

**LAND ADJACENT ROSE COTTAGE GARDEN,
10 ORBY ROAD,
BURGH LE MARSH,
LINCOLNSHIRE**



MUSEUM ACCESSION NUMBER: LCNCC: 2015.168

PLANNING REF: S/023/01139/15

OASIS ID: independ1-229613

IAC SITECODE: RCGO15

NGR REF: TF 5008 6520

ARCHAEOLOGICAL SCHEME OF WORKS

PREPARED BY CHRISTER CARLSSON

FOR MISS MARY MACKINDER

NOVEMBER 2015

CONTENTS

Summary

- 1 Introduction**
- 2 Site Location and Description**
- 3 Geology and Topography**
- 4 Planning Background**
- 5 Archaeological and Historical Background**
- 6 Methodology**
- 7 Results**
- 8 Discussion and Conclusion**
- 9 Effectiveness of Methodology**
- 10 Acknowledgements**
- 11 Bibliography**
- 12 Site Archive**

Appendix 1: Colour Plates

Appendix 2: Context Descriptions

Appendix 3: Finds List

Appendix 4: Pottery Report

Appendix 5: Osteology Report

Appendix 6: OASIS Form

Figures:

Figure 1: Site Location Map

Figure 2: Site Outline Map

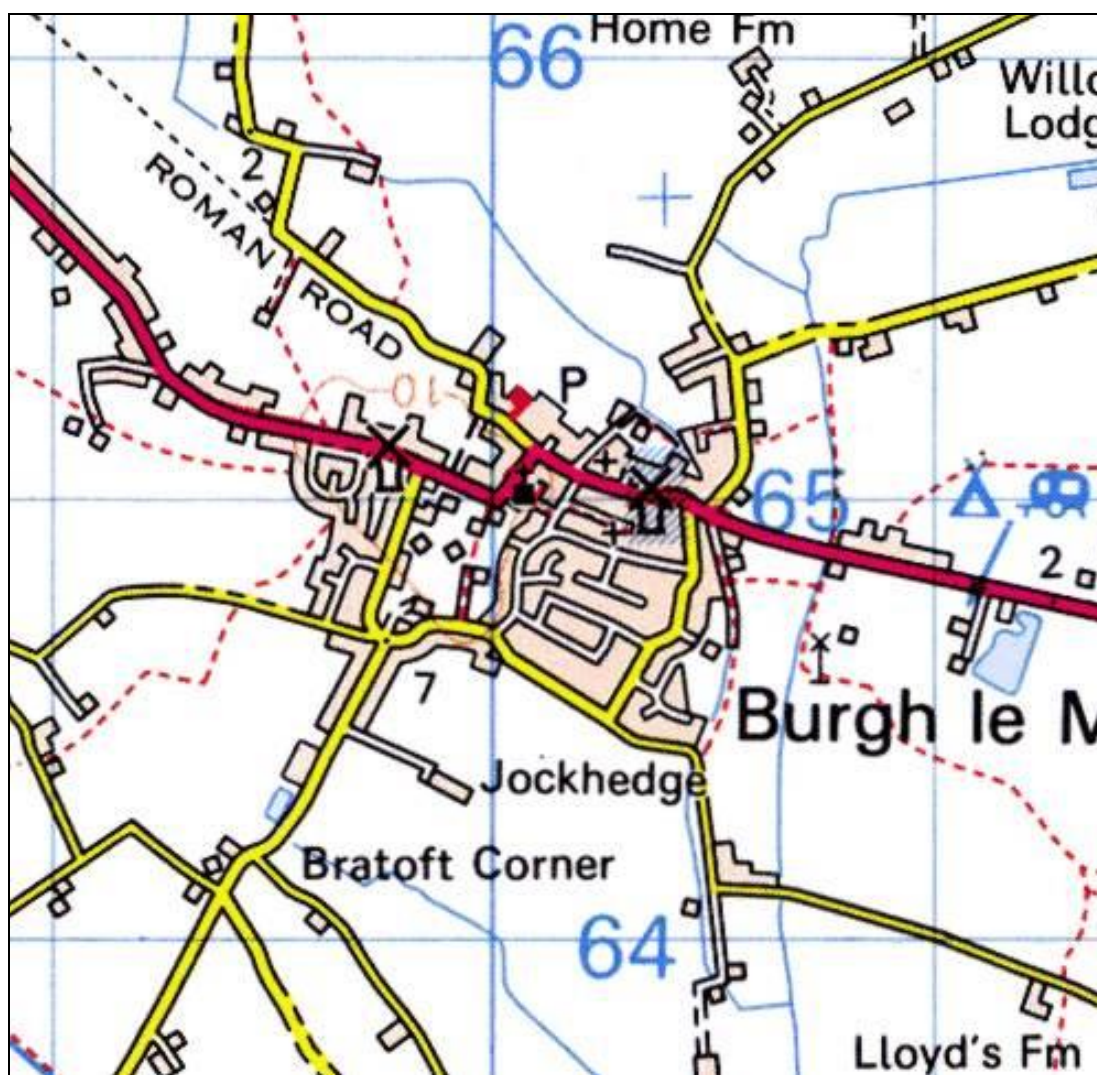
Figure 3: Plan

Figure 4: Sections

Summary

An Archaeological Scheme of Works was conducted by Independent Archaeology Consultants for the construction of four new dwellings on land adjacent Rose Cottage Garden, 10 Orby Road, Burgh le Marsh, Lincolnshire. IAC was commissioned by the client Miss Mary Mackinder to undertake the programme of archaeological investigation.

The development area contained a previously unknown early Medieval ditch, as well as pottery and animal bones in well stratified deposits dating from the Medieval Ages to the Modern period. Mixed in with the Medieval pottery were also some Romano-British pottery sherds, indicating that a Roman settlement was once located in the vicinity.



Site Location Map. (Produced with OS Licence Number 0100031673).

1 INTRODUCTION

- 1.1 An Archaeological Scheme of Works was conducted by Independent Archaeology Consultants for the construction of four detached dwellings, with associated drive and car parks, adjacent Rose Cottage Garden, 10 Orby Road, Burgh le Marsh, Lincolnshire. The site works were carried out 3-5 November 2015. IAC was commissioned by the client Miss Mary Mackinder to undertake the programme of archaeological works, which was linked to a planning condition for the site.

2 SITE LOCATION AND DESCRIPTION

- 2.1 The development site was located in the central parts of the village of Burgh le Marsh in Lincolnshire, on land adjacent Rose Cottage Garden, 10 Orby Road (NGR: TF 5008 6520). The site covered an area of some 1600m² and was located behind Rose Cottage and north of Orby Road. The area consisted of previously undeveloped land in the centre of the village.

3 GEOLOGY AND TOPOGRAPHY

- 3.1 The site was located at an average height of 10m AOD. The area was higher in the south and dropped about 3.5m down towards the Orby Dyke in north. The geology of the site comprised Glaciofluvial- and Till deposits over Claxby Ironstone Formations (British Geological Survey). The land was previously undeveloped and partly covered with low vegetation.

4 PLANNING BACKGROUND

- 4.1 The site was situated within an area of archaeological potential, as defined by Lincolnshire HER. Therefore, an Archaeological Scheme of Works was required prior to the proposed construction works. This condition was mentioned in the Planning Permission (S/023/01139/15) granted by East Lindsey District Council, and was in line with standards described in *NPPF* (2012).
- 4.2 A previous Archaeological Evaluation of the land indicated that the site contained potential for archaeological remains and finds dating predominately from the Roman and Medieval periods (Berger 2014).
- 4.3 A second stage of archaeological work was therefore carried out in accordance with the *Standard and Guidance for Archaeological Investigation* issued by the Chartered Institute for Archaeologists (CifA 2014), as well as discussions with the Archaeological Officers at Lincolnshire County Council. The project was based on a WSI, which was approved by the Council and complies with the principles of *NPPF* (National Planning Policy Framework 2012).

5 ARCHAEOLOGICAL AND HISTORICAL BACKGROUND

- 5.1 Burgh le Marsh is situated in the marsh area of eastern Lincolnshire. This area is of great archaeological and historical importance. The region has preserved a large number of archaeological sites from the Roman, Saxon, Viking and Norman periods. The nearby coastal town of Skegness may have been founded during the Viking period, and might have been one of a large number of Viking settlements in eastern England.
- 5.2 The village of Burgh le Marsh has in itself a long and fascinating history: Its name comes from the Old English and means “a fortified place”. Burgh le Marsh has been constantly occupied since at least the Roman period. A well preserved Saxon burial mound is still visible near the parish church on the west side of the village. During archaeological investigations in the 1930s Saxon burial remains were uncovered here (PRN 43596).
- 5.3 Parts of a Medieval settlement with associated field systems in the form of ridge and furrow are visible on aerial photographs from the area, and what was one of Lincolnshire’s last remaining areas of commons is referred to on nineteenth century maps.
- 5.4 The development site is located within 100m from the known boundaries of the Medieval settlement of Burgh le Marsh. As the proposed development covers a large area just outside the historical core of the village significant deposits may be disturbed during the groundworks associated with the new development. Known archaeological remains within the area indicate that the site could have potential for finds and deposits from the Roman period (PRN 41510), (PRN 41507), (PRN 41512), and (PRN 41508).
- 5.5 Roman pottery sherds were found about 15m east of the development site in a trench for a telephone cable. A year later more finds were discovered in the same area, and were interpreted as a possible edge of a ditch with finds including: a shale bracelet, organic material and further 4th century pottery. Additional Roman and Medieval pottery was found west of the site together with a number of Roman coins. There is therefore a good potential for archaeological remains within the proposed development area.
- 5.6 An initial archaeological evaluation within the development site revealed that archaeological deposits survive, and would be impacted upon by the development. The evaluation trenches revealed Roman features and finds, including: *'a cohesive assemblage of 4th century Roman material; domestic and architectural, animal skeletal remains and carbonised organics'* in one of the features, a possible V-shaped ditch and a feature interpreted as *'a shallow linear gully, beam slot?'* (Berger 2014).

6 METHODOLOGY

6.1 Digging of Testpit

The Archaeological Scheme of Works commenced with the excavation of a testpit in the northern part of the development site. The 1x2m large testpit was opened up under constant archaeological supervision using a flat bladed ditching bucket. All deposits present in the testpit were cleaned and manually excavated in order to determine their date, character and relationships.

6.2 Monitoring of Groundworks

The remaining part of the archaeological scheme of works consisted of the continuous monitoring of the groundworks within the site. The stripping of overburden was made under constant archaeological supervision using a flat bladed ditching bucket. Areas of development were mechanically stripped to the upper interface of secure archaeological deposits or, where these were not present, to the upper interface of natural deposits. Thereafter, hand-excavation was required to sample any features exposed. When necessary the construction work was temporarily stopped to allow a careful recording of the exposed features.

The stripping of overburden took into consideration potential above- and below-ground constraints and/or hazards, such as trees, utility trenches, overhead cables and areas of modern disturbance. Topsoil and overburden were stored within the development site during the course of the archaeological investigation.

When archaeological features were encountered they were hand cleaned, investigated and recorded according to the parameters described below. The investigation was not carried out at the expenses of the heritage assets within the site.

6.3 Metal Detecting

Thorough metal detector sweeps of deposits, features and spoil heaps were carried out in advance of, and during, the excavation process.

6.4 Hand Excavation

All man-made features were hand cleaned, photographed, excavated and documented. Apparently natural features (such as tree throws) were sampled sufficiently to establish their origin and to characterise any related human activity. Hand excavation and feature sampling was sufficient to establish the date, character and relationships with other features. Deposits and layers (including buried horizons of top- and subsoils) were sampled sufficiently to enable a confident interpretation of their character, date and relationships.

Linear features were excavated away from intersections with other features or deposits to obtain unmixed samples of material. Particular attention was given to terminals and intersections, to ascertain stratigraphic and physical relationships.

The developer was informed that provision must be made for delays caused by the need for archaeological recording, or if contingency allowance must be made for more detailed recording.

6.5 Environmental Sampling

The site contained only one proper archaeological feature, an early Medieval ditch, and was situated in a sharp slope. This has caused mud and silt to slide down the slope over the centuries, and manmade fills has changed the topography further in recent years. This has resulted in a situation where mixed material is covering large areas of the site, something that is particularly true for the upper parts of the stratigraphy. It is otherwise standard that environmental samples are collected during archaeological investigations, but in this particular case there was a risk for contamination in especially the upper layers. The shallow Medieval ditch became very soft in the muddy and rainy conditions, and there was therefore further risk for contamination from later organic material. For this reason no environmental samples were collected from the site.

6.6 Recording

A numbered single context-based recording system, written on suitable forms and indexed appropriately, was used for all elements of the archaeological recording programme.

Measured plans were produced that show all exposed features (including natural features, modern features, etc.) and excavated areas. Plans and sections in the scales 1:10 and 1:20 were produced for all excavated features and deposits. These were accurately tied in to trench plans/trench location plans, that in turn were accurately related to the Ordnance Survey grid and to suitably mapped local features (boundaries, buildings, roads, etc.). All sections and plans were related accurately to Ordnance Datum. A photographic record comprising monochrome and digital photos formed part of the excavation record. A selection of digital photos was also used in this report.

7 RESULTS

- 7.1 The Archaeological Scheme of Works began in Plot 4, in the northern part of the investigation area. Here a 1x2m large testpit was opened up in order to investigate if archaeological monitoring was required in this area or not. However, no archaeological features were discovered (Figure 1).
- 7.2 The lowest deposit encountered in the testpit was (103), a layer consisting of light yellow, plastic silty clay with occasional limestone. This layer was sealed by (102), a 0.37m thick layer of made ground of light brown, plastic silty clay with frequent modern mortar and bricks. The uppermost deposit in Plot 4 was the 0.35m thick topsoil (101) of dark brown, soft silty clay with frequent

modern bricks, roots, mortar. The context also contained sherds of Brown Stoneware from the 17th-18th century.

- 7.3 The investigation then moved on to Plot 1, in the southern part of the site. The lowest deposit encountered in Plot 1 was the natural ground, which consisted of light yellow, plastic sandy silt with occasional small stones.
- 7.4 Cut into the natural was the ditch [205]. This E-W orientated ditch was 0.30m deep, 0.65m wide and had a fill of dark brown, soft silty clay with occasional stones (204). The ditch contained sherds of Grey Ware from the 2nd-4th century and St. Neots Ware from the 10th-11th century, and the ditch is likely to be from the early Medieval period. No environmental samples were collected from the relatively shallow ditch due a high risk of contamination in the rainy and muddy conditions. There was no evidence for a continuation of the ditch further to the west in Plot 1 (Figure 2).
- 7.5 Sealing the ditch was (203), a 0.25m thick layer consisting of light brown, plastic silty clay with frequent limestone. The pottery from this layer was a mix of Romano-British and Medieval pottery, but the layer also contained a large number on animal bones. The context can probably be dated to about the 13th century.
- 7.6 Overlaying (203) was the up to 0.35m thick layer (202), which consisted of light brown plastic silty clay with occasional modern bricks and stones. The uppermost layer in Plot 1 was the 0.40m thick topsoil (201) of dark brown, soft silty clay with frequent modern bricks and occasional mortar, roots and Post Medieval pottery.
- 7.7 In Plot 2 the sequence of deposits was very similar to that in Plot 1, although the natural ground was not reached all over the plot. The lowest deposit encountered was (303), an up to 0.15m thick layer of light brown, plastic silty clay with occasional limestone and a mixed pottery assemblage. The layer is likely to be contemporary with (203) (described above). It contained a sherd of Potterhanworth Ware and can probably be dated to about the 13th century.
- 7.8 Overlaying (303) was the 0.35m thick layer (302) of light brown, plastic silty clay with occasional modern bricks and stones. The uppermost deposit in Plot 2 was the 0.40m thick topsoil (301) of dark brown, soft silty clay with frequent modern bricks and occasional mortar and roots.

8 DISCUSSION

- 8.1 The Archaeological Scheme of Works at Rose Cottage Garden, 10 Orby Road, Burgh le Marsh, Lincolnshire revealed few features of archaeological interest. An E-W orientated ditch was found in Plot 1, in the southern part of development area. The ditch contained a few sherds of pottery, and can probably be dated to the early Medieval period, about 900-1100 A. D.

- 8.2 Further pottery from the Romano-British, Late Saxon, Medieval and Post Medieval periods was found in various layers sealing the ditch. The range of fabric types is fairly typical of sites in the region.
- 8.3 The chronological spread of the pottery from the investigation is interesting, and indicates that there has been human activity in the area since at least the Roman period. It is likely that the Roman settlement was located on higher grounds nearby, possibly north of Orby Road.
- 8.4 The presence of the Medieval ditch indicates that there was human activity within the development area around the 10th-11th century A. D. It is likely, however, that the four new plots were located in a slope just behind the Medieval buildings, and that the old houses were situated along Orby Road.
- 8.5 It was clear that the pottery and animal bones that were collected during the investigation were in a fairly good condition, and are likely to be domestic waste that has been dumped in the slope behind the older settlement. The fact that this slope was once much steeper raises questions whether the deposits present within the area have been mixed up over the years due to a constant movement of soil and artefacts down the slope. Environmental sampling from the site, therefore, turned out to be problematic.
- 8.6 The most likely position for Medieval (and Roman) buildings are therefore on the higher grounds just to south of the investigation area. The still standing Rose Cottage contains older masonry, and further archaeological remains can be hidden beneath the lawns of the cottage.

9 EFFECTIVENESS OF METHODOLOGY

- 9.1 The adopted methodology was appropriate in order to identify, assess and record the features, deposits and finds present within the site. The decision that no environmental samples were to be collected during the fieldworks was based on a scientific strategy and a high risk for contamination in the rainy and muddy conditions.

10 ACKNOWLEDGEMENTS

- 10.1 Independent Archaeology Consultants would like to thank the client Miss Mary Mackinder, the ground staff and Lincolnshire County Council for their kind cooperation during the various stages of this project.

11 BIBLIOGRAPHY

APP (2007) *Archaeological Archives: A Guide to best practice in creation, compilation, transfer and curation*: (Archaeological Archive Forum)

BERGER, M. (2014) Trench Evaluation. Land Adjacent to Rose Cottage Garden, 10 Orby Road, Burgh-le Marsh.

British Geological Survey. (Online resource). Available at www.bgs.ac.uk

Digital Archives from Excavation and Fieldwork *Guide to Good Practice* Second Edition: available online at <http://ads.ahds.ac.uk/project/goodguides/excavation>

ENGLISH HERITAGE (1991b) *Exploring Our Past*. London

ENGLISH HERITAGE (1997) *English Heritage Archaeology Division Research Agenda* (Unpublished draft). London

ENGLISH HERITAGE (2009) *Management of Research Projects in the Historic Environment* and *MoRPHE Project Planning Note 3: Excavation*. London

ENGLISH HERITAGE (2011) *Environmental Archaeology: A Guide to the Theory and Practice of Methods, from sampling and recovery to post excavation (second edition)* (Centre for Archaeology Guidelines). London

FIRST AID FOR FINDS: PRACTICAL GUIDE FOR ARCHAEOLOGISTS. 1998. By David Leigh (Author), David Watkinson (Editor), Virginia Neal (Editor).

HER ARCHIVE FOR LINCOLNSHIRE. Lincolnshire County Council. (2015). Lincoln

INSTITUTE FOR ARCHAEOLOGISTS. (1999). *Standard and Guidance for Archaeological Excavation*. Reading

INSTITUTE FOR ARCHAEOLOGISTS. (2009). *Standard and Guidance for the Creation, Compilation, Transfer and Deposition of Archaeological Archives*. Reading

LINCOLNSHIRE ARCHAEOLOGICAL HANDBOOK. (1997, revised 2008/9). Lincoln

MUSEUM AND GALLERIES COMMISSION. (1992). *Standards in the Museum Care of Archaeological Collections*. London

NPPF (2012) (National Planning Policy Framework). Department for Communities and Local Government. London

SOCIETY FOR MUSEUM ARCHAEOLOGISTS. (1993). *Selection, Retention and Dispersal of Archaeological Collections*. London

Treasure Act of 1996. London.

12 ARCHIVE

The archive consists of the following:

Paper Record

The project brief

Written Scheme of Investigation

The photographic and drawn records

The project report

The primary site records

Finds

The archive is currently maintained by Independent Archaeology Consultants.
The archive will be transferred to:

The Collection in Lincoln.

APPENDIX 1

COLOUR PLATES



Figure 1. In Plot 4 in the northern part of the development area a 2x1m large testpit was opened up. The bottom of the pit was reached 1m below ground level, but no archaeological features were visible. North facing photo.



Figure 2. The ditch [205] was discovered in Plot 1, in the southern part of the development area. The ditch contained Grey Ware from the 2nd-4th century and St. Neots Ware from the period ca 900-1100 A. D. East facing photo.



Figure 3. Overview of site from Plot 1. North east facing photo.

APPENDIX 2

CONTEXT DESCRIPTIONS

Context nr	Depth (m)	Description	Younger than	Older than
(101)	0.35	Dark brown, soft silty clay with frequent modern bricks, roots and mortar.	(102)	-
(102)	0.37	Made ground of light brown, plastic silty clay with frequent modern mortar and bricks.	(103)	(101)
(103)	?	Light yellow, plastic clay with occasional limestone.	?	(102)
(201)	0.40	Dark brown, soft silty clay with frequent of bricks and occasional modern mortar and roots.	(202)	-
(202)	0.35	Light brown, plastic silty clay with occasional modern bricks and stones.	(203)	(201)
(203)	0.25	Light brown, plastic silty clay with frequent limestone.	(204)	(202)
(204)	0.30	Fill of ditch [205]. Dark brown, soft silty clay with occasional stones and Medieval pottery.	[205]	(203)
[205]	0.30	Cut of ditch [205]. Concave sides and a rounded bottom.	Natural	(204)
Natural		Light yellow, plastic sandy silt with occasional small stones.	-	[205]
(301)	0.40	Dark brown, soft silty clay with frequent modern bricks and occasional mortar and roots.	(302)	-
(302)	0.35	Light brown, plastic silty clay with modern occasional bricks and stones.	(303)	(301)
(303)	0.15	Light brown, plastic silty clay with occasional limestone.	?	(302)

APPENDIX 3

FINDS LIST

Find nr	Context	Material	Object	Description	Period
1	(101)	Fired Clay	1 sherd of pottery	Brown Stoneware	17 th -19 th Century
2	(201)	Fired Clay	1 sherd of pottery	Brown Stoneware	17 th -19 th Century
3	(201)	Fired Clay	1 sherd of pottery	Brown Stoneware	17 th -19 th Century
4	(201)	Fired Clay	1 sherd of pottery	Glazed Red Earthenware	16 th -19 th Century
5	(203)	Fired Clay	1 sherd of pottery	Grey Ware	2 nd -4 th Century
6	(203)	Fired Clay	1 sherd of pottery	Grey Ware	2 nd -4 th Century
7	(203)	Fired Clay	1 sherd of pottery	Grey Ware	2 nd -4 th Century
8	(203)	Fired Clay	1 sherd of pottery	Grey Ware	2 nd -4 th Century
9	(203)	Fired Clay	1 sherd of pottery	Grey Ware	2 nd -4 th Century
10	(203)	Fired Clay	1 sherd of pottery	Grey Ware	2 nd -4 th Century
11	(203)	Fired Clay	1 sherd of pottery	Grey Ware	2 nd -4 th Century
12	(203)	Fired Clay	1 sherd of pottery	Grey Ware	2 nd -4 th Century
13	(203)	Fired Clay	1 sherd of pottery	Grey Ware	2 nd -4 th Century
14	(203)	Fired Clay	1 sherd of pottery	Grey Ware	2 nd -4 th Century
15	(204)	Fired Clay	1 sherd of pottery	Grey Ware	2 nd -4 th Century
16	(204)	Fired Clay	1 sherd of pottery	Grey Ware	2 nd -4 th Century
17	(204)	Fired Clay	1 sherd of pottery	Grey Ware	2 nd -4 th Century
18	(204)	Fired Clay	1 sherd of pottery	Grey Ware	2 nd -4 th Century
19	(204)	Fired Clay	1 sherd of pottery	Grey Ware	2 nd -4 th Century
20	(303)	Fired Clay	1 sherd of pottery	Grey Ware	2 nd -4 th Century
21	(203)	Fired Clay	1 sherd of pottery	Grimstone-type Ware	13 th -15 th Century
22	(203)	Fired Clay	1 sherd of pottery	Nene Valley Colour Coated Ware	3 rd -4 th Century
23	(203)	Fired Clay	1 sherd of pottery	Potterhanworth Ware	13 th -14 th Century
24	(203)	Fired Clay	1 sherd of pottery	Potterhanworth Ware	13 th -14 th Century

Land adjacent Rose Cottage Garden, Burgh le Marsh, Lincolnshire: Archaeological Scheme of Works

25	(303)	Fired Clay	1 sherd of pottery	Potterhanworth Ware	13 th -14 th Century
26	(204)	Fired Clay	1 sherd of pottery	St. Neots Ware type	10 th -11 th Century
27	(204)	Fired Clay	1 sherd of pottery	St. Neots Ware type	10 th -11 th Century
28	(303)	Fired Clay	1 sherd of pottery	Thetford-type Ware	10 th -12 th Century
29	(203)	Bone	An animal bone	Cattle	13 th Century
30	(203)	Bone	An animal bone	Cattle	13 th Century
31	(203)	Bone	An animal bone	Cattle	13 th Century
32	(203)	Bone	An animal bone	Pig	13 th Century
33	(203)	Bone	An animal bone	Pig	13 th Century
34	(203)	Bone	An animal bone	Sheep/goat	13 th Century
35	(203)	Bone	An animal bone	Medium mammal	13 th Century
36	(203)	Bone	An animal bone	Medium mammal	13 th Century
37	(203)	Bone	An animal bone	Medium mammal	13 th Century
38	(203)	Bone	An animal bone	Medium mammal	13 th Century
39	(203)	Bone	An animal bone	Medium mammal	13 th Century
40	(203)	Bone	An animal bone	Medium mammal	13 th Century
41	(203)	Bone	An animal bone	Large mammal	13 th Century
42	(203)	Bone	An animal bone	Large mammal	13 th Century
43	(203)	Bone	An animal bone	Large mammal	13 th Century
44	(203)	Bone	An animal bone	Large mammal	13 th Century
45	(203)	Bone	An animal bone	Large mammal	13 th Century

APPENDIX 4

POTTERY FROM BURGH LE MARSH, LINCOLNSHIRE (*Paul Blinkhorn*)

The pottery assemblage comprised 28 sherds with a total weight of 595g. It consisted of a mixture of Romano-British, late Saxon, medieval and post-medieval wares. The Romano-British pottery was classified using the City of Lincoln type-series (Darling and Precious 2014), while the late Saxon, medieval and later material was related to the coding system of the City of Lincoln Archaeology Unit type-series (Young and Vince 2005) as follows:

BS:	Brown Stoneware , late 17 th –19 th century. 3 sherds, 86g.
GRE:	Glazed Red Earthenwares , mid 16 th –19 th century. 1 sherd, 18g.
GREY:	Grey Ware , 2 nd –4 th century. 16 sherds, 247g.
GRIM:	Grimston-type Ware , 13 th –15 th century. 1 sherd, 101g.
NVCC1:	Nene Valley Colour Coated Ware , late 3 rd –4 th century. 1 sherd, 15g.
POTT:	Potterhanworth Ware , 13 th –14 th century. 3 sherds, 74g.
SNEOT:	St. Neots Ware type , 900–1100. 2 sherds, 37g.
THET:	Thetford-type Ware , 900–1150. 1 sherd, 17g.

The pottery occurrence by number and weight of sherds per context by fabric type is shown in Table 1. Each date should be regarded as a *terminus post quem*. The range of fabric types is fairly typical of sites in the region. All the stratified sherds are reasonably large and in fairly good condition. The Romano-British material is also largely unworn, indicating it has been subject to very little transportation since its original deposition. The sherds are all from jars.

The medieval material included a rim from a Thetford Ware jar, an inturned St Neots Ware bowl rim and three Potterhanworth jar rims. The Grimston Ware is from the base of a small glazed jug. These are all typical products of their respective traditions. All the sherds of BS are Nottingham/Derby types, and typical of the 18th – 19th century.

Table 1: Pottery occurrence by number and weight (in g) of sherds per context by fabric type

Land adjacent Rose Cottage Garden, Burgh le Marsh, Lincolnshire: Archaeological Scheme of Works

	GREY		NVCC1		SNEOT		THET		POTT		GRIM		GRE		BS		
Cntxt	No	Wt	No	Wt	No	Wt	No	Wt	No	Wt	No	Wt	No	Wt	No	Wt	Date
101															1	29	18thC
201													1	18	2	57	18thC
203	10	155	1	15					2	43	1	101					13thC
204	5	28			2	37											10thC
303	1	64					1	17	1	31							13thC
Total	16	247	1	15	2	37	1	17	3	74	1	101	1	18	3	86	

Bibliography

Darling, M, and Precious, B, 2014. *A Corpus of Roman Pottery from Lincoln*. Lincoln Archaeological Studies **6**

Young, J, and Vince, A, with Nailor, V, 2005. *A Corpus of Anglo-Saxon and Medieval Pottery from Lincoln*. Lincoln Archaeological Studies **7**

APPENDIX 5

ANIMAL BONE REPORT FROM BURGH LE MARSH (*Tania Kausmally (PhD) (Ossa Freelance)*)

Introduction

The archaeological excavation at Burgh-le-Marsh, Lincolnshire yielded a very limited number of animal bones (17 fragments) from layer (203) believed to date to the 13th century. The remains were of limited archaeological significance due to the size of the assemblage, but revealed the presence of cattle, pig and sheep/goat.

Methods

The bone was identified using a comparative osteological reference collection at the Institute of Archaeology, UCL and Schmid (1972) and Hillson (1996).

This assemblage was recorded identifying the zones of each element present based on Dobney and Rielly (1988) for mammals in order to produce a fragment count based on Number of Identifiable Fragments (NISP). In order to identify the relative distribution of body parts within each species a Minimum Number of Elements was recorded (MNE), this was calculated from the sum of the most frequent portion of an element present. A Minimum Number of Individuals (MNI) was produced based on the single most frequent element of each species identified taking fusion into account. Bones that could not be identified to species were assigned size categories, Large (cattle-size), medium (sheep/goat/pig size) and small (cat/rodent size).

Taphonomy was recorded to identify fragmentation in 20% intervals. Surface preservation was divided into four categories following the York system (Harland *et al.* 2003). Modifications to the bones, such as carnivore gnawing, chop marks, knife marks were recorded and location on the bone noted. Helical breaks were recorded as present or absent.

Fusion for pigs was based on Zeder, Lemoine and Payne (2015) and for all other species on Sisson and Grossman (Getty 1975). Ageing by tooth wear followed Grant's tooth wear stages (1982). Measurements were carried out following guidelines by von den Driesch (1976).

Results

A total of 17 fragments were available for analysis. This very low number significantly limits any interpretative value of the assemblage but does provide a general idea of the nature of layer (203) from which they were recovered.

The overall skeletal completeness was poor with 58.8% (10/17) less than 20% complete. Only one element was 80-100% complete (Figure 1). The surface preservation was good in all fragments (Score=2), allowing reliable observations on butchery and animal activity. Three elements including pig and cattle exhibited evidence of weathering through mild longitudinal cracking on the surface of the bone. Carnivore puncture marks were noted on one pig Humerus whilst rodent marks were noted along the margin of the pelvis of a medium mammal, suggesting the elements had been left exposed for some time after disposal.

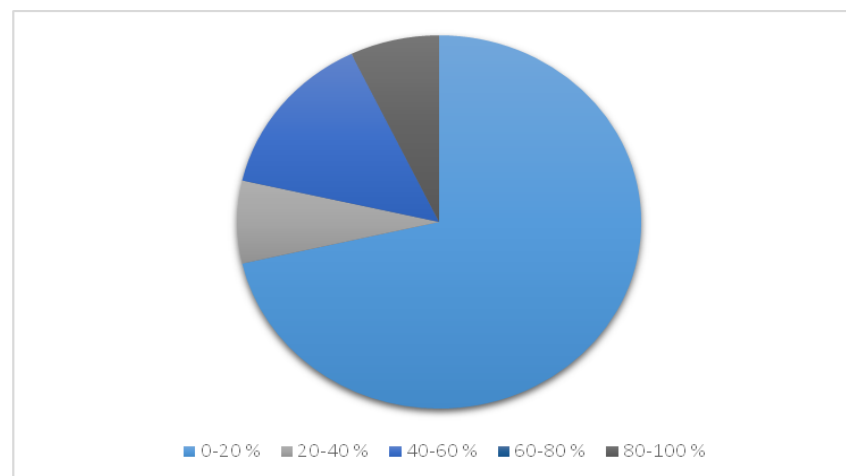


Figure 1 Skeletal completeness

The species identified were those of typical domesticates including cattle, pig and sheep/goat. No other species were identified (Table 1). The MNI yielded a total of at least three animals one from each of the identified species.

	NISP	MNE	MNI
Cattle (<i>Bos.</i>)	3	3	1
Pig (<i>Sus.</i>)	2	2	1
Sheep/goat (<i>Ovis/Capra</i>)	1	1	1
Medium mammal	6		
Large mammal	5		
Total	17	6	3

Table 1 Identification of fragments present

All cattle elements were fully mature one just fused proximal Humerus suggested an age of more than 3.5-4 years old. The mandible of cattle had the first and second molar present, these were scored to wear stage K and L respectively also suggesting an adult individual. The two distal humeri identified as pig suggested an age of more than 1 year. The sheep/goat radius yielded no information on age.

Due to the small assemblage size any interpretation in relation to body part distribution is notional. Elements identified as cattle were both those of butchery waste and domestic waste. The elements of pig and sheep/goat were only domestic waste but the medium and large mammal fragments suggested a distribution of both butchery waste and domestic waste (Table 2).

Land adjacent Rose Cottage Garden, Burgh le Marsh, Lincolnshire: Archaeological Scheme of Works

	Cattle	Pig	Sheep/goat	Medium mammal	Large mammal
Horn core					
Skull				3	
Mandible/teeth	2				
Atlas					
Axis					
Scapula					
Humerus	1	2			
Radius				1	
Ulna					
Pelvis					1
Sacrum					
Femur					
Tibia					
Fibula					
Astragalus					
Calcaneum					
Carpal					
Tarsal					
Metacarpal					
Metatarsal					

Lat. Metapodial					
Phalanx I					
Phalanx II					
Phalanx III					
Lateral phalanx					
Ribs					2
Long bone				1	2
Unidentified				1	1
Total		3	2	1	6

Table 2 Body part distribution (NISP)

Modification to the bones was noted in nine fragments. A mandible and a Humerus of cattle exhibited both helical breaks and chop marks. Both pig humeri displayed helical breaks on the distal portion of the shaft whilst one had possible fine knife marks present on the distal posterior-lateral portion of the shaft. The single sheep/goat radius had helical break to both the proximal and distal portion of the shaft. Two elements of large mammal also exhibited helical breaks whilst none of the medium mammal fragments had any visible modifications. The modifications are evidence of butchery such as skinning and dismemberment, though it is not clear whether these were carried out on or off site. The helical breaks may be evidence of the common practice of marrow extraction. It is however possible that these helical breaks are taphonomic and a result of trampling or other post depositional activities (Lyman 1994, 324).

One mandible of cattle exhibited degenerative wear in the form of pitting on the joint surface of the mandibular condyle (Figure 2). This perhaps suggests the remains of an older individual or a pathological condition forcing excessive chewing motion.



Figure 2 mandibular condyle of cattle exhibiting degenerative wear on the joint surface.

Conclusion

The well preserved but fragmented small animal bone assemblage from Burgh-le-March revealed the presence of domestic species of cattle, pig and sheep/goat. The age profile suggested that the cattle were adults and the pigs older than 1 year. This generally suggests a mixed economy of animal utilisation where the animals are used for breeding and secondary produce such as milk prior to butchery. Information on body part distribution was limited but tentatively suggesting that the layer contained both butchery and domestic refuse, with skull, torso and limb elements present of both medium and large mammals. Carnivore and rodent marks on two bones indicate the presence of such species on site as well as surface exposure prior to burial. Pathology was observed in form of degenerative wear of the mandibular condyle of cattle.

References

Dobney, K. & Rielly, K. 1988. A method for recording archaeological animal bones: the use of diagnostic zones. *Circaea*, 5, (2) 79-96

Getty, R. 1975. Sisson and Grossman's. *The anatomy of the domestic animals*, 1, 5

Grant, A. 1982. The use of tooth wear as a guide to the age of domestic ungulates. *Ageing and sexing animal bones from archaeological sites*, 109, 91-108

Harland, J.F., Barrett, J.H., Carrott, J., Dobney, K., & Jaques, D. 2003. The York System: An integrated zoo archaeological database for research and teaching. *Internet Archaeology*, 13.

Hillson, S. 1996. Mammal bones and teeth.

Lyman, R.L. 1994. *Vertebrate taphonomy* Cambridge University Press.

Schmid, E.F. 1972. *Atlas of animal bones: for prehistorians, archaeologists and quaternary geologists. Knochenatlas. Fur prahistoriker, archaologen und quartargiologen. Drawings by Otto Garraux* Elsevier.

Seetah, K 2006. The importance of cut placement and implement signatures to butchery interpretation. University of Cambridge. ICAZ essay prize submission.

Von Den Driesch, A. 1976. *A guide to the measurement of animal bones from archaeological sites: as developed by the Institut für Palaeoanatomie, Domestikationsforschung und Geschichte der Tiermedizin of the University of Munich*, 1 ed. Peabody Museum Press.

Zeder, M.A., Lemoine, X., & Payne, S. 2015. A new system for computing long-bone fusion age profiles in *Sus scrofa*. *Journal of Archaeological Science*, 55, 135-150.

APPENDIX 6

OASIS FORM

OASIS ID: independ1-229613

Project details

Project name	The Rose Cottage Garden, Burgh le Marsh
Short description of the project	Archaeological Monitoring of the excavation for new footings within the development site.
Project dates	Start: 03-11-2015 End: 05-11-2015
Previous/future work	Yes / No
Any associated project reference codes	RCGO15 - Sitecode
Any associated project reference codes	S/023/01924/14 - Planning Application No.
Type of project	Recording project
Site status	Local Authority Designated Archaeological Area
Current Land use	Vacant Land 2 - Vacant land not previously developed
Monument type	BT Roman
Monument type	BT Early Medieval
Significant Finds	BT NT Roman
Significant Finds	BT NT Early Medieval
Investigation type	"Watching Brief"
Prompt	Planning condition

Project location

Land adjacent Rose Cottage Garden, Burgh le Marsh, Lincolnshire: Archaeological Scheme of Works

Country	England
Site location	LINCOLNSHIRE EAST LINDSEY BURGH LE MARSH Rose Cottage Garden
Postcode	PE24 5JH
Study area	1600 Square metres
Site coordinates	TF 5008 6520 53.162417980752 0.245128796366 53 09 44 N 000 14 42 E Point
Height OD / Depth	Min: 9m Max: 12m

Project creators

Name of Organisation	Independent Archaeology Consultants
Project brief originator	Local Authority Archaeologist and/or Planning Authority/advisory body
Project design originator	Independent Archaeology Consultants
Project director/manager	Christer Carlsson
Project supervisor	Christer Carlsson
Type of sponsor/funding body	Developer
Name of sponsor/funding body	Mrs Mary Mackinder

Project archives

Physical Archive recipient	Lincolnshire Museums
Physical Contents	"Animal Bones","Ceramics"
Digital Archive recipient	Lincolnshire Museums
Digital Contents	"Animal Bones","Ceramics"
Digital Media available	"Images raster / digital photography","Images vector"
Paper Archive recipient	Lincolnshire Museums

Land adjacent Rose Cottage Garden, Burgh le Marsh, Lincolnshire: Archaeological Scheme of Works

Paper Contents "Animal Bones", "Ceramics"
Paper Media available "Context sheet", "Matrices", "Photograph", "Plan", "Report", "Section"

Project bibliography 1

Publication type Grey literature (unpublished document/manuscript)
Title Archaeological Scheme of Works at Rose Cottage Garden, 10 Orby Road, Burgh le Marsh, Lincolnshire
Author(s)/Editor(s) Carlsson, C
Date 2015
Issuer or publisher Independent Archaeology Consultants
Place of issue or publication Peterborough
Entered by Christer Carlsson (contact@independentarchaeology.co.uk)
Entered on 9 November 2015

FIGURES



Figure 1: Site Location Map. (Produced with OS Licence Number 0100031673).



Figure 2: Site Outline Map. (Produced with OS Licence Number 0100031673).

