project as described in the Project Specification.
- 20.2 Licence will also be given to the archaeological curators to use the documentary archive for educational, public and research purposes.
- 20.3 In the case of non-satisfactory settlement of account then copyright will remain fully and exclusively with Archaeological Project Services. In these circumstances it will be an infringement under the *Copyright, Designs and Patents Act* 1988 for the client to pass any report, partial report, or copy of same, to any third party. Reports submitted in good faith by Archaeological Project Services to any Planning Authority or archaeological curator will be removed from said Planning Authority and/or archaeological curator will be notified by Archaeological Project Services that the use of any such information previously supplied constitutes an infringement under the *Copyright, Designs and Patents Act* 1988 and may result in legal action.
- 20.4 The author of any report or specialist contribution to a report shall retain intellectual copyright of their work and may make use of their work for educational or research purposes or for further publication.

21 BIBLIOGRAPHY

Brown, N. and Glazebrook, J. (eds), 2000 Research and Archaeology: A Framework for the Eastern Counties, 2. Research agenda and strategy, East Anglian Archaeology Occasional Papers 8

Glazebrook, J (ed), 1997 Research and Archaeology: A Framework for the Eastern Counties, 1. resource assessment, East Anglian Archaeology Occasional Papers 3

GSGB, 1978 King's Lynn and The Wash, solid and drift edition, 1:50000 map sheet 145 with parts of 129

Gurney, D, 2003 Standards for Field Archaeology in the East of England, ALGAOEE

Roe, A., 2005 Nar Ouse Regeneration Area: Cultural Heritage Recommendations for Future Strategy and Works, unpublished Scott Wilson report D104633

Specification: Version 1, 06/04/09

CONTEXT DESCRIPTIONS

No.	Trench	Description	Interpretation
001	3	Firm mid brown silty sand	Fill of (002)
002	3	Sub-circular feature, 1.05m long by >0.88m wide and 0.23m deep, steep sides and flattish base	Pit
003	1	Soft light greyish brown sandy silt	Dumped deposit
004	1	Soft mid greyish brown silt, 0.45m thick	Demolition deposit
005	1	Soft and friable mid brown silt with frequent brick/tile and mortar fragments	Demolition deposit
006	1	Soft and friable light greyish brown silt, 0.7m thick	Alluvial deposit
007	2	Soft dark brownish grey sandy silt, 0.23m thick	Topsoil
008	2	Soft mid brown silt, 0.33m thick	Subsoil
009	2	Soft dark brownish grey sandy silt, 0.15m thick	Dumped deposit
010	2	Soft mid to light brown silt	Dumped deposit
011			
012	2	Soft light brown silt	Fill of (013)
013	2	?linear feature, aligned northwest-southeast, >5m long by >1.8m wide by 1.2m deep, near vertical sides and flattish base	?ditch
014	2	Soft light brown silt	Fill of (016)
015	2	Firm mid reddish brown clayey silt	Fill of (016)
016	2	Feature, >0.38m long by >0.38m wide by >0.45m deep, steep sides not fully excavated	?pit
017	3	Firm mid yellowish brown silty sand, 100mm thick	Fill of (020)
018	3	Friable dark grey sand and cinders	Fill of (020)
019	3	Firm mid brown silty sand	Fill of (020)
020	3	Irregular feature, 2.75m long by >1.6m wide by 0.49m deep, steep sides with rounded base	Pit
021	2	Firm dark greyish brown silt	Fill of (023)
022	2	Soft light brown sandy mortar	Fill of (023)
023	2	Sub-rectangular feature, >4m long by >0.85m wide by 0.89m deep, steep sides and rounded base	Pit
024	2	Soft mid red fired clay fragments, 20mm thick	Dumped deposit
025	2	Soft light brown silt	Fill of (016)
026	2	Soft mid reddish brown clayey silt	Fill of (016)
027	2	Soft light brown silt	Fill of (016)
028	2	Soft light bluish grey silt	Fill of (016)
029	2	Soft mid grey clayey silt, 20mm thick	Dumped deposit
030	2	Soft light brown silt, 0.6m thick	Dumped deposit
031	2	Friable mid grey sandy silt, 0.3m thick	Topsoil
032	2	Friable light grey sandy silt with rubble, 0.23m thick	Dumped deposit
033	2	Friable light brown sandy silt, 0.24m thick	Levelling deposit
034	2	Firm light brown sandy silt, 0.39m thick	Dumped deposit
035	2	Firm light brown sandy silt, 0.22m thick	Dumped deposit
036	2	Firm to soft mid greyish brown silt	Fill of (037)
037	2	Linear feature, aligned east-west, 2.47m wide by 0.88m deep, steep sides and rounded base	Ditch
038	2	Soft light brown silt, 0.26m thick	Dumped deposit
039	2	Soft mid greyish brown silt, 0.11m thick	Dumped deposit
040	2	Soft light brown and grey silt	Fill of (041)

No.	Trench	Description	Interpretation
041	2	Linear feature, aligned east-west, 2m wide by 0.16m deep, gradual sides and flattish base	Ditch
042	2	Soft light brown silt, 0.13m thick	Dumped deposit
043	2	Soft light brown laminated silt, 1.04m thick	Natural deposit
044	3	Firm mid yellowish brown silty sand	Fill of (049)
045	3	Firm mid brown with red mottled silty sand	Fill of (049)
046	3	Firm mid greenish grey clay and mid brown silty sand	Fill of (049)
047	3	Firm mid brown silty sand	Fill of (049)
048	3	Firm mid to dark brown silty sand	Fill of (049)
049	3	Irregular feature, 2.3m long by >1.55m wide by 0.89m deep, steep to vertical sides and stepped base	Pit
050	1	Firm mid brownish grey silt with frequent brick/tile and chalk fragments, 0.65m thick	Topsoil
051	1	Soft light yellowish brown silt, 0.48m thick	Levelling deposit
052	1	Mortar structure, three sides recorded, 100mm thick by 0.65m high	?cellar wall
053	1	Soft and friable light brown silt with frequent mortar fragments, 0.32m thick	Demolition deposit
054	1	Firm light grey mortar, 0.58m thick	Demolition deposit
055	1	Soft light yellow lime mortar, 0.16m thick	Surface
056	1	Soft and friable light brown silt and mortar with frequent brick/tile fragments, 0.55m thick	Demolition
057	3	Firm mid brown silt and clay	Backfill within (060)
058	3	Friable dark greyish brown silty sand with frequent pot	Backfill within (060)
059	3	Brick (219mm x 106mm x 61mm) structure, laid flat	Surface
060	3	Brick (237mm x 112mm x 68mm) structure, English or English Cross bond, 3.23m long by >0.8m wide by 0.88m high	Cellar wall
061	Cancelled	context	T
062	1	Firm mid brownish grey clayey silt	Dumped deposit
063	1	Mortar structure, part of (052)	?cellar wall
064	3	Rectangular feature, 3.24m long by >0.8m wide by 0.9m deep, vertical sides and flat base	Cut for (060)
065	3	Firm mid yellowish brown sand	Dumped deposit
066	3	Firm mid yellowish brown sand, >1m thick	Alluvial deposit
067	3	Firm dark grey silty sand, 0.17m thick	Topsoil
068	3	Truncation, flat base	Clearance cut
069	3	Firm mid to dark brown silty sand, 0.2m thick	
070	3	Firm mid yellowish brown silty sand	Backfill within (060)
071	3	Firm light to mid brown silty sand, 0.35m thick	Dumped deposit
072	3	Firm light yellow/white mortar, 40mm thick	Dumped deposit
073	2	Soft mid yellowish brown silt	Fill of (075)
074	2	Firm mid grey clayey silt	Fill of (075)
075	2	Sub-rectangular feature, >0.5m long by >0.45m wide by 0.6m deep, steep sides not fully excavated	?ditch
076	2	Soft light greyish brown clayey silt, 0.22m thick	Dumped deposit
077	2	Soft mid brown silt	Fill of (023)
078	2	Soft light brown silt, 0.27m thick	Dumped deposit
079	2	Soft mid greyish brown silt, 100mm thick	Dumped deposit
080	2	Soft light brown silt	Fill of (075)
081	2	Soft mid greyish brown and light brown silt, 0.46m thick	Dumped deposit
082	2	Friable light greyish brown silt with frequent gravel, 0.12m thick	Dumped deposit

No.	Trench	Description	Interpretation
083	2	Friable light brown silt, 0.3m thick	Dumped deposit
084	2	Firm light brownish grey clayey silt	Dumped deposit
085	2	Firm light greyish brown clayey silt, 0.27m thick	Dumped deposit
086	2	Loose dark yellow sand and gravel, 0.12m thick	?former path
087	2	Feature, 0.7m wide by 0.4m deep, steep sides and flat base	Planting trench
088	2	Soft and friable mid greyish brown silt	Fill of (087)
089	2	Soft mid reddish grey sandy silt, 0.28m thick	Dumped deposit
090	2	Soft light grey silt with frequent ash and charcoal, 100mm thick	Dumped deposit
091	2	Soft mid bluish grey silt, >0.55m thick	Natural deposit

THE FINDS

POST ROMAN POTTERY

By Anne Boyle and Ross Kendall

Introduction

All the material was recorded at archive level in accordance with the guidelines laid out in Slowikowski *et al.* (2001). The pottery codenames (Cname) are in accordance with the Post Roman pottery type series for Lincolnshire, as published in Young *et al.* (2005) which also covers surrounding counties. A total of 142 sherds from 78 vessels, weighing 5195 grams was recovered from the site.

Methodology

The material was laid out and viewed in context order. Sherds were counted and weighed by individual vessel within each context. The pottery was examined visually and using x20 magnification. This information was then added to an Access database. An archive list of the pottery is included in Archive Catalogue 1, with a summary in Table 1. The pottery ranges in date from the medieval to the early modern period.

Condition

The pottery is in mixed condition, with the earlier pottery being more highly fragmented. Several of the post medieval and early modern vessels are complete, near complete or have extant profiles. This is due to their deposition within cellar deposits, resulting in little or no disturbance. A single cross-context vessel (V01) is present.

Results

Table 1, Post Roman Pottery Archive

Cname	Full name	Earliest date	Latest date	NoS	NoV	W (g)
BL	Black-glazed wares	1550	1750	1	1	16
BOSTTT	Boston Glazed ware - Toynton type	1230	1330	2	2	15
DST	Developed Stamford ware	1150	1230	2	1	5
DUTRT	Dutch Red Earthenware-types	1550	1650	2	2	5
EMHM	Early Medieval Handmade ware	1100	1250	16	16	46
ENGS	Unspecified English Stoneware	1690	1900	4	3	1344
ENPO	English Porcelain	1750	1900	1	1	7
GRE	Glazed Red Earthenware	1500	1650	29	10	819
GRIM	Grimston ware	1200	1550	17	16	138
LERTH	Late Earthenwares	1750	1900	1	1	147
MART	Martincamp stoneware	1450	1700	6	2 (1*)	38
MISC	Unidentified types	-	-	8	8	6
PEARL	Pearlware	1770	1900	50	15	2593
RGRE	Reduced glazed red earthenware	1600	1850	3	1	16
			TOTAL	142	79 (78*)	5195

^{*}excludes cross-context vessel

Provenance

Pottery was retrieved from the fills of pits [002], [020], [023], [049], linear [013], ditch [037], the backfill of a cellar (005) and as dumped deposits (038), (042) and (065). Pit [020] contained a group of 16th to 17th century Glazed Red Earthenwares. Contexts (057) and (058) are the backfill against cellar wall (060). The latter two deposits contain a nice group of 18th to early/mid 19th century vessels.

Range

A single early medieval Developed Stamford ware is present (DST), as are 34 Early Medieval Handmade (EMHM), Grimston (GRIM) and Boston Toynton Type Wares (BOSTTT). The latter also occur and require comparison with other examples to be certain of their identification, as this recently defined ware type has not previously been identified in assemblages from King's Lynn. A single continental import, a Martincamp flask, was recovered from contexts (017) and (018). Post medieval glazed earthenwares (BERTH, BL, GRE, RGRE) comprise the usual range of jars/pipkins and bowls, including two small bowls/dishes. Several vessels of 18th and 19th century date are complete or near complete and include several Pearlware mugs with slip banded mocha decoration, oval dishes and stoneware jam or lard pots.

Potential

Further work could be carried out on the Early Medieval Handmade wares and those vessels whose provenance is uncertain. Two vessels are suitable for illustration. In-depth stratigraphic analysis of the pottery, particularly in relation to other finds from the site, may contribute further to understanding the dating and development of the site. All the pottery is stable and poses no problems for long term storage.

Summary

A mixed group of medieval, post medieval and early modern pottery was retrieved from 18 contexts. All the medieval pottery appears to be redeposited, with the post medieval and early modern vessels more likely representing undisturbed material.

CERAMIC BUILDING MATERIAL

By Anne Boyle and Ross Kendall

Introduction

All the material was recorded at archive level in accordance with the guidelines laid out by the ACBMG (2001). A total of 375 fragments of ceramic building material, weighing 38250 grams were recovered from the site.

Methodology

The material was laid out and viewed in context order. Fragments were counted and weighed within each context. The ceramic building material was examined visually and using x20 magnification. This information was then added to an Access database. An archive list of the ceramic building material is included Archive Catalogue 2, with a summary in Table 2.

Condition

Most of the assemblage is quite fresh and contains some complete and near complete examples, particularly of brick. This is reflected in the average fragment weight of 102 grams. Evidence for use comes from mortar on 75 examples, although only two pieces display mortar over broken edges, which would indicate that brick and tiles were cut to shape post-firing and possibly reused. Twenty-one fragments are abraded, probably as a result of post-depositional conditions.

Results

Table 2, Ceramic Building Material Archive

Cname	Full name	NoS	W (g)
BRK	Brick	33	23852
CBM	Ceramic building material	194	2754
FCLAY	Fired Clay	1	7
FLOOR	Floor tile	1	101
MTIL	Medieval tile (unspecified)	1	12
PEG	Peg tile	24	2807
PNR	Peg, nib or ridge tile	102	7364
RID	Unidentified ridge tile	19	1353
	TOTAL	375	38250

Provenance

Undated brick and tile was recovered from deposits (009), (038), (056). Post-medieval and early modern brick and tile was recovered from possible demolition layer (005), pit [020], ditch (037) and cellar deposits (057), (059) and (060). Medieval brick and tile was recovered from deposits (003), (010), (044), (065), pits [102], [013], [023], [049]

Range

Of the 375 fragments, 194 are non-diagnostic flakes and recorded in the archive as Ceramic Building Material (CBM); many of these are probably pieces of brick.

Brick

The bricks had, on the whole, very similar fabrics which fall into the typical calcareous "Fenland" type. These are produced from the 12th century to the early modern period and are extremely difficult to date, although manufacturing methods and Clarke and Carter's typology (1977, 441-42) was used to date as many examples as possible. Evidence for manufacture is present in the form of stacking scars, bedding, trimming and moulding. Twenty-eight (85%) of the brick fragments are handmade and twelve of the brick fragments (37%) are either

partially or mostly vitrified. The presence of vitrified bricks is not necessarily indicative of poor manufacturing techniques, as often these have a decorative use. Further investigation of the brick features in relation to site stratigraphy may reveal patterns of manufacture which could have chronological/typological significance. The bricks most like date to the later medieval and post medieval periods.

Tile

Roofing

A large group of flat roofing tiles (PNR and RID), including 24 examples of pegtile (PEG), was recovered. The majority of these are manufactured from Gault clay. Macroscopic examination of this collection suggests the range of fabrics and suspension method is similar to that excavated from Greyfriars Tower, the Littleport Street garage site and the assemblage from the Boal Quay. It is worthy of note that 77% of the roofing tiles are either partially or mostly vitrified. This could be the result of poor manufacture or the tiles being subjected to intense heat (for example, during a fire).

Floor

One possible Gault clay floor tile was recovered which may be of medieval date, although its condition was too poor to assign a particular style

Potential

Further work should be carried out to characterise the bricks from different periods and the medieval roofing tile could undergo microscopic fabric analysis. In-depth stratigraphic analysis of the ceramic building material, particularly in relation to other finds from the site, may contribute further to understanding the dating and development of the site. All of the material is stable and poses no problems for long-term storage.

Summary

A substantial assemblage of brick and tile was retrieved from the site. There is a fairly even divide between post-medieval and medieval dates for the collection.

FAUNAL REMAINS

By Paul Cope-Faulkner and Gary Taylor

Introduction

A total of 734 (3302g) fragments of faunal remains were recovered from stratified contexts, comprising mammal, fish, bird, mollusc and amphibian remains. The remains were identified using published catalogues.

Provenance

The animal bone was collected from the fills of pits (001, 017, 018, 019, 021, 022, 044, 047 and 048), the fill of a ditch (036), the backfill within a cellar (058) and from layers (003, 005, 010, 053 and 065).

The mollusc shell was recovered from pit fills (001, 017, 022) and layers (005, 010).

Condition

The overall condition of the remains was good to moderate. Bones recovered from the samples tended to be very fragmentary and mostly unidentifiable.

Results

An archive list for the animal bones are included in the archive catalogues at the end of this appendix.

Mollusc remains are shown in table 3 below.

Table 3, Molluscs

Cxt	Taxon	Element	Side	Number	W (g)	Comments
	oyster	shell	top	1	10	
001	cockle	shell		1	1	
001	mussel	shell		4	1	
	tellin	shell		1	1	
	oyster	shell	bottom	2	44	
005	cockle	shell		1	1	
003	mussel	shell		4	6	
	tellin	shell		1	1	
010	cockle	shell		1	4	

Cxt	Taxon	Element	Side	Number	W (g)	Comments
	Garden snail	shell		1	3	
017	oyster	shell	T&B	3	112	
	cockle	shell		3	1	
	mussel	shell		2	1	
	tellin	shell		10	1	
022	scallop	shell		1	1	
	whelk	shell		5	72	
	winkle	shell		1	1	
036	oyster	shell	T&B	5	84	
Totals				178	554	

Summary

The assemblage is dominated by the principal meat producing animals, cattle and sheep goat. Pig rarely occurs, although is present in a 17th century pit and a medieval deposit. Horse may also have been eaten, though there are no recorded butchery marks present.

Of the smaller mammals recorded, none were identified to species. Mice and rats may account for some of these bones, but the presence of rabbit and a cat at the site are perhaps responsible for some more.

Bird bone retrieved from the investigation includes those tentatively identified as goose and chicken. No eggshell was identified in the samples.

Fish were recovered from samples taken during the course of the evaluation. Most of the fish remains are small, perhaps of herring, though one large vertebra from a cod or ling was also retrieved. Any further work at the site should allow for the identification of the fish bone to species level. Amphibians, either frogs or newts, were also identified in the samples and would be expected in this locality adjacent to a watercourse.

Almost all of the mollusc shells are marine, and while some are likely to be food waste there are numerous examples of small or very small shells that would not have yielded useful food. Consequently, it is possible that some of the material was recovered by dredging or possibly on seaweed gathering.

GLASS

By Gary Taylor

Introduction

A moderate-large quantity of glass, 24 items weighing a total of 3837g, was recovered.

Condition

Although naturally fragile, all of the glass is in good condition. Many of the pieces exhibit iridescent decay. One-third of the glass items from (058) are complete.

Results

Table 4, Glass Archive

Cxt	Description	NoF	W (g)	Date
017	Colourless (very pale green) window, diamond-shaped quarries, grozed edges, much iridescence	2	12	17 th -18 th century
019	Colourless (very pale green) window	1	1	Late post- medieval
058	Very pale blue-green Hamilton bottle, embossed: WADSWORTH, SODA WATER, MANUFACTURERS, S ^T IVES, much iridescence, incomplete, mid-late 19 th century	1	364	Late 19th-early 20th century
	Very pale green Hamilton bottle, embossed: STOCKER & Co, Superior Gingerade, STIVES, much iridescence, complete, mid-late 19th century	1	444	
	Very pale green Hamilton bottle, embossed: FROM THE CAMBRIDGE, SODA WATER, STEAMWORKS, PROPRIETORS, LATE, H LYON & Co, slight iridescence, complete, mid-late 19 th century	1	454	
	Pale green glob-top torpedo bottle, embossed punt mark: X, moderate iridescence, complete, mid-late 19 th century	1	445	
	Very pale green Codd bottle, embossed: E. EYRE & C ^O , KINGS LYNN, CODDS PATENT, MAKERS, CODD & RYLANDS, BARNSLEY, moderate iridescence, complete, late 19 th century	1	600	

Cxt	Description	NoF	W (g)	Date
	Very pale green Codd bottle, embossed: E. EYRE & C ^Q , KINGS LYNN, J. W. DOBSONS, PATENT, BARNSLEY, complete, late 19 th century	1	384	
	Very pale blue flat hexagonal bottle, slight iridescence, complete, late 19th century	1	96	
	Colourless phial, complete, late 19th-early 20th century	1	21	
	Colourless fluted beaker, base only, late 19th-early 20th century	1	45	
	Colourless drinking glass, plain top, fluted lower sides, incomplete, late 19 th -early 20 th century	1	17	
	Colourless fluted beaker, base only, late 19th-early 20th century	1	30	
	Colourless moulded salt, scalloped rim, slight iridescence, incomplete, late 18th-early 19th century	2(link)	84	
	Colourless drinking glasses, slight-moderate iridescence, incomplete, late 19 th -early 20 th century	3(2 link)	32	
	Colourless decanter stopper, cut decoration, facets on edge, 8-point cross on top, moderate iridescence, complete, late 18th-early 19th century	1	40	
	Pale yellow-green flask/jug?, moderate iridescence, incomplete, 19th century	1	25	
	Colourless drinking glass, moderate iridescence, incomplete, 19th century	1	260	
	Colourless drinking glass, heptagonal stem, incomplete, 19th-early 20th century	1	180	
	Pale yellow rummer, moderate iridescence, incomplete, late 18th-early 19th century (c. 1800-1840)	1	303	
Totals		24	3837	

Provenance

The glass was recovered the fills of pits (017, 019), and the backfill within a cellar (058).

There are two bottles that contained products manufactured in St. Ives, Cambridgeshire, and another from Cambridge. There are also two bottles that originally held beverages locally-made in King's Lynn.

Range

Bottles and drinking vessels dominate the assemblage, though there are also a few other vessels (including a probable flask or jug, a decanter stopper and a salt) and windows. All of the glass is post-medieval, with most of it 19th century.

One of the bottles from St Ives contained a drink made by the Wadsworth mineral water works, which was established in 1869. Both King's Lynn bottles were from the Eyre brewery, founded in 1820. They began to trade under the name Eyre and Company in 1857 and, after 1878, as Elijah Eyre & Co (www.norfolkbottles.com/gowiths.htm).

In addition to the bottles there are fairly numerous pieces of drinking glasses. Amongst these is the greater part of a rummer in pale yellow coloured glass. This has a typically short stem with a collar beneath the ovoid bowl. A similar example, though with a conical bowl, has been published and dated to c. 1825-35 (Cleveland 1959, plate 20). Other pieces associated with liquid containers include part of a probable flask or jug and a decanter stopper.

Parts of a salt were also found.

Additionally, a few pieces of window glass were recovered, two of them being from diamond-shaped panels.

Potential

For the most part the main potential of the glass is as dating evidence. However, the vessels suggest waste dumping, particularly in the 19th century. Moreover, the nature of this glass, comprising mineral water bottles, drinking glasses of various kinds, a decanter stopper and a possible flask, relate to the historically-attested public house on the site. Consequently, they indicate the drinking establishment was operational from at least the late 18th century until the early 20th century.

The window fragments probably indicate that buildings with leaded glazing were located nearby during the 17th-18th centuries.

CLAY PIPE

By Gary Taylor

Introduction

Analysis of the clay pipes followed the guidance published by Davey (1981) and the material is detailed in the accompanying table.

Condition

All of the clay pipe is in good condition.

Results

Table 5, Clay Pipes

Context		Bore	diamete	r /64"		NoF	W/a)	Comments	Date
no.	8	7	6	5	4	NOF	W(g)	Comments	Date
001				1		1	3	stem	18 th century
017	26	4	2			32	155	Incl.4 bowls & 2 bowl frags, all similar to Atkins type 5, c. 1630-60. 2 mouthpieces	c. 1630- 60; bore date 1643
018	100	26	1			129	565	Incl.22 bowls & 2 bowl frags.with no bore	c. 1630- 60; bore date 1642
019	4	3				7	38	Incl.2 bowls, both similar to Atkins type 5, c. 1630-60. 1 mouthpiece	c. 1630- 60
057		1				1	5	Bowl frag, similar to Atkins type 5, c . 1630-60	c. 1630- 60
058				6	2	8	81	Incl.6 bowls,all decorated/marked. 2 bird's claw (c. 1830-70); 1 with a floral band of rose, thistle and shamrock (c. 1830-80); 1 with leaves on mould seam (c. 1840-80); and 1 with a figural elephant head, perhaps French or London (c. 1880-1900). There is also a plain bowl of c. 1840-60 with the initials JE stamped on the spur	c. 1880- 1900
Totals	130	34	3	7	2	178	847		

Provenance

The clay pipes were recovered from pit fills (001, 017, 018, 019) and cellar wall backfills (057, 058).

Range

A large quantity of clay pipe fragments was recovered from Southgates Park, 178 pieces weighing a total of 847g. The great majority are similar to Atkin's type 5 of the period c. 1620-50 (Atkin 1985, 126-7) and also Oswald's general type 5, of c. 1640-60 (Oswald 1975, 37-40). One pit, (020), yielded almost all of these 17^{th} century examples, with 166 (93%) of the total pipe assemblage being retrieved from the three fills (017, 018, 019) of this pit.

It has been found, through the examination of complete pipes from the wreck of the *Vergulde Draeck* which sank off Western Australia in 1656, that two different size moulding wires were used to make the stem bores at that time (Higgins 1995, 50-1) and that, therefore, statistical methods of dating based on bore measurements are suspect. However, bore dating methods have been found previously to provide reliable dates (Walker 1967, 96-7) and were, therefore, applied to the two large, coherent groups of pipes from contexts (017) and (018). Using these methods, context (017) had a Binford date of 1635 and a Hanson date of 1643, while (018) was 1634 by the Binford formula and 1642 by Hanson's technique (Oswald 1975, 92-3). The Binford dates are probably too early and the chronology provided by the Hanson equation is likely to be more accurate. Moreover, these dates concord with those indicated by the bowl forms which, consistently, are of the period *c*. 1630-60.

Several decorated pipes were retrieved from (058). Bird's claw pipes, of which two examples were recovered, seem to date from as early as 1830-40, but are more common after 1850 and perhaps extend into the early 20th century (Graf 1998, 31-2). One pipe has a central band showing the flowers of England, Scotland and Ireland. Pipes with these floral motifs date from about 1830 and may be commemoratives relating to the coronation of William IV in 1830 (Mann 1977, 41-2). However, these floral patterns may also have a socio-political significance and relate to the Reform Act of 1832 (Le Cheminant 1996). The bowl form of this King's Lynn example probably dates to the latter part of the period for such decoration, probably c. 1860-80.

Another pipe from the same context has leaves on the front mould seam (but not the back). This is probably the commonest, and simplest, decorative motif found on pipes. In addition, there is a plain spurred bowl with the initials JE. These initials have not been identified. There was a Lynn pipemaker by the name of John Esdaile operating about 1820 (Atkin 1985, 147), but the bowl form is later than this, and Esdaile is not known to have marked his pipes.

There is also a figural pipe bowl of an elephant's head (Plate 12). This is near-identical to examples produced by the Gambier (French) pipe-making firm in the period 1880-1900 (Pijpenkabinet nd). However, the Gambier examples are made as stub-stemmed pipes with a short stem that ends in a collar into which is fitted a separate stem of bamboo or other materials (*ibid*.), whereas the present example appears to have had an ordinary incorporated stem. While this King's Lynn example may also be a French product it is perhaps more likely to be an English copy of probably London origin. Other figural pipes, mimicking French and Belgian originals but manufactured in London, have previously been recognised (Woodcock 1989, 19).

Potential

The clay pipes have moderate potential and high local significance. The large mid-17th century groups are likely to relate to activity in the area during the Civil Wars of 1642-51. The group of decorated/marked pipes is also of note, particularly the figural example, which is likely to be at least a regional import, if not a foreign one.

METAL FINDS

By Gary Taylor

Introduction

A moderate quantity of metal objects, 27 items weighing a total of 423g, were recovered.

Condition

All of the metal items are in good condition though the iron, in particular, is corroded.

Results

Table 6, Metals

Cxt	Material	Description	NoF	W (g)	Date
003	iron	nail	1	17	
	iron	nail	1	13	
005	iron	Nail?	1	6	
	Copper alloy	Pins/tacks	2	1	
010	iron	nails	2	13	
018	iron	Nail?	1	9	
010	iron	Rectangular strip	1	53	
	iron	nail	1	17	
019	iron	Horseshoe?	1	213	
	iron	Nail/hook?	1	24	
021	iron	Blade?	1	18	
022	Copper alloy	Buckle, 13th-15th or 17th century	1	2	13 th -15 th or
022	Copper alloy	Buckle? Very fragmented	10	1	17 th century
036	iron	nail	1	22	
038	iron	nail	1	13	
047	Copper alloy	Unidentified minute fragment	1	1	
Totals		•	27	423	

Provenance

The metals were recovered from dumped deposits (003, 010, 038), demolition deposit (005), pit fills (018, 019, 021, 022, 047), ditch fill (036), and cellar wall backfill (058).

Range

Iron dominates the small assemblage though copper alloys were also recovered. Most of the iron objects appear to be nails, though there is also a probable horseshoe fragment and a blade.

There are a couple of copper alloy tacks/pins and two buckles, the more compete example being similar to other buckles and strap fasteners found in Norwich and there dated from the 13th-15th centuries (Margeson 1993, 37-8). It also resembles shoe buckles of 17th century date (Read 1988, figs 26-7).

Potential

The metal items are of limited potential.

OTHER FINDS

By Gary Taylor

Introduction

A large quantity of other finds, though mostly small or very small items, were recovered. Many of these small items were retrieved by sieving.

Condition

All of the other finds are in good condition, though the mortar is friable.

Results

Table 7, Other Materials

Cxt	Material	Description	NoF	W (g)	Date
	Industrial residue	Iron smithing slag	1	2	
001	Industrial residue	Magnetic material, including rare plate hammerscale	-	1	
001	coal	Coal/clinker	c40	3	
	mortar	Off-white mortar	c25	42	
	coal	Coal/cinder	c20	50	16 th
	charcoal	charcoal	4	1	century?
	clinker	clinker	10	3	
005	Industrial residue	Magnetic material, including rare plate and spheroidal hammerscale	•	1	
	mortar	Off-white mortar, 1 whitewashed	c100	352	
	bone	Socketed tool, 16mm dia hole in articular end, shaft cut obliquely to form wedge shape, heavily polished through use, 16th century?	1	135	
010	Industrial residue	Iron smelting slag	1	15	
010	Industrial residue?	Ferrous concretion	1	25	
012	Industrial residue	Unidentified slag	1	1	
017	limestone	ashlar	1	-	
018	cinder	cinder	3	13	
	coal	Coal/clinker	c25	3	
022	Industrial residue	Iron smithing slag	1	1	
022	Industrial residue	Magnetic material, including rare plate hammerscale	1	1	
	mortar	Off-white mortar	c20	39	
	coal	Coal/clinker	c30	1	
036	Industrial residue	Magnetic material, including moderate plate and rare spheroidal hammerscale	1	1	
	Industrial residue?	Ferrous concretion	1	4	
	mortar	Off-white mortar	c30	32	
039	Industrial residue	Plano-convex hearth bottom, iron smithing slag	1	254	
047	coal	Coal/clinker	c100	10	
	Industrial residue	Magnetic material, including moderate plate hammerscale	1	1	
	Industrial residue	Iron smithing slag	1	1	
	mortar	Off-white mortar	c20	15	
048	coal	Coal	c50	6	
	Industrial residue	Magnetic material, including occasional plate hammerscale	1	1	
	mortar	Off-white mortar	c30	35	
053	coal	coal	1	32	
	mortar	Off-white mortar	2(link)	348	
058	bone	Button, c. 18mm dia, 1.5mm thick, 1mm dia central perforation, late post-medieval	1	1	Late post-
	Ivory(?) and iron	Knife handle, ivory plates with scale tang, late post-medieval	1	50	medieval

Provenance

The other finds were recovered from pit fills (001, 017, 018, 022, 047, 048), demolition deposits (005, 053), dumped deposits (010, 039), ditch fills (012, 036), and cellar wall backfill (058).

Range

Items associated with burning, including charcoal, coal, cinders and clinker, are numerous but mostly occur in small

pieces. Industrial residues are also present, though the quantities are fairly low. Where identifiable, these are probably all associated with iron smithing. A moderate quantity of mortar was retrieved.

As noted above, the industrial residues occur in modest quantities. This suggests that iron smithing was occurring near to the site but not on it, as iron working generates large quantities of slag, which are absent here.

There were also a few artefacts of worked bone. These include a socketed tool formed on a horse right radius, using the proximal end and upper shaft, with the distal end and lower shaft removed. In the joint end is a drilled circular hole, while the shaft end is cut obliquely to form a wedge shape. Most of the bone surface, but especially near the wedge-shaped cutting end, is extremely polished. The function of this object is unknown but a virtually identical example was found at Norwich where it was dated to 1500-80 (Margeson 1993, 196, fig 148, no 1531). A button blank of late post-medieval, probably 18th-19th century date, was found in (058). Additionally, there is a knife handle, also from (058). The handle plates, which are decorated with cross-hatching and linear grooves, appear to be of ivory (but could be of bone). The handle shape tapers slightly toward the blade, but is otherwise a plain rectangle. It is of post-medieval date, probably not earlier than the 17th century.

A single fragment of limestone ashlar was retrieved from a 17th century pit. The piece is undiagnostic and may have derived from any local building. It is of a shelly rich limestone, typical of the Barnack area near Peterborough, and is well weathered. Faint tooling survives.

Potential

The other finds have moderate potential and provide some functional evidence of activities occurring on and near the site.

SPOT DATING

The dating in Table 8 is based on the evidence provided by the finds detailed above.

Table 8, Spot dates

Cxt	Date	Comments
001	13th to 15th	Includes single piece of 18th century clay pipe that may be intrusive
003	13th to 15th	
005	14th to 16th	Include possible post medieval brick (16th?)
010	13th to 15th	
012	13th to 15th	Possibly 13th?
017	1630-60, perhaps 1643	
018	1630-60, perhaps 1642	
019	1630-60	
021	13th to 15th	
022	12th to mid 13th	Contains medieval tile
036	13th to 15th	
038	13th to 15th	
042	13th to 15th	
044	13th to 15th	
045	16th to 18th	Date on CBM
047	Late 12th to 13th?	Date on single sherd and CBM; possibly later
048	13th to 15th	
056	13th to 15th	Date on CBM
057	Mid-late 19th	Date on single sherd and cbm
058	1880-1900	
059	17th to 18th?	Date on CBM
060	17th to 18th?	Date on CBM
065	13th to 15th	

ABBREVIATIONS

ACBMG Archaeological Ceramic Building Materials Group

BS Body sherd

CBM Ceramic Building Material

CXT Context

EMT Early Medieval Type LHJ Lower Handle Join NoF Number of Fragments NoS Number of sherds NoV Number of vessels

TR Trench

UHJ Upper Handle Join W (g) Weight (grams)

REFERENCES

- ~ 2001, Draft Minimum Standards for the Recovery, Analysis and Publication of Ceramic Building Material, third version [internet]. Available from http://www.geocities.com/acbmg1/CBMGDE3.htm
- ~ 2003, *Lincolnshire Archaeological Handbook* [internet]. Available at http://www.lincolnshire.gov.uk/section.asp?catId=3155
- Atkin, S, 1985 The clay pipe-making industry in Norfolk, Norfolk Archaeology XXXIX, pt 2, 118-149
- Clarke, H. and Carter, A., 1977, Excavations in King's Lynn, 1963-1970, Medieval Archaeology Monographs, Volume 7
- Davey, PJ, 1981 Guidelines for the processing and publication of clay pipes from excavations, *Medieval and Later Pottery in Wales* **4,** 65-88
- Graf, OHT, 1998 Alphen mill wheel race clay pipe collection, Society for Clay Pipe Research Newsletter 53, 24-35
- Higgins, DA, 1995 Clay tobacco pipes: a valuable commodity, *The International Journal of Nautical Archaeology* **24.1**, 47-52
- Le Cheminant, R, 1996 Socio-political clay tobacco pipes of the 18th and 19th centuries, *Society for Clay Pipe Research Newsletter* **49**, 6-16
- Mann, JE, 1977 *Clay Tobacco Pipes from Excavations in Lincoln 1970-74*, Lincoln Archaeological Trust Monograph Series Vol. **XV-1** (Council for British Archaeology)
- Margeson, S, 1993 Norwich Households: The Medieval and Post-Medieval Finds from Norwich Survey Excavations 1971-78, East Anglian Archaeology **58**
- Oswald, A., 1975 Clay Pipes for the Archaeologist, British Archaeological Reports 14

Pijpenkabinet, nd, Figural Clay Pipes

Read, BA, 1988 History Beneath our Feet (Braunton)

- Slowikowski, AM, Nenk, B, and Pearce, J, 2001 *Minimum Standards for the Processing, Recording, Analysis and Publication of Post-Roman Ceramics*, Medieval Pottery Research Group Occasional Paper 2
- Walker, IC, 1967 Statistical Methods for Dating Clay Pipe Fragments, Post-medieval Archaeology 1, 90-101
- Woodcock, DJ, 1989 The clay pipe smoking monkey's clay pipe, *Society for Clay Pipe Research Newsletter* **22**, 19-21
- Young, J, Vince, AG and Nailor, V, 2005 A Corpus of Saxon and Medieval Pottery from Lincoln (Oxford)

ARCHIVE CATALOGUES

Archive catalogue 1, Post Roman Pottery

Cxt	Cname	Fabric	Form	NoS	NoV	W (g)	Decoration	Part	Samp.	Ref	Description	Date
001	ЕМНМ		Jar	1	1	5		Rim			Soot and carbonised deposit; EMT rim	
001	EMHM		?	3	3	2	?ID	BS			Tiny frags; some soot	
001	GRIM		Jug/ jar	1	1	12		BS				
001	GRIM		Pipkin	1	1	15		Handle				
001	MISC		?	6	6	1		BS	<1>		Tiny frags; some probably EMHM and GRIM	
003	DUTRT		?	1	1	2		BS				
003	EMHM		Jar/ bowl	1	1	3		Base			Soot	
003	EMHM		Jar	1	1	4		Rim			Abraded	
003	EMHM		Jar/ bowl	2	2	13		BS				
003	GRIM		?	1	1	3		BS			Cracked glaze - oxidised fabric	
005	DUTRT		Jar	1	1	3		BS			Internal soot	
005	EMHM		Jar/ bowl	1	1	3		BS			External soot	
010	EMHM		Jar/ bowl	1	1	5		BS				İ
010	EMHM		Jar	1	1	4		Rim			EMT rim; soot	1
010	GRIM		Jug/ jar	1	1	3		BS			Cracked during firing?	
010	GRIM		Jug/ jar	1	1	3		BS			illing.	
012	EMHM		Jar/ bowl	1	1	5		BS			Internal soot	12th to mid 13th
012	GRIM		Jar/ bowl	2	2	4		BS				13th to 15th
017	GRE		Dish	10	1	274	Two scored lined around inside rim	Rim & BS			Complex rim	17th
017	GRE	FE bichrome	Jar/ pipkin	4	1	50	Ribbed exterior body	Profile			Complex lid seated rim	17th
017	MART	Red	Flask	2	1	19		BS		V01		
017	GRE		Jar/ bowl	2	1	20		BS			Same vessel?	
017	RGRE		Jar/ bowl	3	1	16		BS			Same vessel?	
018	GRE		Jar/Jug	1	1	188	Parallel incised lines	Rim			Complex everted rim	17th
018	GRE		Jar	3	1	120	At least 4 incised lines externally above base	Base			Patchy external glaze	
018	GRE	CU bichrome	Bowl	2	1	81	4 scored wavy lines above 3 scored lines on internal rim	Rim			Complex everted rim	17th
018	GRE		Small bowl	4	1	63	Incised lines on internal rim	Profile			Abraded internal glaze	17th
018	MART	Red	Flask	4	1	19		BS		V01	Patchy soot	
018	MISC		Jar	1	1	4		Rim			?ID; flake; heavily vitrified	
019	GRE		Jar/ pipkin	1	1	6		BS			,	İ
019	GRE		Jar/ pipkin	1	1	8		Rim				1
019	GRE		Jar/ pipkin	1	1	9	Trailed yellow lines	BS			Large fe concretion on external surface	16th
021	GRIM		Jar/ bowl	1	1	7		BS			Late?	13th to
												15th

Cxt	Cname	Fabric	Form	NoS	NoV	W (g)	Decoration	Part	Samp.	Ref	Description	Date
022	EMHM		?	2	2	1		BS	<5>		Soot	
036	BL	GRE-type	Tyg	1	1	16		Base				Mid 16th to 17th
036	BOSTT T		Jug?	1	1	11		BS			?ID; white deposit	
036	ЕМНМ		?	2	2	1		BS	<4>		Tiny frags; soot; ?ID	
036	GRIM		Jar/ bowl	1	1	16		BS			?ID; underfired? Possible traces of glaze	
036	GRIM		?	1	1	2		BS	<4>		?ID	
036	GRIM		Jug?	1	1	5	Ridged	BS				400.4
038	GRIM		Jar/ bowl	1	1	4		BS				13th to 15th
038	GRIM		Jar/ bowl	1	1	5		BS				13th to 15th
042	GRIM		Jar/ bowl	2	1	39		BS			?ID	13th to 15th
042	GRIM		Jar/ bowl	1	1	7		BS				13th to 15th
044	BOSTT T		Jug/ jar	1	1	4		BS			?ID	13th to 14th
047	DST	B/C	Jug	2	1	5		Rim	<2>			
047	MISC		?	1	1	1		BS	<2>		Tiny flake possibly CBM	?
057	PEARL		Dish/bowl	1	1	35	Blue transfer print; chinoiserie	Rim			Scalloped rim edge	Mid to Late 19th
058	ENGS		Jar	1	1	417	On base: "MALING F AVERAGE 14oz"	Compl ete				
058	ENGS		Bottle	1	1	465		Compl ete			Unglazed base	
058	ENGS		Bottle	2	1	462		Compl ete			Unglazed base	
058	ENPO		Cup	1	1	7		Compl ete			Toy cup	
058	LERTH		Plant pot	1	1	147		Profile			Abraded	
058	PEARL		Jar	1	1	15		BS				
058	PEARL		Mug	1	1	11		Handle			Oval handle	
058	PEARL		Dish	9	1	542	Blue and white transfer print; chinoiserie	Profile			Oval - possibly serving platter/dish?	
058	PEARL		Dish	5	1	474	Blue and white transfer print; floral Asiatic design	Profile			Oval - possibly serving platter/dish?	
058	PEARL		Dish/bowl	4	1	176	Blue and white transfer print; floral design	Profile				
058	PEARL		Egg cup	2	1	37	Hand painted; chinoiserie	Profile				
058	PEARL		Bowl/dish	5	1	350	Hand painted; blue feathering around rim	Near comple te				
058	PEARL		Dish	3	1	114	Hand painted; three red lines on rim above single red line	Rim/Ba se				
058	PEARL		Mug	1	1	248	Mocha; hand	Near		DR		
							painted;	comple				

Cxt	Cname	Fabric	Form	NoS	NoV	W (g)	Decoration	Part	Samp.	Ref	Description	Date
							dendritic patterns on sage background in- between two sets of two blue lines	te				
058	PEARL		Dish/bowl	1	1	15		Rim				
058	PEARL		Mug	1	1	23	Mocha; hand painted; dendritic pattern on light brown background beneath a blue stripe, itself between two thin black lines	Rim with UHJ and LHJ				
058	PEARL		Mug	4	1	195	Mocha; hand painted; dendritic patterns on sage background in- between two sets of four blue lines; ' feathered' UHJ and LHJ	Near comple te		DR		
058	PEARL		Dish/bowl	11	1	346	Blue and white transfer print; chinoiserie	Profile			? All same vessel	
058	PEARL		Cup	1	1	12	Blue and white transfer print	Handle				
065	GRIM		Jar/ bowl	1	1	13		BS			?ID	13th to 15th

Archive catalogue 2. Ceramic Building Material

Cxt	Cname	Fabric	Subform	NoF	W (g)	Description	Date
001	CBM	Gault		6	13	Frags; possibly PNR?	
001	CBM	Ox; fine		13	25	Frags; mostly abraded - Ref	
001	CBM	Ox; fine; partially vitrified		2	61	Flakes; possibly BRK?	
001	PEG	Gault; vitrified		1	141	Half peghole 18mm diameter one side to 13mm other side; struck	
001	PNR	Gault; vitrified		1	57	Flat roofer; corner; struck - Ref	
001	PNR	Gault; vitrified		5	48	Same tile; flat roofer; struck - Ref	
001	PNR	Gault; vitrified		1	51	Flat roofer; mortar; struck	
001	PNR	Gault; slightly vitrified		1	12	Frag; flat roofer?	
001	PNR	Gault; partially vitrified		1	13	Flat roofer; mortar; struck	
001	PNR	Gault; vitrified		1	16	Flat roofer; corner	
001	RID	Gault; vitrified		1	8	Fragment; possibly curved?	
001	RID	Gault; partially vitrified		1	46	Corner; slight curve; struck	
003	CBM	Ox; mostly fine		11	148	Flakes; some heavily fired; some organic impressions	
003	MTIL	Ox/r/ox; freq ca; large poor sort quartz		1	12	?ID; possible PNR?; struck	
003	PEG	Gault; vitrified		1	56	Partial peghole approx 10mm	

Cxt	Cname	Fabric	Subform	NoF	W (g)	Description	Date
						diameter	
003	PEG	Gault; vitrified		1	7	Flake; partial peghole approx	
003	PNR	Gault; vitrified		1	47	8mm diameter Flat roofer; struck	
003	PNR	Gault; light		1	38	Flat roofer; struck; corner;	
		firing		'			
003	PNR	Gault; partially vitrified		1	85	Flat roofer; struck	
003	PNR	Gault; partially vitrified		1	17	Flat roofer; mortar	
003	PNR	Gault; partially vitrified		1	14	Flat roofer	
003	PNR	Gault; slightly vitrified		1	70	Flat roofer; struck	
003	PNR	Gault; vitrified		1	142	Flat roofer; corner; struck; blob of glaze on one surface	
003	PNR	Gault; partially vitrified		1	74	Flat roofer; struck	
003	RID	Gault; slightly vitrified		1	15	Slight curve	
005	BRK	Ox; fine; calcareous		2	380	End fragments; handmade; possible stacking scar;	
005	BRK	Ox; fine; calcareous	163x121x48mm	1	1320	Half brick; handmade; stacking scar; struck; slop-moulded?; possible organic impressions	Medieval?
005	BRK	Ox; fine; calcareous	185x118x62mm	1	1718	3/4 brick; mortar; handmade; knife trimming marks; sand moulded	Post medieval?
005	BRK	Ox; fine; calcareous	235x110x55mm	5	1412	Near complete brick in pieces; seems spalled; handmade; organic impressions; possible animal footprints on base;	Post medieval?
005	BRK	Ox; calcareous; fine	83x57x68mm	1	374	Corner; handmade	
005	BRK	Fine; calcareous; vitrified	93x110x55mm	1	708	Brick end; slightly bloated and melted; stacking scar; handmade; sand moulded; organic impressions	Post medieval?
005	BRK	Ox; heavily vitrified	145x112x50mm	1	1163	Half brick; handmade; partially melted; mortar; organic impressions;	Post medieval?
005	BRK	Ox; fine; calcareous; heavy fired	142x127x55mm	1	1367	Half brick; organic impressions, handmade; sand moulded; struck	Post medieval?
005	BRK	Ox; fine; calcareous		2	352	Same brick; fragments; struck; mortar; stacking scar; knife trim marks; handmade; - Ref	
005	BRK	Ox; fine; calcareous; partially vitrified	100x112x50mm	1	817	1/2 brick; handmade; mortar; stacking scar; green glazed; organic impressions	Post medieval?
005	BRK	Ox; fine; calcareous; slightly vitrified	140x125x59mm	1	1155	1/2 brick; handmade; struck; sand moulded; knife trim marks	Post medieval?
005	BRK	Fine; calcareous; vitrified		1	153	Corner; distorted; possible stacking scar; handmade?; organic impressions; melted	
005	CBM	Ox; fine; calcareous; one heavily fired		3	161	Fragments; BRK?	
005	CBM	Ox; fine; calcareous		1	48	Fragment; BRK?; green glazed	
005	CBM	Ox; fine; calcareous		1	58	Flake; BRK?	
005	CBM	Ox;		13	411	Frags and flakes; probably	

Cxt	Cname	Fabric	Subform	NoF	W (g)	Description	Date
						BRK; some heavily fired and partially vitirifed; salt surfacing; some with mortar	
005	СВМ	Ox; fine; partially vitrified		1	10	Flake	
005	СВМ	Ox; fine; calcareous; some slightly vitrified		12	255	Fragments; probably BRK; most with mortar - Ref	
005	PEG	Gault; slightly vitrified		1	204	Corner; complete peghole 12mm diameter one side, 8mm other side; struck	
005	PEG	Gault; partially vitrified		2	415	Same tile; complete peghole 13mm diameter; struck	
005	PEG	Gault; vitrified		1	162	Corner; complete peghole 22mm diameter one side, 8mm other side; struck	
005	PEG	Gault; vitrified		1	62	Half peghole 14mm diameter one side to 12mm other side; struck	
005	PEG	Gault; vitrified		2	132	Same tile; corner; flat roofer; struck; mortar; one piece has peghole 14mm diameter one side to 7mm other side	
005	PEG	Gault; slightly vitrified		4	241	Same tile; partial peg hole 14mm diameter; struck	
005	PEG	Gault?; highly calcareous; heavily fired		1	193	Partial peghole 11mm diameter; smoothed mortar layer; organic impressions	
005	PEG	Gault; partially vitrified		1	412	Large piece; corner; half peghole 10mm diameter; organic impressions; struck	
005	PEG	Gault		1	87	Corner; partial peg hole 11mm diameter	
005	PEG	Gault; vitrified		1	118	Partial peghole 9mm diameter; struck; mortar	
005	PNR	Gault; vitrified		2	142	Same tile; flat roofer; struck	
005	PNR	Gault; partially vitrified		1	75	Flat roofer; corner; organic impressions; struck; stacking scar?	
005	PNR	Gault; partially vitrified		1	56	Flat roofer; struck; mortar	
005	PNR	Gault; slightly vitrified		1	98	Flat roofer; mortar; struck	
005	PNR	Gault; vitrified		1	210	Flat roofer; mortar; struck	
005	PNR	Gault		1	46	Flat roofer; organic impressions; struck	
005	PNR	Gault; vitrified		3	377	Same tile; flat roofer; mortar; struck;	
005	PNR	Gault; partially vitrified		2	507	Flat roofers; two pieces stuck together with mortar (over breaks)	
005	PNR	Gault; partially vitrified		1	13	Flat roofer; struck	
005	PNR	Gault; vitrified		2	51	Flat roofer; same tile;	
005	PNR	Gault; partially vitrified		3	202	Same tile; flat roofer; possible organic impressions	
005	PNR	Gault		1	36	Flat roofer; corner; struck	
005	PNR	Gault; vitrified		1	136	Flat roofer; corner; mortar; struck	
005	PNR	Ox; partially vitrified		1	52	Flat roofer; mortar	
005	PNR	Gault; vitrified		1	48	Flat roofer	
005	PNR	Gault		1	88	Flat roofer; mortar	

Cxt	Cname	Fabric	Subform	NoF	W (g)	Description	Date
005	PNR	Gault; partially vitrified		2	69	Flat roofer; same tile; struck	
005	PNR	Gault; vitrified		2	309	Same tile; flat roofer; corner; bloated; mortar; struck	
005	PNR	Gault; light firing		1	29	Flat roofer; corner	
005	PNR	Gault		1	169	Flat roofer; corner; struck; possible organic impressions	
005	PNR	Gault; slightly vitrified		1	56	Flat roofer; struck	
005	RID	Gault; slightly vitrified		1	164	Corner; slight curve; mortar; struck; possible finger impressions on base	
005	RID	Gault; partially vitrified		1	110	Slight curve; struck; mortar;	
005	RID	Gault; vitrified		2	186	Same tile; slight curve; mortar	
005	RID	Gault; vitrified		1	173	Slight curve; mortar;	
005	RID	Gault; slightly vitrified		1	62	Slightly curved; stacking scar; struck	
009	PNR	Gault; vitrified		1	96	Flat roofer; struck	
010	CBM	Ox; fine		2	15	Flakes	
010	CBM	Ox/r; calcareous		1	2	Flake	
010	PNR	Gault; heavy firing		1	35	Flat roofer;	
010	PNR	Gault; vitrified		1	71	Flat roofer; corner; struck; slightly bloated	
010	PNR	Gault; partially vitrified		1	56	Flat roofer; struck	
010	PNR	Gault; partially vitrified		1	24	Flat roofer; corner; struck	
010	PNR	Gault; vitrified		1	20	Flat roofer	
010	PNR	Gault; vitrified		1	7	Flake; flat roofer	
010	PNR	Gault; partially vitrified		1	140	Flat roofer;	
010	PNR	Gault?		1	29	?ID; possible ox/r/ox PNR?	
010	PNR	Gault; light firing		1	15	Flat roofer	
012	FCLAY			1	7	Flake	
012	RID	Gault; vitrified		1	18	?ID; possibly RID, but might be PNR distorted by vitrification	
017	BRK	Ox; fine; calcareous; heavily fired	120x106x56mm	1	845	1/4 brick; handmade; sand- moulded; deep struck scar on one surface; struck	
017	CBM	Gault		1	9	Flake	
017	СВМ	Gault		1	405	?ID; BRK or FLOOR?; struck; handmade;	
017	PNR	Gault; light firing		1	73	Flat roofer; struck	
017	PNR	Gault		1	66	Flat roofer; organic impressions; struck	
017	PNR	Gault; vitrified		1	281	Flat roofer; corner; slightly distorted; mortar; struck;	
018	BRK	Ox/r/ox; fine; vitrified;	135x125x54mm	1	1091	Half brick; mortar; handmade;	
018	PNR	Gault; vitrified		1	160	Flat roofer; mortar	
018	PNR	Gault		2	132	Flat roofer; same tile; struck	
018	PNR	Gault; partially vitrified		2	62	Flat roofer; struck; same tile	
018	PNR	Gault; partially vitrified		1	137	Flat roofer; corner	
018	PNR	Gault		1	189	Flat roofer; corner; slightly burnt	
021	CBM	Ox; fine		3	138	Flakes; possibly BRK	
021	FLOOR	Gault; vitrified		1	101	ID? FLOOR or thick PNR?	

Cxt	Cname	Fabric	Subform	NoF	W (g)	Description	Date
021	PEG	Gault; vitrified		1	154	Corner; struck; peghole present that doesn't perforate through tile, 18mm diam at surface, 12mm further in	
021	PNR	Gault; vitrified		1	104	Flat roofer; possible claw mark in one surface?	
021	PNR	Gault		1	53	Flat roofer	
021	PNR	Gault; vitrified		4	85	Flat roofer; same tile; quite heavily vitrified	
021	PNR	Ox; fine; partially vitrified		1	14	Flat roofer; abraded	
021	PNR	Ox; fine partially vitrified		1	36	Flat roofer; abraded	
021	PNR	Ox/r/ox; fine; vitrified		1	19	Flat roofer; abraded	
021	PNR	Gault; vitrified		1	47	Flat roofer; struck; mortar	
021	PNR	Gault; vitrified		1	114	Flat roofer; struck	
021	PNR	Gault; slightly vitrified		1	26	Flat roofer; struck	
021	PNR	Gault		1	122	Flat roofer; corner, struck	
021	PNR	Gault		2	30	Same tile; flat roofer; abraded	
021	RID	Gault; vitrified		1	21	Slight curve	
022	BRK	Ox; fine; calcareous; occ fe		1	84	Fragment; likely handmade - Ref	
022	BRK	Ox/r/ox; vitrified	62x48x50mm	1	142	Corner frag; distorted; handmade; possibly struck; possible organic impressions	
022	CBM	Gault; some vitrified		4	47	PNR? Frags - Ref	
022	CBM	Gault		4	7	Frags only - Ref	
022	CBM	Ox;		7	21	Frags only - Ref	
022	PNR	Gault; vitrified		1	38	Flat roofer; slightly distorted; struck - Ref	
022	PNR	Gault; vitrified		1	41	Flat roofer; slightly distorted; mortar - Ref	
022	PNR	Gault; vitrified		3	95	Same tile; flat roofer; struck - Ref	
022	RID	Gault		1	33	Slight curve; mortar - Ref	
022	RID	Gault		1	83	Corner; slight curve; struck; organic impressions - Ref	
036	BRK	Ox; fine; calcareous		1	118	Corner frag; handmade; salt- surfacing?; sand moulded; struck	
036	BRK	Ox; fine; calcareous; occ fe; vitrified	102x110x44mm	1	557	1/4 brick; handmade; slightly distorted; mortar; sand moulded;	Medieval
036	BRK	Fine; calcareous; vitrified		1	82	Corner fragment; sand moulded; struck; mortar	
036	BRK	Ox; fine; calcareous;		1	182	Corner; handmade; abraded	
036	СВМ	Ox; fine; rare mica; occ large quartz; heavily fired		1	189	Fragment; BRK?	
036	CBM	Ox; fine; some vitrified		17	26	Frags only - Ref	
036	CBM	Ox; heavy firing; micaceous; occ ca;		1	285	?ID; fragment of BRK?; very heavy for size	
036	CBM	Ox; fine; calcareous		2	377	BRK fragments?; mortar; slightly abraded	

Cxt	Cname	Fabric	Subform	NoF	W (g)	Description	Date
036	PEG	Gault; slightly vitrified		2	270	Same tile; half peghole 11mm diameter; struck;	
036	PNR	Gault; vitrified		1	106	Flat roofer; struck; one edge cupped; slightly bloated	
036	PNR	Gault; vitrified		1	26	Flat roofer frag; struck	
036	PNR	Gault; vitrified		1	116	Flat roofer; corner; struck	
036	PNR	Gault; vitrified		1	274	Flat roofer; mortar; struck	
036	RID	Ox/r/ox; fine; rare mica; occ ca; rare fe		1	39	Slight curve; struck - Ref	
036	RID	Gault; light firing		1	131	Pronounced curve; struck;	
036	RID	Gault; vitrified		1	19	Slight curve; struck	
038	PEG	Gault		1	101	Corner; half peg hole 12mm diameter;	
044	BRK	Ox; fine; calcareous;	65x64x52mm	1	226	Corner; salt surfaces; organic impressions; handmade; mortar	
044	BRK	Ox; fine; calcareous; heavy firing	66x72x45mm	1	157	Corner; salt surfaces; possible knife trimming marks; handmade	
044	PNR	Gault; slightly vitrified		1	136	Flat roofer; mortar; struck	
044	PNR	Gault; vitrified		1	120	Flat roofer; slightly bloated; struck	
044	PNR	Gault		1	71	Flat roofer; struck	
044	PNR	Gault		1	17	Flat roofer; frag	
044	RID	Gault; partially vitrified		1	10	Curved	
045	BRK	Fine; calcareous; vitrified	137x110x60mm	1	720	Brick end; handmade; mortar; organic impressions	Post medieval
045	PNR	Gault?; highly calcareous; heavily fired		1	98	Flat roofer; thick mortar layer	
047	CBM	Gault; mostly vitrified		25	19	Fragments only - Ref	
047	CBM	Ox		26	13	Flakes only - Ref	
047	PEG	Ox/r/ox; partially vitrified		1	15	Fragment with half peg hole 13mm diameter - Ref	
047	PNR	Ox/r/ox		1	11	Flat roofer fragment; struck - Ref	
047	RID	Ox/r/ox		1	17	Fragment; possible stacking scar - Ref	
048	CBM	Gault; some vitrified		13	7	Tiny frags only - Ref	
048	CBM	Ox; fine; some vitrified		23	4	Tiny frags only - Ref	
048	PEG	Gault; slightly vitrified		1	37	Half peghole, 14mm diameter; struck?	
048	PNR	Gault		1	92	Flat roofer; struck; possibly slightly burnt	
048	PNR	Ox/r/ox; calcareous		1	14	Flat roofer fragment; struck - Ref	
056	BRK	Fine; vitrified	146x110x45mm	1	1147	3/4 brick; slightly bloated and melted; mortar; stacking scar; knife trim marks; organic impressions	Medieval
056	RID	Gault; partially vitrified		1	218	Corner; slight curve; struck; mortar;	
057	BRK	Ox; fine; calcareous; slightly vitrified	228x108x68mm	1	2658	Complete; possibly industrially made (no frog); struck; mortar; stacking scars on one edge; sand moulded	Late post medieval to early modern?
057	PNR	Ox; fine;	119x130x18mm	1	371	?ID; possible half width roofer;	modern:

Cxt	Cname	Fabric	Subform	NoF	W (g)	Description	Date
						mortar; greenish concretion on one surface	
059	BRK	Ox; fine; calcareous; heavily fired	220x110x60mm	1	2196	Complete; slightly burnt; struck; sand-moulded; well made	Post medieval +
060	BRK	Ox; fine; calcareous	235x112x65mm	1	2728	Near complete; mortar; possible paw print on one side; well made; sand moulded; possible organic impressions	Post medieval +
065	PNR	Gault; slightly vitrified		1	42	Flat roofer; struck; possible organic impressions	

Archive catalogue 3, Faunal Remains

Cxt	Taxon	Element	Number	W (g)	Comments
001	cattle	skull	2	17	includes part of horn core
001	medium mammal	pelvis	1	14	
	sheep/goat	phalange	1	<1	
	medium mammal	skull	4	2	
	medium mammal	unidentified	61	<1	
001 <1>	small mammal	femur	1	<1	
	amphibian	unidentified	6	<1	
	fish	vertebra	2	<1	small fish
	fish	unidentified	5	<1	
	cattle	metacarpus	1	28	juvenile
	cattle	phalange	1	12	1
003	large mammal	rib	1	6	
	sheep/goat	humerus	1	12	
	bird	unidentified	2	<1	
	cattle	skull	5	88	includes part of horn core
	cattle	molar	1	9	morado part or nom ooro
	cattle	radius	2 (join)	48	juvenile
	cattle	fibula	1	<1	juvernie
005	horse	rib	2	39	
003	sheep/goat	radius/ulna	1	51	
	medium mammal	vertebra	3	7	
	medium mammal	unidentified	4	9	
	bird	femur	1	<1	probably chicken
	medium mammal	unidentified	30	2	probably chicken
005 <6>		unidentified		<1	
005 <6>	small mammal	vertebra	8 1	<1	small fish
	fish				Small lish
010	sheep/goat	astragalus	1	4 2	
	medium mammal	rib	1		1 have 11-
	cattle	femur	2	405	i juvenile
	cattle	skull	7	425	includes horn core; two molars
	cattle	phalange	2	31	
017	large mammal	vertebra	2	33	
	sheep/goat	humerus	1	15	
	sheep/goat	metatarsus	1	11	
	medium mammal	radius	1	13	9.1
	bird	femur	2	3	possibly goose
	cattle	phalange	1	27	
	cattle	molar	1	6	deciduous
	?horse	rib	1	18	
	pig	skull	8	149	includes part of the maxilla
018	pig	mandible	2	96	
	medium mammal	tibia	1	3	
	medium mammal	rib	3	4	
	small mammal	radius	2	2	
	unknown	unidentified	4	8	
	cattle	mandible	1	11	small beast
	horse	rib	1	20	
019	dog	teeth	3	4	2 incisors; 1 canine
	medium mammal	rib	2	2	
	unknown	unidentified	3	4	1 possibly a bird

Catile melacarpus 1 78 respective catile catile catile catile catile catile catile catile catile catile catile catile catile catile catile catile catile catile catile disample disa	Cxt	Taxon	Element	Number	W (g)	Comments
catte				-	78	
Cattle Prumerus 1 18 18 pivenile; unfused Prumerus 1 22 12 12 13 14 15 15 15 15 15 15 15						
Description Description						
pig sheep/goat humerus 1 22 sheep/goat large mammal unidentified 1 5 5 5 5 5 5 5 5 5						juvenile; unfused
sheeplogoat humerus	021					
Barge mammal Unidentified 1 5 3						
Small mammal Delvis 1 3 3 3 5 5 5 5 5 5 5				1		
Catile				1		
Sepenjoat Skull 1 83 83 83 84 84 86 86				<u> </u>		
Unidentified 1				-		
Unknown Unidentified 4 6 6 6 6 6 6 6 6 6	022					
large mammal midentified 1			unidentified	4		
medium mammal midentified 12 -1		large mammal				
Small mammal		medium mammal		1	<1	
Information Information 40 51 56 56 56 56 56 56 56	022 /5>	medium mammal	unidentified		<1	
fish	022 <32				<1	
Cattle Cattle Cattle Cattle Cattle Cattle Calcaneus 1 56 56 1 1 1 1 1 1 1 1 1					-	small fish
036 cattle large mammal vertebra large mammal sheep/goat phalange medium mammal medium mammal medium mammal medium mammal medium mammal medium mammal vertebra 1 177 medium mammal medium mammal vertebra 1 177 medium mammal vertebra 1 177 medium mammal vertebra 1 177 medium mammal vertebra 1 177 medium mammal vertebra 1 170 medium mammal unidentified 6 170 mall mammal unidentified 6 170 medium mammal unidentified 4 170 medium mammal large mammal large mammal large mammal unidentified 1 113 medium mammal unidentified 1 1 12 medium mammal unidentified 1 1 12 medium mammal unidentified 1 1 12 medium mammal unidentified 1 1 11 medium mammal unidentified 1 1 11 medium mammal unidentified 1 1 11 medium mammal unidentified 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1						
large mammal vertebra 1 23 38 38 38 39 39 39 39 3				-		
1 1 38 38 38 38 38 39 39 39				-		
Sheep/goat medium mammal in medium mam	000					
medium mammal medium mammal medium mammal medium mammal medium mammal medium mammal medium mammal muldentified c. 62 2 2 2 2 2 3 3 3 3	036					
medium mammal rib				-		
medium mammal small mammal small mammal small mammal small mammal small mammal small mammal small mammal small mammal small mammal small mammal small mammal small mammal small mammal small mammal unidentified 6 < <1 <						
Small mammal Skull 1					2	
Small mammal skull 1 1 1 1 1 1 1 1 1						
Small mammal Unidentified 6						
fish amphibian unidentified d d d d d d d d d	036 <4>					
Cattle		fish			<1	
044 cattle large mammal large mammal vertebra 1 11 13 large mammal bird remur 1 2 large mammal cat phalange 1 14 2 small mammal bird unidentified 2 4 bird unidentified 1 4 fish spine 1 4 fish spine 1 4 fish vertebra 1 4 amphibian unidentified 2 4 unknown unidentified 93 2 horse phalange 1 31 large mammal unidentified 1 4 sheep/goat humerus 1 3 large mammal unidentified 1 2 medium mammal skull 3 <1		amphibian	unidentified	4	<1	
Description			metacarpus	1	34	
large mammal bird femrur 1 2 2 2 1 1 1 1 1 1				1		
bird femur 1 2	044					
large mammal						
Cat Small mammal Unidentified 2 C1 Small mammal Unidentified 1 C1 C2 C3 C3 C3 C4 C4 C4 C5 C5 C5 C5 C5				-		
Small mammal Unidentified 2						
Dird				-		
1						
fish amphibian unidentified unknown vertebra unidentified unidentified unknown 1	047 <2>					
amphibian unidentified 93 2 2						cod or ling
unknown unidentified 93 2 horse phalange 1 31 large mammal sheep/goat unidentified 1 4 sheep/goat humerus 1 3 large mammal medium mammal medium mammal medium mammal medium mammal distal fibula medium mammal small medium mammal unidentified 1 <1						555 51 mig
horse						
048 large mammal sheep/goat sheep/goat sheep/goat unidentified molar 1	048					
Sheep/goat She				1		
large mammal		sheep/goat	molar	1		
048 <3> medium mammal medium mammal medium mammal medium mammal small medium mammal small medium mammal medium mammal small medium mammal medium mammal small medium mammal femur small medium mammal rabbit crab claw \$3 <1					3	
048 <3> medium mammal medium mammal medium mammal small medium mammal small medium mammal small mammal small mammal fish 1 <1	048 <3>			-		
048 <3> medium mammal small mammal mammal small mammal mammal mammal mammal small mammal						
Medium mammal Section						
fish vertbra 2 <1 053 sheep/goat humerus 1 28 cattle rib 1 61 butchery marks sheep/goat pelvis 1 54 sheep/goat vertebra 1 10 sheep/goat rib 1 8 medium mammal femur 1 <1						W.C. I
053 sheep/goat humerus 1 28 cattle rib 1 61 butchery marks sheep/goat pelvis 1 54 sheep/goat vertebra 1 10 sheep/goat rib 1 8 medium mammal femur 1 <1						small fish
058 sheep/goat sheep/goat rib medium mammal rabbit crab 1 61 butchery marks 058 sheep/goat rib sheep/goa	050					
sheep/goat pelvis 1 54 sheep/goat vertebra 1 10 sheep/goat rib 1 8 medium mammal femur 1 <1	053	sneep/goat		-		hutaham, mayka
058 sheep/goat sheep/goat rib 1 10 8 sheep/goat medium mammal femur 1 <1	058			1 1		butchery marks
058 sheep/goat medium mammal rabbit mandible crab rib 1 8 fragment of unfused femur head 050 cattle ulna 1 13				1 1		
medium mammal rabbit rabbit crab femur mandible crab 1 claw 6 claw 1 claw 2 claw 1 claw				1		
rabbit crab mandible claw 1 6 065 cattle ulna 1 13						fragment of unfused femur head
crab claw 1 2 065 cattle ulna 1 13				1		
065 cattle ulna 1 13				-	2	
	065			-		
		totals		556	2748	



THE ENVIRONMENTAL DATA

CHARRED PLANT MACROFOSSILS AND OTHER REMAINS

By Val Fryer

Introduction and method statement

Excavations at South Gates, Kings Lynn, undertaken by Archaeological Project Services (APS), recorded a small number of features of probable medieval date. Samples for the retrieval of the plant macrofossil assemblages were taken from pit and ditch fills, and six were submitted for assessment.

The samples were bulk floated by APS and the flots were collected in a 300 micron mesh sieve. The dried flots were scanned under a binocular microscope at magnifications up to x 16 and the plant macrofossils and other remains noted are listed in Table 1. Nomenclature within the table follows Stace (1997). All plant remains were charred. Modern contaminants including fibrous roots and fungal sclerotia were present throughout.

Results

Cereal grains and seeds of common grassland plants were present within all but one sample, although most were recorded as single specimens within an assemblage. Preservation was moderately good, although some grains were puffed and distorted, probably as a result of combustion at very high temperatures.

Oat (Avena sp.), barley (Hordeum sp.) and wheat (Triticum sp.) grains were present along with seeds of medick/clover/trefoil (Medicago/Trifolium/Lotus sp.), persicaria (Persicaria maculosa/lapathifolia), grass (Poaceae), buttercup (Ranunculus sp.) and vetch/vetchling (Vicia/Lathyrus sp.). Two possible fragmentary fruits of the wetland species club rush (Bolboschoenus/Schoenoplectus sp.) and bog bean (Menyanthes trifoliata) were also recorded. Low densities of charcoal/charred wood fragments were present throughout and sample 3 (pit [049]) contained charred stonewort (Characeae) oogonia.

Although specific sieving for molluscan remains was not undertaken, small shell assemblages were present within three samples. Three of Evans (1972) ecological groups of terrestrial taxa were represented, with open country species occurring most frequently. All three samples also contained shells of the brackish water species *Hydrobia ulvae* and *H. ventrosa* (see also Rackham, below).

Fragments of black porous and tarry material were present throughout and although some were possible residues of the combustion of organic remains at very high temperatures, others were probably derived from the combustion of coal. Coal fragments were present within four of the six samples, and formed the major component of the assemblage from pit [049] (sample 2). Ferrous globules were noted within samples 3, 5 (pit [023]) and 6.

Conclusions

All six assemblages are extremely small (<0.1 litres in volume) and appear to be primarily composed of scattered hearth waste, much of which was probably accidentally included within the feature fills. The composition of the mollusc assemblages would appear to indicate that the excavated features were situated within an open, grassland landscape, although ditch [037] may have been partially shaded. It would also appear that parts of the site were periodically inundated with brackish water.

Recommendations for further work

As none of the assemblages contain a sufficient density of material for quantification, no further work is recommended at this time. However, a written summary of this assessment should be included within any publication of data from the site.

Key to Table

x = 1 - 10 specimens xx = 11 - 50 specimens xxxx = 100+ specimens xxx = 100+ speci

Sample No.	1	2	3	4	5	6
Context No.	001	047	048	036	022	005
Feature No.	002	049	049	037	023	
Feature type	Pit	Pit	Pit	Ditch	Pit	
Cereals						
Avena sp. (grains)	xcf	xcf	Х			
Hordeum sp. (grains)			xcf	xcf		
Triticum sp. (grains)			х		Х	
Cereal indet. (grains)	Х		Х			
Herbs						
Medicago/Trifolium/Lotus sp.			х			
Persicaria maculosa/lapathifoila	Х					
Small Poaceae indet.		х	х			
Ranunculus acris/repens/bulobosus	Х					
Rumex sp.					xcf	
Vicia/Lathyrus sp.		Х			7.0.	
Wetland plants		,,				
Bolboschoenus/Schoenoplectus sp.	xcf					
Menyanthes trifoliata L.	7.0.				xcf	
Other plant macrofossils					7.0.	
Charcoal <2mm	XX	XX	XX	Х	XX	Х
Charcoal >2mm	X	, AA	, , ,	X	X	X
Indet.seeds	^	Х	Х	^	Α	^
Characeae indet.		^	X			
Molluscs			^			
Woodland/shade loving species						
Carychium sp.				Х		
Trichia striolata				xcf		
Zonitidae indet.				X		
Open country species				^		
Pupilla muscorum				v	v	V
				X	X	X
Vallonia sp. V. costata				X	Х	Х
				X		
V. pulchella				Х		
Catholic species						
Cochlicopa sp.				V24	.,	X
Trichia hispida group				XX	Х	Х
Marsh species Succinea sp.					,,	
					Х	
Brackish water species				y-f	,,	
Hydrobia ulvae			1	xcf	X	
H. ventrosa				Х	Х	Х
Other remains						
Black porous 'cokey' material	Х	XX	Х			
Black tarry material	XX	XX	Х	XX	Х	Х
Ferrous globules			Х	-	Х	Х
Small coal frags.		XXXX	XX	XX	Х	
Vitrified material	X			х		
Sample volume (litres)						
Volume of flot (litres)	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
% flot sorted	100%	100%	100%	100%	100%	100%

SNAILS

By James Rackham

<u>Introduction</u>
Soil samples taken for environmental assessment were bulk floated by APS and the flots were collected in a 300micron mesh sieve. The flots and sorts were submitted to the Environmental Archaeology

Consultancy for the assessment of the snails. Each flot was scanned under a binocular microscope and the snail taxa preliminarily identified.

Provenance

The snail shells were recovered from a layer (005), the fill of a pit (022) and a ditch fill (036).

Results

Shells were very few in all the flots, and their quantities are specified, below.

Sample <6> from layer (005) contained: *Hydrobia ulvae* - 1; *Trichia hispida* - 1; *Helix aspersa* - 2. While the *Hydrobia* is a marine species, the others are terrestrial, the *Helix aspersa* being the garden snail.

Sample <5> from pit fill (022) yielded: *Littorina saxatilis* - 1; *Littorina sp.* - 1; Cockle *sp.* - 1; *Retusa alba* - 3; *Retusa cf retusa* - 2; *Hydrobia ulvae* - 7; *Hydrobia ventrosa* - 1; *cf Trichia hispida* - 1. Most of the snails represented here are marine, with the *Littorina* species being winkles, the *Retusa* being bubble shells, and the *Hydrobia* is common in estuaries and salt marshes. There is a single example of a terrestrial species, the *Trichia*.

Sample <4> from ditch fill (036) had the following: *Cecilioides acicula -2*; *Helix aspersa - 3*; *Hydrobia ulvae -* 1; *Trichia hispida -* 3; Cerithiidae/Cerithiopsidae - needle whelk (eroded) - 1. This collection is somewhat mixed, but mainly comprises terrestrial species, including the garden snail (*Helix aspersa*), the subterranean dweller *Cecilioides*, and the *Trichia*. There are also isolated marine species including the *Hydrobia* and the needle whelk.

In summary, the assemblages from these three separate deposits comprise mainly marine or estuarine species with a few catholic terrestrial shells.

Potential

Due to their limited quantities these snail shell collections have low potential and it is not recommended that any further work is undertaken on these assemblages. However, the samples taken during the evaluation have established that snails preserve in good condition, and can be recovered with appropriate sampling, though they occur in limited numbers, restricting the ability to interpret the assemblages.

REFERENCES

Evans, J, 1972 Land Snails in Archaeology. London

Stace, C, 1997 New Flora of the British Isles. 2nd edition. Cambridge University Press

GLOSSARY

Alluvium A deposit (usually clay, silts or sands) laid down in water. Marine alluvium is deposited

by the sea and freshwater alluvium by streams, rivers or within lakes.

Bretask A fortified tower.

Context An archaeological context represents a distinct archaeological event or process. For

example, the action of digging a pit creates a context (the cut) as does the process of its subsequent backfill (the fill). Each context encountered during an archaeological investigation is allocated a unique number by the archaeologist and a record sheet detailing the description and interpretations of the context (the context sheet) is created and placed in the site archive. Context numbers are identified within the report text by

brackets, e.g.(004).

Cut A cut refers to the physical action of digging a posthole, pit, ditch, foundation trench,

etc. Once the fills of these features are removed during an archaeological investigation

the original 'cut' is therefore exposed and subsequently recorded.

Dumped deposits These are deposits, often laid down intentionally, that raise a land surface. They may be

the result of casual waste disposal or may be deliberate attempts to raise the ground

surface.

Fill Once a feature has been dug it begins to silt up (either slowly or rapidly) or it can be

back-filled manually. The soil(s) which become contained by the 'cut' are referred to as

its fill(s).

Layer A layer is a term to describe an accumulation of soil or other material that is not

contained within a cut.

Medieval The Middle Ages, dating from approximately AD 1066-1500.

Murage Tax levied for building or repairing the walls of a town.

Natural Undisturbed deposit(s) of soil or rock which have accumulated without the influence of

human activity.

Post-medieval The period following the Middle Ages, dating from approximately AD 1500-1800.

Saltern Salt producing site typified by ash, derived from fuel needed to evaporate sea water, and

briquetage.

THE ARCHIVE

The archive consists of:

- 91 Context sheets
- 2 Photographic record sheets
- 1 Section record sheets
- 1 Plan record sheet
- 7 Daily record sheets
- 22 Sheets of scale drawings
- 3 Stratigraphic matrices
- 5 Boxes of finds

All primary records and finds are currently kept at:

Archaeological Project Services The Old School Cameron Street Heckington Sleaford Lincolnshire NG34 9RW

The ultimate destination of the project archive is:

Norfolk Museums Service Union House Gressenhall Dereham Norfolk NR20 4DR

The archive will be deposited in accordance with the document titled *County Standards for Field Archaeology in Norfolk*, produced by Norfolk Landscape Archaeology.

Norfolk Museums Service Number: ENF 122804

The discussion and comments provided in this report are based on the archaeology revealed during the site investigations. Other archaeological finds and features may exist on the development site but away from the areas exposed during the course of this fieldwork. *Archaeological Project Services* cannot confirm that those areas unexposed are free from archaeology nor that any archaeology present there is of a similar character to that revealed during the current investigation.

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