LAND AT LAUGHTON CRESCENT, ERMINE ESTATE (off Laughton Way/Redbourne Drive), Lincoln

Archaeological Evaluation Report

NGR: Planning Authority: Site code: PCAS job no.: Archive acc. code: SK 98463 73612 City of Lincoln Council LCLE 15 1585 LCNCC 2015.238

Prepared for

Cloud Lettings Ltd.

by

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Fig. 1: Location of the proposed development site at scale 1:25,000. Site outlined in red. OS mapping © Crown copyright. All rights reserved. PCAS licence no. 100049278.

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Summary

A scheme of archaeological trial trenching was undertaken to assess the archaeological potential of land at Laughton Crescent, in the Ermine East estate of Lincoln. A planning application for residential development is currently under preparation.

The site lies in the Upper City, within an area which was not developed until the mid 20th century. It lies close to the Roaring Meg spring which is thought to have possibly had ritual significance in the prehistoric era, and to possible barrow features associated with a scatter of Neolithic – Bronze Age flints. The spring was channelled in the Roman period, creating an aqueduct which extended southwest towards the Roman settlement on the cliff edge.

Two evaluation trenches were positioned to investigate the footprints of the proposed new dwellings. Only two archaeological features were identified; both of which relate to medieval agricultural activity. It is thus surmised that the proposed residential development will have no significant impact upon buried archaeological remains.

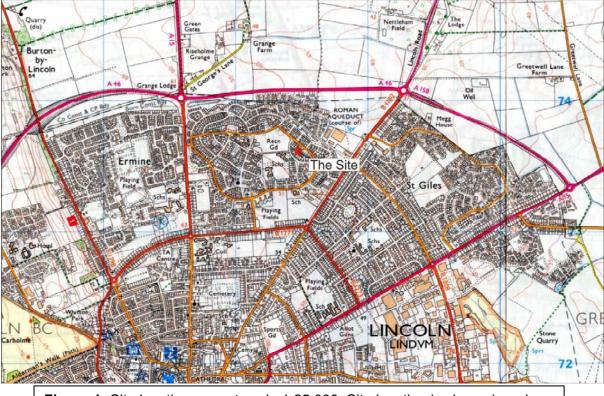


Figure 1: Site location map at scale 1:25,000. Site location is shown in red.

1.0 Introduction

Pre-Construct Archaeological Services Ltd (PCAS) was commissioned by Cloud Lettings Ltd. to undertake an archaeological evaluation on land off Laughton Crescent, Laughton Way/Redbourne Drive, Lincoln.

A methodology to be employed during the fieldwork, and the post-excavation reporting and archiving procedures was set out in a Written Scheme of Investigation (Lane 2015). It followed current best practice and national guidance including:

- NPPF, National Planning Policy Framework (2012)
- IFA Code of Conduct (2014);
- IFA Standards and Guidance for Archaeological Field Evaluation (2014)
- Management of Research Projects in the Historic Environment (MoRPHE)
- The Lincolnshire Archaeology Handbook (2012)

This strategy was subject to the approval of the City Archaeologist advising the City of Lincoln Council.

2.0 Location and description (Figs. 1)

The proposed development site lies in the Upper City of Lincoln, on the Ermine East Estate. As its name suggests, the estate lies to the east of the Roman Ermine Street approaching the city from the north, just inside the A46 ring road. The site lies between Riseholme Road and Nettleham Road, just east of the Sudbrooke Drive play area. It is bounded to the northeast by Laughterton Way, to the south by Haydour Avenue and to the west by Redbourne Drive. There are currently two access points; from Laughton Way almost opposite the junction with Thurlby Crescent, and approximately half way along Haydour Avenue. The redline boundary is defined largely by the rear gardens of properties fronting onto these roads.

The site is currently covered almost entirely by a modern metalled surface, with a large building occupying the northern corner. This site area is approximately 1300m², and its approximate central National Grid Reference is SK 98463 73612.

3.0 Geology and topography

The site lies on the plateau at the top of the Lincoln Escarpment, a ridge of limestone bedrock which extends along the north bank of the River Witham and northwards to the River Humber. There are no recorded overlying drift deposits

(http://mapapps.bgs.ac.uk/geologyofbritain/home.html). Ground levels in the area are fairly consistent, between 45m-50m, sloping slightly to the east. The closest recorded benchmark to the site is on the southwest face of No. 42 Laughton Way (approximately 75m east of the Laughton Way site entrance), which is recorded at 45.315m AOD (0.50m above EGL) (http://www.ordnancesurvey.co.uk/benchmarks/).

4.0 Planning background

A planning application for the construction of nine new dwellings, including three pairs of semi-detached houses and a short row of three terraced properties, is currently under preparation for submission to the City of Lincoln Council. The City Archaeologist was consulted regarding this proposal, and he advised an archaeological evaluation was required to investigate the sites archaeological potential and thus inform the planning application. The results are to be submitted for consideration with the planning application.

5.0 Archaeological and historical background

The site lies in the Ermine East Character Area as defined on the Heritage Connect Lincoln website. This largely residential area was constructed between 1950-1972 as local authority housing and as a result is quite uniform in appearance, with many long streets looping back on themselves. Most of the housing was built in a Modernist-influenced style with little or no external decorative detailing, mainly in red or yellow brick, with the majority of the dwellings being two storeys although bungalows and three storey apartment blocks are interspersed throughout the area. (http://www.heritageconnectlincoln.com/character-area/).

The Ermine East character area has the following research agendas as classified by Lincoln Urban Archaeological Assessment (LARA):

Prehistoric Era (-10000BC – 60AD); 5.9.1 Limestone uplands dry land and relatively easily worked soils that may have been attractive to later prehistoric communities for occupation and agriculture.

Roman Military Era (60AD – 90AD); 6.18 Legionary 'prata' and 'territorium' large areas of land surrounding major Roman fortresses in which agricultural production and services were dedicated to the service of the legion rather than the local population; *6.21 Roads beyond the Canabae*

Roman colonia Era (90AD - 410AD); 7.1 Roads entering the city; 7.14 Area of centuriation around the city, land devoted to agricultural production for the settlement inhabitants rather than being directly occupied; 7.17 The aqueduct running parallel to Nettleham Road piping water from the natural springs to the north of the city to the Roman settlement.

Early Medieval Era (410AD - 850AD); 8.3.1 Central elements of former Roman city and Roman network what did the Anglo-Saxons do with the massive remains of Roman infrastructure; *8.4 Land around city potentially usable for settlement and agriculture.*

High Medieval Era (850AD – 1350AD); 9.12.1 Long distance roads namely the former Ermine Street giving access from the north gate of the city; *9.12.2 Intermediate distance roads* connecting Lincoln with the smaller outlying towns and villages; *9.45.4 Humber Cross on Ermine Street; 9.45.6 Nettleham mere and contiguous features; 9.9.1 Lincoln common fields* the city fields lay exclusively to the north and east of the walled city

Early Modern Era (1350AD – 1750AD); 10.12.1 Long distance roads namely the former Ermine Street giving access from the north gate of the city; *10.12.2 Intermediate distance roads* connecting Lincoln with the smaller outlying towns and villages; *10.45.4 Humber Cross on Ermine Street; 10.45.6 Nettleham mere and contiguous features; 10.9.1 Lincoln common fields* the city fields lay exclusively to the north and east of the walled city *Industrial Era (1750AD – 1945AD); 11.6.1 Long distance road routes; 11.7.1 Intermediate road routes; 11.17 City's arable fields; 11.31 Middle class house building between the wars.* (http://www.heritageconnectlincoln.com/character-area/ermine-east-estate/36/related)

There are no Lincolnshire HER recorded archaeological monuments within 200m of the redline site boundary.

To the northeast of the site, a scatter of flints were recovered during fieldwalking ahead of residential development. The scatter is focused around NGR SK 987 739 at the northeast end of Searby Road, c. 360m from the site, and have been dated to the early Neolithic – late Bronze Age (LHER 70370). They are possibly associated with two circular cropmarks that were originally seen on aerial photographs and have also been identified through geophysical survey, lying in the same area (LHER ref: 70068/70069). These features have been provisionally interpreted as possible round barrows.

The Roaring Meg spring which lies just to the south of the flint scatter at NGR SK 988 738 was tapped and funnelled towards the Roman Colonia around the 1_{st} century fort on the cliff edge; the remains of the Roman aqueduct have been identified in this area, along with scatters of Roman pottery, evidence of structures and metalled surfaces (LHER ref: 70013). A single sherd of Iron Age pottery has been found in this vicinity (LHER ref: 70271), and a group of 2_{nd} century pottery sherds have been recovered from just inside the A46 ring road, thought to reflect manuring of the fields outside the Roman town (LHER ref: 54928).

Saxon, medieval and post-medieval pottery has been recovered from the area just south of the A46 Lincoln bypass, around 400m north of the site (LHER ref: 54927, 54935, 94390). In the immediate post-Roman period, occupation at Lincoln withdrew inside the Roman city walls, and throughout the medieval period and in the early post-medieval occupation activity was more intense in the Lower city, therefore it is likely that these sherds also represent agricultural activity on the periphery of the settlement.

Two modern monuments around the site are St. Johns Church, a Grade II* Listed Building lying c.600m southwest, and Ermine County Infants School, which lies c.250m southeast of the site (LHER ref: 70998, 71142).

6.0 Methodology

The evaluation comprised two trenches, one measuring 15m x 2m, and another measuring 10m x 2m (see figure 2).

The purpose of the evaluation was to gather sufficient information to establish the presence or absence, extent, depth, condition, character, quality and date to any archaeological deposits. Environmental evidence was to be taken into account where possible.

Trenches were machine excavated using a JCB 3CX machine fitted with a smooth wide bucket. They were manually cleaned and archaeological features were excavated by hand. Sections were drawn at a scale of 1:20 and features plotted on trench plans drawn at a scale of 1:50 to 1:100, which were tied into the GPS trench positions. Drawings were supplemented by colour slide and digital photography, a selection from which is reproduced in Appendix 1. Deposits were recorded on standard PCAS record sheets, and an excavation site diary was also kept. Finds were stored in labelled bags prior to their removal to the offices of PCAS for initial processing. An online record of the project data was initiated with the Archaeological Data Service (OASIS database) prior to fieldwork commencing, and is to be completed at the end of the project, including an uploaded digital copy of the report.

Following fieldwork completion, finds were processed and dispatched to the relevant specialists.

The fieldwork was completed between the 5th and 6th January by L. Brocklehurst.

7.0 Results

The results are described below and are followed by a discussion and conclusion.

Of the two trenches investigated, one was archaeologically sterile; the other contained two parallel linear features, most likely associated with post-medieval agriculture.

7.1 Trench 1

Trench 1 (10m x 2m) was located towards the western edge of the site, and was orientated NNW-SSE. It was excavated to a depth of 0.65m below existing ground level at which the natural geology was encountered. Two linear features were exposed, each of which was sealed by subsoil, topsoil and a layer of modern hardcore and concrete.

Furrow [104] was orientated NE-SW and located towards the centre of the trench. It had regular sloped sides and a fairly flat base; 1.1 m wide and 0.3m deep. It contained a single silt clay fill, from which no finds were recovered.

To the SE a second furrow [106], was also orientated NE-SW. This was 1.2m wide and 0.3m deep. As with [104] it also contained a single compact silty clay fill, from which two fragments of medieval tile were recovered.

Both of features were cut into the subsoil (103).

7.2 Trench 2

Trench 2 (15m x 2m) was set on a NE-SW alignment. It was excavated to a depth of 0.7m below existing ground level, at which the natural substrate was encountered. Excavation exposed a stratigraphy including subsoil and topsoil sealed by modern hardcore and tarmac layers.

No cut archaeological features were identified, nor were any artefacts recovered.

8.0 Discussion and conclusion

Of the two investigated trenches, one was archaeologically sterile, and the other exposed relatively little.

The two parallel furrows in Trench 1 are most likely related to medieval agricultural activity within the area.

The only finds recovered from site comprised two fragments of medieval flat roof tile dated to between the 13th and 15th century. This was recovered from the fill of furrow [106]. They were both un-glazed and are in the most commonly found fabric used in Lincoln (Appendix 4).

It is concluded that the site has limited archaeological potential.

9.0 Effectiveness of methodology

Intrusive evaluation was an appropriate method for gathering further information about the sites archaeological potential. The body of data produced by this evaluation is considered sufficient to inform the planning and development process.

10.0 Acknowledgements

Pre-Construct Archaeological Services would like to thank Cloud Lettings Ltd. for this commission.

11.0References

Lane, A. 2015. Land at Laughton Crescent, Ermine Estate (Off Laughton Way/Redbourne Drive), Lincoln: Written Scheme of Investigation. PCAS. Unpublished.

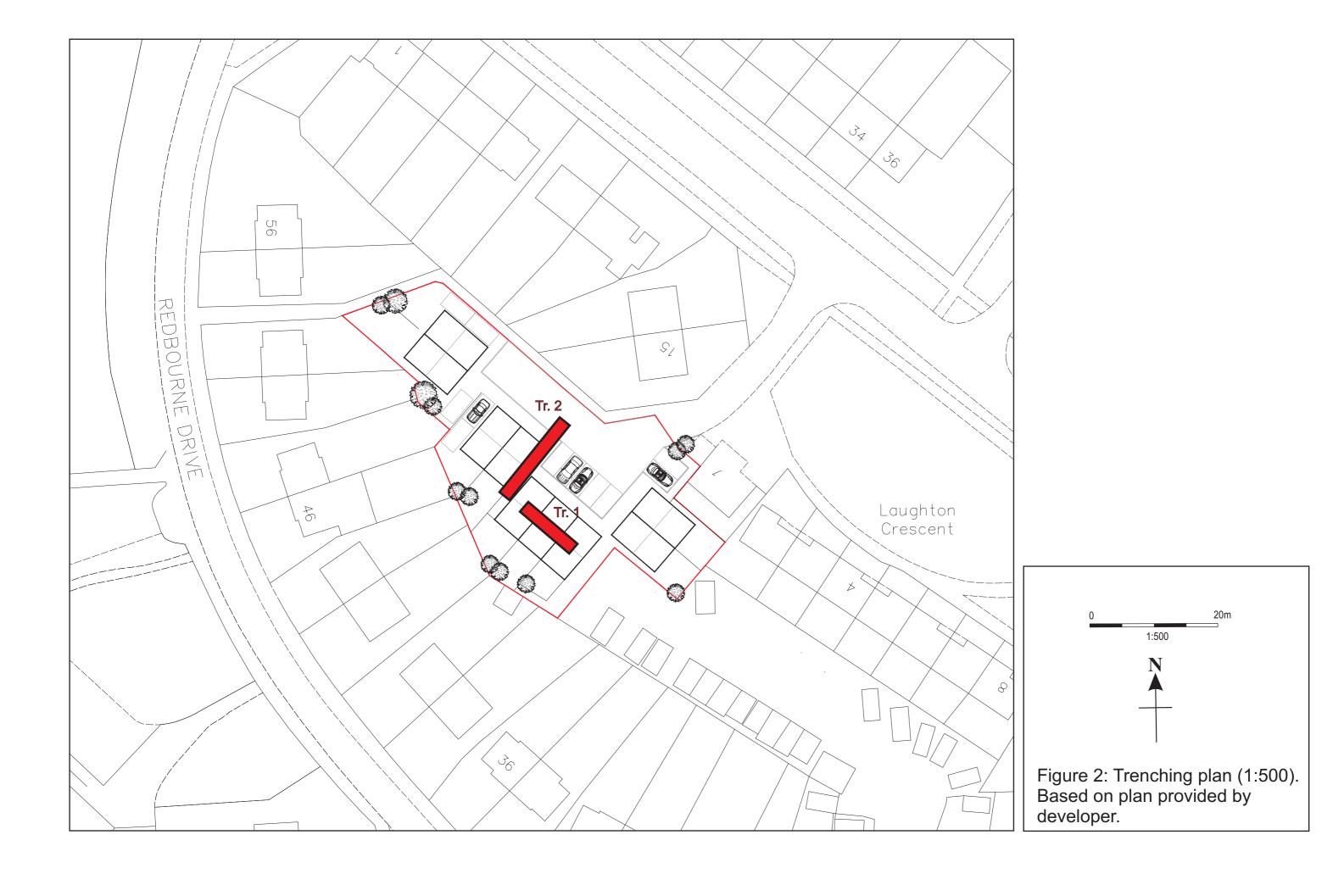
OS Explorer Map, 2006, *Sheet 272: Lincoln, Sleaford, Metheringham and Navenby*. Ordnance Survey, Southampton. (OS mapping © Crown copyright. All rights reserved. PCAS licence no.100049278).

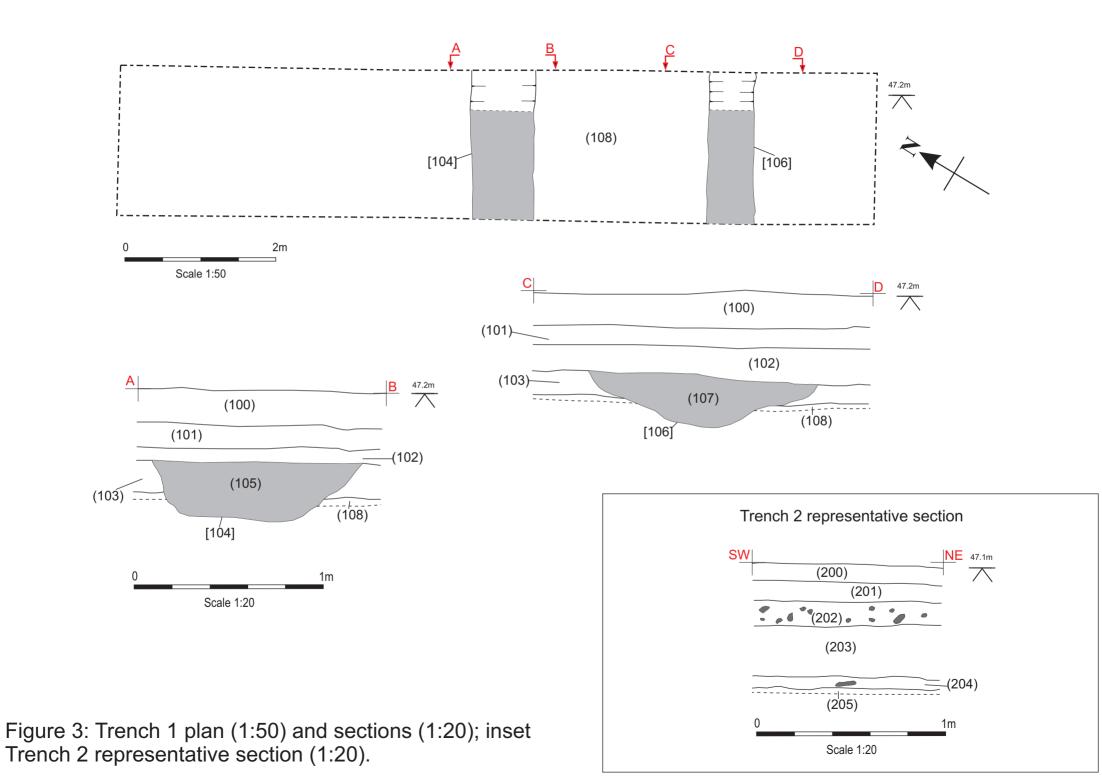
Websites:

http://www.ordnancesurvey.co.uk/benchmarks/

http://www.heritageconnectlincoln.com/

http://mapapps2.bgs.ac.uk/geoindex/home.html





<u>Appendix 1 – Colour Plates</u>



Plate 1: Pre-excavation shot of area where Trench 2 was positioned (looking W).



Plate 2: Pre-excavation shot of area where Trench 1 was positioned (looking SW).



Plate 3 (left): Trench 1 post-excavation (looking NW).

Plate 4 (right) Trench 2 post-excavation (looking NE).





Plate 5: Trench 2 representative section (looking NW).



Plate 6: Furrow [104] (looking NE).



Plate 7: Furrow [106] (looking NE).

Appendix 2 – Context Summary

Context No.	text Type Description			
Trench 1		·	•	
100	Layer	Modern concrete surface. 0.18m thick.		
101	Layer	Modern hardcore foundation layer for (100). 0.12m thick.		
102	Layer	Buried topsoil. Dark brown to black silty clay. Very compact and firm. 0.3m thick.		
103	Layer	Subsoil. Mid orange clay silt. Fairly compact and firm. Frequent limestone flecks throughout. Natural interface. 0.2m thick.		
104	Cut	NE-SW orientated furrow. Fairly steep sides and a flat base. Cut into (103) and sealed by (102). 1.1m wide and 0.3m deep.		
105	Fill	Fill of ditch [104]. Mid orange brown grey silty clay. Firm and compact. Frequent limestone throughout deposit. No finds.		
106	Cut			
107	Fill	Of ditch [106]. Same as (105), however it contained three fragments of tile/CBM.	Tile/CBM	
108				
Trench 2				
200	Layer	Modern tarmac surface. 0.1m thick.		
201	Layer	Mid orange brown sand. Very fine. Modern, used as base for (200). 0.1m thick.		
202	Layer	Light yellow modern hardcore. 0.14m thick.		
203	Layer			
204	Layer	Subsoil. Dark orange brown silty till. Friable and loose. Natural interface. 0.06m thick.		
205	Layer	Natural limestone brash.		

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OASIS ID: preconst3-232683

Project details

Project name Archaeological Evaluation on land off Laughton Cresent, Lincoln

Short description A scheme of archaeological trial trenching was undertaken to assess the archaeological potential of land at Laughton Crescent, in the Ermine East estate of Lincoln. A planning application for residential development is currently under preparation. The site lies in the Upper City, within an area which was not developed until the mid 20th century. It lies close to the Roaring Meg spring which is thought to have possibly had ritual significance in the prehistoric era, and to possible barrow features associated with a scatter of Neolithic - Bronze Age flints. The spring was channelled in the Roman period, creating an aqueduct which extended southwest towards the Roman settlement on the cliff edge. Two evaluation trenches were positioned to investigate the footprints of the proposed new dwellings. Only two archaeological features were identified; both of which relate to medieval agricultural activity. It is thus surmised that the proposed residential development will have no significant impact upon buried archaeological remains.

Project dates	Start: 05-01-2016 End: 06-01-2016
Previous/future work	No / Not known
Any associated project reference codes	LCLE 15 - Sitecode
Type of project	Field evaluation
Site status	None
Current Land use	Industry and Commerce 4 - Storage and warehousing
Monument type	FURROW Medieval
Significant Finds	TILE Medieval
Methods & techniques	""Sample Trenches""
Development type	Urban residential (e.g. flats, houses, etc.)
Prompt	Voluntary/self-interest
Position in the planning process	Pre-application

1/26/2016

Project location	
Country	England
Site location	LINCOLNSHIRE LINCOLN LINCOLN Land at Laughton Cresent
Study area	1300 Square metres
Site coordinates	SK 98463 73612 53.250091620276 -0.524089644831 53 15 00 N 000 31 26 W Point

Project creators

Name of Organisation	Pre-Construct Archaeological Services Ltd
Project brief originator	Local Authority Archaeologist and/or Planning Authority/advisory body
Project design originator	Pre-Construct Archaeological Services Ltd
Project director/manager	Will Munford
Project supervisor	Leigh Brocklehurst
Type of sponsor/funding body	Developer

Project archives

archives	
Physical Archive Exists?	No
Digital Archive recipient	The Collection, Lincoln
Digital Contents	"Ceramics"
Digital Media available	"Images raster / digital photography","Text"
Paper Archive recipient	The Collection, Lincoln
Paper Contents	"Ceramics"
Paper Media available	"Context sheet","Diary","Drawing","Notebook - Excavation',' Research',' General Notes","Photograph","Plan","Report","Section"
Entered by	Leigh Brocklehurst (leigh@pre-construct.co.uk)
Entered on	26 January 2016



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JANE YOUNG

INTRODUCTION

A total of two fragments of tile weighing a total of 99 grams recovered from the site were presented for examination. The material was examined both visually and at x 20 binocular magnification. The Lincoln Medieval Fabric Tile Type Series was consulted. The resulting archive was then recorded on an Access database (Appendix 5) and complies with the guidelines laid out in Slowikowski, *et al.* (2001), the Archaeological Ceramic Building Materials Group (2001) and the Lincolnshire County Council's *Archaeological Handbook* (sections 13.4 and 13.5).

CONDITION

The material is in slightly abraded but stable condition.

THE CERAMIC BUILDING MATERIAL

Two pieces of medieval flat roof tile (PNR) were recovered from ditch **106**. This fabric was in use from the mid 12th to 16th centuries but these pieces are most likely to be of 13th to 15th century date.

Table 1: Ceramic Building material codenames and total quantities by fragment count and weight

Cod	ename	Full name	Total fragments	Total weight in grams	
PNR		Flat roof tile	2	99	

DISSCUSION

The two fragments of un-glazed flat roof tile recovered from this site are of medieval date. They are in the most commonly found fabric used in Lincoln (Fabric 1).

The material is in a stable condition and should be kept for future study.

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>

Lincolnshire Archaeological Handbook 2009 edition [Internet]. Available from

<http://www.lincolnshire.gov.uk/upload/public/attachments/1073/Archaeological_Handbook.pdf

Slowikowski, A. 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.

site code	context	cname	fabric	frags	weight	description	date
Icle 15	107	PNR	Lincoln Fabric 1	1	51	flat roofer	13th to 15th
Icle 15	107	PNR	Lincoln Fabric 1	1	48	flat roofer	13th to 15th