ARCHAEOLOGICAL MONITORING
OF AUGER HOLES AT
PETTICOAT LANE,
BOSTON,
LINCOLNSHIRE
(BPL02)



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ARCHAEOLOGICAL

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SERVICES

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ARCHAEOLOGICAL MONITORING
OF AUGER HOLES AT
PETTICOAT LANE,
BOSTON,
LINCOLNSHIRE
(BPL02)

Work Undertaken For Oldrid and Co. Ltd

Report Compiled By Gary Taylor BA, MA

February 2002

Planning Application No: B/99/0488 National Grid Reference: TF 3285 4418 City and County Museum Accession No:2000.16

A.P.S. Report No: 25/02





Highways & Planning Directors a

# **CONTENTS**

# List of Figures

1.	Summary 1
2.	Introduction12.1 Definition of a Watching brief12.2 Planning Background12.3 Topography and Geology12.4 Archaeological and Historical Setting2
3.	Aims
4.	Methods
5.	Results
6.	Discussion
7.	Conclusions 5
8.	Acknowledgements 6
9.	Personnel
10.	Bibliography
11.	Abbreviations
Apper	ndices
1 2	Glossary The Archive

# **List of Figures**

Figure 1 General location plan

Figure 2 Site location plan

Figure 3 Plan of the development showing auger hole locations

Figure 4 Representative Sections through Auger holes

#### 1. SUMMARY

Archaeological monitoring of auger holes was undertaken in advance of redevelopment of Oldrids store, Petticoat Lane, Boston, Lincolnshire. The monitoring determined the level of natural geological deposits across the area.

The site lies in the historic core of Boston, astride the Barditch, the medieval boundary of the town. Previous investigations at the site established that medieval remains, including a probable brick-built house, were located in the eastern part of the site, near to Mitre Lane. No medieval remains were identified in the western part of the site. where the earliest archaeological deposits revealed were of the 16th-17th century. The medieval remains in the eastern part of the site, and the post-medieval remains to the west, both overlay deposits tentatively identified as natural flood silts, though similar natural layers, overlying medieval remains, have previously been revealed elsewhere in the vicinity. Remains of 18th century and later date occurred throughout the area and were, in general 0.75m-1.1m deep.

The monitoring revealed that natural geological deposits in the western part of the site, within the line of the Barditch, occur at 3.7-3.8m below present ground level. In the central and eastern part of the site, outside the Barditch circuit, natural deposits occur between 3.3m and 2.8m below the present ground level, though at the eastern limit of the site, on Mitre Lane, archaeological deposits are thicker and natural clays were only encountered at 3.8-3.9m below ground level.

#### 2. INTRODUCTION

# 2.1 Definition of a Watching Brief

An archaeological watching brief is defined as 'a formal programme of observation and investigation conducted during any operation carried out for non-archaeological reasons within a specified area, where there is a possibility that archaeological deposits may be disturbed or destroyed.' (IFA 1997).

# 2.2 Planning Background

Planning permission (application number B/99/0488) for the construction of an extension to a store has been by granted Boston Borough Council, subject to conditions that the applicant should secure the implementation of a programme of archaeological work in accordance with a written scheme of investigation which has been submitted to and approved by the planning authority, and mitigation in all areas of ground disturbance.

It was determined that information regarding the level at which natural geological layers occur across the area was necessary to assist with the mitigation of impact. This information was to be provided by a sequence of auger holes across the site.

In consequence, Archaeological Project Services was commissioned by Oldrid and Co. Ltd to undertake the archaeological monitoring of geotechnical auger holes. The monitoring was undertaken on the 4<sup>th</sup> and 6<sup>th</sup> February 2002.

## 2.3 Topography and Geology

Boston lies 45km southeast of Lincoln and 7km from the northwestern coast of The Wash in the fenland of south Lincolnshire (Fig. 1). Located in the town core,

approximately 100m east of the parish church of St Botolph, the site lies to the rear of Oldrid's store along Petticoat Lane, extending westwards from Mitre Lane toward the Market Place. The site is located at national grid reference TF 3285 4418 (Fig. 2).

The site lies at approximately 5m OD on a slight rise above the generally flat terrain. As an urban area soils have not been mapped but are likely to be Wisbech Series typically coarse, silty alluvial gleys (Robson 1990, 36). Beneath these soils are deposits of marine alluvium overlying glacial drift that was deposited in a geological basin between the Lincolnshire Wolds and the East Anglian Heights (Harden 1978, 5).

# 2.4 Archaeological and Historical Setting

The site lies in the town core, close to the medieval parish church and Market Place and is crossed by the Barditch, the medieval boundary around the core of the town. This boundary is first mentioned in 1160 and by the 13th century there are records of properties outside its line. Previous investigations on nearby Strait Bargate have revealed remains of 14th century date, thereby broadly confirming the documentary evidence of medieval occupation outside the Barditch. Mitre Lane is recorded as early as the 16th century when it was known as Pescod Lane. Petticoat Lane is recorded from the 18th century when it was called Smock Lane. A map of 1741 shows buildings on Mitre Lane, including one spanning its width, though Petticoat Lane was largely undeveloped and comprised gardens to the rear of properties on Strait Bargate (Archaeological Project Services 2000).

Previous archaeological investigations in the vicinity have revealed medieval deposits between 1-3m below the modern ground

surface (Symonds 1988; Jarvis 1992; Archaeological Project Services 1997). Flood silts of *c*. 14<sup>th</sup> century date have been identified during some of these previous investigations and there is documentary evidence of floods several times during the 13<sup>th</sup> century (Thompson 1856). At one location on nearby Wide Bargate the flood silts overlay 14<sup>th</sup> century archaeological remains (Archaeological Project Services 1997). This feature is common throughout Boston where flood deposits of different dates overlie archaeological remains of various periods.

Investigations at the site itself recorded medieval deposits in the eastern part of the site only. These remains, of the 13<sup>th</sup>- 15<sup>th</sup> century, occurred close to Mitre Lane and were revealed approximately 0.75m below the present ground surface and extended to at least 0.6m thick. These medieval remains were mostly represented by a brick building with associated floors, probably a house. This building was established on a deposit which contained 13th-14th century pottery and which may be partly composed of flood silts (Archaeological Project Services 2000; Rackham 2000).

No medieval remains were encountered in the western part of the site, inside the circuit of the Barditch. The earliest archaeological remains identified in this area were 16th- 17th century in date. These comprised a boundary ditch, a refuse pit, dumped deposits and former topsoils. The ditch is considered to be a boundary between properties fronting Strait Bargate, to the north. These remains overlay what is probably a flood deposit (Rackham 2000) which extended to over a metre deep. The top of the early postmedieval deposits was revealed about 1.0-1.1m below the current ground surface and they extended to between 0.3m and 0.5m thick. These early post-medieval deposits were only identified in the western part of the site and appeared to be absent from the eastern part of the area. It is possible that later activity in the area disturbed or removed early post-medieval remains in the eastern part of the site. Later deposits of the 18<sup>th</sup> century and subsequently, occurred across the area. In the western part of the site these were generally about 1.0-1.1m deep and to the east were 0.75m thick, though particular features extended to at least 1.5m deep below present ground level.

Although no waterlogged ancient environmental remains were encountered in the investigations, the groundwater was reached. There is thus the possibility of organic remains being preserved by waterlogging in deeper features or deposits (Archaeological Project Services 2000).

On the basis of the results of the earlier investigations, together with cartographic and other evidence, it seems probable that medieval structural remains, defining occupation and other activities, are largely confined to the eastern, Mitre Lane, end of the site. Elsewhere across the area it seems probable that the site occupied back plots to the rear of houses fronting Strait Bargate. Although development on Strait Bargate is known from the 13th- 14th century, the investigation revealed only 16th- 17th century remains. It is possible that earlier deposits are buried beneath flood silts in this area, or that this part of the site was gardens or similar back plots in medieval times. The post-medieval remains to be expected include property boundaries between separate plots, cess and refuse pits and dumped deposits. Although the investigation encountered only post-medieval examples of these types of remains it is very possible, given the known medieval occupation of Strait Bargate, that similar features of perhaps the 13th century onwards occur in the area.

Elsewhere in Boston, Roman remains have been found about 1.4m below the current ground surface at a height of 2m OD. However, there is no evidence of Roman remains occurring at the site and no redeposited artefacts of the period were encountered during the investigation of the area, though a single piece of Roman pottery has previously been found a little to the northeast (*ibid.*).

#### 3. AIMS

The aim of the archaeological monitoring was to determine the depth at which natural geological deposits occur across the area.

# 4. METHODS

Locations for auger holes were positioned at appropriate, moderately evenly-spaced positions across the area (Figure 3). The positions of the auger points was planned by tape survey to fixed points recorded on maps of the area.

Augers were excavated using shafts with a maximum width of 100mm, driven by a pneumatic percussion drill.

Each 1.00m long column was trowelled clean to identify boundaries in deposits and to determine whether the layers were of an archaeological nature, contained occupation and other debris, or natural. However, only the locations of natural, or apparently natural, deposits were recorded and their nature briefly described.

#### 5. RESULTS

Each auger hole is detailed individually, and representative sections detailing archaeological and natural deposits were created (Fig. 4).

# Auger Hole 1

Located in the northwestern corner of the site.

0-1.20m: modern tarmac, hardcore, rubble. 1.20m: auger hit impenetrable layer

#### Auger Hole 1a

Positioned approximately 1.5m to southeast of auger hole 1.

0-1.70m: modern tarmac, hardcore, rubble and 'occupation' deposits.

1.70-2.50m: dark grey silty clay, occasional charcoal.

2.50-3.00m: clean beige silty clay.

3.00-3.70m: black, organic silty layer with charcoal and leather.

3.70-5.00m: clean beige silty clay.

#### Auger Hole 2

Located near southwestern corner of the development area.

0-3.80m: modern tarmac, hardcore, rubble, 'occupation' deposits including black, organic silty material.

3.80-5.00m clean beige silty clay, occasional charcoal near surface.

#### Auger Hole 3

Located near to the southwestern corner of the existing Oldrid's store.

0-1.20m: modern tarmac, hardcore, rubble. 1.20-3.30m: void? Water evident at 1.2m depth.

3.00-3.30m: dark brown/black silty 'occupation' deposit.

3.30-5.00m: clean beige clay, occasional charcoal near surface.

#### Auger Hole 4

Located in Petticoat Lane, mid-way along southern boundary of Oldrid's store.

0-1.90m: modern tarmac, hardcore, rubble, 'occupation' deposits.

1.90-2.30m: clean beige fine sandy silt.

2.30-3.30m: dark brown-black organic silts and clay.

3.30-4.00m: clean beige silty clay occasional charcoal near surface.

#### Auger Hole 5

Located near the southeastern corner of the existing Oldrid's store.

0-1.40m: modern tarmac, hardcore, rubble, 'occupation' deposits.

1.40-1.80m: clean, light brown sand.

1.80-2.40m: black, organic silty layer.

2..40-2.80m: dark grey silty clay.

2.80-4.00m: clean beige clay.

# Auger Hole 6

Located near the southeastern corner of the development area.

0-0.80m: modern tarmac, hardcore, rubble and brick.

0.80-1.70m: grey-yellow sandy clay and crushed brick.

1.70-2.70m: dark grey/black silt, charcoalrich in top 0.3m, sandier lower down.

2.70-3.90m: grey-brown silty clay, no obvious inclusions.

3.90-5.00m: clean beige clay.

#### Auger Hole 7

Positioned approximately 1.5m to southwest of auger hole 6.

0-0.80m: modern tarmac, hardcore, bricks. 0.80-1.00m: clean, light brown fine sandy silt.

1.00-1.50m mixed medium brown silty sandy clay with occasional brick fragments.

1.50-2.80m: very dark grey silty clay with charcoal.

2.80-3.00m: clean, beige silty clay.

3.00-3.80m: very dark brown silts.

3.80-5.00m: light grey-brown clay, occasional charcoal near surface.

#### 6. DISCUSSION

The augering has indicated that the surface

of the natural undulates across the area, and also that there are some later probable flood silts that overlay archaeological levels (Fig. 4).

In the western part of the site, in Auger holes 1a and 2, archaeological deposits, defined by the presence of charcoal and other materials, extended to 3.7-3.8m below modern ground level. In one of the auger samples, 1a, there was a clean, beige silty clay between 2.50-3.00m below ground level. This probable signifies a flooding episode. However, further dark, organic archaeological layers occurred below this to a depth of 3.70m before natural clays were encountered. These natural clays extended to at least 5m below the modern surface.

East of the postulated line of the Barditch the surface of the natural rose. In Auger holes 3 and 4, the natural clean beige clays were revealed at 3.30m below ground level. About 8m further to the east, in Auger 5, the natural is 2.8m below ground level. However, about 11m further to the east, in Auger hole 7, the surface of the natural was lower, at 3.8m below the modern ground surface. It was at a similar depth, 3.9m, in the adjacent auger hole 6, about 1.5m to the northeast.

A series of clean, apparently natural deposits was encountered in auger holes 4, 5 and 7, in the eastern part of the site. In each of these auger holes a beige to light brown silt or sandy silt was encountered. These deposits probably constitute the same layer and this rose and thinned out to the east (Fig. 4). Dark occupation deposits were encountered beneath this clean silt in all three augers. A further clean beige silty clay was revealed in Auger 7 at a depth of 2.8-3.0m below the surface. This, too, overlay dark occupation deposits which extended to 3.8m beneath ground level.

Neither of these apparently historical period flood deposits were evident in Auger 6, only 1.5m from Auger 7. The clean light brown sand, which formed the upper alluvial layer in Augers 4, 5 and 7, was thinning out to the east and may not have extended as far as Auger 6. The lower alluvial clean silty clean in Auger 7 was thin and may have been a localised flood deposit, not extending into the area of adjacent Auger 6. However, the lower archaeological deposits in Auger 6 display some differences to those in the other augers, which may imply that this sample encountered an ditch or pit.

Ground water was only clearly observed in Auger 3, were a possible void was encountered. However, the auger samples indicated that deposits below about 2m beneath the ground surface were damp or moist throughout the site.

#### 7. CONCLUSIONS

Archaeological monitoring of geotechnical auger holes was carried out at Petticoat Lane, Boston to determine the level of natural deposits in an area of significant archaeological remains.

This augering indicated that natural clays occurred at 3.7-3.8m below current ground level in the western part of the site, within the circuit of the Barditch. At the very eastern limit of the site, on Mitre Lane, natural was at a similar depth, 3.8-3.9m below the surface. However, along Petticoat Lane, in the middle and eastern part of the site, the natural rose and was 3.3m below the surface, rising further to 2.8m beneath ground level, before dipping towards Mitre Lane. Deposits below about 2m beneath the surface were damp and thus have the potential for the preservation of organic remains through waterlogging. Evidence of historical period flood silts was also identified across the area.

# 8. ACKNOWLEDGEMENTS

Archaeological Project Services would like to acknowledge the assistance of Mr S. Goulder of Oldrid and Co. Ltd who commissioned this investigation. Thanks are also due to Mr F. Yuill of MLG Associates Ltd and Mr N. Chamberlain of Lindum Construction Ltd. The work was coordinated by Gary Taylor and this report was edited by Tom Lane. Ms. R. Wilcox, the Boston Community Archaeologist, kindly permitted access to the parish files maintained by Heritage Lincolnshire. Plans of the development were kindly provided by Ward Cole Consulting Engineers and MLG Associates.

#### 9. PERSONNEL

Project Coordinator: Gary Taylor

Supervisor: Gary Taylor Illustration: Sue Unsworth

Post-excavation Analyst: Gary Taylor

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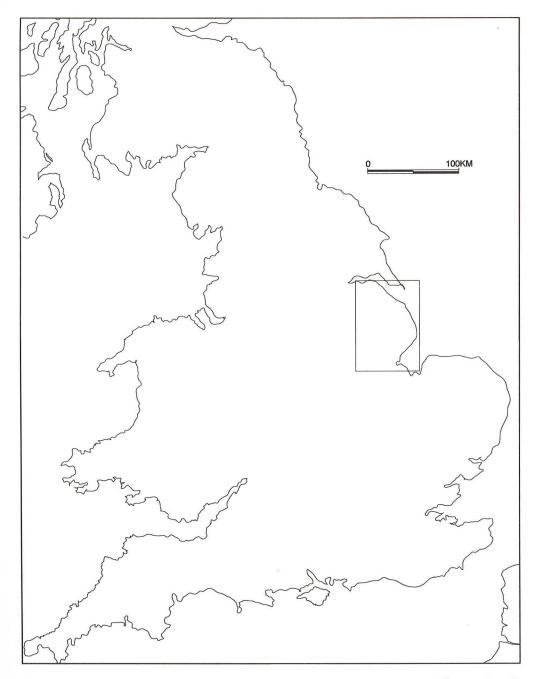
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#### 11. ABBREVIATIONS

APS Archaeological Project Services

IFA Institute of Field Archaeologists



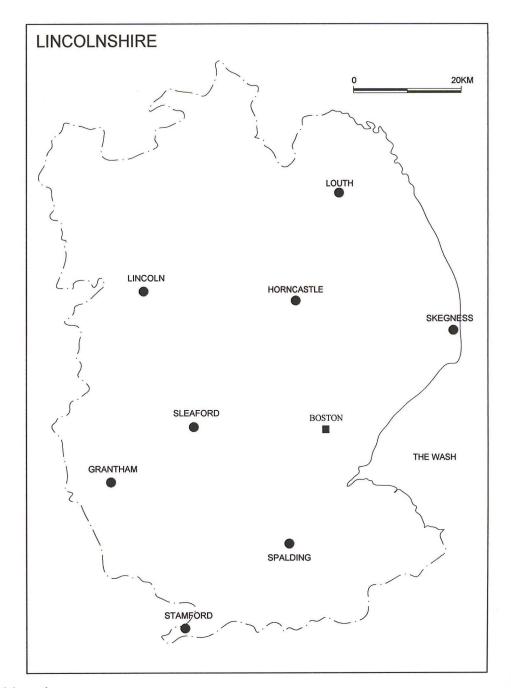


Figure 1 - General location map

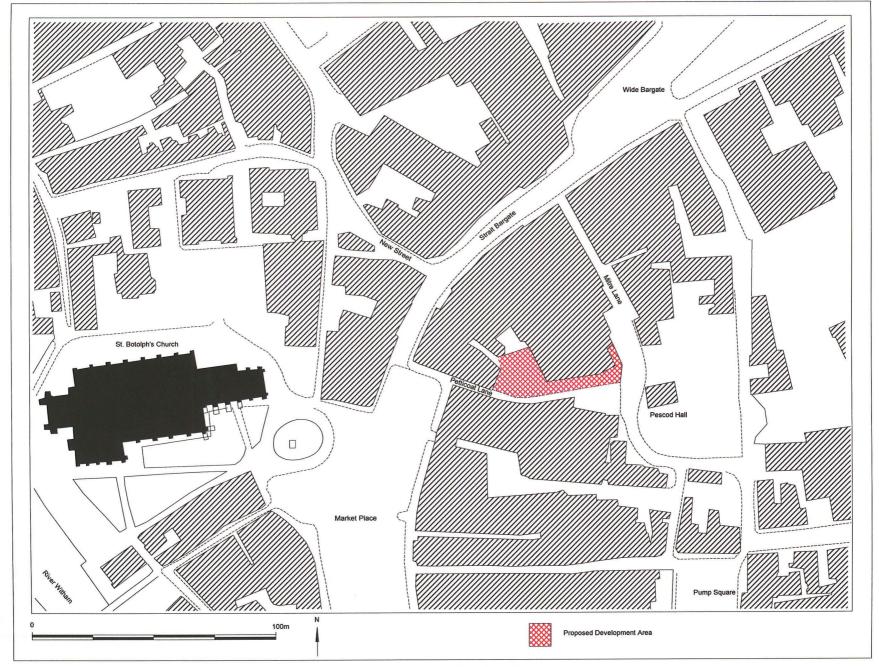


Figure 2 - Site location plan

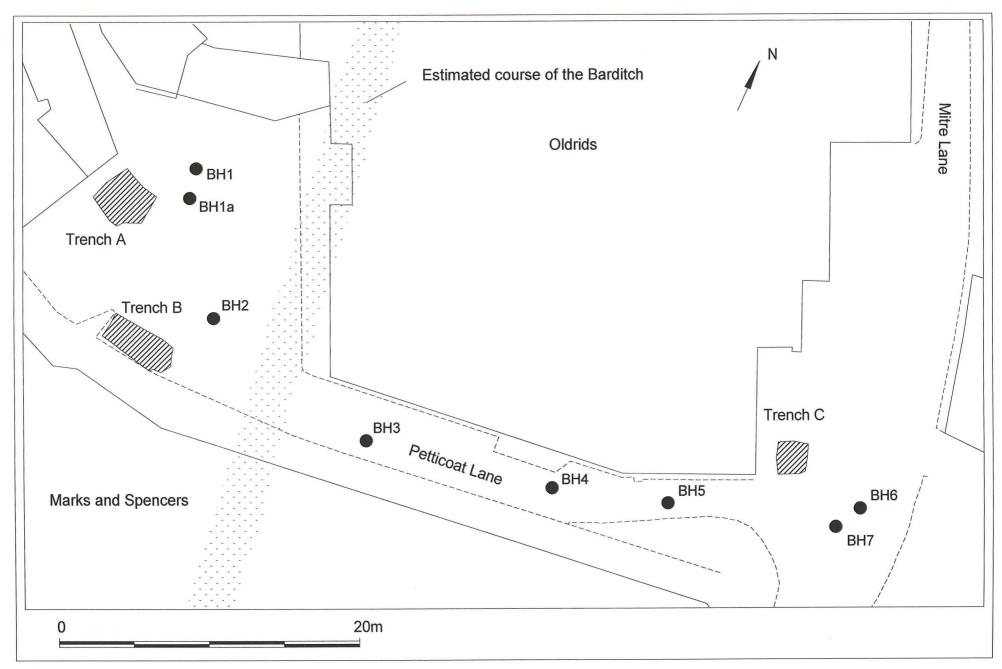


Figure 3 - Plan of the development showing auger hole locations

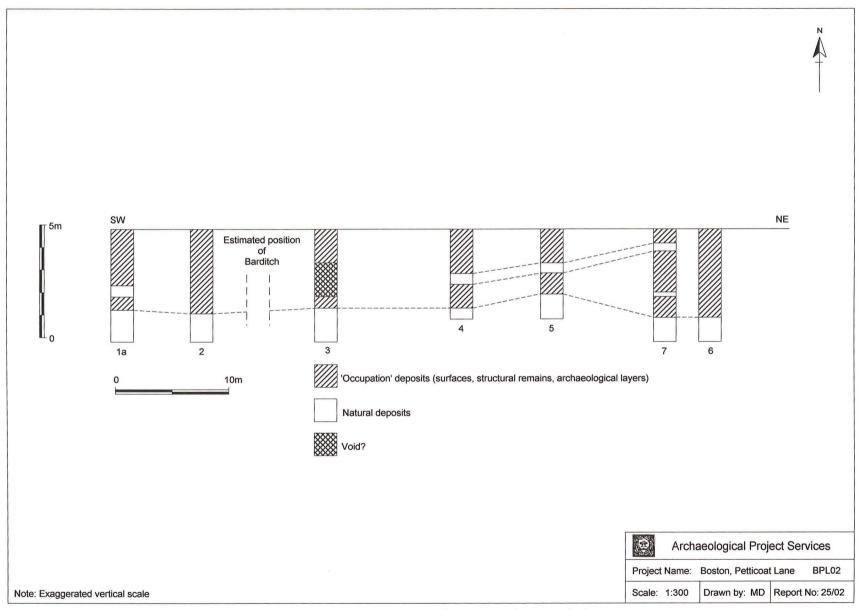


Figure 4 Representative sections through Auger holes

# Appendix 1

## **GLOSSARY**

Alluvium Deposits laid down by water. Marine alluvium is deposited by the sea,

and fresh water alluvium is laid down by rivers and in lakes.

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

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.

# Appendix 2

#### THE ARCHIVE

The archive consists of:

- 2 Day recording sheets
- 3 Auger record sheets
- 1 Drawing sheet
- 2 Copies of report

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:

Lincolnshire City and County Museum 12 Friars Lane Lincoln LN2 1HQ

The archive will be deposited in accordance with the document titled *Conditions for the Acceptance of Project Archives*, produced by the Lincolnshire City and County Museum.

Lincolnshire City and County Council Museum Accession Number: 2000.16

Archaeological Project Services Site Code: BPL02

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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