

ARCHAEOLOGICAL WATCHING BRIEF AT BAILGATE, LINCOLN, LINCOLNSHIRE (LNBG 10)

Work Undertaken For Technical Services Partnership Lincolnshire County Council

September 2010

Report Compiled by Paul Cope-Faulkner BA (Hons)

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1. SUMMARY

A watching brief was undertaken during groundworks at Bailgate, Lincoln. The watching brief monitored the excavation of three drainage gullies and works associated with the re-surfacing of the road.

The site is located in an archaeologically sensitive area, lying within the Roman (AD 43-410) and medieval (AD1066-1540) walled city. Although located along the line of the Roman thoroughfare, Ermine Street, previous discoveries have suggested that a wall was built into this street, perhaps part of a colonnaded structure. The present course of Bailgate is a medieval route and deviates from its Roman precursor.

The watching brief revealed possible Roman deposits, one of which was overlain by a demolition layer, containing medieval roof tile. Most of the deposits encountered relate to previous levelling and make-up for road surfaces and service trenches.

Finds retrieved during the investigation include Roman pottery, roof tile and stonework. A small quantity of medieval roof tile was collected along with an oyster shell.

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 nonarchaeological reasons. This will be within a specified area or site on land, inter-tidal zone or underwater, where there is a possibility that archaeological deposits maybe disturbed or destroyed." (IfA 1999).

2.2 Planning Background

Archaeological Project Services was commissioned by Lincolnshire County Council to undertake an archaeological groundworks watching brief during associated with new road re-surfacing and drainage Bailgate, Lincoln. at The watching brief was carried out between the 29th January and 11th May 2010 in accordance with a specification prepared by Archaeological Project Services and approved by the City Archaeologist, City of Lincoln Council.

2.3 Topography and Geology

Bailgate is situated in the northern upper part of the city of Lincoln. The site lies some 310m northwest of the cathedral at National Grid Reference SK 9764 7095 (Fig. 1). The works were undertaken along the length of Bailgate between Newport Arch and Eastgate. The area lies on gently undulating ground at heights of between 66m and 68m OD.

As an urban area local soils have not been mapped. The site overlies a solid geology of Jurassic Lower Lincolnshire Limestone (GSGB 1973).

2.4 Archaeological Setting

The site lies in an area of known archaeological remains dating from the Neolithic period to the present day. Several Neolithic stone axes were found during excavations near the Newport Arch.

Bailgate follows the line of Ermine Street, a major thoroughfare connecting Lincoln to London and northwards to the Humber. It was on the axis of this street that a Roman Legionary fortress was built around AD 55. Excavations at Bailgate Methodist church identified wall trenches for timber buildings that may relate to barrack blocks (Jones 2003, 42). Excavations along East Bight also found burnt material accumulated against the rear of the rampart (Jones 1980, 48).

The legionary fortress was replaced by a *Colonia*, a colony for veteran soldiers. The defences of the fortress were retained and modified as was the principal street layout. New civic buildings were constructed including a forum/basilica towards the south of the examined area along Ermine Street and public baths to the west of the site.

To the north of the site are the remains of the Newport Arch, a third century gateway to the *Colonia*. There were originally three openings, two pedestrian gates flanking a major passageway. Excavations in 1954 found a projecting tower on its western side (Thompson and Whitwell 1973, 189).

Bailgate is a medieval deviation from the original line of the Roman Ermine Street, determined by the presence of ruined Roman structures.

A watching brief was undertaken during trenching for a new watermain in 1993. This located a possible wall built on the line of Ermine Street as well as several stone surfaces. The wall was further examined during an evaluation where it was found to be an island of medieval road surfaces (Cope-Faulkner 2010, 4).

3. AIMS

The aim of the archaeological investigation was to ensure that any archaeological features exposed during the groundworks should be recorded and, if present, to determine their date, function and origin.

4. METHODS

The road surface was stripped of overburden by machine to heights determined by the development. Drainage gullies were also excavated by machine (Fig. 2). The sides of the gullies were then cleaned and rendered vertical. The stripped surface of the road was also examined for archaeological deposits, although the depths did not reach archaeological horizons. Selected deposits were excavated further to retrieve artefactual material and to determine their function. Each deposit was allocated a unique reference number (context number) with an individual written description. A list of all contexts and their descriptions appears as Appendix 1. A photographic record was compiled and sections were drawn at a scale of 1:10 and plans at 1:20. Recording was undertaken according to standard Archaeological Project Services practice.

Following excavation finds were examined and a period date assigned where possible (Appendix 2). The records were also checked and a stratigraphic matrix produced. Phasing was assigned based on the nature of the deposits and recognisable relationships between them and supplemented by artefact dating.

5. **RESULTS**

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

Gullies 1 and 2

The earliest deposit encountered in Gully 2 was a layer of brown clayey sand (007) that measured in excess of 50mm thick (Fig. 3, Section 2; Plate 2). A single sherd of Roman pottery was retrieved from this layer.

This was sealed by a dumped deposit comprising brown clayey sand with limestone (006) that contained frequent medieval tile. This was 0.33m thick. Overlying this was a layer of brown clayey sand (005) subsequently sealed by yellowish brown sandy clay and demolition material (004). This had been cut by a modern service trench.

Sealing these deposits was the modern tarmac surface (001). In Gully 1 this lay above brownish yellow sand and gravel (003) hardcore.

Gully 3

Deposits in Gully 3 comprised three layers, a lower of degraded brown mortar (016) upon which was concrete (002), measuring over 0.47m thick (Fig. 3, Section 3), sealed by the current tarmac road surface (001).

Gullies 4 and 5

In Gully 4, the lowest deposit reached was a layer of mixed rubble (013). This measured over 0.58m thick (Fig. 4, Section 4; Plate 3). A steel service pipe was recorded above this.

In Gully 5, the earliest deposit comprised grey clayey silt (015) that was over 0.17m thick (Fig. 4, Section 5; Plate 4). This was sealed by a 0.54m thick layer of limestone fragments in a clayey silt matrix (014).

Sealing these deposits in both gullies was a layer of mixed rubble (011) measuring up to 0.3m thick. This was sealed by modern hardcore (010) for the current pavement (009).

Gullies 6 and 7

The earliest deposit recorded in Gully 6 comprised a mixed stone deposit within a clayey sand matrix (022), which was over 0.3m thick (Fig. 4, Section 6; Plate 5) and contained a fragment of Roman tile. Above this was a layer of brown sandy clay with occasional large stones (021).

This had been cut by two service pipe trenches (020) and (019), the latter encased a pipe in concrete. Sealing this was gravel (018) that provided a make-up deposit for the modern tarmac road (017). In Gully 6, a yellowish brown sandy clay with brick/tile fragments (025) was recorded (Fig. 4, Section 7; Plate 6). Above this was a layer of concrete surrounding a plastic drain (024). Set upon the concrete was the curb of the present pavement.

North Bailgate Area

Stripping of modern surface layers (Plate 7) revealed an extensive levelling deposit of brown sandy clay with stone, tile and charcoal (026). It was from this area that the large piece of stonework was obtained.

6. **DISCUSSION**

The depth of the investigations precluded deposits of Roman date from being exposed. However, a deposit of clayey sand in Gully 2 revealed a fresh sherd of 2^{nd} to 3^{rd} century date and a mixed stone layer in Gully 6 produced an un-abraded Roman tile, and these may represent undisturbed horizons.

The possible Roman deposit in Gully 2 had been sealed by a demolition deposit containing tiles of $15^{th} - 16^{th}$ century date. It is unknown if the demolition occurred during the medieval period or later. Most of the other deposits appear to indicate levelling deposits probably associated with former surfaces of Bailgate. Also recorded were a number of service trenches.

Finds include a single sherd of Roman pottery, a fragment of tile and a limestone plinth, of probable Roman date. Medieval roof tile was also retrieved along with a single oyster shell.

7. CONCLUSION

An archaeological watching brief was undertaken during improvements to Bailgate as the site lay within the archaeologically sensitive core of the Roman and medieval town. Two deposits were identified that may be of Roman origin. It is likely that further deposits of this period lie at a greater depth as no natural was encountered. A demolition deposit was also recorded that contained medieval roof tile. Other deposits relate to more recent road makeup and service trenches.

Finds include Roman pottery, tile and stonework as well as medieval roof tile and oyster shell.

8. ACKNOWLEDGEMENTS

Archaeological Project Services wishes to acknowledge the assistance of Mr A Round, Senior Engineer, Technical Services Partnership, Lincolnshire County Council, for commissioning the fieldwork and post-excavation analysis. The work was coordinated by Dale Trimble 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: Dale Trimble Site Supervisors: Andrew Failes, Bob Garlant

Finds processing: Denise Buckley

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

Failes Post-excavation analysis: Paul Cope-Faulkner

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11. ABBREVIATIONS

- APS Archaeological Project Services
- CLAU City of Lincoln Archaeology Unit
- GSGB Geological Survey of Great Britain
- IfA Institute for Archaeologists
- LAS Lindsey Archaeological Services



Figure 1 - Site location plan



Figure 2 - Plan of the Bailgate area showing section locations



Figure 3 - Sections 1 to 3



Figure 4 - Sections 4 to 7



Figure 5 - Profile of worked stone from northern part of Bailgate



Plate 1 – View looking north along Bailgate



Plate 2 – Section 2, looking south



Plate 3 – Section 4, looking west



Plate 4 – Section 5, looking east

Plate 5 – Section 6, looking west



Plate 6 – Section 7, looking west

Plate 7 – View showing the ground reduction at the north end of Bailgate, looking north



Plate 8 – The worked stone from the north Bailgate area

CONTEXT DESCRIPTIONS

No.	Interpretation	Description
001	Indurated black tarmac, up to 0.36m thick	Modern tarmac
002	Indurated white concrete	Recent concrete
003	Friable light brownish yellow sand and gravel	Hardcore
004	Friable mid yellowish brown sandy clay and demolition rubble, 0.24m thick	Backfill deposit
005	Soft mid brown clayey sand, 0.23m thick	?Road make-up
006	Firm dark brown clayey sand and limestone deposit, 0.33m thick containing frequent tile	Dumped deposit
007	Soft mid brown clayey sand at least 50mm thick	Deposit
008	Friable light brownish yellow sand and gravel	Hardcore
009	Modern pavement, 60mm thick	Pavement
010	Modern hardcore, 0.34m thick	Modern hardcore
011	Mixed rubble, 0.30m thick	Mixed rubble
012	Iron service pipe, 0.12m diameter	Service pipe
013	Mixed rubble deposit, 0.58m deep	Levelling deposit
014	Loose buff and grey limestone fragments in a clayey silt matrix, 0.54m thick	Levelling deposit
015	Soft mid to dark grey clayey silt, 0.17m thick	Levelling deposit
016	Friable light brown degraded mortar	Dumped deposit
017	Tarmac road surface	Tarmac
018	Loose mid yellow gravel, 0.23m thick	Gravel hardcore
019	Indurated white concrete surrounding a service pipe	Concrete filler
020	Loose yellowish brown sand surrounding a service pipe	Sand filler
021	Firm dark brown sandy clay with occasional large stones, 0.56m thick	Sandy clay deposit
022	Firm to loose light reddish to yellowish brown and grey stone and clayey sand with frequent flecks of CBM, 0.30m thick	Backfill deposit
023	Modern curb of pavement	Curb
024	Indurated concrete surrounding plastic drain tank, there is grey sludge in the bottom from the plastic drain tanks removal	Concrete fill
025	Firm mid yellowish brown sandy clay with frequent charcoal and frequent CBM flecks, 0.15m thick	Sandy clay layer
026	Firm mid brown sandy clay with frequent stone, tile and charcoal	Levelling deposit

THE FINDS

ROMAN POTTERY

 $By \, Alex \, Beeby$

Introduction

All the material was recorded at archive level in accordance with the guidelines laid out by Darling (2004) and to conform to Lincolnshire County Council's *Archaeology Handbook*. A single sherd from one vessel, weighing 31 grams was recovered from the site.

Methodology

The material was laid out and viewed before being counted and weighed. 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 Table 1 below.

Condition

The sherd is relatively fresh.

Results

Table 1, Roman Pottery Archive

Context	Cname	Full Name	Form	Decoration	Vessel	Comments	Sherds	Weight
007	BB2	Black Burnished Ware 2	J	BZ	1	BS; PROB JEV	1	31
007	ZDATE					M2-E3C		

Provenance

The pottery came from clayey sand layer (007).

Range

There is a single sherd from a jar in Black Burnished Ware 2. This is a common type produced in south east England and distributed widely across the south east, during the mid 2^{nd} to the early 3^{rd} century AD. Although this material is not very common in Lincolnshire it is not unknown.

Potential

There is little potential for further work. The sherd should be retained as part of the site archive and should pose no problems for long term storage.

Summary

A single sherd dating from the mid 2nd to mid 3rd century AD was recovered during the watching brief.

CERAMIC BUILDING MATERIAL

By Alex Beeby and Anne Boyle

Introduction

All the material was recorded at archive level in accordance with the guidelines laid out by the ACBMG (2001) and to conform to Lincolnshire Council's *Archaeology Handbook*. A total of 12 fragments of ceramic building material, weighing 605 grams was 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 in Archive catalogue 1, with a summary in Table 2 below.

Condition

The material is fragmentary; the average fragment weight is moderately low at 50 grams. Joining fragments from one tile, a late medieval peg type (PEG), have a reoxidised broken edge. This piece is also very highly fired to the

point of partial virtrification. The tile may have been burnt, reused and reheated in a structure such as a hearth or fireplace, or it may be kiln waste. Another flat roofing tile has mortar adhered, this is also suggestive of later reuse.

Results

Table 2, The Ceramic Building Material

Cname	Full name	NoF	W(g)
BRK	Brick	2	74
PEG	Peg tile	2	142
PNR	Peg, nib or ridge tile	7	76
TEG	Tegula	1	313
	Total	12	605

Provenance

Ceramic building material was recovered from dump deposit (006) and backfill deposit (022).

Range

A single piece of Tegula tile is the only building material of Roman date recovered. This fragment is in an oxidised medium sandy fabric and, according to Bett's typology (1986), has a Type 2 flange.

Most of the fragments are from roofing tiles, although there are also two pieces from a single late medieval brick (BRK) present. The remainder of the material is from medieval or late medieval flat roofing tiles. This group includes one pegged tile (PEG) and three peg, nib or ridge tiles (PNR). The pegged tile has a very large peg hole intended to hold a wooden dowel or nail. The presence of this particular kind of tile is unusual in the city and it may be imported from outside the Lincoln area.

Potential

There is little potential for further work. The material should be retained as part of the site archive and should pose no problems for long term storage.

Summary

Twelve fragments of ceramic building material ranging in date from the Roman to the late medieval period were recovered during the watching brief.

STONEWORK

By Paul Cope-Faulkner

Introduction

A fragment of worked stone was retrieved as an unstratified item from an area of ground reduction at the northern end of Bailgate.

Description

The stone measures 625mm long by 530mm wide by 160mm thick. It has mouldings on two faces at 90° apart. The mouldings comprise a fillet with a hollow chamfer above. The fillet does not extend the full depth of the stone suggesting that the lower part of the moulding was probably buried, indicating that the stone was a plinth or base. The upper surface of the stone has been damaged so any other moulding details are now lost. There is no evidence for the stone having been reused and there is no affixed mortar.

Geology

The stone is a shelly limestone with white veins running through it. It is generally too course for the Lincoln stone beds which outcrop in the immediate vicinity and it is likely that the stone was brought some distance to the site.

Dating

The stone is of a very classical form and is likely to be Roman or post-medieval in date. Given the lack of postmedieval buildings of a type to use such stone in the Bailgate area, a Roman date is preferred. The baths located east of Bailgate may indicate a source for this stone, though colonnaded shops along the street frontage may also have had elaborate plinths.

FAUNAL REMAINS

By Gary Taylor

Introduction

A single shell weighing 46g was recovered from stratified contexts.

Provenance

The shell was retrieved from a layer (007).

Condition

The overall condition of the remains was good to moderate, averaging at grades 2-3 on the Lyman Criteria (1996).

Results

Table 3, Fragments Identified to Taxa

Cxt	Taxon	Element	Side	Number	W (g)	Comments
007	oyster	shell	bottom	1	46	

Summary

The shell represents food waste and has limited potential. However, it should be retained as part of the site archive.

SPOT DATING

The dating in Table 4 is based on the evidence provided by the finds detailed above.

Table 4, Spot dates

Cxt	Date	Comments	Earliest Horizon	Latest Horizon
006	15th-16th	Based on CBM	MH	PMH3
007	M2nd-L2nd	Based on a single sherd	R	R
022	Roman	Based on CBM	R	R

ABBREVIATIONS

ACBMG	Archaeological Ceramic Building Materials Group
BS	Body sherd
CBM	Ceramic Building Material
CXT	Context
NoF	Number of Fragments
NoS	Number of sherds
NoV	Number of vessels
W (g)	Weight (grams)

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ARCHIVE CATALOGUES

Archive Catalogue 1, Ceramic Building Material

Context	Cname	Fabric	NoF	W(g)	Comment	Date
006	PEG	Fabric 1/7	2	142	Over fired; oxidised over the break; crack during firing?; hard rounded Fe; shale; large Q grits; large peg hole partially extant; sunken margin	15th- 16th

Context	Cname	Fabric	NoF	W(g)	Comment	Date
006	BRK	Oxidised; coarse sandy	2	74	Mortar on upper surface; handmade	15th- 16th
006	PNR	LSWA	1	28	Shell; mudstone; white quartzite grits; FLR	13th- 15th
006	PNR	Fabric 7	2	28	Joining; FLR	13th- 15th
006	PNR	Fabric 7	4	20	Fragmentary	13th- 15th
022	TEG	Bright oxidised; medium sandy	1	313	Knife trimmed edge; mudstone grits	Roman

GLOSSARY

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, <i>e.g.</i> (004).
Cut	A cut refers to the physical action of digging a posthole, pit, ditch, foundation trench, <i>etc.</i> 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.
Natural	Undisturbed deposit(s) of soil or rock which have accumulated without the influence of human activity.
Neolithic	The 'New Stone Age' period, part of the prehistoric era, dating from approximately 4500-2250 BC.
Post-medieval	The period following the Middle Ages, dating from approximately AD 1500-1800.
Roman	Pertaining to the period dating from AD 43-410 when the Romans occupied Britain.

THE ARCHIVE

The archive consists of:

- 26 Context records
- 1 Photographic record sheet
- 8 Sheets of scale drawings
- 1 Box 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:

The Collection Art and Archaeology in Lincolnshire Danes Terrace Lincoln LN2 1LP

Accession Number:

LCNCC: 2010.17

Archaeological Project Services Site Code:

LNBG 10

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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