

**HOPLANDS, BOSTON ROAD
SLEAFORD**

Archaeological Excavation

Site Code: HOPS 09

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**Prepared by
NETWORK ARCHAEOLOGY LTD
On behalf of
NAOMI FIELD ARCHAEOLOGICAL CONSULTANCY
For
NORTH KESTEVEN DISTRICT COUNCIL**

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Naomi Field
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NON-TECHNICAL SUMMARY

An archaeological excavation was conducted by Network Archaeology Limited between 11th January and 2nd March 2010 on land in the Hoplands area of Sleaford, Lincolnshire (centred NGR 507934 345907).

The investigations revealed the remains of part of a roadside settlement, founded in the later Iron Age and which continued in use throughout the Roman period. This settlement included several phases of a metalled road, which may have had late Iron Age origins, a possible ring gully from an Iron Age circular building, the stone foundations of up to eight Roman buildings, stone-lined wells, an oven, three human burials, and ditches and pits, as well as significant levels of stratified occupation deposits. There was occasional evidence for the re-organisation of the site, but this generally occurred within the co-axial template that guided the earliest structures.

Iron Age and Roman remains have been recorded in the eastern half of modern Sleaford during a number of archaeological excavations and are regularly encountered during construction works. By making a significant contribution to the growing understanding of the development of the settlement and its wider environment, the results presented here are of considerable importance, both locally and regionally.

1 INTRODUCTION

1.1 Purpose of this report

This report presents the results of an archaeological excavation which took place on land within the Hoplands area of Sleaford, Lincolnshire (Figure 1), as part of a planning condition ahead of redevelopment of the land for residential units.

1.2 Commissioning bodies

The archaeological investigations detailed in this report were commissioned by North Kesteven District Council (NKDC) and were undertaken by Network Archaeology Limited (NAL) on behalf of Naomi Field Archaeological Consultancy (NFAC).

1.3 The development

The proposed development involves the construction of six affordable housing units and associated access roads, car parking and utility services.

1.3.1 Location and topography

The Hoplands is an area to the east of the modern town centre of Sleaford, on the northern side of Boston Road. The area is loosely defined by Boston Road to the south, the River Slea to the north, the Grantham to Skegness railway line to the east and the former course of Mareham Lane, now a public footpath, to the west. The area is largely residential, although a council depot, a police station and an undeveloped area which forms part of the river floodplain also lie within it. Two distinct, linked cul-de-sacs are located immediately to the east of the Police Station and the development area (hereafter known as the 'Hoplands site') lies at the eastern end of the northern cul-de-sac, in an area formerly used as garages and parking for local residents (centred NGR 507934 345907). To the north the site is bounded by the council depot, to the east by the Grantham to Skegness railway line, with housing and the Hoplands cul-de-sac forming the southern and western boundaries. The site, along with much of the area in the immediate vicinity, is relatively flat, lying at approximately 13m OD. The historic course of the River Slea, which meanders on a largely north-east to south-west direction in this area, lies approximately 280m to the north-west of the development site (Figure 1).

1.3.2 Geology, soils and land use

The Hoplands area has not yet been surveyed as part of the Soil Survey Map of England and Wales due to its urban location. The underlying drift geology is, though, known to comprise Sleaford sand and gravels, overlying interbedded sandstone and siltstone of the Kellaways sand member (BGS Geology Viewer September 2011).

1.4 Legislation, regulations and guidance

NKDC applied for planning permission (09/0929/FUL) for the redevelopment of the site. The archaeological works at the site were undertaken as part of this application on the recommendation of Heritage Trust for Lincolnshire (HTL) who provide advice to the council on archaeological matters.

A Project Design (NFAC 2009) was produced in accordance with a Brief prepared by HTL detailing the procedures to be used during the excavation.

1.5 Archaeological background

Sleaford has a rich archaeological heritage dating from prehistory through to the modern period and the results of the present excavation add to the large, and growing, body of evidence on which our understanding of the evolution of the town is based. To date, the only attempt to fully synthesise the results of over one hundred years of archaeological investigation in the town has been Sheila Elsdon's *Old Sleaford Revealed* (Elsdon 1997). Since the publication of this important book, numerous discoveries, often related to investigations carried out ahead of construction projects, have enhanced and sometimes altered our understanding of the nature and development of the town. It is not the purpose of this report to produce a synthesis incorporating the large body of new evidence available since the publication of Elsdon's book, but a brief summary of the archaeological evidence relevant to the present site is presented below.

1.5.1 Mesolithic, Neolithic and Bronze Age

The earliest evidence of activity in the vicinity of the site is a scatter of flint tools, of Mesolithic or early Neolithic date, recovered during archaeological investigations at East Road (HER 62676), on the northern side of the old River Slea (LAS 1999). The site was most likely the location for temporary camps rather than sustained occupation. There is no evidence that the Hoplands area was settled during this early period. A radiocarbon date of 8730-8560 BC was obtained from a sample of unworked wood recovered during an archaeological trial trench evaluation at Hoplands Bridge, approximately 300m to the north-west of the present site (Rayner 2001). The sample was recovered from a deposit which contained worked wood and might point to Mesolithic activity close to the old course of the River Slea; however, the reliability of the data is questioned by the original author (*ibid*).

There is little suggestion of increased activity in the area during the Neolithic and Bronze Age periods. A flint core of Neolithic or early Bronze Age date was found at Hoplands Bridge during a site visit for a desk-based archaeological assessment prior to evaluation trenching (Taylor 1996) and a ditch which produced a Neolithic leaf-shaped arrowhead was revealed during the trial trench evaluation (Rayner 2001). A number of undated features revealed during the same phase of work could also conceivably date to this period. Further afield, a possible cremation contained within an almost complete Neolithic pot was revealed ahead of housing development at Quarrington (Taylor 2003), and Bronze Age cremations were discovered at Grey Lees in Quarrington to the west of Sleaford (Toop 2004).

A Bronze Age palstaff and prehistoric flints have been found approximately 100m to the west of the site at the former Dalgetty Warehouse (Bradley-Lovekin 2005 citing Taylor 1996).

1.5.2 Iron Age

An increase in the number of remains in the vicinity of the Hoplands site is evident from the middle Iron Age onwards. Since the publication of Elsdon's 1997 work, which noted a single middle Iron Age enclosure 600m to the south of the Hoplands site (Trimble 1990), the number of known enclosures of a similar date has risen, and

several have now been recorded through excavation or analysis of cropmarks (see Taylor 2010 p113 for summary). It is possible that some of the sites represent stock enclosures but there is little doubt that others represent enclosed settlements, and a pattern of enclosed, possibly contemporary settlements appears to have developed in the Sleaford area during the middle Iron Age. This settlement type and pattern appears to have been abandoned by the late Iron Age in favour of a nucleated, apparently undefended settlement centred on or around the eastern half of modern Sleaford.

There is considerable evidence for late Iron Age activity at Sleaford, with features and finds of the period revealed at a number of sites. Much of the evidence has been recovered close to the line of Mareham Lane, to the west of the Hoplands site, between Boston Road and the River Sleas, with a possible concentration to the west of Mareham Lane. During 1984-5, excavations at Old Place, approximately 280m west of the site, revealed a late Iron Age system of enclosures, at least two of which appear to have been housing plots, radiating from a north-west to south-east aligned trackway (Elsdon 1997, 30-34). Ditches and pits of late Iron Age date were revealed during construction works for a water pipeline along St Giles Avenue to the west of the Mareham Lane (Trimble 1997) and further ditches and pits containing late Iron Age tradition pottery were revealed in the 1950s and 1960s, close to the line of Mareham Lane (Elsdon 1967, 12-21) and in the Hoplands Bridge area (Rayner 2001). A possible field or enclosure system was revealed beneath a Roman cemetery on the eastern side of the Mareham Lane line at the former Hoplands Business Centre, approximately 140m to the north-west of the Hoplands site (Murphy 2011), whilst to the south of Boston Road, excavations in 1989 produced late Iron Age pottery from intersecting pits and gullies (Elsdon 1997, 26). To the north of the River Sleas, late Iron Age remains have been recorded close to East Road (HER 62679, McDaid 2006), which may indicate limited settlement and agricultural activity on the opposite side of the river to the main settlement focus.

A track connecting the settlement areas on either side of the river has been proposed (Taylor 2010, 121) which may have formed part of a prehistoric route, later becoming the Romanised Mareham Lane (May 1976, 176). However, the precise line of this prehistoric track has yet to be identified. Excavations through the line of Mareham Lane close to the River Sleas have so far failed to identify the existence of a late Iron Age track beneath the Roman road or to either side. In addition, excavations by Fennell in 1955 revealed ditches of probable Iron Age date sealed by the later Roman road (Elsdon 1997, 12) and those of Margaret and Tom Jones in 1961 revealed further ditches sealed by the Roman road (*ibid* 19-21). None of these features appears to be related to an earlier track and it seems more likely that the ditches represent enclosures or possibly drainage ditches relating to the late Iron Age settlement. To date the only evidence for a track running towards the river is the north-west to south-east orientated track revealed at Old Place. The crossing point of any route linking the north and south banks of the Sleas during the late Iron Age has yet to be established.

Whilst the ditches and pits revealed during the various archaeological investigations offer considerable indirect evidence of settlement during the late Iron Age, few structures from the period have been recognised beyond the two revealed during the Old Place excavations. Given the number of boundary or enclosure ditches and pits it seems unlikely that the lack of structural evidence represents a true absence of houses or other structures and it is perhaps more likely that the relatively ephemeral remains often left by Iron Age structures have been badly damaged by the intensive

activity from later periods, and are not therefore easily recognised if they have survived at all. The lack of structures does not therefore suggest that the settlement was small but it does present challenges when trying to consider how large it actually was, or the extent to which it had become nucleated by the late Iron Age.

The finds assemblages recovered from the assorted archaeological works in Sleaford includes a very large collection of late Iron Age coin pellet-moulds; these have been recovered in the Giles Avenue/Old Place area, west of Mareham Lane and approximately 250m west of the present site. Over 4000 fragments have been found, one of the largest assemblages in Europe, along with a large number of crucible fragments. The moulds suggest the presence of an Iron Age mint in Sleaford, but its exact location remains elusive as the coin moulds have been recovered almost entirely from the fills of later features and are therefore divorced from their original context(s). The likely presence of a mint has been used to infer that late Iron Age Sleaford must have been an extensive settlement and an important centre for the *Corieltavi*, the name given to the peoples who inhabited much of Lincolnshire and Leicestershire (eg Elsdon 1997, 75).

Despite the numerous excavations and the likely presence of a mint, the scale of the late Iron Age settlement on the south side of the Sleas is difficult to discern. Late Iron Age remains are spread over a fairly wide area, from the 1984-5 excavations near to Old Place in the west, to the possible field or enclosure system beneath the Roman cemetery at the former Business centre (Murphy 2011) in the east (a distance of some 300m). Intercutting pits and gullies just south of Boston Road mark the southernmost known archaeology, and remains have been regularly, if not necessarily intensively, revealed as far north as the course of the old River Sleas, a distance of approximately 330m. Elsdon suggests that the settlement may have extended for at least 32 hectares (Elsdon 1997, 2), which would make it one of the largest late Iron Age settlements in Britain. By contrast, recent work by Taylor suggests that the nucleated settlement was no more than 4 hectares in extent (Taylor 2010, 114).

Whether either of these estimates bears close scrutiny is perhaps a matter of debate. Excavation in Sleaford has been undertaken for over a hundred years in a largely piecemeal fashion with variable results. Since the early 1990s, excavations have been undertaken almost solely as part of the planning process, with the developer of each site funding the excavation of remains within the impact zone of the proposed construction. Whilst this has afforded regular opportunities to examine archaeological remains, deposits and features are frequently left unexcavated if they extend below the impact depth of the development. As a result remains have been left *in situ* on some sites, potentially masking earlier features and deposits. This situation was perhaps most notable at the Sleaford Town Football Club site, approximately 100m to the east of the Hoplands site, where archaeological work undertaken ahead of the construction of car parks and sports pitches mapped the visible remains once the site had been stripped of its topsoil but did not excavate many of the remains as they were to be preserved *in situ* (Field pers comm). As a result the extensive surviving Roman layers would have masked any Iron Age remains and so the eastern limit of late Iron Age remains is therefore unknown. To the west, there has been very little archaeological investigation westwards of the 1984-5 excavations near to Old Place. A trial trench evaluation undertaken at East Banks Car Park (McDaid 2006), approximately 320m west of the Old Place excavations and 720m west of the Hopland site, did not reveal any late Iron Age remains and the Iron Age settlement may not extend this far, although again the

density of Roman features and surviving layers reduced the likelihood of identifying earlier remains.

1.5.3 Roman

Evidence for a large, well-preserved Roman settlement in the eastern part of Sleaford has been unearthed in a piecemeal fashion over a number of years. Excavations since the 1950s have resulted in an increasing awareness of the complex remains and have been greatly supplemented and enhanced by analysis of aerial photographs and through finds regularly unearthed by metal detectorists. However, the nature of the settlement is poorly understood, its extent has not been established with any confidence and there is much still to be understood regarding the development of the settlement and its relationship both with its rural catchment area and with other towns in the region and beyond.

The town appears to have been centred around the course of a north to south aligned Roman road, part of which is formed by the modern Mareham Lane, from which the Roman road, at least where it runs through Sleaford, takes its common name. Mareham Lane was most likely part of the Roman road from the important Roman settlement at Water Newton (*Durobrivae*) in Cambridgeshire to Lincoln and ran approximately 180m to the west of the present site, fording the historic course of the River Sleasome some 280m to the north-west of the site. Archaeological investigation of the road has been undertaken on several occasions and is summarised by Elsdon (Elsdon 1997, 36-39), with more recent investigation of the road undertaken during recent evaluation work at Hoplands Bridge (Rayner 2001). Within the town the road was certainly a well-made and well-maintained route, built on a gravel or stone agger, with a metalled surface. Beyond the town limits the road appears to be less well-preserved, or was perhaps more poorly constructed.

On the eastern side of Mareham Lane an east to west oriented gravel road or track was revealed during excavations at the new police station in 1997-8 (Herbert 2010), possibly with a north to south orientated track or road extending from it (*ibid* 91, figure 2); also, a metalled surface which may have been a second east to west road was revealed during an archaeological evaluation further to the north (Jarvis 1997). The east to west orientated roads probably formed junctions with Mareham Lane and may be part of a complex of side roads leading from Mareham Lane. In 1964, Margaret and Tom Jones revealed part of what may have been an east to west road on the western side of Mareham Lane (Elsdon 1997, 24). Although the Jones' records give little information about this find, its location suggests that it may have been a continuation of the gravel track or road revealed by Herbert and suggests that this particular east to west route formed a crossroads with Mareham Lane. To the east of the present site, an east to west road was revealed at the site of the football club (Field pers comm), and a series of shallow pits, revealed during archaeological excavations ahead of the laying of a water pipeline on the south side of Boston Road some 800m east of the Hopland site, have been interpreted as gravel extraction pits, either for construction or resurfacing works related to the road, suggesting that it extended at least that far (Field pers comm). A metalled road surface was revealed during the evaluation of the present site (Parker 2008) and it is possible that the road surfaces revealed at the new police station, the football club and the present site are all part of the same east to west road entering Roman Sleaford from the east. Further roads or tracks have been suggested at St Giles Avenue (Trimble 1997), Russell Crescent (HER 65322) and East Banks Car Park (McDaid 2006) all of which

probably represent minor roads within the Roman settlement which appears to have been largely laid out on a north to south/east to west grid.

The remains of Roman buildings have been revealed from New Street in the west, where Roman building foundations were revealed during the construction of an air raid shelter in 1940, to Sleaford Town Football Club in the east, where an extensive roadside settlement was revealed. Widespread cropmarks in the fields to the east of the football club may in part reflect further structural remains as similar cropmarks were recorded at the football club site prior to its construction (Pickering 1995, 24). Beyond the area of cropmarks to the east, evaluation of land on the north side of Boston Road suggests that intensive activity and possibly some settlement continued into this area (PCA 2008), perhaps as a farmstead or part of the suburbs of the Roman town. Two further substantial buildings were encountered on the south side of Boston Road approximately 1km east of the Hoplands site ahead of the laying of a gas pipeline and a water pipeline (Network Archaeology 2003 and NFAC forthcoming, respectively).

Intensive Roman settlement is evident along the line of Mareham Lane, where numerous buildings have been revealed during several archaeological investigations (summarised in Elsdon 1997) from at least Boston Road to the old course of the Sleas. Excavations at the police station have revealed buildings alongside the gravel road or track there (Herbert 2010) which, along with the remains of buildings at the football club site and those at New Street and East Banks Car Park (McDaid 2006), have begun to show that the area of settlement extended for some distance both east and west of Mareham Lane, giving the impression that Roman Sleaford was a sprawling town at least 1km wide.

A number of burials are also known from the town, with a formal cemetery located on the eastern side of Mareham Lane (Murphy 2011, Rayner 2001, PCA 1995, Bradley-Lovekin 2005) and outlying burials revealed at the police station site, (Herbert 2010) and the Old Place excavations (Oetgen 1997). Infant burials in association with buildings are known at the football club site and at the police station.

It has been suggested recently that the evolution of the late Iron Age settlement into a Roman settlement was not a gradual process (Taylor 2010, 120) and that a general lack of pottery dating from the mid 1st to the early-mid 2nd century AD from sites in Sleaford indicates a hiatus of activity and settlement which lasted for perhaps one hundred years. This depiction of the development of the settlement is at odds with Elsdon's view of gradual evolution of the settlement from the late Iron Age through the Roman period (Elsdon 1997, 76). It remains to be seen whether Taylor's interpretation of the evidence will be taken up by other authors or the gradual evolution model, perhaps with a flourishing after the second century AD, will persist.

1.5.4 Saxon

There is little evidence of activity in the immediate vicinity of the present site, during the Saxon period. The area appears to have been abandoned by this time and may have been given over to agriculture or left as disused land on the edge of the Saxon settlement, the focus of which may have moved further to the west towards the present day market place on the north side of the river where evidence of settlement dated to the eighth and ninth century has been revealed (Elsdon 1997,

39). Whilst the immediate vicinity of the present site appears to have ceased to be used for settlement or intensive activity, it appears that the nearby area close to the line of Mareham Lane was not completely abandoned. Investigations along the route of a water pipeline at St Giles Avenue in 1997 revealed the foundations of a building, dated to the ninth century by the presence of three sherds of pottery recovered from within the make-up of the wall foundations (Trimble 1997). The building was interpreted as a possible early church, the remains of which survive beneath the later St Giles or All Saints church known from the Jones' 1960 excavation, approximately 200m to the west of the present site. An Anglo-Saxon grave cover found at the site of the later church during the 1960s excavations is almost certainly related to the earlier church.

1.5.5 Medieval

By the time of the Domesday survey in 1085-6 it is apparent that the focus of settlement in Sleaford had shifted to north of the river. The town is mentioned as *Eslaforde* in the Domesday book but this almost certainly refers to the settlement on the north side of the river and may not have included the area of the former Roman centre in the Hoplands and Old Place areas (Pawley 1997).

The remains of a church were revealed during the Jones' 1960 excavation, along with an associated cemetery (Elsdon 1997, 43). If the remains revealed at St Giles Avenue in 1997 do represent a Saxon church then it would appear that those revealed in 1960 were of a church built to replace an earlier building during the late Saxon or early medieval period. The later remains are commonly referred to as the remains of St Giles church although the church may have been re-dedicated as early documents refer to 'the church of All Saints' (Pawley 1997, 71). It has been suggested that the St Giles church is recorded as one of the two churches at Quarrington in the Domesday survey (*ibid* 71) and the distinction between the settlement north of the river and a much smaller one on the southern bank is apparent in medieval documents which refer to Magna Lafford (Great Sleaford) and Parva Lafford (Little Sleaford) or New Sleaford and Old Sleaford (sometimes East Sleaford) (*ibid*). Certainly by the later medieval period the settlement on the south side of the river had become no more than a hamlet.

The church had been constructed over the Roman road of Mareham Lane and it is uncertain how long Mareham Lane continued in use after the Roman period. Its Roman alignment was certainly no longer in use by the medieval period when the church was constructed over it and it is possible that it did not continue into the Saxon period.

Excavations in 1989 revealed a large building which probably originated in the early medieval period to the south of Boston Road (Elsdon 1997, 26). A resurfaced road, possibly part of Mareham Lane, was also revealed, suggesting that even if it did not extend further north in this part of Sleaford during the medieval period, Mareham Lane was at least maintained this far north. Two further buildings, along with enclosures and a possible moat, were revealed during the 1984-5 excavations at Old Place (Elsdon 1997, 43). These are perhaps most likely to represent parts of the complex of buildings and features which formed the Manor House of Lord John Hussey, mentioned by Leland in the 1530s.

1.5.6 Post-medieval

The Hoplands area appears to have been given over to agriculture throughout much of the post-medieval period. A map of Old Place Farm, dated 1849, shows the Hoplands area as a field, with Old Place farm, which was probably constructed in the early nineteenth century in the same approximate location as Hussey's manor house, shown to the west. Boston Road was shown to the south and the line of Mareham Lane marked, forming the boundary between the parishes of Old Sleaford and Kirkby La Thorpe, although there is no suggestion that Mareham Lane was in use at this time. An estate map surveyed for the Marquis of Bristol, dated 1860, also shows the Hoplands area as fields and little-changed when compared with the earlier map. The Great Northern and Great Eastern Joint Railway is marked on the second edition Ordnance Survey map dated 1906, passing close to the Hoplands site on its eastern side and this represents the first major alteration to the nature of the Hoplands area since the 1849 Old Place Farm map. Further development of the area is of relatively recent origin as the modern town of Sleaford began to expand eastwards in the 1950s and 1960s.

1.6 Archaeological investigations

1.6.1 Scope of works

The archaeological excavation at the site was undertaken to mitigate the impact of development on the buried archaeological resource. The density of the proposed residential units, associated utility services and access routes at the site coupled with the shallow depth of the archaeological horizon, as indicated by the archaeological evaluation at the site (Parker 2008), meant that preservation of archaeological remains *in situ* was unlikely to be possible for much of the development area and would therefore not be a feasible option on its own to preserve the archaeological remains. In light of this, a Brief for the archaeological excavation of the site was prepared by the Senior Historic Environment Officer at North Kesteven District Council (NKDC) and a Project Design was compiled by Naomi Field Archaeological Consultancy (NFAC 2009). Preservation *in situ* was considered by the NKDC Historic Environment Team to be a suitable option for some of the remains within the excavation area, as they extended below the level of impact likely to be caused by construction work, and as a result not all remains were excavated.

1.6.2 Aims

The objectives of the archaeological work detailed in this report, as set out in the Project Design (NFAC 2009), were:

- To record all archaeological remains that would otherwise be destroyed by the proposed development of the site.
- To ascertain the relationship between the settlement remains and the Roman road at the south end of the site and to determine if they are together part of the roadside settlement known to have existed to the east of the railway line.

1.6.3 Archaeological resourcing

The archaeological excavation was carried out by up to six archaeologists between by 11th January and 2nd March 2010.

Use was made of MapInfo GIS and AutoCAD to manage and present the data. Eight sub-contractors provided finds assessment reports.

1.7 Circulation of this report

This report will be circulated to the following:

- North Kesteven District Council
- Naomi Field Archaeological Consultancy
- Heritage Trust for Lincolnshire
- Lincolnshire County Council Historic Environment Record

1.8 Report structure

This report is divided into five main chapters followed by four appendices:

Chapters 1-2 serve to introduce the organisations involved, the development, the context, method and standards, and the layout of this report; Chapter 3 presents the results of the archaeological works; and Chapters 4-5 discuss and interpret the results and draw conclusions.

2 PROCEDURES

2.1 Quality standards

All archaeological work was undertaken in accordance with the Institute for Archaeologists standard and guidance documents (IfA 2008).

The standards represented by the Registered Organisation (RO) scheme operated by the IfA were adhered to throughout. Network Archaeology Limited is an RO.

2.2 Survey

The location of the excavation area was surveyed using a Leica GPS 900, which was also used to produce a pre-excavation plan of the archaeological features. A local grid, tied to the Ordnance Survey grid, was established at the site.

2.3 Mechanical excavation

Ground reduction and removal of the latest deposits (topsoil and subsoils) down to the top of the archaeologically significant levels was undertaken using a tracked excavator fitted with a wide (1.80m), toothless, ditching bucket. Spoil was stored on site in a single mound.

2.4 Hand excavation, recording and sampling

Archaeological remains were hand-excavated, in a controlled and stratigraphic manner, and in sufficient quantities, in order to meet the stated aims (1.6.2).

All features and deposits of archaeological interest were recorded by photograph; paper records were produced and plans and sections were hand drawn at an appropriate scale.

All work was undertaken in accordance with the Project Design (NFAC 2009).

2.5 Limitations

As preservation *in situ* was the proposed mitigation for certain remains within the excavation area, a number of features were left unexcavated. In these cases, every effort was made to establish the stratigraphic relationship between features and deposits in plan. However, whilst stratigraphic relationships were, on the whole, established, the lack of excavation of these features has in some cases meant that little datable evidence was recovered and the dating of some of these features is therefore less secure than of those which were excavated. In addition, some features, including the walls of buildings, extended under deposits which were left *in situ*. The full extent of a number of features was not therefore visible, preventing some stratigraphic relationships from being established and limiting confidence in the interpretation of some remains.

2.6 Project code and number block allocations

The excavation was issued a project code (HOPS09) and an accession number (LCNCC: 2009.193) by The Collection (Lincoln County Museum). A sequence of context numbers was used by the excavation team, running from 100-470.

2.7 Assessment of archive, finds and soil samples

The artefact assemblage comprised nine categories of finds; these have been assessed by external specialists and are summarised in table 2.1 below. Analysis reports have been included as appendices.

Table 2.1 Material types and specialists

Type	Specialist
Iron Age and Roman Pottery	Ian Rowlandson
Ceramic Building Material	Jane Young
Industrial residues	Dr Rod Mackenzie
Human and Animal Bone	Jen Wood
Worked stone	Ruth Shaffrey
Glass	Janey Brant
Registered finds	Dr Kevin Leahy
Environmental Samples	PRS

2.8 Data management and presentation

2.8.1 Contextual information

Summary context data is presented in Appendix A. Stratigraphic matrices appear in Appendix B.

2.8.2 Figures

Sixteen figures are presented in this report. There is one overall location plan, showing the development area in its geographical context (figure 1) and a plan showing the excavation area in relation to the current landscape, along with other archaeological sites mentioned in the text (figure 2). The location of the excavation area showing more detail of other sites in the near vicinity (notably the football club site) is also shown (figure 3). The remaining figures show the remains revealed at the site in detail, starting with a simplified plan showing all of the features and deposits revealed (figure 4) followed by a sequence of plans and sections showing the progressive changes by phase (figures 5-13). Figures 14-16 present some of the finds recovered from the site.

2.8.3 Accuracy of displayed data

Survey data was captured with Leica GPS900, which has a horizontal accuracy of approximately 0.01m and a vertical accuracy of approximately 0.02m, and with a Leica TC407 Total Station Theodolite which was used to establish the site grid. Permatrace section and plan drawings were produced at 1:50, 1:20 and 1:10 scale

and were tied to the site grid, the location of which was established using the Leica GPS900.

3 RESULTS AND INTERPRETATION

3.1 Natural deposits

The stratigraphically and chronologically earliest deposit revealed at the site comprised loose yellowish orange sand and gravel **102**, which was relatively level across the site, at approximately 11.80-12.10m OD. This deposit is interpreted as being naturally formed and laid down, and forms part of the Sleaford sands and gravels, the superficial geology of the site.

3.1.1 Phase 1. Late Iron Age settlement (Figure 5)

Phase 1 represents the stratigraphically earliest features. Pottery evidence suggests that settlement commenced in the late Iron Age, although many features were assigned to Phase 1 on the basis of stratigraphic evidence, rather than positive artefactual results.

The road (Figure 6)

A layer, **191 = 403**, comprising coarse sand and gravel was revealed in the southern half of the site, within a sondage (a test excavation slot) cut through later road material. This layer formed a low, wide bank measuring 0.20m high and 4.20m wide. A second layer **405**, comprising light grey gravel, formed an overlying, compact surface. Both deposits extended to the east and west beyond the limits of the sondage. The deposits appear to form the makeup and surface of an east-west orientated road or track. No material to date the construction of the road was recovered.

Roadside enclosures (Figure 6)

Close to the southern limit of the site, ditch **459** was aligned parallel to the road and may have been associated with two adjacent ditches, **365** and **461**. All three had been truncated by a more extensive ditch, **367=396**, which extended to the north-east, and cut into the road/track described above before turning to the west, and extending beneath deposits which were to be preserved *in situ*. Part of a heavily truncated feature, **414**, was revealed during the investigation of later deposits further to the west and may represent a continuation of the same ditch.

Ditches **367**, **396** and **414** are tentatively interpreted as the remains of a single, ditched, roadside enclosure. Cut **367** (which did not overlie the road) produced 15 sherds of shell-gritted pottery of late Iron Age date, and cut **414** (which did overlie the road) contained 3 sherds of a fine ware bowl, also of late Iron Age date. The presence of this material, and the absence of any later material, might imply that the road is also late Iron Age in date, but does not prove such an attribution. As will be seen, residual pottery was frequently encountered at the Hoplands site, and so the date of the construction and use of this phase of the road remains uncertain.

The roadside enclosure (ditches **367**, **396** and **414**) may represent the replacement or maintenance of an earlier boundary represented by ditches **365** and **461**. It is possible that ditch **459** may have been associated with this earlier boundary, representing an internal division of the enclosure which had ceased to be maintained.

To the north of the road, two undated ditches, **425=427** and **429** have been assigned to this phase of activity on the basis of their stratigraphic relationships with later features. Preservation *in situ* of deposits on the northern side of the line of the road prevented the full extent of either ditch from being established and is also likely to have masked the presence of any other features from this phase of activity along the northern edge of the road.

The full extent of a more substantial ditch, **231**, was revealed to the north, which ran parallel to the line of the road. One of its fills, **277**, produced an assemblage of twenty six sherds from shell-gritted jars, dated to the late Iron Age.

The three ditches revealed on the northern side of the road are interpreted as boundary ditches. It is possible that they relate to enclosures similar to that revealed on the southern side of the road, although this could not be fully established. Given the proximity of the three ditches (to each other) it perhaps seems less likely that they were in use concurrently, and more likely that they represented instead a sequence of roadside boundaries or enclosures.

Pits (Figures 5-6)

A group of three, small, oval shaped pits, **265**, **269** and **271**, was encountered to the north of ditch **231**. Late Iron Age pottery was recovered from each of the pits, although the assemblages from pits **269** and **271** were relatively small. In contrast pit **265** produced a large assemblage relative to its size, comprising 164 sherds mainly from large or globular jars, along with four examples of s-shaped bowls (Appendix C1). Nearly a third of the sherds showed evidence of misfiring during production, perhaps suggesting that the assemblage represents the dumping of waste from a nearby kiln. A second possibility might be that the pits represent the remains of pottery clamps. Each contained some charcoal but there was little evidence of the application of heat within or around the pits (eg. there were no apparent scorched deposits). On balance, the remains are perhaps most likely to represent the disposal of kiln or clamp waste, although the possibility that a clamp existed at this location cannot be ruled out entirely.

Two further pits, **108** and **112** (Figure 6b), were revealed a short distance to the west of the above pit group, where pit **108** truncated pit **112**. Both of these pits were probably rectangular in plan, although this was not certain as the western end of pit **108** had been truncated during the previous archaeological evaluation of the site. A large assemblage of ceramics, comprising 104 sherds of pottery from a range of vessels, including drinking, dining and cooking vessels, was recovered from the upper fill of pit **108**. This material has been dated to the late Iron Age, probably the first century AD, prior to the Roman conquest (Appendix C1). The function of the pits is unclear, although their similarity in form (to each other) might suggest they had the same function, pit **108** at some point replacing pit **112**.

Possible Ring Gully

A curvilinear gully, **375**, extended southwards from the northern limit of the site. The feature described a slight, but distinct, arc, which measured 2.6m across, and it had a rounded terminus at its southern end. No finds were recovered from the gully. Although only part was visible within the confines of the excavation area, the feature is tentatively interpreted as part of a ring gully, marking the former location of a circular structure, either as part of an eaves drip gully, or as part of the

construction trench for a timber wall. Much of the gully is likely to survive beyond the northern limit of the excavation area, although the western side of the ring would have been truncated by archaeological features assigned to later phases of activity. The possible ring gully has been assigned to this phase of activity on the basis of its tentative interpretation and its stratigraphic relationship to later, well-dated features. It is not impossible that it pre-dates the late Iron Age, or conversely, could even have its origins in the early Roman period. On the whole, however, since late Iron Age ring gullies are well attested in the archaeological record, and the presence of late Iron Age domestic vessels from within nearby pit **108** is suggestive of settlement here during this period, it seems reasonable to assign the possible ring gully to this phase of activity.

3.1.2 Phase 2. Late first to mid second century activity (Figure 7)

A series of features and deposits located north of the road (see Phase 1 above) have been assigned to this early Roman phase of activity. The road itself was presumably still in use (ie. road surface 405), although the absence of pottery post-dating the late Iron Age in the enclosure ditches on the south side of the road suggests that these ditches had probably been filled in by this time.

Wells (Figure 6-8, Plate 16)

Two wells were located at the north end of the site. Stone-lined well **121** measured approximately 2.60m in diameter and 1.24m deep. Its lining, 141, comprised regular courses of roughly hewn limestone brash, forming an inner shaft which measured 0.80m in diameter. Whilst only five of the lining's courses survived it seems likely that it originally extended up as far as the contemporary (ie. Roman) ground surface. A single sherd of amphora dated to the mid first to second century was recovered from construction deposit 144, low down in the well and behind the well lining, whilst a group of seven pottery sherds dated to the late first and early second centuries was recovered from the primary fill of the well shaft. These artefacts suggest that the well was probably constructed during the late first or early second century. A small, undated feature, **142**, apparently truncated by the well, may have been an earlier pit, or perhaps represents part of the well cut which collapsed during construction. No pottery sherds post-dating the early second century were recovered from the main, upper well backfill, 122, indicating it may have been used for a relatively short period of time. Relatively few fragments of stone were observed within the backfill of the well, or within the fill of the well shaft; this fact, along with the belief that the lining once extended higher up, hints that that much of the lining's stone had been robbed after the well had fallen into disuse.

The cut for another well, **229**, was revealed 1m from well **121**. Whilst only part of this second well was present within the excavation area, it was apparent that although its depth was similar to **121**, it was a more substantial feature, measuring 4.2m across. It is uncertain whether this larger well originally had a stone lining; a small number of flat limestone slabs resting on the side of the well cut may have been the residual remains of a lining, but equally they could have represented building debris within the well's initial backfill, deposit 359. The only pottery recovered from this well was a small group of mid second century (or later) sherds found in tertiary fill 218 (Appendix C1). This assemblage suggests a date by which the well was largely infilled, rather than the date of its construction or use; given, however, the apparently short lifespan of adjacent well **121**, an early or mid second century date for the origin of well **229** appears reasonable, and perhaps suggests that

well **229** replaced well **121**, with the earlier well in part being dismantled to provide material for the new one.

A third, possible, well, **424**, was revealed in the zone to the south of boundary ditch **205**. This feature was due to be preserved *in situ* and was therefore not excavated. In plan it appeared as a substantial, sub-circular pit measuring up to 4m across. Whilst it is possible that the feature was a pit (three other fairly large pits were located close-by), its shape and scale were similar to the two wells to the north, and so the same well interpretation is proposed. A single mortarium fragment was collected from the top of the possible well, and has been dated to the mid to late second century (Appendix C).

Maintenance of earlier boundary (Figures 6-7)

In the centre-north part of the site, an irregularly shaped pit, **215**, truncated Phase 1 boundary ditch **231**. Three sherds of mid second century pottery were recovered from the fill of the pit, although its function remains obscure. The pit was itself truncated by a short length of ditch **201**, which appeared to terminate opposite a similar ditch, **435**, which lay just to the north-west. Both these ditches are undated, but probably represent the remains of a north-west to south-east orientated boundary. A larger ditch, **195**, cut through both gullies, and might reflect a reinforcement of the same boundary. Two sherds of shell gritted pottery, which could not be closely dated, were recovered from its fill. Yet another ditch, **205**, larger still, truncated ditch **195**, and probably represents continued maintenance or renegotiation of this boundary. A small assemblage of pottery dated to the late first century or later was recovered from the fill of this later/larger ditch (Appendix C1). Analysis of sediment from the ditch revealed limited remains of cultivated cereals, including diagnostic fragments of emmer and/or spelt wheat, along with fragments of the arable weed brome. The quantities and types of cereal remains are indicative of waste from domestic processing rather than on-site cultivation (Foster *et al*, Appendix C5), whilst charcoal recovered from the sample most likely represents fire waste from fuel collected locally and indicates mixed woodland as its source with oak dominant. Charred rhizomes/tubers may have originated from the burning of turves, possibly for fuel, or as a result of the firing of used construction material, roofing, bedding or animal litter (*ibid*). The mollusc assemblage recovered from the sample indicates that the ditch periodically held standing water (perhaps on a seasonal basis) but seems likely to have been sited in an area of lightly vegetated open ground with the ditch itself being more densely vegetated and shaded. There was no evidence of woodland in the immediate vicinity. Fragments of oyster and mussel shell are likely to represent human food waste, indicating that shellfish were being imported from the coast, whilst a single flatfish vertebrae is also indicative of marine resources forming part of the local diet.

Pit **207**, revealed in the base of ditch **205** may have been a contemporary, or possibly earlier, feature but produced no finds and its function remains unclear.

The sequence of north-west to south-east orientated ditches most likely represents a single boundary, which was maintained through periodic recutting or reinstatement throughout this phase of activity. It probably had its origins in the boundary established by ditch **231** in Phase 1.

Pits

Three pits, **279**, **416** and **433** were revealed close to putative well **424**. Only pit **279** was fully exposed, as archaeological layers due to be preserved *in situ*, partially masked pits **416** and **433**. Each of the pits was substantial, with pit **279**, the smallest, having dimensions of 2.5m x 0.80m and 0.32m deep. Pit **433** remained unexcavated as it was due to be preserved. The only pottery was recovered from pit **416**, which produced an assemblage of twenty one sherds, including a nearly complete rusticated jar, dated to the late first or early second centuries (Appendix C1). It is assumed, although not proven, that the other two pits are of a similar date.

Ditch

An east to west orientated ditch **420** was revealed between the pits and the line of the road. Only a short length of the ditch was revealed, in the base of an exploratory trench, the remainder being masked by archaeological layers due to be preserved *in situ*. The ditch measured 1m wide and 0.24m deep and produced three sherds of pottery including a sherd of decorated samian ware originating from the Trajanic central Gaulish industry of les Martres-de-Veyre (Appendix C1). It is difficult to interpret the ditch beyond the level of its basic feature type as there is no indication of its extent. Taken at face value, the exposed remains suggest that the ditch probably ran parallel to both the road and heavily maintained boundary represented by ditch **205** and it may therefore a further boundary respecting these alignments.

3.1.3 Phase 3. Mid second to late second century settlement (Figure 9)

Substantial remodelling of the site appears to have been undertaken during the mid to late second century. The road established during Phase 1 was retained but the north-west to south-east orientated boundary (ditches **231**, **205** etc), which had been established during the late Iron Age and maintained into the early Roman period, appears to have fallen out of use and had been filled in by this time. Deposit 217, in the top of the filled in Phase 2 well **229**, produced late second to mid third century wares, including Nene Valley greywares and amphora, and suggest that the final filling-in of well **229** probably took place during this phase of activity (Appendix C1).

Roadside ditches and burial (Figures 6, 9, Plate 13)

On the southern edge of the road, Ditch **411**, was cut into the road foundation material. The ditch appeared to run on an east to west orientation and was probably aligned parallel to the road surface, although its full extent was not visible as overlying archaeological layers were preserved *in situ*. A second ditch, **394**, which truncated the Phase 1 roadside enclosure ditch **396**, ran parallel to ditch **411**, beyond the southern extent of the road construction material. The full extent of this ditch was also not visible due to the preservation of overlying deposits. Ditches **411** and **394** are both interpreted as roadside ditches, possibly dug to form drainage channels along the side of the road. Given their proximity it seems likely that they are not contemporary and it is perhaps more probable that one is a replacement of the other.

Grave **187**, containing a tightly crouched adult male skeleton **176**, was also revealed to the south of the line of the road surface. The grave, which formed a shallow, sub-oval pit measuring 0.92m x 0.40m, had been cut into the road construction material. Two sherds of mid second century pottery were recovered from the fill of the grave and might date the burial, although it is possible that the sherds are residual and the burial dates to the beginning of the following phase of activity.

Ground raising deposits (Figure 8)

On the northern side of the road two distinctive sandy layers, **332** and **447**, were partially revealed, which probably represent episodes of dumping. The coarse sand of both deposits was notably different from the natural geological deposits, being a coarser grain and the material appears to have been brought to the site. A small assemblage of mid second century pottery was recovered from layer **332**. The dumping of these sandy deposits along the road side might reflect attempts at raising the ground level in what may have been a relatively damp area along the roadside.

Building 1 and an infant burial (Figures 8, 9, Plates 9-11)

A substantial, trench-built wall foundation, **335=407**, constructed from coursed limestone brash blocks was revealed cut into layer **332**. Its visible length measured 11.5m and the wall survived to at least 4 courses, in total approximately 0.30m high. No bonding material had been used in the wall construction which measured at least 0.38m wide. The full extent of the wall was not visible as it extended under archaeological deposits which were to be preserved *in situ*.

The wall is interpreted as part of a substantial structure, Building 1, which would have fronted onto the road. It is possible that its construction is related to the deposition of the sandy deposits, with the sandy deposits forming a slightly raised and possibly drier surface on which to build than the existing land surface would have been.

To the west, a second length of trench-built wall **406**, may be a continuation of the wall line of Building 1 although it may equally represent a separate building constructed on a similar alignment. Pit **255**, which contained an infant burial **254**, was revealed cut into layer **447** against the side of this wall and appears to be contemporary with the wall foundation. The child seems to have died around the time of birth (Appendix C4).

The possibility that the wall foundations may not be part of a building cannot be fully dismissed as it is possible that they represent a boundary wall along the side of the road rather than a building. The dumping of sand deposits seemingly to raise the level of the ground surface ahead of the construction of the wall perhaps seems excessive if the wall were only to represent a roadside boundary and the interpretation of the walls as parts of buildings is therefore preferred although the alternative interpretation is acknowledged.

Boundary ditches

To the north of Building 1, an east to west orientated ditch **275**, which had been recut by a second ditch **267**, extended across the majority of the site. A small assemblage of second century pottery was recovered from both of the ditches. A further, short length of unexcavated ditch **431**, was revealed beyond the western end of ditch **267**, and probably represents a continuation of the same feature. The ditch is interpreted as a possible boundary or drainage feature. A possible east to west orientated ditch **418**, was revealed to the south of ditch **267**. Only a small portion of the feature was revealed as it continued underneath deposits to be preserved *in situ* and no dating evidence was recovered. A second short length of ditch **422**, was revealed to the east, but also largely masked by *in situ* deposits, may represent a

continuation of the same ditch. The ditch has been assigned to this phase of activity on the basis of its proximity and similar orientation to ditch **267**.

A north-west to south-east orientated ditch **346**, truncated ditches **267** and **431**. Its full extent was not visible as the southern end of the ditch continued under archaeological layers which were to be preserved *in situ*. The ditch is interpreted as a boundary or drainage ditch, similar to that represented by ditches **267**, **275** and **431**. The heavily truncated remains of a further ditch were revealed close to the eastern limit of the excavation. The ditch ran parallel to ditch **431** and produced a single pottery sherd dated to the late second century or later. Although little of this feature survived it is tentatively interpreted as a boundary or drainage ditch similar to ditch **346**.

A fuller interpretation of the ditches is hampered by the retention *in situ* of deposits overlying the southern end of ditch **346**. These mask the possible relationship between this ditch and Building 1, preventing the interpretation of the features beyond the basic level offered here. The ditches perhaps most likely represent either boundary or drainage features within the back lot of Building 1; or, if Building 1 represents a boundary wall rather than a building, the ditches may represent drainage or internal divisions of an area separated from the road by the wall. Ditch **346** may be either a later feature than the east to west orientated ditches or perhaps all of the ditches are part of the same ditch system where the north-west to south-east element of the system continued to be maintained after the east to west element of the system had been filled in.

Cess pits

Circular pit **301**, was revealed close to boundary ditch **346**, measured 1.1m in diameter and 0.22m deep. The fill of the pit, 302, comprised soft greenish brown silty sand from which 104 sherds of pottery, including a near complete greyware wide-mouthed bowl and other domestic pottery, were recovered. The assemblage dates to the late second or early third century (Appendix C1). A sample of the fill was analysed for its environmental content (Appendix C5) and the results are consistent with those from cess deposits, pointing to the most likely interpretation of the pit as a cess pit. Cultivated cereal remains, including diagnostic spelt wheat fragments, were well represented in the sample, along with inedible arable weeds, such as brome, fool's parsley and field gromwell. Plum stones were recovered and plums appear to have formed part of the diet of the inhabitants of the site. Fish bones, many of which had been crushed possibly during chewing or passage through the gut, included eel and flatfish. A small quantity oyster shells were also recovered. The presence of the fish bones and oyster again indicates the availability of coastal and marine resources to the inhabitants of the site. Seeds from a member of the nightshade family were also recovered from the sample. They may have originated from a plant growing near to the pit, but, despite being poisonous, nightshade was used in medicine in the past and the possibility of such a use in this instance cannot be discounted.

A second pit, **283**, was revealed close to the eastern limit of the site. It had been heavily truncated by a later archaeological feature but measured 1.2m across and at least 1.2m wide, with a truncated depth of 0.2m. The single fill of the pit, 282, comprised soft brownish grey silty sand and produced 10 sherds of second century or later pottery. No environmental sample was taken from the fill but the pit is

tentatively interpreted as a second cess pit on the basis of the similarity in composition of fill 282 to fill 302 in cess pit **301**.

The cess pits would have been located in the area behind Building 1 and presumably are associated with the building. The remains from the pits, particularly the environmental remains from pit **302**, provide valuable information relating the diet and economy of the inhabitants of the site during this phase of activity.

Well (Figure 9, Plate 17)

A circular well **152**, with a stone-lining **156**, was revealed close to the northern limit of the site. It truncated the southern side of Phase 2 well **229** along with a small pit, **166**. Well **152** measured 2.8m in diameter and 1.4m deep. The lining was constructed from roughly hewn limestone brash slabs, each measuring an average of 380mm x 170mm x 60mm. These slabs were laid in regular, level courses; twenty courses of which survived in the best preserved part of the lining. The lining formed a shaft within the well which was oval-shaped in plan, measured 1.08m x 0.84m and survived to a maximum height of 1.23m. Pottery recovered from the fills of the well suggests that it was fell out of use and was filled in possibly during the mid second century or later (Appendix C1). A fragment of human skull, probably from an adult male, was recovered from the upper deposits.

Limestone brash slabs were relatively frequent within the fills of the well, (particularly fill 158, which may have been an area of lining collapse) but they were not numerous enough to account for the missing portion of the stone lining. Instead, it seems that the lining was robbed out before the well was filled in, probably reflecting the value of building stone in the immediate area.

Analysis of deposit 181, the primary fill of the well, revealed the remains of cultivated plants, arable weeds and wild plants. The remains of cultivated cereals, including emmer/spelt wheat, were recovered, along with a pea/bean, a rather less common but not unique find within Roman assemblages. Coriander and flax, which are both cultivated species, are represented within the sample and could either been planted deliberately or present as opportunistic weeds. Remains of the arable weed brome were present within the sample, along with a number of other weed species, which may indicate local cereal cultivation but could also be the result of opportunistic plants originally brought to the site with processed grain taking hold in waste areas of the site. Equally, at least some of the weed species are themselves edible and may therefore have been deliberately collected as food. A diverse range of wetland species represented in the sample are perhaps most likely to be directly associated with the well and woodland species, including hazel, are perhaps more likely to have been growing in waste areas of the site. Charred rhizomes/tubers may, as with the sample from Phase 2 ditch **205**, indicate the burning of turves or the destruction of used construction material, roofing, bedding or animal litter. The charred remains of wetland and heath species may indicate a source for some of this material.

A north-west to south-east orientated ditch **197** revealed close to the northern side of the well had been cut into the filled in Phase 2 well, **229**, and may have been associated with well **152**, although its function remains unclear.

3.1.4 Phase 4. Early to mid third century settlement (Figure 10)

Phase 4 again saw substantial remodelling of the site. The road established during Phase 1 was considerably altered and the Phase 3 building and boundary ditches were pulled down or filled in.

Road remodelling (Figure 6)

The east to west orientated road, which extended across the southern end of the site, was significantly remodelled during Phase 4. The roadside ditches, **394** and **411**, established during the previous phase of activity were filled in at the beginning of this phase, with material that included a small assemblage of third-century pottery (Appendix C1).

An extensive deposit of dark brown and grey silty sand and gravel, **190**, **392** and **412**, sealed the earlier road surface, construction material and roadside ditches. It had apparently been deliberately deposited to form an agger approximately 6.5m wide and 0.30m high for a road surface **189**, comprising small cobbles and rounded limestone fragments. The burial of a crouched male **176**, assigned to the previous phase of activity had also been sealed by the road agger and although pottery from the grave suggest that the burial belongs the previous phase it is possible that it should be assigned to this phase.

An undated ditch **372**, which ran parallel to the southern edge of the road, is interpreted as a roadside drainage ditch. It is likely that it was constructed during this phase as part of the road remodelling and maintained through into the following phase, although the possibility that its origins lie during the later phase cannot be dismissed.

Ground raising deposits (Figures 6, 8)

A series of sandy layers **343**, **445**, **402**, **404**, **409**, **342**, and **334**, were deposited on the north side of the remodelled road. Layer **334**, extended in a 0.47m thick band from the eastern limit of the site, sealing the remains of Building 1 and continuing, as layer **342**, as far as the western limit of the site. An assemblage of forty-one sherds of pottery was recovered from the layer and has been dated to the late first to early second centuries (Appendix C1). The apparently early origin of the pottery assemblage within a deposit which seals mid and late second century deposits is most likely the result of layer **334** being derived from earlier deposits which have been redeposited in this location. The fills of Phase 3 ditch **346**, which extended under layer **334**, produced pottery of the same date and it is possible that this ditch was filled in at the same time that layer **334** was deposited. Analysis of sediment samples taken from layer **334** revealed similar biological remains to those from pit **213** to the north. Cereal grains, specifically spelt wheat, were present, along with food waste in the form of flatfish and mussel remains. The mollusc shell assemblage indicates that layer **334** was prone to saturation and possibly periodic flooding and it is possible that efforts to raise ground level in this area may have been in direct response to the damp ground conditions. An undated layer **404** had been deposited on top of layer **342** probably during the same depositional episode. A further layer, **402**, which continued as layer **409**, extended over the southern part of layer **334** and over the northern fringe of the remodelled road. An assemblage of thirty-three sherds of pottery, which included a two handled flagon and rusticated jars, was recovered from this deposit and has again been dated to the late first to early second

centuries (Appendix C1). On the western side of a modern sewer pipe, layers **343** and **445** probably represent continuations of the extensive deposition on the eastern side of the pipe.

These sandy layers are interpreted as dumped deposits, deliberately laid to raise the level of the ground surface and probably to produce a surface to allow further development. The apparently early dates of the pottery contained within these deposits might suggest an origin during Phase 1 or 2 but are contrary to the stratigraphic evidence which undoubtedly indicates a later origin. The most likely explanation of this apparent anomaly is that the sandy deposits are derived from the redeposition of earlier deposits. It is possible that these were located within the site boundaries; however, in general the sand component of the layers was considerably coarser than that of the natural, geological sands at the site and the deposits may have been brought onto the site in an effort to raise the construction level in an area prone to flooding or ground saturation.

Building 2 (Figures 8, 10, Plate 8)

The fragmentary remains of an east to west orientated wall foundation **389**, which had been trench-built within construction cut **451**, were revealed to the north of the remodelled road, forming part of a second building, Building 2. It consisted of irregular or roughly hewn limestone blocks, up to 200mm x 180mm x 40mm, which had been laid in un-mortared, pitched or herringbone courses, at least two of which survived in places. The wall foundation ran parallel to the road for approximately 6.7m and had a northerly return at its eastern end which ran for approximately 1.2m, extending under the corner of Building 3, assigned to Phase 5. At its western limit the wall apparently extended almost as far as the earlier evaluation trench (Parker 2009) but is not recorded as extending through it.

Beyond the evaluation trench and a modern sewer pipe, a short length of shallow, east to west orientated ditch **252**, the function of which is unknown, had been cut into the ground raising layer **445** and was subsequently truncated by the construction of a wall corner **280**. The corner lies on the same line as wall **389** and may represent its western limit. Stratigraphically it is possible that the corner **280**, is associated with Building 1 assigned to Phase 3, but this is perhaps unlikely as it would suggest that wall **406**, presently assigned to Phase 3 as part of Building 1 represents an earlier building rather than a continuation of the Building 1 wall line. As a result corner **280** is interpreted as representing the western corner of Building 2, suggesting that the road frontage of the building was approximately 13m long.

A pit, **340=341**, which may have been related to the construction of Building 2, was cut into the top of ground raising layers **338** and **339** to the north of the building corner. A short length of badly disturbed, north to south orientated wall **256**, had been constructed over part of the filled in pit and is interpreted as part of the western wall of the building. The wall was constructed from roughly hewn, un-mortared limestone brash slabs, possibly laid in pitched or herringbone courses. The slabs measured 300mm x 200mm x 100mm on average. Two large limestone slabs, each measuring approximately 600mm x 500mm x 100mm had been laid on top of the smaller pitched slabs and may represent the top of the wall foundation. A similar arrangement is known from several archaeological sites in Sleaford and it is suggested that the large flat slabs probably formed an above ground level base for the wooden superstructure of the building.

The remains of a possible floor or yard surface **344**, which extended over a small area measuring 0.70m x 0.36m (but extended beyond the limit of the excavation), were revealed to the west of the western wall of the building, constructed on top of the ground raising layer **343**. It comprised worn limestone blocks, measuring 200mm x 100mm x 100mm on average, and had been heavily scorched. An unexcavated deposit comprising compact yellowish brown clay and frequent charcoal **345** covered a small area measuring 0.4m across, adjacent to the putative floor surface, which may represent the site of a hearth or small fire. Both the surface and the possible hearth were left *in situ* as the area was to be unaffected by the proposed development. The relationship of this small area of possible floor surface and burning with the structural remains of Building 2 is unclear. Stratigraphically the surface may be in phase with the building and it may represent an external, paved area beyond the western end of the building or may be an indication that an insubstantial element of the building, such as a lean to, had been constructed against the western wall. Alternatively, it should be recognised that the floor surface may not belong the same phase as Building 2 and the floor surface and burnt area may not be associated with the building.

A short length of wall **391** abutted wall **389**, close to its eastern corner and probably formed part of addition to the eastern end of Building 2. It extended for a distance of 0.9m and had apparently been constructed in the same style as wall **389**. A short distance to the north, a further area of stonework **453**, probably represented a floor surface or possible tumble rather than a further wall.

Stone-lined pit **470** was revealed on the inside of Building 2, constructed against the wall line. No finds were recovered from the pit. The stone lining and the pit surroundings lacked of any obvious evidence of burning to suggest that the pit may have been a hearth or an oven, and the pit was most likely used for storage.

Building 3 (Figure 10)

A single course of largely flat, limestone brash slabs, **203**, may have formed part of Building 3, to the north of the road. The remains had been constructed on top of the ground raising deposit **334=342** but had slumped onto the soft deposits filling Phase 3 ditch **346** and were partially masked by a later archaeological deposit which was to be preserved *in situ*. Consequently the form of the remains could not be fully established but the slabs are perhaps most likely to represent either the lowest course of a stone wall foundation or part of a floor surface.

Two small pits, **439** and **441**, recorded to the west of the possible wall or floor surface, are interpreted as the remains of postholes, most likely associated with the building. Neither posthole was excavated as both were to be preserved *in situ*. Neither produced any finds from the surface of their fills. However, pit **441** appeared to contain limestone brash packing material **442**, similar to the postholes associated with Building 3, perhaps suggesting a similar building design.

The building or floor surface may have been relatively short-lived, perhaps in part as a result of the slumping or subsidence caused by the soft fills of earlier features as recorded above. After falling out of use it was covered by three sandy layers; **338**, **339** and **449**, which were similar in composition to the ground raising deposits and probably deposited for the same purpose.

Wells (Figures 8 and 10)

A probable well **294** extended into the excavation area from the western limit of the site. It had visible dimensions of 4m x 1.9m and, if fully exposed, may have been comparable in size to Phase 2 well **229**. Instability of a deep section against the edge of the excavation, along with the likely preservation of the well *in situ*, limited excavation of the well to a depth of 0.9m below the level of natural geological deposits and the base of the well was not reached. Two sherds of late second century pottery were recovered from fill 327, the earliest fill revealed in the well and may date the time at which the well fell out of use (Appendix C1). The majority of the well fills produced small assemblages of late second or third century pottery and the well appeared to have been filled in during this phase. The well produced no evidence of a lining, which might suggest that it was either never lined, or, as extensive robbing of the linings is apparent in the earlier wells; it is possible that the lining was removed prior to the well being filled in.

A further, circular well cut, **148**, was revealed in the north-eastern corner of the site. It measured approximately 2.4m in diameter and was 1.35m deep. The well contained a stone lining **169**, comprising roughly hewn limestone brash slabs, measuring up to 500mm by 350mm by 100mm. The slabs had been laid in regular, level un-mortared courses to form a shaft which was rectangular or square shaped in plan and measured 0.52m x at least 0.45m. The northern half of the lining appeared to have completely collapsed; the stone from the collapse forming a large part of the fills of the well. The southern half of the lining however, had survived in good condition to a height of 1.3m. Pottery from the fills of the well was largely limited to the upper fill 171, which produced a medium sized assemblage of wares dating to the late third century, although two scraps of late second century or later pottery recovered from the primary fill might suggest that the well was in use early in the third century (Appendix C1).

Pits (Figures 6, 8)

Several pits, the majority of which are poorly dated, have been assigned to this phase of activity. It is possible that they have their origins within other phases but have been assigned to Phase 4 as a 'best guess' based on their proximity to other, more securely dated features.

A sequence of relatively well-dated, intercutting, sub-oval pits, **244**, **263** and **213** (figure 6a), where pit **244** was the earliest in the sequence and pit **213** the latest, was revealed in the centre of the site. These pits were of similar sizes and may have performed the same function, although it is not immediately apparent what this may have been. Assemblages of third century pottery were recovered from each of the pits. Analysis of sediment samples from pit **213** suggests an environment and economy at the site which was broadly similar to that suggested by the analysis of samples assigned to Phase 3. Cultivated cereals are well represented as a food staple and charcoal from fire waste suggests access to mixed woodland for fuel. The presence of oyster and mussel shell and a flatfish vertebrae continue to emphasise the importance of marine resources to the inhabitants of the site. Again the burning of turves for fuel or the burning of used construction material, roofing, bedding or animal litter may be indicated by some of the biological remains. The snail shell assemblage indicates areas of open, lightly vegetated ground with some areas of damper ground with more plant cover and the possibility of occasional standing water within pit **213** (Appendix C5).

To the south, an undated pit **225**, truncated Phase 1 ditch **231**. The pit is assigned to this phase on the basis of its proximity to pits **213**, **244** and **263** and may have been used for a similar purpose. To the east was located sub-circular pit **273**. Although undated, it has been assigned to this phase due to its proximity to pits **213**, **244** and **263**.

Further to the south-west, pit **337** had been cut into the ground raising deposit **334=342**. This pit produced a small assemblage of mid to late first or second century pottery, the early date of which suggest that it was most likely derived from the underlying ground raising deposit during weathering or collapse of the sides of the pit.

Two further undated pits, **240** and **238** were revealed close to well **148**. The proximity of the pits to the well might suggest a related function.

To the west, a sequence of pits **119**, **117**, **114**, **106** and **104** formed an intercutting group which truncated the filled in Phase 2 well **121**. Some of these contained residual pottery. The pits have been assigned to this phase of activity due to their proximity of the well-dated pits **213**, **244** and **263**, which lie approximately 10m to the south-west.

3.1.5 Phase 5. Mid to late third century settlement (Figure 11)

By the mid to late third century, Building 2 established during the previous phase of activity, had been completely destroyed and the wells and probably the pits which had been in use had been filled in. The road, which had been remodelled during the previous phase, was apparently retained with little or no alteration, with the roadside ditch **372**, either maintained through into this phase or possibly originating during it.

Ground level raising (Figure 6)

On the south side of the road a substantial sandy layer **357**, which measured up to 0.48m thick, had been deposited so that it slightly lapped over the margins of the southern camber of the road. A small assemblage of pottery dated to the mid third century was recovered from the layer. A second sandy deposit **387**, revealed in the south-western corner of the site, may represent a continuation of the same layer.

The deposit of layers **357** and **387** appears to have been a deliberate effort to raise the level of the ground surface on the southern side of the road. This may have been fairly localised on the southern side of the road as the sandy layers appeared to be constrained to a relatively narrow band little more than 2m wide along the edge of the road.

On the northern side of the road two further sandy deposits, **333** and **361**, probably represent a single dumped layer. The layer, which measured up to 0.2m thick, sealed the foundations of Building 2 and extended as far as the northern edge of the road. An assemblage of over 100 sherds of pottery was recovered from layer **333** with sherds dated as late as the early third century, but with a large proportion dated to the later first to mid second century (Appendix C1). The pottery dates suggest that the layer is a re-worked deposit, which may have been derived from the re-use of some of the construction layers deposited during the previous phase of activity, which were laid down during the early third century and may have contained residual late first or early second century sherds. Analysis of layer **333** for biological

remains revealed a generally similar suite of taxa to that revealed in contexts assigned to Phase 4, suggesting a considerable degree of continuity in the environment and economy of the site between Phases 4 and 5. However, the snail shell assemblage from layer **333** showed reduced level of taxa associated with wet ground or standing water perhaps indicating that attempts to raise the ground level and create a drier land surface may have been successful (Appendix C5).

At the extreme western edge of the site, on the western side of the modern sewer trench, there is no evidence that additional ground raising was undertaken during this phase of activity. This might suggest that either horizontal truncation in this area had removed any evidence of the practice or that the level obtained by the deposition of material in this area during Phase 4 created a dry enough surface that ground level did not need to be increased when layers **333** and **361** were deposited.

Building 4 (Figures 6, 11, Plates 5-11)

An east to west orientated wall, **352**, which had a northern return at its eastern end was revealed on the north side of the road and formed part of Building 3. The wall had been trench-built within construction cut **353**, which had been dug into ground raising layers **333** and **361**. This wall extended for 7.1m parallel to the road with its northern return measuring 2.15m, and was constructed from roughly hewn, unmortared, limestone brash slabs which measured an average of 280mm by 270mm by 50mm. The slabs had been laid as pitched or herringbone courses; at least three of which survived. The wall extended as far westwards as the western archaeological evaluation trench (Parker 2009) but was not recorded during those investigations, suggesting that it had not have survived into this area. A small pit **350** had been cut into the wall seemingly to remove a small amount of stonework and backfilled with rubble. This may have been a small repair or perhaps an episode of later stone robbing.

An alignment of substantial postholes, **307**, **310**, **313**, and **316** were positioned parallel to the east to west wall line, approximately 2.9m further to the north. The postholes were of similar sizes, measuring an average of approximately 0.5m in diameter and each contained a number of limestone brash slabs, which most likely represent packing stones to secure substantial posts. Finds from the postholes were limited to small fragments of residual pottery dated to the late first and second centuries, recovered from postholes **310** and **313**. The postholes probably held substantial, structural posts which may have stood within the building, forming an aisle to help support the roof.

To the south of the posthole alignment, a further, substantial, stone-packed posthole, **300**, was revealed 0.9m from the line of wall **352**. Two further pits, **331** and **370**, may represent additional postholes which, along with posthole **300**, formed a second posthole alignment. A small group of third century pottery was recovered from pit **300** and an assemblage of only 2 sherds, dated to the mid second to mid third century was recovered from pit **331** (Appendix C1).

A further, undated, stone-packed posthole, **319** was revealed in line with the eastern wall of the building. Its function is unclear but its location might suggest an association with the building.

A keyhole-shaped oven, **297**, was revealed within the angle created by wall **352** and measured 1.4m x 0.65m x 0.48m deep (Plate 14). This oven contained a stone lining

296, constructed from flat limestone slabs which typically measured approximately 400mm by 250mm by 100mm. The slabs had been set mainly on end or on their sides around the edge of the pit but not on the base, although an area of flat slabs sloped down to the base from the northern end of the feature. Scorching of some stones was evident, probably the result of firing the oven. The primary fill of the oven, deposit 329, comprised mottled red, yellow and light brown silty sand with frequent charcoal flecks and contained three small scraps of second century or later pottery. No evidence of any particular specialist function for the oven was recorded. Within 329, cereal grains including emmer and/or spelt wheat are indicative of wheat continuing as the staple food ingredient at the site; the presence of charcoal suggests that mixed woodland continued to be accessible for fuel. Trace evidence of burnt turves was also present (Appendix C5).

The upper fill 295 of the oven was mid brownish yellow silty sand, and was more likely to have been deposited to backfill the feature after the oven had ceased to be used, as it did not appear to have a heightened charcoal component and was similar to some of the ground levelling/raising layers at the site. There was no evidence of a collapsed superstructure for the oven and if such a construction had ever existed it appears to have been removed prior to the filling in of the feature.

A scatter of limestone blocks **194** was revealed to the west of Buildings 3 and 4. This scatter measured 1.7m by 150m, and had been heavily truncated by modern utility services to the east but extended beyond the limits of the excavation area to the west. It consisted of blocks measuring 260mm by 140mm by 30mm amongst which a small assemblage of late second century or later pottery was recovered.

Stone surface

A stone-packed posthole **281** was revealed close to the northern edge of the scatter of blocks, cut into the spread of heat effected clay **284**, assigned to Phase 4. The fragmentary remains of a possible surface **184**, adjacent to the posthole were probably contemporary with it and covered an area measuring 2.2m x 0.8m. It comprised limestone blocks measuring up to 550mm by 140mm by 50mm, some of which appeared to have been scorched. A further area of stone surface **293** was revealed on the eastern side of the modern utility service. This surface covered an area measuring 1.2m by 0.4m and comprised worn limestone blocks which measured 200mm x 100mm x 100mm on average. Many of the stones appeared to have been scorched, strongly suggesting that the surface was a continuation of surface **184**.

The surfaces may have been contemporary with Building 3 or 4, possibly representing a surviving part of the floor surface within the building. The presence of posthole **281**, might suggest that a substantial internal feature stood in this position. The apparent scorching of a number of the stones within the floor surface may be an indication of a hearth in this location, although the possibility that the scorching was caused by accidental burning cannot be discounted.

Building 5 (Figure 11, Plates 7-11)

Close to the western edge of the site, four discrete patches of un-mortared, uncoursed limestone, **464-467**, formed an approximately north to south alignment. These may represent the remains of a wall line. Set at a right angle to this was a further possible fragmentary wall line, comprising five discrete patches of surviving

wall foundation: **397-401**. Each of these patches had been constructed from roughly hewn, un-mortared, limestone brash slabs which had been laid in pitched or herringbone courses. To the east lay postholes **382** and **384**, which possibly formed a right-angled return to the wall line represented by patches **397-401**. Posthole **382** was undated but contained limestone packing, which was absent in posthole **384**. A single sherd of Roman greyware was recovered from posthole **384**.

These three sets of features may have been architectural elements associated with previously described buildings, or together may represent the traces of an entirely separate structure, Building 5. Unfortunately the poor preservation of the remains and the surviving stratigraphy precludes finer resolution.

Burial (Plate 12)

A female human skeleton **159** was revealed a short distance to the northeast of the area of building remains. It had initially been revealed during the evaluation of the site (Parker 2008) within Trench 2 but no grave cut was recorded and by the time of the excavation only the base of the grave remained. However, it was apparent that the grave had been cut into the Phase 4 ground raising deposit **334** and, assuming that the evaluation layer **2004** was the equivalent of Phase 6 layer **168** (see below), the grave had probably been sealed by layer **168**. Therefore it seems most likely that the burial of skeleton **159** should be assigned to Phase 5, although the possibility that it is of a later date cannot be dismissed.

The skeleton had been buried in an extended prone position, aligned approximately east to west, with the head to the east and looking south. Analysis of the skeleton suggests that the individual was probably in her fifties at the time of death and had begun to suffer from arthritis (Appendix C4).

Building 6 (Figure 11)

An approximately north to south orientated wall foundation **130**, within construction cut **192** was revealed in the north-eastern corner of the site, constructed partially over the filled in Phase 4 well **148**. The foundation measured 7.6m long x 0.8m wide, having apparently been truncated away to the south. To the north the wall may also have been truncated, or formed a wall end. The foundation had been constructed from roughly hewn, un-mortared, limestone brash slabs, which measured an average of 170mm by 170mm by 30mm, and had been laid in pitched or herringbone courses, which survived up to four high.

Two stone-packed postholes **222** and **232** were revealed to the east of the wall, each approximately 2.6m from it. Given their location, the postholes seem likely to have been associated with the building, possibly marking the location of substantial internal supports for the roof. A small assemblage of mid second to mid third century pottery was recovered from posthole **232**. A single sherd of mid to late first century or later pottery and a *Sestertius* coin, dated to 98-117AD, were recovered from posthole **222** and probably represent residual finds.

Pits and postholes (Figure 11)

A small, stone-packed posthole **362** was revealed close to the western limit of the site. This feature had been cut into the top of the filled in Phase 4 well **294** and Phase 3 ditch **346**. A small assemblage of mid second century or later pottery was

recovered, but a probable third century origin for the feature is suggested by its stratigraphic relationship with well **294**.

An unexcavated and undated feature **437** was revealed approximately 7m to the south of posthole **362** and may represent a further posthole. This feature had been cut into the top of the Phase 4 layer **449** and has been assigned to this phase of activity on the basis of its proximity to posthole **362**. The two postholes may represent further structural evidence in this part of the site; certainly the stone-packed posthole **362** suggests a fairly large post existed here. There is insufficient evidence to reveal their purpose.

A substantial, sub-circular pit **248**, was revealed towards the eastern limit of the site. This pit measured 2.23m by 2.2m by 0.4m deep and had a broad flat base. An assemblage of third century pottery was recovered from both fills of the pit, later third century pottery being recovered from the upper fill.

The pit had been truncated by three much smaller pits **246**, **258** and **260**. Third century pottery was recovered from pits **246** and **260**. However, pit **258** produced a group of late Iron Age pottery, which, based on the stratigraphic evidence, must have been residual.

To the south another substantial pit **241**, was revealed which measured 2m by 1.46m by 0.4m deep. Late second and third century pottery was recovered from the fills of the pit, with the majority of the pit being filled with large, trimmed limestone slabs measuring up to 500mm x 400mm x 80mm. These slabs appeared to have been fairly carefully placed rather than simply thrown into the pit, but did not appear to form a structure. It is possible that the pit was used to store the slabs, possibly reflecting the value of stone for building purposes during this phase of activity.

A further substantial pit **163**, was revealed close to pit **241**. This feature measured 2.07m by 1.5m by 0.47m deep. Mid third century pottery, along with a number of second century sherds, were recovered from the pit. Whelk and oyster shell were also recovered from the pit but its function remains unclear and it perhaps acted as a large storage pit.

3.1.6 Phase 6. Late third to fourth century settlement (Figure 12)

By the beginning of Phase 6, Buildings 3, 4 and 5 had fallen into disuse; either fallen down, or more likely being demolished. The fate of Building 6 in the north-east corner of the site is less clear and it is possible that it continued in use into this phase of activity.

Road repair or resurfacing (Figures 6 and 1, Plates 2 and 15)

A major phase of repair or deliberate alteration to the east to west road, originally established during Phase 1, was undertaken during this phase of activity. Layer **291** comprised compact yellowish brown gritty sand, which was deliberately deposited to act as bedding or a make-up layer for surface **290**, constructed from medium sized limestone cobbles and sub-angular limestone fragments. The surface had evidently suffered a degree of damage, probably from agricultural activity after the road had gone out of use, but the remains suggest that it measured at least 4.6m wide. The bedding or make-up layer partially extended over the Phase 5 ground raising deposit **333** and did not contain any dating evidence.

To the south, an east to west orientated ditch **354**, may have formed a drainage feature along the southern edge of the road. A small assemblage of pottery recovered from the fill of the ditch has been dated to the late fourth century, although as the ditch may have been subject to regular cleaning out to facilitate drainage it is possible that it had been established somewhat earlier in the fourth century. The ditch appears to have fallen out of use during this phase of activity and was backfilled prior to the construction of a paved or cobbled roadside area (see below).

Paved areas to the south of the road (Figure 6)

A layer of stones **356** formed a paved or cobbled surface which extended over the filled in roadside ditch **354**. This layer was constructed from limestone brash blocks, which measured up to 260mm x 40mm x 30mm, and extended in a 0.7m wide strip across the western half of the site. It is possible, perhaps even probable, that the layer was originally wider as the surviving remnants mainly comprised parts of the surface that had slumped into the soft fill of the underlying ditch. Areas beyond the slumped zone are likely to have been more exposed to damage from later activities such as ploughing and may therefore have been destroyed or deliberately removed.

To the east, beyond the easternmost evaluation trench, a second paved or metalled surface **358**, formed an area which measured 3.3m wide. It had been constructed from similar materials and may represent a continuation of the same layer as **356**, and may more accurately reflect the original width of layer **356**.

Several possible interpretations for the paved or metalled area can be proposed. It may represent the remains of an area of hardstanding to the side of the road, perhaps a yard or storage area. The surface could also represent the remains of a paved walkway along the side of the road, possibly related to buildings on the south side of the road, or it could be part of the road surface. The latter interpretation would suggest that the road was either widened or shifted slightly southwards at some point during the late fourth century or later, after the possible roadside ditch **354** had been filled in. There was no evidence of a bedding layer beneath the stones, a construction technique which had been consistently applied during earlier road alterations at the site and during the road alterations already assigned to this phase; and although the possibility that the surface represents a road cannot be dismissed one of the former interpretations is preferred.

Structural evidence on the south side of the road

Despite the presence of the paved area on the south side of the road, the only accompanying structural evidence was a single, stone-packed posthole **463**. The size of the posthole and its packing material was similar to several of the postholes on the north side of the road that have been interpreted as holding structural uprights for buildings. It is possible that posthole **463** performed a similar function for a building associated with the nearby paved areas, but no further evidence of this putative structure was revealed.

Ground level raising

An extensive layer **168** revealed on the north side of the road appeared to represent a further phase of ground level raising, similar to those assigned to the preceding three

phases of activity. This layer comprised yellowish brown silty sand, up to 0.2m thick and extended across an area measuring 10m x 7m. The deposit lapped over the road make up or bedding layer **291** and produced a medium sized assemblage of pottery, dated to the late second century or later (Appendix C1). The apparently early date for the pottery assemblage does not appear to reflect the stratigraphic evidence and as with the Phases 3, 4 and 5 ground-raising deposits, layer **168** probably represents the redeposition of earlier material in an effort to level up the ground surface and produce a stable platform for construction. A similar deposit **444**, revealed to the west of the modern utility service trench in the south-western corner of the excavation area probably represents a continuation of the same layer.

Building 7 (Figure 12, Plate 4)

The fragmentary remains of a trench-built, east to west orientated wall foundation, **123=127=457** were revealed on the northern edge of the road, cut into the ground-raising deposit **168**, and abutting road surface **290**. This foundation measured at least 8.4m in length and 0.6m wide and had been constructed from roughly hewn, un-mortared limestone brash slabs which typically measured around 200mm by 150mm by 80mm. These had been laid in herringbone or pitched courses, at least two of which survived. On the southern side of the wall, three further patches of masonry, **124**, **125** and **126** may have formed parts of other walls or a small structure built against the main east to west orientated wall. These remnants of masonry were poorly preserved and less well defined than the east to west wall, but appeared to have been constructed in the same fashion. All three had been cut into road surface **290** and if they had formed part of a small structure it must have caused a narrowing of the road at this point. The walls are interpreted as the remains of a further structure, Building 7, which fronted onto the road. Other possible interpretations may be possible as no evidence for a wall return was revealed and it is therefore possible that the foundation represented a roadside wall or other structure rather than a building. However, the construction technique is similar to the remains of better preserved buildings, both at this site and others in Sleaford (Elsdon 1997), and on balance, the interpretation of the remains as those from a building is preferred.

On the northern side of the east to west wall, three discrete layers of smoothed or worn limestone blocks **160**, **161** and **162**, had been constructed on top of the ground raising deposit **168**. A small assemblage of abraded pottery dated to the late second century or later, was recovered from between the stones of layer **160**. A second small assemblage dated to the late first century or later was also recovered from between the stones of layer **162** (Appendix C1). Both of these assemblages are likely to have derived from the underlying ground raising deposit **168**. Layers **161** and **162** were shown to abut the east to west wall and given the similarity of all three layers it seems likely they were parts of a single, badly damaged layer which formed part of a paved surface, possibly an interior floor surface of Building 7. It is tempting to ascribe a degree of longevity to the building, based on the worn nature of the floor surface. However, the possibility that the floor surface was constructed from re-used stones should not be discounted.

A sub-oval pit **177** possibly the remains of a hearth within Building 7, was revealed close to the northern limit of the floor surface, cut into the ground raising deposit **168**. This pit measured 1m by 0.4m by 0.08m deep and contained a single fill **178**, which included fired clay fragments, scorched red sand and a moderate amount of charcoal flecks. A small assemblage of pottery dated to the late first century or later

was recovered from the fill but, again, was probably derived from the ground raising deposit **168**. Analysis of the fill for biological remains produced results similar to those of samples from earlier phases and suggests broad continuity in the local environment across Phase 2 to 6. The presence of charred thorns of rose/bramble and blackthorn/hawthorn might suggest the burning of material collected during an episode of land clearance or gardening but may also point to the casual exploitation of a wider range of local resources (Appendix C5).

To the west of the possible hearth a small discrete patch of sand **292**, may also have been related to Building 7. This sand produced a small assemblage of pottery dated to the late second century or later and may represent a small area of levelling associated with the construction of the building or perhaps part of the more extensive ground raising activities represented by layer **168**.

Building 8 (Figure 12)

To the west of Building 7, the remains of wall foundation **210** were revealed in the base of a later ditch **186** (which had originally been cut into the ground raising deposit **444** probably in order to rob the foundation). This foundation was orientated east to west and had been trench-built within construction cut **211**, which measured 0.64m wide. The foundation was constructed from roughly hewn, un-mortared limestone brash slabs, which measured an average of 150mm by 100mm by 80mm and were laid in pitched or herringbone courses. The foundation's eastern end had been completely truncated by a modern utility service trench and no eastward continuation was apparent beyond this truncation. North to south orientated ditch **236**, assigned to Phase 7, may reflect later robbing of this eastern wall of the building.

Much of the stratigraphic information relating the wall foundation to other features had been removed by the later ditch **186** and there is no stratigraphic reason why the wall foundation could not have been constructed during any of the earlier phases of activity.

A possible floor surface, **194**, comprising worn or smoothed limestone blocks measuring an average of 260mm by 130mm by 30mm was revealed to the north of the wall foundation and may represent an internal floor surface of Building 8. The surface had been constructed directly on top of the spread of heat affected clay, **284** assigned to Phase 4 and covered an area which measured 1.7m x 1.5m. A small assemblage of pottery dated to the late second century or later was recovered from between the stones of the floor surface and is probably largely derived from the underlying deposit.

A layer of similar stones **374** was revealed on the southern side of the wall foundation. The layer had been laid directly on top of the ground raising deposit **444** but was less well preserved than surface **194**. It possibly represents a further stone surface, possibly on the outside of Building 8 and may have formed a small paved area or path between the building and the road.

Possible drains

A possible drain and sump **149** was revealed against the western limit of the excavation area. The drain consisted of a steep sided, north to south orientated ditch with a flat base. This feature measured 0.42m deep, but its southern end terminated

in a wider, deeper area which measured 0.68m deep and had been cut into the top of Phase 4 well **294**. A medium sized assemblage of third century pottery was recovered from the primary fill of the drain, located in the base of the sump, which probably represents finds derived from the fill of the underlying well, possibly entering the drain during collapse of the sides during its use. A small assemblage of pottery dated to the late fourth century was also recovered from the secondary fill of the drain, which probably reflects the date at which the drain was in use (Appendix C1).

An east to west orientated ditch **140** revealed close to the eastern limit of the excavation may represent a further drain, although alternative interpretations such as a palisade or wall trench could be valid. It had near vertical sides, a largely flat base and a square terminus at its western end. The fills contained a number of limestone brash slabs of similar dimensions to those used in the wall foundations at the site. Several of the limestone slabs appeared to have been set on their edges and may represent a disturbed lining of the ditch or packing material. Pottery ranging in date from the second to the fourth century was recovered from the fills of the ditch (Appendix C1).

3.1.7 Phase 7. Post-fourth century abandonment of the settlement (Figure 13)

There is no indication that settlement at the site continued after the fourth century AD, although the area may still have been frequented, either for farming or for the robbing of building materials. There is no indication that the road continued in use beyond the end of the fourth century AD.

Robber trenches

As described above, an east-west orientated ditch **186** revealed close to the western limit of the excavation area formed a robber trench, cut along the line of the Phase 6 wall foundation **210**. The wall was presumably visible at the time that the robber trench was dug, although the survival of the floor surfaces associated with the building suggest that either the floor stone was not considered for removal or was not visible; perhaps because deposition and accumulation of soils over some of the remains had already begun by this time. A north to south orientated ditch **236** may have been part of the same episode of robbing, removing the eastern wall foundation of the building in its entirety.

A second north to south orientated ditch **221** was revealed on the western side of robber trench **236**. The function of this ditch is unclear but it may represent a further robber trench, possibly dug to remove masonry associated with some of the earlier buildings at the site by 'chasing' masonry exposed during the digging of robber trench **236**. To the east, a further area of robbing **174** had removed part of the roadside wall of Building 8.

A layer of limestone brash slabs **182** and **183** sealed the robber trench **236**, partly slumping into the top of its fill. The stones appeared to have been heavily disturbed, in part probably during the construction of modern utility services. However, there was no indication that the layer had ever formed a surface or structure prior to this. It is possible that the stones are part of a dump of robbed masonry which was not removed from the site and was subsequently spread by activities such as ploughing or landscaping.

Boundary ditches

Two parallel, north to south orientated ditches **145** and **287** were revealed close to the eastern limit of the site. The southern end of both of the ditches had been cut into the Phase 6 road and both terminated within the line of the road. The apparent terminus at the northern end of ditch **145** may, however, have been the result of horizontal truncation rather than a reflection of the original extent of the ditch. A very small assemblage of pottery dating to at least the third century was recovered from ditch **145** but probably represents residual finds. The road had probably gone out of use by the time the ditches were dug, although it is possible that it remained as a narrow track and the ditches probably acted as boundary or drainage features, perhaps related to agricultural activities.

3.1.8 Phase 8. Dark earth development

A layer of soft, dark brown sandy silt **101** extended across the site between 0.42m and 0.92m thick. The deposit was thinnest where it sealed the remains of the east to west road, and thickest towards the northern end of the site.

Deposits categorised as ‘dark earth’ commonly form the initial post-Roman horizons both in Sleaford, and in many other former Roman settlements across the country (Esmonde-Cleary 1989, 147). Layer **101** is interpreted as this type of deposit. The formation processes that led to the development of dark earth are not well understood, but may have included cultivation, natural accumulation and the dumping of occupation waste from elsewhere, with the precise circumstances differing from site to site (Zant 2009, 367-9). Certainly, the Hoplands dark earth is typical in its homogeneity and the fact that it appears to have developed after the Roman period occupation had ceased.

A layer of overburden, topsoil and turf, **100**, sealed the dark earth and formed the modern ground surface across the site.

3.2 Finds

This section quantifies the amount of finds by type and gives a brief description of each material and a date range where possible. The full technical reports are presented in appendix C.

3.2.1 Iron Age and Roman pottery (Ian Rowlandson, appendix C1)

A substantial assemblage of Iron Age, Iron Age tradition and Roman pottery was recovered from the site. The assemblage weighs over 53kg and comprises 2198 sherds from 103 different contexts, predominantly the fills of pits and ditches. Just under a quarter of the assemblage dates to the late Iron Age, or comprises sherds of a form and fabric which are of Iron Age tradition, the manufacture of which began during the late Iron Age but continued into the Roman period.

3.2.2 Ceramic building material (Jane Young, appendix C2)

The ceramic building material assemblage consists of 73 fragments and weighs over 9kg. Roman tegula, imbrex, box-flue tile and brick were recovered along with a

modern brick. The fragments appear to be residual and some, if not all, had been deposited during infilling of features or during levelling and landscaping work.

3.2.3 Animal bone (Jen Wood, appendix C3)

A total of 903 fragments of animal bone, weighing over 23kg were hand-collected at the site and a further 884 small fragments, weighing 193g, were recovered from sieved environmental samples. The bones of cattle, sheep, goat, pig, horse and dog, along with domestic fowl and duck were recorded. Fish, including eel, herring and flatfish were represented in the sieved samples, as were small rodent and amphibian bones. A number of bone fragments could be assigned to large or small mammals but were too fragmentary to indicate a species.

3.2.4 Human bone (Jen Wood, appendix C4)

Two complete adult inhumation burials and a neonate burial were revealed, along with part of skull recovered from the upper fill of a well. Of the adults, one was a female, estimated to be 50-59 years old when she died and had been buried prone. The individual appeared to have suffered from arthritis. A younger male, estimated at 20-24 years old when he died, had been buried in a tightly flexed crouch position. The individual had apparently suffered nutritional deficiency as a child, presumably through poor diet or illness. The skull fragment recovered from the well is probably from an older adult but the limited remains prevent further interpretation. The neonate had been buried against the foundation wall of a building and had probably died at or around birth.

3.2.5 Environmental samples and hand-collected shell (PRS, appendix C5)

Analysis of bulk sediment samples for biological remains was undertaken on 36 'assessment' samples as part of rolling process undertaken during the course of the excavation. The results informed the targeting of specific deposits for larger samples and full analysis; eight of the larger samples were taken. Plant remains preserved by charring, mineral replacement or anoxic waterlogging along with snail shell assemblages were relatively well represented in the samples and allow the reconstruction of the local environment. Vertebrate remains were mainly food waste and include both domestic mammals and fish. The hand-collected shell assemblage was dominated by oysters with mussel and winkle also present and indicates the availability of coastal resources to the inhabitants of the site.

3.2.6 Metalwork and registered finds (Kevin Leahy, appendix C6)

The metalwork assemblage included 7 coins, iron fittings, a linch pin and a leather worker's punch amongst other items. A bone cheek-piece from a horse bridle, decorated with incised crossing lines, was also recovered.

3.2.7 Slag (Roderick Mackenzie, appendix C7)

In total, 34 fragments of metalliferous slag, weighing 641g were recovered. These included fragments of possible smithing slag and hearth bottoms.

3.2.8 Stone (Ruth Shaffrey, appendix C8)

The assemblage of worked stone comprises 8 fragments of rotary querns, and a single square tessera.

3.2.9 Glass (Janey Brant, appendix C9)

A single fragment of glass from a pillar moulded bowl was recovered from the site.

3.3 Confidence rating of the results

Stratigraphic relationships between features and deposits were the key to phasing the evolution of the site. The majority of features and layers had clear stratigraphic relationships with other features. Where it has not been possible to use stratigraphic relationships to assign features to phases, normally due to features being discrete, a combination of pottery dates, physical similarities between features and proximity to other features was used to create the phasing. Some areas of the site, including the east to west road and some of the deposits along both its northern and southern edge were unlikely to be impacted upon by subsequent construction and it was agreed, in consultation with the Senior Historic Environment Officer for North Kesteven, that preservation *in situ* of the archaeological deposits in these areas would be the appropriate mitigation strategy. The areas to be preserved included layers and surfaces which masked further archaeological deposits and as a result a complete stratigraphic sequence along the edges of the road was not available for investigation. It is inevitable therefore, that important remains which could change the interpretation of some features at the site were not excavated or revealed. However, notwithstanding these issues, a high level of confidence is attributed to the results and interpretation.

4 DISCUSSION

The archaeological excavation undertaken at the Hoplands site revealed a complex sequence of remains that indicate occupation from the late Iron Age through to the fourth century AD. The only evidence of earlier activity was two sherds of probable Bronze Age pottery recovered as residual finds from later features. This early pottery probably points to low levels of activity at or around the site during the Bronze Age. Post-Roman evidence was also limited, with no evidence of settlement at the site after this period. A deposit of 'dark earth', typically associated with abandonment of Roman towns, extended across the excavation area, sealing the Roman and earlier deposits. It seems most likely that the site was either waste ground, agricultural land or episodically used for both purposes throughout much of the post-Roman period, with more intensive use only re-occurring in recent times.

4.1 The road

An east to west road or track, which extended across the southern half of the excavation area, formed part of the earliest evidence of activity at the site. Its initial construction may date to the late Iron Age, as suggested by the fact that it was cut by a probable enclosure ditch that produced only late Iron Age style pottery. The road was well built; a distinctive layer of coarse sand and gravel had been directly dumped onto the geological deposits, to form a low embankment up to 0.2m high and over 4m wide. A thin layer of grey gravel then topped this material, probably forming a surface. Both deposits were highly compacted.

The constructional finesse of the road might suggest that it represents a particularly solid prehistoric example of this sort of feature, or, conversely (and perhaps more likely), that it in fact dates to the Roman period, and the late Iron Age pottery from the later enclosure ditch is residual.

Excavated evidence of Iron Age roads is rare but not absent in Britain, with metalled road or track surfaces revealed within the late Iron Age settlements at Silchester and Danebury, along with a recently excavated example at Sharpstone Hill quarry in Shropshire (Malim and Hayes 2011, 14-20). Others may have existed but were rendered invisible by the imposition of Roman roads over pre-Roman routeways.

If Sleaford had contained metalled roads prior to the Roman conquest this would be congruent with the evidence of coin minting in indicating a high status for the settlement. Elsdon's claim that Sleaford was the largest town or settlement of the *Corieltauvi* during the late Iron Age is not yet proven, but it is increasingly clear that Sleaford was a place of some importance during this period.

The road continued in use for the remainder of the site's occupation. Its eastward course is unknown, although the road that was recorded at the football club (Field, pers comm.) may represent its continuation. If so, the road appears to run broadly parallel to the present Boston Road and may at some point merge onto this line, continuing to head in the direction of Kirkby La Thorpe.

Roadside ditches, probably dug to improve drainage alongside the road, were added along the south side of the road, most likely during the second century, but major remodelling of the road did not appear to take place until the early to mid third century. At this time, sands and gravels were dumped over the earlier road surface to increase the height of the agger by approximately 0.3m to 0.5m and its width to approximately 6.5m. A road surface made from small cobbles and rounded limestone fragments was then constructed on top of the new agger, with both the

new agger and surface compacted through ramming or tamping. The remodelling of the road appears to have been accompanied by a replacement of the roadside ditches with a single drainage ditch.

The improvement to the road is indicative of its continued importance to the inhabitants of the site and to Roman Sleaford itself. By this time it may have formed the main route into the settlement from the east, probably linking up with Mareham Lane, which appears to have provided the main north to south route, a short distance to the west. Further roads within the Roman settlement would have provided a degree of infilling and a possible westward road revealed during the 1960s (Elsdon 1997, 24) may have extended from Mareham Lane, possibly forming a crossroad with the road revealed during the present excavation.

A further, and seemingly final, major phase of road repair and alteration took place during the late third or fourth century. A gritty sand deposit was dumped on top of the existing road surface and limestone cobbles added to form a surface. The surface had been heavily damaged, probably by agricultural activity after the site had been abandoned, but the surviving evidence suggests that the road was at least 4.6m wide and had been raised by at least a further 0.2m. A new roadside ditch was added on the south side of the road and pottery from the ditch suggests that it was not filled in until the late fourth century, although its origin is likely to be earlier in the century.

At the end of the fourth century, a paved area was constructed over the roadside ditch on the south side of the road. This may have acted as a paved walkway, an area of hard standing or possibly an attempt to widen the road. Whatever its function, it is likely to have been fairly short-lived as by the fifth century there is no evidence that the road was still in use, indeed there is no evidence of any activity within the excavation area and the site had by this time most likely been abandoned.

4.2 Iron Age settlement

Structural evidence of settlement at the site during the late Iron Age was limited to part of a possible ring gully, revealed towards the northern limit of the excavation. It is interpreted as an eaves drip gully, or possibly a bedding trench for the wattle walls of a small circular structure. This was most likely to have been a small dwelling or shelter, typical of the 'roundhouses' revealed on many Iron Age sites. No pottery was recovered from the ring gully itself, but a large assemblage of late Iron Age pottery, which included drinking, dining and cooking vessels, was recovered from a rectangular pit located close to the structure and the suggested date and domestic function of the possible ring gully relies heavily on this material (Appendix C1). Evidence of late Iron Age houses is rare in Sleaford, despite the generally accepted interpretation that the settlement was a large and important tribal centre; if the feature interpreted as a ring gully does represent the location of an Iron Age house, it is of local importance in its own right.

A large assemblage of pottery, which included decorated large or globular jars, was recovered from one otherwise unremarkable small, shallow pit in the north-east of the site, close to the ring gully. Almost one third of the sherds in the assemblage showed evidence of spalling or misfiring and it is possible that the pit represents the much denuded remains of a pottery clamp, or a refuse pit used for discarding waste generated from a partially successful clamp or kiln firing nearby. Undoubtedly the pottery suggests that at least small-scale pottery production was carried out in the vicinity (Appendix C1).

A series of late Iron Age ditches revealed within the excavation area are consistent with boundaries and drainage ditches, which may have marked out property boundaries, stock enclosures or defined activity zones within the settlement. A ditched enclosure, which appears to have been maintained through periodic cleaning out, or recutting, was laid out along the southern edge of the road, with its northern edge cut through the edge of the agger material of the early road. The enclosure may have had an internal division, although this had apparently been filled in by the time the enclosure fell out of use. Further ditches on the north side of the road suggest a local landscape of boundaries broadly laid out to respect the road.

The pit or clamp, the ring gully and the rectangular pit are all to the north of the drainage or boundary ditch which ran parallel to the road, with no similar features revealed in the zone between the ditch and the road. This could be taken as possible evidence of zoning of activities within the late Iron Age settlement. It is, however, more likely to be the result of later archaeological layers being left *in situ* along the margin of the road, as they were not under threat from construction works. This would have masked any Iron Age deposits in this area, and so the extent and nature of any such remains along the northern edge of the road is uncertain.

Biological remains recovered from the late Iron Age boundary or drainage ditches suggest that the occupants had access to sheep, goat, horse and cattle. Sheep appear to have been the main source of meat, with most apparently culled at a prime meat bearing age. The bias in the bone assemblage to animals at a prime meat bearing age probably reflects the economy of the site, indicating the settlement, at least within the excavation area, was a consumer site rather than one predominantly associated with wool or milk production.

It seems likely that much of the late Iron Age evidence has been destroyed by intensive Roman activity. Poorly dated native tradition pottery forms one third of the pottery assemblage. A considerable amount of the material occurred as residual finds, meaning they were found within later deposits, and had presumably been disturbed from where they were first deposited.

4.3 Iron Age to Roman transition

There is some uncertainty surrounding the nature of the transition from the Iron Age to Roman period in Sleaford. Elsdon's view is that the settlement gradually evolved from the late Iron Age through into the Roman period (1997, 76). By contrast, Taylor proposes a hiatus in settlement activity between the late Iron Age and early Roman period (2010). Although there seems little doubt that the level of activity at the Hoplands site in the late first to mid second century AD was less intense than in the later Roman period, in general, the excavations suggest a degree of continuity between the late Iron Age and early Roman periods, with no evidence that the road was abandoned. For instance, the ditched boundary on the northern side of the road, established during the late Iron Age was apparently maintained into the Roman period. Although there was occasional evidence for the re-organisation of the site, continuity is apparent overall, with later structures being built within the same spatial template that guided the earliest elements. The remains therefore tend to support Elsdon's view of an unbroken settlement sequence from the late first century BC or the early first century AD until some time in the fourth century AD.

4.4 Roman period ground raising

Repeated attempts to raise the level of the ground surface on the northern side of the road are evident during the Roman period. A series of sandy deposits were dumped along the edge of the road, apparently to create a construction surface at a higher level than the geological deposits. This seems most likely to be an attempt to produce a drier land surface in an area which may have been, at least seasonally, damp. Four episodes of dumping appear to have been undertaken between the late second and fourth centuries, each ahead of major construction work at the site. Initial attempts to counter the damp conditions appear to have been largely unsuccessful; analysis of snail shells within the deposits do not show a reduction in the levels of *taxa* associated with damp ground until deposits had been laid down in the mid to late third century.

The dumps raised the ground surface at least 0.5m on the north side of the road and may not have been derived from the site. The main sandy component of all of the deposits was of a coarser grain than the naturally occurring sands within the excavation area. It therefore seems likely that this material was brought to the site from elsewhere.

4.5 The Roman buildings

As many as eight separate Roman buildings were identified at the site, dated between the second and fourth centuries. Retention of some deposits *in situ* (mainly early ground raising layers and road material) inevitably led to the full extent of surviving elements of the earlier buildings being impossible to discern. However, the excavated remains do demonstrate the complexity of the history of building at the site.

The earliest Roman structure revealed, Building 1, was constructed in the mid to late second century and was distinct from later buildings as it comprised a stone wall foundation, constructed from level courses of unmortared stone, rather than the pitched stone foundations used for all of the subsequent buildings where coursing could be identified. The excavated foundations were probably part of a large building fronting on to the road. Alternatively, as an unbroken length of the foundation was not visible, the remains may represent two separate buildings.

Whether the foundations supported a stone, wooden or even earthen structure was not evident, although the lack of abundant local stone and its apparent value, indicated by the robbing of stone from well linings (see below), might suggest that a wooden framed structure was most likely to have been built on top of the stone foundations.

The generally low quantities of tile recovered suggest that roofing material was most likely thatch or wooden shingles, unless the roof had been carefully removed and the tiles reused. The size of the building is unknown, as only a single wall line was revealed but boundary ditches approximately 8m to the north suggest that the building would have been narrow, unless they were not contemporary with the building. An 8m width for the building would be of the same approximate order as traders' houses of a similar date found in the southern suburb of Roman Lincoln (Jones 2002, 91). Retention of dumped deposits *in situ* meant that none of the internal plan of the building was visible and it is not known whether the building

was separated into different rooms, had internal features or had internal roof supports.

It could perhaps be argued that the traces of Building 1 may actually represent a roadside boundary wall, rather than a building. However, the presence of a neonate burial against the wall forms part of a contemporary tradition of such burials more commonly associated with houses than boundary walls or commercial structures. (Millett 2006, Watts, 1989, 372). In the absence of clearer evidence, it seems most likely that the wall foundation was part of a domestic building.

Following the demolition of Building 1 and the dumping of more ground raising deposits, Building 2 was constructed along the road frontage, probably during the early to mid third century. The construction style differed from the earlier building, with pitched coursing used in the foundations instead of level regular courses. The superstructure of the building may have been made of stone, but is perhaps more likely to have been a timber construction. Whether the change in type of building foundation is a response to the damp ground conditions, a reflection of a change in construction trends or fashions, or is associated with a change in use of the building is not apparent.

The surviving foundations measured approximately 13m; although it is not altogether clear whether this would have been its length or its width. At the football club site to the east, two aisled buildings with surviving perimeter wall foundations were exposed and measured 14.5m by 8m and 16.5m by 10m. This might suggest that Building 2 was 13m long with its width unknown.

The remains of a possible yard or floor surface were revealed abutting the eastern end of Building 2, but little of it was visible between the end of the building and the eastern limit of the excavation area. A short length of wall foundation ran to the south of the surface and abutted the eastern end of Building 2. This may represent a further room of the building, or may have been part of a courtyard or boundary wall. A second area of floor or yard surface was revealed at the western end of the building and appeared to have been the site of a fire or a small hearth.

The remains of Building 3 were located to the north-west of Building 2, with which it may have been broadly contemporary. These remains were fragmentary and only one corner appears to have survived, possibly as a result of it slumping into an underlying ditch. The structure appears to have been built on a slightly different orientation to the buildings a short distance to the south. With such a small amount of the structure surviving, it is not known whether the different orientation is indicative of a different function for this structure, is the result of an alignment to different boundaries, or whether the slumped nature of the surviving remains has altered the original setting of the stonework enough to simply give the impression of a different orientation where none originally existed.

Building 2 was replaced by a substantial building, Building 4, probably during the mid to late third century. This new structure had pitched stone foundations for its outer walls and internal posts which most likely formed an aisle of supporting timbers. The full extent of the building had not survived, although it was apparent that it had measured over 7m by 3.5m. The configuration of the internal posts is uncertain as the postholes that were revealed within the building did not form pairs, which would be expected for an aisled building and was certainly a construction method used in Roman Sleaford as at the football club site and elsewhere (Elsdon

1997, 49). It is perhaps more likely that the settings for only one of the aisles of posts for the building were revealed, with the other postholes either representing the positions of structures or permanent fittings within the building, or possibly representing an aisle of posts related to a different building. Comparison of the few aisled buildings excavated elsewhere in Sleaford suggests that the aisles tend to be set between 2.5m and 3m from the external walls. The northern line of posts within Building 4 were set approximately 3.1m from the southern wall of the building and are the most likely to represent an aisle within the structure. The southern line of posts is probably too closely positioned to the wall of Building 4 to represent aisle posts within that building and are therefore more likely to be related to other internal features or other buildings. Interestingly, the posts appear to be quite closely set together at 1.7m apart, approximately half the distance seen in the other examples of aisled buildings in Sleaford and, although this may represent an unusual construction feature of this particular building, it is perhaps more likely that some of the posts were replacements, erected during the lifespan of the building.

If Building 4 was of a similar size to those at the football club site then its western end would have extended beyond the limit of the excavated area, whilst its northern side would have extended into the more heavily truncated area of the site. Given these potential dimensions, an area of floor surface formed by two discrete patches of scorched limestone blocks to the west of the surviving walls may be the remains of an internal floor surface and a stone-packed posthole in this location may represent the position of a substantial feature or fitting within the building. Alternatively, it may be part of an aisle of posts relating to a different building. A further layer or scatter of stone in this area may have been part of an external yard of Building 4, but had been badly damaged by modern disturbance and further interpretation is not possible.

There is no conclusive evidence on which to base an interpretation of the function of Building 4, although a small keyhole-shaped oven or hearth set in its south-eastern corner is probably indicative of the building being used either for domestic purposes, as a commercial property, or a combination of the two. Environmental evidence from the oven did not clarify what the oven had been used for, although some wheat grains were recovered, along with charcoal and trace evidence of burnt turves.

At the football club site, an apparently raised number of amphora sherds, in comparison to many sites, might suggest that trade was a major focus of that site (Field pers comm.) although there is nothing within the ceramic assemblage of the present site to suggest the same interpretation, and the finds assemblage appears to be more indicative of habitation.

To the south of Building 4, a fragmentary, pitched stone wall foundation may be the remains of either a less substantial structure against the southern wall of Building 4, perhaps a lean-to, or may be the poorly preserved remains of a further building, Building 5. Without completely disregarding the former interpretation, it is possible that Building 5 was a further aisled building, with the line of posts which appear to have been set unusually close to the southern wall of Building 4 actually being one of the aisles of Building 5. The potential floor surfaces and the possible external yard surface which have been associated with Building 4 could all feasibly be associated with Building 5.

If Buildings 4 and 5 represent separate buildings, rather than a single building with a lean-to, then it is apparent that they were not contemporary and it is likely that one would have been a replacement for the other. This would suggest that Buildings 2, 4 and 5 were constructed over a relatively short space of time, maybe over a span of one hundred years or less, perhaps on a generational basis. The extent to which this may have been as a result of the buildings themselves losing structural integrity after a relatively short period of time, or was the result of changes to property ownership, building tastes or function is not known.

Building 6 was a similar aisled building to Buildings 4 and 5 and was revealed in the north-eastern corner of the site. The structure was aligned parallel to Buildings 4 and 5 and, if it had similar dimensions to the proposed dimensions of Building 4, its northern wall would have been beyond the limit of the excavation and its southern wall, if it survived, would have run beneath a baulk left unexcavated due to the presence of live cables. Two large, stone-packed postholes to the east of the wall appear to represent the positions of the western ends of the two timber post aisles that would have supported the roof structure. The alignment of the building, alongside its stratigraphic relationship with a well, dated to the early to mid third century, indicates that the building is likely to have been contemporary with either Building 4 or 5. This suggests that the buildings at the site during this period had been constructed close together, which along with the buildings found at the football club site and the police station give the impression of numerous fairly densely clustered, similar buildings along both sides of the east to west road in this area of Sleaford.

On the north side of the road, after Buildings 4 and 5 had been demolished and a further episode of ground raising undertaken, a further building with pitched foundations, Building 7, was constructed. There is little to date the construction of the new building, although it had apparently been undertaken after the final resurfacing of the road and is assumed to be broadly in phase with the fourth century roadside ditch. Patches of stone floor surface suggest that the building had a stone block floor surface, but there was no evidence that it had been an aisled building.

A further probable structure, Building 8, lay to the west. The remains of an east to west pitched wall foundation were revealed in the base of a later ditch, thought to be a robber trench. A further robber trench was aligned approximately north to south, just beyond the visible eastern extent of the wall and may represent the complete robbing of the eastern wall of the building. An internal floor surface, similar to that in Building 7, was revealed along with a scatter of stones which may represent the remains of a path between the road and the building.

4.6 Burials

Three burials and part of a human skull found within the backfill of a well were revealed at the site, all of Roman date. The burial of a neonate against the foundation wall of a mid to late second century building forms part of a tradition of such burials during this period (Millett 2006, Watts 1989, 372) and others have been recorded in the near vicinity, at the site of Sleaford police station (Herbert 1999). Such burials are likely to have been part of a complex set of burial rites related to notions of place and permanence.

A tightly crouched burial had been cut into the late Iron Age road material on the southern margin of the road and was sealed by construction deposits related to

substantial improvement of the road. This burial represented an adult male in his twenties and dates either to the same period as the neonate burial, or possibly to the earlier third century. The grave appears to have been deliberately positioned to be covered over by the deposits related to the road. A number of Roman burials are known in the Hoplands area, with a formal cemetery excavated 150m to the north-east (Murphy 2011, Kitch 2006) and a scattering of isolated burials revealed at several sites, including the Dalgetty warehouse site (Bradley-Lovekin 2005), the police station site (Herbert 2010) to the west, and the football club site (Field pers comm) to the east. Crouched burials are largely absent at these sites, although an example was revealed at the Dalgetty warehouse site. Crouched burials are more commonly associated with Iron Age rites, but continued into the Roman period. Given the position of the burial beneath the resurfacing deposits of the road, and the age of the individual, it is tempting to relate the burial to the improvement works on the road, maybe even to suggest that the individual had been part of the construction workforce.

The third burial revealed at the site was of a woman, probably in her fifties, who had been buried in a prone position. The burial was poorly dated, but probably took place during the later third or fourth century. No evidence of a coffin was revealed and there is no evidence that the burial was part of a formal cemetery. It seems likely that the burial is one of a number of Roman burials in Sleaford found outside the formal cemeteries mentioned above. Why some individuals were excluded from cemeteries is poorly understood.

4.7 Wells

A total of six wells were revealed during the excavation, five of which were excavated; the sixth was left preserved *in situ*. The wells probably date from the late first century through to the mid third century, but were most likely all of a similar design. Three of the excavated wells contained at least partial stone linings, two of which had been partly robbed, the third had partially collapsed. The other two excavated wells did not contain any lining, although this may have been totally robbed.

The lining of one of the wells formed a square or rectangular shaft towards its base, whilst the two remaining lined wells contained circular or oval shafts. The square shaft appears to have been the smallest, measuring 0.52m across, whilst the oval and circular shafts measured between 0.80m and 1m across. The differing shapes of the shafts is not thought to represent any functional difference and is more likely to be the result of differing styles of individual builders.

The extensive robbing of stone from the well linings indicates the value of good quality building stone to the local inhabitants during the Roman period. The stone may have been re-used in other well linings or the buildings at the site, and may reflect a wider trend for re-using building stone, possibly explaining the generally low quantities of building quality stone found and the poor preservation of structural remains.

4.8 Pits

A number of pits were revealed, the majority (with the exception of those interpreted as postholes associated with buildings) probably functioned as waste pits or storage pits. All were revealed on the northern side of the road, possibly

reflecting the use of this side of the road as a settlement area. However, the area available for excavation on the south side of the road was relatively small in comparison and the bias in density may be more perceived than real.

Three pits are of particular interest. Two appear to have been cess pits dating to the second century. Environmental remains from one give an indication of the likely diet of the occupants of the site. The remains suggest that wheat, specifically spelt, formed a major part of the diet. Sheep bones were recovered from other features of a similar date, and lamb or mutton probably formed part of the diet. Fish was most likely a staple, with both flat fish and eels noted; the former brought in from the coast, the latter likely to be available locally. Oysters were also present and again would have been brought in from coastal areas, possibly through trade, whilst the presence of plum stones is an indication of the type of soft fruits eaten.

In addition to the evidence of the diet of the inhabitants of the site, the remains of a member of the nightshade family were recovered from one cess pit. The plant may have been growing locally and its presence may only reveal general habitat conditions at the site but, despite (or perhaps because of) its toxic nature, nightshade has traditionally been used in medicine. Its presence may indicate deliberate usage for good, or ill.

A further pit of interest was a substantial, third century pit, located to the north of the remains of Building 3. It contained mainly large, flat, trimmed limestone slabs and may have been used to store the slabs, possibly ahead of the construction of Building 3. The possible storage of masonry in this way may again reflect the importance and value of building quality stone to past populations.

4.9 Abandonment of the site

There is little evidence for use of the site between the fifth century AD and the post-medieval period, with the exception of the possible robbing of building materials. A deposit of 'dark earth' extended across much of the site, sealing the fourth century horizon and earlier remains. Similar dark earth has been recorded at several sites in the vicinity (eg Bradley-Lovekin 2005, Murphy 2010) and the deposit appears to be a widespread feature of the post-Roman levels across south-east Sleaford. The accumulation of dark earths is generally associated with the abandonment of settlements, although it is possible that not all dark earths were formed by the same processes (Macphail 2004, 78; Zant 2009, 367-9). It has been proposed that at least some dark earths were formed by the decay of Roman clay-walled buildings and given the apparent density of buildings at the present site, particularly during the third and fourth century, such a scenario might account for at least some of the dark earth development.

5 CONCLUSIONS

The archaeological excavation at the Hoplands site has added a great deal to our understanding of the development of the late Iron Age and Roman settlement at Sleaford. Individual features are undoubtedly of local significance, but taken as a group, the remains have added significance, particularly in regard to how they illustrate the evolution of building styles and techniques, and, as such, are regionally important.

It is important to note that not all of the archaeological deposits were excavated, with a number of layers left *in situ* to be preserved beneath the modern construction horizon. Any future development could impact on the preserved archaeological levels. The extent and character of the remains recorded here should inform future strategies regarding the preservation, or investigation, of the local archaeological resource.

6 ARCHIVE AND ARCHIVE DEPOSITION

The documentary archive comprises:

- A copy of the Project Design for the fieldwork
- A copy of this report
- Relevant and non-confidential documents and correspondence relating to the site held by Network Archaeology Ltd
- Finds catalogues
- Site records, as detailed in the table below:

Table 6.1 Quantification of the site archive

Item	Count
Context registers	11
Context sheets	370
Drawing registers	12
Drawing sheets	63
Sample registers	2
Sample sheets	31
Photographic registers	28
Black and white photographs	287
Colour slide photographs	288
Digital photographs	377

On completion of the reporting stages of the project, the archive will be prepared for long-term storage, in a format agreed in advance with the relevant local depository. This will be in accordance with guidelines prepared by the UK Institute of Conservation (Walker 1990) and the Museums & Galleries Commission (MGC 1992). The project archive will be managed in accordance with current guidelines (Ferguson & Murray 1997).

The recipient museum is The Collection, Danes Terrace, Lincoln, LN2 1LP, Telephone: 01522 550961, who have assigned this project the accession code LCNCC: 2009.193.

The recipient museum will receive the document archive, and with the permission of the landowners, any finds generated from the archaeological works.

Prior to the deposition of the archive, the necessary arrangements will be made with the site owner regarding the transfer of ownership of any archaeological finds to the recipient museum. In the event that deposition of the archive cannot be concluded, Network Archaeology will store the archive to a suitable standard until deposition can be arranged. In this event, Network Archaeology will retain ownership of the document archive until it and its ownership is passed to the recipient museum.

7 ACKNOWLEDGEMENTS

Network Archaeology Ltd would like to thank the following for their contribution to the project:

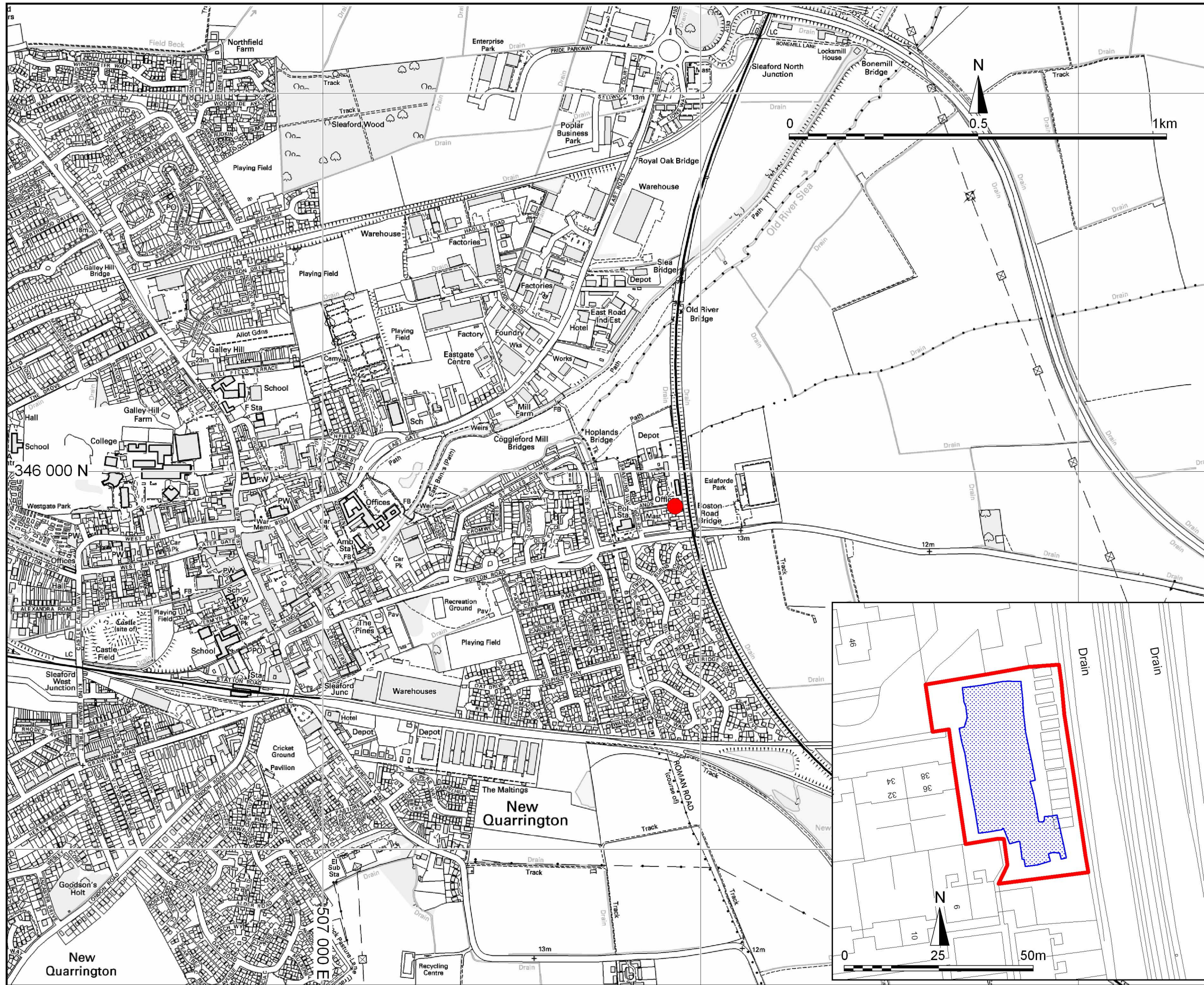
Name	Organisation	Position	Contribution
Property Services	North Kesteven District Council	Developer	Funding body
Jenny Young	Heritage Trust of Lincolnshire	Senior Historic Environment Officer	Curatorial monitoring
Naomi Field	Naomi Field Archaeological Consultancy	Consultant	Project Design and QC
Chris Taylor	Network Archaeology Ltd	Senior Project Manager	Co-ordination and QC
Mike Wood		Project Manager	Co-ordination and edit
Gavin Glover		Senior Project Officer	Field Manager and Author
Chris Casswell		Senior Supervisor	Field Staff and research
Natasha Gaddas		Senior Supervisor	Field Staff and database
Jacqueline Churchill		Illustrations Manager	Report figures (GIS)
Dave Watt		Senior Illustrator	Report figures (CAD)
Kealey Manvell		Resource and Archive Officer	Resourcing and archives
Janey Brant		Finds Officer	Co-ordination and liaison
Caroline Kemp		Finds Supervisor	Finds processing

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- Main key**
- Development area
- Inset key**
- Development area
 - ▨ Excavation area



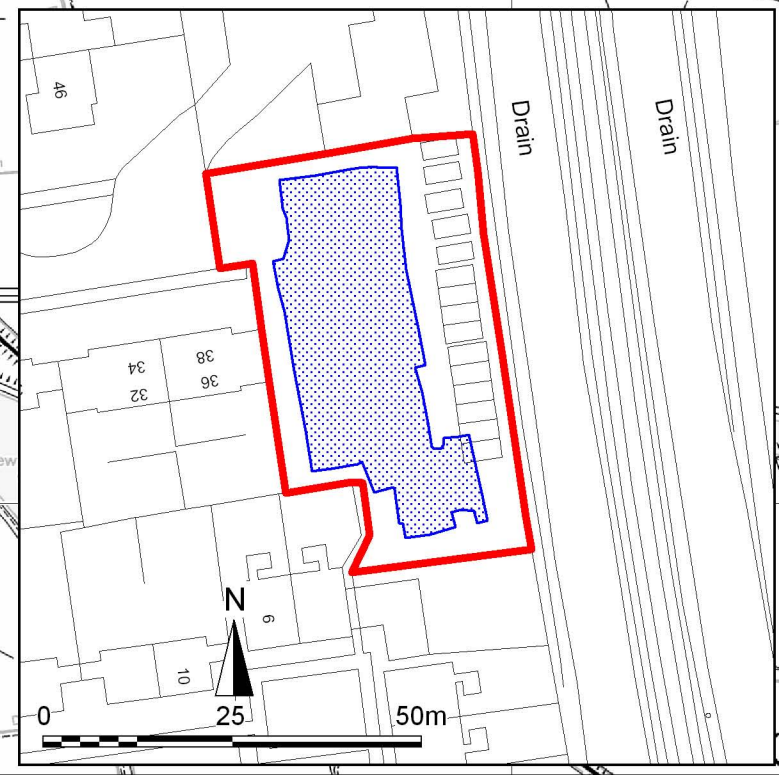
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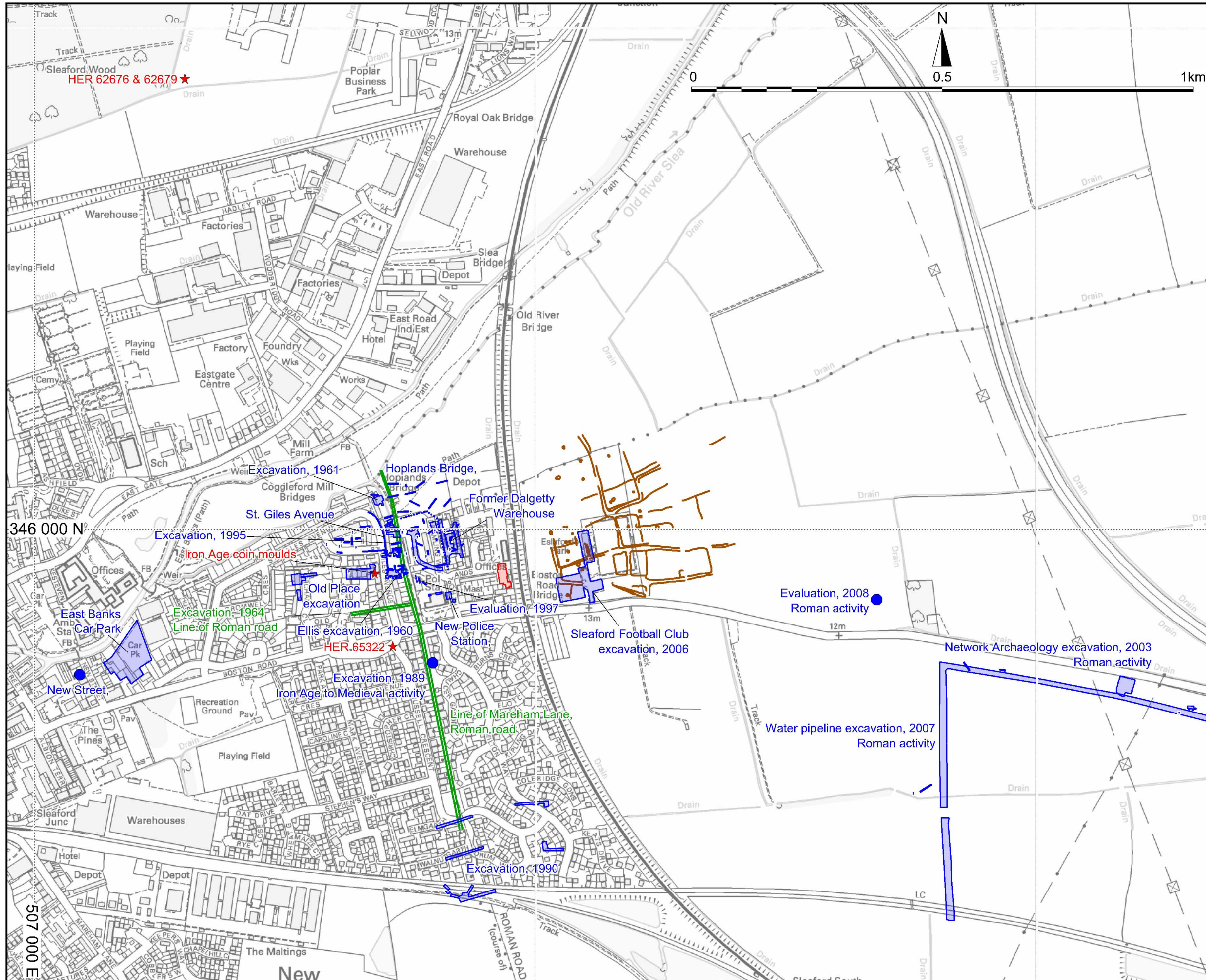


Hoplands, Sleaford

Figure 1
Location of development and excavation areas

Scale: 1:10 000





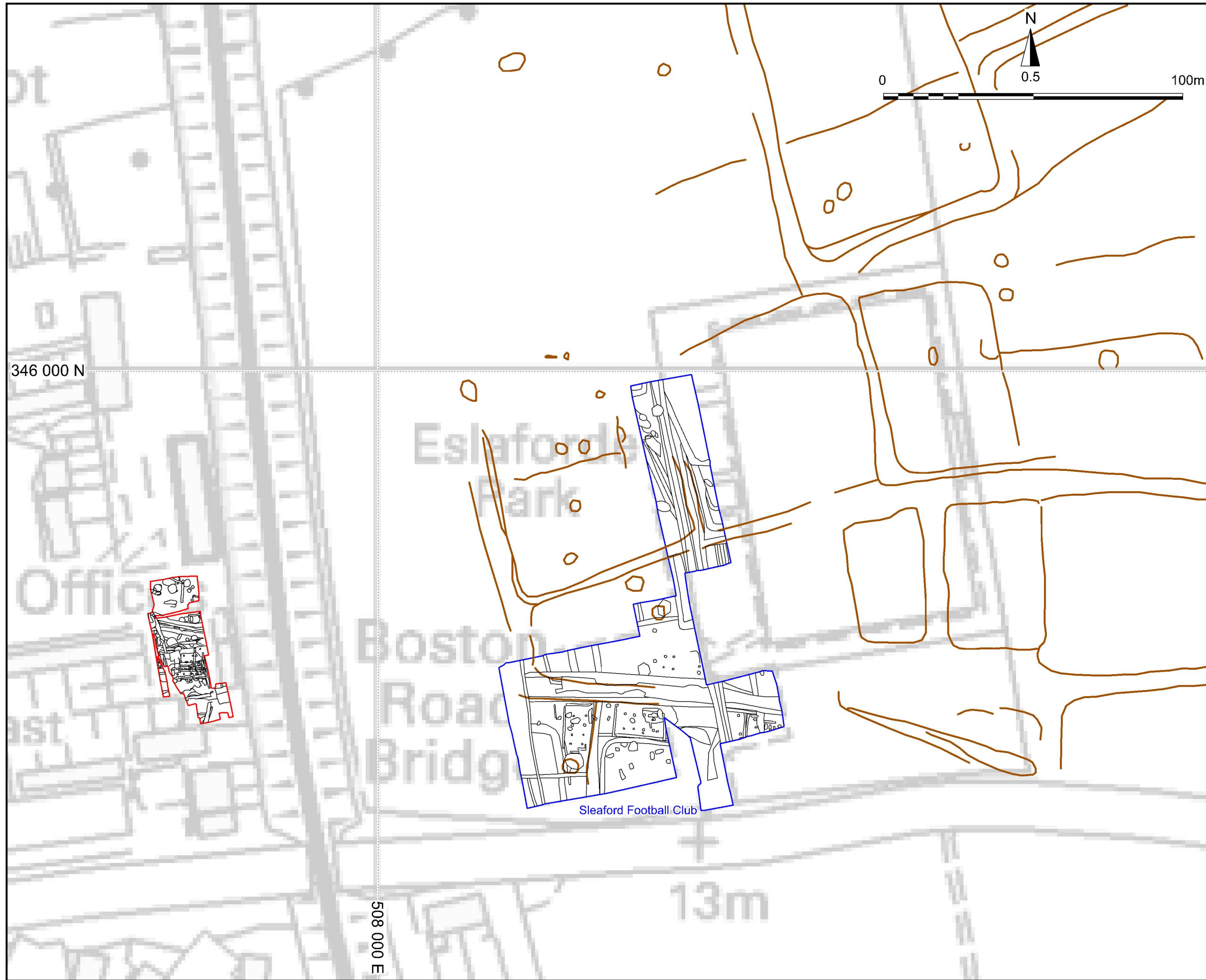
- The present site
- HER information
- Cropmarks
- Roman roads
- Previous interventions

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Hoplands, Sleaford
 Figure 2
 Location of the 2010 excavation showing other sites in the area

Scale: 1:7500



- The present site
- Previous interventions
- Cropmarks
- Archaeological features

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Hoplands, Sleaford

Figure 3
An outline plan of the excavation and nearby football club sites

Scale: 1:1250

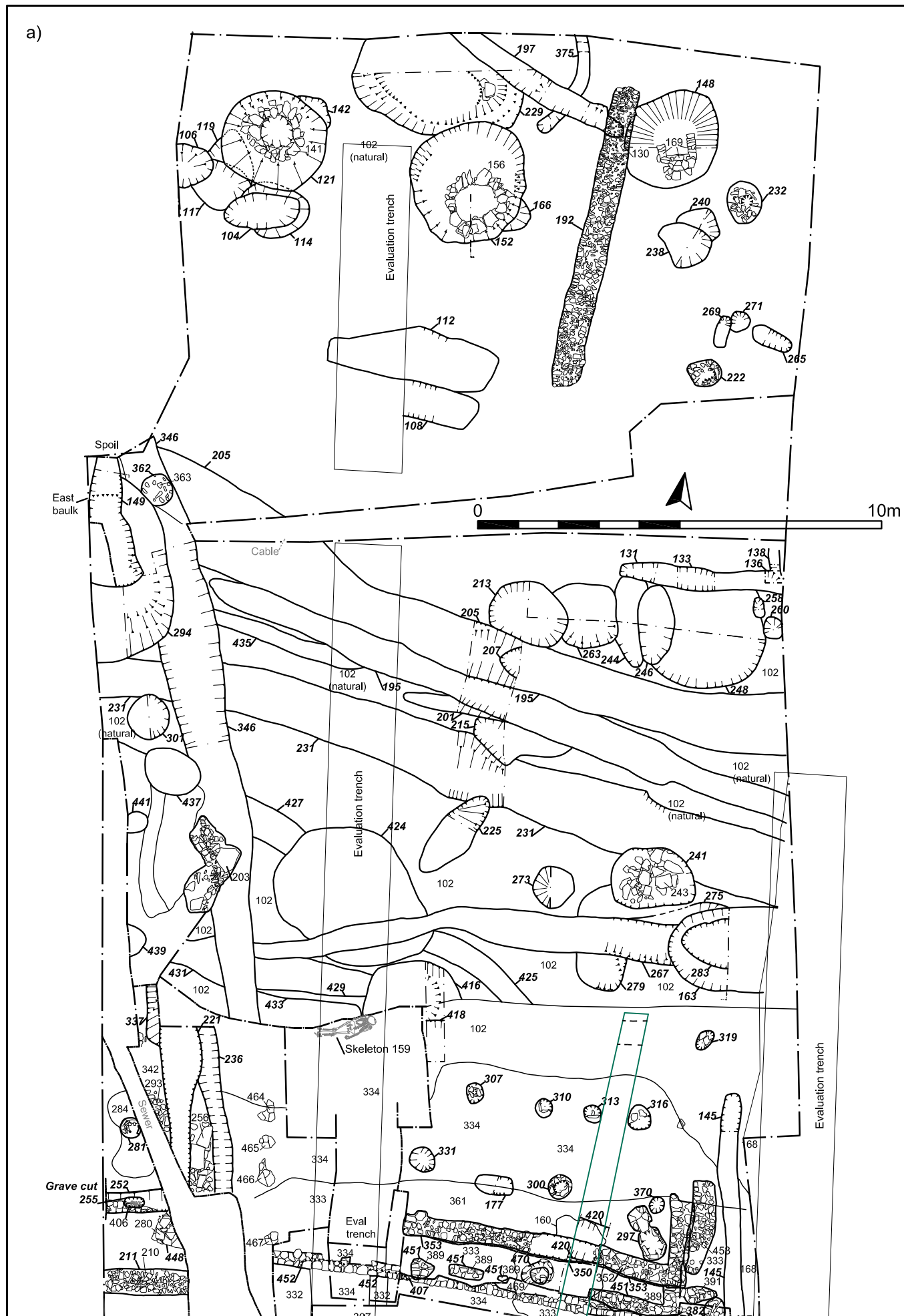


Fig. 4a

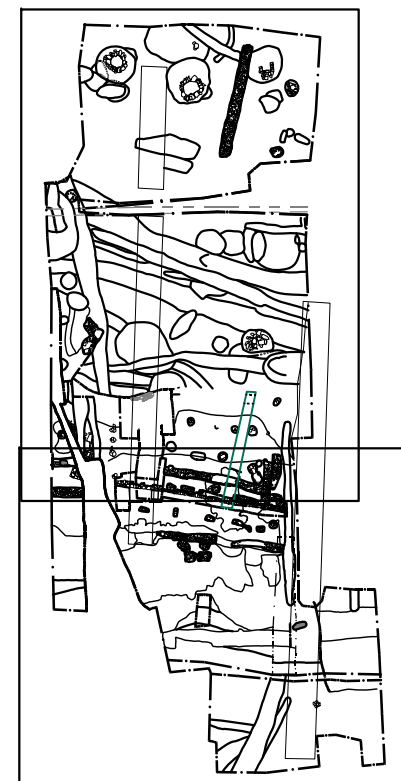


Fig. 4b

- Limit of excavation
- Cut line
- Layer line
- - - Modern intrusion
- - - Projected line
- 123** Cut number
- 124 Fill/layer number
- Stones

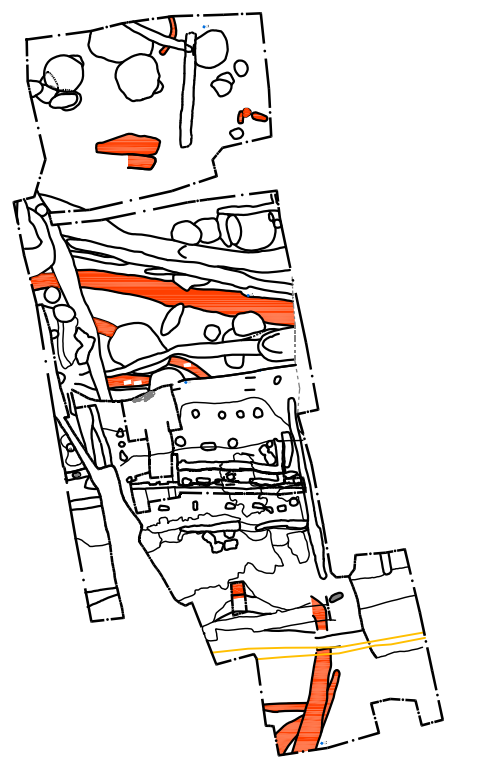
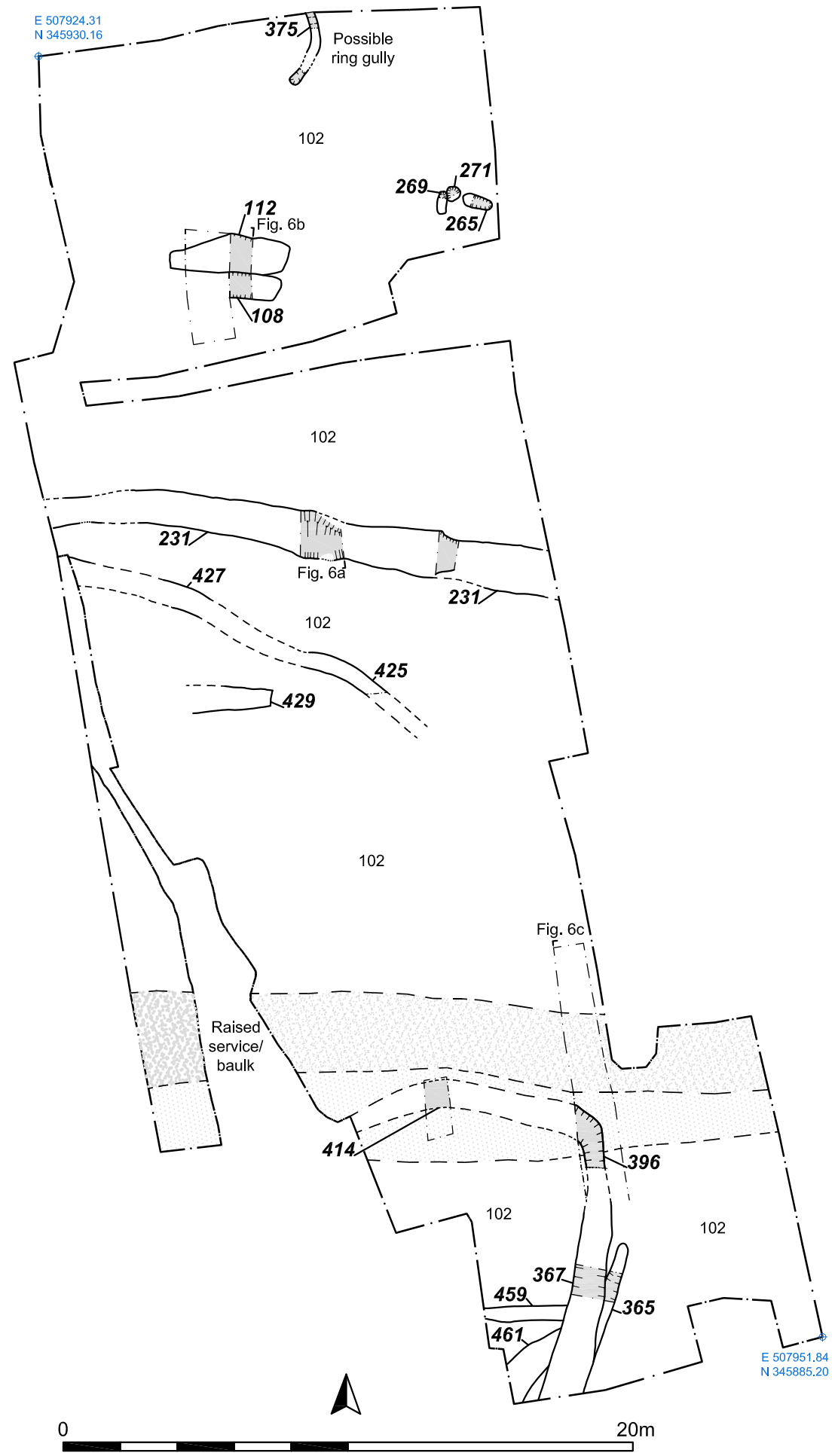
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Hoplands, Sleaford

Figure 4
a) All features plan (north)
b) All features plan (south)

Scale 1:125



- Limit of excavation
- Cut line
- Layer line
- - - Modern intrusion
- - - Projected line
- Excavated sections
- Road surface 405
- Road agger 403

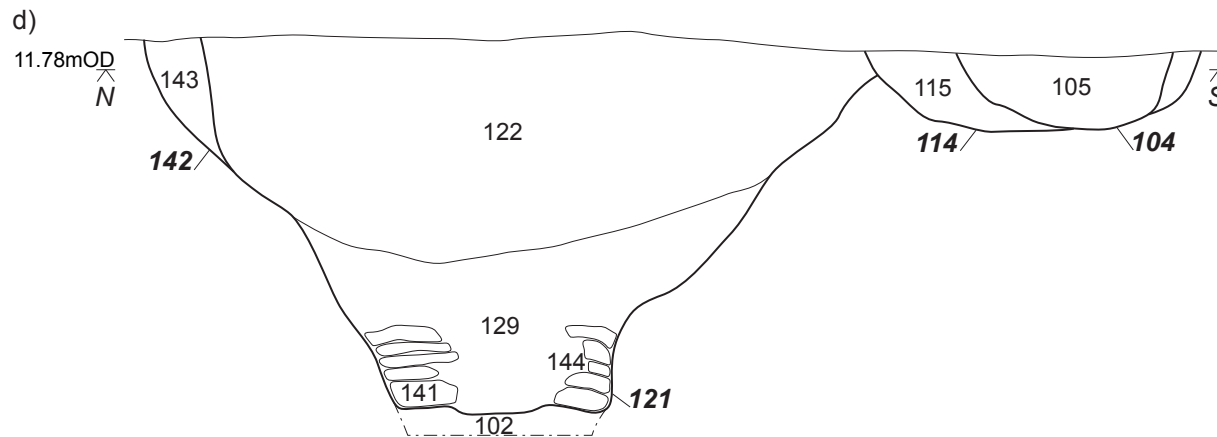
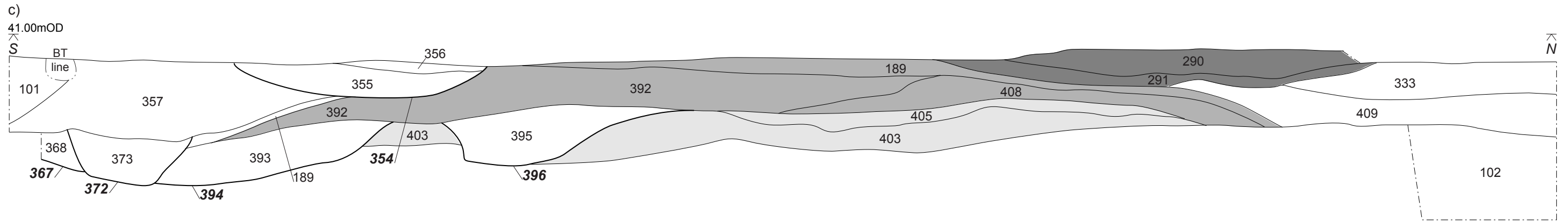
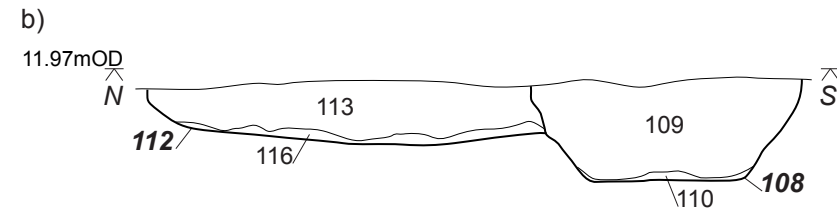
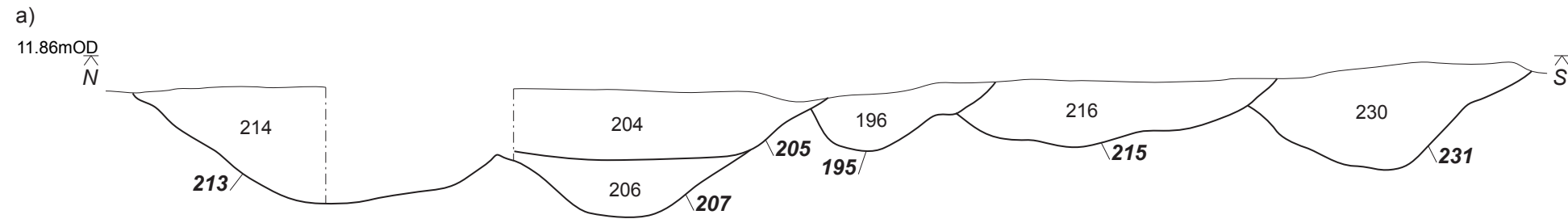
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Hoplands, Sleaford

Figure 5
Plan of Phase 1: Late Iron Age features

Scale 1:200



- Limit of excavation
- Cut line
- Layer line
- Field drain/modern features
- 1234** Cut number
- 1233 Layer/fill number
- Road surface and agger - Phases 1-3
- Road surface and agger - Phases 4 and 5
- Road surface and agger - Phase 6
- Stones

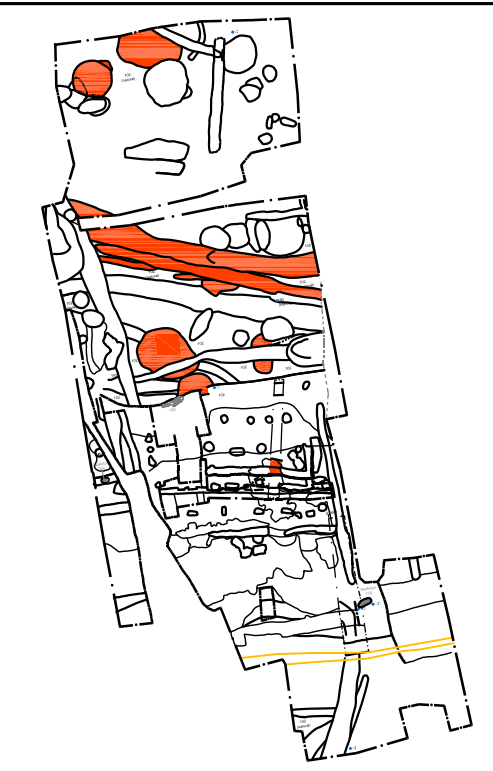
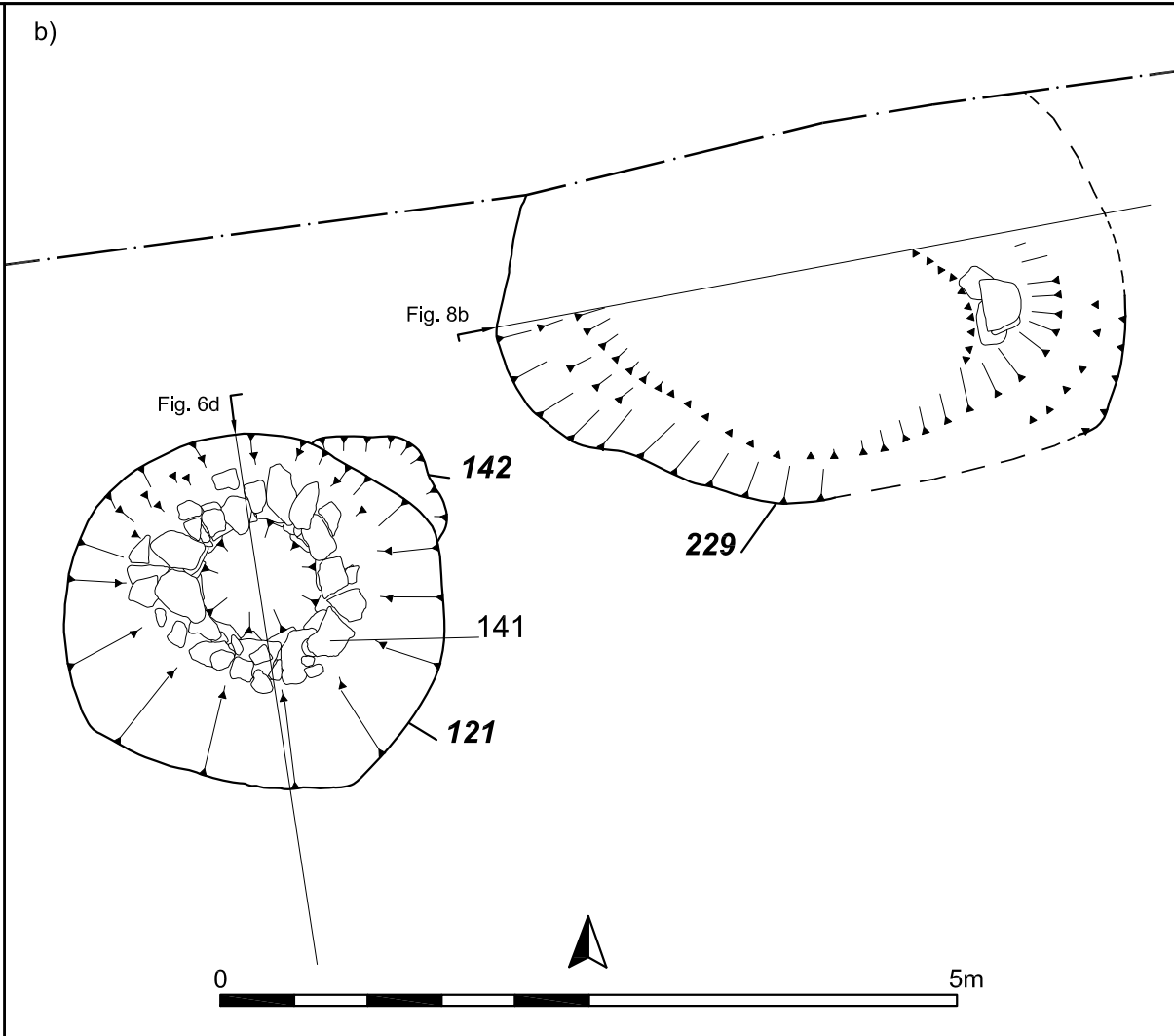
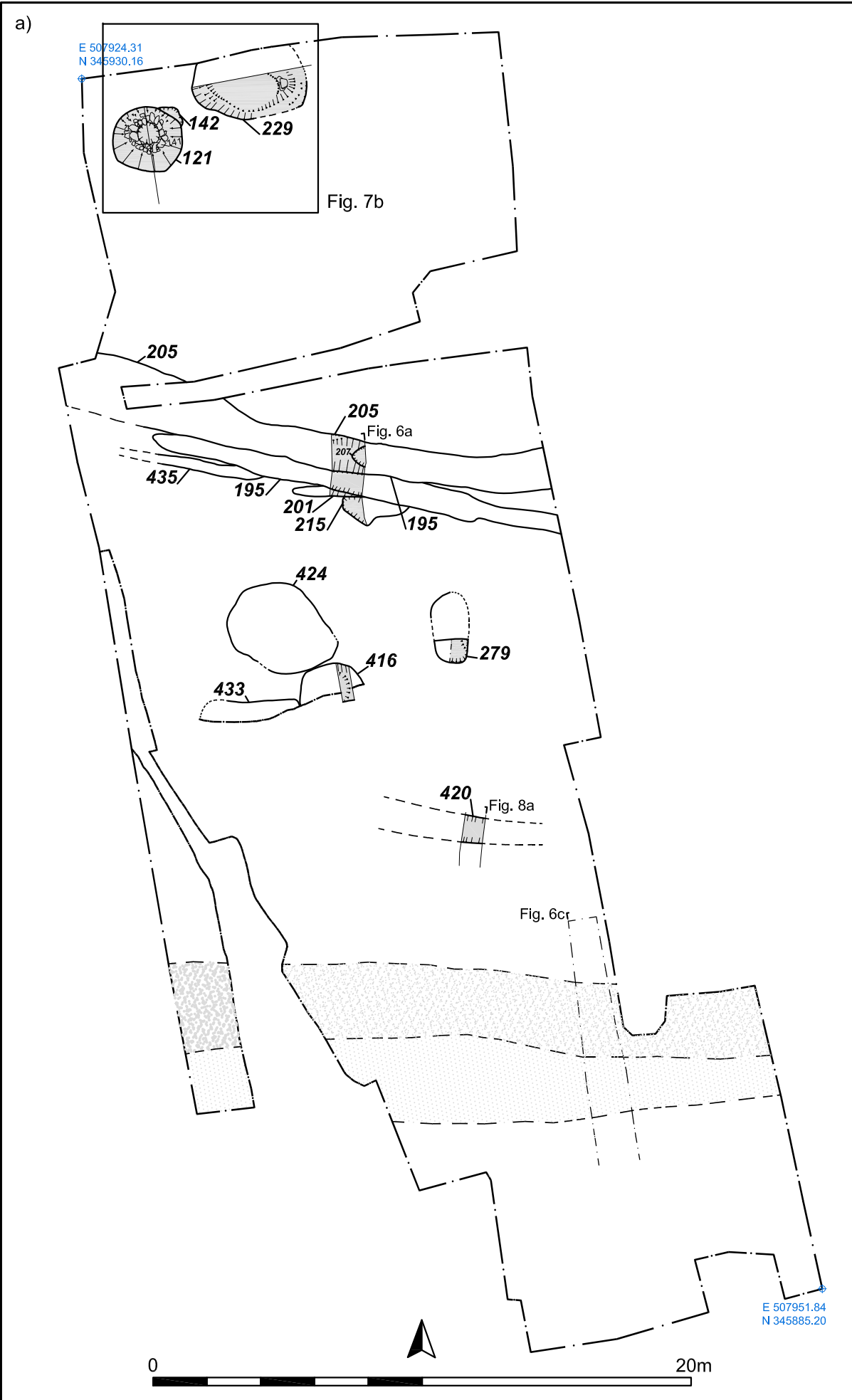
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Hoplands, Sleaford

Figure 6
Selected sections
a) Phase 1 pits 108 and 112
b) Phase 1 ditch 231, Phase 2 ditches 215, 195, 205 and 207, Phase 4 pit 213
c) Phase 1 and 2 features, Phase 4 ditch 372
d) Phase 2 well 121, pits 114 and 104

Scale: 1:25



- Limit of excavation
- Cut line
- Layer line
- - - Modern intrusion
- - - Projected line
- Excavated sections
- ▨ Road surface 405
- ▩ Road aggar 403
- ⊙ Stones

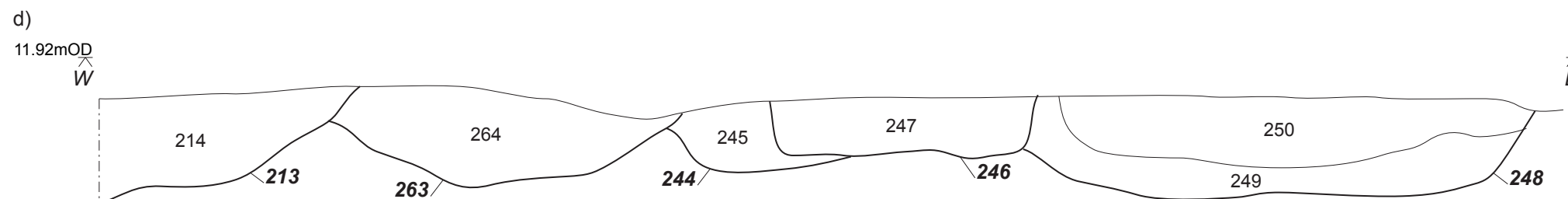
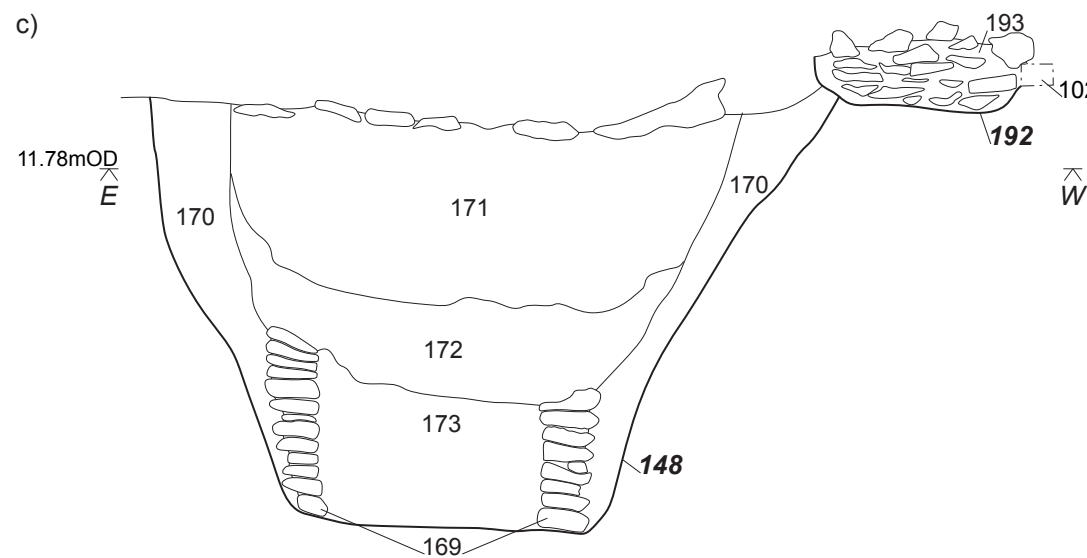
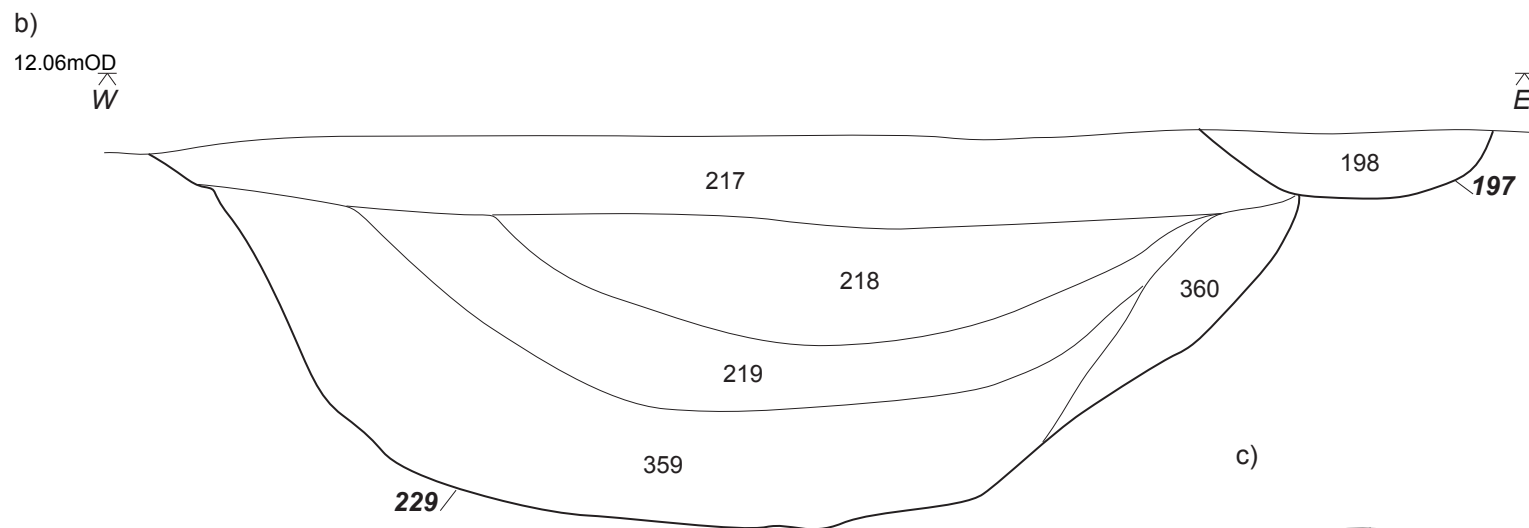
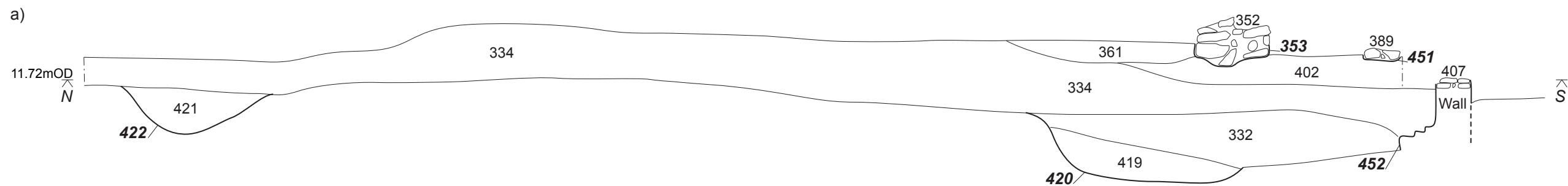
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1.00	15/9/11	Phase plan	JLC	GG	CT



Hoplads, Sleaford

Figure 7
 a) Plan of Phase 2: Mid 1st to Mid 2nd century features
 b) Plan of well 121 and pit 229

Scales 1:200 and 1:50



- Limit of excavation
- Cut line
- Layer line
- 1234** Cut number
- 1233 Layer/fill number
- Stones

Ver	Date	Description	DM	Chk	App
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Hoplands, Sleaford

Figure 8
Selected sections

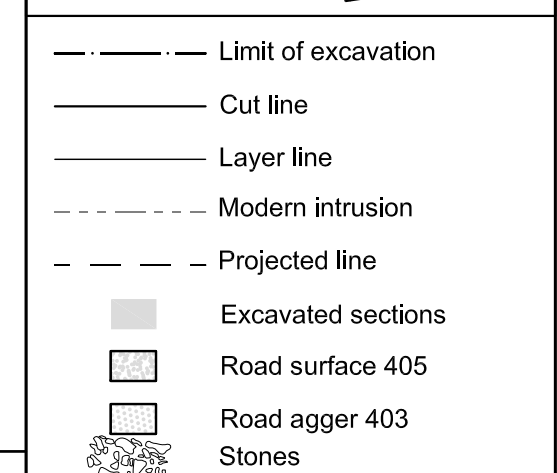
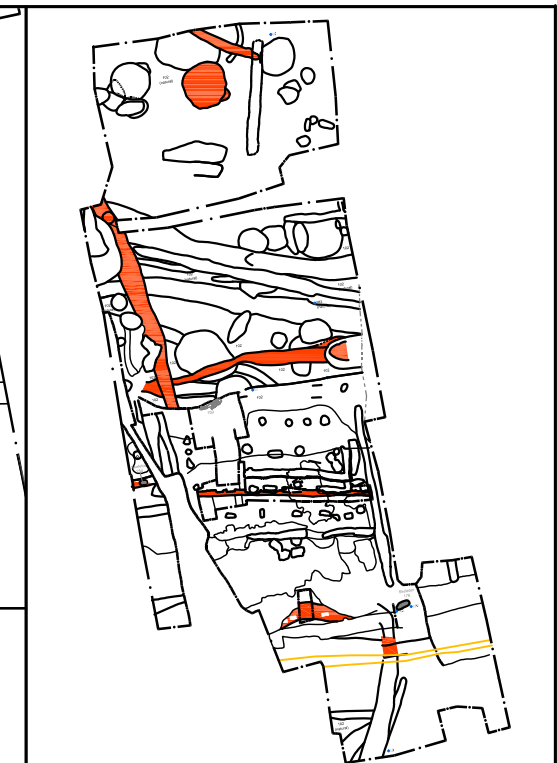
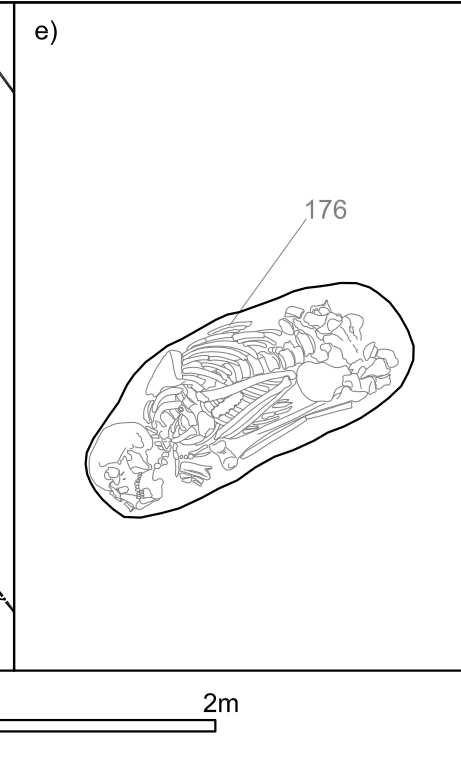
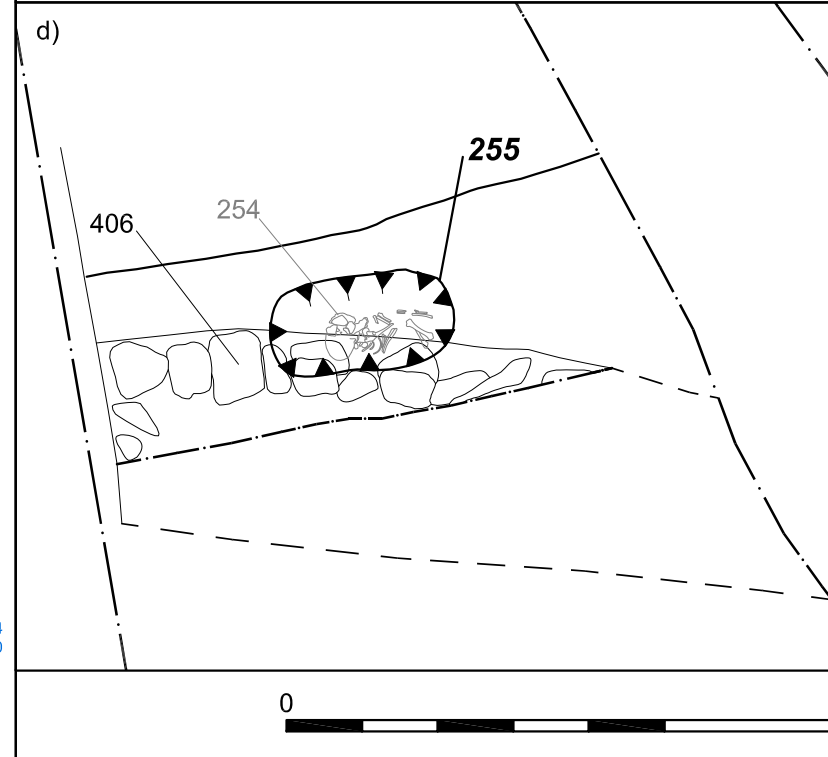
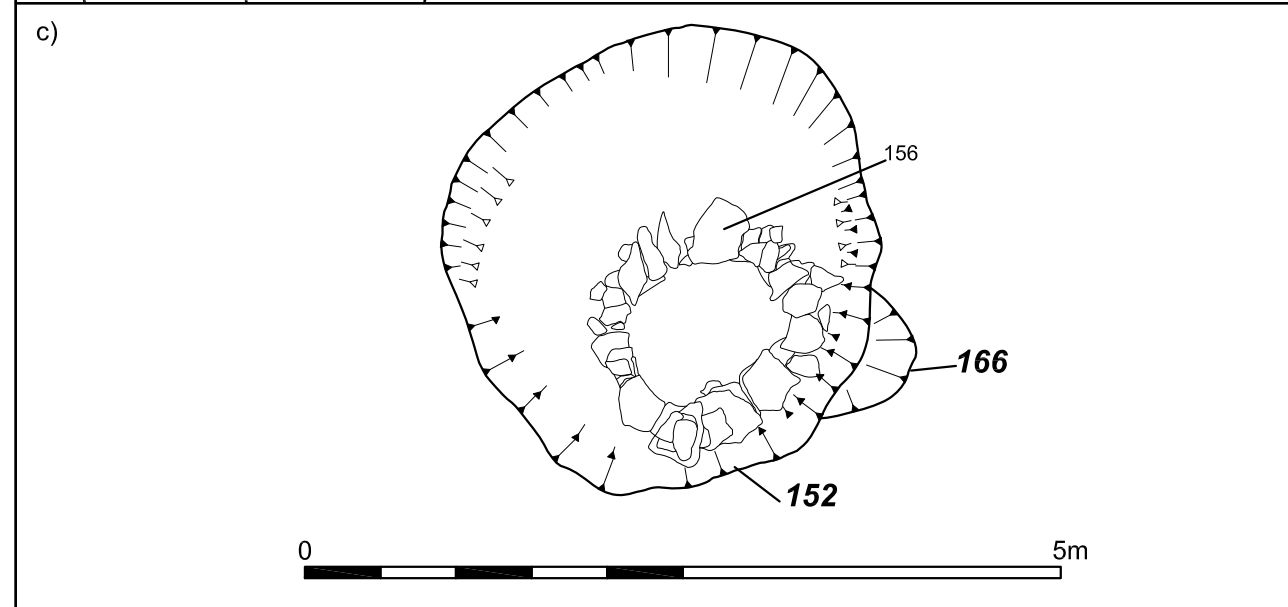
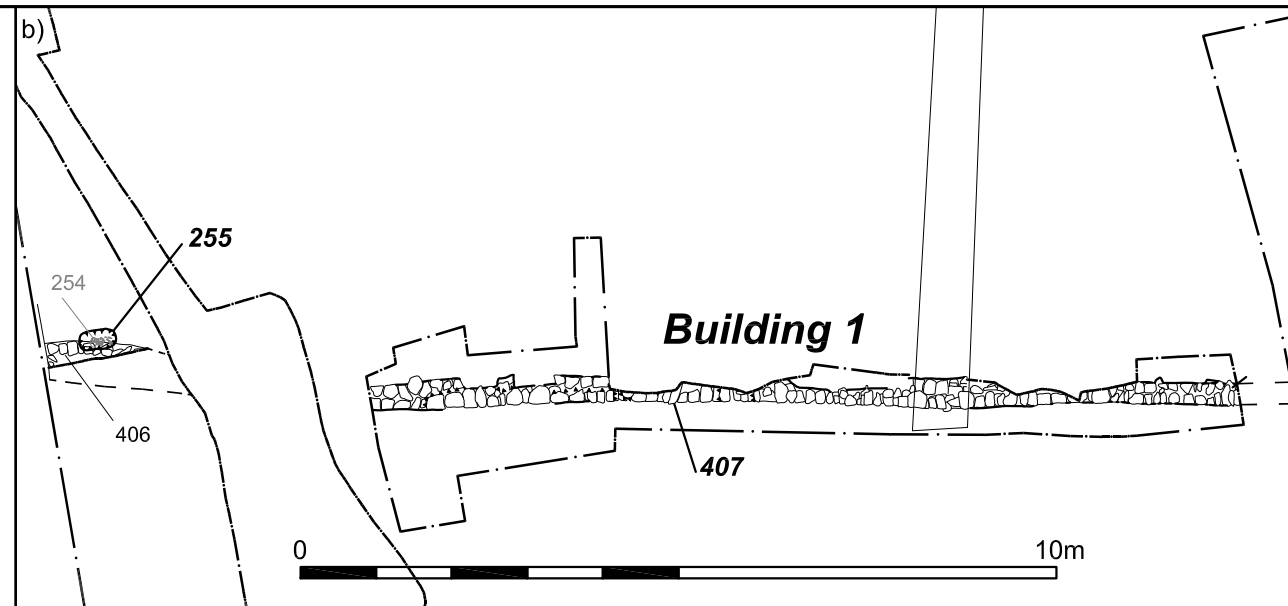
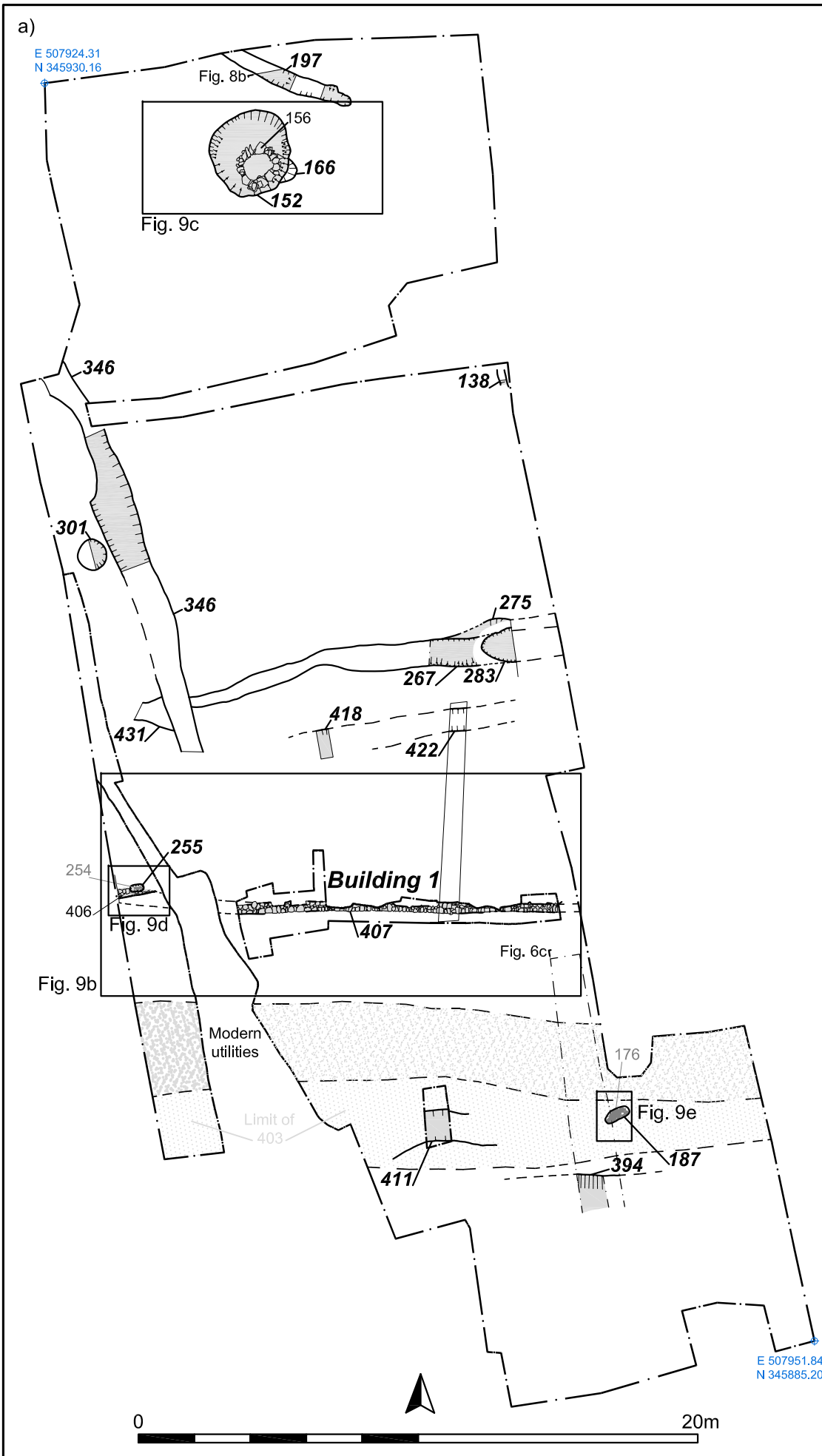
a) Phase 2 ditch 420, Phase 3 wall 452, Phase 3 ditch 422 and Phase 5 wall 353

b) Phase 2 pit 229 and Phase 3 ditch 197

c) Phase 4 well 148 and Phase 5 wall 192

d) Phase 4 pits 213, 263 and 244, Phase 5 pits 246 and 248

Scale: 1:25



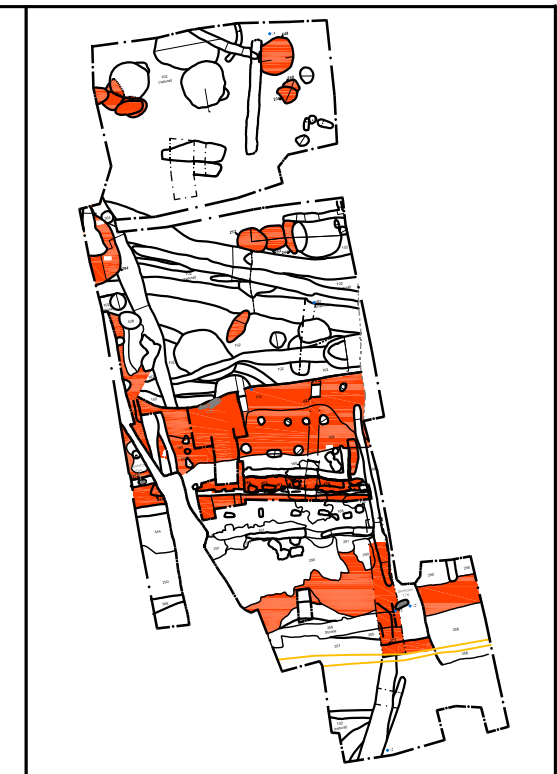
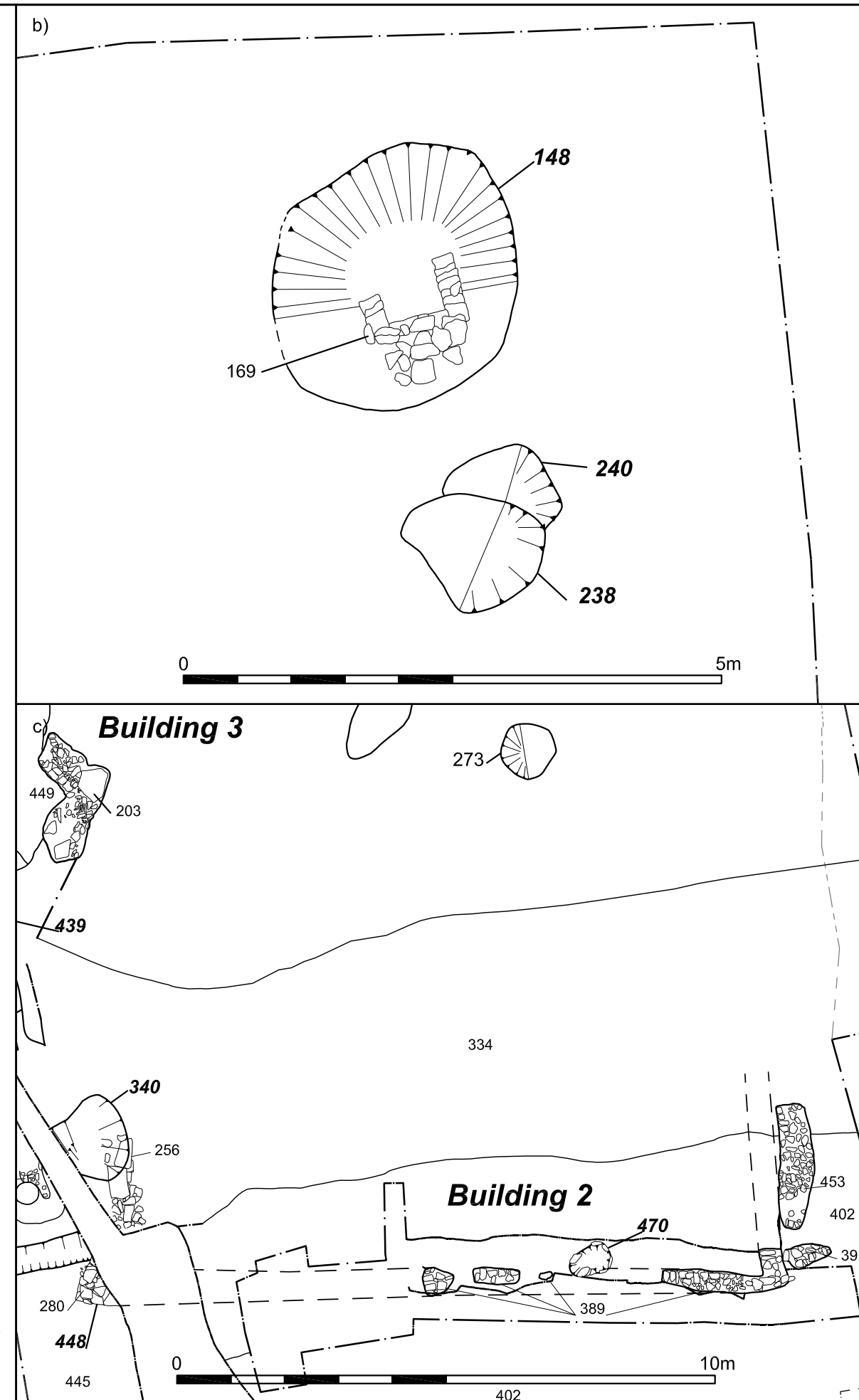
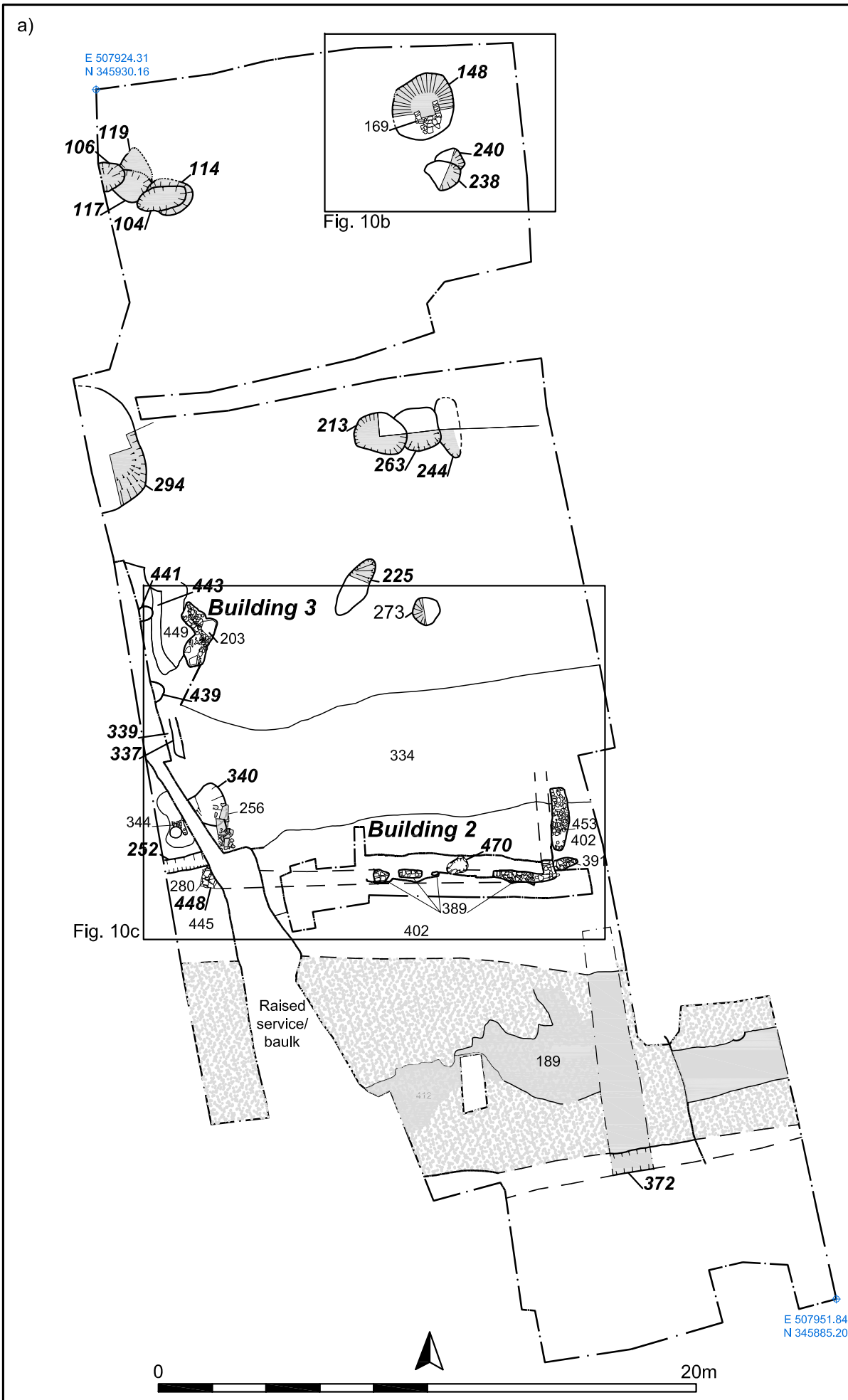
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1.00	14/9/11	Phase 3 plan	JLC	GG	CT



Hoplands, Sleaford

Figure 9
 a) Plan of Phase 3: Mid to late 2nd century features
 b) Plan of wall 452
 c) Plan of well 152
 d) Plan of Skeleton 254
 e) Plan of Skeleton 176

Scales 1:200, 1:100, 1:50 and 1:20



- Limit of excavation
- Cut line
- Layer line
- - - Modern intrusion
- - - Projected line
- █ Excavated sections
- ▨ Road surface 405
- ▩ Road agger 403
- ⊙ Stones

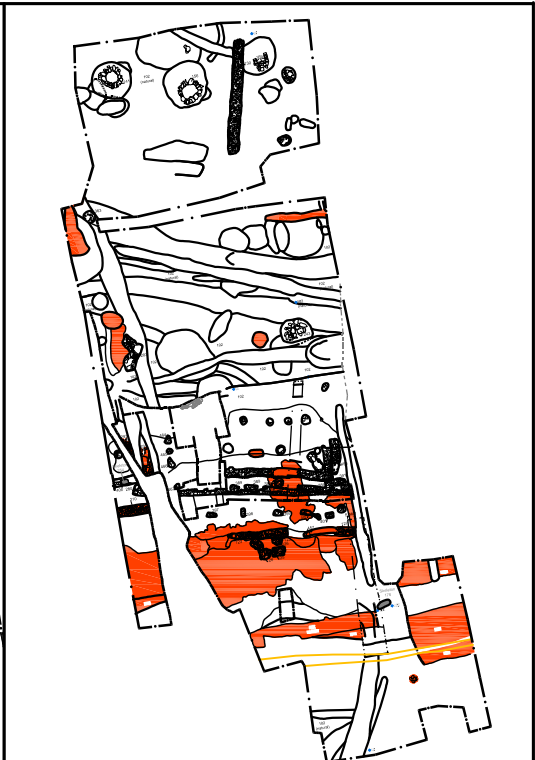
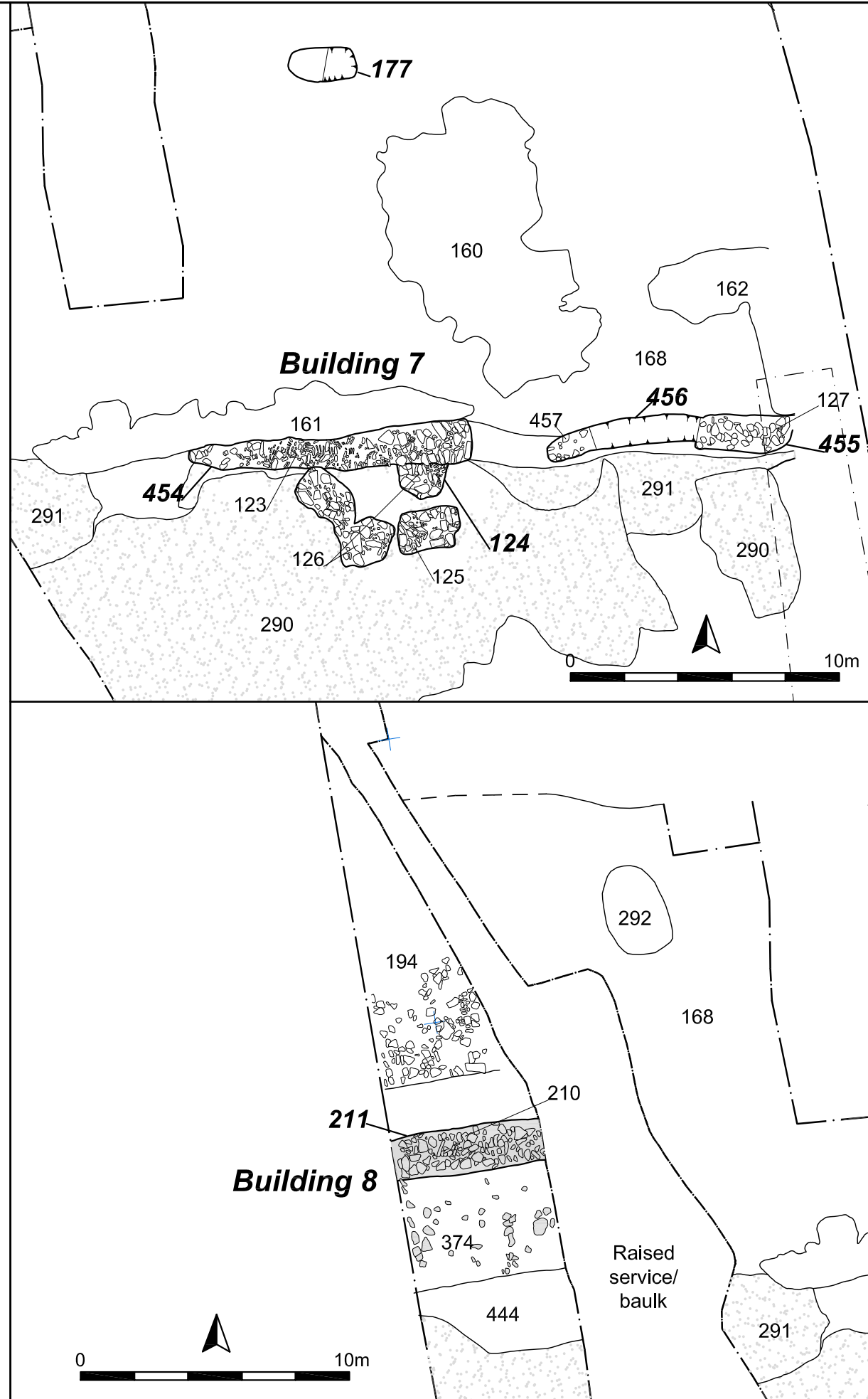
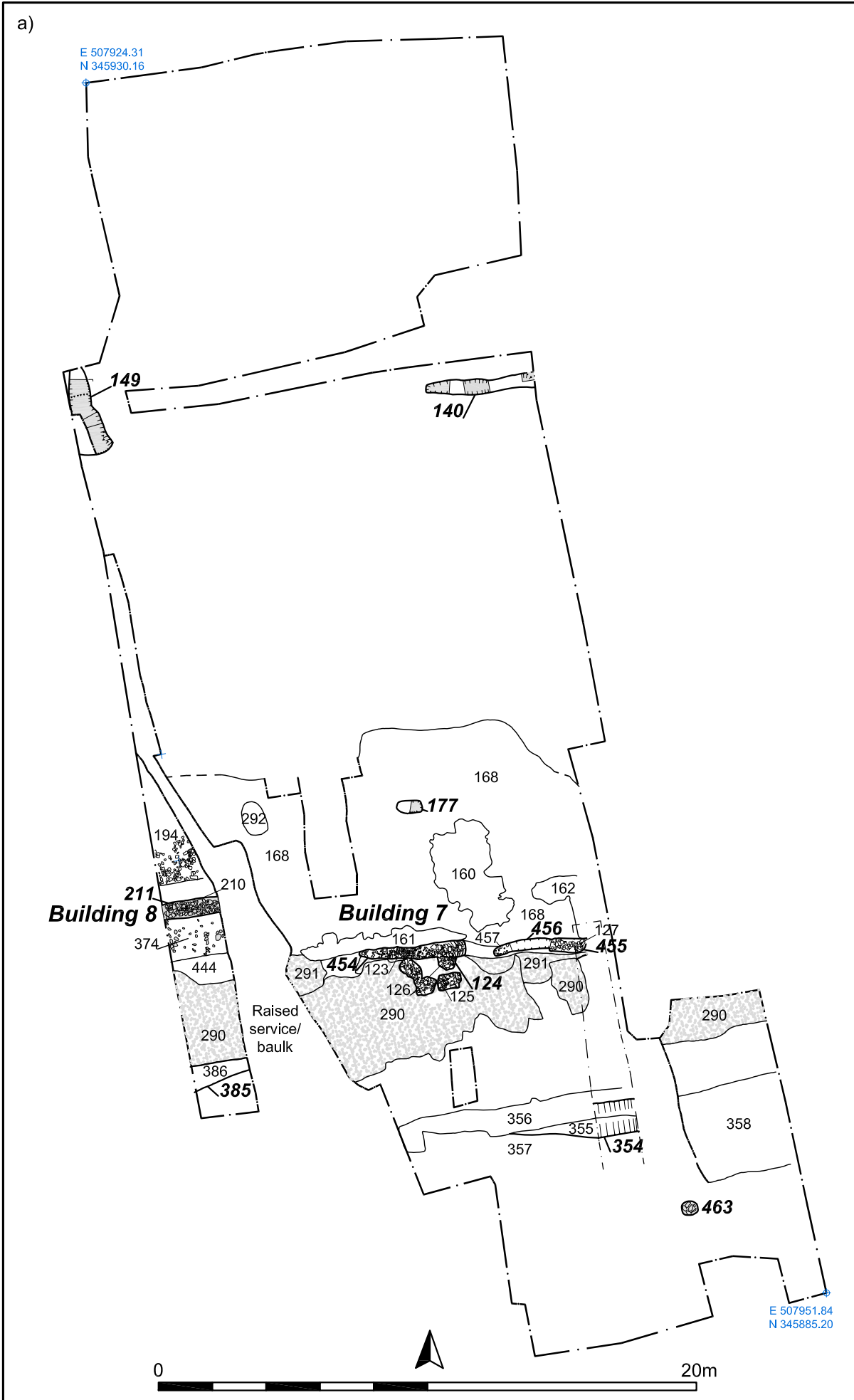
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1.00	15/9/11	Phase 4 plan	JLC	GG	CT



Hoplands, Sleaford

Figure 10
 a) Plan of Phase 4: Early to Mid 3rd century features
 b) Plan of well 148 and pits 238 and 240
 c) Plan of wall and floor areas

Scales 1:200, 1:100, 1:50



- Limit of excavation
- Cut line
- Layer line
- - - Modern intrusion
- - - Projected line
- █ Excavated sections
- █ Road 290 and 291
- █ Stones

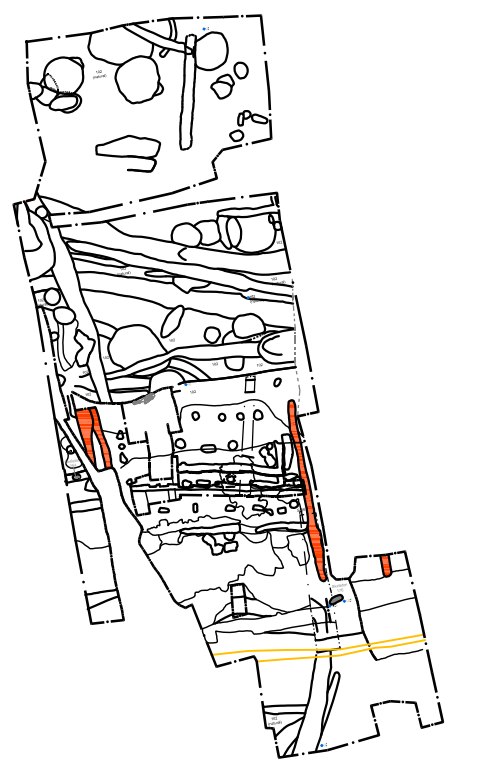
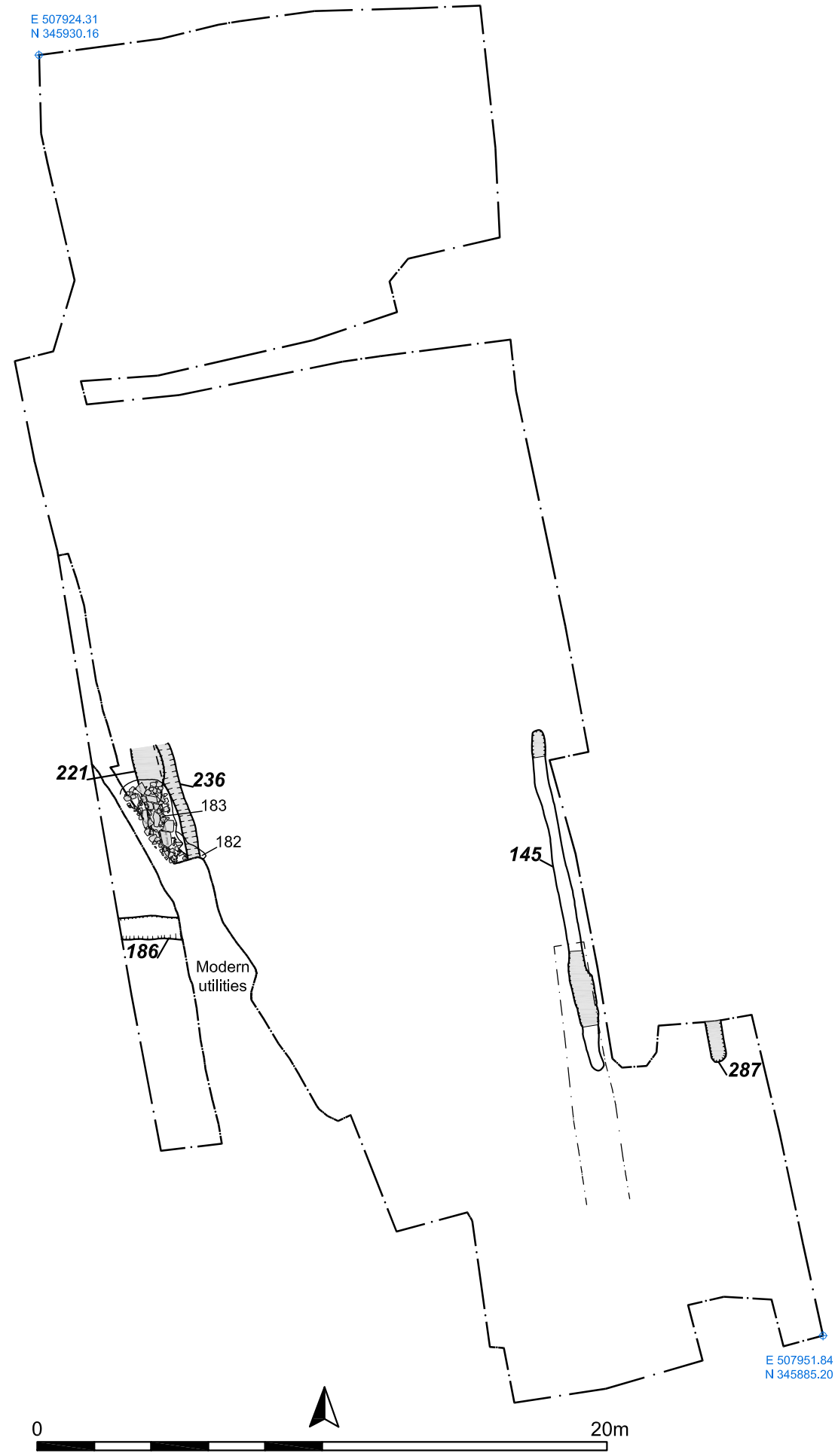
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1.00	15/9/11	Phase 6 plan	JLC	GG	CT



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Figure 12
a) Plan of Phase 6: 4th century features
b) Plan of Buildings 7 and 8

Scales 1:200 and 1:100



- Limit of excavation
- Cut line
- Layer line
- - - Modern intrusion
- - - Projected line
- █ Excavated sections
- ☼ Stones

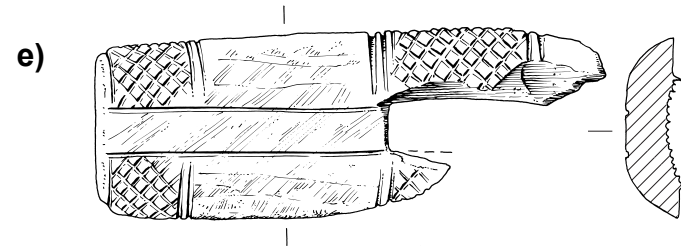
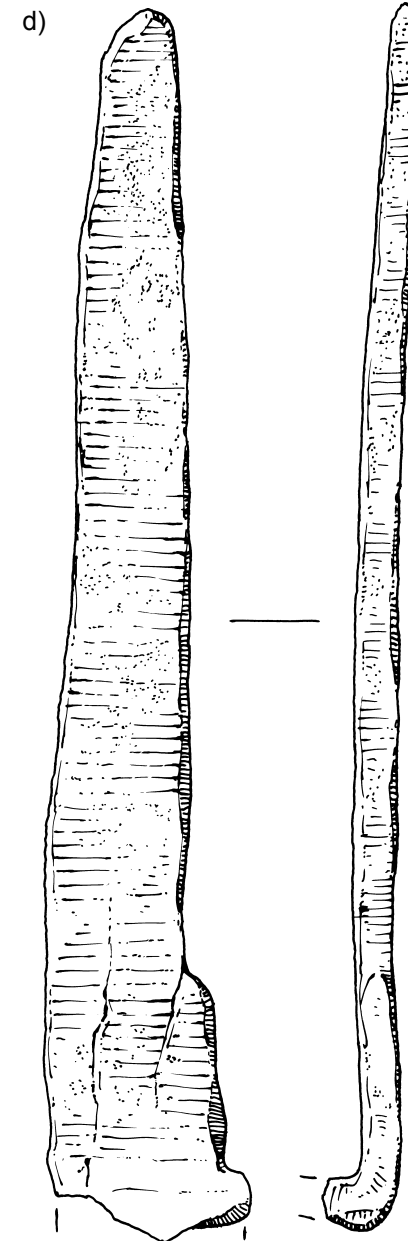
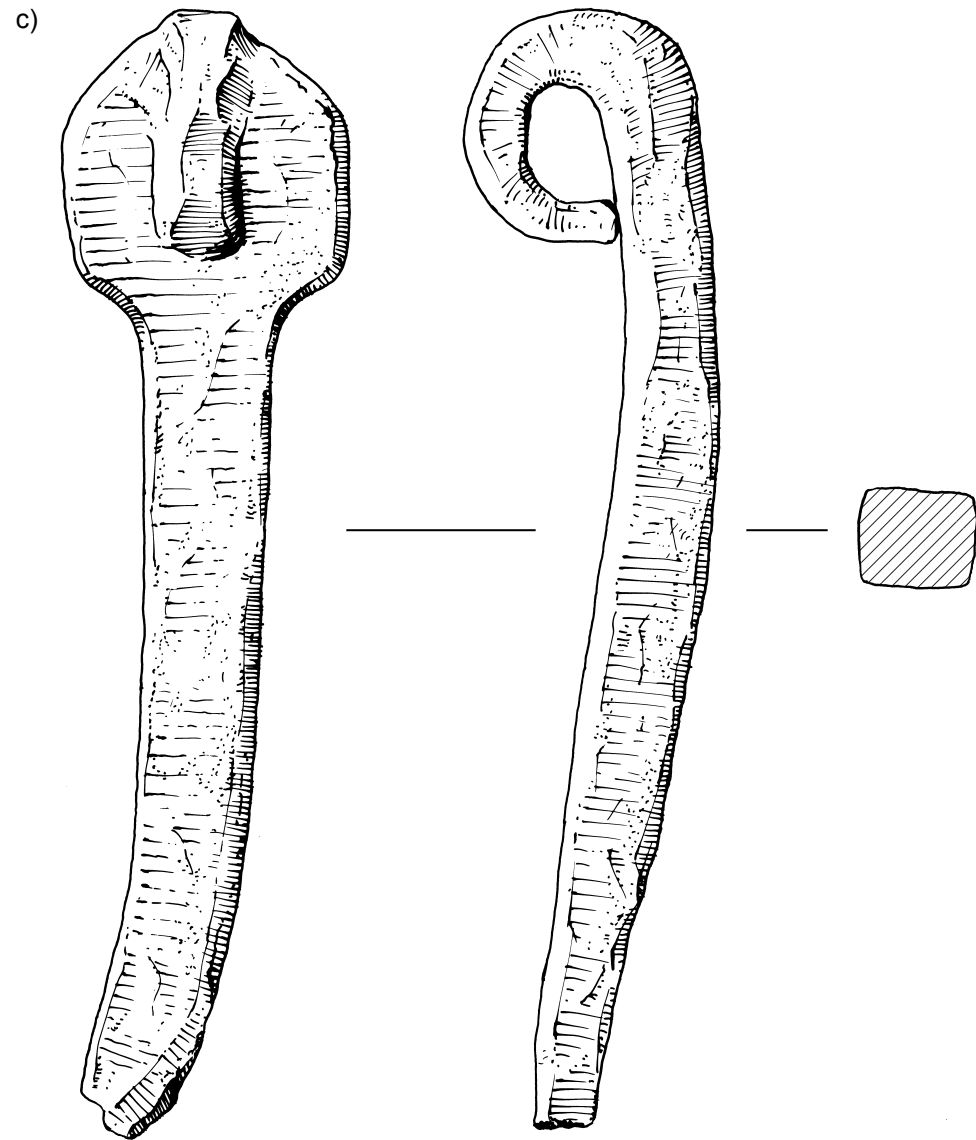
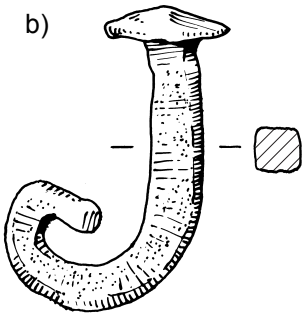
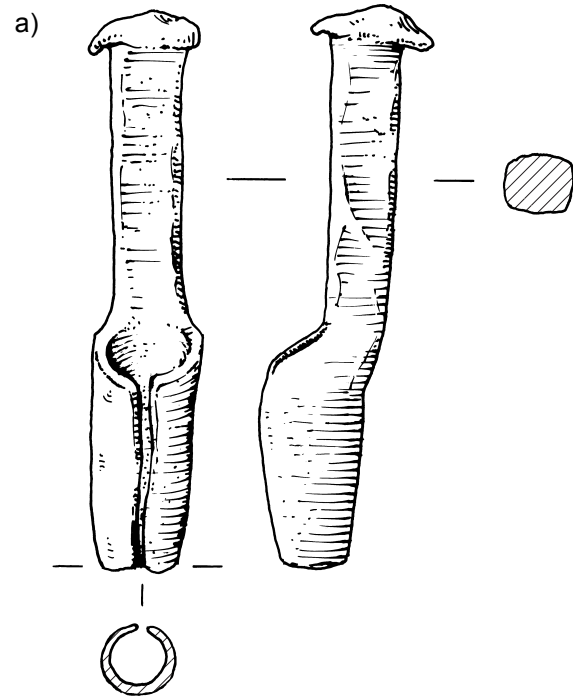
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1.00	15/9/11	Phase 7 plan	JLC	GG	CT



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Figure 13
Plan of Phase 7: Post 4th century features

Scale 1:200



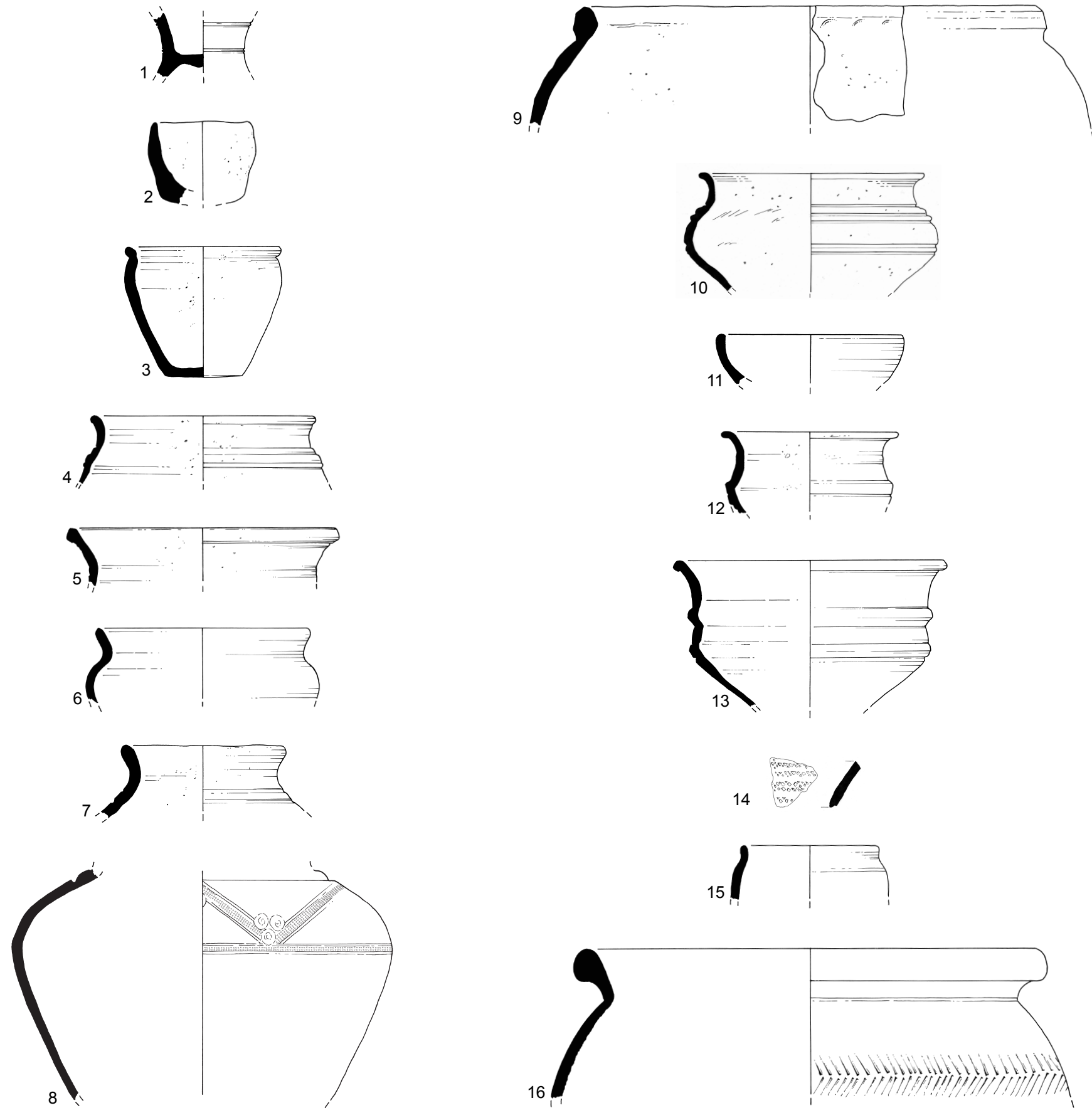
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Ver	Date	Description	DM	Chk	App
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1.00	15/9/11	Registered finds	JLC	GG	CT



Figure 14:
Romano-British artefacts
a) Iron leather workers' ring punch
b) Iron nail
c) Iron linch-pin
d) Iron strip
e) Bone cheek-piece from a horse bridle

Scale: 1:1



0 10cms

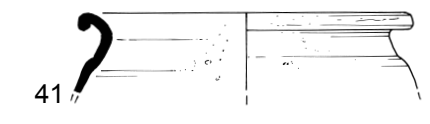
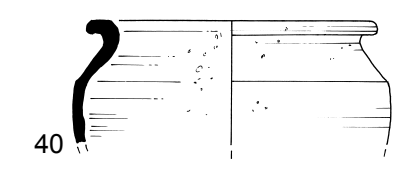
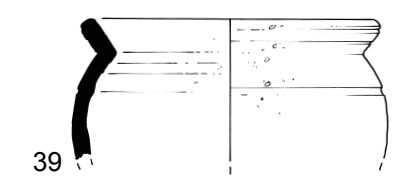
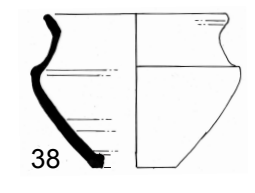
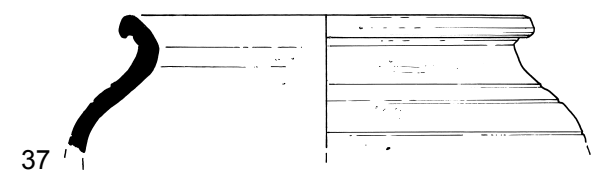
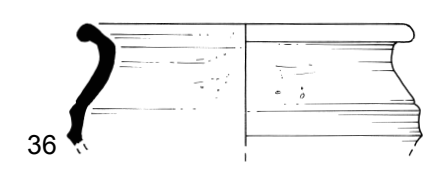
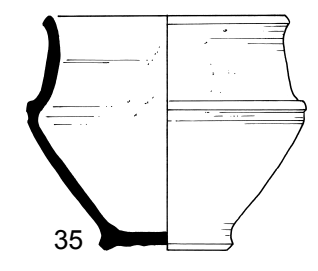
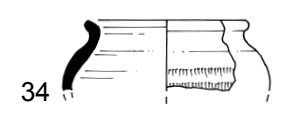
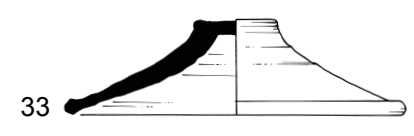
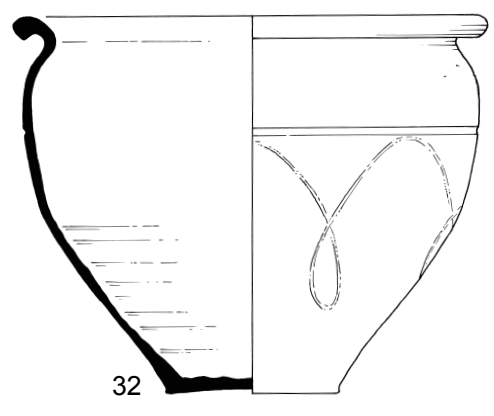
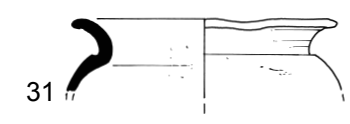
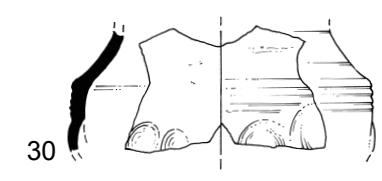
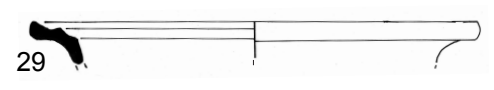
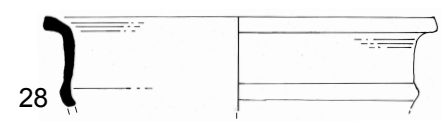
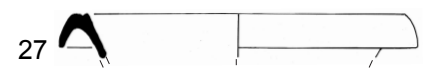
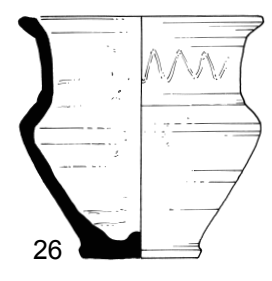
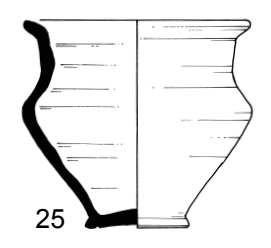
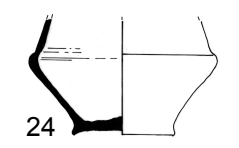
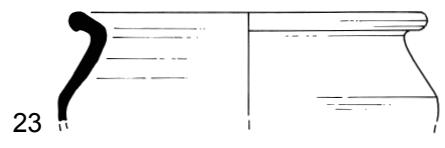
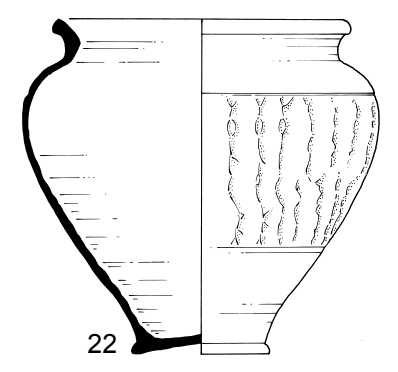
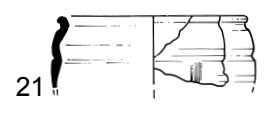
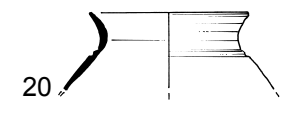
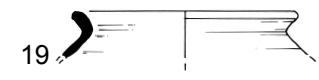
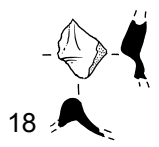
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1.00	15/9/11	Iron Age pottery	JLC	GG	CT



Hoplands, Sleaford

Figure 15
Iron Age Pottery

Scale: 1:4



Ver	Date	Description	DM	Chk	App
1.01	19/3/12	Edits	JLC	GG	CT
1.00	15/9/11	Roman pottery	JLC	GG	CT



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Figure 16
Roman Pottery

Scale: 1:4 and mortaria stamp scale 1:2

Plates

Plate 1: Initial strip of site looking west

Plate 2: Cleaning of Roman road, looking southwest

Plate 3: Northern part of site following cleaning

Plate 4: Latest phase of buildings exposed, looking west

Plate 5: Building 4, looking west

Plate 6: Building 4, looking west

Plate 7: Postholes and postpads exposed either side of Building 4, looking west

Plate 8: Earlier phase of building exposed to the east, looking southwest

Plate 9: Further details of earlier building revealed, looking southwest

Plate 10: Detailed view of exposed phases of buildings, looking west

Plate 11: Overview of buildings, looking northwest

Plate 12: Burial 159

Plate 13: Burial 176

Plate 14: Oven 297

Plate 15: Excavation of Roman buildings, looking southwest

Plate 16: Excavation of Well 121

Plate 17: Well 152



Plate 1: Initial strip of site, looking west



Plate 2: Cleaning of Roman road, looking southwest



Plate 3: Northern part of site following cleaning



Plate 4: Latest phase of buildings exposed, looking west



Plate 5: Building 4, looking west



Plate 6: Building 4, looking west



Plate 7: Postholes and postpads exposed either side of Building 4, looking west



Plate 8: Earlier phase of building exposed to the east, looking southwest



Plate 9: Further details of earlier building revealed, looking southwest



Plate 10: Detailed view of exposed phases of buildings, looking west



Plate 11: Overview of buildings, looking northwest

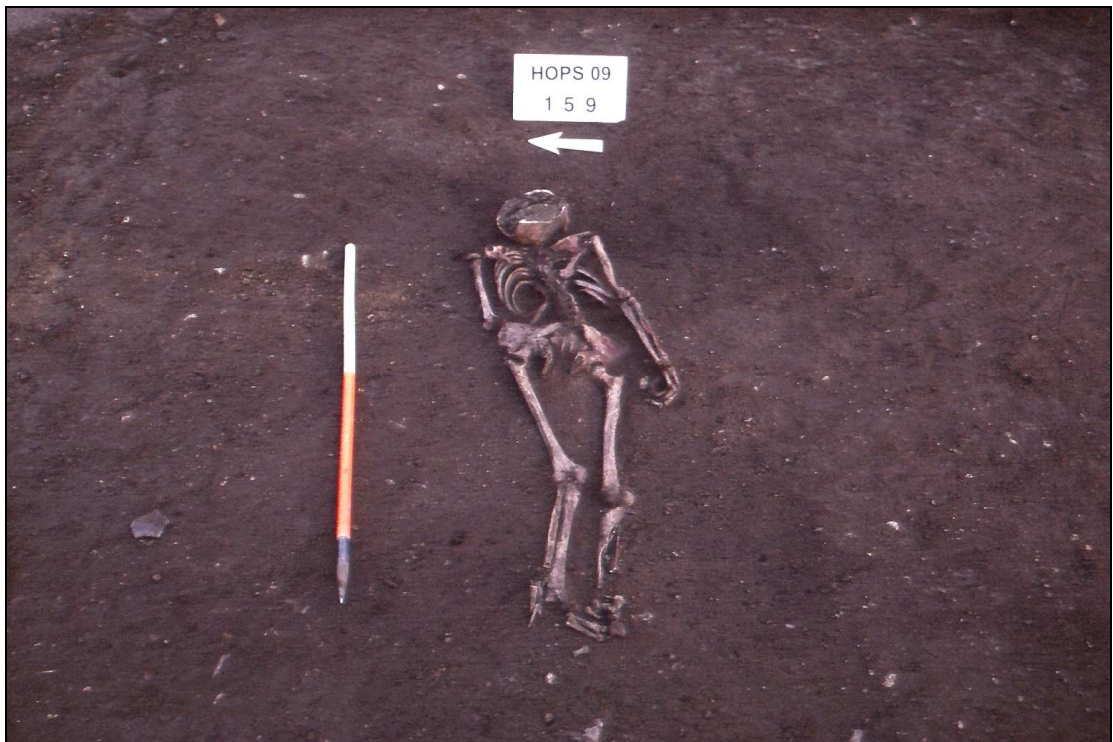


Plate 12: Burial 159



Plate 13: Burial 176

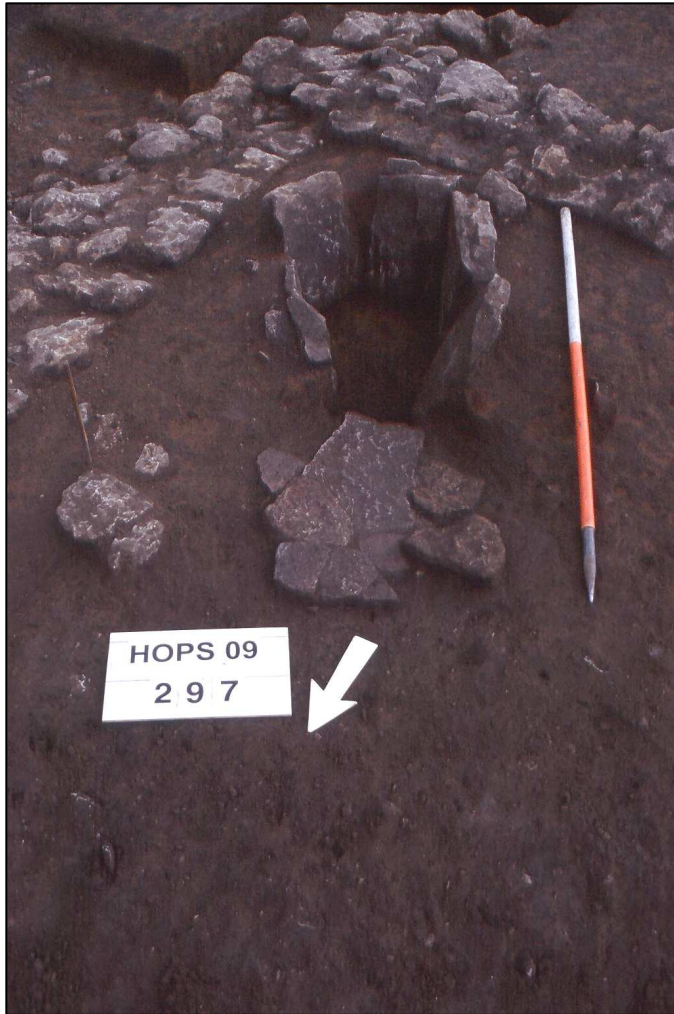


Plate 14: Oven 297



Plate 15: Excavation of Roman buildings, looking southwest



Plate 16: Excavation of well 121



Plate 17: Well 152

Appendices

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Appendix B	Matrices
Appendix C1	Iron Age and Roman Pottery Report
Appendix C2	CBM, Fired Clay and Daub Report
Appendix C3	Animal Bone Report
Appendix C4	Human Bone Report
Appendix C5	Environmental Report
Appendix C6	Registered Finds Report
Appendix C7	Slag Report
Appendix C8	Stone Report
Appendix C9	Glass Report
Appendix D	Catalogue of all finds
Appendix E	Photographic register
Appendix F	OASIS summary

Summary table of contexts

Context	Type	Dimensions	Description	Sample	Interpretation	Fill of	Contains	Phase
100	Layer	0.20m thick	soft dark grey brown sandy silt	0	Overburden + Turfline	0	0	8
101	Layer	0.42m-0.92m thick	Soft very dark brown sand silt	0	'Dark earth' layer	0	0	8
102	Layer	0	Loose yellowish orange sand and gravel	0	Natural	0	0	
103	Finds Number	0		0	Unstrat Finds	0	0	
104	Pit	1.70m x 0.80m x 0.27m	Oval, concave sides, concave base	0	Cut of Pit	0	105	2
105	Fill	1.70m x 0.80m x 0.27m	Loose dark greyish brown sand. Occasional charcoal flecks	0	Fill of pit 104	104	0	2
106	Pit	0.56m x 0.66m x 0.48m	Sub oval, moderately steep sides, concave base	0	Cut of pit	0	107, 111	2
107	Fill	0.56m x 0.66m x 0.48m	Loose mid to dark greyish brown sand.	0	Secondary fill of pit 106	106	0	2
108	Pit	0.94m x 0.37m x 1.02m	Rectangular, moderately steep sides, flat base	0	Pit. Possible rubbish pit	0	109, 110	1
109	Fill	0.34m thick	Very soft dark brown silty sand	0	Secondary fill of pit 108	108	0	1
110	Fill	0.03m thick	Very soft orange brown silty sand	0	Primary fill of pit 108	108	0	1
111	Fill	0.99m x 0.80m x 0.16m	Loose mid greyish brown sand	0	Primary silting of pit 106	106	0	2
112	Pit	4.20m x 1.37m x 0.21m	Linear, E-W oriented, moderately steep sides, flat base	0	Elongated pit	0	113	1
113	Fill	0.16m thick	very soft mid brown silty sand	0	Secondary fill of pit 112	112	0	1
114	Pit	1.30m x 1.10m x 0.28m	Sub oval, steep sides, flat base	0	Pit	0	115	2
115	Fill	1.30m x 1.10m x 0.28m	Loose mottled mid greyish brown/ mid orange brown sand	0	Fill of pit 114	114	0	2
116	Fill	0.05m thick	Soft orange sand and mid brown gravelly, silty sand	0	Primary fill of pit 112	112	0	1
117	Pit	1m x 0.75m x 0.35m	Sub oval, moderately steep sides, concave base	0	Cut of pit	0	118	2
118	Fill	0.35m thick	Loose dark brown sand, occasional charcoal flecks	0	Fill of pit 117	117		2
119	Pit	1.30m x 0.65m x 0.40m	Sub oval, moderately steep sides, concave base	0	Cut of pit	0	120	2
120	Fill	0.40m thick	Loose dark brownish grey sand	0	Fill of pit	119		2
121	Well	2.60m x 2.40m x 1.24m	Sub circular, steep sides, concave base	0	Cut for stone-lined well	0	122, 129	2
122	Fill	0.70m thick	Loose dark brown greyish sand	0	Upper fill of well cut 121	121		2

The Hoplands, Sleaford
Archaeological Excavation
Appendix A – Summary table of contexts

123	Wall	3.98m x 0.60m x 0.12m	Limestone brash, 250mm x 170mm x 30mm, pitched or herringbone coursed, no bonding material, up to 2 courses survive. E-W oriented	0	Wall foundation of roadside building	454	0	6
124	Wall	0.65m x 0.55m x 0.12m	Limestone brash, 170mm x 140mm x 50mm, pitched or herringbone coursed, no bonding material, up to 2 courses survive.	0	Wall foundation of roadside building	0	0	6
125	Wall	.0.90m x 0.52m x 0.12m	Limestone brash, 140mm x 100mm x 30mm, pitched or herringbone coursed, up to 2 courses survive. E- W oriented	0	Wall foundations for roadside building	0	0	6
126	Wall	1.70m x 0.80m x 0.15m	Limestone brash, 210mm x 130mm x 40mm, pitched or herringbone coursed, no bonding material, up to 2 courses survive.	0	Wall foundations of roadside building	0	0	6
127	Wall	1.25m x 0.50m x 0.10m	Limestone brash, 220mm x 150mm x 30mm, pitched or herringbone coursed, no bonding material, 1 course survived. E-W oriented	0	Wall foundations of roadside building	455	0	6
128	Fill	0.17m thick	Very soft mid brown silty sand	0	Fill of pit 112	112	0	1
129	Fill	0.55m thick	Loose dark brownish grey sand	1	Fill of well 121	121	0	2
130	Wall	7.60m x 0.80m x 0.30m	Limestone brash, 170mm x 170mm x 30mm, pitched or herringbone coursed, no bonding material, up to 4 courses survive. N-S oriented	0	Wall foundations for building in area of wells	192	0	5
131	Ditch	0.50m x 0.26m deep	Linear, E-W oriented, rounded terminus at western end, steep sides, slightly concave base	0	Ditch terminus, part of group 140	0	132	6
132	Fill	0.26m thick	Loose dark greyish brown silty sand. Occasional charcoal flecks	0	Fill of ditch 131	131	0	6
133	Ditch	0.45m wide x 0.48m deep	Linear, E-W oriented, near vertical sides, slightly concave base	0	Possible drainage ditch, part of group 140	0	135, 134	6
134	Fill	0.30m thick	Loose mid grey silty sand. Occasional charcoal flecks	0	Primary fill of ditch 133	133	0	6
135	Fill	0.22m thick	Loose dark greyish brown silty sand, frequent large sub- angular limestone blocks, up to 240mm x 20mm x 100mm	0	Upper fill of ditch 133	133	0	6

The Hoplands, Sleaford
Archaeological Excavation
Appendix A – Summary table of contexts

136	Ditch	0.30m wide x 0.27m deep	Linear, E-W oriented, near vertical sides	0	Possible drainage ditch, part of group 140	0	137	6
137	Fill	0.27m thick	Loose dark greyish brown silty sand, occasional charcoal flecks	0	Fill of ditch 136	136	0	6
138	Ditch	0.50m x 0.18m x 0.20m	Linear, N-S oriented, steep west side (east not visible), flat base	0	Ditch or pit	0	139	3
139	Fill	0.20m thick	Loose dark brown greyish silt and very fine sand. Occasional charcoal flecks	0	Fill of ditch 138	138	0	3
140	Group	4m x 0.45m x 0.48m	Cuts 131, 133, 136	0	E-W ditch with terminus at western end. Drainage?	0		6
141	Stone lining	Outer diameter 1.19m x up to 0.50m wide x 0.42m high	Limestone brash, roughly hewn, up to 370mm x 180mm x 40mm, regular courses, no bonding material. 5 courses survive	0	Stone lining of well 121	121	0	2
142	Pit	1.16m x 0.70m x 0.28m	Sub-oval, moderately steep sides, concave base	0	Pit	0	143	2
143	Fill	0.28m thick	Loose mid greyish brown sand	0	Fill of pit 142	142	0	2
144	Fill	0.42m thick	Fairly loose dark brown grey sand	2	Fill of well 121 behind stone lining 141	121	0	2
145	Ditch	12.15m x 0.82m x 0.21	Linear, N-S oriented, rounded terminal at either end, steep sides, flat base. Terminals may be due to truncation	0	Boundary ditch? Cuts through Roman road	0	146, 147	7
146	Fill	0.21m thick	Very soft very dark brown silty sand	0	Fill of ditch 145 in central area of the ditch	145	0	7
147	Fill	0.05m thick	Loose, very dark brown silty sand	0	Fill at northern terminus ditch 145	145	0	7
148	Well	2.30m x 2.40m x 1.35m	Sub circular, steep sides, near vertical, flat base	0	Cut of well	0	169, 170, 171, 173	4
149	Ditch	3.20m x 0.45m x 0.68m	Linear, N-S oriented, possible terminus at southern end, steep, near vertical sides, flat stepped base, deeper at southern end	0	Drainage ditch with integral sump at southern end	0	150, 151	6
150	Fill	0.05m thick	Soft mid greenish grey clayey sand, occasional charcoal flecks	0	Primary fill of drain 149	149	0	6
151	Fill	0.35m thick	Soft mid greenish grey sandy clay	3	Secondary fill of drain 149	149	0	6
152	Well	2.80m x 2.80m x 1.40m	Sub-circular, steep, near vertical sides, with large step in base	0	Cut of stone-lined well, same as 180	0	154, 155, 156, 157, 158, 181	3
153	Fill	0.50m thick	Light to mid brown sandy silt, occasional charcoal flecks	0	Fill of well 180=152	180	0	3

The Hoplands, Sleaford
Archaeological Excavation
Appendix A – Summary table of contexts

154	Fill	0.25m thick	Mid brownish orange sandy silt	0	Upper fill of well 152	152	0	3
155	Fill	0.60m thick	Loose mid brown sandy silt	9	Fill of well 152	152	0	3
156	Stone lining	1.60m outer diameter (1m x 0.8m interior) x 0.40m wide x 1.23m high	Limestone brash, roughly hewn, trimmed not dressed, 380mm x 170mm x 60mm, regular courses, no bonding material	0	Well lining	152	0	3
157	Fill	0.13m x 0.25m thick	Light to mid brown sandy silt, occasional charcoal flecks	0	Backfill of well 152 behind stone lining 156	152	0	3
158	Fill	0.25m wide x 0.62m high	Mainly large limestone brash fragments with mid orange brown sandy silt and patches of light grey orange clay	0	Area of collapsed well lining	152	0	3
159	Skeleton	1.39m long	Human, prone, extended, E-W oriented, head to the east, left arm across from, right arm by side	0	Adult skeleton. No grave cut found.	0	0	5
160	Surface	4.20m x 2.20m x 0.05m	Limestone blocks many with smoothed edges, 260mm x 240mm x 30mm, not coursed, no bonding material	0	Floor surface	0	0	6
161	Surface	4.0m x 1.0m x 0.2m	Limestone cobbles and sub-angular blocks up to 250mm x 250mm x 250mm, no coursing, no bonding material	0	Floor surface, well worn cobbles, flat large slabs	0	0	6
162	Surface	2m x 1.5m x 0.08m thick	Worn limestone brash blocks, 220mm x 170mm x 30mm, no coursing, no bonding material	0	Floor/ yard surface	0	0	6
163	Pit	2.07m x 1.50m x 0.45m	Sub oval, moderately steep sides, flat base	0	Possible rubbish or cess pit	0	164, 165	5
164	Fill	0.20m thick	Soft mid to light greenish greyish brown silty sand	4	Upper fill of pit 163	163	0	5
165	Fill	0.50m thick	Soft mid greenish greyish brown silty sand	27	Primary fill of pit 163	163	0	5
166	Pit	0.83m x 0.56m x 0.40m	Sub-circular, steep sides, concave base	0	Cut of pit	0	167	3
167	Fill	0.40m thick	Soft dark brown silty sand	0	Fill of pit 166	166	0	3
168	Layer	7.0m x 10.0m x 0.20m	Mixed yellowish brown silty sand, occasional limestone fragments, occasional charcoal flecks	15	Made ground or bedding layer for stone surfaces	0	0	6
169	Stone lining	1m x 0.90m x 1.30m high	Limestone brash, 500mm x 350mm x 100mm, regular courses, no bonding material. Forms a rectangular lining at top of well but more oval towards the base	0	Stone lining of well 148.	148	0	4

The Hoplands, Sleaford
Archaeological Excavation
Appendix A – Summary table of contexts

170	Fill	1.3m thick	Loose mid greyish brown silty sand	0	Original backfill of well before lining collapse	148	0	4
171	Fill	1.70m x 0.66m x 0.56m thick	Loose dark brown silty sand, occasional charcoal flecks	0	Upper fill of well	148	0	4
172	Fill	0.35m thick	Loose brownish grey sandy silt, occasional charcoal flecks, frequent shell	0	Fill of well	148	0	4
173	Fill	0.43m thick	Loose brownish grey sandy silt, occasional charcoal flecks	5, 6, 7	Fill within shaft of well 148	148	0	4
174	Robber cut	1.50m x 0.30m x 0.06m	Linear, E-W oriented, concave sides, flat base		Robber trench of walls 127 and wall 123	0	175	8
175	Fill	0.06m thick	Loose mid brownish green silty sand	0	Fill of robber cut 174	174	0	8
176	Skeleton	0.86m x 0.35m	Human, crouched, placed on right side, head to the west, looking south. Arms and legs drawn up and in, right hand under skull	0	Crouch burial in grave 187	187	0	3
177	Hearth	1.0m x 0.40m x 0.08m	Sub-oval, concave sides, concave base	8	Possible hearth	0	178	6
178	Fill	0.08m thick	Loose mixed yellow and mid brown silty sand. Moderate charcoal fragments, fired clay fragments, burnt red sand	8	Fill of possible hearth 177	177	0	6
179	Void		Void		VOID	0		0
180	Robber cut	2.80m x 2.80m x 1.40m	Sub-circular, steep, near vertical sides, with large step in base	0	Cut of stone-lined well, same as 152	0	153	3
181	Fill	0.25m thick	Mid grey sandy silt	10	Primary silting of well 152	152	0	3
182	Layer	1.2m x 1.0m x 0.20m	Compact mixed mid - dark brown silty sand and dark orange brown gritty sand	0	Limestone slab dump. Same as 183	0		7
183	Surface	2.0m x 1.0m x 0.30m	Loose mid to dark brown sandy silt and large limestone fragments and slabs	0	Limestone slab dump. Same as 182	0	0	7
184	Surface	2.20m x 0.80m x 0.05m	Limestone blocks and fragments, 550mm x 140mm x 50mm, no coursing, no bonding material, some blocks scorches in situ	0	Floor surface	0	0	6
185	Fill	0.40m thick	Soft mid brown silty sand	0	Ditch 186	186	0	7
186	Ditch	2.10m x 0.84m x 0.40m	Linear, E-W oriented, steep sides, flat base	0	Ditch, possible robber cut removing part of 210	0	185, 212, 208	7
187	Grave	0.86m x 0.35m x 0.06m	Sub-oval, gradual sides, concave base	0	Grave cut for crouched burial 176	0	188	3
188	Fill	0.06m thick	Very soft greyish brown silty sand	0	Fill of grave 187	187	0	3

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189	Surface	0	Cobbles and rounded limestone fragments up to 160mm x 120mm x 90mm	0	Road surface	0	0	4
190	Layer	Up to 0.22m thick	Mid to dark brown silty sand with yellow sandy patches, moderate small stones	0	Make up and bedding layer for road surface 189	0	0	4
191	Layer	2.40m wide x 0.23m thick	Yellowish orange coarse sand	0	Road make up	0	0	1
192	Construction cut	7.60m x 0.75m x 0.10m	Linear, E-W oriented, gradual sides, flat base	0	Construction cut for wall 130	0	193, 130	5
193	Fill	0.10m thick	Loose dark greyish brown silty sand	0	Fill of construction cut 192	192	0	5
194	Surface	1.70m x 1.50m	Soothed or rounded limestone blocks, 260mm x 140mm x 30mm, no coursing, no bonding material	0	Floor surface	0	0	6
195	Ditch	1.15m x 0.85m x 0.22m	Linear, E-W orientated, moderately steep sides, concave base	0	Boundary ditch	0	196	2
196	Fill	0.22m thick	Soft mid to dark brown silty sand, moderate Charcoal flecks	21	Fill of ditch 195	195	0	2
197	Ditch	4.75m x 0.55m x 0.35m	Linear, NW-SE oriented, rounded terminus at SE end, steep sides, concave base	0	Drainage or boundary ditch	0	198, 199	3
198	Fill	0.35m thick	Mid brown sandy silt	0	Fill of ditch 197	197	0	3
199	Fill	0.25m thick	Mid brown sandy silt	0	Fill at terminus of ditch 197	197	0	3
200	Fill	0.04m thick	Soft mix of orange sand and mid brown silt sand	0	Redoped natural in ditch 201	0	201	2
201	Ditch	1m x 0.30m x 0.12m	Linear, E-W oriented, moderately steep sides, concave base	0	Boundary or drainage ditch	0	200, 202	2
202	Fill	0.08m thick	Soft mid brown silty sand	0	Secondary fill of ditch 201	201	0	2
203	Wall	2m x 1.4m	Limestone slabs and fragments, up to 600mm x 640mm x 70mm, no coursing visible, no bonding material, unexcavated	0	Wall or floor surface partially exposed	0	0	5
204	Fill	0.28m thick	Soft mid greyish brown silty sand	22	Fill of ditch 205	205	0	2
205	Ditch	16m x 1.40m x 0.28m	Linear, E-W oriented, moderately steep sides, concave base	0	Boundary ditch	0	204	2
206	Fill	0.23m thick	Soft mid brown silty sandy clay	23	Fill of possible pit or ditch terminus 207	207	0	2
207	Pit	1.20m x 0.70m x 0.22m	Partially visible, rounded terminus, steep sides, flat base	0	Cut of possible pit or ditch terminus	0	206	2
208	Fill	0.10m thick	Dark brown silty sand and limestone fragments	0	Stone-rich upper fill of ditch 186	186	0	7

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209	Fill	0	Soft dark brown sandy silt	0	Fill of construction cut 211 for wall 210	211	0	6
210	Wall	2.10m x 0.64m	Limestone brash, 150mm x 100mm x 80mm, pitched or herringbone coursing, no bonding material, unexcavated	0	Wall foundation for roadside building	211	0	6
211	Construction cut	2.10m x 0.64m	Linear, E-W oriented, unexcavated		Construction cut for wall 210	209	0	6
212	Fill	0.10m thick	Light yellow brown silty sand, occasional charcoal flecks	0	Primary fill of ditch 186	186	0	7
213	Pit	2.0m x 1.40m x 0.45m	Oval, moderately steep sides, flat base	0	Pit	0	214	4
214	Fill	0.45m thick	Soft greyish brown silty sand, occasional charcoal flecks	25	Fill of pit 213	213	0	4
215	Pit	2.50m x 1.20m x 0.30m	Irregular in plan, moderately steep sides, concave base	0	Pit	0	216	2
216	Fill	0.30m thick	Soft dark brown silty sand	0	Fill of pit 215	215	0	2
217	Fill	0.25m thick	Loose dark brown silty sand	0	Upper fill of well 299	229	0	3
218	Fill	0.40m thick	Loose mid brown silty coarse sand	0	Fill of well 229	229	0	2
219	Fill	0.30m thick	Soft mid blue grey sandy silt with lenses of iron pan	0	Fill of well 229	229	0	2
220	Fill	0.25m thick	Friable pale greenish brown silty sand, occasional patches of charcoal	0	Fill of ditch 221	221	0	7
221	Ditch	4.1m x 0.40m x 0.25m	Linear, N-S oriented, steep near vertical sides, flat base	0	Boundary ditch or robber trench	0	220	7
222	Posthole	0.75m diameter x 0.20m deep	Circular, near vertical sides, flat base	0	Packed posthole	0	223, 224	5
223	Fill	0.20m thick	Limestone fragments up to 300mm x 100mm x 40mm	0	Stone packing for posthole 222	222	0	5
224	Fill	0.10m thick	Loose mid brownish yellow silty sand	0	Fill to secure stone packing 223 in posthole 222	222	0	5
225	Pit	2.40m x 0.75m x 0.40m	Elongated, steep sides, concave base	0	Elongated pit	0	226, 227	3
226	Fill	0.10m thick	Mottled yellowish orange sand with dark brown silty clayey sand	0	Redeposited natural in base of pit 225	225	0	3
227	Fill	0.30m thick	Very dark brown almost black silty clayey sand	0	Secondary fill of pit 225	225	0	3
228	Fill	0.20m thick	Loose mid brownish grey silty sand, occasional charcoal flecks	0	Fill of post pipe in posthole 222	222	0	5
229	Well	4.20m x 2.40m x 1.30m	Sub-circular, steep sides, slightly steeped on eastern side, flat base	0	Well	0	217, 218, 219, 359, 360	2

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230	Fill	0.40m thick	Soft mid greyish brown silty sand, occasional small stones	24	Fill of ditch 231	231	0	1
231	Ditch	17.25m x 1.50m x 0.40m	Linear, E-W oriented, moderately steep sides, concave base	0	Boundary ditch	0	230, 277	1
232	Posthole	1.02m x 0.80m x 0.30m	Sub-circular, vertical sides, concave base	0	Cut of posthole	0	223, 234, 235	5
233	Fill	0.30m thick	Limestone fragments, up to 280mm x 220mm x 70mm	0	Packing within posthole 232	232	0	5
234	Fill	0.27m thick	Loose mid brown silty sand	0	Fill behind packing stones in posthole 232	232	0	5
235	Fill	0.28m diameter x 0.30m thick	Loose dark brown silty sand	0	Fill of post pipe within posthole 232	232	0	5
236	Ditch	4.1m x 0.50m x 0.35m	Linear, N-S oriented, steep to gradual sides, concave base	0	Possible boundary ditch	0	257	7
237	Fill	0.42m thick	Mid to dark greyish brown sandy silt	0	Fill of pit 238	238	0	4
238	Pit	1.30m x 1.10m x 0.42m	Sub-circular, moderately steep sides, concave base	0	Pit	0	237	4
239	Fill	0.32m thick	Mid to dark greyish brown sandy silt	0	Fill of pit 240	240	0	4
240	Pit	1.05m x 0.85m x 0.32m	Sub-circular, moderately steep sides, concave base	0	Pit	0	239	4
241	Pit	2.0m x 1.46m x 0.40m	Sub-circular, moderately steep sides, concave base	0	Pit, possible rubbish pit	0	242, 243, 262	5
242	Fill	0.24m thick	Soft dark greyish brown silty sand	0	Upper fill of pit 241	241	0	5
243	Fill	0.46m thick	Limestone slabs, trimmed not dressed, up to 500mm x 400mm x 80mm, no coursing but laid flat in a pile	0	Store of large flat limestone slabs in pit 241	241	0	5
244	Pit	2.25m x 0.60m x 0.28m	Sub-oval, moderately steep sides, irregular base	0	Pit	0	245	4
245	Fill	0.28m thick	Loose mid greyish brown silt sand, occasional charcoal flecks	26	Fill of pit 244	244	0	4
246	Pit	1.80m x 0.80m x 0.24m	Sub rectangular, steep sides, flat base	0	Pit	0	247	5
247	Fill	0.24m thick	Loose dark greyish brown silty sand	0	Fill of pit 246	246	0	5
248	Pit	2.30m x 2.20m x 0.40m	Sub-circular, moderately steep sides, flat base	0	Pit	0	249, 250	5
249	Fill	0.32m thick	Loose dark brownish grey silty sand, occasional charcoal flecks	11	Primary fill of pit 248	248	0	5
250	Fill	0.28m thick	Loose mid greyish brown silty sand	0	Secondary fill of pit 248	248	0	5
251	Fill	0.31m thick	Loose mid brown sandy silt with yellow sand patches, frequent charcoal flecks	0	Fill of ditch 252	252	0	4

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252	Ditch	1.47m x 0.55m x 0.31m	Linear, E-W oriented, moderately steep sides, flat base, deeper at eastern end	0	Ditch, possible boundary feature		251	4
253	Fill	0.23m thick	Loose light greyish brown silty sand	0	Fill of grave 255	255	0	3
254	Skeleton	0	Infant, crouched, E-W oriented, head to the west, facing north	0	Infant burial	255	0	3
255	Grave	0.58m x 0.25m x 0.23m	Sub oval, irregular sides, flat base, 0.58m x 0.25m x 0.23m deep	0	Grave cut for infant burial	0	253, 254	3
256	Wall	1.8m x 0.6m x 0.3m	Limestone, cobbles and fragments, 300mm x 200mm x 100mm with two large flat limestone slabs on top, possible 1 or 2 collapsed courses, no bonding material	0	Possible collapsed wall	0	0	6
257	Fill	0.35m thick	Soft light greenish brown silty sand	0	Fill of ditch 236	236	0	7
258	Pit	0.50m x 0.27m x 0.10m	Sub-oval , gradual sides, concave base	0	Pit	0	259	5
259	Fill	0.10m thick	Loose dark grey silty sand, occasional charcoal flecks	0	Fill of pit 258	258	0	5
260	Posthole	0.50m x 0.32m x 0.18m	Sub-circular, gradual sides, concave base	0	Small pit or posthole	0	261	5
261	Fill	0.18m thick	Loose light grey silty sand, occasional charcoal flecks	0	Fill of pit/posthole 260	260	0	5
262	Fill	0.22m thick	Soft mid brown silty sand	0	Primary fill of pit 241	241	0	5
263	Pit	1.60m x 1.50m x 0.40m deep	Sub-circular, steep sides, concave base	0	Pit	0	264	4
264	Fill	0.40m thick	Loose dark brown silty sand, occasional charcoal flecks	0	Fill of pit 263	263	0	4
265	Pit	1.10m x 0.45m x 0.14m	Sub-oval, concave sides, concave base, 1.10m x 0.45m x 0.14m deep	12	Pit	0	266	1
266	Fill	0.14m thick	Mid to light grey and orange brown laminated silt, occasional charcoal flecks	12	Fill of pit 265	265	0	1
267	Ditch	10.30m x 1.02m x 0.36m deep	Linear, E-W oriented, moderately steep sides, flat base	0	Boundary ditch	0	268	3
268	Fill	0.36m thick	Soft mid greyish brown silty sand	0	Fill of ditch 267	267	0	3
269	Pit	0.50m x 0.15m x 0.18m	Sub-oval, concave sides, concave base	0	Pit	0	270	1
270	Fill	0.18m thick	Loose mid to light greyish brown sandy silt	17	Fill of pit 269	269	0	1
271	Pit	0.45m x 0.45m x 0.20m	Sub-circular, concave sides, concave base	0	Pit	0	272	1
272	Fill	0.20m thick	Loose mid to dark greyish brown silt, occasional flecks of	18	Fill of pit 271	271	0	1

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			charcoal					
273	Pit	1.0m diameter x 0.25m	Circular, steep sides, concave base	0	Pit	0	274	6
274	Fill	0.25m thick	Dark brown sandy silt	0	Fill of pit 273	273	0	6
275	Ditch	2.0m x 0.20m x 0.20m	Linear, E-W oriented, gradual sides, concave base	0	Heavily truncated ditch, possibly recut by 267	0	268	3
276	Fill	0.20m thick	Soft mid brown sandy silt		Fill of ditch 275	275	0	3
277	Fill	0.20m thick	Soft mid greyish brown silty sand	0	Fill of ditch 231	231	0	1
278	Fill	0.32m thick	Soft mid greyish brown silty sand	0	Fill pit 279	279	0	2
279	Pit	2.50m x 0.80m x 0.32m	Sub-rectangular, stepped side, flat base	0	Pit	0	278	2
280	Wall	0.80m x 0.80m x 0.12m	Limestone blocks, trimmed, 250mm x 240mm x 90mm, regular level coursing, no bonding material	0	Corner of a wall	448	0	4
281	Posthole	0.50m diameter x 0.24m deep	Circular, steep sides, concave base	0	Posthole		285	5
282	Fill	0.20m thick	Soft brownish grey silty sand	0	Fill of pit 283	283	0	3
283	Pit	1.2m x 1.2m x 0.20m	Sub semi-circular, moderately steep sides, concave base	0	Pit visible in base of pit 163	0	282	3
284	Layer	2.15m x 1.00m x 0.15m	Mixed soft mid brown silty sand and red sandy clay, occasional charcoal flecks	13	Spread of heat affected clay	0	0	5
285	Fill	0.24m thick	Light greenish brown silty sand	0	Fill of posthole 281	281	0	5
286	Fill	0.35m thick	Mixed compact red sandy clay, very dark grey gritty sand and mid to dark brown silty sand	14	Fill of pit 340, possibly production residue	340	0	6
287	Ditch	1.30m x 0.62m x 0.15m	Linear, N-S oriented, near vertical sides, uneven base	0	Boundary ditch or possible robber trench	0	288	7
288	Fill	0.15m thick	Soft dark brown sandy silt and large limestone fragments up to 260mm x 200mm x 40mm	0	Fill of ditch 287, possibly from robbed wall	287	0	7
289	Pit	1.6m x 0.60m x 0.10m	Compact light red sandy clay, occasional charcoal flecks	0	Score fill of pit 341, possibly production residue	341	0	6
290	Surface	21.27m x 4.0m x 0.20m	Medium limestone cobbles and subangular stones, 120mm x 120mm x 80mm, occasional smaller stones	0	Road surface	0	0	6
291	Layer	0.07m thick	Compact, yellowish brown gritty sand	0	Bedding layer for road surface 290	0	0	6
292	Layer	1.20m x 0.90m x 0.20m	Firm mixed yellow and brown sand, occasional charcoal flecks	0	Dumped layer or spread - domestic refuse?	0	0	6

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293	Surface	1.2m x 0.40m x 0.10m	Burnt limestone cobbles and rounded limestone fragments, 200mm x 100mm x 100mm, no coursing, no banding material	0	Floor surface	0	0	6
294	Well	4m x 1.90m x 0.90m	Sub-oval, steep sides, base not visible, not fully excavated	0	Well	0	321-328	4
295	Fill	0.19m thick	Soft mid brownish yellow silty sand	16	Upper fill of oven 297	297	0	5
296	Stone lining	1.35m x 0.70m x 0.26m	Limestone brash, flat slabs, 400mm x 250mm x 100mm, mainly on end or side, no bonding material, some scorching evident	0	Stone lining of oven 297, forming a keyhole shape	297	0	5
297	Oven	1.40m x 0.65m x 0.48m	Sub rectangular, near vertical sides, flat base	0	Stone-lined oven	0	295, 296, 329	5
298	Fill	0.43m thick	Loose dark brown silty sand	0	Fill of posthole 300	300	0	5
299	Fill	0.41m thick	Loose yellow sand and limestone fragments	0	Packing within posthole 300	300	0	5
300	Posthole	0.65m diameter x 0.43m	Circular, near vertical sides, flat base	0	Posthole	0	298, 299, 349	5
301	Pit	1.10m x 1.10m x 0.22m	Sub oval, gradual sides, flat base	0	Pit, possible cess/rubbish pit	0	302	3
302	Fill	0.22m thick	Soft greyish greenish brown silty sand	20	Fill of pit 301	301	0	3
303	Ditch	0	Root action - not planned	0	Root action	0	304	0
304	Fill	0	Soft greyish brown silty sand	0	Root action	303	0	0
305	Fill	0.18m thick	Loose dark brown silty sand	0	Fill of posthole 307	307	0	5
306	Fill	0.27m x 0.14m x 0.03m	Limestone fragments	0	Packing in posthole 307	307	0	5
307	Posthole	0.50m diameter x 0.31m deep	Circular, steep sides, concave base	0	Posthole	0	305, 306, 369	5
308	Fill	0.17m thick	Loose mid yellowish brown silty sand	0	Primary fill of posthole 310	310	0	5
309	Fill	0.25m thick	Loose mid brown silty sand, frequent large limestone fragments	0	Secondary fill of posthole 310	310	0	5
310	Posthole	0.50m diameter x 0.40m deep	Circular, steep sides, concave base	0	Posthole	0	308, 309	5
311	Fill	0.36m thick	Loose mid brown silty sand	0	Primary fill of posthole 313	313	0	5
312	Fill	0.26m thick	Loose mixed yellow and brown silty sand, frequent large limestone fragments	0	Upper fill of posthole 313, possible packing	313	0	5
313	Posthole	0.45m diameter x 0.36m deep	Circular, near vertical sides, irregular base	0	Packed posthole	0	311, 312	5
314	Fill	0.17m thick	Loose mid yellowish brown silty sand, occasional charcoal flecks	0	Primary fill of posthole 316	316	0	5

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315	Fill	0.14m thick	Loose mid brown silty sand, frequent large limestone fragments	0	Upper fill of posthole 316, possible packing	316	0	5
316	Posthole	0.60m x 0.60m x 0.28m	Sub-circular, near vertical sides, flat base	0	Packed posthole	0	314, 315	5
317	Fill	0.20m thick	Loose mid brown silty sand	0	Primary fill of posthole 319	319	0	5
318	Fill	0.05m thick	Loose mid yellowish brown silty sand, frequent large limestone fragments	0	Upper fill of posthole, possible packing	319	0	5
319	Posthole	0.55m x 0.40m x 0.27m	Sub-oval, steep sides, concave base	0	Posthole	0	317, 318	5
320	Fill	0.25m thick	Compact red clayey sand mixed with brown silty sand	0	Fill of pit 337, possible production residue	337	0	5
321	Fill	0.11m thick	Soft greyish brown silty sand	0	Fill of well 294	294	0	6
322	Fill	0.42m thick	Soft mid orange brown silty sand, occasional medium sized lumps of charcoal	0	Fill of well 294	294	0	6
323	Fill	0.15m thick	Soft dark grey silty sand	0	Fill of well 294	294	0	6
324	Fill	0.10m thick	Soft light to mid brown silty sand	0	Fill of well 294	294	0	6
325	Fill	0.03m thick	Orange gravely sand	0	Fill of well 294, probable slumping	294	0	4
326	Fill	0.48m thick	Soft mixed mid grey and light brown silty sand, moderate charcoal flecks	0	Fill of well 294	294	0	6
327	Fill	0.21m thick	Soft light brownish grey silty coarse sand	31	Fill of well 294	294	0	4
328	Fill	0.30m thick	Soft brownish grey silty clayey sand	32	Fill of well 294	294	0	6
329	Fill	0.07m thick	Loose mottled red, light brown and light yellow silty sand, frequent charcoal	30	Fill of oven 297	297	0	5
330	Fill	0.55m thick	Loose mid brown silty sand, occasional limestone fragments	0	Fill of large posthole 331	331	0	5
331	Posthole	0.75m diameter x 0.55m deep	Circular, vertical sides, concave base	0	Large posthole	0	330	5
332	Layer	2.50m x 0.45m (as seen) x 0.07m thick	Soft grey sand	0	Bedding layer for wall 335	0	0	3
333	Layer	6.70m x 6.60m x 0.20	Compact mid yellow silty sand, occasional charcoal flecks	28	Made ground on north side of Roman road	0	0	5
334	Layer	12m x 5.2m x 0.47m	Mottled mid brown and dark brown silty sand	29	Made ground on northern side of Roman road	0	0	4
335	Wall	0.20m x .015m x 0.10m	Limestone brash, 200m x 150mm x 100mm, regular courses, at least 4 visible, no banding material	0	E-W wall, part of a roadside building	3360	0	3

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336	Construction cut	0.40m wide x 0.10m deep	Linear, E-W oriented, vertical sides, flat base	0	Cut for wall 335, same as 452	0	335	3
337	Pit	1.5m x 0.40m x 0.25m	Sub-rectangular, moderately steep sides, base not visible	0	Heavily truncated pit	0	320	5
338	Layer	2.8m x 0.65m	Mottled brown silty sand with extensive yellow patches	0	Made ground or bedding layer for stone surface	0	0	6
339	Layer	2.0m x 1.0m x 0.15m	Mottled yellow sand and mid brown silty sand	0	Made ground or a bedding layer for a stone surface	0	0	5
340	Pit	1.0m x 0.40m x 0.35m	Single, fairly straight edge visible, moderately steep side, concave base	0	Pit, possibly same as 341	0	286	6
341	Pit	1.60m x 0.50m x 0.10m	Sub semi-circular, moderately steep sides, base not visible	0	Pit, possibly same as 340	0	289	6
342	Layer	10.0m wide x 0.20m thick	Greyish brown sandy silt	0	Made ground or bedding layer, same as 334	0	0	4
343	Layer	3.60m x 1.40m	Mixed soft yellow sand and mid brown silty sand	0	Made ground or bedding/levelling layer	0	0	4
344	Surface	0.70m x 0.36m	Worn limestone blocks, 200mm x 100mm x 100mm, no coursing, no bonding material	0	Floor surface	0	0	5
345	Fill	Unexcavated	Compact yellowish brown clay, frequent charcoal and scorched clay	0	Fill of pit or spread, possible production residue	0	0	6
346	Ditch	14.2m x 1.40m x 0.39m	Linear, N-S oriented, steep sides, concave base	0	Boundary ditch	0	347, 348	3
347	Fill	0.17m thick	Soft greyish brown silty sand	0	Primary fill of ditch 346	346	0	4
348	Fill	0.23m thick	Soft greyish brown silty sand, moderate charcoal flecks	0	Secondary fill of ditch 346	346	0	4
349	Fill	0.39m thick	Loose dark brown silty coarse sand	0	Backfill behind packing stones in posthole 300	300	0	5
350	Robber cut	1.80m x 0.55m x 0.30m	Linear, E-W oriented, vertical sides, flat base	0	Cut of robber trench through wall 352	0	351	5
351	Fill	0.30m thick	Dark brown silty sand		Fill of possible robber trench 350	350		5
352	Wall	7.1m x 0.45m x 0.26m	E-W oriented wall with northward return of 2.15m at eastern end. Limestone brash 280mm x 270mm x 50mm, pitched or herringbone coursing, no bonding material		Wall foundation of a roadside building	353		5
353	Construction cut	7.1m x 0.6m x 0.2m	Linear, E-W oriented, turns to the north at the eastern end, vertical sides, flat base		Construction cut for wall 352	0	352	5
354	Ditch	4.2m x 1.45m x 0.2m	Linear, E-W oriented, gradual sides, concave base		Possible roadside drainage ditch or	0	355	6

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					boundary ditch			
355	Fill	0.20m thick	Dark brown silty sand, moderate charcoal flecks, occasional limestone fragments		Fill of ditch 354	354		6
356	Layer	8.5m x 0.7m x 0.05m	Limestone brash fragments, up to 30mm x 260mm x 40mm		Possible yard surface or road widening			6
357	Layer	8m x 1.4m x 0.48m	Mottled yellow and brown silty sand, moderate small limestone fragments		Possible made ground against south side of road			5
358	Layer	3.7m x 3.3m x 0.1m	Limestone brash fragments, up to 400mm x 400mm x 70mm, laid flat one course thick		Possible floor/yard surface or road widening			6
359	Fill	0.8m thick	Mid grey silty sand, frequent small limestone fragments, 0.8m thick		Primary fill of well 229	229		2
360	Fill	0.40m thick	Lenses of mid brown/yellow/mid grey silty sand, occasional limestone fragments		Fill of well 229. Possible slumping of sides			2
361	Layer	6.7m x 1.7m x 0.15m	Mid yellow silty sand, occasional charcoal flecks		Made ground/ground levelling			5
362	Pit	0.82m x 0.73m	Sub-circular, unexcavated		Pit or posthole		363, 364	6
363	Fill	-	Large, flat limestone fragments. Unexcavated		Possible packing material within a posthole	362		6
364	Fill	-	Mid greyish brwn silty sand, frequent small stones. Unexcavated		Fill of pit or posthole 362	362		6
365	Ditch	4.3m x 0.5m x 0.19m	Linear, NE-SW oriented with rounded terminus at NE end. Moderately steep concave sides and base		Possible boundary feature		366	1
366	Fill	0.19m thick	Mid to light greyish brown silt, occasional small stones		Fill of ditch 365	365		1
367	Ditch	7m x 1.42m x 0.25m	Linear, NE-SW oriented, moderately steep sides, concave base		Possible roadside enclosure ditch		368	1
368	Fill	0.25m thick	Mid to light greyish brown sandy silt, occasional small stones		Fill of ditch 367	367		1
369	Fill	0.40m thick	Mid brown silty sand, occasional limestone fragments		Fill of posthole 310	310		5
370	Posthole	0.5m diameter x 0.20m	Circular, steep sides, flat base		Posthole		371	5
371	Fill	0.20m thick	Mid brown silty sand and large limestone fragments		Fill of posthole 370, may include packing stones	370		5
372	Ditch	3.45m x 0.8m x 0.32m	Linear, E-W oriented, moderately steep sides, concave base		Possible roadside ditch		373	4

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373	Fill	0.32m thick	Mid to light greenish brown sandy silt, frequent gravel, occasional charcoal flecks, occasional large limestone fragments		Fill of ditch 372	372		4
374	Surface	2.2m x 1.50m x 0.05m	Limestone brash, 300m x 260mm x 40mm, single course, no bonding material. Some stones appeared scorched but not scorched in situ		Possible floor surface			6
375	Ditch	2.6m x 0.34m x 0.26m	Curvilinear with rounded terminus at southern end, steep sides, narrow concave base		Possible ring gully		376, 377, 378, 379	1
376	Fill	0.14m thick	Mid to dark brown silty sand with orange mottling, frequent small stones		Primary fill of ring gully 375	375		1
377	Fill	0.16m thick	Mid to dark brown silty sand with orange mottling, frequent small stones		Primary fill at terminus of ring gully 375	375		1
378	Fill	0.12m thick	Mid to dark brown silty sand, occasional small stones	19	Upper fill of ring gully 375	375		1
379	Fill	0.10m thick	Mid to dark brown silty sand, occasional small stones		Upper fill at terminus of ring gully 375	375		1
380	Fill	0.20m thick	Mid yellowish brown silty sand, occasional small limestone fragments, occasional charcoal flecks		Fill of posthole 382	382		5
381	Fill	0.20m thick	Limestone brash fragments 150mm x 100mm x 50mm		Packing within posthole 382	382		5
382	Posthole	0.50m diameter x 0.20m	Circular, steep sides, concave base		Packed posthole		380, 381	5
383	Fill	0.30m thick	Mid yellowish brown silty sand, occasional limestone fragments, occasional charcoal flecks		Fill of posthole 384	384		5
384	Posthole	0.50m diameter x 0.30m	Circular, steep sides, concave base		Posthole		383	5
385	Ditch	2.10m x 0.95m	Linear, E-W oriented, unexcavated		Possible roadside or enclosure ditch		386	6
386	Fill	unexcavated	Dark brown silty sand, occasional charcoal flecks, occasional limestone fragments		Fill of ditch 385	385		6
387	Layer	2.20m x 1.82m	Mixed yellow and brown silty sand, occasional limestone fragments, unexcavated		Possible made ground on south side of road			5
388	Group	8.30m long	Several discrete elements of masonry		E-W oriented wall, part of a roadside building		397, 398, 399, 400, 401	5

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389	Wall	7m x 3.5m	Limestone brash up to 200mm x 180mm x 40mm, pitched or herringbone coursing (2 courses visible max), no bonding material.		Fragmentary wall of roadside building	451		4
390	Void	-	Void		Void	0		0
391	Wall	0.90m x 0.40m	Limestone brash, 190mm x 160mm x 30mm, possible pitched or herringbone coursing, no bonding material		Possible fragment of wall			4
392	Layer	4.35m x 1m	Compact, dark grey silty sand with gravel, frequent small limestone fragments		Make up layer for Roman road			4
393	Fill	0.30m thick	Mid to dark greyish brown sandy silt, occasional limestone fragments, occasional gravel		Fill of ditch 394	394		3
394	Ditch	1.40m wide x 0.30m deep	Linear. E-W oriented, moderately steep concave sides, concave base		Possible roadside ditch		393	4
395	Fill	0.32m thick	Mid to light greyish brown silty sand, occasional small stones		Fill of ditch 396	396		1
396	Ditch	2.20m x 1m x 0.32m	Curvilinear, moderately steep sides, generally flat base		Possible roadside enclosure ditch	0		1
397	Wall	0.64m x 0.30m	Limestone brash, 260mm x 100mm x 30mm, pitched or herringbone coursing, no bonding material. 2 courses present		Fragment of E-W wall, part of a roadside building			5
398	Wall	0.54m x 0.22m	Limestone brash, 200mm x 180mm x 30mm, pitched or herringbone coursing, no bonding material		Fragment of E-W wall, part of a roadside building	0		5
399	Wall	0.60m x 0.40m	Limestone brash, 220mm x 200mm x 40mm, pitched or herringbone coursing, one course visible		Fragment of E-W wall, part of a roadside building			5
400	Wall	0.54m x 0.30m	Limestone brash, 300mm x 220mm x 50mm, pitched or herringbone coursing, no bonding material		Fragment of E-W wall, part of a roadside building			5
401	Wall	0.50m x 0.34m	Limestone brash, 240mm x 100mm x 40mm, pitched or herringbone coursing, no bonding material		Fragment of E-W wall, part of a roadside building			5
402	Layer	11m x 3.80m x 0.20m	Mixed yellow and brown silty sand, moderate limestone fragments, moderate shell fragments		Made ground or levelling deposit			4
403	Layer	4.2m wide x 0.20m thick	Compact mid grey sand and gravel		Road make-up for early road surface	0		1

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404	Layer	1.70m x 0.12m thick	Mottled mid brown and yellow silty sand		Possible levelling layer			5
405	Surface	1.43m x 0.08m thick	Compact mid to light grey gravel		Earliest road surface			1
406	Wall	1.20m x 0.30m	Limestone brash, 200mm x 160mm x 30mm, pitched or herringbone coursing, no bonding material		Fragment of E- W wall, part of a roadside building			3
407	Wall	11.50m x 0.38m x at least 0.30m high	Limestone brash, 200m x 150mm x 100mm, regular courses, at least 4 visible, no banding material		E-W wall, part of a roadside building	0		3
408	Layer	2.95m x 0.20m thick (max)	Compact orange gravel and limestone fragments		Road make up	0		4
409	Layer	2.36m x 0.26m thick	Mottled yellow/brown silty sand, occasional small stones		Made ground on northern side of road			4
410	Fill	0.36m thick	Mid to dark brown silty sand, occasional small stones		Fill of ditch 411	411		4
411	Ditch	1.26m wide x 0.36m deep	Linear, E-W oriented, gradual sides, flat base		Roadside ditch		409	3
412	Layer	0.90m wide x 0.19m thick	Compact mid to dark brown silty sand, frequent gravel		Road make up			4
413	Fill	0.27m thick	Mid to dark brown silty sand, frequent small stones, frequent charcoal flecks		Fill of ditch 414	414		1
414	Ditch	0.82m wide x 0.27m deep	Linear, E-W oriented, no edges visible, flat base		Possible roadside or enclosure ditch			1
415	Fill	0.65m thick	Dark greyish brown gritty silty sand, moderate charcoal flecks, occasional limestone fragments		Fill of pit 416	416		2
416	Pit	2.40m x 1.80m x 0.65m	Sub-oval, steep, near vertical sides, concave base		Pit		415	2
417	Fill	0.35m thick	Dark greyish brown sandy silt, frequent charcoal flecks		Fill of ditch 418	418		3
418	Ditch	At least 1.15m wide x 0.35m deep	Single edge visible, linear, moderately steep, flat base		Possible ditch but could be a large pit		417	3
419	Fill	0.24m thick	Light brwn silty clay, occasional small sub- rounded pebbles		Fill of ditch 420	420		2
420	Ditch	1m wide x 0.24m deep	Linear, E-W oriented, moderately steep sides, flat base		Possible boundary ditch		419	2
421	Fill	0.24m thick	Mid brownish grey clayey sand		Fill of ditch 422	422		4
422	Ditch	0.80m wide x 0.24m deep	Linear, E-W oriented, moderately steep sides, concave base		Possible bounday ditch or feature within building		421	4
423	Fill	Not excavated	Mid to dark brow silty sand, frequent stones of varying size		Fill of possible well 424	424		2

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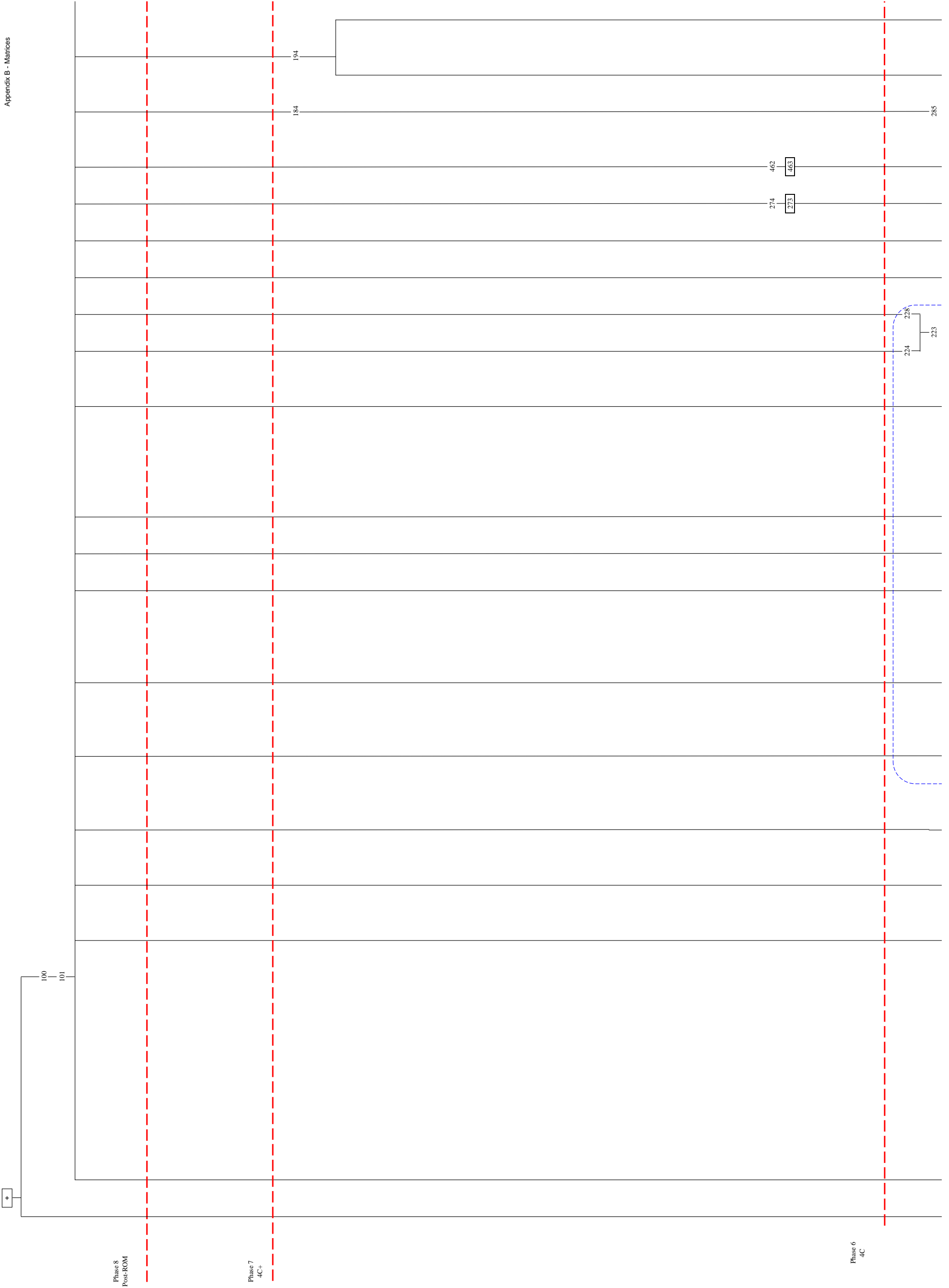
424	Well	4.0m x 3.10m unexcavated	Sub-oval in plan, unexcavated		Probable well		423	2
425	Ditch	2.60m x 0.70m x unexcavated	Linear, NW-SE oriented, unexcavated		Possible boundary ditch		426	1
426	Fill	Unexcavated	Mid brown silty sand		Fill of ditch 426	426		1
427	Ditch	1.70m x 0.80m x unexcavated	Linear, NW-SE oriented		Ditch, probable continuation of ditch 425	0	428	1
428	Fill	Unexcavated	Mid brown silty sand		Fill of ditch 427	427		1
429	Ditch	2.80m x 0.80m x unexcavated	Linear, E-W oriented, unexcavated		Possible boundary ditch		430	1
430	Fill	Unexcavated	Light to mid brown silty sand, occasional small stones.		Fill of ditch 429	429		1
431	Ditch	1.22m x 1.08m x unexcavated	Linear, E-W oriented, unexcavated		Ditch, may be a continuation of 267 or 429	0	432	3
432	Fill	Unexcavated	Light to mid brown silty sand, occasional small to medium stnes, unexcavated		Fill of ditch 431	431		3
433	Pit	2.50m x 0.75m x unexcavated	Partially visible, sub- rectangluar, E=-W oriented, unexcavated		Large pit		434	2
434	Fill	Unexcavated	Mid brown silty sand		Fill of pit 433	433		2
435	Ditch	3.80m x 0.40m x unexcavated	Linear, NW-SE oriented, unexcavated		Boundary ditch		436	2
436	Fill	Unexcavated	Mid brown silty sand, occasional small and medium stones, unexcavated		Fill of ditch 435	435		2
437	Pit	1.37m x 1.10m x unexcavated	Sub-circular, unexcavated		Pit		438	6
438	Fill	Unexcavated	Mid to dark brown silty sand, moderate medium to to large stones, unexcavated		Fill of pit 437	437		6
439	Posthole	0.75m x 0.40m	Partially revealed, sub semi-circular as seen, unexcavated		Packed posthole	440		5
440	Fill	Unexcavated	Mid brown silty sand with large limestone fragments		Fill of posthole 439 with probable post packing	439		5
441	Posthole	0.50m x 0.50m x unexcavated	Not fully revealed, sub- circular, unexcavated		Packed posthole	0	442	5
442	Fill	Unexcavated	Mid brown silty sand and large limestone fragments		Fill of posthole 441 with probable post packing	441		5
443	Layer	3.10m long x 0.36m wide	Yellowish brown gritty sand, unexcavated		Floor make-up or levelling deposit. Same as 339			5
444	Layer	2.50m x 2.10m x unexcavated	Yelowish brown silty sand with patches of coarse yellow sand, occasional limestone fragments		Made ground or bedding layer for stone surface			6

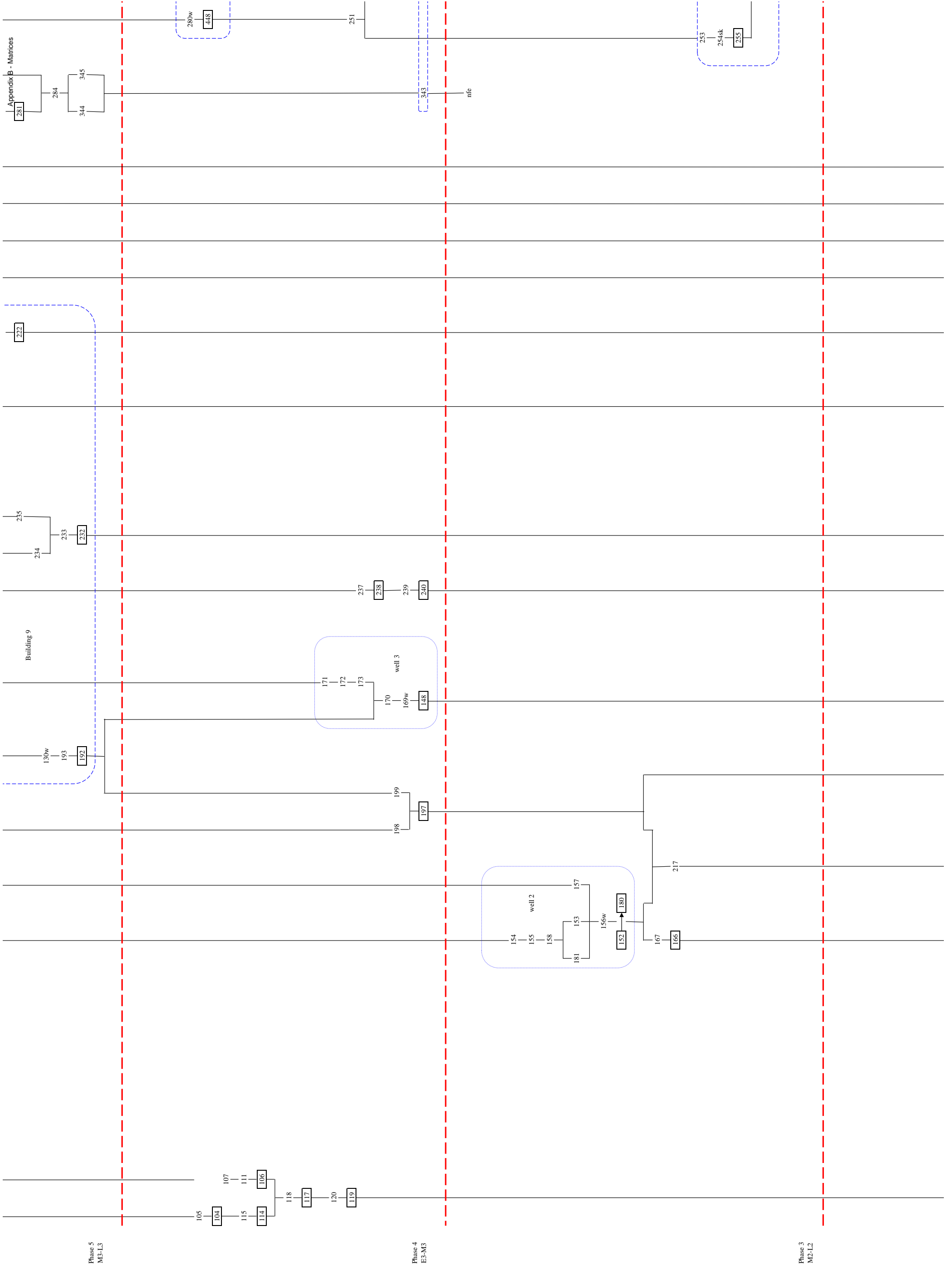
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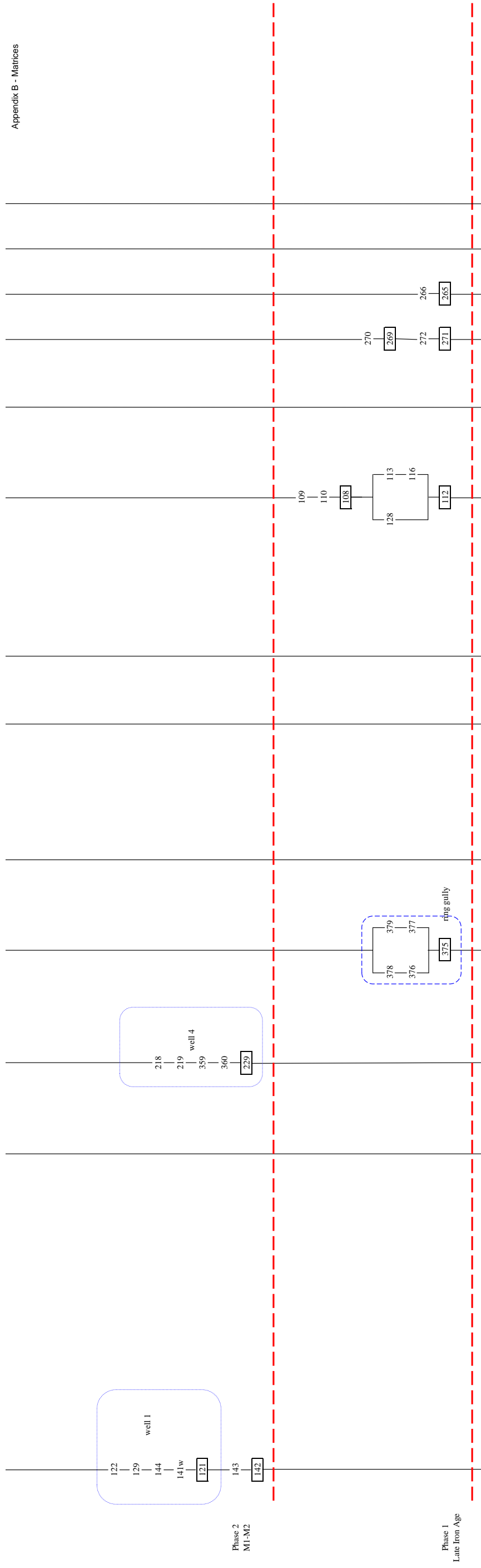
445	Layer	1.30m x 2m	Yellowish brown silty sand with patches of coarse yellow sand		Made ground or bedding layer for stone surface			6
446	Void		Void		Void	0		0
447	Layer	0.30m x 1.50m x unexcavated	Yellow coarse sand, occasional charcoal flecks, occasional limestone fragments		Probable made ground or levelling			3
448	Construction cut	0.80m x 0.80m x unexcavated	Sub-triangular in plan as seen, unexcavated		Construction cut for wall 280		280	4
449	Layer	3m x 1.3m x unexcavated	Mottled brown/yellow silty sand, occasional small limestone fragments		Made ground or levelling, possibly same as 338			6
450	Void		Void		Void	0		0
451	Construction cut	6.60m x 0.40m x 0.10m	Linear, E-W oriented, steep, near vertical sides, flat base		Construction cut for wall 389		389	4
452	Construction cut	0.40m wide x 0.10m deep	Linear, E-W oriented, vertical sides, flat base		Construction cut for wall 407		407	3
453	Surface	2.30m x 0.65m x unexcavated	Limestone brash, 150mm x 150mm x 100mm, no coursing, no bonding material		Yard or floor surface			4
454	Construction cut	4m x 0.55m x 0.10m	Linear, E-W oriented, vertical sides, flat base		Construction cut for wall 123		123	6
455	Construction cut	1.30m x 0.50m x 0.10m	Linear, E-W oriented, vertical sides, flat base		Construction cut for wall 455		455	6
456	Construction cut	0.70m x 0.35m x 0.10m	Linear, E-W oriented, vertical sides, flat base		Construction cut for wall 457		457	6
457	Wall	0.65m x 0.32m x 0.10m	Limestone brash, 200mm x 150mm x 80mm, pitched or herringbone coursed, 2 courses visible, E-W oriented		Roadside building wall, continuation 123 and 127	456		6
458	Fill	Unexcavated	Dark brown silty sand, occasional charcoal flecks, unexcavated		Fill of ditch 459	459		1
459	Ditch	2.95m x 0.50m x unexcavated	Linear, E-W oriented, unexcavated		Boundary ditch		458	1
460	Fill	Unexcavated	Dark brown silty sand, occasional charcoal flecks		Fill of ditch 461	461		1
461	Ditch	2m x 1.10m	Linear, NE-SW oriented, unexcavated		Boundary ditch		460	1
462	Fill	Unexcavated	Dark brown silty sand and limestone fragments up to 300mm x 150mm x 100mm. Unexcavated		Fill and probable packing of postholes 463	463		6
463	Posthole	0.60m diameter x unexcavated	Sub-circular, unexcavated		Packed posthole		462	6
464	Wall	0.58m x 0.40m x unexcavated	Limestone brash, 150mm x 100mm x 100mm, no coursing apparent, no bonding material.		Possible remnant of N-S wall			5

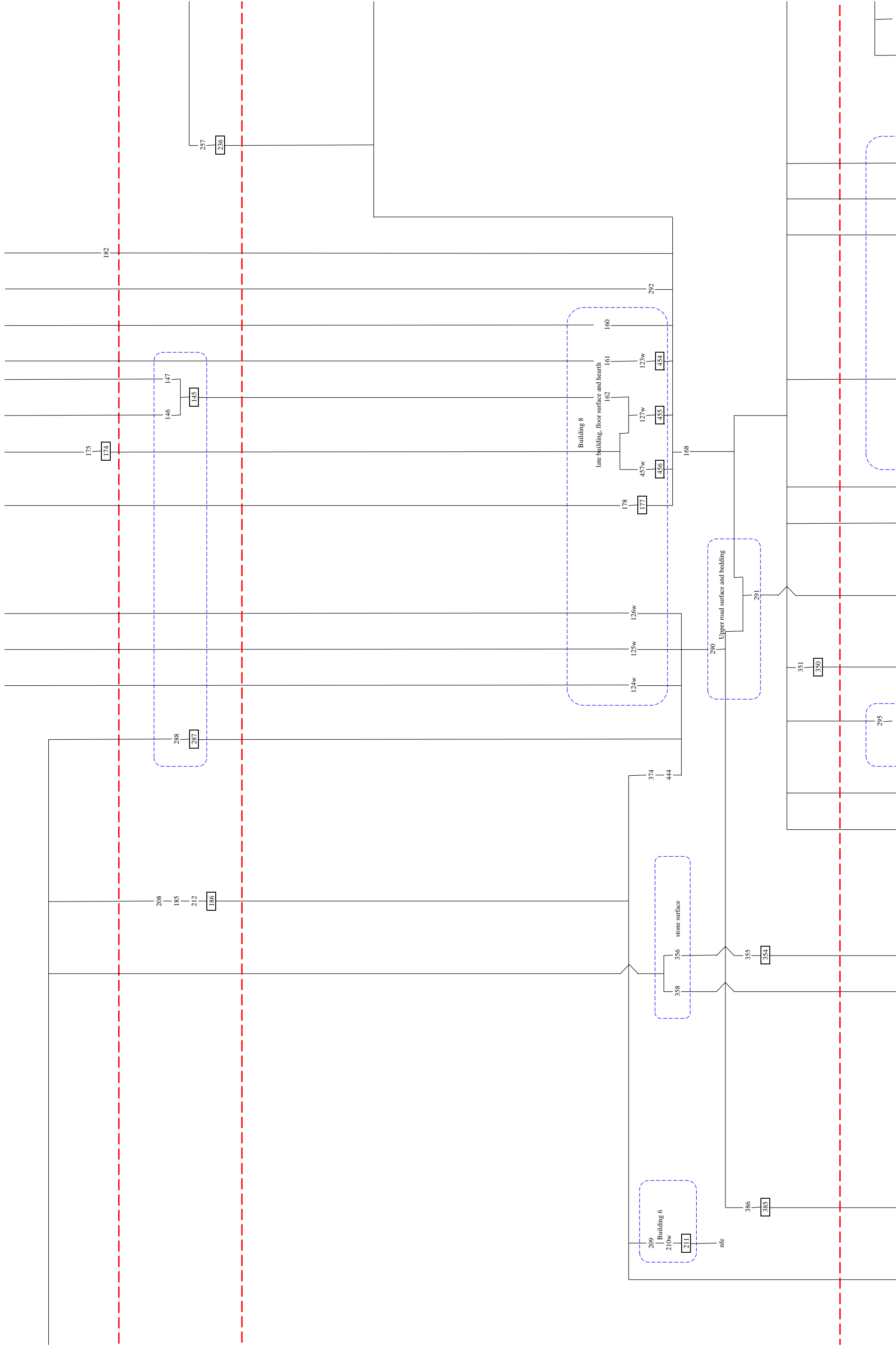
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465	Wall	0.32m x 0.40m x unexcavated	Limestone brash, 150mm x 100mm x 80mm, no coursing evident, no bonding material		Possible remnant of N-S wall			5
466	Wall	0.62m x 0.42m x unexcavated	Limestone brash, 150mm x 100mm x 80mm, no coursing evident, no bonding material		Possible remnant of N-S wall			5
467	Wall	0.30m x 0.30m	Limestone broash, 150mm x 80mm x 80mm, no coursing evident, no bonding material		Possible remnant of N-S wall			5
468	Fill	0.20m thick	Mid brown sandy silt, occasional charcoal flecks, occasional limestone fragments		Fill of pit 466	466		5
469	Fill	0.20m thick	Limestone brash fragments 240mm x 100mm x 80mm average		Stone lining of pit 466	470		5
470	Pit	0.80m x 0.60m x 0.20m	Sub-oval, steep sides, flat base		Stone-lined pit	0	468, 469	5







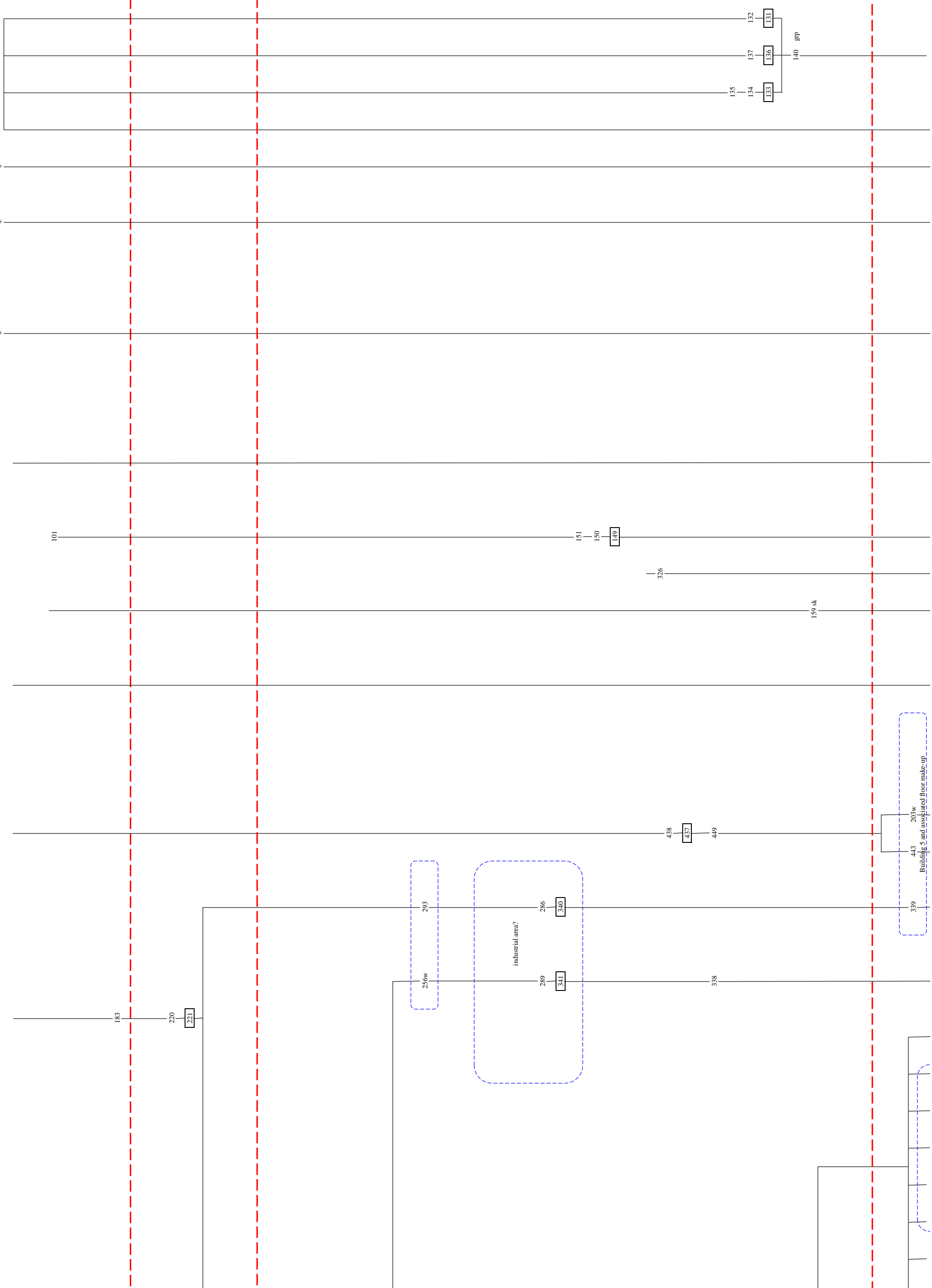




Phase 8
Post-ROM

Phase 7
4C+

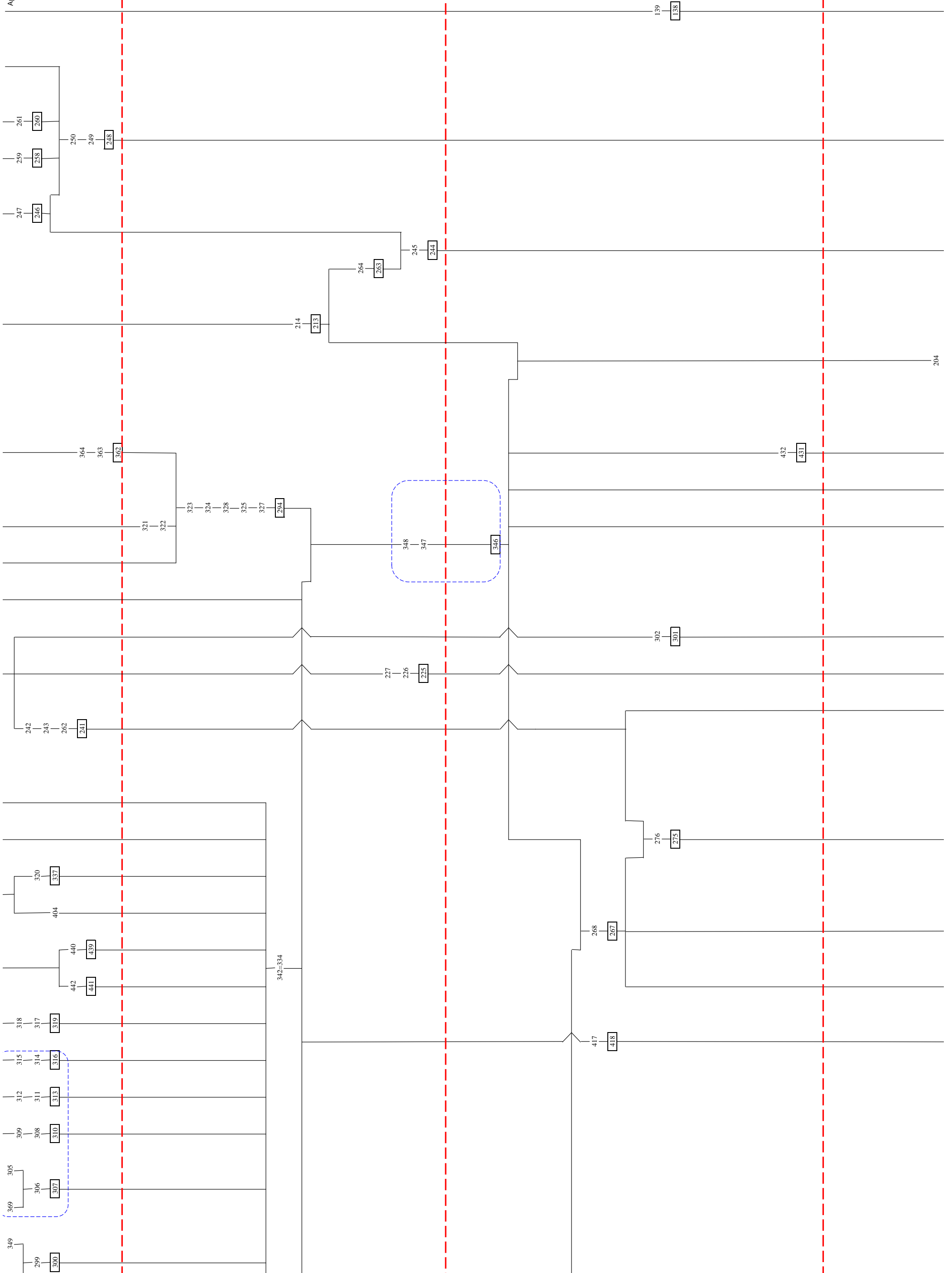
Phase 6
4C

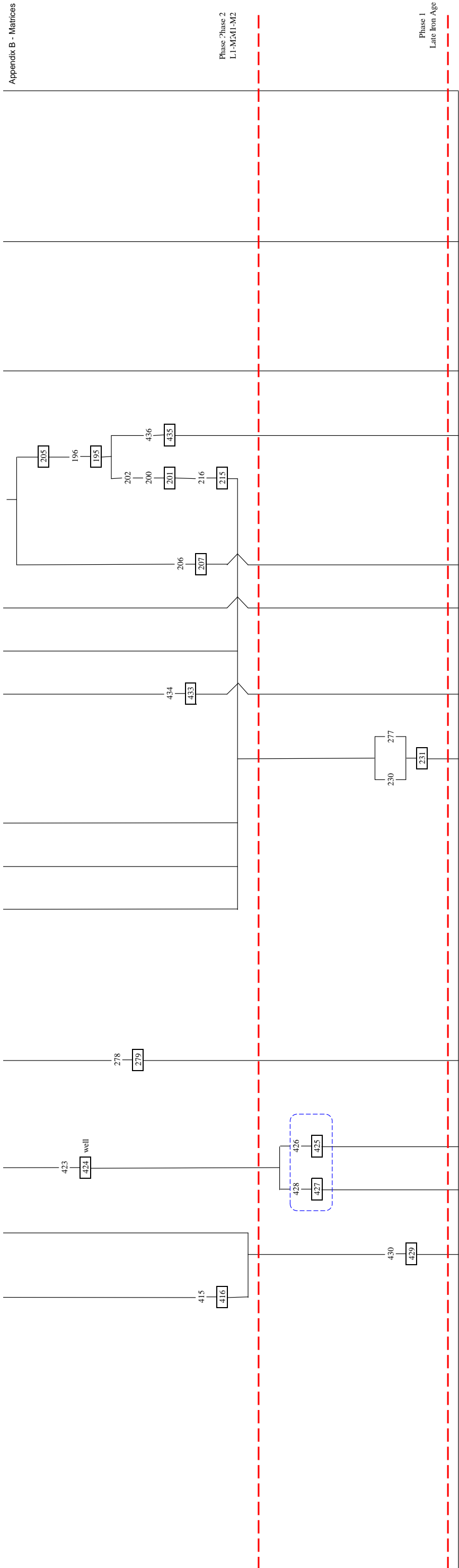


Phase 5
M3-L3

Phase 4
E3-M3

Phase 3
M2-L2





A report on the Iron Age and Roman pottery from Hoplands, Sleaford, Lincolnshire (HOPS09)

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SUMMARY

This group of pottery from Sleaford consists of 2198 sherds, weighing 53.409 kg, RE 37.46, from 103 contexts. The pottery was retrieved during a scheme of archaeological excavations. It is one of the larger quantified groups of Iron Age and Roman pottery from Sleaford. Of this group just under a quarter of the assemblage dates to the Late Iron Age Period, some of which is residual in later groups. The Iron Age pottery includes a large pit group including a decorated vessel typical of others known from Sleaford but the cracking and spalling evident on sherds from the group and the homogenous nature of the group raises the possibility that the shallow feature represents a pottery clamp for the production of Iron Age pottery. Other Iron Age groups include native carinated bowls, platters and storage jars. A fragment of a Terra Nigra platter imported from Gaul also dates to the late Iron Age highlighting that Iron Age inhabitants of the site had access to finewares imported from the Continent.

The Roman pottery from the site includes a range of pottery which suggests continued activity on the site from the 1st century AD into the late 4th century AD. The pottery from the site was mostly retrieved from pits and the back filling of wells including a number of near complete vessels and large groups. The inhabitants of the site had access to a variety of imported amphora born goods and imported pottery such as samian. A number of vessels show signs of being customised to function as discs or counters, a lid and a pestle. Other vessels were pierced perhaps to function as strainers. A number of vessels were deposited in a nearly complete state raising the possibility of 'selected' deposits or primary waste deposition. The majority of the cooking wares appear to have been provided by local sources with shell gritted vessels commonly used throughout the Roman period. External sooting and internal calcareous deposits indicative of use of the fire in the kitchen or for an industrial process is evident on a number of the jars. Later Roman fine ware beakers and bowls produced by the Nene Valley potters were in use on the site. The presence of distinctive cook pot and bowl forms in the later phases of the site suggest that the settlement continued to be active until the end of the period of Roman pottery production. Another example of a fine ware face flagon is present in this group adding to a growing number found from Sleaford and providing further evidence of the ritual observances of the Roman inhabitants of the settlement.

METHOD

The pottery has been archived using count and weight as measures according to the guidelines laid down for the minimum archive by *The Study Group for Roman Pottery* (Darling 2004) using the codes developed by the City of Lincoln Archaeological Unit- CLAU (see Darling and Precious *forthcoming*). Rim equivalents (RE) have been recorded for the stratified groups and an attempt at a 'maximum' vessel estimate has been made following Orton (1975, 31). The pottery has been bagged by fabric and vessels selected as suitable for illustration have been bagged separately for ease of future reference. Samian and mortaria have also been extracted and bagged along with the vessels selected as fabric samples or suitable for illustration. The report was produced on the basis of a phased context list, plans and a matrix provided by Gavin Glover and Janey Brant of Network Archaeology. The description of fabrics, archive record, samian archive and list of codes used is an integral part of this report and will be curated in an Access database, available from the author in a digital format.

It should be noted that 'very late 4th century' is used interchangeably with 'final Roman' in this report. The pottery is dated by typology and it is possible that some of the 'final Roman' pottery from this site and others in Lincolnshire remained in use and circulation into the 5th century AD. The groups of pottery from this site do not help to clarify this chronological question.

CONDITION

The ceramics presented for assessment totalled 2198 sherds, weighing 53.409 kg, RE 37.46, from 103 contexts from a scheme of archaeological excavation. The majority pottery is fresh or very fresh, the average sherd weight was high at 24.30g. Of this group a small quantity of pottery presented for study was retrieved from sieved soil samples. These sherds have been included in the analysis. These sherds have not been bagged by fabric due to the tiny size of some fragments. The pottery from the soil samples has been stored together with the selected pottery.

TAPHONOMY

The majority of the pottery was relatively fresh. A greater level of abrasion is evident on the shell tempered wares but this may be due to the more friable nature of these fabrics. It is notable that over half of the sherds presented for study were retrieved from wells or pits with only 26.48% of sherds from layers or unstratified deposits (a relatively high figure in comparison to other groups from the area, see Rowlandson in prep.). The high proportion of pottery from these cut features has produced a number of good fresh large groups which can be used to date the phases of activity on the site and provide some good groups for study. Unfortunately many of the later groups contain a high proportion of residual earlier Roman pottery. Many of the vessels illustrated were nearly complete when deposited, most notably a rusticated jar (No. 22, Pit 416, context 415) and a wide mouthed bowl (No. 32, Pit 301, context 302). This group gives an appearance

of the pottery from the HOPS09 site being more regularly disposed of in cut features in contrast to the groups from Navenby which appear to suggest that the pottery was left in middens or on the ground surface (Rowlandson in prep.). There was no evidence that the ceramics found in association with the graves excavated from the site had been selected especially for deposition with the burials. The sherds present in these groups probably represent random sherds present in earth used for backfilling.

A group of Iron Age pottery from context 266, pit 265, showed signs of spalling and overfiring, discussed further below. A single Roman vessel showed signs of being a misfire or exposed a subsequent fire (No. 24 Context 155). A kiln 'second' in the GREY group was also retrieved but this vessel was probably a perfectly serviceable cooking pot despite a slightly drooping rim (No. 31, context 168).

Evidence of internal calcareous deposits and external sooting patterns were noted on a number of sherds. These vessels were most commonly the coarser shell gritted vessels of both the Iron Age and Roman periods suggesting that these vessels probably fulfilled a kitchen or industrial function. A two handled cream ware 1st century AD flagon from context 402 shows signs of having been waterproofed internally with a black substance, perhaps pitch. Five of the samian vessels including a samian moratium show signs of internal wear, probably due to repeated use. A Nene Valley colour coat mortarium from context 171 also shows evidence of internal use wear.

A number of vessels appear to have been trimmed to discs, perhaps for use as counters or tokens (contexts 171, 242 and 220) and an other vessels appear to have been trimmed or pierced including a Black Burnished Type bead and flanged bowl which has been pierced in the wall of the vessel (context 164) and a carinated bowl also pierced in the lower wall area. It is notable that there is only a single specialist cheese press and no specialist colander forms present in the assemblage. It is possible that the vessels with post-firing piercings represent customisation by that the inhabitants of the site to make suitable strainers.



Amphora base reused as a lid, context 320, maximum width 155mm

A Dressel 20 amphora base from context 320 has been trimmed to a rough disc and been used as an overshot lid with sooting evident around the rim (see photograph). A handle from a similar vessel, DR20 context 101, shows signs of being used as a grinder or pestle and the rim of a large greyware bowl from context 182 appears to have been used as a rubber.

THE STRATIFIED GROUPS

The stratified pottery is been discussed below by phase. A table showing a brief quantified summary is presented for each phase and significant are discussed in greater depth. It should be noted that the 'spotdate' is based upon the pottery alone, the phases provided G. Glover structure the discussion of the pottery.

Phase 1- Late Iron Age

Phase 1- Dating summary									
Phase	F No	F Type	Context	Spot date	Comments	Sherd	Weight (g)	Total RE%	SH/g
1	108	Pit	109	LIA	A large group of late Iron Age pottery including fragments of a pedestal, necked jars and a possible crucible	104	1460	108	14.04
1	112	Pit	113	IA-ROM	Two scraps of pottery	2	7	0	3.50
1	231	Ditch	230	IA-ROM	A single tiny scrap from sample 24	1	1	0	1.00
1	265	Pit	266	LIA	A large group of oxidised late Iron Age pottery including a large decorated globular jar and necked jar	164	4558	143	27.79
1	269	Pit	270	LIA	A small group of handmade shell gritted pottery	2	138	0	69.00
1	271	Pit	272	LIA	A small group shell gritted pottery and a roulette decorated sherd	12	314	0	26.7
1	231	Ditch	277	LIA	A medium sized group of fragments from shell-gritted jars	26	657	0	25.27
1	367	Ditch	368	LIA	A small group of shell gritted pottery including a necked jar or bowl	15	310	26	20.67
1	414	Ditch	413	LIA	Fragments of a necked and cordoned fine ware bowl	3	169	22	56.33

The stratified pottery from Phase 1 consisted of 329 sherds weighing 7.614kg and 2.99 RE, from 9 contexts with an average sherd weight of 23.14g. The majority of groups are small but the main two groups are from pits containing large fresh fragments of Iron Age pottery

Pit 108, context 109 illustrated vessels, contained a range of vessels. Fine ware vessels include a cut down fragment of a sand gritted pedestal jar, a small cup or crucible a large proportion of a bead rimmed jar with traces of external sooting and two shell gritted cordoned bowls (No.1-5, see Catalogue below for further

discussion). This group probably fits in the earlier part of the 1st century AD prior to the Roman conquest. There are a range of drinking, dining and cooking vessels within the group.

The most notable group in Phase 1 is the pottery from pit 265, fill 266 (No. 6-9). The majority of vessels present are from large or globular jars but there also 4 examples of the 's-shaped bowl' form (No. 6). The pottery from this feature is predominantly oxidised to a light to mid orange, the vessels all have shell or oolitic gritting which might be acquired in the area. Nearly a third of the sherds, although fresh, show signs of spalling, dunting cracking or misfiring. Clamp kilns seldom leave recognisable archaeological features as much of the Iron Age pottery firing sites would leave little more than a shallow scrape in the ground. The burnt clay and charcoal from this pit, commonly associated with more formal kilns, and the large quantity of similar vessels retrieved from the fill with some evidence of spalling and patchy firing might support this hypothesis. It may also be the case that this feature represents the dumping of waste from a partially successful firing nearby.

Also of note are large fresh fragments from a necked and cordoned bowl from ditch 413, context 414 (No.10- discussed in Catalogue below).

Phase 2- Late Iron Age- Early Roman (LIA-M2)

Phase 2- Dating summary									
Phase	F No	F Type	Context	Spot date	Comments	Sherd	Weight (g)	Total RE %	SH/g
2	121	Well	122	L1-E2	A medium sized group of pottery including sherds of samian, a carinated bowl, a rusticated jar and a fragment from a decorated Iron Age bowl	28	319	12	11.39
2	121	Well	129	EM2	A small group mostly late 1st century including a fragment of a stamped mortarium from the Verulamium region	7	181	17	25.86
2	121	Well	144	M1-2C	A single fragment from a Dressel 20 amphora date range between mid 1st to 2nd century possible	1	289	0	289.00
2	195	Ditch	196	IA-ROM	Two fragments of shell gritted pottery	2	67	0	33.50
2	205	Ditch	204	L1+	A group including fragments of a jar with rouletted decoration, a necked and carinated bowl and a fragment of a Butt Beaker	16	418	76	26.13
2	215	Pit	216	M2	A small group including fragments of oolitic gritted sherds and a wide-mouthed jar in a romanised reduced fabric	3	126	0	42.00
2	229	Well	218	M2	A medium sized group containing fragments of a shell gritted jar, Nene Valley greyware and a rusticated jar	13	248	69	19.08
2	416	Ditch	415	L1-E2	A small group of samian dish, a London Ware type bowl and sherds from a linear rusticated jars including one nearly complete example	21	921	87	44.80

Phase 2- Dating summary									
Phase	F No	F Type	Context	Spot date	Comments	Sherd	Weight (g)	Total RE %	SH/g
2	420	Ditch	419	E2	A small group of Roman pottery including a fragment from a decorated samian form 37 bowl from les Martres-de-Veyre and sherds from a rusticated jar	3	92	5	30.67
2	424	Well	423	ML2	A single fragment from a hook rimmed mortarium from the Mancetter/Hartshill industry	1	245	29	245.00

The stratified pottery from Phase 2 consisted of 95 sherds, weighing 2.906kg and 2.95RE, from 10 contexts with an average sherd weight of 30.59g. The majority of the sherds from this phase come from the backfilling of wells.

The largest group from this phase is from Ditch 420, context 419, which includes a large proportion of a jar with linear rustication and a high shoulder (No. 22) and a 'London Ware' small bowl (No. 24). These vessels and the presence of samian from les Martres-des-Veyre place this group in the early 2nd century AD suggesting that the ditch went out of use during this period. Also of note is the late 1st century AD group from ditch 205, context 204 which includes a rouletted beaker (No. 34) and a carinated bowl (No. 35) in a coarse greyware fabric.

The three small groups from Well 121 are small including fragments of a South Gaulish Samian bowl, a stamped Verulamium Region mortarium (No. 17), rusticated jar, carinated bowl and a Dressel 20 amphora. These groups suggest that the well was both constructed and backfilled during the late 1st to early 2nd century. Also included in the backfill of the well was a small sherd of decorated Iron Age pottery, probably residual by this period. Although the groups are small this suggests activity on the site during the later 1st to early 2nd century AD. This well probably represents the water source for nearby buildings.

The backfilling of Well 229, context 218, suggests that it was backfilled in the mid 2nd century or later including a beaker in a fine greyware (No. 20). No ceramic dating was evident to date the construction of this well.

The other well attributed to this phase was backfilled with context 423 which contained a hook rimmed Mancetter Hartshill mortarium which probably dates to the middle of the 2nd century AD. This sherd is probably from the backfilling of the well as it went out of use.

Phase 3- Mid to late second century AD

Phase 3- Dating summary									
Phase	F No	F Type	Context	Spot date	Comments	Sherd	Weight (g)	Total RE %	SH/g
3	138	Ditch	139	L2C+	A single colour-coated sherd	1	3	0	3.00
3	152	Well	155	EM2+	A medium sized group including a number of early Roman vessels including a carinated bowl, a jar with a bead rim a rusticated jar. The deposition of this context is dated by fragments of a jar with burnished lattice decoration.	20	880	20	44.00
3	152	Well	181	ROM	A small group including a greyware base and shell gritted sherd	31	315	0	10.16
3	187	Grave	188	EM2	A small group including a jar with burnished lattice decoration	2	54	15	27.00
3	197	Ditch	199	IA-ROM	A single fragment of shell gritted pottery	1	6	0	6.00
3	229	Well	217	L2-M3	A medium sized group including a Nene Valley greyware dish with a plain rim and a wide mouthed jar. Also present are fragments of a colour-coated base and a Dressel 20 amphora	50	822	140	16.44
3	267	Ditch	268	M2	A group of early Roman pottery dated on the basis of a sherd of Nene Valley greyware	6	105	0	17.50
3	275	Ditch	276	L2+	A small group including a small fragment of Nene Valley colour-coated pottery	4	54	0	13.50
3	283	Pit	282	L2+	A small group including fragments of samian and Nene Valley colour coat	10	103	4	10.30
3	301	Pit	302	L2-E3	A medium sized group including a near complete greyware wide-mouthed bowl and smaller fragments of other similar vessels. Also present are fragments of a plain rimmed dish and Nene Valley Greyware	104	2485	170	23.89
3	294	Well	332	M2	A small group including a flagon in a cream fabric	12	192	35	16.00
3	346	Ditch	347	L1-E2	A small group including a necked jar and native tradition wares	8	251	59	31.38
3	346	Ditch	348	L1-E2	A group including fragments of a Dressel 20 amphora a flagon in the Lincoln legionary fabric PINK, rusticated jars and native tradition wares	84	2659	122	31.65
3	394	Ditch	394	L2-3	A small group including fragments of samian and Nene Valley colour coat	8	89	11	11.13

The stratified pottery from Phase 3 consisted of 341 sherds weighing 8.018kg. and 5.76 RE from 14 contexts with an average sherd weight of 23.51g. Groups from three further wells are included within this phase.

Two small groups of pottery dating to the earlier part of the second were retrieved from the backfill of Well 152 including fragments of a carinated bowl and a rusticated jar. A larger group dating to the late 2nd to early 3rd century AD was retrieved from Well 229 which included amphora fragments and wide mouthed bowl sherds. Grave 187 could be dated to the Hadrianic period or later on the basis of a sherd decorated with a burnished lattice decoration.

The largest group of pottery attributed to this phase was from Pit 301, context 302. This group included a wide mouthed bowl (No. 32) was deposited complete or near complete when the pit was backfilled, perhaps representing a selective deposit. Sherds from other similar wide mouthed bowls and Nene Valley Greyware were also present perhaps representing the clearance of a group of unwanted pottery or a dump pottery and refuse.

It is notable that the pottery backfilling ditch 346 is of early Roman date and relatively fresh and may represent an earlier feature or the re-working of a midden deposit to infill the ditch.

Phase 4- Earlier third century?

Phase 4- Dating summary									
Phase	F No	F Type	Context	Spot date	Comments	Sherd	Weight (g)	Total RE %	SH/g
4	104	Pit	105	IA-ROM	A single sherd of shell gritted pottery	1	3	0	3.00
4	117	Pit	118	IA+	Two scraps of pottery	2	52	0	26.00
4	119	Pit	120	IA	Three fragments of shell gritted pottery	4	24	0	6.00
4	148	Well	171	L3	A medium sized group including samian, a Dalesware jar rim, and fragments of colour-coat and a mortarium from the Nene Valley	47	1050	85	22.34
4	148	Well	172	ROM	A small group	14	265	42	18.93
4	148	Well	173	L2+	Two tiny scraps of pottery from sample 5/6/7	3	3	0	1.00
4	213	Pit	214	E3	A small group containing fragments of samian and Nene Valley colour-coat fabrics	23	218	38	9.48
4	244	Pit	245	3C	A small group dated on the presence of a Dalesware jar	3	5	0	1.67
4	252	Ditch	251	3C	A small group including fragments of Dressel 20 amphora, A Nene Valley colour-coat jar and a shell tempered jar	26	1432	38	55.08
4	256	Wall	257	3C+	A medium sized group with abraded Dressel 20 amphora and greyware fragments. Also present is a single sherd of Nene Valley colour-coat which dates the context	42	2622	8	62.43
4	263	Pit	264	3C	A medium sized group including fragments of a Nene Valley colour-coat bowl and a greyware cheese press	22	280	7	12.73
4	294	Well	323	L2+	A small group including two sherds of samian and Nene Valley colour coat	7	120	18	17.14
4	294	Well	324	ROM	A small group	2	32	0	16.00
4	294	Well	327	L2+	A small group including fragments of a large greyware bowl	2	47	12	23.50
4	294	Well	328	M2-M3	A small group dated on the presence of Nene Valley greyware	2	18	0	9.00

Phase 4- Dating summary									
Phase	F No	F Type	Context	Spot date	Comments	Sherd	Weight (g)	Total RE %	SH/g
4	334	Layer	334	E2	A small group including a decorated samian bowl, native tradition wares and a large shell gritted storage jar	41	615	83	15.00
4	337	Pit	320	ML1-2	A small group including fragments of Dressel 20 amphora, shell-gritted and early greyware fabrics	6	618	0	103.00
4	340	Pit	286	1C	A fragment of a butt beaker	1	9	10	9.00
4	402	Layer	402	L1-E2	A medium sized group including a considerable proportion of a large two handled flagon in the CR fabric, rusticated jars and a complete profile of a lid	33	1118	77	33.88
4	411	Ditch	410	3C+	A small group including fragments from a Nene Valley colour coat bowl	5	106	0	21.20

The stratified pottery from Phase 4 consisted of 286 sherds, weighing 8.637kg and 4.18RE from 20 contexts with an average sherd weight of 30.20g. These groups are mostly small and include a large proportion of early Roman pottery, most notably the ditches. Medium sized groups were retrieved from layers 334, 402 and wall 257. The pottery from the early fills of well 294 suggests that the feature was open by at least the later 2nd century AD. Much of the pottery from Phase 4 probably represents the reworking of earlier ceramics present on the surface during a period of redevelopment of this site.

Phase 5- Third century AD?

Phase 5- Dating summary									
Phase	F No	F Type	Context	Spot date	Comments	Sherd	Weight (g)	Total RE %	SH/g
5	159	Grave	159	IA-ROM	A single sherd	1	5	0	5
5	163	Pit	164	M3	A medium sized group including a greyware flanged bowl, a Nene Valley colour-coated beaker with barbotine scroll decoration and a number of 2nd century sherds	41	428	43	10.44
5	163	Pit	165	IA-ROM	A single tiny scrap from sample 27	1	2	0	2.00
5	194	Layer	194	L2+	A small group including fragments of a Dressel 20 amphora, and a large storage jar	9	492	0	54.67
5	222	Posthole	228	ML1+	A single cream (CR) sherd, probably from a flagon	1	12	0	12.00
5	226	Pit	235	M2-M3	A small group dated by the presence of Nene Valley greyware	4	86	0	21.50
5	241	Pit	242	3C	A medium sized group including fragments from a folded beaker and a Castor Box in a Nene Valley colour-coat fabric. Also present is a 'Dales type' jar in a grey fabric	52	775	98	14.90
5	246	Pit	247	L3	A medium sized group containing BB1; A fragment of a late Nene Valley colour-coat beaker and a dalesware jar rim	27	448	42	16.59

Phase 5- Dating summary									
Phase	F No	F Type	Context	Spot date	Comments	Sherd	Weight (g)	Total RE %	SH/g
5	248	Pit	249	3C	A small group including fragments of samian and Nene Valley colour-coat beakers and a jar	15	162	11	10.80
5	248	Pit	250	L3	A small group including samian and Dressel 20 amphora	23	564	37	24.52
5	258	Pit	259	LIA	A medium sized group including fragments from a shell gritted cordoned jar and body sherds from a large vessel gritted with limestone ooliths	32	356	0	11.13
5	260	Posthole	261	ROM	Two small scraps of Roman pottery	2	25	0	12.50
5	241	Pit	262	L2+	A group containing a stamped Terra Negra platter. This context is dated by the presence of a greyware dish with a plain rim	27	386	13	14.30
5	300	Posthole	298	3C	A small group including fragments of Nene Valley colour-coat and greywares	10	389	102	38.90
5	310	Posthole	308	L1+	A small group including a fragment of a dish	2	44	11	22.00
5	313	Posthole	311	L1-M2	A small group including fragments of a butt beaker	10	299	12	29.90
5	297	Oven	329	2C+	Small scraps from sample 30	3	3	0	1.00
5	331	Posthole	330	M2-M3	A small group dated on the presence of Nene Valley greyware	2	69	31	34.50
5	333	Layer	333	L2-E3	A large group of Roman pottery including samian and a dish with a grooved rim	122	3596	152	29.48
5	350	Robber trench	351	ROM	A small group including shell gritted fragments	4	38	5	9.50
5	357	Layer	357	M3	A small group of fragments of Nene Valley colour-coat, a greyware wide-mouthed bowl	14	344	34	24.57
5	384	Posthole	383	ROM	A single greyware sherd	1	24	5	24.00

The stratified pottery from Phase 5 consisted of 403 sherds, weighing 8.547kg and 5.96RE from 22 contexts with an average sherd weight of 21.21g. The pottery from this phase is similar in nature to that attributed to Phase 5. The largest group of pottery from this phase, layer 333 dating to the late 2nd to the early 3rd century, lies beneath many of the other groups from pits and post holes. A large proportion of the pottery from this context was probably manufactured of a later 1st to mid 2nd century but the presence of a NVCC beaker sherd, Bourne shell gritted jars with fragments of a greyware dish with a grooved rim probably push the date of deposition into the 3rd century AD. The freshest and most contemporary groups of pottery from this phase with the highest average sherd weights (excluding amphora) contained pottery broadly dating to the 3rd century AD. The smaller more fragmentary groups largely appear to contain residual early Roman pottery. It is quite likely that following the redevelopment of the site it may have been kept relatively clean of ceramic waste during a period of occupation with pottery being dumped elsewhere unless earth was needed to backfill an open pit.

Phase 6- Third to fourth century AD

Phase 6- Dating summary									
Phase	F No	F Type	Context	Spot date	Comments	Sherd	Weight (g)	Total RE %	SH/g
6	131	Ditch	132	L3	A small group including a fragment of a bead and flange bowl in a Nene Valley colour-coat fabrics	6	91	11	15.17
6	133	Ditch	134	4C	A small group including a colour-coated sherd with painted decoration	9	117	11	13.00
6	133	Ditch	135	3C	A small group including a fragment of a Castor box lid in a Nene Valley colour-coated fabric	7	45	11	6.43
6	136	Ditch	137	2C	A small group including a jar with an everted rim and Dressel 20 amphora	3	69	7	23.00
6	149	Drain	150	E3	A small group including fragments of samian, an unusual North Africa olive oil amphora and a Nene Valley beaker	46	1561	133	33.93
6	149	Drain	151	VL4	A medium sized group including fragments of samian, Nene Valley colour-coat and a jar with a double lid-seat	6	128	0	21.33
6	160	Layer	160	2C+	A small group of very abraded sherds including Dressel 20 amphora	5	108	4	21.60
6	162	Layer	162	L1+	A small group	11	139	0	12.64
6	168	Layer	168	L2+	A medium sized group including shell gritted sherds, Nene Valley colour-coat and a large greyware bowl	51	1125	154	22.06
6	177	Hearth	178	ML1+	A small group including a fragment of a Butt Beaker	2	9	0	4.50
6	292	Layer	292	L2+	A small group containing fragments of Roman pottery including	16	295	49	18.44
6	294	Well	321	3C	A small group including a fragment of a wide-mouthed bowl	3	144	12	48.00
6	294	Well	322	3C	A small group including fragments of samian, shell gritted and mica dusted colour-coated pottery	20	266	15	13.30
6	294	Well	326	VL4	A large group of Roman pottery including a double lid-seated jar, Nene Valley colour coat and greyware	103	2389	103	23.19
6	354	Ditch	355	VL4	A small group including fragments of Nene Valley beaker, a bowl with an in turned bead and flange and a Dalesware jar	13	321	35	24.69
6	356	Layer	356	4C	A medium sized group including a samian stamp, a bead flanged bowl and a fragment of a face flagon	2	50	0	25.00
6	365	Pit	364	M2+	A small group Roman pottery including a Roman jar with bossed decoration similar to other 2 nd century examples from	6	185	12	30.83

The stratified pottery from Phase 6 consisted of 309 sherds, weighing 7.042kg and 5.57 RE, from 17 contexts with an average sherd weight of 22.79g. The dating range of the pottery from this phase varies greatly and represents activity during the 3rd and 4th century AD and the re depositing of earlier groups of

Roman pottery during this period. It still appears that this site was occupied during the ‘very late 4th century’ as a small group of final Roman pottery from Drain 149 and a medium sized group from the final backfilling of Well 294, fill 326 are present. It is quite possible that occupation continued on this site with the ceramic rubbish dumped elsewhere or left on site and subsequently included in the Phase 8 dark earth deposit. These contexts do not provide substantial groups of homogenous late Roman pottery worthy of more detailed analysis. The high residual element also makes analysis of the group as a whole unproductive.

Phase 7- ?Late Roman

Phase 7- Dating summary									
Phase	F No	F Type	Context	Spot date	Comments	Sherd	Weight (g)	Total RE %	SH/g
7	145	Ditch	146	3C+	A small fragment including Nene Valley colour-coat	9	71	15	7.89
7	145	Ditch	147	ROM	Two small fragments	2	48	0	24.00
7	182	Layer	182	L3	A mixed medium sized group including a range of 2nd century pottery including a beaker with fragments of a cornice rim and a colour-coated beaker with a barbotine hunt scene. The group is dated by greyware flanged bowl and wide-mouthed bowl types.	22	632	26	28.73
7	183	Layer	183	3C	A medium sized group including Nene Valley colour-coat and dated on a shell gritted Dalesware jar rim	59	797	70	13.51
7	186	Ditch	185	M2-M3	A small group including fragments of Nene Valley greyware, samian and Dressel 20 amphora	12	152	37	12.67
7	186	Ditch	212	E3+	A small mixed group including some second century forms and a plain rimmed dish	21	345	25	16.43
7	221	Ditch	220	3C	A medium sized group containing fragments of samian, Dressel 20 amphora and a dish with an expanded rim	31	802	70	25.87

The stratified pottery from Phase 7 consisted of 156 sherds weighing 2.847kg and 2.43 RE, from 7 contexts with an average sherd weight of 18.25g. A large proportion of this pottery is probably residual and re deposited from earlier layers or features.

Phase 8- ?Late Roman ‘dark earth’

Phase 8- Dating summary									
Phase	F No	F Type	Context	Spot date	Comments	Sherd	Weight (g)	Total RE %	SH/g
8	101	Layer	101	IA-VL4	A large group containing a range of pottery from the late Iron Age through to 'Final Roman' forms such as a greyware bowl with an inturned bead and flange bowl	185	4682	421	25.31

The stratified pottery from Phase 8 consisted of 185 sherds weighing 4.682kg and 4.21RE, from a single context with an average sherd weigh of 25.31g. This ‘dark earth’ deposit is mixed containing a range of Iron

Age and Roman pottery but is dated by the presence of a late Roman inturned bead-and flange bowl. This group is not a homogenous dump of late Roman date like some of the groups from Navenby (Rowlandson in prep.) and the pottery varies greatly in date and condition. The Phase 8 dark earth deposit may represent reworking or abandonment of the ground at the end of the Roman period, this ceramic group does not help to support any specific theory.

Unstratified and ungrouped contexts

Unstratified and ungrouped contexts- Dating summary									
Phase	F No	F Type	Context	Spot date	Comments	Sherd	Weight (g)	Total RE %	Area
US	103	U/S	103	4C/L2	A mixed medium sized group including a sherd of an early Roman flagon, Dressel 20 amphora and shell tempered pottery. Mostly dating to the 2nd century with a small quantity of 4C pottery	58	2329	316	40.16
0	100	Layer	100	VL4	Mixed group ranging from Iron age to late Roman from topsoil/ overburden	9	366	25	40.67
0	835	-	835	IA-ROM	A single shell gritted fragment	1	8	0	8

Unstratified and ungrouped pottery from the site total 68 sherds, weighing 2.703kg and 3.41RE, from 3 contexts with an average sherd weight of 39.75g . Details are contained in the full archive.

FABRICS AND TRADE

PREHISTORIC AND TRANSITIONAL POTTERY

Of the total assemblage 482 sherds weighing 11.074kg with 5.63 RE can be attributed to the Iron Age or earlier fabrics. The majority of the pottery from this period is shell gritted and of later Iron Age date.

?Bronze Age sherds

The vast majority of pre roman pottery can be comfortably attributed to the late Iron Age with the exception of a two sherds from one vessel retrieved from 'dark earth' layer 101 and from Iron Age context 113 (Phase 1, pit 112). The sherds in question are fired to a partially reduced grey brown with a partially oxidised surface. The sherd has an in turned 'tapered direct rim' with an approximate diameter of 20cm (terminology as Knight 1998). There is a freehand groove beneath the rim with diagonal grooves beneath it. The sherd has sparse grog and quartz temper and rare voids from chaff. A rim with similar decoration is illustrated by Didsbury from a late Bronze Age to early Iron Age site at Barnetby Wold Farm (Didsbury and Steedman 1992, Fig. 4, 26.1) but this sherd from Sleaford may perhaps be from an earlier Bronze Age type. As the rim sherd is small, weighing 6g and with only 2% of the rim surviving attributing a certain date is difficult and the stratification of the sherd with a range of Iron Age to Late Roman pottery provides no assistance. No other sherds in this fabric were noted during archiving and it is likely that these sherds are

stray find as there have been a number prehistoric finds dated to the Bronze Age from Sleaford and the neighbouring parish of Quarrington (Lincoln HER 64063, 60886, 62957, 60761, 65258, 63703 and 64063).

Mid- Late Iron Age pottery

The majority of the Iron Age pottery from this site would fit with a late Iron Age date. A single vessel from retrieved from the topsoil (context 100, No.15) might perhaps predate the majority of the Iron Age pottery from the site

Late Iron Age pottery

The majority of the Iron Age pottery is probably from a local source. The possible group of pottery waste is predominantly shell gritted with two sherds of limestone gritted pottery. The stamp decorated vessel from this context has a typical configuration of local stamps and roulette wheel styles. It also appears to have been stamped by a right handed potter judging by the overlapping stamp imprints (No.8, images below showing stamps and surface flashing and cracking, discussed further in the catalogue). This group may be the waste from a clamp firing due to the homogenous firing colour, range of forms and manufacturing style.

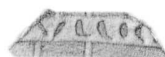


*Stamped Iron Age vessel, Context 266, showing detail of stamps.
Rubbing scale 1:1, see also illustration No. 8.*

The other groups, notably context 109 contained mostly shell gritted pottery with some sand gritted wares. Previous groups studied from Sleaford have shown that the latest Iron Age and transitional wares are usually partially or wholly sand gritted (Elsdon 1997, 124-125). The pottery from this group appears to fit this pattern. Amongst the other Iron Age pottery from HOPS09 are sherds gritted with calcareous ooliths, a fabric also present in other groups from Sleaford. All of these fabrics were probably locally made.

Also of note is the presence of an imported Terra Nigra platter discussed by Rigby below, suggesting that the site was also linked to long distance trade networks in the later Iron Age.

GALLO-BELGIC POTTER'S STAMP by V. Rigby



HOPS 09 Context 262 [G-B database V1119]. Scale 1:1.

[I]VLLIO[].

Jul(i)ios, G-B database P18, Die 03G03

Radial stamp on a large foot-ring platter, probably Cam form 5, decorated with one double bordered rouletted wreath, over-stamped, and one double incised circle. Terra Nigra - pale grey fine sandy matrix with sparse grey argillaceous inclusions; thin marked blue/grey under-surface; blue/grey surfaces; well finished polished upper surface, faceted lower. It is an unusual fabric.

Five TN stamps from this die are recorded on small and large foot-ring platters, including Camulodunum form 5, at Colchester, Sheepen I and II excavations, none is usefully dated. The kiln site is unknown but the ICP chemical analysis of one of the stamps from this die matches the generalised results for the Marne-Vesle potteries even though none has been identified in Gallia Belgica or Lower Germany (G-B database V549). Date c. AD 25-50.

Comments

A varied assemblage of G-B imports has been excavated at Sleaford over the years and there are now three readable stamps on TN plus one tiny fragment on a TR cup Cam 56 (Elsdon 1997). The die of V1119 connects Sleaford directly into the distribution pattern centred on Camulodunum while those of the previous finds, database V602, V760 and V1120, have yet to be recognised there.

All the common vessel types are present including at least 12 cups, 40 platters, a pedestal cup, a girth beaker and a butt beaker. No Late Augustan stamps or forms have been found so the range is dominated by TN platters and includes the definitely post-conquest Cam forms 13, 14 and 16; it is similar to those recorded at Colsterworth, Lincs, Dragonby, Old Winteringham and North Ferriby, Humberside. Like Sleaford, these rather peripheral sites are tied into the Camulodunum trading network and hence also the oppida of southern Britain by die connections with Sheepen I and II, Stanway cemetery, Burial BF 64, the King Harry Lane cemetery, Burial 265, Canterbury and Silchester. The quantity implies a limited but

continued demand for the imports after AD 25 until AD 60 when the Boudiccan revolt seriously interrupted import trade.

The Sleaford assemblage appears to typify successful Late Iron Age settlements to the east of the Fosse Way which survived the initial stages of Roman occupation and only gradually changed their basic economy in the aftermath. After c AD 60/1 G-B trade declined probably due to competition from South Gaulish samian and was limited to the TN platter Cam 16. In marked contrast to the immediate post-conquest period there is a strong emphasis on forts in the active military zones of the North, Wales and the South-West.

POST CONQUEST ROMAN POTTERY

Of the total assemblage 1716 sherds weighing 42.335kg with 31.83 RE can be attributed to the Roman period. The pottery is discussed below by class.

SAMIAN POTTERY by G. Monteil

Introduction

A total of 34 sherds of samian ware were recovered from excavations in Sleaford, Lincolnshire and submitted for assessment. The fabric of each sherd was examined, after taking a small fresh break, under a x20 binocular microscope and was catalogued by context number. Each archive catalogue entry consists of a context number alongside fabric, form and decoration identification, sherd count, rim EVEs and weight.

Quantities of samian fabrics present			
Fabric	sherd	weight	Rim EVE
Central Gaulish	20	252	0.73
South Gaulish	6	35	0.14
Martres-de-Veyre	6	97	0.25
Rheinzabern	2	48	
Total	34	432	1.12

Samian forms present			
Form	sherd	weight	Rim EVE
bowl	3	34	0.07
dish	5	30	
DR18	1	7	0.08
DR18/31	2	52	0.03
DR18/31 or 31	1	2	
DR18/31R or 31R	1	7	
DR31	4	49	0.095
DR33	2	34	0.3
DR36	1	10	

Samian forms present			
Form	sherd	weight	Rim EVE
DR37	7	69	0.26
DR38	2	63	0.125
mortarium	1	54	
WA79	2	16	0.16
unidentified	2	5	
Total	34	432	1.12

The samian assemblage

The assemblage is small with 34 sherds, 31 of which are stratified for a total weight of 432 g and a total rim EVEs figure of 1.12 (table 1). This group is in fairly good condition with an average samian weight of 13.5g. No repair or sherd links between contexts were noticed during recording.

Despite its small size, the samian assemblage contains a range of fabrics and forms dating from the 1st to the later part of the 2nd century AD. Second century material dominates however with Central Gaulish samian (Lezoux and les Martres-de-Veyre) adding up to 26 sherds. The relative proportion of the different sources of samian ware found in this group is not dissimilar to previous samian assemblages recovered from Sleaford especially the emphasis on second century Central Gaulish material. The present assemblage differs however in that it has a higher proportion of 1st century material from South Gaul (0.27% of the total Roman Pottery assemblage) than the groups from Dalgetty Warehouse and the Police Station Site (Precious 1998 and 2004).

The range of forms is fairly typical though again this group differs from other samian groups from Sleaford in the slightly under-represented number of cups (table 2). No example of the cup form Dr27 was recorded and only two examples of the cup form Dr33 are present, an unusually low number for a group mostly dating to the 2nd century AD when the Dr33 is the most popular type of cups. This figure could be related to the small size of this group and the fact that a dish will break into more sherds than a cup; when comparing the rim EVE figure of Dr33 and Dr18/31 or 31, the difference is not as stark. The relatively low amount of samian cups is however unusual and different to other groups from Sleaford (Precious 1998 and 2004) and the British trend for smaller civilian centres (Willis 2005, chart 16).

South Gaulish samian ware

There are six sherds of South Gaulish samian. The range of forms is limited with mostly dishes and a single bowl. The earliest piece is a Dr18, usually dated to AD 40-80, was found residual in the secondary fill of pit 248 (phase 5). Two of the South Gaulish pieces are clearly Flavian (AD 70-100) in nature with a dish form Dr36 in ditch 416 and the rim of a Dr37 in well 121, both features dating to phase 2. The rest of the South

Gaulish group consists of unidentified forms found residual in phases 5 and 6 features (ditch 221 and pit 248).

Central Gaulish-Les Martres-de-Veyre

Some 6 sherds were identified as originating from the Trajanic Central Gaulish industry of les Martres-de-Veyre. Very few forms were identified: an example of the dish Dr18/31, one cup form Dr33, a possible dish form Cu23 and two examples of the decorated form Dr37.

The decorated fragment from ditch 420 has ovolo B37 with wavy line underneath. The decoration consists of a horizontal wreath made out of bifid motif between two wavy lines and the top of motif L6 (Rogers 1974) is just visible. This bowl is probably in the style of potter Igocatus.

The second decorated bowl from les Martres-de-Veyre was recovered from made ground 334. This example is really thin-walled. A little of the decoration remains and consists of a scroll made out a leaf that looks a little like J89 (Rogers 1974), a trifid motif (G89?) and a little rosette. On the basis of what is left it is quite difficult to assign this vessel to a particular potter. The rosette and a similar leaf were used by potter X-13.

Central Gaulish-Lezoux

The largest group of samian ware with 20 sherds comes from the industry of Lezoux. The range is typical with dishes of the Dr18/31-31 family, a cup Dr33 and three examples of the decorated bowl form Dr37. A little decoration remains on the examples from pit 283 in phase 3 and drain 149 in phase 6 but not enough for detailed comment.

The latest stratified Central Gaulish vessels in this group are examples of the platter form Wa79 in ditch 394 and well 294. Other late samian material include a very well used fragment from a mortarium and a rim from a bowl form Dr38 dating to a similar period were found unstratified ([103]).

East Gaulish

Two vessels were identified as originating from East Gaul; both found residual in phase 6: one dish in the secondary fill of drain 149 and the stamped base of a bowl form Dr38 in layer 356. The latter vessel displays the single name stamp recovered from this small group.

Form Dr38, base fragment with partial stamp reading NIVAL[. This is a stamp by Nivalis, die 1b. AD 145-175. For a similar stamp see accession number U.33.115 II-C in the Felix Oswald samian collection at the University of Nottingham Museum. This potter worked at Rheinzabern and Heiligenberg but here the fabric seems to be from Rheinzabern.

AMPHORAE by *I.M. Rowlandson*

The majority of amphorae from the site are in the typical globular Dressel 20 form produced in Southern Spain used to transport olive oil. Also present in the assemblage are fragments of the Gauloise 4 type (GAU4) fabric usually considered to have been used to transport Gaulish wine and a rare fragment of a North African amphora (NAAM) probably of 3rd century date. Another example of a North African amphora, perhaps the same vessel, has recently been identified in an adjacent Hoplands site currently being studied (A. Beeby pers. com.). Amphorae made up 3.43% of the HOPS09 assemblage by count in comparison to 1.05% from the SPS97 site and 1.22% from the SDW03 site. An unpublished group from the Sleaford Football Club viewed by this author does however appear to have a larger relative volume of amphorae than any of the other Sleaford sites (STFC06). Groups from Sleaford appear to have a relatively larger proportion of amphorae than those from Navenby (CHNE09 0.50%, Rowlandson in prep). The assemblage from the HOPS09 site suggests that a range of amphorae bourn goods were available at Sleaford into the 3rd century AD. The interpretation of the relative site status of an urban or roadside settlement assemblage is fraught with danger as sherds are often the reused for structural uses such as yard surfaces and lining wells or as tools such as ‘rubbers’ or hone stones (eg. the DR20 handle used as a grinding tool from context 101). Depositional factors may skew estimations of relative status (see Rowlandson in prep.) but it broadly appears likely that the occupants of the HOPS09 site could access amphorae bourn goods more readily than the inhabitants of Navenby.

MORTARIA by *I.M. Rowlandson with K. Hartley*

The mortaria from this site make up 0.64% of the assemblage by count which is slightly less than the groups from the Police Station (SPS07, 0.90%) and Dalgetty Warehouse sites (SDW03, 0.66%) but the HOPS09 site has a greater relative proportion of mortaria in comparison to the large group from Navenby (CHNE09, Rowlandson in prep.). Mortaria from the HOPS09 site include a stamped vessel from the Verulamium potteries (Hartley below) an addition to other early Roman vessels from Gallia Belgica and Lincoln already published from Sleaford (Hartley in Elsdon 1997). The majority of sherds present are from the Mancetter Hartshill industry with a single hook rimmed vessel present in context 423 but the majority of the vessels appear to have the later 2nd to 3rd century fired clay trituration grits. The remaining mortaria which can be assigned a Nene Valley source including a late Roman colour coated vessel from context 103. There is a relatively low presence of mortaria but this is not unusual for groups from roadside settlements from Lincolnshire where mortaria often only make up less than 1% of an assemblage by count. Whilst it is clear that these vessels were probably present in the kitchens of the inhabitants of the site from the later 1st century AD onwards it does not appear that these vessels were acquired in large numbers, perhaps as a result of limited utilisation of such vessels or due to their durable nature.

A stamped mortarium from Sleaford Hoplands by K. Hartley (10th June 2010)

HOPS 09, context 129, Illustration 17 115gms Diameter 260 17% two joining flange fragments from a mortarium in Verulamium region fabric (Tomber and Dore 1998, 154). The broken, right-facing potter's stamp reading [.]RVCCI[...] is from the most commonly used die of Bruccius (Castle 1976 (fig 8, MS5-6)). Bruccius was using the die which produced this stamp at the workshop at Brockley Hill where twelve stamps from that die have been found (Suggett 1958, fig. 3, M11 and 71 (6 exx) and elsewhere). At least fifty mortaria of Bruccius are now known from occupation sites in England and Wales: Alchester, Oxen; Binchester; Caerleon; Caerhun; Caesar's Camp, Laleham, Surrey; Castleford; Chelmsford; Cirencester (2); Corbridge (4); Enfield; Chesterholm (3); Godmanchester; Holditch; Kinderton, Middlewich; Lancaster; Little Hadham, Herts; London (7); *Magiovinium*; Malton; North Church, Herts; Ribchester (2); Rocester (4); Silchester; Sleaford, Hoplands; Staines; Templeborough; Towcester; *Verulamium* (2); Wilderspool (2); and Wroxeter (3).

There is no site-dating evidence for Bruccius, but his rim-profiles and spout-forms would best fit a date within the period AD80-120. Judging from his rim-profiles, this die is not his latest and its use could well pre-date AD110.

THE OTHER COARSEWARES by I.M. Rowlandson

Fabrics and forms are discussed in greater detail below and in the Fabric descriptions

Fabric summary							
Fabric	Fabric group	Fabric details	Sherd	Sherd %	Weight (g)	Weight %	Total RE %
AMPH	Amph	Miscellaneous amphorae	2	0.09%	43	0.08%	0
AMPH?	Amph	Miscellaneous amphorae	1	0.05%	12	0.02%	0
DR20	Amph	Dr 20 amphorae	71	3.23%	7245	13.57%	21
GAU4	Amph	Gauloise 4	2	0.09%	112	0.21%	0
NAAM	Amph	North African amphorae	1	0.05%	181	0.34%	0
GRSH	Calcareous	South Lincs Grog with shell	3	0.14%	45	0.08%	12
IALIM	Calcareous	Iron Age Limestone tempered	2	0.09%	81	0.15%	0
IASAOL	Calcareous	Iron Age sandy fabric with ooliths	1	0.05%	13	0.02%	0
LROL	Calcareous	Late Roman oolitic gritted fabric	1	0.05%	12	0.02%	7
SHCC	Calcareous	Shell- common coarse	69	3.14%	2620	4.91%	107
SHCF	Calcareous	Shell- common fine	16	0.73%	149	0.28%	43
SHCFP	Calcareous	Shell- common fine- Punctate shell	1	0.05%	4	0.01%	0
SHCM	Calcareous	Shell- common medium	210	9.55%	4923	9.22%	131
SHCMP	Calcareous	Shell- common medium shell & Punctate shell	37	1.68%	980	1.83%	0
SHEL	Calcareous	Miscellaneous undifferentiated shell-tempered	213	9.69%	3726	6.98%	161
SHELP	Calcareous	Shell gritted including Punctate Brachiopods	1	0.05%	5	0.01%	0
SHMM	Calcareous	Shell- moderate medium shell	5	0.23%	87	0.16%	17
SHOLF	Calcareous	Shell and ooliths- fine	3	0.14%	169	0.32%	22
SHSC	Calcareous	Shell- sparse coarse shell	8	0.36%	414	0.78%	65

Fabric summary							
Fabric	Fabric group	Fabric details	Sherd	Sherd %	Weight (g)	Weight %	Total RE %
SHSF	Calcareous	Shell- sparse fine shell	60	2.73%	141	0.26%	20
SHSM	Calcareous	Shell- sparse medium shell	7	0.32%	127	0.24%	30
SHSMP	Calcareous	Shell- sparse medium & Punctate shells	3	0.14%	48	0.09%	0
SHSMP	Calcareous	Shell- sparse medium shell & Punctate shell	3	0.14%	48	0.09%	0
SLSHB	Calcareous	Bourne shell gritted	37	1.68%	892	1.67%	35
SLSHB?	Calcareous	Bourne shell gritted	21	0.96%	364	0.68%	45
CC	Fine	Other colour-coated wares	5	0.23%	100	0.19%	10
CC?	Fine	Other colour coated wares	2	0.09%	13	0.02%	9
NVCC	Fine	Nene Valley colour-coated ware	26	1.18%	254	0.48%	8
NVCC?	Fine	Nene Valley colour-coated ware	3	0.14%	36	0.07%	4
NVCC1	Fine	Nene Valley Colour-coat- light firing fabric	126	5.73%	1845	3.45%	240
NVCC1?	Fine	Nene Valley Colour-coat- light firing fabric	1	0.05%	25	0.05%	0
NVCC2	Fine	Nene Valley Colour-coat- late red fabric	1	0.05%	4	0.01%	7
NVGCC	Fine	Nene Valley grey colour-coated ware	4	0.18%	26	0.05%	0
NVMIC	Fine	Nene Valley colour-coated with mica overslip	1	0.05%	10	0.02%	6
SCC	Fine	South Carlton colour-coated	1	0.05%	37	0.07%	0
SCC?	Fine	South Carlton colour-coated	1	0.05%	2	0.00%	6
SPCC	Fine	Swanpool colour-coated	3	0.14%	21	0.04%	0
SPOXT	Fine	Swanpool type oxidized wares	1	0.05%	10	0.02%	0
TN	Import	Terra nigra	1	0.05%	28	0.05%	0
MOMH	Mort	Mancetter-Hartshill mortaria	5	0.23%	376	0.70%	29
MONV	Mort	Nene Valley mortaria	1	0.05%	91	0.17%	0
MONVC	Mort	Nene Valley colour-coated mortaria	1	0.05%	29	0.05%	6
MONVC?	Mort	Nene Valley colour-coated mortaria	1	0.05%	86	0.16%	0
MORT	Mort	Mortaria; undifferentiated	1	0.05%	11	0.02%	0
MOVVR	Mort	Verulamium region mortaria	2	0.09%	115	0.22%	17
CR	Oxid	Roman cream wares (various)	41	1.87%	833	1.56%	35
CR?	Oxid	Roman cream wares	1	0.05%	9	0.02%	10
MICA	Oxid	Mica-dusted	1	0.05%	36	0.07%	0
OX	Oxid	Misc. oxidized wares	16	0.73%	171	0.32%	8
OXL	Oxid	Light oxidised fabrics	8	0.36%	57	0.11%	0
OXL?	Oxid	Light oxidised fabrics	2	0.09%	61	0.11%	0
OXLC	Oxid	Light oxidised fabrics with fine calc inclusions	2	0.09%	18	0.03%	0
PINK	Oxid	Pink micaceous flagons etc. Lincoln	1	0.05%	6	0.01%	0
TILE	Oxid	Tile fabric vessels	5	0.23%	154	0.29%	11
VRW	Oxid	Verulamium region white flagons	1	0.05%	16	0.03%	7
QUGRVE	Prehistoric	Quartz, Grog and Veg. gritted, handmade	2	0.09%	11	0.02%	2
BB1	Reduced	Black burnished 1, unspecified	3	0.14%	64	0.12%	11
BBT	Reduced	Black Burnished type copies	7	0.32%	90	0.17%	25
BBT?	Reduced	Black Burnished type copies	1	0.05%	7	0.01%	0
DSGR	Reduced	Early-mid Roman grog and sand ware	21	0.96%	329	0.62%	0

Fabric summary							
Fabric	Fabric group	Fabric details	Sherd	Sherd %	Weight (g)	Weight %	Total RE %
DSGR?	Reduced	Early-mid Roman grog and sand ware	8	0.36%	6	0.01%	0
DSSA	Reduced	Early- mid Roman sandy ware	192	8.74%	4298	8.05%	470
DSSA?	Reduced	Early- mid Roman sandy ware	17	0.77%	294	0.55%	35
FEGY	Reduced	Iron Rich Early Roman Greyware	5	0.23%	107	0.20%	30
GFIN	Reduced	Miscellaneous fine grey wares	2	0.09%	39	0.07%	48
GFIN?	Reduced	Miscellaneous fine grey wares	1	0.05%	7	0.01%	0
GREY	Reduced	Miscellaneous grey wares	568	25.84%	13245	24.80%	1270
GREY?	Reduced	Miscellaneous grey wares	17	0.77%	107	0.20%	0
GREYC	Reduced	Coarse Greyware	18	0.82%	1100	2.06%	106
GREYCS	Reduced	Grey with sand sized calcareous inclusions	12	0.55%	356	0.67%	31
GROG	Reduced	Grog-tempered wares	13	0.59%	877	1.64%	0
GROGF	Reduced	Fine Grog tempered ware	5	0.23%	35	0.07%	0
GYMS	Reduced	Grey wheel-made with minimal fine shell	5	0.23%	99	0.19%	0
IAGR	Reduced	Native tradition/transitional grit-tempered wares	32	1.46%	1133	2.12%	59
IAGR?	Reduced	Native tradition/transitional grit-tempered wares	5	0.23%	98	0.18%	20
IAGRCS	Reduced	Iron Age Gritty tradition with calcareous sand	4	0.18%	137	0.26%	17
IASA	Reduced	IA type sandy wares	46	2.09%	998	1.87%	97
IASA?	Reduced	IA type sandy wares	3	0.14%	7	0.01%	0
LGRL	Reduced	Lincoln grey ware with light firing core	7	0.32%	98	0.18%	22
LGRL?	Reduced	Lincoln grey ware with light firing core	2	0.09%	31	0.06%	20
LOND	Reduced	London wares	1	0.05%	9	0.02%	5
NVGW	Reduced	Nene Valley grey ware	74	3.37%	1269	2.38%	156
NVGWC	Reduced	Nene Valley grey ware coarse sandier	23	1.05%	377	0.71%	69
NVGWC?	Reduced	Nene Valley grey ware coarse sandier	2	0.09%	31	0.06%	0
NVGY	Reduced	Earlier Nene Valle grey ware	12	0.55%	106	0.20%	29
NVGY?	Reduced	Earlier Nene Valle grey ware	1	0.05%	23	0.04%	0
SLGY	Reduced	South Lincs grey cf NVGY	8	0.36%	472	0.88%	24
SAM	Samian	Undifferentiated	2	0.09%	2	0.00%	0
SAMCG	Samian	Central Gaulish	19	0.86%	236	0.44%	67
SAMEG	Samian	East Gaulish	2	0.09%	48	0.09%	0
SAMLM	Samian	Les Martres de Veyre	4	0.18%	41	0.08%	5
SAMSG	Samian	South Gaulish	6	0.27%	35	0.07%	14

Form summary							
Form	Form Type	Form Description	Sherd	Sherd %	Weight (g)	Weight %	Total RE %
A	Amph	Unclassified form	76	3.46%	7593	14.22%	21
BKBAG	Beaker	Baggy	1	0.05%	17	0.03%	0

Form summary							
Form	Form Type	Form Description	Sherd	Sherd %	Weight (g)	Weight %	Total RE %
BKHC	Beaker	Hunt cup	6	0.27%	30	0.06%	0
BKGR	Beaker	Grooved rim	1	0.05%	29	0.05%	10
BKFOSC	Beaker	Folded scaled; curved rim	3	0.14%	19	0.04%	0
BKFOS	Beaker	Folded scaled beaker	4	0.18%	25	0.05%	0
BKFOF	Beaker	Folded; with funnel rim	10	0.45%	214	0.40%	15
BKFO	Beaker	Folded; indeterminate type	17	0.77%	78	0.15%	0
BKFN	Beaker	Funnel necked; form unknown	5	0.23%	17	0.03%	35
BKFG	Beaker	Funnel necked grooved-rimmed	1	0.05%	5	0.01%	5
BKEV	Beaker	Everted rim	4	0.18%	27	0.05%	36
BKCOR	Beaker	Cornice rim	1	0.05%	2	0.00%	6
BKBB	Beaker	Butt beaker	5	0.23%	28	0.05%	10
BK?	Beaker	Unclassified form	3	0.14%	21	0.04%	0
BK	Beaker	Unclassified form	36	1.64%	344	0.64%	10
BKBB?	Beaker	Butt beaker	1	0.05%	5	0.01%	0
BK-F	Beaker/flag	-	1	0.05%	3	0.01%	0
BPR	Bowl	Plain rimmed	1	0.05%	35	0.07%	2
37	Bowl	Samian form- see Webster 1996	7	0.32%	69	0.13%	26
36	Bowl	Samian form- see Webster 1996	1	0.05%	10	0.02%	0
BL	Bowl	Large	18	0.82%	595	1.11%	75
BL?	Bowl	Large	3	0.14%	65	0.12%	0
B?	Bowl	Unclassified form	3	0.14%	55	0.10%	10
BNNK	Bowl	Large bowl with no neck	2	0.09%	126	0.24%	40
B30	Bowl	Imitation samian 30	1	0.05%	9	0.02%	5
BREED	Bowl	Reeded rim	1	0.05%	23	0.04%	5
BSEG	Bowl	Segmental Gillam 294-5	1	0.05%	14	0.03%	7
BTR	Bowl	Triangular rimmed	4	0.18%	104	0.19%	41
BWM	Bowl	Wide-mouthed; D&P No 1225-30	1	0.05%	88	0.16%	16
BWM1	Bowl	Wide-mouthed; D&P No.1225-7	56	2.55%	1918	3.59%	146
BWM2	Bowl	Wide-mouthed; D&P No. 1228	2	0.09%	103	0.19%	18
BWM3	Bowl	Wide-mouthed; D&P No. 1229-30	1	0.05%	91	0.17%	6
BNK	Bowl	Necked	23	1.05%	573	1.07%	163
BEXR	Bowl	With expanded rim	1	0.05%	16	0.03%	0
B31	Bowl	Imitation samian 31	1	0.05%	10	0.02%	6
B31	Bowl	Imitation samian form 31	1	0.05%	10	0.02%	6
B334	Bowl	Carinated jar/bowl with flat cordon- Petch1962 5.8	2	0.09%	42	0.08%	15
BFBH	Bowl	Bead and flange high bead	1	0.05%	83	0.16%	3
B37	Bowl	Hemispherical possibly imitating samian 37	1	0.05%	14	0.03%	4
BFL	Bowl	Flange rimmed	13	0.59%	515	0.96%	132
BCAR	Bowl	Carinated	43	1.96%	1611	3.02%	207
BFB	Bowl	Bead and flange bowl	13	0.59%	460	0.86%	109
BG225	Bowl	Rounded as Gillam 1970 No 225	1	0.05%	42	0.08%	11
B	Bowl	Unclassified form	7	0.32%	245	0.46%	53
BIBF	Bowl	In-turned bead and flange Swanpool D13-23	4	0.18%	324	0.61%	43
BGR	Bowl	With grooved rim	1	0.05%	63	0.12%	11
BGF	Bowl	Grooved flange	2	0.09%	24	0.04%	13

Form summary							
Form	Form Type	Form Description	Sherd	Sherd %	Weight (g)	Weight %	Total RE %
BD	Bowl/dish	-	19	0.86%	421	0.79%	0
18/31-31	Bowl/dish	Samian form- see Webster 1996	2	0.09%	9	0.02%	0
CLSD	Closed	Form	408	18.56%	6400	11.98%	8
CLSD?	Closed	Form	22	1.00%	328	0.61%	0
CPN	Cook pot	Native tradition	2	0.09%	69	0.13%	17
33	Cup	Samian form- see Webster 1996	2	0.09%	34	0.06%	30
DTR	Dish	Triangular rim	2	0.09%	67	0.13%	9
DPR	Dish	Plain rim	17	0.77%	487	0.91%	118
DGR?	Dish	Grooved rim	4	0.18%	47	0.09%	14
DGR	Dish	Grooved rim	4	0.18%	127	0.24%	33
DEXR	Dish	Expanded rim	4	0.18%	127	0.24%	22
D36	Dish	Imitation samian 36	3	0.14%	93	0.17%	25
D	Dish	Unclassified form	8	0.36%	122	0.23%	11
18/31	Dish	Samian form- see Webster 1996	2	0.09%	52	0.10%	3
79	Dish	Samian form- see Webster 1996	2	0.09%	16	0.03%	16
FTR	Flagon	Ringed dominant top ring	1	0.05%	18	0.03%	35
FFN	Flagon	Face-neck	1	0.05%	7	0.01%	0
F?	Flagon	Unclassified form	2	0.09%	26	0.05%	0
FX2	Flagon	2 handled	22	1.00%	539	1.01%	0
F	Flagon	Unclassified form	1	0.05%	54	0.10%	0
FJ	Flagon/jar	Unclassified form	7	0.32%	218	0.41%	7
JNK?	Jar	Necked	1	0.05%	6	0.01%	0
JEVS	Jar	Everted rim- stubby	3	0.14%	52	0.10%	45
JGLOB	Jar	Globular	19	0.86%	842	1.58%	0
JIR	Jar	Inturned rim	1	0.05%	6	0.01%	2
JL	Jar	Large	53	2.41%	3076	5.76%	83
JL?	Jar	Large	9	0.41%	346	0.65%	0
JNK	Jar	Necked	18	0.82%	260	0.49%	90
JEVC	Jar	Everted rim- curved as Gillam type 135	15	0.68%	262	0.49%	74
JNN	Jar	Narrow-necked	10	0.45%	416	0.78%	153
JNN?	Jar	Narrow neck	3	0.14%	102	0.19%	8
JPED	Jar	Pedestal- IA Type	1	0.05%	185	0.35%	0
JRUST	Jar	Rusticated	6	0.27%	185	0.35%	0
JS	Jar	Storage	17	0.77%	1145	2.14%	11
JS52	Jar	Storage (form as Webster 1949 Fig 12.48)	11	0.50%	641	1.20%	27
JUP	Jar	Upright rim	2	0.09%	70	0.13%	35
JDLS	Jar	Double lid-seated	3	0.14%	242	0.45%	55
JWM	Jar	Wide-mouthed as RPNV 3-5	30	1.36%	836	1.57%	160
JWM?	Jar	Wide-mouthed as RPNV 3-5	13	0.59%	358	0.67%	61
JSQ	Jar	Squared rim	1	0.05%	54	0.10%	10
JCUR?	Jar	Curved	3	0.14%	27	0.05%	33
JCUR	Jar	Curved	22	1.00%	354	0.66%	104
JCH	Jar	Channel rim- Iron Age type	2	0.09%	24	0.04%	15
JBR	Jar	Bead rimmed	2	0.09%	325	0.61%	35
JEV	Jar	Everted rim	60	2.73%	1182	2.21%	237

Form summary							
Form	Form Type	Form Description	Sherd	Sherd %	Weight (g)	Weight %	Total RE %
JDW	Jar	Dales ware	25	1.14%	763	1.43%	189
J	Jar	Unclassified form	110	5.00%	2888	5.41%	107
J?	Jar	Unclassified form	38	1.73%	1052	1.97%	19
J168	Jar	Storage; as D&P 1027	1	0.05%	232	0.43%	24
JBK	Jar/Beaker	Small jar or beaker	5	0.23%	51	0.10%	10
JBKFO	Jar/Beaker	Folded	2	0.09%	27	0.05%	0
JBKEV	Jar/Beaker	Everted rim	3	0.14%	44	0.08%	53
JB	Jar/Bowl	Unclassified form	28	1.27%	457	0.86%	73
JBCAR	Jar/Bowl	Carinated	2	0.09%	14	0.03%	0
JBL	Jar/Bowl	Large	75	3.41%	3746	7.01%	10
JBNK	Jar/Bowl	Necked	43	1.96%	505	0.95%	145
JB?	Jar/Bowl	Unclassified form	1	0.05%	15	0.03%	15
L?	Lid	Unclassified form	1	0.05%	24	0.04%	5
L	Lid	Unclassified form	12	0.55%	333	0.62%	87
CRUC?	Misc	Crucible	3	0.14%	45	0.08%	12
BX	Misc	Castor box	2	0.09%	39	0.07%	12
CHP	Misc	Cheese press	1	0.05%	22	0.04%	0
M	Mortaria	Unclassified Form	8	0.36%	373	0.70%	0
MHK	Mortaria	Hook-rimmed as Gillam 237-45	3	0.14%	360	0.67%	46
OPEN	Open	Form	15	0.68%	294	0.55%	0
P	Plate	Form	4	0.18%	100	0.19%	6
P?	Plate	Form	1	0.05%	69	0.13%	0
PGB	Plate	Gallo-Belgic imitation	1	0.05%	29	0.05%	11
18	Plate	Samian form- see Webster 1996	1	0.05%	7	0.01%	8
PD	Plate/Dish	Form	1	0.05%	20	0.04%	0
38	Samian	Samian form- see Webster 1996	2	0.09%	51	0.10%	13
31	Samian	Samian form- see Webster 1996	4	0.18%	49	0.09%	10
-	Unknown	Form uncertain	572	26.02%	5739	10.75%	36

REGIONAL FINEWARE IMPORTS

From the later 2nd to the end of the 4th century the majority of the fine wares were produced by the Nene Valley colour coat potters. There is a relatively lower proportion of Nene Valley colour coated wares from the HOPS09 site in comparison to the groups studied from the Police Station site (Precious 2004) but this is due to the earlier bias to the Hoplands assemblage. There is a good range forms from the Nene Valley including a face flagon (No. 18) and a variety of bowls, dishes, 'Castor-Boxes' and beakers. There are relatively few jars in NVCC fabrics in this assemblage suggesting that jars were mostly provided by the local coarse ware industries in contrast to assemblages from sites further south such as Baston which where the market was saturated by Nene Valley products. It is notable that there are few of the later beaker forms or fabrics from the Nene Valley colour coat industry within the HOPS09 group in contrast to the assemblages from Navenby (Rowlandson in prep.).

REGIONAL COARSEWARE IMPORTS

Although small the group of BB1 imported from the Dorset region within this assemblage is much larger than in groups from Navenby (Rowlandson in prep.). Whilst this may be a bias due to the date range a similar proportion of BB1 is also other sites at Sleaford (eg Precious 1998). Another notable occurrence in this group from the Hoplands is a sherd from a jar or a flagon in the 1st century Verulamium White Ware fabric. Other examples have been recognised from excavations at Sleaford (Precious 2004) and this is probably due to the continued settlement of Sleaford throughout the 1st century AD. Examples of the VRW fabric are rare in Lincolnshire and the presence of this ware suggests that there was already a willing market for romanised coarse ware vessels at Sleaford in the 1st century AD.

Sleaford is on the edge of the area which regularly received Nene Valley Greyware. This assemblage has a small proportion of these mid 2nd to mid 3rd century coarsewares including wide mouth jars, narrow necked jars, bowls, dishes and a single example of a folded beaker. A small quantity of the early NVGY fabric is also present amongst the assemblage, another fabric more common in assemblage to the south of Sleaford. At Navenby Nene Valley Greyware is unusual; Sleaford probably represents the outer limit of the regular distribution of this ware (Rowlandson in prep.). The coarser NVGWC fabric was also present in small products with forms including carinated bowls (No.38), a triangular rimmed dish and everted rimmed jars. It is unclear if this coarser fabric is produced in the Nene Valley and it remains possible that it was produced more locally from another light firing clay source. The majority of the coarse wares from the HOPS09 site were probably produced by potters in the southern Lincolnshire area.

LOCAL FINWARES

A small number of sherds in the South Carlton colour coated fabric have been tentatively identified in this group. This is a rare occurrence as it appears much of the output of the South Carlton kilns was distributed to the north of Lincoln although the difficulty of splitting SCC from other colour coated fabrics may hinder our understanding of the distribution of these wares. A single sherd from a mica-dusted platter or dish is also present which shares similar quartz inclusions to the DSSA fabric. Only two sherds of the 4th century Lincoln SPCC fabric are present in the assemblage probably partly as a result of the earlier bias of the pottery in this group and also due to the quantity of the NVCC fabrics available.

LOCAL OXIDISED WARES

There are a low proportion of oxidised wares amongst the Roman pottery assemblages which is typical of assemblages from the region. The source of many of the Cream (CR) wares is unclear and most of the sherds are probably from flagons from the Lincoln, or perhaps the Nene Valley, industries but one notable vessel is a pitch lined two handled flagon from context 402, almost certainly of 1st to early 2nd century date. Also of note is a sherd of the Lincoln Legionary fabric PINK also indicative of an early Roman date. Of the other oxidised wares the OXL and calcareous OXLC fabric also appears to have been used for the

manufacture of flagons in the 1st and second century AD. Three sherds from a large tile fabric pot probably used for storage are present in the assemblage and there is also a low proportion of the late Roman SPOX fabric from Swanpool within this group.

OTHER LOCAL COARSE WARES

A small quantity of Black Burnished Type wares, predominantly small bowls and dishes, are present. A local source for these vessels is possible or they may be atypical examples of regionally traded fabrics. A number of vessels from the HOPS09 group share similar sand tempering to examples from Lincoln (eg. Rowlandson 2006b).

The majority of the early Roman wheel thrown vessels from this assemblage are assigned to the DSSA fabric (No. 19, 22-29) which are discussed in the catalogue below and in the detailed fabric description section. Vessels in this fabric appears to date to the later 1st to earlier 3rd century on the basis of the range of forms seen by this author. A notable vessel not suitable for illustration is the neck of a large flagon from context 220 probably copying the large two handled early Roman flagons (as Elsdon 1997, Fig. 64.168), other reduced flagons have also been illustrated from previous excavations (Elsdon 1997, Fig. 64.181). Other early Roman vessels in the DSSA fabric from Sleaford, reported on by this author, also include a jar with an everted rim and web rustication and (Rowlandson 2008, No. 8). This fabric has also been encountered at Navenby where a later range of vessels are present mimicking BB1 types suggesting a Hadrianic or later date (Rowlandson in prep.). A source in southern Lincolnshire for the DSSA fabric appears likely as a number of the tiles found at Sleaford share a similar dull oxidised firing colour. Further analysis may yet help to refine a source. A small number of LGRL sherds, probably from a Lincoln source (Rowlandson in prep. & 2006b) and the South Lincolnshire greyware fabric (SLGY) are also present, Sleaford is probably at the outer limit of the distribution of both these fabrics.

The majority of the sherds in the GREYC fabric are from large jars but two early Roman wheel made vessels- a rouletted beaker (No. 34) and a carinated bowl (No. 35) are also present. A small proportion of the early Roman Iron Age tradition fabrics DSGR and IAGR are also present mostly large jars (No. 39) and large bowls but also an unusual example of a cheese press from context 264.

The majority the reduced greywares from the site were attributed to the GREY fabric group. Assigning reduced greywares to production sources with certainty can be difficult and there are clearly a range of fabrics within this group representing a range of dates and production sources. The forms present range from rusticated jars to late roman wide mouthed bowls. A number of sherds (noted with SWPT in the archive) compare well with the greyware products of the Swanpool kilns (Webster and Booth 1947). A Lincolnshire source is likely for the majority of the GREY group. The illustrated vessels are discussed below in the catalogue.

Roman shell gritted vessels (SHEL, SHELP) present include the typical late Roman Dalesware and ‘Double lid seated’ jar forms along with simple small bowls and dishes (Gillam 1970, Type 157, Darling 1977). The source of much of this material is unclear although the SHELP group is probably from a southern Lincolnshire source. None of the Dalesware jars appear to have similar fabrics to examples from north-west Lincolnshire and it appears likely that the majority of the shell gritted Roman pottery from the HOPS09 site was produced fairly locally. An example of a double lid seated jar in a late Roman calcareous oolitic gritted fabric (LROL) is also probably from a fairly local source. A small proportion of shell and sand gritted wheel made jars are present in the assemblage which compare well with samples from the Bourne kilns (SLSHB, No. 41). Although a small number of sherds from the typical curved rimmed jar type occur in this assemblage there are none of the distinctive groove rimmed dishes in the HOPS09 assemblage. It is likely that the majority of the shell gritted pottery was used for kitchen or industrial functions as many vessels show signs of soot deposits.

CATALOGUE

The Illustrated Pottery					
Pub	D. No	Context	Fabric	Form	Comments
01	D21	109	IASA	JPED	A lower wall fragment of a pedestal jar in a reduced sand tempered fabric. Burnished externally and handmade with cordon decoration this vessel appears to have been trimmed around the lower wall and pedestal to re use the vessel. Iron Age pedestal vessels are known from Dragonby, Saltersford and Northamptonshire. Friendship- Taylor dates these vessels to AD25-50 and Elsdon has examples of hollow pedestal vessels in Ceramic stages 8-9 and which probably equates to a similar date range as Dragonby Ceramic stages 9-11 represent the peri-Conquest period (Elsdon 1996a Type 3; Elsdon 1996a, C16; Friendship-Taylor 1999, Type 18).
02	D01	109	GRSH	CRUC?	A small hand made cup or crucible. This is a relatively unusual Iron Age form. The crucibles identified at Sleaford appear to be triangular in shape were as this vessel from the HOPS site is probably rounded. No residue was present on this vessel so it is perhaps more likely to be an unusual ‘cup’ form. An example of a similar vessel is already noted from the Hoplands, Sleaford and Dragonby (Boyle and Precious 2008, D3; Elsdon 1996b, Fig.19.20.7) .
03	D20	109	SHSC	JBR	A large proportion of a small handmade bead rim jar. This form is a typical late Iron Age form which occurs from Dragonby Ceramic Phase 1 onwards (Elsdon 1996b, Fig.19.20.14). Broadly similar vessels have been illustrated from Sleaford by Elsdon (1997)
04	D23	109	SHMM	JNK	A handmade necked jar decorated with cordons. A vessel illustrated by Elsdon from Sleaford has a similar rim and neck (1997, Fig. 62.148).
05	D22	109	SHCM	BCAR	A carinated bowl in a shell-gritted fabric. The form of this vessel is probably broadly similar to No 13 discussed below.
06	D07	266	SHSM	B	A simple ‘s-shaped bowl’ (as Knight 2002) in an oxidised shell gritted fabric. This is the best example of a total of 4 examples from this context.
07	D06	266	SHCM	JL	A hand made narrow necked jar rim in an oxidised shell gritted fabric. It appears likely that this rim is probably from a similar large globular jar to No.8 although they are clearly separate vessels.

The Illustrated Pottery					
Pub	D. No	Context	Fabric	Form	Comments
08	D04	266	SHCM	JGLOB	A handmade globular jar with roundel stamp and rouletted decoration. The vessel is mostly oxidised but appears to have partially misfired in patches, cracked and spalled (see photo above for cracking). There are many examples of similar vessels from Sleaford with varying decorative motifs. The roundel stamp is an exact parallel to that illustrated by Elsdon (1997, Pl.19; 1975, Fig. 6.3). This is grouped in triads (as Elsdon 1997, Fig. 59.92). The overlapping stamps appear to have been made by a right handed potter working above the vessel during the decoration of the vessel (see photo and rubbing- above).The typical double square toothed rouletted decoration with grooved boundaries is used which is common on vessels from Ancaster, Sleaford and Sapperton (Elsdon 1996a) and another broader four square toothed wide roulette wheel with external grooves was also used for the chevrons (see rubbing above for detail). Examples of vessels of a similar form occur at Dragonby but they are not usefully stratified (Elsdon 1996b, Fig. 19.54.647 & 649). It appears that globular vessels occur from the earliest groups at Dragonby and it is possible that this vessel may date to before the end of the 1 st century BC.
09	D05	266	SHCM	JL	A handmade large jar with finger pressed marks joining the rim coils. A good parallel can be found from Dragonby (Elsdon 1996, Fig. 19.46.474).
10	D36	413	SHOLF	BNK	A large proportion of a handmade necked bowl in an irregularly fired fine shell gritted fabric. Finger marks are evident internally where the neck has been joined to the body. Numerous similar vessels are illustrated from Sleaford (Elsdon 1997, Fig.62).
11	D26	308	IASA	PGB	A sand gritted platter, reduced, wheel finished copping Gallo-Belgic imports such as Terra Nigra. Friendship-Taylor considered that locally produced vessels such as this first occurred in 'the later part of the first quarter of the first century AD' (1999, 26). Residual in a Phase 5 deposit.
12	D13	168	IASA	BCAR	A wheel finished sand gritted carinated vessel fired to a reduced browl and externally burnished. This vessel is probably a transitional vessel, residual in a phase 6 context.
13	D19	311	IASA	BCAR	This cordoned carinated vessel is similar to the 'Tazza' Type 7 defined by Friendship-Taylor as dating broadly to the middle of the 1 st century AD (1999).
14	D35	101	IASA	CLSD	An sherd from a closed ?handmade vessel with an unusual rouletted decoration. The poorly impressed wheel has imprinted a pattern of triangles and squares onto the vessel. The vessel appears similar to the other IASA vessels- it is possible that this vessels is of transitional date. This vessel has been shown to J. Young and it is presumed by this author that this vessel is Iron Age although it may conceivably be considerably later as it is from the 'dark earth' deposit sealing the Roman occupation on the site! A parallel for this vessel is illusive.
15	D24	100	SHCM	JUP	A simple handmade jar with an upright rim. This vessel might be comfortably dated to the mid or late Iron Age. The vessel is sooted externally from use on a fire. A topsoil find.
16	D25	100	SHCC	JS52	A large 'Late La Tène' storage jar in a wheel-finished, oxidised shell gritted fabric. A common form in 1 st century AD groups. A number of broadly similar vessels are illustrated from Sleaford (Elsdon 1997, Fig.52.20-22). This vessel has a rouletted 'wheatsheaf' like motif around the girth of the vessel. Probably Iron Age in date, a topsoil find.
17	D34; R2	129	MOVR	MHK	Two sherds from a hook-rimmed mortarium stamped by the potter Bruccius. The applied spout has broken off the sherds present. This vessel is discussed in detail by Hartley (above).
18	D33	356	NVCC	FFN	A nose fragment from a Nene Valley Colour coated face flagon (as Howe 1980, Fig.7.74). A fragment of similar vessel has been retrieved from another Hoplands site (Boyle and Precious 2008)

The Illustrated Pottery					
Pub	D. No	Context	Fabric	Form	Comments
19	D16	168	DSSA	JEVS	An early Roman wheel made jar with a stubby everted rim
20	D30	218	GFIN	BK	A beaker in a fine black silty fabric. Perhaps a poppy-head beaker type. Late 1 st to early Antonine. In a Phase 2 context.
21	D08	415	LOND	B30	A 'London Ware' type vessel with scribed vertical line decoration. Other London ware vessels have been illustrated from Sleaford by Elsdon (1997, Fig. 70.282). A Flavian to Trajanic date would be appropriate.
22	D02	415	DSSA	JEV	A jar with a high shoulder and linear rustication. This vessel would probably fit with a Flavian-Trajanic date
23	D27	348	DSSA	JWM?	A jar with an everted rim and a wide mouth.
24	D37	155	DSSA	BCAR	The base and lower wall of a carinated bowl with irregular reduced and oxidised surfaces. A misfired or heavily burnt vessel
25	D10	333	DSSA	BCAR	A carinated bowl. An date between the late 1 st to 2 nd century date would be appropriate for this vessel. Residual in a Phase 5 context.
26	D11	333	DSSA	BCAR	A carinated bow with burnished wavy line on the neck of the vessel. An date between the late 1 st to 2 nd century date would be appropriate for this vessel. Residual in a Phase 5 context.
27	D41	326	DSSA	BSEG	A flanged bowl. Probably early to mid Roman in date. Residual in Phase 6 context 326.
28	D40	326	DSSA	BFL	A carinated bowl with a flared lip. A typical early Roman form, a similar vessel is illustrated from in the fortress at Lincoln (Darling 1984, Fig.16.79)
29	D38	171	DSSA	BREED	A bowl with a reeded rim. A similar vessel with a similar fabric description is illustrated from Sleaford (Elsdon 199, Fig. 67.220). An early Roman form usually associated with Flavian and Trajanic deposits which is not common in form in Lincolnshire assemblages. Residual in a Phase 4 context.
30	D09	364	GREY	J	A greyware jar with pushed out bossed decoration. Although often occurring on late Roman vessels examples from Sleaford and Ancaster appear to date to the Antonine period (Elsdon 1997, Fig. 66.202-3 & p167).
31	D15	168	GREY	JEVC	A greyware jar copying BB1 types. The vessel is wheel thrown and has a warped rim, a kiln 'second'.
32	D03	302	GREY	BWM1	A nearly complete wide mouthed bowl, probably deposited whole. This vessel can be paralleled with another vessel from Sleaford illustrated by Elsdon (1997, Fig. 70.276).
33	D12	402	GREY	L	A greyware lid. A complete profile, nearly half of the lid is present.
34	D18	204	GREYC	JBKEV	A small wheel made beaker with juddered rouletted decoration. An early Roman vessel. Phase 2
35	D17	204	GREYC	BCAR	A carinated bowl with cordons, wheel made and hard kiln fired, in a coarse sandy fabric. This vessel appears similar to some of the Iron Age vessels. An early Roman vessel. Phase 2
36	D31	347	GREYC	JWM	A large wide mouthed jar in a coarse grey fabric.
37	D29	348	GREYC	JL	A large greyware jar
38	D39	103	NVGWC	BCAR	A neat carinated bowl or beaker in a coarse sandy light fired and fumed fabric. Un-stratified, probably late 1 st to 2 nd century.
39	D28	334	IAGRCS	CPN	A transitional native tradition cook pot with grog, quartz and calcareous sand grit. Similar native tradition cook pot vessels types are illustrated from Sleaford (Elsdon 1997, Fig.68.248). Probably a Late 1 st to early 2 nd century vessel residual in a Phase 4 context
40	D32	348	SHEL	JSQ	A shell gritted jar probably early Roman
41	D14	168	SLSHB	JCUR	A Bourne type curve rimmed jar

FUNCTION AND USE

IRON AGE AND TRANSITIONAL POTTERY

As discussed above there are two large stratified groups of note and a number of other vessels in other later groups. The earlier group, context 266, may represent pottery waste from a clamp firing. The range of vessels is exclusively large jars and s-shaped bowls perhaps representing a batch of larger vessels produced for domestic use, as discussed, possibly in the later part of the 1st century BC.

Within the rest of the assemblage there is a broad range of vessels present including a platter, beakers, small (?drinking) bowls, hand made lids jars and large jars. Notable is the presence of a range of open forms in the group, notably the Terra Nigra platter (Rigby above), the native platter No. 11 and carinated bowls No. 5 and No. 13, which suggest that the inhabitants of the area had moved towards using ceramics as part of a more complicated and continental influenced dining practice. Such vessels are more suited to dining at a table than the earlier suite of Iron Age vessels; this may represent either a chronological or status marker. In comparison with other groups from Lincolnshire and Northamptonshire it probably represents activity in the 1st century AD (May 1996, Friendship Taylor 1999). These themes of dining practice in late Iron Age Britain have been expanded by Hill (2002) and Fitzpatrick and Timby (2002) who note that the change to a broader range of ceramic forms and the probable development of formalised dining at tables represents a social change in Iron Age society prior to the Roman conquest.

Another factor when considering this assemblage which would appear to support this theory is the relative absence of large Iron Age bowls. These vessels, often with bead rims in the Iron Age being replaced by the 'BNAT' form in the early Roman period and subsequently the romanised wide mouthed bowl types (BWM) are a standard vessel class throughout assemblages in these periods. These vessels, in various guises, continue to be one of the most common forms in use on less sophisticated sites. Although the function of these vessels is unclear, and probably broad and varied, these bowl types are more common on sites with more limited ceramic ranges. It is likely that these large bowls represent a collective eating practice, perhaps with less dependence upon tables. The broad range of Iron Age forms present in the HOPS09 group and the low level of these large bowl types suggest activity on this site is similar to the sophisticated 'high status' activity known from previous excavations at Sleaford in comparison to other more limited rural groups in the region.

POST CONQUEST ROMAN POTTERY

The sequence of pottery deposits from the post- Conquest period appears to suggest that a large proportion of the ceramics from the site were dumped in the early Roman period and were subsequently reworked in the later period when the area was kept cleaner of contemporary rubbish. Many of the later structural features contain only earlier Roman pottery, probably present in the soil, perhaps suggesting a structured

process of rubbish disposal in the later Roman period. During a large period of the Roman activity there are only sparse deposits of contemporary pottery deposited in pits or in the backfilling of wells when they became redundant. This disposal of pottery in wells and pits is largely in contrast to Navenby where there were far fewer dumps of pottery into cut features and rubbish was probably piled in middens or smashed and abandoned in yard areas (Rowlandson in prep.).

The range of early Roman pottery present suggests a good range of romanised wheel made kitchen and table wares with pottery from the fortress at Lincoln and a range of samian and flagons. The later Roman pottery (mid 2nd century onwards, Phase 3) is much more typical of a roadside settlement group with a range of functional kitchen vessels such as jars and wide mouthed bowls along side table wares such as the beakers and bowls from the Nene Valley. The late Roman assemblage compares well to groups from the Sleaford Police station site and the earlier phases of occupation at Navenby.

Of note is another find of a NVCC face neck flagon (No. 18) from the Hoplands area. An example of a similar vessel was found during previous excavations at the Hoplands (Boyle and Precious 2008) and a greyware facepot was found during the evaluation of the HOPS09 site itself (SLTH08, Precious and Boyle 2008). Further facepots were found during the older excavations at Sleaford and are illustrated by Elsdon (1997). The presence of these specialist or 'cultic' vessels has also been discussed at length on the basis of suite of similar vessels from the nearby roadside settlement at Navenby (Darling in Rowlandson in prep.) where she has suggested that they formed some part of a personal ritual or observance for the inhabitants of the site. It appears that an increasing number of these specialist vessels are being found at roadside and official town sites in the region but they are extremely rare on more basic rural sites. The example from the HOPS09 site adds further light to the growing evidence of the beliefs and observances of the inhabitants of Roman Sleaford. This vessel was probably an important vessel to the inhabitants of the site and possibly provided the focus for prayer or veneration.

CONCLUSIONS

The nature of the Iron Age to Roman transition at Sleaford still remains elusive. Recently it has been suggested that there was a hiatus in occupation from the late 1st to the mid 2nd century AD (Taylor 2010, 121-2). This interpretation is largely based upon the excavations at the Sleaford Police Station site (Herbert 2010). The Police Station excavations did not find evidence of any evidence of ceramics dating to before the middle of the 2nd century AD but the 'Old Sleaford Revealed' excavations and subsequent excavations have found a growing amount of early Roman pottery from the Hoplands and Old Place areas which debunk the assertions made by Taylor (Elsdon 1997; Boyle and Precious 2008; Precious and Boyle 2008; Leary 2008; Rowlandson 2008). Taylor also takes no consideration of the extensive research undertaken by Willis (1996 & 1993) who has attempted to establish the nature of the change in ceramic assemblages or

'romanisation' which occurred during this period. Willis highlighted that many of the groups of early Roman pottery found at Sleaford and Ancaster contained a high proportion of local native tradition wares with a limited uptake of romanised wares until some time in the 2nd century. This more Iron Age type of ceramic usage and continuity results in a much smaller number of pots in circulation than in later Roman periods after the large scale development of the romanised wheel made 'greyware' industries in the middle of the second century AD. As such the change in ceramic usage in to a more profligate pattern of consumption of pottery in the late Roman period makes comparison between periods on the basis of number of sherds a little unsound. Indeed the problem is compounded by the fact that even military units regularly utilised local potters as they made perfectly durable vessels and many of these military installations also produce very little pottery when excavated (discussed in Rowlandson 2010, 2009a, Willis 1996 and Darling 1988) This continuity of pottery styles at Sleaford rather than a stark change in ceramic usage (eg York) probably suggests a continuity of occupation in this case not a hiatus or massive change. Indeed the repertoire of the potters of the 2nd century AD in this region harks back to many of the late La Tène forms present before the conquest suggesting a continuing need and for similar style vessels but mass produced in more durable wheel made 'Roman' fabrics.

As much of the new evidence for occupation at Sleaford and other settlements in the region is collected on the basis of developer funded excavations it is difficult to establish that earlier deposits are not present. The mandate for developer funded excavations often does not result in comprehensive sampling of earlier deposits due to project constraints (eg. Herbert, 2010, Fig.3- showing layers potentially masking the earlier deposits). This is a general problem, most commonly felt when interpreting urban sites in the region, and it is often only possible to produce an understanding of the latest groups from a site.

In the case of Sleaford the proposal of a hiatus of occupation largely on the basis of the Police Station excavation and largely ignoring the nature of the ceramic evidence is probably unsound. A more plausible suggestion would be that the settlement at Sleaford expanded in the Antonine period from the core of the Iron Age and early Roman settlement. Other sites at a distance from the main core of the settlement such as the unpublished excavations on the edge of the Roman settlement of Sleaford in the Kirkby-La-Thorpe parish (KILT07, personal spotdate by author) also show a similar pattern ceramics to the Police Station site with a probable development in the middle of the 2nd century. These two sites may represent the flourishing of the settlement rather than the proposed reestablishment.

Although HOPS09 assemblage contains late Roman and final Roman pottery it appears that a relatively small amount of pottery was deposited on this site in comparison to other groups such as those from the Police Station Site. This low level of deposition may be as a result of a rubbish disposal practice of dispersing ceramic waste elsewhere as it is marked that the contemporary groups of late Roman pottery mostly appears on the HOPS09 site in backfilled features such as wells. This suggests, far from

abandonment, ordered living and working on the site rather than fly tipping and dumping. The continued cutting of wells on this site, including one backfilled with final Roman pottery of the very late 4th century or later suggest the area remained in use. However, the ceramic waste produced by the inhabitants during the final period of occupation predominantly lies elsewhere.

RECOMMENDATIONS

The pottery should be retained and deposited in the relevant museum to enable future scrutiny. This assemblage may be suitable for comparison with future groups of late Roman pottery from the area as it has a small number of large, statistically viable groups.

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Iron Age and Roman Pottery Fabrics				
Fabric	Fabric group	Fabric details	National code Tomber and Dore	Description
AMPH	Amph	Miscellaneous amphorae		
DR20	Amph	Dr 20 amphorae	BAT AM 1; BAT AM 2	Darling and Precious forthcoming
GAU4	Amph	Gauloise 4	GAL AM 1	Darling and Precious forthcoming
NAAM	Amph	North African amphorae	NAF AM 1; NAF AM 2	Darling and Precious forthcoming
GRSH	Calcareous	South Lincs Grog with shell	-	
IALIM	Calcareous	Iron Age Limestone tempered	-	Handmade, Iron Age.
IASAOL	Calcareous	Iron Age sandy fabric with ooliths	-	Misc. Iron age/transitional sand and calc. oolith tempered ware. Handmade
LROL	Calcareous	Late Roman oolitic gritted fabric		Similar to LCOA with burnished surfaces and sparse cal. Ooliths. Later 4th century. Form present JDLS-Late Roman double lid seated jar.
SHCC	Calcareous	Shell- common coarse		Description as PCRG 1997
SHCF	Calcareous	Shell- common fine		Description as PCRG 1997
SHCFP	Calcareous	Shell- common fine- Punctate shell		Description as PCRG 1997 with punctate brachiopod shells- South Lincolnshire/South Midlands source.
SHCM	Calcareous	Shell- common medium		Description as PCRG 1997
SHCMP	Calcareous	Shell- common medium shell & Punctate shell		Description as PCRG 1997 with punctate brachiopod shells- South Lincolnshire/South Midlands source.
SHEL	Calcareous	Miscellaneous undifferentiated shell-tempered		Used for Roman shell gritted wares. Includes handmade, wheel finished and wheel made types. 'Dalesware' jars are included within this group and can be isolated by the JDW form.
SHELP	Calcareous	Shell gritted including Punctate Brachiopods		Used for Roman shell gritted wares with punctate brachiopod shells- South Lincolnshire/South Midlands source. Includes handmade, wheel finished and wheel made types
SHMM	Calcareous	Shell- moderate medium shell		Description as PCRG 1997
SHOLF	Calcareous	Shell and ooliths- fine		Description broadly as PCRG 1997
SHSC	Calcareous	Shell- sparse coarse shell		
SHSF	Calcareous	Shell- sparse fine shell		
SHSM	Calcareous	Shell- sparse medium shell		
SHSMP	Calcareous	Shell- sparse medium & Punctate shells		
SHSMP	Calcareous	Shell- sparse medium shell & Punctate shell		

Iron Age and Roman Pottery Fabrics				
Fabric	Fabric group	Fabric details	National code Tomber and Dore	Description
SLSHB	Calcareous	Bourne shell gritted	BOG SH*	Wheel made as Precious 2001
CC	Fine	Other colour-coated wares		Darling and Precious forthcoming
NVCC	Fine	Nene Valley colour-coated ware	LNV CC	Darling and Precious forthcoming
NVCC1	Fine	Nene Valley Colour-coat- light firing fabric	LNV CC	Darling and Precious forthcoming. Light firing, cream core.
NVCC2	Fine	Nene Valley Colour-coat- late red fabric	LNV CC	Darling and Precious forthcoming. Oxidised ried fabric dark colour coat- typical fabric of late Roman beakers see Perrin 1999
NVGCC	Fine	Nene Valley grey colour-coated ware	LNV CC*	Darling and Precious forthcoming. As NVCC with grey slip not fumed surfaces
NVMIC	Fine	Nene Valley colour-coated with mica overslip	LNV CC*	Darling and Precious forthcoming
SCC	Fine	South Carlton colour-coated	SOC CC	Darling and Precious forthcoming. An unusual occurrence in groups to the south of Lincoln- tentative identification.
SPCC	Fine	Swanpool colour-coated	SWN CC	Darling and Precious forthcoming
SPOXT	Fine	Swanpool type oxidized wares	-	Late Roman oxidised type- copying SPOX but with atypical sand temper
TN	Import	Terra nigra	CNG TN; GAB TN 1	Darling and Precious forthcoming.
MOMH	Mort	Mancetter-Hartshill mortaria	MAH WH	Darling and Precious forthcoming
MONV	Mort	Nene Valley mortaria	LNV WH	Darling and Precious forthcoming
MONVC	Mort	Nene Valley colour-coated mortaria	LNC CC	Darling and Precious forthcoming
MONVC?	Mort	Nene Valley colour-coated mortaria	LNC CC	Darling and Precious forthcoming
MORT	Mort	Mortaria; undifferentiated		Darling and Precious forthcoming
MOVR	Mort	Verulamium region mortaria	VER WH	
CR	Oxid	Roman cream wares (various)		Darling and Precious forthcoming. Sherds attributed to a fabric group rather than a discrete fabric, a Lincoln or Nene Valley source is likely for the vessels in this group.
CR?	Oxid	Roman cream wares		Darling and Precious forthcoming. Sherds attributed to a fabric group rather than a discrete fabric, a Lincoln or Nene Valley source is likely for the vessels in this group. The sherds in this fabric are usually flagons
MICA	Oxid	Mica-dusted		
OX	Oxid	Misc. oxidized wares		This coding comprises all miscellaneous oxidized sherds, usually in varying red-brown shades and degrees of grittiness, for which no significant fabric groupings are evident.
OXL	Oxid	Light oxidised fabrics		Light oxidised wares- pale orange or pink

Iron Age and Roman Pottery Fabrics				
Fabric	Fabric group	Fabric details	National code Tomber and Dore	Description
OXLC	Oxid	Light oxidised fabrics with fine calc inclusions		A light oxidised fabric pale orange some sherds with a pale yellow orange external surface. Sparse quartz 0.3mm sparse to common fine calc. ?shell 0.3mm. Probably a flagon fabric
PINK	Oxid	Pink micaceous flagons etc. Lincoln		Darling and Precious forthcoming. Lincoln Legionary fabric.
TILE	Oxid	Tile fabric vessels		Darling and Precious forthcoming. Pot manufactured in a Tile fabric
VRW	Oxid	Verulamium region white flagons	VER WH	Darling and Precious forthcoming
QUGRVE	Prehistoric	Quartz, Grog and Veg gritted, handmade		Described as PCRG 1997
BB1	Reduced	Black burnished 1, unspecified	DOR BB1	Darling and Precious forthcoming
BBT	Reduced	Black Burnished type copies		Local Black Burnished ware copies
BBT?	Reduced	Black Burnished type copies		Local Black Burnished ware copies
DSGR	Reduced	Early-mid Roman grog and sand ware	-	Rowlandson in prep. This fabric fits into the IAGR class. It is a coarser variant of the DSSA fabric with sparse to moderate grog between 2-4mm and some examples have rare shell between 2-4mm. These vessels have dark grey to black surfaces and a distinctive dull oxidised (orange) core or margins. Some sherds have a dark grey core along with dull oxidised margins. The sherds have common aub rounded quartz 0.3-1mm with rare grains 1.5mm and sparse ferrous grains 0.3-1mm sparse fine silver mica is evident on the surfaces. The majority of vessels appear to be wheel finished or wheel made although a number of the larger jars or bowls may be handmade. The repertoire of forms is similar to those found in IAGR; mostly large bowls or jars including everted rimmed types.
DSSA	Reduced	Early- mid Roman sandy ware		Rowlandson in prep. This fabric has been encountered at Sleaford and Navenby. These vessels have dark grey to black surfaces and a distinctive dull oxidised (orange) core or margins. Some sherds have a dark grey core along with dull oxidised margins. The sherds have common aub rounded quartz 0.3-1mm with rare grains 1.5mm and sparse ferrous grains 0.3-1mm sparse fine silver mica is evident on the surfaces. The range of forms including a flagon, early reeded rimmed and flared rimmed bowls with low carinations and everted jars with web and linear rustication in the late 1st to early 2nd century (Rowlandson 2006 and Rowlandson 2010) and copies of Hadrianic Black Burnished Ware forms in the 2nd century and perhaps into the early 3rd (Rowlandson in prep. & Rowlandson 2010). No straight sided flanged bowls or later wide mouthed bowls have been found in this fabric suggesting it was not produced into the later 3rd century AD
FEGY	Reduced	Iron Rich Early Roman Greyware	-	As NVGY (Precious 2001, Davis 1995a) but with Common poorly sorted rounded Iron rich (Fe) grains 0.2-1mm. This fabric is probably a variant of NVGY and a precursor of the Nene Valley Grey Ware (see Precious 2001- NVGW and Perrin 1996, 118-9).
GFIN	Reduced	Miscellaneous fine grey wares		Darling and Precious forthcoming. Also includes undecorated examples of 'Parisian' and 'London' wares

Iron Age and Roman Pottery Fabrics				
Fabric	Fabric group	Fabric details	National code Tomber and Dore	Description
GREY	Reduced	Miscellaneous grey wares	-	Darling and Precious forthcoming. A fabric group containing undifferentiated reduced romanised greywares. The range of forms suggests the majority of the pottery was produced in southern Lincolnshire or Lincoln. A number of sherds, noted with SWPT, in the archive are almost certainly products of the Swanpool industry.
GREYC	Reduced	Coarse Greyware	-	A fabric group consisting of coarse grey reduced wares. A number of these sherds show evidence of being hand built and perhaps from large storage jars.
GREYCS	Reduced	Grey with sand sized calcareous inclusions	-	Light- medium grey with a silty matrix and moderate well sorted sub angular/subrounded quartz, ill sorted sand sized yellow-white calcareous and sized inclusions and sparse ill sorted black brown inclusions. A number of fabrics with calcareous sand have been recognised on other sites in the area (Leary 2008, GRB2; Precious 2001, 137- GREY5). This fabric was defined on the basis of a group of Flavian-Trajanic pottery from Sleaford studied by Rowlandson (2008). It is possible that this fabric may come from a Fen edge source but may also be from further a field (pers. com. Dr. A. Vince). Further thin section and ICPS analysis would be required to establish the nature of the calcareous sand.
GROG	Reduced	Grog-tempered wares	-	Darling and Precious forthcoming. Undifferentiated Grog tempered wares including handmade and wheelmade varieties
GROGF	Reduced	Fine Grog tempered ware	-	
GYMS	Reduced	Grey wheel-made with minimal fine shell	-	Darling and Precious forthcoming
IAGR	Reduced	Native tradition/transitional grit-tempered wares	-	Darling and Precious forthcoming. Coarse tempered, often pimply with grog and other inclusions, occasional shell, IA tradition fabric, which continues in use into the Roman period.
IAGR?	Reduced	Native tradition/transitional grit-tempered wares	-	Darling and Precious forthcoming. Coarse tempered, often pimply with grog and other inclusions, occasional shell, IA tradition fabric, which continues in use into the Roman period.
IAGRCS	Reduced	Iron Age Gritty tradition with calcareous sand	-	An IA tradition fabric with the addition of calcareous sand (as discussed above). The fabric shares a similar firing colour and inclusions to GREYCS but with the addition of grog or clay pellets.
IASA	Reduced	IA type sandy wares	-	Misc. Iron age/transitional sand tempered ware. Handmade or wheel finished
IASA?	Reduced	IA type sandy wares	-	Misc. Iron age/transitional sand tempered ware. Handmade or wheel finished

Iron Age and Roman Pottery Fabrics				
Fabric	Fabric group	Fabric details	National code Tomber and Dore	Description
LGRL	Reduced	Lincoln grey ware with light firing core	-	The LGRL fabric has been encountered by this author at Monson Street in the Wigford area of Lincoln and at Navenby (Rowlandson 2009b; Rowlandson in prep.). The sherds most notably have a moderate, well sorted quartz sand temper (c. 0.3mm) resulting in an uneven fracture in a fresh break with blue grey surfaces and a pale off white core. Fine silver mica is visible on the surfaces. It is possible that this fabric colour is a result of 'fire smudging' a primary clay but further work is needed to establish this. In both the repertoire of forms and the sandiness of the fabric LGRL can be easily split from the light bodied NVGW fabric. The range vessels in the LGRL fabric at the Monson Street and Navenby sites appear to date to the 2nd to the first half of the 3rd century. The forms produced include neatly wheel-made copies of everted rimmed jars with burnished surfaces and lattice decoration, necked and carinated bowl and beakers
LOND	Reduced	London wares	LON FR	Darling and Precious forthcoming
NVGW	Reduced	Nene Valley grey ware	*	Darling and Precious forthcoming. Light firing clay with fumed surface- see Cooper 1989 and Perrin 1999
NVGWC	Reduced	Nene Valley grey ware coarse sandier		Darling and Precious forthcoming. Light firing clay with fumed surface but with coarse sand (common rounded 0.3-1.3mm) temper. This is coarser than Nene Valley kiln samples seen by this author and might be from another Upper Estuarine source in the east Midlands as light firing wares are made elsewhere in other periods eg Stamford (see Cooper 1989 for discussion of Upper Estuarine deposits).
NVGY	Reduced	Earlier Nene Valley grey ware		Highlighted by Precious at Morton and Stainfield (2001, Davis 1995a) this fabric is probably a precursor of the Nene Valley Grey Ware (see Precious 2001- NVGW and Perrin 1996, 118-9).
SLGY	Reduced	Early South Lincs. grey		Highlighted by Precious at Morton and Stainfield (2001, Davis 1995a) this fabric is probably a local variant of the NVGY fabric.
SAM	Samian	Undifferentiated		Darling and Precious forthcoming
SAMCG	Samian	Central Gaulish	LEZ SA 2	Darling and Precious forthcoming
SAMEG	Samian	East Gaulish	ARG SA; BLW SA; CHF SA; HGB SA; MAD SA; RHZ SA;etc	Darling and Precious forthcoming
SAMLM	Samian	Les Martres de Veyre	LMV SA	Darling and Precious forthcoming
SAMSG	Samian	South Gaulish	LGF SA	Darling and Precious forthcoming

Other Archive Codes Used		
DECORATION CODE	DECORATION TYPE	DECORATION DETAILS
BAAN	Barbotine	Animals/fish
BAS	Barbotine	Scrolls
BDL	Burnished	Diagonal lines
BIA	Burnished	Intersecting arcs
BSC	Burnished	Scroll
BVL	Burnished	Vertical lines
BWL	Burnished	Wavy lines
FF	Friiled	Made with fingers
LA	Latticed	Acute
NAME	Name stamps	-
PA	Painted	Uk
RCS	Roughcast	Sand
RIL	Rilled	Fine
RLIN	Rusticated	Linear
RNOD	Rusticated	Nodular
ROU	Rouletted	Uk
RUST	Rusticated	Uk
SHG	Scored	Horizontal grooves
STAB	Stabbed	-
STR	Stamped	Round
B EXT	Burnished	External
B INT	Burnished	Internal
STRING	Wiped	String cut base
WF	Manufacture	Wheel finished
WM	Manufacture	Wheel made
VAB	Alteration	Very abraded
CORD	Cordon	
CORUG	Manufacture	Corrugated
MOULD	Moulded	Decoration
SCVL	Scribed	Vertical lines

HOPS09- Iron Age and Roman Pottery Archive													
Context	Fabric	Form	Decoration	Vessels	Alt	D. No	Comments	Join	Sherd	Weight	Rim diam	RE %	Pub No
100	SHCC	JS52	STAB	1		D25	RIM SHLDR; OX/R; WHEAT SHEAF DECORATION		8	324	40	5	16
100	SHCM	JUP	HM	1	SOOT EXT	D24	RIM SHLDR		1	42	10	20	15
101	CC?	-		1	ABR		BS		1	9	1	9	
101	CC?	BK		1	BURNT		BS		1	4	0	0	
101	CR	CLSD		1	DEP INT		BS		1	12	0	0	
101	CR	-		1			BS		1	3	0	0	
101	DR20	A		1	WORN		HANDLE; WORN- USED AS A PESTLE FOR GRINDING		1	82	0	0	
101	DR20	A		1			HANDLE NECK; EARLY SANDY FABRIC		1	341	0	0	
101	DR20	A		1			BS; FLAKE		1	1	0	0	
101	DSSA	-		1	SOOT EXT; ABR		BS		1	21	0	0	
101	DSSA	-		5			BS		5	50	0	0	
101	DSSA	OPEN		1	ABR		BASE		1	37	0	0	
101	GAU4	A		1			BS		1	59	0	0	
101	GREY	B?	B EXT	1			RIM		1	29	24	5	
101	GREY	CLSD		1			BASE		1	21	0	0	
101	GREY	-	BDL	1			BS		1	4	0	0	
101	GREY	BL?	BIA	1	ABR		BS		1	34	0	0	
101	GREY	BFBH		1	ABR		RIM; SWPT		1	83	33	3	
101	GREY	JEV	B EXT	1			RIM SHLDR RIM FRAG		1	8	0	0	
101	GREY	JNN	LA; B EXT	1		D?	RIM SHLDR;		1	84	24	8	
101	GREY	BL	B EXT	1			RIM;		1	24	38	4	
101	GREY	J168	B EXT	1			RIM SHLDR; SWPT		1	232	23	24	
101	GREY	JBNK		1			RIM		1	20	12	17	
101	GREY	BWM3	B EXT	1			RIM; SWANPOOL TYPE;		1	91	20	6	
101	GREY	JBNK		1			RIM		1	12	10	12	
101	GREY	J?		1			RIM		1	13	10	8	
101	GREY	JB		1			RIM		1	11	12	10	
101	GREY	J		1			RIM		1	16	12	12	
101	GREY	CLSD	ROU	1	ABR		BS		1	7	0	0	
101	GREY	DTR		1			RIM		1	22	21	9	
101	GREY	-		1			BS		2	50	0	0	

HOPS09- Iron Age and Roman Pottery Archive													
Context	Fabric	Form	Decoration	Vessels	Alt	D. No	Comments	Join	Sherd	Weight	Rim diam	RE %	Pub No
101	GREY	JBKFO		1			BS		1	22	0	0	
101	GREY	BD		1			BASE		1	17	0	0	
101	GREY	CLSD		1	ABR		BASE		1	11	0	0	
101	GREY	CLSD?		1	ABR		BASE		1	9	0	0	
101	GREY	-		1		D?	RIM		1	5	10	11	
101	GREY	JBL	B EXT	20			BS; MISC SWANPOOL TYPES		20	611	0	0	
101	GREY	BIBF	FF	1			RIM; SWPTYPE; NOTCH UPPER SURFACE		1	102	25	20	
101	GREY	BIBF	FF	1			RIM; SWANPOOL TYPE; NOTCH UPPER SURFACE		1	146	25	15	
101	GREY	BIBF	B EXT	1	VAB		RIM; SWANPOOL TYPE; NOTCH UPPER SURFACE		1	31	0	0	
101	GREY	-		31	ABR		BS; MISC GREY SHERDS		32	248	0	0	
101	GREY	-		1			BS; SWANPOOL TYPE; NOTCH LOWER FLANGE		1	83	28	10	
101	GREY	-		1			BS		1	9	0	0	
101	GREY?	CLSD?		1	ABR		BASE		1	15	0	0	
101	GREY?	-		1			BS; SIMILAR TO DSSA BUT HIGH FIRED NO MICA VISABLE ??		1	28	0	0	
101	IAGR	J	WM	1			RIM		1	23	14	7	
101	IAGR?	BNK		1			RIM SHLDR		1	37	22	20	
101	IASA	CLSD	ROU	1		D35	BS		1	18	0	0	14
101	IASA	BNK		1			RIM		1	5	13	5	
101	IASA	JBKEV	WM?	1			RIM		1	9	10	11	
101	IASA	JBK		1			RIM		1	4	9	10	
101	LROL	JDLS		1		D?	RIM		1	12	18	7	
101	NVCC	BD	STRING	1			BASE		1	17	0	0	
101	NVCC	JB		1			BS		1	30	0	0	
101	NVCC	BD	STRING	1			BS		1	28	0	0	
101	NVCC1	-		1					2	72	0	0	
101	NVCC1	BFB		1	ABR		RIM		1	28	14	8	
101	NVCC1	B37	PA	1	ABR		RIM		1	14	18	4	
101	NVCC1	-		1			BS		1	8	0	0	
101	NVCC1	BD	STRING	1			BASE		1	17	0	0	
101	NVCC1	BFB		1	ABR		RIM		1	31	28	8	
101	NVCC1	BD	STRING	1			BASE		1	5	0	0	
101	NVCC1	JWM		1			RIM		5	97	20	27	

HOPS09- Iron Age and Roman Pottery Archive													
Context	Fabric	Form	Decoration	Vessels	Alt	D. No	Comments	Join	Sherd	Weight	Rim diam	RE %	Pub No
101	NVCC1	DPR		1			RIM		1	8	21	7	
101	NVCC1	DPR		1			RIM		1	4	16	6	
101	NVCC1	BK		1			BASE		1	101	0	0	
101	NVCC1	BD	STRING	1			BS		1	37	0	0	
101	NVCC1	-		1	ABR		BS		1	19	0	0	
101	NVCC1	FJ		1			BS		1	19	0	0	
101	NVCC1	JWM?		2			BS SHLDR		2	3	0	0	
101	OXL	CLSD		1			BS; LOWER WALL		1	37	0	0	
101	QUGRVE	JIR	HM; SDL	1			RIM; QU- SPARSE 0.8MM ROUNDED; GROG UPTO 7MM; VE SPARSE 7MM		1	6	20	2	
101	SAMLM	D		1			BS; POSS A CU23		1	11	0	0	
101	SCC	BK	RCS	1					0	0	0	0	
101	SHCC	JDW		1			RIM SHLDR BASE; GILLAM 157		12	437	24	65	
101	SHCM	CLSD	HM; BDL	1			BS; IRF OX SURF		1	14	0	0	
101	SHCM	CLSD	HM	5			BS; IRF OX SURF		5	77	0	0	
101	SHCM	-	HM	1			BS; REDUCED		1	21	0	0	
101	SHCM	CLSD	HM	1			BS; IRF; OX SURF		4	107	0	0	
101	SHCMP	-		1			BS		1	8	0	0	
101	SHCMP	CLSD	HM	1	SOOT EXT		BS; R/OX		1	47	0	0	
101	SHEL	-		1			BS; LOWER WALL		1	42	0	0	
101	SHEL	CLSD	HM	1	SOOT EXT; CAL DEP INT		BS		4	139	0	0	
101	SHEL	-	HM	1			BASE		1	33	0	0	
101	SHEL	J	WM	1			RIM		1	8	12	6	
101	SHEL	JDW		1			RIM; GILLAM 157		1	42	14	20	
101	SHEL	-	HM	1			BS		2	35	0	0	
101	SHEL	-		10			BS		10	59	0	0	
101	SHEL	-	HM	1			BASE		1	106	0	0	
101	SHEL	-	HM	1	CALC DEP INT		BS		1	10	0	0	
101	SHOL	L		1	HM		RIM		1	22	18	10	
101	SHSC	JCH	HM	1			RIM; OX SURF		1	8	14	8	
101	SHSMP	-	HM	1			BS; REDUCED		1	21	0	0	
101	SHSMP	-	HM	1			BS; OX/R		1	11	0	0	

HOPS09- Iron Age and Roman Pottery Archive													
Context	Fabric	Form	Decoration	Vessels	Alt	D. No	Comments	Join	Sherd	Weight	Rim diam	RE %	Pub No
101	SPCC	BK	ROU	1			BS; NO WHITE SLIP		1	2	0	0	
101	VRW	FJ		1		D?	RIM		1	16	12	7	
103	AMPH	A		1	MISFIRE SPAUL		BS; IRF		1	22	0	0	
103	BBT	BFB		1			RIM FRAG		1	24	0	0	
103	DR20	A		1	ABR		BS		4	312	0	0	
103	DR20	A		1			BS		1	46	0	0	
103	DR20	A		1			RIM		1	219	16	21	
103	DSSA	CLSD		1	MISFIRE SPAUL		BS; IRF		1	13	0	0	
103	DSSA	BNK		1			RIM; LARGE ROUNDED SHOULDER TYPE		1	70	18	22	
103	DSSA	BCAR		1	PIERCED LOWER WALL; BURNT EXT		BS LOWER WALL BROKEN AT CARINATION WEIGHT OR PENDANT??		1	33	0	0	
103	DSSA	BNK		1			RIM SHLDR; LARGE EXAMPLE		1	43	28	7	
103	DSSA?	JNN?		1	ABR		RIM		1	40	12	8	
103	GAU4	A		1			HANDLE		1	53	0	0	
103	GREY	-		1	TRIMMED?		BASE		1	62	0	0	
103	GREY	CLSD		1			BASE		1	64	0	0	
103	GREY	BL	SHG	1			RIM		5	62	20	9	
103	GREY	BFL		1			RIM; STRAIGHT SIDED		1	38	26	7	
103	GREY	CLSD	STING	1	TRIMMED		BASE		1	93	0	0	
103	GREY	J	LA	1			BS		1	14	0	0	
103	GREY	J		1	ABR		RIM		1	14	12	14	
103	GREY	BTR	BWL	1			RIM		1	68	19	24	
103	GREY	JNN	B EXT	1			RIM; SWPT		1	158	12	61	
103	GREY	JCUR	SHG	1			RIM SHLDR		1	42	14	14	
103	GREY	CLSD		3	ABR		BS		3	77	0	0	
103	GREY	CLSD		1			BASE		2	45	0	0	
103	GREY	D36		1			BS SANDY		1	14	0	0	
103	GREY	BL		1			RIM		1	19	26	6	
103	IAGR	JEV	WF	1			RIM SHLDR; REDUCED		1	38	14	16	
103	IAGR	JEV	WF	1			RIM SHLDR; OXID		1	30	15	16	
103	IAGR	D	WM	1			RIM; IRF; GROOVED RIM?- EARLY ROMAN?		1	28	18	7	
103	IAGR	CLSD	HM	1			BASE LOWER WALL		1	35	0	0	
103	MONVC	BFB		1	VAB		RIM		1	29	28	6	

HOPS09- Iron Age and Roman Pottery Archive													
Context	Fabric	Form	Decoration	Vessels	Alt	D. No	Comments	Join	Sherd	Weight	Rim diam	RE %	Pub No
103	NVCC1	BK	ROUZ	1			BS		1	4	0	0	
103	NVCC1	BK		1			BS		1	75	0	0	
103	NVCC1	FJ	STRING	1			BASE		1	77	0	0	
103	NVGWC	BCAR		1		D39	RIM- BASE		9	92	9	45	38
103	OX	-		1			BS		1	14	0	0	
103	OXL?	F		1			BS; NECK HANDLE X3 RIBS EARLY FLAGON TOOSANDY FOR PINK		1	54	0	0	
103	SAMCG	M		1	WORN INT		BASE		1	54	0	0	
103	SAMCG	38		1	WORN RIM		RIM		1	8	14	13	
103	SAMLM?	33		1			RIM		1	8	9	20	
103	SHEL	JBL	HM?	1			BASE		1	138	0	0	
105	SHEL	-	HM	1	ABR		BS		1	3	0	0	
109	GROGF	JNK		1			BS SHLDR; GROG UP TO 3MM & QU SAND 0.3-5MM; SAMPLE S'		4	30	0	0	
109	GRSH	CRUC?	HM	1	WORN INTERNAL?; WHITE CONCRETION?	D01	RIM- BASE; CRUCIBLE OR CUP?; OX/R/OX; POORLY MIXED; SPARSE FINE SHELL; SPARSE GROG UP TO 4MM; MODERATE ROUNDED QUARTZ 0.3-0.5MM; SPARSE FE 0.3-0.5MM		3	45	9	12	02
109	IASA	JPED	CORD; B EXT	1	TRIMMED	D21	NEAR BASE		1	185	0	0	01
109	IASA	BKBB	ROUZ	1			BS; OXID		1	3	0	0	
109	IASA	BNK	WF?; CORD	1			RIM; LIGHT BROWN SURFACES; LOW CAINATION TYPE FORM WITH CORDON		2	38	20	9	
109	SHCC	-	HM	8			BS		10	369	0	0	
109	SHCC	-	HM	5			BS		5	19	0	0	
109	SHCC	-		1	ABR		BS		1	6	0	0	
109	SHCM	BCAR	HM	1		D22	RIM		3	81	24	15	05
109	SHCM	CLSD	HM	11			BS		11	71	0	0	
109	SHCM	CLSD	HM?	1			BASE; FTM; MOULDED FOOT		1	86	0	0	
109	SHMM	JNK	CORD	1		D23	RIM SHLDR		4	73	20	17	04
109	SHSC	JBR	HM	1		D20	RIM BASE		2	325	13	35	03
109	SHSF	-	HM	50	ABR		BS; SCRAPS		50	48	0	0	
109	SHSF	BNK	HM; B EXT	1			RIM LOWER WALL; BLACK SURFACES; SOME MEDIUM SAND- S-SHAPED BOWL TYPE		2	59	16	7	
109	SHSF	JNK		1			RIM SHLDR		3	18	14	7	

HOPS09- Iron Age and Roman Pottery Archive													
Context	Fabric	Form	Decoration	Vessels	Alt	D. No	Comments	Join	Sherd	Weight	Rim diam	RE %	Pub No
109	SHSF	JBNK	HM	1	ABR		RIM		1	4	16	6	
113	IASA	CLSD		1			BS; THIN WALL		1	2	0	0	
113	QUGRVE	CLSD	HM	1			BS		1	5	0	0	
118	SHCM	-	HM	1			BASE		1	49	0	0	
118	SHSF	-	HM	1			BS		1	3	0	0	
120	SHSM	-	HM	1			BS		2	1	0	0	
120	SHSM	CLSD	HM	1			BS		2	23	0	0	
122	BBT	DGR		1			RIM		1	9	20	6	
122	DSGR	J?		1	DEP INT CALC		BS		1	23	0	0	
122	DSSA	J?		1			BS		5	72	0	0	
122	DSSA	-		1			BS		1	13	0	0	
122	DSSA	CLSD	HM	1			BS		1	13	0	0	
122	DSSA	CLSD		1			BS		1	4	0	0	
122	DSSA	JRUST	RLIN	1			BS		1	7	0	0	
122	DSSA?	-		1	ABR		BS		1	6	0	0	
122	FEGY	CLSD		1			BS SHLDR		1	15	0	0	
122	GREY	CLSD		1			BS		3	36	0	0	
122	GREY	CLSD		3			BS		3	34	0	0	
122	GYMS	-		1			BS		1	6	0	0	
122	IASA	CLSD	HM	1			BS		1	13	0	0	
122	IASAOL	CLSD	HM	1		FS	BS		1	13	0	0	
122	NVGW	-		1			BS		1	8	0	0	
122	NVGW	JB	SHG	1			BS		1	4	0	0	
122	SAMSG	37		1			RIM		1	4	22	6	
122	SHCF	CLSD	HM; ROU	1			BS; ROULETTED DOUBLE SQUARE TOOTH AND GROOVES		1	6	0	0	
122	SHEL	-		2	VAB		BS		2	33	0	0	
129	DSSA	J		1	ABR		BS SHLDR		2	32	0	0	
129	GREY	-		1			BS SCRAP; SAMPLE 1		1	5	0	0	
129	MOVR	MHK	NAME	1		D34; R2	RIM; SPOUT BROKEN AWAY; SEE K.HARTLEY REPORT-POTTER BRUCCIUS		2	115	26	17	17
129	NVGWC	D36		1			BS		1	25	0	0	
129	OXL	J?	LA	1	ABR		BS		1	4	0	0	

HOPS09- Iron Age and Roman Pottery Archive													
Context	Fabric	Form	Decoration	Vessels	Alt	D. No	Comments	Join	Sherd	Weight	Rim diam	RE %	Pub No
132	GREY	-		1			BS		1	6	0	0	
132	IAGR	-		1			BS		1	5	0	0	
132	IAGR	J		1			BS; NECK		1	9	0	0	
132	LGRL?	-	LA	1			BS		1	4	0	0	
132	NVCC	BFB		1	ABR		RIM		1	21	23	8	
132	SHEL	JB	HM	1			BS		1	17	20	3	
132	SHEL	J	HM	1	SOOT EXT		BS		0	29	0	0	
134	GREY	OPEN		1			BS		1	15	0	0	
134	GREY	-		3	ABR		BS		3	45	0	0	
134	MOMH	M		1			BS; TRITS BLACK & RED FIRED CLAY		1	9	0	0	
134	NVCC	-	PA	1			BS		1	16	0	0	
134	NVCC	CLSD		1	VAB		BS		1	6	0	0	
134	SHEL	JDW	WF	1			RIM		1	16	18	11	
134	SLGY	CLSD		1	VAB		BS		1	10	0	0	
135	GREY	-		1	ABR		RIM		1	3	0	0	
135	GREY	-		3	ABR		BS		3	10	0	0	
135	GREY	J		1			RIM; UNDERCUT; DARK SURFACE SIMILAR TO JDLS CONTEXT 150		1	21	15	11	
135	NVCC1	CLSD	ROU	1			BS		1	6	0	0	
135	NVCC1	-		1			BS		1	5	0	0	
137	DR20	A		1			BS		1	62	0	0	
137	GREY	-		1			BS		1	2	0	0	
137	SLGY	JEV		1			RIM		1	5	11	7	
139	NVCC1	BK		1	ABR		BS		1	3	0	0	
144	DR20	A		1	ABR		BS		1	289	0	0	
146	CC	-		1	VAB		BS		1	4	0	0	
146	GREY	CLSD		3			BS		3	13	0	0	
146	GREY	CLSD	STRING	1			BASE		1	13	0	0	
146	NVCC1	BD		1	ABR		BASE		1	19	0	0	
146	NVCC1	B?		1	VAB		RIM		1	12	20	5	
146	NVCC1	BKFN		1	ABR		RIM		1	4	7	10	
146	OX	OPEN		1	ABR; BURNT		BS		1	6	0	0	
147	IAGR	CLSD	HM	1	SOOT EXT		BS		1	11	0	0	

HOPS09- Iron Age and Roman Pottery Archive													
Context	Fabric	Form	Decoration	Vessels	Alt	D. No	Comments	Join	Sherd	Weight	Rim diam	RE %	Pub No
147	SHCM	CLSD	HM	1			BASE		1	37	0	0	
150	AMPH?	A		1	BURNT		BS		1	12	0	0	
150	CC	CLSD		1			BS		1	12	0	0	
150	CC	J?		1			BASE; JAR PINK 'MESSY' FABRIC REDUCED CORE SEE CF LIMO09- MONSON STREET		1	64	0	0	
150	DSGR	-	HM?	1			BS		1	64	0	0	
150	DSSA	CLSD		3	VAB		BS		3	21	0	0	
150	DSSA	-		1	VAB		BS		1	41	0	0	
150	DSSA	CLSD		1	VAB		BS		3	58	0	0	
150	DSSA	JEVC		1			RIM		1	11	14	15	
150	GREY	-		1	ABR		BS		1	4	0	0	
150	GREY	BFB	B	1			RIM		2	154	19	35	
150	GREY	JS	BWL	1			BS		2	99	0	0	
150	GREY	CLSD		3			BS		3	41	0	0	
150	GREY	BGR		1			RIM		1	63	22	11	
150	GREY	CLSD		1			BS		1	25	0	0	
150	GREY	J?	B EXT	1			RIM		1	17	20	7	
150	GREY	JS	BDL	1			BS		1	55	0	0	
150	GREY	-		1	ABR; CONCRETION		BS		1	19	0	0	
150	GREY	BWM	SHG	1			RIM SHLDR		1	88	22	16	
150	GREY	-		1	ABR		BASE		1	45	0	0	
150	GREY	JNK		1			BS SHLDR		1	30	0	0	
150	GREY	JDLS	WM	1	SOOT SHLDR		RIM SHLDR		1	164	13	28	
150	GREY	-	B EXT	1			BS		1	13	0	0	
150	GREY	BFL		1	VAB		RIM		1	11	18	5	
150	GREY	JBNK	B EXT	1			RIM		1	9	16	9	
150	MOMH	M		1	VAB; BURNT POST BREAK		BASE; BLACK FIRED CLAY TRITS		1	98	0	0	
150	MONV	M		1	BURNT OVER BREAK		BASE; BURNT OVER BREAK; TRITS BLACK SLAG		1	91	0	0	
150	NVCC1	L		1			RIM		1	15	22	6	
150	NVCC1	CLSD		1			BS		1	12	0	0	
150	NVCC1	BK	ROUZ	1			BS		1	7	0	0	
150	NVCC1	CLSD		1	ABR		BASE		1	88	0	0	

HOPS09- Iron Age and Roman Pottery Archive													
Context	Fabric	Form	Decoration	Vessels	Alt	D. No	Comments	Join	Sherd	Weight	Rim diam	RE %	Pub No
150	NVGW	J		1	SOOT OVER BREAK		RIM; SOOT OVER BREAK		1	14	0	0	
150	NVGW	-		1			BS		1	10	0	0	
150	NVGW	-		1	ABR		BS		1	11	0	0	
150	NVGW	CLSD		1			BASE		1	28	0	0	
150	OX	-		1			BS		1	38	0	0	
150	OXLC	CLSD		1			BS; PROB FLAGON		1	11	0	0	
150	SAMCG	37	MOULD	1			RIM		1	8	0	1	
150	SAMCG	31		1			BS		1	10	0	0	
151	DSSA	BFL	BDL	1			BS; SAMPLE 3		1	18	0	0	
151	GREYC	JL	WM	1			BS		1	71	0	0	
151	SAMEG	D		1	WORN INT		BASE; FORM ?35 OR 36		1	5	0	0	
151	SHEL	-	HM	3			BS		3	34	0	0	
155	DSSA	BCAR		1	MISFIRE	D37	BASE; NEAR WHOLE LOWER ZONE; IRF; MISFIRE		1	197	0	0	24
155	DSSA	P?		1		D?	BASE; NARROW FOOTRING; FTR		1	69	0	0	
155	DSSA	-		1	ABR		BS		3	49	0	0	
155	DSSA	JL	CORD; LA	1			BS		3	109	0	0	
155	DSSA?	CLSD		1			BS		1	35	0	0	
155	DSSA?	CLSD		1			BASE- COMPLETE		2	102	0	0	
155	GREY	JRUST	RLIN	1			BS SHLDR		1	12	0	0	
155	GREY	JRUST	RUST	1			RIM		1	22	0	0	
155	IAGR	BKEV	WF	1			RIM SHLDR; REDUCED; FINE		1	13	7	13	
155	LGRL	JEV		1			RIM		1	14	14	7	
150	NAAM	A		1			BS ?NECK SALT SURFACED		1	181	0	0	
155	NVGWC	CLSD	SHG	1			BS		1	20	0	0	
155	SHCF	CLSD	HM	1			BS; OX/R; SPARSE GROG?		1	24	0	0	
155	SHEL	-		3	ABR		BS		3	33	0	0	
159	SHELP	-	HM	1			BS; OX/R; PB SHELL		1	5	0	0	
160	DR20	A		1	ABR; MORTAR EXT		BS; ?SAME VESSEL		2	59	0	0	
160	GREY	-		1	VAB		BS		2	36	0	0	
160	NVCC1	D		1	VAB		RIM		1	13	15	4	
162	DR20	A		1			BS; LATE FAB SALT SURF		1	27	0	0	
162	GREY	-	CORD	1	CONCRETION		BS		1	12	0	0	

HOPS09- Iron Age and Roman Pottery Archive													
Context	Fabric	Form	Decoration	Vessels	Alt	D. No	Comments	Join	Sherd	Weight	Rim diam	RE %	Pub No
162	GREY	CLSD		1	ABR; CONCRETION OVER BREAK		BASE		6	60	0	0	
162	SHEL	-		3			BASE		3	40	0	0	
164	BBT	BFB		1	DRILLED HOLE IN WALL		RIM		1	13	14	8	
164	DSSA	-		1	VAB		BS		1	5	0	0	
164	GREY	CLSD		5			BS		5	25	0	0	
164	GREY	BK		1			BS		1	2	0	0	
164	GREY	-		1	ABR		BS		1	5	0	0	
164	GREY	BK?		1			BASE		1	4	0	0	
164	GREY	-		1			BASE		1	40	0	0	
164	GREY	J	BSC	1			BS		1	23	0	0	
164	GREY	BFB		1	VAB		RIM & BASE		2	46	24	6	
164	IASA	-		1			BS		2	14	0	0	
164	MOMH	M		1	ABR		BS; FIRED CLAY TRITS		1	16	0	0	
164	NVCC	BK?	PA	1			BS		1	1	0	0	
164	NVCC	BK		1			BS		2	4	0	0	
164	NVCC1	BK	BA	1	ABR		BS; DIAGONAL LINES		2	6	0	0	
164	NVCC1	BK	BA	1			BS; DIAGONAL LINES		1	3	0	0	
164	NVGCC	BK	BAS	1			BS		1	4	0	0	
164	NVGW	JNK?		1			BS		1	6	0	0	
164	NVGW	CLSD	LA	1			BS		1	3	0	0	
164	NVGW	JBL		1			BS		1	51	0	0	
164	NVGY	-		1	ABR		BS		1	5	0	0	
164	NVGY	CLSD		1	ABR		BS		1	13	0	0	
164	NVGY	CLSD	ROU	1			BS		1	2	0	0	
164	NVGY	JWM		1	ABR		RIM		3	45	18	29	
164	OXL	F?		1			BS		1	2	0	0	
164	SHEL	CLSD	HM	7	ABR		BS		7	90	0	0	
165	IASA?	-		1			BS SCRAP; SAMPLE 27		1	2	0	0	
168	AMPH	A		1	ABR		BS		1	21	0	0	
168	DSSA	JEVS		1		D16	RIM SHLDR		2	25	12	25	19
168	GREY	-		1			BS		1	3	0	0	

HOPS09- Iron Age and Roman Pottery Archive													
Context	Fabric	Form	Decoration	Vessels	Alt	D. No	Comments	Join	Sherd	Weight	Rim diam	RE %	Pub No
168	GREY	J		1			RIM		1	12	12	11	
168	GREY	-		1			BS		1	8	0	0	
168	GREY	JNK		1			RIM		2	31	20	9	
168	GREY	-	STRING	1			BASE		1	24	0	0	
168	GREY	-		1			BASE		1	23	0	0	
168	GREY	BTR	BIA	1			RIM		3	36	19	17	
168	GREY	JEVC		1			RIM SHLDR		1	24	15	14	
168	GREY	J	LA	1			BS		1	21	0	0	
168	GREY	CLSD		4			BS		4	90	0	0	
168	GREY	J		1			RIM		1	9	14	10	
168	GREY	JEV		1			RIM		1	7	12	4	
168	GREY	BFL		1			RIM		1	22	21	6	
168	GREY	BL	SHG	1			BS		1	40	0	0	
168	GREY	JEVC		1	WARPED RIM	D15	RIM SHLDR- WARPED SECOND?		2	53	14	23	31
168	GREYCS	JRUST	RNOD	1			BS		1	11	0	0	
168	IAGR	CLSD		1			BS		1	73	0	0	
168	IASA	BCAR		1		D13	RIM CARINATION		2	86	15	25	12
168	IASA	-	HM; BEXT	1			BS		1	11	0	0	
168	NVCC1	CLSD		2			BS		2	17	0	0	
168	NVGW	JNN		1			BS NECK		2	23	0	0	
168	NVGW	-		1			BS		1	9	0	0	
168	OXLC	BKBB	WM; ROUZ; CORD	1			BS		1	7	0	0	
168	SAMLM?	18/31		1			BASE		1	48	0	0	
168	SHCC	JS	HM	1			BS; OX/R		1	160	0	0	
168	SHEL	JCUR		1		D14	RIM SHLDR; BOUNRE JAR?		1	33	14	10	41
168	SHEL	-		6	ABR		BS		6	31	0	0	
168	SHEL	CLSD	HM	1			BASE		1	91	0	0	
168	SLSHB?	CLSD	WM	1			BS		2	12	0	0	
168	SLSHB?	J	WM	1			BS SHLDR		3	64	0	0	
171	BB1	L		1			RIM		1	17	20	4	
171	DSSA	CLSD		1			BS		1	9	0	0	
171	DSSA	BREED		1	ABR	D38	RIM		1	23	26	5	29

HOPS09- Iron Age and Roman Pottery Archive													
Context	Fabric	Form	Decoration	Vessels	Alt	D. No	Comments	Join	Sherd	Weight	Rim diam	RE %	Pub No
171	GREY	OPEN		1			BASE		1	8	0	0	
171	GREY	-		1			BS; ?SWPT- LINCOLN?		2	57	0	0	
171	GREY	CLSD		1	PIERCE HOLE		BASE; NARROW BASE;BASE DIAM 50MM; HOLE 1.5MM; DRILLED INTERNAL- POST BREAK		1	59	0	0	
171	GREY	BL?		1			BS SHLDR		1	14	0	0	
171	GREY	-		3	ABR		BS		3	12	0	0	
171	GREY	J?		1	BURNT?		BS SHLDR		1	5	0	0	
171	GREY	BL?	BIA	1			BS		1	17	0	0	
171	GREY	-		1	ABR		BS		1	5	0	0	
171	GREY	JB		1			RIM		1	5	0	0	
171	GREY	BWM1		1	ABR		RIM		1	30	21	9	
171	GREY	-	SHG	1	ABR		BS		1	13	0	0	
171	IAGR	-	WF	1			BS; REDUCED		1	75	0	0	
171	LGRL	-		1			BS SHLDR		1	9	0	0	
171	MONVC?	M		1	ABR; WORN INT		BASE; BLACK TRITS EXT ORANGE CC?		1	86	0	0	
171	NVCC	B		1	WEAR INT		BASE; FTR		1	37	0	0	
171	NVCC?	BKFN		1			RIM		1	2	8	4	
171	NVGW	J?		1			RIM		1	8	18	4	
171	NVGW	BL		1			RIM		1	31	27	31	
171	NVGW	CLSD		1			BS		1	5	0	0	
171	NVGW	-		1			BASE		1	5	0	0	
171	NVGW	-		1	ABR		BASE		1	34	0	0	
171	NVGW	CLSD		2	ABR		BS		2	21	0	0	
171	NVGW	CLSD	LA	1			BASE		1	71	0	0	
171	NVGW	BFL		1			RIM		1	8	12	5	
171	SAMCG	31		1	BURNT		BASE; BURNT BLACK- FLAKED		1	19	0	0	
171	SHCM	-	HM	1			BS		2	44	0	0	
171	SHCMP	JBL	HM	1			BS; OXID		1	84	0	0	
171	SHEL	-	HM	7	ABR		BS		7	80	0	0	
171	SHEL	JDW	WF	1	SOOT OVER RIM		RIM		1	27	18	11	
171	SHEL	CLSD	HM	1	TRIMMED TO DISC		BASE		1	66	0	0	
171	SLSHB?	JCUR	WM	1			RIM		2	31	14	12	
171	TILE	JS	HM	1			BS; SAME IN172 & 355		1	33	0	0	

HOPS09- Iron Age and Roman Pottery Archive													
Context	Fabric	Form	Decoration	Vessels	Alt	D. No	Comments	Join	Sherd	Weight	Rim diam	RE %	Pub No
172	DSGR	-		1	ABR		BS		1	9	0	0	
172	GREY	-		1	INT DEP CALC		BS		1	7	0	0	
172	GREY	L	B EXT	1			RIM		2	16	21	6	
172	GREY	CLSD	SHG	1			BS		1	11	0	0	
172	NVCC1	OPEN		1			BS		1	7	0	0	
172	NVGWC	CLSD		1			BS		1	14	0	0	
172	SHCC	JS52	HM	1			RIM; LID SEATED VARIENT		1	84	20	8	
172	SHCC	JB	CORD	1			BS; OXID		1	5	0	0	
172	SLGY	JWM		1			RIM		1	32	16	17	
172	SLSHB?	J	WM	1			BS		1	7	0	0	
172	TILE	JS	HM	1			RIM;SAME IN 171 & 355		3	73	22	11	
173	GREY?	-		1			BS SCRAP; SAMPLE 5/6/7		1	1	0	0	
173	NVCC	-		1			BS SCRAP; SAMPLE 5/6/7		1	1	0	0	
173	SHEL	-		1			BS SCRAP; SAMPLE 5/6/7		1	1	0	0	
178	NVGWC	CLSD		1			BS		1	5	0	0	
178	OXL	BKBB	ROUZ; CORD	1			BS		1	4	0	0	
181	DSGR	JEV		1			RIM BS BASE SCRAPS; SAMPLE 10		8	15	0	0	
181	DSGR?	-		8			BS; SCRAPS; SAMPLE 10		8	6	0	0	
181	GREY	J		1			BASE; FTM		1	78	0	0	
181	GREY	CLSD		1	SOOT EXT		BASE; FTG; SOOT ON BASE		1	49	0	0	
181	GREY?	-		3			BS; SCAPS; SAMPLE 10		3	4	0	0	
181	IAGR	-	WM	1	BURNT		BS		3	48	0	0	
181	IAGR	BKEV		1			RIM SCRAP; SAMPLE 10		1	3	0	0	
181	IAGRCS	-		1			BASE		1	27	0	0	
181	IASA	BKBB?	ROU	1			BS; OX/R		1	5	0	0	
181	LGRL	CLSD		1			BS		1	29	0	0	
181	SHEL	JBL	HM	1			BS		2	50	0	0	
181	SHEL	-		1			BS; SCAPS; SAMPLE 10		1	1	0	0	
182	CC	BKBAG		1			RIM; EVERTED- TINY FRAGMENT; LINCOLN/ SOUTH CARLTON; SPARSE RED FE FLECKS UP TO 1.8MM; SPARSE MICA AND RARE QU C. 0.5MM; OFF WHITE FABRIC BROWN CC		1	17	0	0	
182	DR20	A		1			BS		3	232	0	0	

HOPS09- Iron Age and Roman Pottery Archive													
Context	Fabric	Form	Decoration	Vessels	Alt	D. No	Comments	Join	Sherd	Weight	Rim diam	RE %	Pub No
182	DR20	A		1			BS		3	92	0	0	
182	DSSA?	JBNK		1			BS NECK; LIGHTER SURFACES		1	9	0	0	
182	GREY	BFB	B EXT INT	1			RIM; SWPT;		1	19	19	8	
182	GREY	CLSD		1			BS; SAND & FE		1	10	0	0	
182	GREY	BWM2	B EXT	1	USE WEAR		RIM; SWPT; WORN EDGE- USE AS RUBBER?		1	38	15	6	
182	GREY	BFL		1			RIM; STRAIGHT SIDED		1	95	24	12	
182	GREY	-		1			BS		1	5	0	0	
182	IASA	-	HM	1	ABR		BS		1	14	0	0	
182	NVCC	CLSD		1			BS		1	4	0	0	
182	NVCC1	BKHC	BAAN	1	VAB		BS;LOWER WALL; BARBOTINE DOG? AND DOTS		2	13	0	0	
182	NVGW	CLSD		1			BS; NOTE FE		2	10	0	0	
182	NVGY?	CLSD		1	ABR		BASE		1	23	0	0	
182	SHEL	CLSD	HM	1	CALC DEP INT		BS; OX/R		1	31	0	0	
182	SHEL	CLSD	HM	1	SOOT EXT; CALC DEP INT		BS		1	20	0	0	
183	DSSA	BNK		1			RIM SHLDR; ROUNDED CARINATION AS DRAGONBY KILN MAY 1996 AND LEARY 1997		1	28	12	17	
183	DSSA	DGR?		1			RIM; B31 COPY? L2- E3 DATE; SMALL SHERD		1	11	23	6	
183	GREY	-		1			BS		1	7	0	0	
183	GREY	BPR		1	BURNT POST BREAK?		RIM BASE; BB2 TYPE STRAIGHT BOWL		1	35	21	2	
183	GREY	JBL		1			BASE		2	231	0	0	
183	GREY	BD	B EXT; B INT	1			BS; BURNISHED AS BB1 COPY- LINCOLN RACECOURSE??		1	12	0	0	
183	NVCC1	BKFO		1			BS		2	25	0	0	
183	NVCC1	BKFN		1			RIM;		1	5	6	9	
183	NVCC1	-		1			BS		1	3	0	0	
183	NVCC1	BD		1			BS		1	7	0	0	
183	NVGW	BFL		1			RIM		1	21	20	10	
183	OX	DGR?		1			RIM; OX/R/OX		3	36	26	8	
183	SHEL	CLSD	HM	19	CALC DEP INT		BS		19	202	0	0	
183	SHEL	JDW	HB/WF	1			RIM		1	24	14	12	
183	SHEL	JDW	HB/WF	1			RIM SHLDR		2	48	24	6	
183	SHEL	CLSD	HM	1			BS		10	74	0	0	

HOPS09- Iron Age and Roman Pottery Archive													
Context	Fabric	Form	Decoration	Vessels	Alt	D. No	Comments	Join	Sherd	Weight	Rim diam	RE %	Pub No
183	SHEL	-	HM	11	VAB		BS		11	28	0	0	
185	DR20	A		1	ABR		BS; SALT SURFACE		1	43	0	0	
185	DR20	A		1			BS; LATE- SALT WASH		1	17	0	0	
185	GREY	OPEN		1			BASE		1	13	0	0	
185	GREY	CLSD		2			BS		2	10	0	0	
185	GREY	BL		1			RIM		1	25	28	7	
185	NVCC1	-		1	ABR		BS		4	11	0	0	
185	NVGW	JNN		1			RIM		1	16	8	30	
185	SAMCG	B		1	WORN INT		BS; OR ROM 36?		1	17	0	0	
188	IASA	J	HM; LA	1	BURNT EXT		BS		1	39	0	0	
188	SHCC	JB?		1			RIM		1	15	12	15	
194	DR20	A		1			BS; SALT SURFACE		1	189	0	0	
194	DR20	A		1			BS; FLAKES		3	13	0	0	
194	GREY	BD		1	MORTAR EXT		BS		1	41	0	0	
194	IAGR	JS	SHG; HM	1			BS; LARGE GLOBULAR JAR?		4	249	0	0	
196	SHCC	CLSD	HM	1	ABR		BASE; VESIC REDUCED		1	42	0	0	
196	SHCM	-	HM	1			BS OXID		1	25	0	0	
199	SHCM	-		1			BS; ?IA?		1	6	0	0	
204	DSSA	L		1			RIM		1	6	18	11	
204	DSSA	J		1			BS SHLDR		2	30	0	0	
204	GREYC	BCAR		1		D17	RIM BASE; CP		8	314	12	43	35
204	GREYC	JBKEV	ROU	1		D18	RIM		1	23	9	22	34
204	GROG	CLSD		1			BS THIN WALLED REDUCED		2	31	0	0	
204	GROGF	BKBB	ROUZ	1			BS; OX/R		1	5	0	0	
204	SHSM	CLSD	WF	1			BS SHLDR; SAMPLE 22		1	9	0	0	
212	DR20	A		1	ABR		BS; FLAKE		1	46	0	0	
212	DSSA	-		2	ABR		BS		2	18	0	0	
212	DSSA	JEV		1			RIM SHLDR; HIGH SHLDR		3	28	10	12	
212	GREY	CLSD		1	ABR		BS; COARSE POORLY MIXED		2	14	0	0	
212	GREY	DPR		1			RIM BASE		1	38	21	13	
212	GREY	JL		3			BS		3	90	0	0	
212	IASA	-	HM	1	ABR		BS		1	7	0	0	

HOPS09- Iron Age and Roman Pottery Archive													
Context	Fabric	Form	Decoration	Vessels	Alt	D. No	Comments	Join	Sherd	Weight	Rim diam	RE %	Pub No
212	LGRL	CLSD		2	ABR		BS		2	16	0	0	
212	NVGW	CLSD		1	ABR		BS		1	3	0	0	
212	NVGWC	CLSD		2	ABR		BS		2	25	0	0	
212	OX	OPEN		1			BS		1	17	0	0	
212	SHEL	CLSD	HM	1			BASE		1	14	0	0	
212	SLSHB?	J	WM	1	CALC INT DEP		BASE		1	29	0	0	
214	BBT	DGR	BIA	1			RIM		1	19	20	6	
214	CR	CLSD		1			BS SCRAPS; SAMPLE 25		2	21	0	0	
214	DSSA	-		1			BS SAMPLE 25		1	1	0	0	
214	DSSA	P		1			RIM		1	10	22	6	
214	DSSA	CLSD		1	ABR		BS		1	4	0	0	
214	GREY	CLSD		1			BS SAMPLE 25		1	18	0	0	
214	GREY	CLSD		1			BASE		1	14	0	0	
214	GREY	BNK		1			RIM		2	26	20	12	
214	GREY	JEV		1			RIM		1	12	10	11	
214	GREY	-		1	VAB		BS		1	1	0	0	
214	NVCC1	JBK		1			BS LOWER WALL		1	18	0	0	
214	NVCC1	BK		2	VAB		BS		2	5	0	0	
214	NVGWC	CLSD		1			BS		1	34	0	0	
214	NVGWC	OPEN	STRING	1			BASE		1	29	0	0	
214	SAMCG	18/31		1	ABR		RIM		1	4	17	3	
214	SHCF	-		5			BS SCRAPS; SAMPLE 18		5	2	0	0	
216	GREY	JNN	BVL	1			BS NECK; LARGE LATE ROMAN NARROW NECK JAR		1	47	0	0	
216	IAOL	JBL	HM	1	SOOT INT		BS; OX/R		1	78	0	0	
216	SAM	-		1	VAB		BS; SCRAP; SAMPLE S		1	1	0	0	
217	DR20	A		1	BURNT POST BREAK		BS; SALT WASH		1	32	0	0	
217	DSSA	BFL		1			RIM		1	8	20	4	
217	DSSA	CLSD		1			BASE		1	32	0	0	
217	DSSA	CLSD		5			BS		5	54	0	0	
217	DSSA?	BCAR		1			RIM CARINATION- BROADLY B29 TYPE LOW CARINATION		2	28	13	27	
217	DSSA?	P	ROU	1			BS LOWER WALL		1	26	0	0	
217	GFIN?	CLSD		1			BS		1	7	0	0	

HOPS09- Iron Age and Roman Pottery Archive													
Context	Fabric	Form	Decoration	Vessels	Alt	D. No	Comments	Join	Sherd	Weight	Rim diam	RE %	Pub No
217	GREY	BFL		1			RIM		1	48	17	22	
217	GREY	JBCAR		1			BS		1	4	0	0	
217	GREY	CLSD		5			BS		5	24	0	0	
217	GREY	CLSD		3			BS		3	58	0	0	
217	GREY	J		1			RIM		1	22	14	14	
217	GREY?	CLSD		1	OVERFIRED?		BASE		1	42	0	0	
217	GREYCS	PD		1			BS- LOWER WALL PLATTER/ 18/31 TYPE		1	20	0	0	
217	GREYCS	-		1			BS		1	14	0	0	
217	IAGR	CLSD		2			BS		2	44	0	0	
217	IAGR?	CLSD	ROU	1			BS; OX/R; DECORATION AS BUTT BEAKER ROULETTING; SMALL SHERD- FORM UNCLEAR		1	7	0	0	
217	LGRL	J		1	CALC DEP INT		BS		1	10	0	0	
217	NVCC1	BK		1	ABR		BS		1	5	0	0	
217	NVCC1	BK		1			BASE		1	12	0	0	
217	NVGW	JEV		1			RIM		2	24	0	0	
217	NVGW	JWM		1			BS		5	31	0	0	
217	NVGW	CLSD		1	BURNT		BS		1	11	12	8	
217	NVGW	DGR		1			RIM		1	74	20	8	
217	NVGW	JWM		1			RIM		1	48	19	27	
217	NVGWC	L		1			RIM		1	20	16	8	
217	NVGWC?	CLSD		1			BS; COARSE WITH SPARSE ANGULAR FE 0.8MM ?SOURCE		1	26	0	0	
217	OXL?	CLSD		1			BS; CONATINS SOME COARSE SAND- TRANSITIONAL?		1	7	0	0	
217	SHEL	-		3	ABR		BS		3	26	0	0	
217	SHSC	JUP	HM	1	SOOT EXT		RIM SHLDR; FORM AS D24		1	28	9	15	
217	SHSC	L	HM	1			RIM; R/OX/R; HANDMADE UNEAVEN RIM- LARGE		1	30	20	7	
218	DSSA	BKEV		1			RIM; BAG SHAPE?		1	9	8	12	
218	GFIN	JNK		1		D30	RIM SHLDR;		1	32	10	48	20
218	GREY	BL	B EXT; SHG	1			BS SHLDR; INTUSIVE?		1	37	0	0	
218	GREY	-		1	ABR		BS		2	31	0	0	
218	GREY	J	RUST	1		FS2	BS; CHECK FABRIC		1	7	0	0	
218	GREYCS	-		1			BASE; FTM		1	49	0	0	
218	MOMH	M		1	VAB		BASE		1	8	0	0	

HOPS09- Iron Age and Roman Pottery Archive													
Context	Fabric	Form	Decoration	Vessels	Alt	D. No	Comments	Join	Sherd	Weight	Rim diam	RE %	Pub No
218	NVGW	CLSD		1			BS		2	37	0	0	
218	NVGW	CLSD		1	VAB		BS		1	2	0	0	
218	NVGWC	JEV		1			RIM SHLDR		1	29	17	9	
218	SLGY	J	RLIN	1			BS		1	7	0	0	
220	DR20	A		1	BURNT OVER BREAK		BS		1	146	0	0	
220	DR20	A		1			BS		1	92	0	0	
220	DSSA	F?		1			BS NECK CORUGATED ?ASELSDON 1997 FIG 64.168		1	24	0	0	
220	DSSA	-		2			BS		2	33	0	0	
220	DSSA	JBNK		1			RIM; ROUNDED SHLDR		1	33	17	12	
220	GREY	B334		1		D?	RIM CARINATION		2	42	12	15	
220	GREY	-		1	ABR		BS		1	5	0	0	
220	GREY	JBCAR	LA	1			BS CARINATION UNUSUAL LATTICE DECORATED VESSEL		1	10	0	0	
220	GREY	J		1	VAB		BS		1	15	0	0	
220	GREY	DEXR		1			RIM BASE; SPAULLED		4	127	18	22	
220	NVCC	BK		1	DISC?		BASE; TRIMMED TO DISC; DIAM 50MM		1	22	0	0	
220	NVCC	BKFO		1			BS		2	18	0	0	
220	NVCC1	BKFOF		1			RIM- NEAR BASE LARGE PROPORTION OF VESSEL- L3 TYPE; WITH BASE BROKEN OFF		10	214	8	15	
220	NVMIC	B31		1		FS1	RIM		1	10	20	6	
220	SAMSG	D		1			BASE; 18 OR 18/31		2	11	0	0	
228	CR	CLSD		1			BS		1	12	0	0	
230	IASA?	-		1			BS; SCRAP; SAMPLE 24		1	1	0	0	
235	DSSA	BCAR		1			BS CARINATION		1	33	0	0	
235	DSSA	-		1	VAB		BS		1	7	0	0	
235	IASA	-	WIPE	1			BS		1	2	0	0	
235	NVGW	JB		1			BS		1	44	0	0	
242	BBT	DPR		1			RIM SCRAP		1	2	18	5	
242	DR20	A		1			BS; LATE- SALT WASH		1	29	0	0	
242	DSSA	JEV		1	ABR		RIM		1	11	10	12	
242	DSSA	CLSD		1			BS		1	27	0	0	
242	DSSA	DPR		1			RIM BASE		1	18	20	10	
242	GREY	JDW		1			RIM SHLDR; OX/R/OX; FINE FAB; FORM SIMILAR TO		4	120	15	45	

HOPS09- Iron Age and Roman Pottery Archive													
Context	Fabric	Form	Decoration	Vessels	Alt	D. No	Comments	Join	Sherd	Weight	Rim diam	RE %	Pub No
							MONAGHAN 1997 JD2						
242	GREY	CLSD?		1	ABR		BS		1	6	0	0	
242	GREY	CLSD		2			BS		2	8	0	0	
242	GREY	CLSD	B EXT	1			BASE		4	53	0	0	
242	GREY	-		2			BS		2	73	0	0	
242	GREY	CLSD		1	DISC		BASE TRIMMED TO DISC; 68MM		1	115	0	0	
242	NVCC1	BKFO		1			BS		1	2	0	0	
242	NVCC1	BKFNF		1			RIM BS; \$\$\$FUNNEL FOLDED\$\$\$		4	20	10	6	
242	NVCC1	BK		1			BS		1	1	0	0	
242	NVCC1	BKFO	ROU	1			BS		4	13	0	0	
242	NVCC1	BX	ROU	1			RIM		2	39	18	12	
242	NVCC1	BKFO		1			BS		5	10	0	0	
242	NVGW	CLSD		1			BS		1	20	0	0	
242	NVGWC	CLSD?		1			BS		1	14	0	0	
242	SHEL	-		1	ABR		BS SCRAP		1	3	0	0	
242	SHEL	-	HB	1			BS; DWSH TYPE		2	34	0	0	
242	SHEL	JDW	HB; WF; WIPE EXT	1			RIM SHLDR; DWSH TYPE- GILLAM 157		2	34	12	8	
242	SHEL	CLSD	HB	1			BS		1	8	0	0	
242	SHEL	CLSD	HB	1			BS; DWSH TYPE		5	58	0	0	
242	SHEL	-		2			BS; TINY SCRAPS		2	1	0	0	
242	SHEL	CLSD	HB	1			BASE; DWSH TYPE		1	56	0	0	
245	NVCC	BK	ROU	1			BS SCRAP; SAMPLE 26		1	1	0	0	
245	SAMCG	D		1			BASE		1	3	0	0	
245	SHEL	-		1			BS SCRAP; SAMPLE 26		1	1	0	0	
247	BB1	DPR	BIWL	1			RIM CHAMFER BASE; DORSET		1	34	0	0	
247	BB1	BGF		1			RIM		1	13	20	7	
247	DR20	A		1			BS; LATE FAB- SMOOTH CALC INCLUSIONS		2	66	0	0	
247	GREY	CLSD		6			BS		6	24	0	0	
247	GREY	CLSD		1			BASE		1	28	0	0	
247	GREY	JL		1			BS		4	91	0	0	
247	MORT	M		1			BASE; REDUCED; RARE QU AND CALC TEMPER; ?IRONSTONE TRITS UP TO 4MM; A LOCAL PRODUCT?		1	11	0	0	

HOPS09- Iron Age and Roman Pottery Archive													
Context	Fabric	Form	Decoration	Vessels	Alt	D. No	Comments	Join	Sherd	Weight	Rim diam	RE %	Pub No
247	NVCC1	BGF		1			RIM		1	11	24	6	
247	NVCC2	BKFN		1			RIM		1	4	8	7	
247	NVGW	CLSD		1			BS SHLDR		1	7	0	0	
247	NVGW	OPEN		1			BS		1	15	0	0	
247	SHEL	OPEN	HM; B INT	1			BASE		1	34	0	0	
247	SHEL	JDW	WF	1			RIM		1	15	16	11	
247	SHEL	BG225	HM	1			RIM		1	42	24	11	
247	SHEL	JL	HM	1	VAB		BASE		1	30	0	0	
247	SHEL	-		3			BS		3	23	0	0	
249	DSSA?	CLSD		1	ABR		BS		1	8	0	0	
249	GFIN	-	SHG	1			BS		1	7	0	0	
249	GREY	-		2			BS		2	26	0	0	
249	GREY	CLSD?		1			BASE		1	9	0	0	
249	GREY?	-		1			BS; SAMPLE 11		1	3	0	0	
249	IASA	-		1			BS SCRAP; SAMPLE 11		1	1	0	0	
249	NVCC1	BKFG		1			RIM; FUNNEL AND GROOVE		1	5	7	5	
249	NVCC1	J		1	PIERCED		BASE; BROKEN WHOLE BASE 62MM; LOWER ZONE OF JAR WITH PIERCED HOLE 17MM CHIPPED MOSTLY FROM THE OUTSIDE OF THE VESSEL		1	70	0	0	
249	NVCC1	BK-F		1			BS;		1	3	0	0	
249	NVGW	-		2			BS		2	12	0	0	
249	SAMCG	-		1			BS; 33 OR 46?		1	2	0	0	
249	SCC?	BKCOR		1			RIM		1	2	10	6	
249	SHCM	J	HM; SHG	1	ABR		BS; IA -EROM		1	14	0	0	
250	BBT	-		1			BS		1	7	0	0	
250	DR20	A		2			BS; SALT SURF LATE FAB		2	200	0	0	
250	DSSA	CLSD		1			BS		1	8	0	0	
250	DSSA	DPR		1	ABR		RIM		1	12	20	5	
250	DSSA	CLSD		1	VAB		BS		1	7	0	0	
250	GREY	CLSD		1			BS		2	10	0	0	
250	GREY	JL		1	KILN BLISTER		BS		1	154	0	0	
250	GREY	J		1			BS		1	3	0	0	
250	GREY	DPR		1			RIM BASE		1	33	20	8	

HOPS09- Iron Age and Roman Pottery Archive													
Context	Fabric	Form	Decoration	Vessels	Alt	D. No	Comments	Join	Sherd	Weight	Rim diam	RE %	Pub No
250	NVCC1	CLSD		1			BS		1	11	0	0	
250	NVCC1	CLSD	BA	1			BS		1	17	0	0	
250	NVCC1	DPR		1	VAB		RIM		1	21	16	9	
250	NVCC1	BK		2			BS		2	4	0	0	
250	NVGW	CLSD		3	ABR		BS		3	35	0	0	
250	NVGWC	JBNK		1			RIM		1	15	16	7	
250	SAMSG	-		1			BS		1	3	0	0	
250	SAMSG	18		1			RIM		1	7	16	8	
250	SHEL	CLSD	HM	1	ABR		BS		1	17	0	0	
251	DR20	A		1			BS; SMOOTH ANT. FAB		1	390	0	0	
251	DR20	A		1			BS; SALT SLIP		1	704	0	0	
251	DSSA	J	LA	1			BS		1	10	0	0	
251	DSSA	JL		1			BS		1	69	0	0	
251	GREY	CLSD		4			BS		4	49	0	0	
251	GREY	L		1			BS		1	12	0	0	
251	GREY	J		1			RIM		1	16	20	10	
251	GREYCS	JEV		1			RIM		1	23	16	11	
251	GROG	JBL	HM	1			BS; OX/R/OX		1	37	0	0	
251	NVCC	CLSD		3			BS		3	33	0	0	
251	SLSHB	JCUR	WM; SHG	1	SOOT EXT; CALC DEP INT		RIM SHLDR; SOOT UPPER WALL AND UNDER RIM		11	89	14	17	
257	BBT?	L	HM	1	VAB		BS TINY FRAG OF RIM; HANDMADE; ANGULAR SAND-BB1?		1	7	0	0	
257	DR20	A		1			BS		22	2071	0	0	
257	DSSA	BD	B INT	1	PIERCED HOLE?		BASE; CHAMFER- MIMICING BB1 FORMS WITH INTERNAL FREEHAND BURNISH		2	68	0	0	
257	GREY	JBK		1			BS SHLDR		1	7	0	0	
257	GREY	BD		1			BS		1	16	0	0	
257	GREY	CLSD		1	ABR		BS		3	28	0	0	
257	GREY	JBL		1			BS		1	106	0	0	
257	GREY	BCAR		1			BS		1	5	0	0	
257	IAGR	CLSD		1			BASE		1	10	0	0	
257	IASA	J	HM	3			BS; FABRICS VARY		4	82	0	0	

HOPS09- Iron Age and Roman Pottery Archive													
Context	Fabric	Form	Decoration	Vessels	Alt	D. No	Comments	Join	Sherd	Weight	Rim diam	RE %	Pub No
257	IASA	J?	HM	1	SOOT INT?		BS		1	30	0	0	
257	NVCC1?	OPEN		1	VAB		BS		1	25	0	0	
257	OX	-		1			BASE FRAGMENT		1	12	0	0	
257	SHCC	JS52	HM	1			RIM		1	146	34	8	
257	SHEL	-	HM	1			BS		1	9	0	0	
259	IAOL	-	HM	1			BS; COMMON OOLITHS		1	34	0	0	
259	SHCMP	JBNK	CORDON; HM; B EXT	1			BS; SHLDR; R/OX/R		31	322	0	0	
261	GREY	-		1			BS		1	6	0	0	
261	GREY	-		1	HIGH FIRED		BASE; COARSE SANDY		1	19	0	0	
262	DSSA	DPR		1			RIM		2	17	20	6	
262	DSSA	-		1			BS		1	4	0	0	
262	GREY	-		1			BS		5	43	0	0	
262	GREY	-		4	ABR		BS		4	78	0	0	
262	GREY	JB		1			BS		6	85	0	0	
262	GREY	JBL		1			BS		2	55	0	0	
262	GREY	JB		1			BS		1	14	24	7	
262	NVGY	-		1	ABR		BS		2	6	0	0	
262	SHEL	JBL	HM	1	ABR		BASE		1	43	0	0	
262	SHEL	-		2	VAB		BS		2	13	0	0	
262	TN	P	NAME	1		R1	BASE FTR- SEE V. RIGBY REPORT- JUL(L)IOS G-B DATABASE P18 DIE 03G03; GB DATABASE REF V1119		1	28	0	0	
264	DSSA	CLSD		2			BS		2	24	0	0	
264	DSSA	-		2			BASE		2	20	0	0	
264	GREY	BL	SHG	1			BS		1	10	0	0	
264	GREY	-		7			BS		7	61	0	0	
264	GREY	J	LA	1			BS		1	12	0	0	
264	GREYC	JBL		1			BASE		1	43	0	0	
264	IAGR?	CHP	WM	1			BASE		1	22	0	0	
264	NVCC1	B?		1			BASE		1	14	0	0	
264	NVCC1	BFL		1			RIM		1	39	26	7	
264	NVCC1	BK	BA	1			BS		1	5	0	0	
264	NVCC1	BKFOS		1			BS		2	9	0	0	

HOPS09- Iron Age and Roman Pottery Archive													
Context	Fabric	Form	Decoration	Vessels	Alt	D. No	Comments	Join	Sherd	Weight	Rim diam	RE %	Pub No
264	NVGW	CLSD		1			BS		1	6	0	0	
264	SHEL	-	HM	1	ABR		BS; OXID		1	15	0	0	
266	IALIM	JBL	HM	1			BS; OX/R/OX; LIMESTONE AND SPARSE QU AND FE UP TO 1MM		2	81	0	0	
266	SHCF	JB	HM/WF	1	DEP EXT?		RIM; OX/R/OX; SMALL S-SHAPED JAR BOWL??		4	43	14	26	
266	SHCM	-	HM	26			BS; MISC; OX/R/OX; ?VESSEL COUNT		26	260	0	0	
266	SHCM	JL	HM	1		D06	RIM OXID		3	149	14	47	07
266	SHCM	JL?	HM; SHG	1			BS; OX/R/OX; TWO GROOVES		3	97	0	0	
266	SHCM	JBL	HM	1	SPAUL		BS; OX/R/OX		3	139	0	0	
266	SHCM	JL	HM; SHG	1			BS; OX/R/OX		3	54	0	0	
266	SHCM	JL	HM	1		D05	RIM SHLDR; OXID; NOTE THUMB MARKS ON RIM TO JOIN COILS		5	338	42	17	09
266	SHCM	JL	HM; SHG	1			BS; OX/R/OX; LOWER WALL ?STRAIGHT SIDED MULTIPLE WF GROOVES		3	231	0	0	
266	SHCM	JL	HM; SHG	1			BS SHLDR; OX/R/OX; AS GLOBULAR JAR D06/PUB07		3	208	0	0	
266	SHCM	-	HM	7			BS;		7	86	0	0	
266	SHCM	JB	HM	7	SPAULS		BS; OX/R/OX		7	133	0	0	
266	SHCM	JL?	HM	1	MISFIRED?		BS; IRF; IRREGULAR FIRING MOSTLY OXID		4	178	0	0	
266	SHCM	JL?	HM; SHG	1			BS; OXID		2	71	0	0	
266	SHCM	CLSD	HM	18			BS; OXID		18	186	0	0	
266	SHCM	-	HM	1			BS; OX/R/OX; INCLUDING SPAULS		27	297	0	0	
266	SHCM	JBL	HM	2			BS; OX/R/OX		2	204	0	0	
266	SHCM	B	HM	1	DEP EXT?		RIM SHLDR; OX/R/OX; FORM AS D07/ PUB06 S- SHAPED BOWL		1	13	16	7	
266	SHCM	JL	HM	1			BS; OX/R/OX; 9MM THICK- LARGE VESSEL		3	200	0	0	
266	SHCM	JGLOB	HM; ROU; STR	1	MISFIRE?- CRACKING; SPAUL	D04	BS; SHLDR; DECORATED; LIGHT OXID FIRING; POSSIBLE MISFIRE		19	842	0	0	08
266	SHCM	B	HM/WF?	1			RIM SHLDR; OX/R/OX; FORM AS D07/ PUB06 S- SHAPED BOWL I		2	86	18	25	
266	SHCM	-	HM	13			BS; OX/R/OX INCLUDING SCRAPS		13	64	0	0	
266	SHCMP	JBL		1			BS		2	397	0	0	
266	SHCMP	JBL		1			BASE; OX/R/OX		1	122	0	0	
266	SHSM	B	HM	1		D07	RIM SHLDR; S-SHAPED BOWL		1	79	18	21	06
268	DSSA	-		1	ABR		BS		1	10	0	0	

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Context	Fabric	Form	Decoration	Vessels	Alt	D. No	Comments	Join	Sherd	Weight	Rim diam	RE %	Pub No
268	GREY	CLSD		1			BS		1	10	0	0	
268	IAOL	JBL	HM	1			BS; OX/R; WIPED SURFACE; SOME SHELL		1	65	0	0	
268	NVGW	CLSD		1			BS		1	10	0	0	
268	SHCF	-		1			BS		1	5	0	0	
268	SHSF	CLSD	HM; ROU	1	ABR		BS		1	5	0	0	
270	IASA	JBL	HM	1			BS; OX/R		1	68	0	0	
270	SHCC	JBL	HM	1			BS; OX/R/OX		1	70	0	0	
272	SHCM	CLSD	HM	9			BS; OX/R/OX FIRING; LARGE THICK WALLED VESSEL- ?AS D4; NUMBER OF VESSELS IS UNCLEAR		9	290	0	0	
272	SHCM	CLSD	HM	1			BS; OX/R; 8MM THICK		1	20	0	0	
272	SHSF	CLSD	HM; ROUZ	1			BS; REDUCED; DOUBLE TOOTHED ROULETTING WITH BURNISHED BORDER; ?CHEVRON MOTIF		2	4	0	0	
276	GREY	-		2			BS		2	5	0	0	
276	IAOL	JBL	HM	1			BS; OX/R		1	43	0	0	
276	NVCC1	-		1	ABR		BS		1	6	0	0	
277	SHCC	JBL	HM	1			BASE; OX/R/OX		9	315	0	0	
277	SHCC	JBL	HM	1	SOOT EXT		BS; IRF		4	221	0	0	
277	SHCC	CLSD		2			BS		2	38	0	0	
277	SHCM	CLSD		10			BS		10	65	0	0	
277	SHCM	CLSD	BVL	1			BS LOWER WALL BURNISHED DECORATION		1	18	0	0	
282	DSSA	-		2			BS		2	20	0	0	
282	GREY	CLSD		3			BS		3	26	0	0	
282	GROG	-		1	BURNT		BS		1	12	0	0	
282	NVCC	BK		1			BS		1	1	0	0	
282	NVGWC	-		1			BS		1	10	0	0	
282	SAMCG	37	MOULD	1	ABR		RIM		1	16	21	4	
282	SHEL	-	HM	1			BS		1	18	0	0	
286	CR?	BKBB		1			RIM; EVERTED UNUSUAL FORM ALMOND SHAPE EVERTED RIM- V.RIBY COMMENTS NOT IMPORT PERHAPS NONE LOCAL/NONE NENE VALLEY SOURCE		1	9	14	10	
292	DSSA	-		1	VAB		BS		1	12	0	0	
292	GREY	J		1			BS SHLDR		1	23	0	0	
292	GREY	JEVC	LA	1	SOOT EXT; CALC DEP INT		RIM; SHLDR BASE		11	174	18	22	

HOPS09- Iron Age and Roman Pottery Archive													
Context	Fabric	Form	Decoration	Vessels	Alt	D. No	Comments	Join	Sherd	Weight	Rim diam	RE %	Pub No
292	IASA	JCH	HM	1			RIM SHLDR		1	16	15	7	
292	NVCC1	JBNK	RIL	1	D?		RIM SHLDR		1	9	9	20	
292	NVGW	JBL		1	SOOT EXT; CALC DEP INT		BS		1	61	0	0	
298	DSSA	DPR		1			RIM BASE		4	96	18	12	
298	GREY	JBL		1	ABR		BS		1	36	0	0	
298	GREY	JBNK		1			RIM		1	8	9	15	
298	GREYCS	JBNK		1			RIM		1	23	12	15	
298	LGRL?	JEVS		1	BURNT		RIM SHLDR		1	27	11	20	
298	NVCC1	BFL		1			RIM BASE FULL PROF NEARLY HALF BOWL		1	162	15	40	
298	SCC	BK		1	ABR		BASE; ?TRIMMED		1	37	0	0	
302	CR	-		1			BS; SAMPLE 20		1	1	0	0	
302	DSSA	J		2	ABR		BS		2	13	0	0	
302	DSSA	J		1	INT CALC DEP		BS		1	10	0	0	
302	DSSA	BD		1			BS		1	14	0	0	
302	DSSA	DPR		1			RIM- BASE		1	178	20	27	
302	DSSA?	JEV		1			RIM; SAMPLE 20		1	5	0	0	
302	DSSA?	CLSD		6	ABR		BS; SAMPLE 20		6	35	0	0	
302	GREY	CLSD		1			BS		2	42	0	0	
302	GREY	-		1			BS		1	14	0	0	
302	GREY	-	B EXT INT	1			BS		1	17	20	6	
302	GREY	BWM1	BWL	1		D03	RIM BASE; NEARLY COMPLETE		44	1513	25	100	32
302	GREY	J?	LA	1			BS		1	23	0	0	
302	GREY	JBKFO		1			BS		1	5	0	0	
302	GREY	BWM1		1	ABR		RIM SHLDR		11	375	28	37	
302	GREY?	-		2	VAB		BS SCRAPS; SAMPLE 20		2	1	0	0	
302	GREY?	-		4			BS; SAMPLE 20		4	11	0	0	
302	GREYCS	CLSD	SHG	1			BS; SAMPLE 20		1	25	0	0	
302	GYMS	CLSD		1			BS SHLDR		1	10	0	0	
302	NVCC	-		3			BS; SAMPLE 20		3	5	0	0	
302	NVCC1	BK		1			BS		1	1	0	0	
302	NVGW	-		2			BS		2	21	0	0	
302	NVGW	-		1	ABR		BASE		5	114	0	0	

HOPS09- Iron Age and Roman Pottery Archive													
Context	Fabric	Form	Decoration	Vessels	Alt	D. No	Comments	Join	Sherd	Weight	Rim diam	RE %	Pub No
302	OXL	-		1	VAB		BS; SAMPLE 20		1	1	0	0	
302	OXL	CLSD		1			BS		1	2	0	0	
302	SAM	OPEN		1	VAB		BS; SAMPLE 20		1	1	0	0	
302	SHEL	-		6			BS; SAMPLE 20		6	10	0	0	
302	SHEL	-		2	ABR		BS		2	38	0	0	
308	GREY	CLSD	BOS	1			BS; BOSS AS 2C SLEAFORD AND ANCASTER EXAMPLES		1	15	0	0	
308	IASA	PGB		1		D26	RIM		1	29	16	11	11
311	DSGR	-		1			BS		1	4	0	0	
311	GREY	JBK	CORD	1			BS		1	4	0	0	
311	IAGRCS	-		1			BS		1	41	0	0	
311	IASA	BCAR	CORD	1		D19	RIM- LOWER WALL		4	239	23	12	13
311	NVGW	-		2	ABR		BS		2	8	0	0	
311	SHEL	-		1	ABR		BS		1	3	0	0	
320	DR20	A		1	BURNT EXT		BS		2	156	0	0	
320	DR20	A		1	REUSE AS LID?; SOOT EXT	PHOT O1	BASE; LATE WHITE SALT WASH FABRIC; BASE OF AMPHORA ROUGHLY TRIMMED AND GROUND AROUND THE EDGE; SOOTING AROUND THE EDGE; 155MM MAXIMUM WIDTH; PARTLY BROKEN ROUGHLY OVAL		1	437	0	0	
320	DSSA	CLSD		1			BS		1	11	0	0	
320	SHSC	-	HM	1			BS FLAKES		2	14	0	0	
321	DSSA	JL	SHG	1			BS SHLDR; JIONS 348??		1	32	0	0	
321	GREY	BWM2		1			RIM SHLDR; SWPT		1	65	30	12	
321	GREY	JBL		1			BS LOWER WALL		1	47	0	0	
322	CR	CLSD		1	ABR		BS; FLAGON		1	7	0	0	
322	GREY	-		3			BS		3	43	0	0	
322	GREY	-	SHG	1			BS		1	35	0	0	
322	GREY	-		1			BS		1	22	0	0	
322	GREY	-	B EXT	1			BS;		2	8	0	0	
322	MICA	P		1		FS	BASE; SAND SIMILAR TO DSSA?		1	36	0	0	
322	NVCC1	BK	BA	1			BS		1	2	0	0	
322	NVGCC	BKFOSC		1			BS	150	1	6	0	0	
322	NVGW	CLSD		1			BS		1	5	0	0	

HOPS09- Iron Age and Roman Pottery Archive													
Context	Fabric	Form	Decoration	Vessels	Alt	D. No	Comments	Join	Sherd	Weight	Rim diam	RE %	Pub No
322	SAMCG	79		1			RIM		1	3	16	5	
322	SAMCG	18/31-31		1			BS		1	7	0	0	
322	SHEL	JB	WM	1			RIM		1	24	19	7	
322	SHEL	JEV	HM	1			RIM SHLDR		1	13	14	3	
322	SHSMP	-	HM	1			BS		1	16	0	0	
322	SLSHB?	-	WM	2			BS		2	16	0	0	
322	SLSHB?	J	WM; SHG	1	SOOT EXT		BS SHLDR		1	23	0	0	
323	GREY	-		1			BS		1	3	0	0	
323	GREY	J?	LA	1			BS		1	8	0	0	
323	NVCC1	BK?		1	ABR; DISC?		BASE; TRIMMED DISC?		1	16	0	0	
323	NVCC1	FJ		1			BASE		1	50	0	0	
323	OX	CLSD		1	CONCRETION EXT		BS		1	9	0	0	
323	SAMCG	31		1	WORN INT		RIM		1	8	13	8	
323	SAMCG	33		1	WORN INT		RIM		1	26	18	10	
324	GREY	BD		1			BASE		1	9	0	0	
324	SLSHB	J	WM	1	CALC DEP INT		BS		1	23	0	0	
326	BBT	BEXR		1			RIM		1	16	0	0	
326	DSGR	J?	WM	1			BASE; QU, GROG AND SHELL		5	98	0	0	
326	DSSA	CLSD		7	ABR		BS		6	43	0	0	
326	DSSA	BSEG		1		D41	RIM;		1	14	19	7	27
326	DSSA	BFL		1		D40	RIM; CARINATED AS DARLING 1984 FIG. 16.79		1	30	21	8	28
326	GREY	BL	SHG; BWL	1			BS		2	85	0	0	
326	GREY	BL		1			RIM		1	12	28	6	
326	GREY	-		9	ABR		BS		9	38	0	0	
326	GREY	BD		1			BASE		1	22	0	0	
326	GREY	CLSD		1			BASE		1	15	0	0	
326	GREY	J		2			BS SHLDR		2	27	0	0	
326	GREY	JCUR		1	SOOT		RIM		2	33	15	21	
326	GREY	JL	BWL	1			BS		1	41	0	0	
326	GREY	BD		1			BASE		1	10	0	0	
326	GREY	J	LA	3			BS		3	42	0	0	
326	GREY	JBL		5	ABR		BS		5	137	0	0	

HOPS09- Iron Age and Roman Pottery Archive													
Context	Fabric	Form	Decoration	Vessels	Alt	D. No	Comments	Join	Sherd	Weight	Rim diam	RE %	Pub No
326	GREY	BD		1			BASE		1	65	0	0	
326	GREY	JNK		1			BS		2	24	0	0	
326	GREYC	JS		1	ABR; CALC DEP INT		BASE		2	269	0	0	
326	GREYCS	CLSD		1			BASE		1	27	0	0	
326	IAGR	CLSD		1			BS		1	11	0	0	
326	IAGR?	CLSD		1			BS		1	19	0	0	
326	LGRL	JBNK		1			RIM		1	20	10	15	
326	NVCC	BK		1			BS		1	1	0	0	
326	NVCC1	BKFO		2			BS		2	3	0	0	
326	NVCC1	BKHC	BAAN	1			BS; ANIMAL FIGURE		4	17	0	0	
326	NVCC1	BKEV		1			RIM		1	2	7	11	
326	NVCC1	BKFOSC		2			BS		2	13	0	0	
326	NVCC1	BKFN		1			RIM		1	2	7	5	
326	NVCC1	BK		3			BS		3	15	0	0	
326	NVGCC	BKFOS		1			BS		2	16	0	0	
326	NVGW	CLSD		3			BS		3	11	0	0	
326	NVGW	BD		1			BS		1	17	0	0	
326	NVGW	-		1			BASE; FTG		1	120	0	0	
326	NVGW	JB		1			RIM		1	11	22	8	
326	NVGW	BKFO		1			BS		1	7	0	0	
326	OX	-		1	VAB		BS		1	24	0	0	
326	OX	-		2			BS		2	6	0	0	
326	OX	-	ROU	1			BS		1	2	0	0	
326	OX	-		2			BS		2	6	0	0	
326	SAMCG	31		1			RIM		1	12	0	2	
326	SAMCG	B		1			RM		1	13	0	0	
326	SHEL	CLSD	WM	13			BS		13	246	0	0	
326	SHEL	BL	B INT	1			BASE		1	115	0	0	
326	SHEL	J		1	SOOT OVER BREAK		BASE		1	415	0	0	
326	SHEL	JDLS	WM	1			RIM SHLDR		1	66	22	20	
326	SLSHB?	J?		1	CALC DEP INT; SOOT EXT		BS		5	151	0	0	
327	GREY	JB		1			RIM		1	31	20	12	

HOPS09- Iron Age and Roman Pottery Archive													
Context	Fabric	Form	Decoration	Vessels	Alt	D. No	Comments	Join	Sherd	Weight	Rim diam	RE %	Pub No
327	NVGW	CLSD		1			BS		1	16	0	0	
328	NVGW	-	LA	1			BS		1	14	0	0	
328	SLSHB?	-	WM	1	ABR		BS		1	4	0	0	
329	CR	-		1			BS SCRAP; SAMPLE 30		1	1	0	0	
329	OX	-		1			BS SCRAP; SAMPLE 30		1	1	0	0	
329	SHEL?	-		1			BS SCRAP/ FIRED CLAY?; SAMPLE 30		1	1	0	0	
330	GREY	BFL		1	SOOT EXT		RIM; SOOT BENEATH RIM		1	15	20	6	
330	NVGW	D36		1			RIM		1	54	24	25	
332	CR	FTR		1			RIM		1	18	6	35	
332	DSGR	CLSD	HM	1	CALC DEP INT; BURNT EXT		BS		1	47	0	0	
332	DSGR	-		1			BS; OX/R/OX; THIN SHERD		1	24	0	0	
332	DSGR	-		1			BS; OX		1	22	0	0	
332	DSSA	CLSD		1			BS		4	11	0	0	
332	GREY	-		3			BS		3	45	0	0	
332	IAGR	-	HM	1			BS		1	25	0	0	
333	CR	-		1			BS; REDUCED GREY CORE		2	17	0	0	
333	CR	CLSD		1			BASE; FTM; LARGE PROPORTION OF ?FLAGON		6	193	0	0	
333	CR	CLSD		1			BS; SAMPLE 28		1	3	0	0	
333	DSSA	BCAR		1		D10	RIM BASE		8	195	12	35	25
333	DSSA	D		1			BASE CHAMFER		1	51	0	0	
333	DSSA	J	RNOD	1			BS; SHLDR; AS NOBUAL EXAMPLES IN ELSDON 1997		3	80	0	0	
333	DSSA	CLSD		1			BASE LOWER WALL		1	30	0	0	
333	DSSA	BCAR		1		D11	RIM- BASE		3	308	11	5	26
333	GREY	CLSD?		1	DEP INT CAL		BS		12	217	0	0	
333	GREY	JEV		1			RIM SHLDR; 'BARREL JAR AS AT ROXBY WITH ;BANDS'		6	142	16	13	
333	GREY	JNN		1			RIM		2	41	14	19	
333	GREY	JBNK		1			RIM		1	21	12	17	
333	GREY	JWM		1			RIM BS		9	294	26	7	
333	GREY	DGR		1			RIM		1	25	14	13	
333	GREY	J?		1	ABR		BS; ZONES AS ROXBY BARREL TYPE		7	70	0	0	
333	GREY	CLSD		1			BS		2	19	0	0	
333	GREY	-		1	ABR		BS		3	35	0	0	

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Context	Fabric	Form	Decoration	Vessels	Alt	D. No	Comments	Join	Sherd	Weight	Rim diam	RE %	Pub No
333	GREY	BNNK		1			RIM		1	57	28	8	
333	GREY	J		1			BS SHLDR		1	17	0	0	
333	GREY	-		4			BS		4	45	0	0	
333	GREY	-		1			BS		1	39	0	0	
333	GREY	CLSD		1			BS SHLDR		2	5	0	0	
333	GREY	-		1	DEP CAL		BS		1	14	0	0	
333	GROG	JL	WF	1			BASE AND LOWER WALL; HIGH FIRESANDY WITH SPARSE GROG UPT TO 4MM		9	797	0	0	
333	IASA	CLSD	CORUG	1			BS LOWER WALL		1	8	0	0	
333	IASA	J	CORUG	1			RIM SHLDR; CORUGATED SHOULDER		1	10	10	7	
333	NVCC	BK		1			BS; SAMPLE 28		1	1	0	0	
333	NVGW	CLSD		1	DEP INT CALC		BS		1	16	0	0	
333	NVGY	CLSD?		1			BS; FABRIC AS ROWLANDSON 2008 NO4		4	35	0	0	
333	SAMCG	37		1			RIM		1	11	18	10	
333	SHCM	-	HM	1			BS; IA TYPE; WELL SORTED		1	20	0	0	
333	SLSHB	J	WF?	1			BASE		2	361	0	0	
333	SLSHB	JCUR		1			RIM SHLDR; AS 333- D?		2	30	18	6	
333	SLSHB	J	WF?	1	DEP CALC INT		BS		10	166	0	0	
333	SLSHB	J		1	DEP CALC INT		BS		1	87	0	0	
333	SLSHB	JCUR	WF	1		D?	RIM SHLDR- BOURNE TYPE JAR		2	38	18	12	
333	SLSHB	J	WF?	1			BASE		7	89	0	0	
333	SLSHB	J		1			BS		1	9	0	0	
334	DSSA	JEV		1			RIM BS SCRAPS; SAMPLE 29		8	10	0	0	
334	GREY	-		2			BS		2	18	0	0	
334	GREY	JBKEV		1			RIM SHLDR; ?BEAKER		1	12	9	20	
334	GREY?	-		2			BS SCRAPS; SAMPLE 29		2	1	0	0	
334	GREY?	-		1			BS SCRAP; SAMPLE 29		1	1	0	0	
334	IAGR	-		1	VAB		BASE?; VEG MARKS ON BASE		1	68	0	0	
334	IAGR	CLSD	HM?	1	DEP CALC INT		BS; SHSF; SPGROG		1	20	0	0	
334	IAGRCS	CPN		1		D28	RIM SHLDR		2	69	20	17	39
334	SAMLM	37	MOULD	1			BS		2	5	0	0	
334	SHCC	JS52	HM	1			RIM		1	87	32	6	
334	SHEL	J	WF	1			BS; REDUCED OX MARINS		13	264	0	0	

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Context	Fabric	Form	Decoration	Vessels	Alt	D. No	Comments	Join	Sherd	Weight	Rim diam	RE %	Pub No
334	SHEL	-		2			BS SCRAP; SAMPLE 29		2	4	0	0	
334	SHMM	J?	HM	1			BS; IA TYPE; IRF		1	14	0	0	
334	SHOL	L	HM	1		D?	RIM; IRF- OXID EXTERNAL	101	1	15	18	7	
334	SLSHB?	JCUR?		1			RIM		1	7	9	15	
334	SLSHB?	JCUR?		1			RIM		2	20	16	18	
347	DSSA	-		1			BS		2	19	0	0	
347	FEGY	JNN		1			RIM		1	21	10	30	
347	GREYC	JWM		1		D31	RIM		4	206	18	29	36
347	NVGWC?	-		1	VAB		BS COARSE; RARE FLINT		1	5	0	0	
348	CR	CLSD		1	ABR		BS		1	6	0	0	
348	DR20	A		1			HANDLE; BS		2	761	0	0	
348	DR20	A		1			BS		7	91	0	0	
348	DSSA	J	RUST	1			BS		4	13	0	0	
348	DSSA	J		1			BS; SANDY		1	17	0	0	
348	DSSA	JWM?		1		D27	RIM SHLDR		11	355	19	61	23
348	DSSA	JEV		1			RIM		1	7	12	4	
348	DSSA	J?		1	ABR		BS		2	26	0	0	
348	DSSA	JEV		1			RIM SHLDR		1	14	12	2	
348	DSSA	JL	SHG	1	ABR		BS SHLDR		5	125	0	0	
348	DSSA	BNK		1	ABR		RIM SHLDR; ROUNDED SHLDR S-SHAPED BOWL IA TYPE DERIVATIVE AS DRAGONBY KILN MAY 1996 AND SLEAFORD LEARY 1997		6	39	12	16	
348	DSSA	JEV		1			RIM		1	15	14	17	
348	FEGY	CLSD		1		FS3	BS		1	9	0	0	
348	FEGY	JNN?	LA; CORD	1		FS3	BS; SHLDR		2	62	0	0	
348	GREYC	JL		1		D29	RIM SHLDR		1	174	22	12	37
348	GYMS	JBL		1			BS SHLDR- SOME FE AS SLGY WITH SPARSE SHELL		2	68	0	0	
348	IAGR	BL		1			BS		1	78	0	0	
348	IAGR	CLSD		1			BASE		1	33	0	0	
348	IAGR	CLSD	WF	1			BASE (WHOLE) LOWER WALL		4	204	0	0	
348	IASA	-		9			BS		9	45	0	0	
348	IASA?	-	HM	1			BS		1	4	0	0	
348	OXL	CLSD		1			BS		1	3	0	0	

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Context	Fabric	Form	Decoration	Vessels	Alt	D. No	Comments	Join	Sherd	Weight	Rim diam	RE %	Pub No
348	PINK	CLSD		1	ABR		BS		1	6	0	0	
348	SHEL	JSQ		1		D32	RIM SQUARE RIM		1	54	13	10	40
348	SHEL	-		12	VAB		BS; SCRAPS		12	20	0	0	
348	SHEL	-	HM	1			BS		1	12	0	0	
348	SLGY	CLSD		1			BS		1	19	0	0	
348	SLGY	CLSD		1			BS		1	13	0	0	
348	SLGY	J?		1	CONCRETION		BASE		2	386	0	0	
351	DSSA	-		1			BS		1	9	0	0	
351	GREY	J		1			RIM		1	12	14	5	
351	IASA	-	HM	1			BS		1	5	0	0	
351	SHEL	-	HM	1			BS		1	12	0	0	
355	GREY	JL		1	CALC DEP INT		BS		1	58	0	0	
355	GREY	JNN		1			RIM; CORDONED CUP RIM SWANPOOL TYPE		1	26	10	5	
355	GREY	JEV		1			RIM SHLDR		2	25	10	10	
355	GREY	BIBF		1			RIM; SWPT		1	45	30	8	
355	NVCC?	CLSD		1			BASE; FTR; COARSE PINKY FAB POOR SLIP		1	12	0	0	
355	NVCC?	OPEN		1			BASE; COARSE PINKY FAB; POOR SLIP		1	22	0	0	
355	OXL	-		1			BS FLAGON TYPE- SIMILAR TO LINCOLN PINK- COARSE LACKS MICA		1	4	0	0	
355	SAMCG	18/31-31		1			BS		1	2	0	0	
355	SHEL	JCUR	WM	1			RIM; AS S. MIDLANDS TYPE JAR RIM		1	58	19	12	
355	SPCC	BK	ROU	1			BS		1	11	0	0	
355	SPOXT	CLSD	PA	1			BS; PAINTED 'Q' SHAPES		1	10	0	0	
355	TILE	JS	HM	1			BS; SAME IN 172 & 171		1	48	0	0	
356	NVCC	FFN		1		D33	BS; NOSE FRAGMENT FROM A RED CC PALE CORE FACE NECK FLAGON		1	7	0	0	18
356	SAMEG	38	NAME	1			BASE; NIVALIS 1B?- NIVAL[.		1	43	0	0	
357	GREY	BL		1			RIM		1	57	24	12	
357	GREY	JWM		1			RIM		1	44	21	12	
357	GREY	JBL		1			RIM		1	12	20	10	
357	GREY	CLSD		3			BS		3	88	0	0	
357	GREY	J		2			BS SHLDR		2	28	0	0	
357	NVCC1	J		1			BS		1	10	0	0	

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Context	Fabric	Form	Decoration	Vessels	Alt	D. No	Comments	Join	Sherd	Weight	Rim diam	RE %	Pub No
357	NVGWC	DTR		1	SOOT EXT		RIM BASE; CHAMFER		1	45	0	0	
357	SHEL	J		1			BS SHLDR		3	42	0	0	
357	SHEL	-	HM	1	ABR		BS		1	18	0	0	
364	GREY	JBL		1			BS		1	63	0	0	
364	GREY	CLSD		1	VAB		BS		1	34	0	0	
364	GREY	JWM		1			RIM		1	39	20	12	
364	GREY	J	BOS; LA	1		D09	BS; SHLDR		1	30	0	0	30
364	GYMS	J	WM	1			BS SHLDR		1	15	0	0	
364	NVGW	CLSD		1			BS		1	4	0	0	
368	IASA	-		1			BS		1	10	0	0	
368	SHCC	-	HM	5			BS		5	35	0	0	
368	SHCC	CLSD	HM	1			BASE		1	18	0	0	
368	SHCC	JS	HM	1			BS; IRF; VERY LARGE 20MM HICK		2	159	0	0	
368	SHCF	CLSD	HM	2			BS		2	25	0	0	
368	SHCF	BNK	HM	1			RIM		1	13	17	8	
368	SHCF	BNK	WF?	1			RIM		1	31	18	9	
368	SHCFP	-	HM	1	ABR		BS		1	4	0	0	
368	SHSM	BNK	HM	1			RIM		1	15	20	9	
383	GREYCS	L?		1			RIM		1	24	24	5	
394	DSSA	JBK	CORG	1			BS; CORUGATED		1	18	0	0	
394	GREY	-		1	ABR		BS		1	7	0	0	
394	NVCC1	-		1			BS		2	5	0	0	
394	SAMCG	79		1			RIM		1	13	20	11	
394	SHEL	-		3	ABR		BS		3	46	0	0	
402	CR	FX2		1	DEP INT PITCH		BS HANDLE; DEPOSIT INTERNAL- PITCHING; SEE FX2 TYPES FROM SLEAFORD PUBLICATION; HANDLE BIFFID		22	539	0	0	
402	DSGR	CLSD?		1			BS		1	23	0	0	
402	DSSA	JL		1			RIM SHLDR		1	55	24	7	
402	GREY	L		1		D12	RIM- FINIAL		1	173	18	28	33
402	GREY	J?		1			BASE LOWER WALL		1	40	0	0	
402	GREY	CLSD		1			BS; SANDY		1	9	0	0	
402	GREY	BNNK		1			RIM		1	69	18	32	

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402	GREY	JEV		1			RIM SHLDR; HIGH SHLDR		1	18	14	10	
402	GREY	JRUST	RNOD	1			BS; LOWER WALL; SANDY		1	60	0	0	
402	GREY	J		1			BASE; FTG; SANDY		2	59	0	0	
402	GREYCS	JRUST	RLIN	1			BS LOWER WALL		1	73	0	0	
410	IAGR?	CLSD	HM?	1			BS; THIN WALL; TRANSITIONAL?		1	13	0	0	
410	NVGW	CLSD		1			BS		1	14	0	0	
410	SHCC	JBL	HM	2			BS		2	70	0	0	
410	SHSC	-	HM	1	ABR		BS OXID		1	9	0	0	
413	SHOLF	BNK	CORDON; HM/ WF?; B EXT	1		D36	RIM SHLDR; IRF EXTERNAL- BROWNS TO ORANGE; BLACK INT		3	169	19	22	10
415	DSSA	JEV	RLIN	1		D02	RIM- BASE		15	689	15	73	22
415	DSSA	JNK	CORD	1			RIM; WM		1	22	16	9	
415	GREY	J	SHG	1	DEP INT CALC?; SOOT EXT		BS SHLDR; SOOTED SHOULDER		3	176	0	0	
415	LOND	B30	SCVL	1		D08	RIM		1	9	10	5	21
415	SAMSG	36	BA	1			BS		1	10	0	0	
419	GREYCS	J	RLIN	1			BS; SHLDR		2	67	0	0	
419	SAMLM	37	MOULD	1			RIM- ?WORK OF IGOCATUS		1	25	17	5	
423	MOMH	MHK		1			RIM; BLACK FIRED CLAY TRITS		1	245	28	29	
835	SHEL	CLSD	HM	1			BS		1	8	0	0	

Specialist samian archive- G. Monteil

context	feature	feature description	vessel part	fabric	secure fabric ID	form	secure form ID	decoration	condition	wear	no of vessels	sherd count	weight	Rim Eve	rim Diam	Base Eve	base Diam	stamp	potter	die	Edat e	Ldat e	comments	
101	101	Layer	bodysherd	SAMMV		dish					1	1	11									100	120	the rim is partly missing but possibly a Cu23
103	103	U/S	rim	SAMMV?		DR33					1	1	8	0.2	91							100	120	the fabric is hard, fairly clean with quite a lot of mica, some voids. small example, thin walled with no noticeable curve on the wall. Two grooves 1/2 down the wall
103	103	U/S	rim	SAMCG		DR38					1	1	20	0.125	142							150	200	thin band of wear on top of rim

Specialist samian archive- G. Monteil

context	feature	feature description	vessel part	fabric	secure fabric ID	form	secure form ID	decoration	condition	wear	no of vessels	sherd count	weight	Rim Eve	rim Diam	Base Eve	base Diam	stamp	potter	die	E date	L date	comments	
103	103	U/S	base	SAMCG		mortarium				Y	1	1	54								160	200	the internal surface is completely worn (no slip left and if there were grits present they've all be worn away). The footring is equally worn (no slip and the original surface has been worn). Cannot take a base EVE because too abr.	
122	121	Well	rim	SAMLG		DR37					1	1	4	0.06	220							70	100	beaded rim
150	149	Drain	rim	SAMCG		DR37		DEC			1	1	8	0.01								150	200	tiny bit of ovolo left-not enough for id-Anto?
150	149	Drain	bodysherd	SAMCG		DR31					1	1	10									120	200	
151	149	Drain	base	SAMRZ		dish				Y	1	1	5									150	250	internal wear (concentric), prob from Dr35 or 36
168	168	Layer	base	SAMMV	?	DR18/31					1	1	48			0.08	100					100	120	

Specialist samian archive- G. Monteil

context	feature	feature description	vessel part	fabric	secure fabric ID	form	secure form ID	decoration	condition	wear	no of vessels	sherd count	weight	Rim Eve	rim Diam	Base Eve	base Diam	stamp	potter	die	Edat e	Ldat e	comments	
171	148	Well	base	SAMCG		DR31			burnt		1	1	19			0.175	100					150	200	burnt black, the footring is worn too and the internal surface of the base has flaked off. There seems to be a rise towards a central kick hence 31
185	186	Ditch	bodysherd	SAMCG		bowl				Y	1	1	17									120	200	or Dr36? slight internal wear
214	213	Pit	rim	SAMCG		DR18/31			abr		1	1	4	0.03	170							120	200	
220	221	Ditch	base	SAMLG		dish					1	2	11			0.07	110					60	100	2=1 base with footring. DR18 or 18/31
245	244	Pit	footring	SAMCG		dish					1	1	3			0.1	110					120	200	DR18/31 or 31 probably
249	248	Pit	bodysherd	SAMCG							1	1	2									120	200	possibly from a cup-Dr33 or 46
250	248	Pit	rim	SAMLG		DR18					1	1	7	0.08	160							50	100	
250	248	Pit	bodysherd	SAMLG							1	1	3									50	100	
282	283	Pit	rim	SAMCG		DR37		DEC	abr		1	1	16	0.04	210							120	200	line of ovolo present though quite abraded.
322	294	Well	rim	SAMCG		WA79					1	1	3	0.05	160							160	200	
322	294	Well	bodysherd	SAMCG		DR18/31 R or 31R					1	1	7									150	200	
323			rim	SAMCG		DR33				Y	1	1	26	0.1	178							120	200	there's a band of wear on the rim and possibly at the internal junction of wall and base

Specialist samian archive- G. Monteil

context	feature	feature description	vessel part	fabric	secure fabric ID	form	secure form ID	decoration	condition	wear	no of vessels	sherd count	weight	Rim Eve	rim Diam	Base Eve	base Diam	stamp	potter	die	Edate	Ldate	comments
323			rim	SAMCG		DR31				Y	1	1	8	0.075	131						120	200	thin band of wear on ext edge of rim
326	294	Well	rim	SAMCG		bowl					1	1	13	0.07	270						120	200	beaded rim
326	294	Well	rim	SAMCG		DR31					1	1	12	0.02							120	200	
333	333	Layer	rim	SAMCG		DR37	?				1	1	11	0.1	178						120	200	thick beaded rim with the very top of the dec section remaining
333	333	Layer	base	SAMCG		bowl			abr		1	1	4								120	200	prob from the base of a bowl, the internal surface looks more worn than the outside
334	334	Layer	bodysherd	SAMMV		DR37		DEC			1	2	5								100	130	2=1 thin walled but looks like a 37. The dec contains a scroll with a leaf that looks a little like J87 and a bifid motif (G89?) and a rosette. The fabric looks MV, the dec somewhere between MV (X-14) and CG (Quintilianus?). Had
355	354	Ditch	bodysherd	SAMCG		DR18/31 or 31					1	1	2								120	200	

Specialist samian archive- G. Monteil

context	feature	feature description	vessel part	fabric	secure fabric ID	form	secure form ID	decoration	condition	wear	no of vessels	sherd count	weight	Rim Eve	rim Diam	Base Eve	base Diam	stamp	potter	die	Edat e	Ldat e	comments	
356	356	Layer	base	SAMRZ		DR38					1	1	43					Y	Nivalis	1b?	160	190	the footring is missing. Partial stamp NIVAL[. See U.33.115 II-C in the Nottingham Museum Collection	
394	394	Ditch	rim	SAMCG		WA79					1	1	13	0.11	200							160	200	
415	416	Ditch	bodysherd	SAMLG		DR36		BAD			1	1	10									70	100	
419	420	Ditch	rim	SAMMV		DR37		DEC			1	1	25	0.05	170							100	120	ovolo B37 with a horizontal wreath made out of bifid motif between 2 wavy lines and top of L6 possibly. Igocatus? The fabric is not typically MV in the sense that it has a lot of white inclusions

Appendix C2

Ceramic Building Material, Fired Clay and Daub Report

Jane Young

Introduction

A total of seventy-five fragments of ceramic building material weighing a total of 9.343kg were examined. The material was examined at x20 binocular magnification to determine fabric type. The material has been recorded at archive level by ware and fabric type in accordance with the Medieval Pottery Research Group's Guidelines (Slowikowski 2001) and complies with the Lincolnshire County Council's Archaeological Handbook (sections 13.4 and 13.5). The resulting archive was then recorded on an Access database.

Condition

The material is mainly in a poor condition with most fragments showing a fair degree of abrasion. Two fragments have been subjected to intense post-firing heat. Fragments range from large-sized (1593g) to small-sized (1g), but are mainly in the medium-sized range (20-328g). Little mortar was noted on the tiles.

The Ceramic Building Material

A range of ceramic building material including Roman Tegula, Imbrex, box-flue tile and brick as well as a modern brick fragment was found on the site. The types are shown and quantified in Table 1.

CNAME	Full name	Total fragments	Weight (g)
BOX	Roman box tile	2	121
BRK	Brick	1	88
IMB	Imbrex	13	1435
RBRK	Roman brick	4	960
RTIL	Roman tile	24	323
TEG	Tegula	31	6416

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

Roman

Seventy-four identifiable fragments of Roman building material from the site were examined. The collection includes examples of brick (RBRK), Tegula (TEG), box-flue tile (BOX) and Imbrex (IMB). Little mortar was noted on the tiles. A wide range of fabrics is present suggesting that the material does not all come from a single supply centre. The high number of fabrics found is similar to that experienced in Roman urban centres such as Lincoln. Only four Tegula flanges were present in the assemblage and these are common types, however all three cut-outs found are of a single unusual type.

All of the Roman tiles are quartz-tempered and mainly fall within a bright to dull oxidised colour range. For the purpose of this report the fabrics have been divided into fourteen different fabrics using a x20 binocular microscope. Individual variations within these fabrics are described in the archive.

Fabric 1

The four tiles and a brick in this fabric are either in light oxidised or marbled fabrics. The fabric contains moderate mixed (0.3-0.8mm) round to sub-round quartz grains, together with occasional larger grains, moderate fine iron-rich grains and sparse flint. Streaks of inclusion-free light firing cream clay also occur. One fragment in this fabric is from a Tegula with a Bett's Type 1 flange. A single small brick fragment cannot be typed. The other three fragments are undiagnostic (RTIL).

Date: A single small undiagnostic scrap came from Phase 5 (context 242). Three fragments came from Phase 6 deposits (contexts 132, 160 and 356) associated with second to third century pottery. The fifth fragment came from mixed layer 101 in Phase 8.

Fabric 2

This fabric mainly occurs as a reduced fabric with oxidised orange to red surfaces, although a few fully oxidised examples also occur. The fabric has abundant fine to medium-sized round to sub-rounded quartz (0.3-0.6mm) with occasional larger grains together with moderate iron-rich grains and sparse calcareous grains. Five tiles, including examples of Tegula, Imbrex and box-flue tile occur in this fabric. The box-flue tile has combing. Re-use of some of the tile is suggested by the fragments in context 162, where mortar extends across broken edges.

Date: Two of the tiles come from Phase 6 deposits associated with late first to mid- second century pottery (contexts 162 and 356) and two from mixed deposit 101 in Phase 8. The box-flue tile fragment was unstratified.

Fabric 3

This mainly oxidised fabric has common medium-sized round to sub-round quartz (0.3-0.6mm) together with moderate iron-rich grains up to 1mm and sparse calcareous grains. Eight fragments from four tiles in this fabric were examined. Three of tiles are Tegula.

Date: The earliest tile in this fabric (a Tegula) was recovered from ditch **346** (fill348) in Phase 3 associated with late first to early second century pottery. Two other tiles come from Phase 6 deposits associated with late third to very late fourth century pottery. The fourth tile is from mixed layer 101 in Phase 8.

Fabric 4

Only three examples of this fabric were found. Two of the tiles are reduced with oxidised surfaces and one is fully oxidised. This fabric has common fine round to sub-round quartz below 0.3mm, moderate fine iron-rich grains and sparse to moderate calcareous grains. Two Tegula and one undiagnostic fragment were recovered.

Date: The small miscellaneous fragment came from deposit 348 in Phase 3. The two Tegula fragments were found in mixed layer 101 in Phase 8.

Fabric 5

This oxidised fabric has sparse quartz grains, sparse iron-rich grains and sparse calcareous grains in an otherwise clean matrix. This fabric is visually similar to post-medieval Bourne ware and has been noted in Lincoln. Four tiles, including three examples of Imbrex occur in this fabric.

Date: The earliest phased tile is an Imbrex, found in deposit 171, associated with late third century pottery. The other tiles were recovered from Phase 5, 6 and 7 deposits.

Fabric 6

The five tiles and a brick in this fabric are mainly in reduced fabrics with oxidised or partially oxidised surfaces. The fabric contains moderate mixed (0.4-0.8mm) sub-round quartz grains, together with moderate iron-rich grains and moderate fine calcareous grains. One fragment in this fabric is from a Tegula with a flange that ranges from Bett's Type 1 to a Type 2 (Betts 1986). Two other Tegulae were recovered along with an Imbrex and a box-flue tile. The box-flue tile is combed.

Date: The earliest stratified tile (a Tegula) comes from deposit 334 in Phase 4 where it was found associated with early second century pottery. The other tiles were recovered from Phase 5 and 6 features.

Fabric 7

This fabric is oxidised to an orange to orange-red colour with varying amounts of cream-coloured clean clay streaks. The fabric has moderate to common fine sub-round to rounded quartz (below 0.4mm) with occasional larger grains together with moderate fine iron-rich grains. Seven tiles, including single identified examples of Tegula and Imbrex occur in this fabric.

Date: The earliest stratified tile fragment comes from deposit 282 in Phase 3, where it is associated with a group of late second century, or later, pottery. The other tiles come from Phase 5 and 6 deposits including three other second century groups (contexts 137, 356 and 160), suggesting perhaps that this is a second century fabric.

Fabric 8

This oxidised fabric is poorly mixed and has bands of clean cream-coloured clay interleaved with bands containing common sub-round to round quartz grains of 0.1 to 0.4mm, moderate iron-rich grains and sparse calcareous grains. Only three undiagnostic fragments were recovered in this fabric.

Date: All three fragments were recovered from Phase 6 deposits associated with second to second century pottery.

Fabric 9

The four tiles in this fabric are mainly in reduced fabrics with oxidised surfaces. The fabric contains moderate mixed (0.4-0.8mm) sub-round quartz grains, together with sparse iron-rich grains up to 3mm, sparse to moderate rounded cream clay inclusions and moderate fine calcareous grains including fossil shell. Two fragments in this fabric are from Tegula and two are from Imbrex tiles.

Date: The earliest stratified tile (a Tegula) comes from a fill of well **229** in Phase 2. The associated pottery is dated to the mid- second century. The other tiles come from Phase 5 and 6 deposits and are associated with late second to second century pottery.

Fabric 10

Four examples of this light-firing fabric were found. Three of the tiles are reduced with oxidised surfaces and one is fully oxidised. This poorly mixed fabric has common mixed round

to sub-round quartz (0.3-0.7mm), moderate iron-rich grains, moderate calcareous grains up to 3mm and sparse to moderate rounded cream clay pellets. Three Tegula and one undiagnostic fragment were recovered. Two of the Tegula have Bett's Type 1 flanges and Lincoln Type I cut-outs.

Date: Two fragments came from Phases 5 and 6 where they were associated with second to second century pottery. The two Tegula fragments found in the upper fill of oven **297** (in Phase 5) are not associated with a pottery group, but other sherds from the feature are dated to the second century and later.

Fabric 11

Two fragments from a single reduced Roman brick with oxidised surfaces are in this unusually fine fabric. The fabric contains common to abundant laminated shale or mudstone fragments, but little else. It is unlikely that this fabric is of local manufacture.

Date: The brick was found in a Phase 4 deposit associated with a group of late second century pottery.

Fabric 12

The single Imbrex in this fabric is a dull oxidised colour. The fabric contains common fine (0.3-0.4mm) round to sub-round quartz grains, together with occasional larger grains up to 1mm, common fine iron-rich grains and sparse calcareous grains. Occasional streaks with common to abundant calcareous grains also occur.

Date: The Imbrex fragment was recovered from deposit 355 in Phase 6 and was associated with very late second century pottery.

Fabric 13

The single Tegula fragment in this fabric occurs as a reduced fabric with oxidised orange to red surfaces. The fabric has abundant fine to medium-sized round to sub-rounded quartz (0.3-0.6mm) with occasional larger grains together with moderate iron-rich grains and common calcareous grains up to 1.5mm.

Date: The Tegula comes from the upper fill of oven **297** (in Phase 5), although not associated with a pottery group other sherds from the feature are dated to the second century and later.

Fabric 14

The two fragments in this fabric are both either over-fired or have been subject to intense post-firing heat. This reduced fabric has abundant mixed round to sub-round quartz (0.3-0.8mm) together with moderate to common iron-rich grains and calcareous grains up to 2mm and sparse grog and carbonised vegetable matter. There are also occasional lenses and pellets of clean clay. One of the two fragments is identifiable as a Tegula.

Date: The two fragments were both recovered from well fills in Phase 3. The associated pottery from well **229** is of late second to second century date. No pottery from the same deposit as the tile (fill 154) was recovered from well **152**, also in Phase 3, but other pottery from this feature is dated to the early second century.

Thirty-one Tegula fragments in ten different fabrics were identifiable. Only four flanges are present, all Bett's Type 1, although one changes shape to a Type 2 along the length of the tile. The three cut-outs present are all Lincoln Type I. An unusual signature occurs on one of the

tiles. It appears to be formed of two semi-circular finger-grooves side by side, unlike the more common single curve. Thirteen Imbrex fragments are present in the group. The fragments are in six different identified fabrics and appear to come from nine different tiles. Two box-flue tiles were recovered from the site. One is in Fabric 2 and one is in Fabric 6. Their presence on the site suggests a nearby hypocaust system.

Only four fragments of Roman brick were found on the site. The tiles are in three different fabrics (Fabrics 1, 6 and 11). No complete measurements were possible but tile thickness ranges from 36-45mm. These measurements are typical of Bessales, Pedales or Sesquipedalis, which could suggest that they came from a hypocaust system, but the tiles are too fragmentary to be sure. Twenty-four other tile fragments are certainly of Roman date (RTIL) but are too fragmentary to determine type.

Post-Roman

A single early modern brick fragment was recovered from the site.

The Site Sequence

Most of the tile was recovered from Phase 5 and 6 features, although the earliest examples of many fabrics occur in Phases 2-3. It appears that Roman tile was first discarded on the site in Phases 2 and 3, but that there may have been continual reuse of ceramic building material on the site until Phase 6, when the largest number of fragments appear to have been discarded.

Statement of Potential and Recommendations

This is a small group of mainly Roman ceramic building material, which exhibits a wide range of fabric types and differing manufacturing traits suggesting that it did not originate from a single building. Unfortunately it is probable that most, if not all, of the material represents secondary use, possibly for rubble infill or levelling. Initial fabric work suggests that much of the Roman tile found on the site may have come from a fairly local source, but a significant amount is from non-local production sites. These fabrics should be further characterised to enhance our knowledge of Romano-British brick and tile in South Lincolnshire.

As most, if not all of the ceramic building material is likely to be residual it is not possible to put this assemblage within a chronological framework. Nevertheless this small group has the potential to answer several questions about Roman tile production in the area.

The early modern brick fragment has been discarded in agreement with the local curator, otherwise the material is in a stable condition and should be kept for future study.

References

Betts, I., 1986, *Identifying Ceramic Building Material*. Unpublished: Museum of London Department of Urban Archaeology.

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.

Ceramic Building Material Archive

Context	C-name	Fabric	Sub type	Frag.	Weight (g)	Ref no.	Description	Date
101	TEG	Site Fabric 4		1	20		OX/R/OX;20mm	Roman
101	TEG	Site Fabric 4		1	38		OX/R/OX;mortar;18mm	Roman
101	TEG	Site Fabric 2		1	38		OX/R/OX;18mm	Roman
101	TEG	Site Fabric 1	Flange Type 1	1	125		20mm thick;light oxid	Roman
101	TEG	Site Fabric 3		4	483		fresh breaks;mortar;25mm;OX/R/OX	Roman
101	IMB	Site Fabric 2		1	161		abraded;18mm;oxid	Roman
103	BOX	Site Fabric 2		1	73		int soot;oxid;combed	Roman
132	RTIL	Site Fabric 1		1	11		oxid;flake	Roman
132	RTIL	Site Fabric 3		1	15		reduced;flake	Roman
135	RTIL	Site Fabric 8		1	32		oxid;flake	Roman
135	RTIL	Site Fabric 8		1	15		oxid	Roman
135	RBRK	Site Fabric 6		1	49		OX/R/OX	Roman
135	RTIL	Site Fabric 7		1	54		oxid;no ext surfaces	Roman
137	RTIL	Site Fabric 7		1	2		oxid	Roman
151	TEG	Site Fabric 7		1	20		oxid	Roman
154	RTIL	Site Fabric 14		1	8		burnt/overfired	Roman
160	RBRK	Site Fabric 1		1	79		OX/R/OX;36mm	Roman

Ceramic Building Material Archive

Context	C-name	Fabric	Sub type	Frag.	Weight (g)	Ref no.	Description	Date
160	RTIL	Site Fabric 7		2	39		oxid;flake	Roman
160	RTIL	Site Fabric 10		1	26		oxid;TEG ?	Roman
162	TEG	Site Fabric 2		8	369		24mm;same tile but 1 large frag & 7 small;mortar on underside & across some breaks	Roman
164	IMB	Site Fabric 9		1	74		oxid;11mm;bedded on coarse quartz & ca	Roman
164	TEG	Site Fabric 10		1	147		dull OX/light R/OX;16mm;bedding incl ca	Roman
164	RTIL	Site Fabric 7		1	38		oxid;IMB ?;15mm	Roman
168	TEG	Site Fabric 9		1	30		reduced with thin dull oxid surfaces;26mm;coarse quartz bedding	Roman
171	IMB	Site Fabric 5		3	326		oxid;18mm	Roman
171	RBRK	Site Fabric 11		2	832		OX/R/OX;45mm	Roman
183	IMB	Site Fabric 5		1	15		oxid;17mm	Roman
212	RTIL	Site Fabric 5		1	14		oxid;TEG ?;flake	Roman
217	TEG	Site Fabric 14		1	63		butnt ?;24mm;OX/R/OX	Roman
218	TEG	Site Fabric 9		1	280		abraded;dull OX/R/OX;26mm;soot patches on upper	Roman
235	BRK	oxid coarse		1	88		machine made;marked ..OH..'discarded	late 19th to 20th
242	RTIL	Site Fabric 1		1	3		marbled;flake	Roman

Ceramic Building Material Archive

Context	C-name	Fabric	Sub type	Frgs.	Weight (g)	Ref no.	Description	Date
247	IMB	Site Fabric 9		3	107		OX/R/OX;soot int & over some edges;16mm	Roman
249	IMB	Site Fabric 6		1	121		oxid;edge to apex;15mm	Roman
249	IMB	Site Fabric 5		1	328		large post-firing spall on ext surface;corner;plant marks on underside;17mm	Roman
282	RTIL	Site Fabric 7		1	3		oxid	Roman
295	TEG	Site Fabric 10	Flange Type 1;Cut out I	2	2295		OX/R/OX;small semi circular 2 line signature 10cm diam ? 1 of 2;24mm;bedding incl ca;mortar & soot patches at edge;knife trimmed edge & underside	Roman
295	TEG	Site Fabric 13		1	459		OX/R/OX;knife trimmed edge & part underside;bedding incl moderate ca;29mm	Roman
295	TEG	Site Fabric 10	Flange Type wide 1;Cut out I	1	136		light OX/R;36mm; very thick;knife trimmed basal edge & side;2 line signature	Roman
326	TEG	Site Fabric 3		1	132		oxid;23mm	Roman
334	TEG	Site Fabric 6		1	15		flake;OX/R/OX	Roman
348	RTIL	Site Fabric 4		7	8		oxid;low fired	Roman
348	TEG	Site Fabric 3		2	127		oxid;24mm	Roman
355	IMB	Site Fabric 12		1	165		dull oxid;abraded;soot patches;18mm	Roman
356	BOX	Site Fabric 6		1	48		OX/R/OX;combed;22mm;bedding incl common grog	Roman

Ceramic Building Material Archive

Context	C-name	Fabric	Sub type	Frag.	Weight (g)	Ref no.	Description	Date
356	TEG	Site Fabric 6		1	46		OX/R;soot;23mmedge;thin incised lines;fabric incl large fe grains	Roman
356	RTIL	Site Fabric 1		1	20		marbled;flake	Roman
356	RTIL	Site Fabric 8		1	28		flake;light oxid	Roman
356	RTIL	Site Fabric 2		1	7		flake;near vitrified;OX/R/OX	Roman
356	IMB	Site Fabric 7		1	138		oxid;16mm;edge to apex	Roman
361	TEG	Site Fabric 6	Flange 2 to 1; Cut out I	1	1593		very unusual;21mm;soot patch on underside;c. 1/4 tile	Roman

Appendix C3

Animal Bone Report

Jennifer Wood

Introduction

A total of 903 (23493g) refitted fragments of animal bone were recovered by hand during a program of archaeological excavation undertaken by Network Archaeology Ltd at The Hoplands, Sleaford, Lincolnshire. A total of 884 (193g) fragments of bone were recovered from the sieved environmental samples.

The assemblage was recovered predominantly from a series of ditches, pits and wells from the small area of intensive archaeology representing a small proportion of settlement dated from the late Iron Age to the late Romano-British period; with further remains recovered from walls, floor surfaces and graves.

Analysis of the assemblage was undertaken in accordance with the site phasing. A breakdown of the phasing is summarised in Table 1.

Table 1, Summary of Site Phases

Phase	Date
0	Unphased
1	Late Iron Age
2	Mid 1 st -2 nd Century
3	Mid 2 nd – Late 3 rd Century
4	Early-Mid 3 rd Century
5	Mid-Late 3 rd Century
6	Late 3 rd -4 th Century
7	4 th Century +
8	Post-Roman

Methodology

For the purposes of this assessment the entire assemblage has been fully recorded into a database archive. Identification of the bone was undertaken with access to a reference collection and published guides. All animal remains were counted and weighed, and where possible identified to species, element, side and zone (Serjeantson 1996). Fusion data, butchery marks (Binford 1981), gnawing, burning and pathological changes were also noted when present. Ribs and vertebrae were only recorded to species when they were substantially complete and could accurately be identified. Undiagnostic bones were recorded as micro (rodent size), small (rabbit size), medium (sheep size) or large (cattle size). The separation of sheep and goat bones was done using the criteria of Boessneck (1969) and Prummel and Frisch (1986) in addition to the use of the reference material. Where distinctions could not be made the bone was recorded as sheep/goat (S/G).

The condition of the bone was graded using the criteria stipulated by Lyman (1996). Grade 0 being the best preserved bone and grade 5 indicating that the bone had suffered such structural and attritional damage as to make it unrecognisable.

The quantification of species was carried out using the total fragment count, in which the total number of fragments of bone and teeth was calculated for each taxon. Where fresh breaks were noted, fragments were refitted and counted as one.

Tooth eruption and wear stages were measured using a combination of Halstead (1985), Grant (1982) and Levine (1982), and fusion data was analysed according to Silver (1969). Measurements of adult, that is, fully fused bones were taken according to the methods of von den Driesch (1976), with asterisked (*) measurements indicating bones that were reconstructed or had slight abrasion of the surface.

Results

Condition

The overall condition of the bone was moderate, averaging at grade 3 on the Lyman criteria (1996). The condition of the hand and sieve collected assemblages was summarised by phase within Tables 2 and 3.

Table 2, Condition of Hand Collected Assemblage, By Phase

Condition	Phase									Total
	0	1	2	3	4	5	6	7	8	
2		87	22	32	60	41	46	4	14	306
3	6	28	63	53	69	150	198	7	11	585
4				1	7	1	3			12
N=	6	115	85	86	136	192	247	11	25	903

Table 3, Condition of Sieve Collected Assemblage, By Phase

Condition	Phase						Total
	1	2	3	4	5	6	
1				1			1
2		2	155	22	4		183
3	6	40	360	128	63	7	604
4		8	7	36	37	8	96
N=	6	50	522	187	104	15	884

The condition of the bone can limit the number of observable traits such as butchery and gnawing marks. Good bone preservation can allow for more frequent observation of alterations such as gnawing, butchery marks and pathological conditions.

Butchery

A total of 69 fragments of bone displayed evidence of butchery marks. The frequency of observed butchery marks is directly proportional to the assemblage sizes for each phase; therefore the most number of butchery marks observed were noted within the Phase 6 assemblage. The butchery marks are relatively consistent in their form, with a number of carcasses processing and portioning chop marks and knife marks associated with disarticulation and meat removal.

Two cattle scapulae recovered from Phase 3 Pit [301] and Phase 5 Pit [241] displayed a square hole within the mid-blade. Similar examples identified from Romano-British assemblages from Lincoln were identified as hook holes from where the meat joint was hung (Dobney *et al* 1996:26-27). Two cattle scapulae recovered from Phase 5 Pit [241] and Phase 6 Pit [354] displayed evidence of the spinous process being trimmed from the blade and in the example from pit [241], chopped across the glenoid fossa. These butchery practices, also observed within the contemporary Lincoln assemblages, were suggested to be part of the curing process allowing for long term preservation and storage. Trimming of the bone in such a manner was thought to allow access into the meat for smoke or salt (*ibid*).

Gnawing

Evidence of gnawing was noted on 58 fragments of bone. Gnawed remains were present within every phase of activity, with the majority (15 fragments) recovered from the well assemblages from Phase 3. The identified gnaw marks were mostly attributed to carnivore, however a single fragment recovered from Phase 6 pit [163] displayed evidence of possible rodent gnawing. Gnawing on the remains suggests that the bones were left open to scavengers as part of/after the disposal process.

Burning

A total of 127 fragments of bone displayed evidence of burning. Burnt remains were present within every phase of activity on the site, the largest assemblage of burnt bone (59 fragments) was recovered from Phase 4. The burnt remains probably represent hearth sweepings and incidental burning events.

Pathology

No evidence of pathology was noted within the assemblage.

Worked

A single fragment of large mammal sized long bone shaft recovered from Phase 4 made ground road side deposit (334) had been worked. The long bone cortical surface had been trimmed and smoothed, with criss-cross and line decoration on the surface with a rectangular hole cut into the centre of the shaft which had subsequently broken. The piece had been formed into a cheek piece for a horse bridle (Appendix C6).

Removal chop marks were noted on 4 fragments of cattle skull or horncores fragments recovered Phase 1 ditch [367], Phase 2 well [229], Phase 4 ditch [236] and Phase 5 pit [163], indicating hornworking may have been undertaken within the locality. Two horncore fragments from Sheep/Goat and Goat were recovered from Phase 1 Pit [108] and Phase 2 [205]. However, no horn removal cuts were noted on these species.

Species Representation

Table 2 summarises the number of fragments of bone identified to species or taxon from each phase.

Both sheep and goat have been positively identified within the assemblage, whilst sheep/goat were the most predominant species identified, very closely followed by cattle, *equid* (Horse Family) and pig remains with small numbers of dog, corvid, domestic fowl and duck were also identified.

Table 2, Identified Taxa from the Hand Collected Assemblage, by Phase

Taxon	Phase									
	0	1	2	3	4	5	6	7	8	Total
<i>Equid</i> (Horse Family)		2	2	6	5	6	12		1	34
Cattle	1	11	24	21	31	25	35	3	8	159
Sheep/Goat	4	26	17	17	27	28	21	1	4	145
Sheep (<i>Ovis Sp.</i>)		2	2	4		5	3	1		17
Goat (<i>Capra Sp.</i>)			1			1				2
Pig		2	5	4	3	4	3			21
Dog (<i>Canis Sp.</i>)						2	1			3

Domestic Fowl (<i>Gallus Sp.</i>)						1				1
Duck (<i>Anas Sp.</i>)						1				1
<i>Corvid</i> (Crow Family)							3			3
Bird			1			1	1			3
Large Mammal	1	30	21	23	59	74	132	5	10	355
Medium Mammal		20	9	9	8	30	23		1	100
Unidentified		22	3	2	3	14	13	1	1	59
N=	6	115	85	86	136	192	247	11	25	903

Within the sieved assemblage, further taxa such as of domestic fowl, field vole, house mouse, pygmy shrew, frog, toad, eel, herring and unidentified flatfish were also identified within the assemblage.

Table 3, *Identified Taxa from the Sieve Collected Assemblage, by Phase*

Taxon	Phase						Total
	1	2	3	4	5	6	
Cattle			2				2
Sheep/Goat		3	4	4	3		14
Bird			9		1		10
Domestic Fowl (<i>Gallus Sp.</i>)			1				1
Field Vole (<i>Microtus arvalis</i>)			1	1	3		5
Pygmy Shrew (<i>Sorex minutes</i>)			3				3
House Mouse (<i>Mus musculus</i>)			3				3
Rodent		1	61	4	3		69
Eel (<i>Anguilla anguilla</i>)			13				13
Herring (<i>Clupea harengus</i>)				3			3
Flatfish		1		2			3
Flatfish?			8	3			11
Fish		1	155	30	2	1	189
Amphibian (<i>Anuran</i>)	1	2	31	10	6	2	52
Frog (<i>Rana temporaria</i>)			13	1			14
Toad (<i>Bufo Bufo</i>)			3				3
Large Mammal	1		8	1	3		13
Medium Mammal	1	5	23	15	10	1	55
Micro Mammal		15	44	33	11		103
Small Mammal			2				2
Unidentified	3	22	138	80	62	11	316
N=	6	50	522	187	104	15	884

Minimum number of individuals (MNI) was calculated to remove the potential bias of species abundance that can be produced by the presence of complete skeletons within the assemblage (Table 3). The MNI of suggests that the number of sheep/goat remains represented within the assemblage are more abundantly represented than initially suggested. Where in the general abundances sheep/goat and cattle remains were almost of equal values, where as the MNI calculations suggest that the number of individual Sheep/Goat represented consistently outnumbered the individual cattle, with the exception of Phases 7 and 8, which may have been influenced by the small size of the assemblages.

Table 3, Minimum Number of Individuals (MNI) for each Phase

	MNI							
	1	2	3	4	5	6	7	8
Equid (Horse Family)	1	1	1	2	2	2	0	1
Cattle	2	2	2	2	1	3	1	2
Sheep/Goat	5	3	3	4	4	5	1	1
Pig	1	2	1	1	1	1	0	0

Sheep/Goat

Sheep/goat remains were the most abundant species identified within the assemblage; both sheep and goat remains were positively identified within the assemblage. Although only two fragments were positively identified as goat, due to the morphological similarity between the two species, there is potential that goats were more frequently represented within the assemblage but have not been duly identified. Calculations of the minimum number of individuals identified for each phase indicates that sheep/goat were the most prominent species present within all phases of activity, with the exception of Phases 7 and 8.

A total of 3 long bones were complete enough to provide measurements for withers height calculations. Sheep metacarpals recovered from Phase 3 well [299], Phase 4 drain [149] and a goat metacarpal recovered from Phase 5 pit [241] produced withers heights of 0.6m, 0.59m and 0.66m respectively. From such a small number of heights it is difficult to determine if this difference in height is due to stock improvements or just normal variation.

Tooth wear ages scores from mandibles were plotted by Phase within Chart 1. As can be seen within Chart 1, a range of tooth wear scores for sheep/goat mandibles were identified within the assemblage. Within Phase 1 and 3, single mandibles with age scores 5-8 years were present. Within Phase 2 two mandibles from younger animals with age wear scores of 3-10 months and 10-20 months were present. Phase 4 produced a single mandible from an animal with a tooth wear score of 3-5 years. Phase 5 produced 6 mandibles with tooth wear scores of 1-3 months, 10-20 months and 5-8 years. Phase 6 produced 6 mandibles, one with a tooth wear score of 3-10 months, three mandibles with a tooth wear score of 10-20 months and two single mandibles with tooth wear scores of 3-5 years and 5-8 years. Phase 7 produced a single mandible with a tooth wear score of 10-20 months.

Due to the small number of mandibles produced for each phase, a formal age at death profile cannot be constructed. However, generalised patterns are observable. The overall pattern appears to suggest a profile that would be expected within a sheep/goat based economy, with peaks at a 1-3 months, 10-20 months and 5-8 years.

Sheep/Goat Tooth Wear Age Score

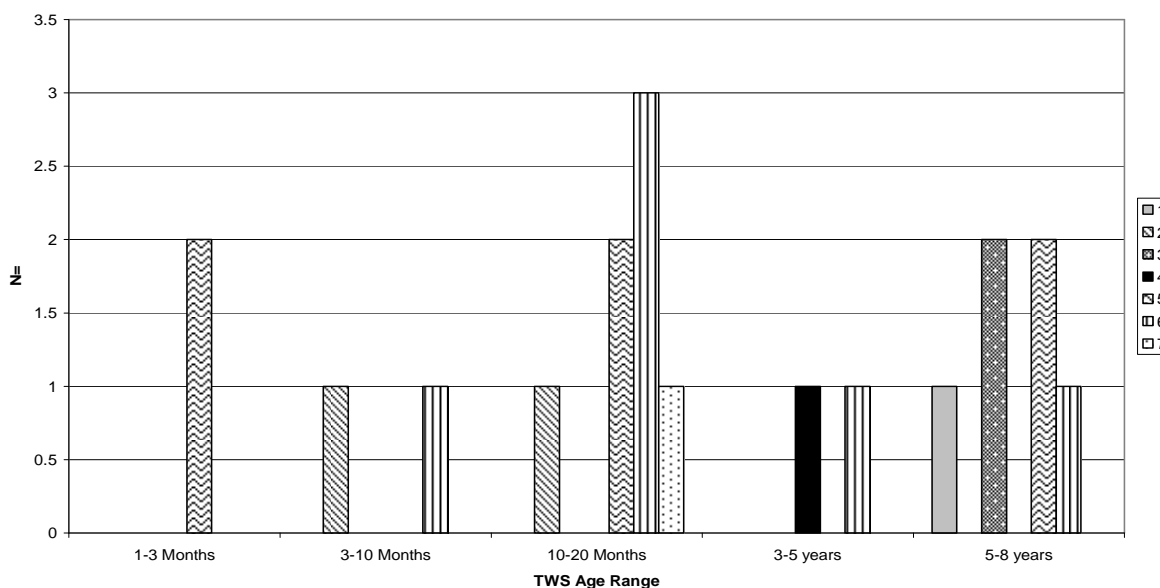


Chart 1, Tooth Wear Age Scores, by Phase

These peaks would represent young animals that had been naturally lost or culled not long after birth. A peak at 10-20 months which would be a prime age for slaughter for meat, with the remainder of the flock retained to old age (5-8 years) for wool production and breeding purposes. This perceived pattern is reflected in both phases 5 and 6 of the tooth wear score assemblage. The assemblages for each phase are too small to suggest if there is any deviation from this pattern.

Epiphyseal fusion data for the sheep/goat assemblage is fairly limited within the assemblage and provides little further data than was already observed within the tooth wear age score data.

Cattle

Cattle were the second most abundant species identified within the assemblage. However, the calculation of MNI suggests that the number of individual cattle represented within the assemblage were in a smaller number than sheep/goat.

Only two bones recovered from Phase 2 [229] and Phase 5 [248] were complete enough to provide measurements for withers height calculations, a metatarsal from Phase 2 gave a withers height estimate of 1.28m and a metacarpal recovered from Phase 5 gave a withers height estimate of 1.27m. There were too few measurements for comparison between phases.

Tooth wear score data for cattle is relatively limited, only 6 mandibles which could provide a tooth wear age score was present within the assemblage. From Phase 2 single mandibles were recovered from aged 8-18 months and adult animals. Phase 3 produced a single mandible from a young adult animal and within Phase 6 a single mandible from an animal 1-8 months old and two mandibles from young adult animals.

The numbers of scorable mandibles are too small to provide an age at death profile. However, the number of identified mandibles for the entire assemblage suggests a slight peak at the young adult age range, which may suggest a slight emphasis of animals being slaughtered at prime meat weight age. No very old animal remains were identified within the tooth wear age scores.

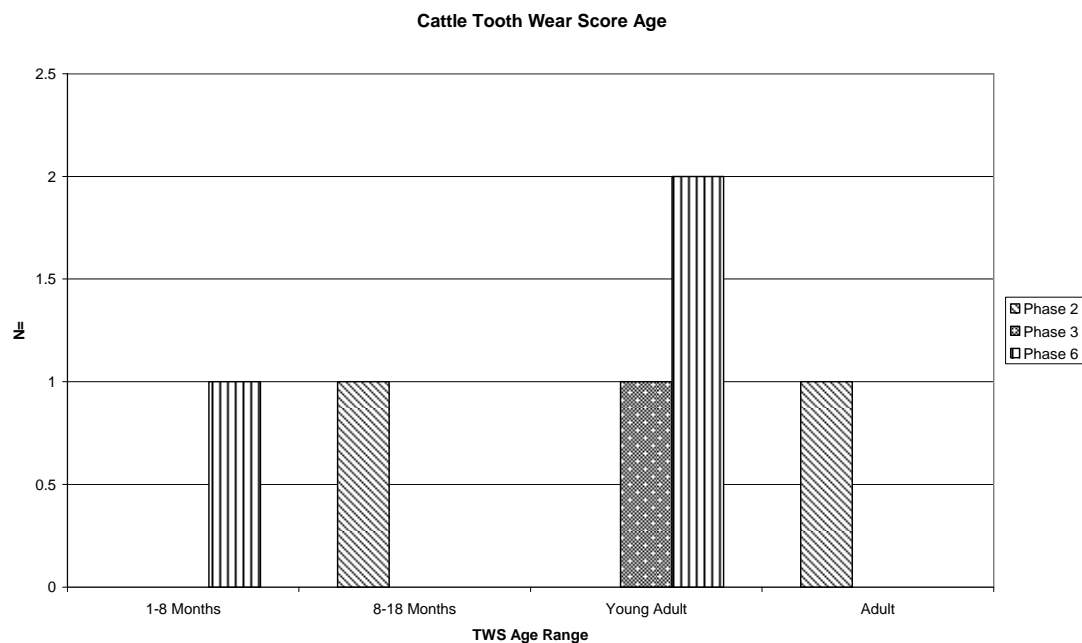


Chart 2, Tooth Wear Age Scores, by Phase

Epiphyseal fusion data (Appendix 5) for the cattle assemblage is fairly limited within the assemblage and provides little further data than was already observed within the tooth wear age score data. The majority of the remains according to the epiphyseal fusion data appear to be from skeletally mature (fully fused) individuals, with no evidence of animals aged below 2-3 years present within the assemblage. As the tooth wear score data suggests that younger animals were indeed present, the lack of animals of this age represented by the epiphyseal fusion data may have been subject to poor preservation or extensive fragmentation.

Pig

Pig remains are not as well represented within the assemblage as cattle and sheep/goat. The skeletal elements represented are mostly from young individuals, with no evidence of animals over 1 years of age (Appendix 5). Tooth wear scores were limited to two mandibles from immature animals from Phase 2 and a single sub-adult mandible recovered from Phase 4. Pigs were often slaughtered at a young age as they provide little in the form of secondary products and usually have large litters and therefore would have only be utilised for the provision of meat.

Equid (Horse Family)

Equid remains were slightly better represented than pig remains, although the MNI calculations suggest that *equids* were present on site in slightly higher ratios than pigs within Phases 4, 5 and 6.

A total of 6 equid bones were complete enough to provide withers height calculations. A measurement from Phase 1 gave a withers height of 1.23m, from Phase 3 provided an estimate of 1.63m and from Phase 4 an estimate of 1.28m. From Phase 6 three measurements provided withers heights of 1.28m, 1.4m and 1.54m. The withers height calculations suggest that most of the animals were pony sized, with the exception of the animals measuring 1.63m from Phase 3 and 1.54m from Phase 6 were more consistent with thoroughbred horse sizes. The withers height estimations appear to be fairly typical for the Romano-British horses. Within the Iron Age, ponies were generally smaller and more gracile averaging at a withers height of 1.2m,

whereas the introduction of imported and specially bred cavalry horses in the Romano-British period increased the average size and robusticity (Johnstone 1996:76). Therefore the observed mix of withers heights within the Hoplands assemblage may suggest that some of the smaller Iron Age breeds were still in use as well as the improved/imported breeds.

Only two teeth recovered from mandibles were able to provide age estimates. A lower first molar recovered from Phase 1 provided an age of 8-11 years and a lower first molar recovered from Phase 8 gave an age of 6.5-9 years. Although, deciduous molars recovered from Phase 3 ditch [197] and Phase 6 floor surface (162) suggest that younger animals (approx 3 years or younger) were present on site. The epiphyseal fusion data suggests that the majority of the remains were skeletally mature at the time of death.

Equids would have probably have been utilised for riding/traction purposes and were commonly consumed/carcasses utilised once considered not longer useful. A single equid humerus fragment recovered from Phase 5 made ground deposits associated with the road, displayed evidence of butchery marks that are consistent with meat removal cuts.

Dog

Three fragments of bone identified as dog were identified within Phase 4 well [294] and Phase 5 pit [248] and posthole [384].

Little further information can be gained save the presence of the species on site. Dogs were often found within settlements as working animals, used for guarding, hunting and sometimes dogs can also be present as pets or as scavengers.

Birds

A small assemblage of bird remains were identified within the assemblage. Domestic fowl, duck and *corvidae* (crow family), tentatively identified as juvenile raven (*Corvus corax*), were recovered from Phase 3, 5 and 6. Domestic fowl were probably retained in small numbers for the provision of meat eggs and feathers. Due to the close proximity of the fen edge at the time of settlement at Hoplands, it is possible that the ducks identified were wild birds caught locally rather than the domesticated breeds. Corvids are a scavenging breed and remains of the species have often been found associated with domestic waste deposits. Ravens (*Corvus corax*) have often been considered as pests in sheep farming communities, especially as they are thought to attack lambs, and therefore remains of ravens may also represent the disposal of unwanted pests.

Fish

A small assemblage of fish remains were recovered from the sieved assemblage predominantly from Phase 2, 3, 4 and 5. Eel, herring and unidentified flat fish had been identified within the assemblage. Crushing had been noted on some of the vertebra suggests that these remains had been masticated and were most likely from cess deposits (Foster et al, this report). Eel can be found within both fresh and salt water, although usually they spend most of their lives in fresh water contexts whereas herring and flatfish were most likely traded in from the coast. Although the assemblage is relatively small, the number of fish remains identified within Romano-British assemblages outside of Lincoln is fairly rare in Lincolnshire.

Micro Mammals and Anurans

Field vole (*Microtus arvalis*), Pygmy Shrew (*Sorex minutus*), House Mouse (*Mus musculus*), unidentified rodent, Common Frog (*Rana temporaria*), Toad (*Bufo bufo*) and unidentified

amphibian (Anuran) were all identified within the sieved assemblage. Most of these species are commensal and therefore live within the locality of the settlement. The inclusions of these remains within the assemblage are probably from natural pit-fall deaths rather than being culturally derived.

Contexts of Interest

The settlement area uncovered within the Hoplands excavation area contains a number of wells which occur in most phases of activity. Within the Romano-British period wells have often held a ritual function, with the specific placement of animals and vessels within the well to “kill” or close it (Fulford 2001 199-218). However, analysis of the individual assemblages from each feature suggests that there was no ritual activity associated with these wells. The animal bone assemblages appear to represent mostly domestic waste, butchery discard, hearth sweepings and pit-fall natural deaths of micro mammals and anurans, and therefore they were most likely used as handy refuse disposal once they were no longer required for their primary functions.

Discussion

The animal bone assemblage recovered from the Hoplands site is of moderate size and in fairly good condition. The remains dated to the Romano-British period with the majority occurring within Phases 5 and 6, mid-late 3rd century and 4th century.

The assemblage, although too small to provide meaningful data on age at death profiles, has some potential to provide data on the general underlying trends on animal utilisation and husbandry practices. The site economy was consistently based predominantly upon sheep/goat, with both sheep and goat positively identified within the assemblage. This is consistent with earlier investigations into the area (Kitch 2006, Wood 2007).

The limited aging evidence within the assemblage indicates a slight emphasis on prime meat weight aged animals being slaughtered for sheep/goat, cattle and pig. This may suggest that meat was the most prized, with secondary products such as wool and milk etc. being of slightly lesser importance. Therefore it is possible that the assemblage from the Hoplands settlement indicates that the targeted area of investigation was more a consumer site than that of a producer site. Evidence for preserved meats, as in the case of the butchered cattle scapulae as previously discussed, may also support this conclusion.

Skeletal elements represented in the assemblage represent domestic waste, a mixture of food and secondary butchery discard. Lower numbers of skeletal elements commonly associated with primary butchery may suggest that the disposal of primary butchery waste was carried out elsewhere, perhaps on the periphery of settlement, more than in the core.

Studies of Romano-British faunal remains undertaken by King (1991, 1999) indicate that sheep based economies were an indication of “non-Romanised” sites, whereas a change in emphasis to cattle was considered a direct Roman influence. Grant (1989) suggests the increase of cattle predominance within the Romano-British period is directly proportional to the intensification of cereal production, where the secondary products such as manure and traction would be in greater demand. However, at Hoplands and other contemporary settlements within the Lincolnshire area, with the exception of the *Colonia* at Lincoln, such as Navenby (Wood, *in press*) and Spalding Wyegate (Kitch, 2007) had all maintained a sheep/goat based industry throughout the Romano-British period. This therefore may indicate that it was more strategic to maintain sheep production within the Lincolnshire landscape. Wool was a useful commodity and sheep and goat milk was highly prized by the Romans (Columella VII.2.1 in Murphy *et al* 2000).

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Appendix C4

Human Bone Report

Jennifer Wood

Introduction

Two complete inhumation burials and a single neonate burial of Roman date were recovered during archaeological excavation at The Hoplands, Sleaford, Lincolnshire, undertaken on behalf of Naomi Field Archaeological Consultancy in conjunction with Network Archaeology Ltd.

Methodology

Each skeleton was individually catalogued on a database, with all available scores for sex, age, pathology, metrical and non-metrical traits noted on this primary record in accordance with the guidelines specified by BABAO and the IFA (Brickley and McKinley, 2004). Methods for the individual scored traits are outlined below.

Sex Estimation

The determination of biological sex is based upon the morphological traits of the cranium and pelvis (Bass 1971, Buikstra & Ubelaker 1994; Schwartz 1995 and Workshop of European Anthropologists 1980). Also using the sexually dimorphic metrics of the post-cranial skeleton where available (outlined in Bass, 1971). Sex was categorised as Female, Possible Female, Indeterminate, Possible Male, Male. No estimation of sex is made for sub-adult remains, as the sexually diagnostic characteristics are often quite ambiguous before puberty.

Age Estimation

The determination of the age at death was assessed employing several ageing techniques on the elements available, to provide the most accurate results possible. Dental wear (Miles 1963 Fig 10, Brothwell 1981:72, fig 3.9), Dental development (Gustafson & Koch 1974), Pubic symphysis phase (Brooks & Suchey 1990), auricular surface phase (Meindl & Lovejoy 1989), Ectocranial suture closure (Meindl & Lovejoy 1985) and the sternal end of rib (İşcan and Loth 1986) were utilised where the relative skeletal elements were present. As a multi-factorial approach produces a range of ages, age categories are used for generalisation and comparison purposes. These age categories are listed below (Table 1).

Table 1. Summary of Age Categories

Category	Age Range
Foetal	9-39 week gestation
Neonate	Birth- 5 Months
Infant	6 Months – 2 Years
Child	3 - 6 Years
Older Child	7 – 15 Years
Juvenile	Below 15 Years
Adolescent	16 - 20 Years
Young Adult	21 - 35 Years
Middle Adult	36 – 45 Years
Old Adult	45 – 60 Years
Senile	61+Years
Adult	Over 25 Years

Metric Traits

Measurements were taken from the skull and post-cranial elements, where completeness allows. Measurements were recorded using the criteria outlined by Brothwell (1981:80-1) and Howells (1973). Stature estimations are based upon the equations by Trotter and Gleser (1952, 1958 as cited in Brothwell 1981:101). The measurements are taken from the available fully fused long bones dependant on preservation.

Non-Metric Traits

Non-metric variations are recorded as standard as part of the full osteological analysis. The analysis of non-metric traits is to assess the prevalence rates of expression within a group or population. The presence of rare non-metric traits may be used to discern relationships within a group. Cranial non-metric traits are scored using the variants outlined by Berry and Berry (1967). Post-cranial non-metric traits were scored according to the descriptions by Finnegan (1978).

Pathology

All pathological lesions and morphological abnormalities were described using standard clinical terminology. The anatomical locations of these pathological conditions were noted on a pictorial reference with accompanying description in the attempt to provide a diagnosis for the possible cause.

Dentition and Dental Pathology

Tooth representation was recorded where possible. Carious lesions and hypoplasia were recorded as according to Lukacs (1989) where present. Prevalance rates of calculus build up and periodontal diseases are recorded as according to Brothwell (1981).

Results

SK (154) Older Adult (50-59 years), Female

Skeleton (154) was recovered from an indeterminate grave cut, lost due to earlier works, of approximate east-west orientation. The skeleton was extended in a prone position, with the

right arm extended along the side of the torso. The left arm was only partially complete, positioned along side of the torso. Both legs were extended straight from the pelvis.

The remains were mostly complete and of moderate overall condition, the bones were rather fragile and therefore subject to a certain amount of post-depositional breakage. Although the condition of the remains has allowed for fairly comprehensive recording of the remains, the fragmentation and poor condition of some of the skeletal elements have limited the full extent in which certain measurements and traits could be scored.

Sexual characteristics of the skull display a number of female traits; the supra-orbital ridges, orbital rims, mental eminence and gonial angle are especially feminine in character. The surviving pelvic traits were limited to the ilium, the sciatic notch and the acetabulum displayed very feminine traits. Where possible, metrical data of sexually dimorphic elements were taken, all elements fell well within the ranges for females, with the exception of the clavicle and scapula, which were more within the male size range.

Few characteristics were available to provide an age score for skeleton (154). Adult dentition appears to have fully erupted and then subsequently the majority had been lost antemortem. No adequate tooth wear scores were possible due to antemortem toothloss. Age score of the auricular surfaces suggest an age of 50-59 years. In support of this the cranial sutures of the skull were closed and partially obliterated, which can often be associated with old age. The surviving dentition, although unable to provide an age score, was heavily worn which may suggest an older age in addition of a rough diet.

Measurements of the long bones have provided a stature estimation of 1.58-1.60m (Approximately 5'2"), average height for female from the Romano-British period was approximately 1.59m (Roberts & Cox, 2003:163).

Non-metric traits are non-pathological variations of the skeleton that are possibly attributed to genetic or developmental factors within a population. Skeleton 154 exhibited a small number of non-metric traits which were considered relatively common such as the complete supra-orbital foramen and zygomatic facial foramen.

Skeleton 154 displayed a number of pathological conditions, some maybe attributed to age related changes, considering the age of the individual.

Extensive macroporosity and eburnation (polishing) was noted on the on the head of the left humerus with further extensive macroporosity and slight eburnation on the articulating scapula and macroporosity on the humeral end of the right clavical.

Osteophytic lipping (Osteophytes are bony out-growths from joint surfaces. Roberts & Manchester 1995:101) was noted on the margins of the femoral head, extending the articular surface, with slight porosity of the femoral head and eburnation around the area of the fova. The corresponding articular (Lunate) surface of the right acetabulum had extended to almost meet, enclosing the acetabulum. Some macroporosity on the extended surface was also noted.

Small areas of eburnation were noted on the articular surface of both the patella with corresponding patches of eburnation on the anterior condyles where articulates with the patella.

All of these pathological conditions a potentially attributed to osteoarthritis. Osteoarthritis is a degenerative disease caused by the degradation the synovial joints caused by continual stress on the joint, either as a result of advancing age or heavy manual labour or trauma to the joint.

Possible osteoarthritis of the vertebral column was also noted within cervical vertebra 5-7, thoracic vertebra 8-9 and lumbar vertebra 3-5. Osteophytic growth, macroporosity and sclerosis

of the cervical bodies, varied between grades 1 and 3 (Sager 1969 cited in Brothwell, 1981, fig. 6.9), with the most extreme cases apparent within the lower lumbar vertebra. The left articular facet of the 4th and adjoining 5th lumbar vertebra had also been subject to osteophytic lipping, macro porosity and some eburnation.

Dentition

R8	R7	R6	R5	R4	R3	R2	R1	L1	L2	L3	L4	L5	L6	L7	L8
X	X	X	X	X	/	/	O	/	X	X	O	X	X	X	X
X	X	X	X	X	O	O	O	O	O	O	O	O	X	X	X

Key:

- = Jaw missing

A= Abscess

/ = Lost Post mortem

X = Lost Ante mortem

C= Caries

NP= Not Present

B=Broken

L= Hypoplasia Line

RO= Root Only

The dental health of skeleton 154 was relatively poor. Antemortem toothloss is noted within both the maxillary and mandibular dentition, focusing mainly on the molars. Antemortem toothloss is thought to occur in 23.9% of the Roman population and closely associated with dental attrition (Rogers and Cox, 2003:135). The remaining occluding teeth are fairly heavily worn. With the only existing upper dentition, right 1st incisor and left 1st premolar, worn extensively; exposing the dentine and pulp cavity almost down to the root. Tooth attrition has been attributed to rough diet and sometime cultural activities (Rogers & Manchester 1997:52). The older age of the individual would suggest that the teeth have been subjected to these processes for sometime to produce the level of wear observed.

Medium to heavy build up of calculus was noted on most of the occluding mandibular teeth, most of the heaviest grades being on the front incisors and premolars (due to the antemortem loss of all occluding molars). Calculus is a calcareous deposit of mineralised plaque accumulation on the teeth, and can be indicative of poor dental hygiene practices (Robert & Manchester 1995:55). Calculus is the main predisposing factor in the development of periodontal disease (Roberts & Manchester, 1995:56), causing irritation and the soft tissues to recede.

SK (176) Young Adult (20-24 years), Male

Skeleton (176) was recovered from a pit feature associated with the road deposits. The skeleton was positioned in a tightly flexed position in an east-west orientation. The right knee is positioned at the chest with the right arm flexed with the hands at the chest. Potentially the remains were originally bound before burial to achieve such a tightly flexed crouched position.

The remains were incomplete (approximately 75-50%) and of fair condition. Post-depositional fragmentation has limited the number of measurements and non-metric traits available for analysis.

Sexual characteristics of both the skull and the pelvis indicated a male individual, which was supported by the sexually dimorphic metric indices.

All bone epiphyses were fused and full adult dentition was erupted and in occlusion. Tooth wear attrition age scores suggested that the individual was aged between 18-24 years. Pubic symphysis phase suggests an age of 22-24 years. Sternal rib end stage suggests an age of 20-23 years. None of the auricular surfaces were complete enough to score. The cranial sutures were too incomplete to provide a fusion score, but all of the observable sutures were open, which would also suggest a younger age.

The incomplete nature of the remains limited the number of elements available for measurements. However, most of the existing long bones were possible to provide a measurement for stature estimation, resulting in a stature of 1.68m-1.71m (5'5" - 5'6") which is within the range for the average height for the period (Roberts & Cox, 2003:163).

The skull was complete enough to allow for the scoring of observable non-metric traits. Relatively commonly observed non-metric variation such as zygomatic facial foramen and supra orbital foramen were present. In the post-cranial skeleton no non-metric traits were observed.

A number of pathological conditions were limited within the skeleton. Slight indentations, possibly small Schmorl's nodes, were noted on the superior and inferior surface of the thoracic vertebra 7-11, with a further indentation on the inferior surface of the 1st lumbar vertebra. Schmorl's nodes are thought to be formed as a result of pressure of the intervertebral discs contents on the surface of the vertebral body surfaces (Roberts & Manchester, 1995:107),

Dentition

<i>R8</i>	<i>R7</i>	<i>R6</i>	<i>R5</i>	<i>R4</i>	<i>R3</i>	<i>R2</i>	<i>R1</i>	<i>L1</i>	<i>L2</i>	<i>L3</i>	<i>L4</i>	<i>L5</i>	<i>L6</i>	<i>L7</i>	<i>L8</i>
○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
○	○	○	○	○	○	○	○	○	○	-	-	-	-	-	○

Key:

- = Jaw missing

A= Abscess

/ = Lost Post mortem

X = Lost Ante mortem

C=Caries

NP= Not Present

B=Broken

L= Hypoplasia Line

RO= Root Only

Postmortem tooth loss due to the fragmentation of the skull has limited the number of teeth available to score from the mandible. Many of the surviving teeth had been subjected to very little wear.

Slight to medium concretions of calculus deposits were observed on the present molars and pre-molars, with the heaviest deposits noted on the right mandibular 1st molar and pre-molars. Calculus develops most commonly on the teeth closest to the salivary glands and may suggest a lack of attention to removing plaque from the teeth (Rogers & Manchester 1997:55), with the heaviest deposits on the harder to reach teeth at the back. Enamel hypoplasia was noted on the right mandibular canine. Hypoplasia occurs through a hiatus in development of the tooth crown during development, usually as a response to stress such as nutritional deficiency or childhood illness (Roberts & Manchester, 1997:58).

Skull (154) Adult, Male

A fragment of adult crania was recovered from the upper deposits of well [152]. The remains consisted of the frontal, left and right parietal and left temporal bones of the skull and were of a good overall condition.

The orbital rims were masculine in shape, with the supra-orbital ridges and the mastoid scoring more within the possible male category. There were no complete aging characteristics visible on the skull fragments however, the coronal suture displayed evidence of obliteration, which would suggest that the remains were from an older adult.

Due to the limited nature of the remains, no metrical or non-metrical traits were scored. No evidence of pathological change were noted on the remains.

Skeleton (254) Neonate (40 weeks f- <1 month)

A mostly complete neonatal skeleton was recovered from a sub-circular feature [255], situated next to a collapsed wall. The remains were in a crouched position, in an east-west orientation.

The skeleton was mostly complete although some aspects of the right hand side of the skull and the pelvis were missing. Measurements of the limb bones gave a developmental age of approximately 40 weeks, suggesting that the infant died around the time of birth. No evidence of pathological conditions was noted on any of the remains.

Discussion

Two adult skeletons, a fragment of adult skull and a single neonatal burial were recovered from the excavation at The Hoplands, Sleaford. The remains were not buried within a formal cemetery.

Skull 154 was an isolated fragment out of the original burial context. Several isolated burials are noted within the surrounding area, with an extensive graveyard known to be in existence to the north west of the excavation area. Therefore the inclusion of displaced remains is to be expected on a site with such intensive archaeological activity.

Skeleton 154 was buried in an extended prone position; there was no indication from the positioning of the hands to suggest that any of the limbs were bound. Prone burials usually occur in a minority of cases within cemetery contexts from the Romano-British period. A total of 6 out of 62 inhumations from the 4th century cemetery at Godmanchester, were buried in the prone position (Jones, 2003:85). The practice of extended inhumation burial was adopted in the Roman world in the second century AD. The burial of individuals in a north-south orientation was a favoured alignment within the Iron Age period. The adoption of the east-west orientation was introduced with the extended inhumation practice, but did not become wide spread within the Roman world till the fourth century (O'Brien 1999). The occurrence of north-south burials is thought to be a possible retention of older native practices, even in highly Romanised areas (*Ibid*).

The prone position was considered to represent social differentiation and may have indicated a number of different underlying factors, such as coercion, to spare mourners the sight of disfigurement or disease, or less than respectful treatment of the individual (Taylor, 2008:101).

Skeleton 176 was buried in a tightly crouched position, a burial rite commonly associated with more prehistoric practices. However, as discussed above the burial practice did not go out practice until the 2nd century.

The burials of neonatal remains are often less formal. Documentary evidence from Pliny and Juvenal suggests that it was customary to bury infants that had not lived 40 days under the eaves. Suggesting that there was little value placed on the life of the very young within the Roman period to actually warrant a formal grave (Watts, 1989:372). Due to the nature of perinatal remains little further information can be gained apart from an approximate developmental age at death.

Skeleton 154 were the remains of an older woman, all of the pathological changes noted throughout the skeleton were probably associated with aged related degeneration. Substantial antemortem tooth loss and extensive tooth wear were apparent, which are more frequently identified within older individuals.

Further more osteoarthritis of the spinal column, left shoulder joint, right hip and knee joints was also present, which would most likely be considered as age related degeneration considering the older age of Skeleton 154.

Skeleton 176 was a young adult male, with little in the form of notable pathological conditions within the skeleton. Due to the young age of the individual no age related degeneration would be expected. Possible Schmorl's nodes were noted in the lower thoracic and upper lumbar vertebrae. In a young man, the presences of these nodes are thought to be attributed to extensive pressures caused by intensive manual labour or heavy lifting (Stirland and Waldron, 1997:334).

Stature estimations for both complete adult individuals, 1.58-1.60m (Approximately 5'2") for (154) and 1.68m-1.71m (5'5"- 5'6") for (176) were both within the average height for the population of the period, with average height for Roman females was 1.59m and males was approximately 1.68m (Roberts & Cox, 2003:163).

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Appendix C5

Environmental Report

Palaeoecology Research Services

Alison Foster, Helen Ranner, John Carrott and Deborah Jaques

Summary

An archaeological excavation was undertaken at The Hoplands, Sleaford, Lincolnshire in advance of redevelopment of the site by the construction of six affordable housing units with associated access roads and car parking. The excavations revealed a dense concentration of archaeological features. The earliest remains probably dated to the Iron Age and were encountered towards the northern limit of the site, but the majority of the features, including a metalled road, nine buildings, six wells, numerous pits and ditches and three burials, related to five phases of Roman period activity.

Limited time was available for the excavation, with construction scheduled to follow immediately. In order to optimise the results from sampling, a 'rolling assessment' strategy was adopted whereby small samples were recovered from deposits and rapidly assessed for their bioarchaeological potential while the site works were ongoing. The feedback from these initial assessment samples was used to inform the recovery of larger samples for analysis from those deposits which yielded remains of interpretative value. A total of 36 'assessment' samples were processed and, subsequently, larger samples from eight of these were processed for analysis. A small assemblage of hand-collected shell was also submitted for analysis.

The analysis samples gave small assemblages of plant and invertebrate remains preserved by charring, mineral replacement and, in one case, anoxic waterlogging, which were of some interpretative value with regard to the local environments of the site and human activity in the Roman period. Vertebrate remains were relatively sparse but included some bones from domesticated mammals and fish representing food waste, together with small mammal and amphibian bones which provided supporting information regarding local habitats.

The small hand-collected shell assemblage was dominated by remains of oysters, most of which showed evidence of having been opened by humans, together with traces of other marine shellfish. All of these remains almost certainly represented human food waste and provided limited evidence of continuous trade with the coast throughout the Roman period but the assemblage was too small to be of any further interpretative value.

Introduction

An archaeological excavation was undertaken by Network Archaeology Ltd at The Hoplands, Sleaford, Lincolnshire (centred on NGR 507934 345907), between the 11th of January and the 2nd of March 2010. The works were undertaken in advance of redevelopment of the site by the construction of six affordable housing units, with associated access roads and car parking. The excavation area measured approximately 50 by 20 metres.

The excavations revealed a dense concentration of archaeological features. The earliest remains probably dated to the Iron Age (Phase 1) and were encountered towards the northern limit of the site, where a small number of shallow pits produced pottery fragments of possible Iron Age date; an undated curvilinear ditch may have represented the partial remains of an eaves drip gully of this period too.

The vast majority of the features and deposits revealed related to multiple phases of Roman period activity (Phases 2 to 6). The principle features (or groups thereof) of the site were:

An east-west orientated metalled road which extended through the southern half the site and showed at least three distinct phases of construction (each raising the height of the road surface).

The stone foundations of nine buildings, five of which formed a sequence which fronted onto the road (two others also possibly fronted the road but the remains of these were only partially revealed). A possible cobble floor surface survived from the latest of the buildings along the road frontage and a line of postholes probably represented the internal structural posts of one of the buildings. A small oven had been constructed in the corner of one of the buildings.

Six large wells were revealed, five of which were excavated, three revealing well preserved stone linings. Whether the wells were contemporary is not known at present.

Numerous pits and ditches were also revealed many of which may have been located in the back lots of the buildings which fronted onto the road. The ditches may have formed property boundaries and the pits were perhaps cess pits and/or for general waste disposal.

Three burials were revealed at the site. An infant burial was excavated against the foundations of one of the roadside buildings and a prone adult, which had initially been revealed during the evaluation of the site, was excavated on the northern side of the road, although its relationship to the other features on the site was not well understood. A crouch burial in a pit was revealed cut into the road make up for one of the construction phases and had been sealed by a later road surface.

A distinct area of burnt and scorched deposits was partially revealed along the road frontage, which may have been the site of some small-scale industrial activity. However, the area had been heavily disturbed by trenching for modern utility services and its function is not remains unclear.

Two final phases, Phases 7 and 8, of activity were identified but only very broadly dated as '4th century AD and later' and 'post-Roman', respectively.

Bulk sediment samples ('GBA'/'BS' *sensu* Dobney *et al.* 1992) and a small quantity of hand-collected shell recovered from the deposits were submitted to Palaeoecology Research Services Limited, Kingston upon Hull, for analysis.

Methods

Limited time was available for the excavation, with construction scheduled to follow immediately. In order to optimise the results from sampling, a 'rolling assessment' strategy was adopted whereby small samples were recovered from deposits and rapidly assessed for their bioarchaeological potential while the site works were ongoing. The feedback from these initial assessment samples was used to inform the recovery of larger samples for analysis from those deposits which yielded remains of interpretative value.

A total of 36 'assessment' samples were processed and, subsequently, larger samples from eight of these were processed for analysis.

Sediment samples

The sediment samples were inspected and their lithologies recorded, using a standard *pro forma*. Both the 'assessment' and analysis samples were processed for the recovery of organic macrofossils (and artefactual remains) broadly following the techniques of Kenward *et al.* (1980; 1986b). Prior to processing, the subsamples were disaggregated in water for 24 hours and their volumes recorded in a waterlogged state. Where necessary, residues were re-processed to maximise recovery in the washover fractions.

The residues were primarily mineral in nature and were dried prior to the recording of their components. The weights and descriptions of the residues were recorded after sorting. Data acquired refer to the larger items which have been extracted; smaller fragments remain in the residues and details of these are not included. Domestic refuse (including building materials, pottery, charcoal, coal and other fuel debris, large mammal bone and marine shell) were all sorted to 4 mm; small vertebrate and fish bone, eggshell and charred plant remains were sorted to 1 mm. Residue less than 1 mm was retained unsorted. For the 'assessment' samples, the less than 2 mm fraction of the residue was scanned for magnetised particles. The residues from the analysis samples were much larger, with a high proportion of sand, and a subsample of 500 g from each of the less than 1 mm residue fractions was checked for magnetised material and any recovered incorporated with that from the 1 to 2 mm fraction.

Assessment samples

The washover and residue fractions from the assessment samples were scanned and brief notes made regarding the quantity and quality of preservation of their content of organic and other remains. The results were forwarded to the excavator whilst still on site and used to inform the collection of larger sediment samples from targeted deposits for analysis.

Analysis samples

In all but one of the deposits, the preservation of ancient organic remains appeared to be primarily by charring and/or mineral replacement. For the one deposit which appeared to exhibit preservation by anoxic waterlogging, the washover was examined wet and an additional stage of processing was employed; paraffin flotation (see Kenward *et al.* 1980; 1986b) was used to separate preserved insect remains from the plant remains.

The plant material was assessed using a low-power binocular microscope (x7 to x45); where necessary, the material was sieved into fractions (0.3 to 2 mm; 2 to 4 mm; over 4 mm) to facilitate viewing. All the components of the washovers were recorded using a five-point semi-quantitative scale; fractions were generally scanned until no new remains were observed and a sense of the abundance of each taxon or component (relative to the total volume of the recovered material) was achieved.

Plant macrofossil remains were identified by comparison with modern reference material (where possible), and the use of published works by Cappers *et al.* (2006) and Jacomet (2006). Remains were identified to the lowest taxon necessary to achieve the aims of the project.

An assessment of the charcoal component of the washovers was undertaken; fragments greater than 2 mm in radial cross-section were examined. Pieces were broken to give a clean radial cross-sectional surface and the anatomical structures were examined using a low-power binocular microscope (x7 to x45). Basic identifications were made by comparison with modern reference material, where possible, and with reference to published works (Hather 2000; Schoch *et al.* 2004).

The single paraffin flot was examined for the presence of insects and other non-molluscan invertebrates using a low-power binocular microscope (x7 to x45); identifiable remains were relatively few, however. Beetles (Coleoptera) and bugs (Hemiptera) were identified using a low-power microscope (x7 to x45). Identification was by reference to standard published works (e.g. Lindroth 1974; Harde 1984). Numbers of individuals and taxa of beetles and bugs were recorded, and taxa were assigned to broad ecological groups following Kenward *et al.* (1986a). The abundance of other invertebrates was recorded semi-quantitatively on a three-point scale (see Table 8). The flot is currently stored in industrial methylated spirits in plastic jars.

Mollusc remains from the processed sample fractions were recorded using a low-power binocular microscope (x7 to x45). All of the remains were identified as closely as possible (with reference to

Cameron 2003, Cameron and Redfern 1976, Ellis 1969, Kerney 1999, Kerney and Cameron 1979 Macan 1977) and counts made of minimum numbers of individuals present. Minimum numbers were determined by counts of shell apices, although occasionally individuals were represented by non-apex fragments. The abundance of unidentified snail fragments present was recorded semi-quantitatively on a five-point scale: f – few (up to 3); s – some (4 to 20); m – many (21 to 50); v – very many (51 to 200); and v+ – more than very many (over 200). The same scale was used to record estimated numbers of *Cecilioides acicula* (Müller) – this is a burrowing snail and not included in any interpretation because of the likelihood of its being intrusive to the deposits. Definite species level identifications were sometimes prevented by encrusted sediment obscuring diagnostic features (e.g. in the mouth of the shell); this was particularly true for *Vertigo* species. Attempts to dislodge the sediment were, generally, unsuccessful (resulting in a counterproductive level of damage) and were abandoned early in the recording.

Artefactual material and vertebrate remains were noted and recorded, or removed to be returned to the excavator to be forwarded to appropriate specialists. Identifications for vertebrate remains were made via comparison with modern reference material at PRS, where possible, and the use of published works (e.g. Hillson 1990; Ratnikov 2001). Wear stages for the teeth from a single caprovid (sheep/goat) mandible were assigned following Grant (1982).

Microfossil ‘squash’ subsamples (of a few tens of ml) were taken from each of the deposits. These were examined using the ‘squash’ technique of Dainton (1992), originally designed specifically to assess the content of eggs of intestinal parasitic nematodes; however, this method routinely reveals the presence of other microfossils, such as pollen and diatoms, and, where present, these other classes of remains were also recorded. The slides were scanned at x150 magnification and at x600 where necessary.

Nomenclature for plant taxa follows Stace (1997), with cereal identifications following Jacomet (2006) where nomenclature follows van Zeist (1984). Nomenclature for insects follows Kloet and Hincks (1966-77), molluscs follow Kerney (1999), marine shellfish follow Hayward and Ryland (1995). Vertebrates follow Corbet and Southern (1977) for mammals, Walters (1980) for birds, Arnold (1995) for amphibians and reptiles, and Wheeler (1969) for fish.

Hand-collected shell

All of the shell fragments recovered were identified as closely as possible, principally with reference to Hayward and Ryland (1995) for marine shell; nomenclature follows this work. Terrestrial and freshwater mollusc remains were identified to species where possible, with reference to the same works as previously listed (see paragraph in ‘Sediment samples’ section above); nomenclature again follows Kerney (1999). The weights (in grammes), numbers of fragments and maximum dimensions of shell of different taxa from each context were recorded (where determinable) and the minimum numbers of individuals (or individual valves for bivalve taxa) represented calculated where possible.

For oyster (*Ostrea edulis* L.) shell additional notes were made (where possible) regarding: numbers of left and right valves; evidence of having being opened using a knife or similar implement; measurability of the valves; damage from other marine biota (e.g. polychaete worms and dog whelks); encrustation by barnacles. Preservation was recorded using two, subjective, four-point scales for erosion and fragmentation—scale points were: 0 – none apparent; 1 – slight; 2 – moderate; 3 – high.

Where measurements other than a simple maximum linear dimension were obtainable for oyster valves, biometrical data were collected following Claassen (1998).

Results

Details of the sampled deposits, including sediment descriptions and summary information regarding the quantities processed and the size of the residue fractions, are shown in Table 1. Table 2 presents a summary of the remains recovered from the assessment samples and Table 3 the results from microfossil ‘squash’ subsamples from all contexts. The remains recovered from the analysis samples are detailed in Tables 4 to 13: Table 4 shows the plant remains recovered from the washovers (with notes on other components); Tables 5 and 6 record the mollusc remains recovered from the washovers and residues, respectively; Table 7 presents details of the marine shell recovered from the sample residues; Table 8 shows the insect remains recovered in the flot from Context 181; Tables 9 and 10 record the vertebrate remains recovered; Table 11 summarises artefactual material from the analysis sample residues; Table 12 presents records for the hand-collected shell assemblage, with Table 13 being an archive of oyster shell measurements.

The dry washovers contained some uncharred plant material including mosses, root material, indeterminate vegetative material and occasional birch (*Betula*) fruits, blackberry (*Rubus fruticosus* L. agg.) fruitstones, raspberry (*Rubus idaeus* L.) fruitstones, elder (*Sambucus nigra* L.) fruits, pea (*Pisum sativum* L.) and grass (Poaceae) caryopses. However, since there was no evidence for waterlogged preservation of organic remains within these deposits, these are likely to represent modern intrusive or contaminant material and their presence has been recorded (see Table 4) but they are not discussed further. Similarly, invertebrate remains in these deposits were also almost certainly modern intrusions or contaminants, i.e. earthworm egg capsules, burrowing snails (*Cecilioides acicula*), millipedes and occasional insect remains (including ants and beetles).

Assessment samples

Of the 36 assessment samples (from 34 deposits), eight included remains the quantity and quality of preservation of which suggested that detailed recording of the corresponding assemblages from larger samples could be of interpretative value. Consequently, larger sediment samples from these deposits were processed for analysis (see below).

Analysis samples

PHASE 2: ROMAN – MID 1ST TO MID 2ND CENTURY

Context 204 [Fill of boundary ditch 205]

Sample 22/T2 (22 kg/18 litres sieved to 300 microns with washover and microfossil ‘squash’; approximately 50 ml of sediment was retained for the ‘squash’ subsample)

Moist, light to mid yellow-brown to mid grey-brown (with a slight olive cast), crumbly to soft (working soft), silty sand, with stones (2 to 60 mm) present.

The dry washover (60 ml) was principally charcoal fire waste (from mixed taxa, including oak (*Quercus*) roundwood), with traces of charred rhizomes/tubers, cinder and semi-vitrified fuel waste. A small assemblage of charred plant macrofossils comprised a few cereal grains, including wheat (*Triticum*), a single glume base from emmer/spelt wheat (*Triticum dicoccum* Schübl./*T. spelta* L.), and caryopses from the arable weed brome (*Bromus*). Mollusc shells from terrestrial, and to a lesser extent, freshwater taxa were abundant. The land snail assemblage was dominated by dry calcareous grassland forms such as *Vallonia costata* (Müller), *Cochlicopa ?lubricella* (Porro) and, in particular, *Vallonia ?excentrica* Sterki, with a few records of *Pupilla muscorum* (L.) which often indicates areas of exposed rock. However, there were also moderate numbers of *Trichia ?hispidia* (L.) which is a widespread species typically found in ground litter in moist, well-vegetated places (e.g. roadside verges, fields, marshes, the base of walls and waste ground – see Kerney 1999, 197). The small *Carychium* species also require permanently damp

conditions and there were some aquatic snails present in the form of *Lymnaea truncatula* (Müller) – although classed as a freshwater snail, this species lives mostly out of water and is often found in ephemeral ponds, roadside trickles and marshy grassland (Kerney 1999, 51). Traces of burnt indeterminate fragments of bone, and others which could be partially identified as frog/toad and small animal bone elements were recorded. Traces of ceramic material were also present.

The residue (dry weight 10.471 kg) was predominantly sand, with limestone (to 54 mm) and occasional angular flint.

Biological remains were sparse comprising a little charcoal (to 9 mm; 0.2 g) and several snails, including broken pieces from larger taxa (e.g. *Cepaea ?nemoralis* (L.)), some *Vallonia ?excentrica*, two *Trichia ?hispidata* (L.), a single fragment of *Cochlicopa* sp., two slug plates (to 10 mm; 0.4 g) and three apices tentatively identified as of a freshwater species (?*Lymnaea* sp.); most of the fragments present were of unidentified land snail taxa, however. A small amount of broken mussel (*Mytilus edulis* L.) shell (to 20 mm; 2.5 g) and one or two pieces of bird eggshell (to 4 mm; <0.1 g, probably chicken) were present. The large mammal bone comprised a few undiagnostic fragments (to 33 mm; 3 g) and the only fish bone found was a single vertebra of a flatfish species. Other small vertebrate remains (to 15 mm; 0.2 g) were limited to a few broken elements which could only be identified as being from an indeterminate anuran (frog/toad) and small rodent. A single piece of pottery (to 38 mm; 9 g) was extracted from the residue and the magnetised fraction (3 g) included abundant flake and spheroid hammerstone.

The microfossil ‘squash’ was almost entirely inorganic, with a trace of organic detritus; no identifiable microfossils were seen.

PHASE 3: ROMAN – MID TO LATE 2ND CENTURY

Context 181 [Primary silting of well 152]

Sample 10/T2 (45 kg/26 litres sieved to 300 microns with washover, paraffin flotation and microfossil ‘squash’; approximately 50 ml of sediment was retained for the ‘squash’ subsample)

A wet, mix of mid to dark brown to grey-brown, soft, fine and coarse herbaceous and woody detritus, amorphous organic sediment, and light to mid yellow-brown silty sand.

The wet washover (250 ml) was principally partly humified plant material, including buds and fragments of bark and wood. Identifiable plant macrofossil remains were preserved by charring, anoxic waterlogging and mineralisation. The small assemblage of charred remains derived from cultivated cereals and pulses, and two ruderal species. Cereal grains and chaff were recorded, including wheat grains and an emmer/spelt wheat spikelet fork, together with a single pea/bean (*Pisum/Vicia*) and, in addition, a tuber from onion couch (*Arrhenatherum elatius* (L.) P. Beauv. ex J. & C. Presl var. *bulbosum* (Willd.) St-Amans), and a seed from cleavers (*Galium aparine* L.). A diverse assemblage of waterlogged plant remains derived from: cultivated flax (*Linum usitatissimum* L.) and coriander (*Coriandrum sativum* L.); the arable weeds fool’s parsley (*Aethusa cynapium* L.), corncockle (*Agrostemma githago* L.), fat-hen (*Chenopodium album* L.), black bindweed (*Fallopia convolvulus* (L.) Á. Löve), fumitory (*Fumaria*), wild radish (*Raphanus raphanistrum* L.), field penny-cress (*Thlaspi arvense* L.) and small nettle (*Urtica urens* L.); the wetland taxa, lesser water-parsnip (*Berula erecta* (Huds.) Coville), sedges (Cyperaceae), hemlock (*Conium maculatum* L.), marsh pennywort (*Hydrocotyle vulgaris* L.), bristle club-rush (*Isolepis setacea* (L.) R. Br.), rush (*Juncus*), gypsywort (*Lycopus europaeus* L.), pale persicaria (*Persicaria lapathifolia* (L.) Gray) and hairy buttercup (*Ranunculus sardos* Crantz); the aquatic taxa, water plantain (*Alisma*), bogbean (*Menyanthes trifoliata* L.), water-dropwort (*Oenanthe*) and ?bur-reed (cf. *Sparganium*); woodland species white bryony (*Bryonia dioica* Jacq.), hazel (*Corylus avellana* L.) and elder (*Sambucus nigra* L.); the ruderal taxa agrimony (*Agrimonia eupatoria* L.), burdock (*Arctium*), hemp-nettle (*Galeopsis speciosa* Mill./*G. tetrahit* L.), cleavers (*Galium aparine* L.), henbane (*Hyoscyamus niger* L.), poppies (*Papaver*), knotgrass (*Polygonum aviculare* L.), silverweed (*Potentilla anserina* L.), common chickweed (*Stellaria media* (L.) Vill.) and common nettle (*Urtica dioica* L.); and

the eurytopic taxa daisies (Asteraceae), orache/goosefoot (*Atriplex/Chenopodium*), thistle (*Carduus/Cirsium*), pinks (Caryophyllaceae), ?aven (cf. *Geum*), dead-nettles (Lamiaceae), ?primroses (cf. Primulaceae), and buttercups (*Ranunculus* subg. *Ranunculus*). Fire waste was recorded as occasional charred rhizomes/tubers and traces of charcoal. Traces of indeterminate fragments of bone (including some burnt) were present, and occasional fly puparia and earthworm egg capsules, with traces of Acarina (mites), insect remains and mollusc shell (a few fragments of unidentified terrestrial snails and a single *Cecilioides acicula* apex fragment) were recorded. Occasional fragments of mericarp from the arable weed fool's parsley were preserved by mineralisation.

The small paraffin flot (~25 ml) taken from the washover fraction was predominantly of plant remains (see above) but also contained a small (particularly given the size of the sediment sample processed) assemblage of insect (notably beetles) and other invertebrate remains. Identifiable remains were rather few but included a significant proportion of aquatic taxa, in particular *Ochthebius* sp?p. of which there were at least 15 individuals present, together with other outdoor taxa including strongly plant associated weevils (e.g. *Otiorhynchus* sp?p. and *Ceutorhynchus* sp?p.) and two individuals of the decomposer species *Megasternum obscurum* (Marsham) (which is common in all kinds of decaying matter – Harde 1984, 116).

The sample produced a large residue (dry weight 25000 g), of which over a third was sand. Much of the coarse fraction (over 10 mm) was made up of large, flat pieces of oolitic limestone (to 270 mm); probably originally part of the well structure that had either fallen down the shaft or been deposited as part of a backfilling event. There was also a smaller amount of rounded, water-worn pebbles (to 110 mm) and occasional ironstone. A few of the stones showed slight signs of heat damage, but there was no severe burning or cracking. The remainder of the residue consisted of smaller limestone and pebbles. Very occasional undiagnostic bone, charcoal and eggshell fragments remained in the residue after sorting.

The residue was relatively rich in artefactual and organic remains. Charred and waterlogged plant remains included charcoal (to 25 mm; 5 g) and some indeterminate seeds (to 16 mm; 0.7 g). A few snail shell fragments (to 22 mm; 3 g) were noted, including a single *Cepaea ?nemoralis* and three apex fragments tentatively identified as a *Bithynia* species (a single operculum was also present which was certainly from *Bithynia*) and occasional unidentified beetle sclerite fragments were noted. A complete oyster valve (a left valve to 62 mm; 21 g) and several pieces of bird eggshell were also recovered. Large mammal bone (to 44 mm; 20 g) was mainly small, unidentifiable pieces but included long bone fragments from a medium-sized mammal and a sheep/goat scaphoid (carpal bone). Remains from small vertebrates were typical of those which accumulate via a feature of this type acting as a pit fall trap. Species/genera identified were vole (microtine), house mouse (*Mus musculus* L.) and common frog (*Rana temporaria* L.), with many undiagnostic bones being assigned to indeterminate anuran, amphibian, rodent or small mammal. Many of the small vertebrate bone elements were complete and in good condition, including numerous metapodials and phalanges, suggesting that they were indeed derived from animals that had fallen into the well, became trapped and died. A significant number, however, were fragmented, with scored and indented surfaces. These may have been subjected to trampling and weathering on the ground surface around the well and been deposited as part of a clearing and back-filling episode. A number of eel (*Anguilla anguilla* (L.)) vertebrae were also present. A large amount of pottery (to 42 mm; 39 g) was recovered; of the nineteen sherds, most seemed to be of the same fabric and may have been from the same vessel. The magnetised material (1.7 g) contained some slag, cinder and flake hammerscale.

The microfossil 'squash' was approximately equal parts inorganic and organic detritus, with some plant tissue fragments and a few fungal hyphae; no identifiable microfossils were seen.

Context 302 [Fill of pit 301]

Sample 20/T2 (27 kg/25 litres sieved to 300 microns with washover and microfossil 'squash'; approximately 50 ml of sediment was retained for the 'squash' subsample)

Moist, mid grey-brown, unconsolidated (working slightly soft), slightly silty sand, with stones (2 to 60 mm) common and larger stones (over 60 mm) present.

The dry washover (100 ml) was principally charcoal fire waste (from mixed taxa, including ash (*Fraxinus excelsior* L.) stemwood, with some evidence for wood boring beetle), with traces of coal. Plant macrofossils were preserved by both charring and mineralisation. The charred assemblage comprised: cereal grains and chaff, including wheat grains and chaff from spelt wheat; remains from the arable weed brome; wetland sedge; the heath species sheep's sorrel (*Rumex acetosella* L.); the ruderal species ribwort plantain (*Plantago lanceolata* L.); and the eurytopic family of grasses. The assemblage of mineralised plant remains derived from: the arable weeds fool's parsley (*Aethusa cynapium* L.) and field gromwell (*Lithospermum arvense* L.); plum (*Prunus domestica* L.) – possibly imported/cultivated or growing wild in local hedgerow; the ruderal species redshank (*Persicaria maculosa* Gray) and knotgrass (*Polygonum aviculare* L.), and nightshade (*Solanum*); and the eurytopic taxa orache/goosefoot (*Atriplex/Chenopodium*), grasses (Poaceae) and cinquefoils (*Potentilla*). In addition, mineralised earthworm egg capsules were common and there were traces of mineralised fly puparia and nodules (?fungal). Occasional indeterminate fragments of bone, including fish bone, and undifferentiated frog/toad and small animal/mammal bone elements were recorded. A small mollusc assemblage was recovered which was predominantly of the burrowing land snail *Cecilioides acicula* and numerous unidentified other land snail fragments. The remainder of the identified component of the snail assemblage was dominated by open grassland forms (e.g. *Vallonia* species, *Cochlicopa lubricella*), again with hints of areas of exposed rock (*Pupilla muscorum*) and damper more vegetated places (*Trichia hispida*); a single fragment was tentatively identified as a small succineid (perhaps *Oxyloma pfeifferi* (Rossmässler), which is found in wetlands of all kinds but is not aquatic).

A large mineral residue remained (dry weight 16.551 kg), almost 50% of which was sand. The coarser material included large pieces of limestone (to 130 mm), which may have been building/structural stone, together with smaller pieces of limestone gravel and some lumps of orange-brown concreted sediment. The 1 to 10 mm fraction exhibited characteristics typical of a mineral residue from a cess pit deposit. Small stones were mixed with frequent concreted sediment (to 38 mm), with a high incidence of compressed and mineralised vegetation and other detritus incorporated within the concretions.

Much of the material from the residue was heavily encrusted with concreted, mineralised sediment, which made identifications difficult. Plant remains included a large amount of mineralised fruit stones and seeds (to 14 mm; 5 g) including *Prunus* sp., grape (*Vitis vinifera* L.) and ?apple (cf. *Malus*), a piece of mineralised wood (to 30 mm; 1.3 g) and some charred grain and chaff fragments (to 6 mm; 0.3 g). Marine shellfish were represented by a single oyster valve (right side) (to 67 mm; 19 g) and a few small fragments of mussel (to 12 mm; 0.5 g); no terrestrial or freshwater mollusc remains were noted. A few small pieces of eggshell (to 5 mm; 0.2 g) were also present. A relatively large amount of mammal bone (to 100 mm; 65 g) was extracted, including two cattle incisors and a sheep/goat incisor, but the majority was undiagnostic fragments or could only be identified as being from large mammal (rib, skull and long bone fragments) or medium-sized mammal (long bone fragments, caudal vertebra and sesamoid). The cattle incisors exhibited unusual wear to the lateral surfaces, resulting in 'peg-like' teeth. Of the few bird bones (to 75 mm; 5 g) recovered, only a chicken tarsometatarsus from a male bird could be identified, the rest being phalanges and carpals. The fish bone consisted of vertebrae (including two from flatfish) and ribs or fin rays, with relatively few cranial elements; a flatfish articular and a flatfish basipterygium were also identified (at least in part). Many of the vertebrae had been crushed, possibly as a result of mastication and passage through the gut (Jones 1986); fish bones displaying these characteristics are frequently found in cess deposits. A large number of small terrestrial/amphibious vertebrate bones (to 28 mm; 2.2 g) indicated that the open pit was deep enough to act as a pit fall trap. Species identified were limited due to mineral encrustation, but common frog and pygmy shrew (*Sorex minutus* L.) were recorded, together with many bones from *Sorex* spp., Muridae sp. (cf. house mouse) and indeterminate anurans. Inorganic finds comprised brick/tile (to 20 mm; 12 g), fired earth (to 25 mm; 8 g), pottery (to 92 mm; 94 g) and some small ferrous objects (to 29 mm; 9 g). The 20 pieces of pottery were of varying fabrics (some fine); the

metalwork seemed to be mostly nail heads. A little hammerscale was found in the magnetised material (2.7 g).

The microfossil 'squash' subsample from the 'raw' sediment was mostly inorganic, with some organic detritus (which appeared mineralised) and a few fungal hyphae. A second 'squash' subsample taken from possible cess concretions within the processed sediment sample residue contained some mineralised plant tissue fragments. No identifiable microfossils were seen in either of the 'squashes'.

PHASE 4: ROMAN – EARLY TO MID 3RD CENTURY

Context 214 [Fill of pit 213]

Sample 25/T2 (20 kg/16 litres sieved to 300 microns with washover and microfossil 'squash'; approximately 50 ml of sediment was retained for the 'squash' subsample)

Moist, mid grey-brown to mid yellow-brown, crumbly to unconsolidated (working crumbly), slightly silty sand, with stones (2 to 60 mm) present.

The dry washover (30 ml) was principally charcoal fire waste (from mixed taxa, including ash stemwood and oak roundwood), with occasional semi-vitrified fuel waste and traces of rhizomes/tubers. A small assemblage of charred plant macrofossils derived from cultivated cereals, arable weeds and wild plants; comprising a few cereal grains, including wheat, caryopses from the arable weed brome, remains from wetland sedges and the eurytopic family of grasses. Traces of small animal bone elements were recorded, and mollusc shells from terrestrial taxa were numerous but predominantly either unidentified fragments or of the burrowing snail *Cecilioides acicula*. Other snails present were, again, mostly dry grassland taxa such as *Vallonia* species and *Cochlicopa ?lubricella*, with a suggestion of bare rock from *Pupilla muscorum* and of more heavily vegetated and damper areas from *Trichia ?hispidia*. Remains of a small number of individuals of aquatic and waterside forms were also present, namely four *Lymnaea ?truncatula* (Müller) (with a further four *?Lymnaea* apices) and a single small succineid (*?Oxyloma pfeifferi*).

Approximately two-thirds of the mineral residue (dry weight 10.655 kg) was sand. The remainder consisted mainly of limestone (to 73 mm), with occasional flint and pebble gravel; a few of the stones looked slightly burnt. Occasional charcoal, indeterminate bone fragments and one or two pieces of broken snail shell remained in the residue after sorting.

A tiny amount of mussel shell (to 13 mm; <0.1 g), bird eggshell (to 6 mm; <0.1g) and a small number of snails (to 16 mm; 1 g – including some large-ish, silted fragments, with identified remains providing additional records for taxa which were more numerous in the washover and, in addition, three slug plates (species indeterminate) were recorded. A sheep/goat mandible, with a complete tooth row (mandible wear stage 24, after Grant 1982) and some medium-sized mammal long bone fragments and vertebrae were present among the mammal bone (to 63 mm; 43 g); the remainder was indeterminate fragments, some of which were calcined. There were also a few fish bones (including three ?flatfish vertebrae). The few amphibian and small mammal remains were from indeterminate anurans, rodents and an immature bank vole (*Clethrionomys glareolus* (L.)). Hammerscale was present in the magnetised fraction (3.1 g) and the only other artefacts from the residue were four pieces of pottery (to 65 mm; 41 g).

The microfossil 'squash' was wholly inorganic; no identifiable microfossils were seen.

Context 334 [Made ground on northern side of Roman road]

Sample 29/T2 (39 kg/28 litres sieved to 300 microns with washover and microfossil 'squash'; approximately 50 ml of sediment was retained for the 'squash' subsample)

Moist, mid grey-brown to mid yellow-brown, crumbly (working somewhat soft), silty sand, with stones (2 to 60 mm) present.

The dry washover (50 ml) was principally charcoal fire waste (from mixed taxa, including oak stemwood and roundwood, with some evidence for wood boring beetle), with occasional coal and rhizomes/tubers, and traces of semi-vitrified fuel waste. The charred plant macrofossil assemblage derived from cultivated cereals, arable weeds and wild taxa, and comprised: cereal grain and chaff, including wheat and spelt wheat glume bases; a seed from the arable weed field gromwell; a caryopsis from heath-grass; and a seed from the ruderal species cleavers (*Galium aparine* L.). Mollusc shells from terrestrial and freshwater taxa were fairly numerous and included traces of snail eggs. Most of the mollusc remains were *Cecilioides acicula*, with quite large numbers of unidentified land snail fragments. The most numerous identified (at least in part) remains were of the widespread litter snail *Trichia hispida* and the open ground/dry grassland taxa *Vallonia costata* and *V. ?excentrica* but, again, there were also records for *Pupilla muscorum* which suggested exposed rock surfaces. Here, the presence of small numbers of remains of *Carychium* species and *Punctum pygmaeum* (Draparnaud) lends some additional weight of evidence for some damper and more heavily vegetated areas in the vicinity. Uniquely for the site, a single sinistral *Vertigo* species was recorded from this washover. Adhering sediment prevented a full determination of this shell but its form requires it to be one of two species, either *Vertigo pusilla* Müller or *V. angustior* Jeffreys; both species are now rare and/or highly localised in their distribution in the British Isles. Freshwater/aquatic marginal taxa were present in the form of some *Lymnaea ?truncatula* apex fragments and, in addition, a few remains of freshwater crustaceans (Ostracoda) were present. Traces of bone were recorded comprising indeterminate fragments, undifferentiated small animal elements and fish bone including an eel vertebra.

Over half of the residue (dry weight 21.169 kg) was sand; the rest was mostly limestone (to 59 mm), with rather less pebble gravel and some lumps of sediment concretion (possibly iron pan). Very occasional broken snail shell, mussel shell and bird eggshell remained after sorting, together with a few undiagnostic bone fragments.

Charred plant remains comprised a little charcoal ((to 14 mm; 1.2 g), six charred grains (to 5 mm; <0.1 g) and a piece of nut shell (to 8 mm; <0.1 g). Mussel shell (to 15 mm; 0.7 g) and egg shell (to 7 mm; 0.1 g) were recovered in very small amounts, and there were small numbers of additional record for snail taxa previously recorded (in greater numbers) from the washover, together with seven indeterminate slug plates. The large mammal bone (to 29 mm; 9 g) was almost entirely undiagnostic fragments, but two sheep/goat incisors were present. Fish bone included a range of skeletal elements (vertebrae, maxilla, premaxillae, articular, preopercular) which could only be partially identified as from an unidentified flatfish species. Small vertebrate identifications (other than fish) were limited to common frog, with other indeterminate anuran remains and some indeterminate small mammal metapodials also present. Eight pieces of pottery (to 28 mm; 18 g) were extracted from the residue. Flake and spheroid hammer scale was present in the magnetised material (3.8 g).

The microfossil 'squash' subsample was almost entirely inorganic, with a little organic detritus; no identifiable microfossils were seen.

PHASE 5: ROMAN – MID TO LATE 3RD CENTURY AD

Context 329 [Fill of oven 297]

Sample 30/T2 (14 kg/10 litres sieved to 300 microns with washover and microfossil 'squash'; approximately 50 ml of sediment was retained for the 'squash' subsample)

Moist, mostly mid to dark grey (with some patches of mid to dark yellow-brown), crumbly to unconsolidated (working crumbly and somewhat soft), silty sand.

The dry washover (130 ml) was principally charcoal fire waste (from mixed taxa, including oak stemwood, with some evidence for wood boring beetle), with occasional semi-vitrified fuel waste and rhizomes/tubers, and traces of coal. A small assemblage of charred plant macrofossils derived from cultivated cereals, arable weeds and wild plants, comprising: a few cereal grains, including wheat, with an

item of emmer/spelt chaff; a single caryopsis from the arable weed brome, nutlets from black bindweed (*Fallopia convolvulus* (L.) Á. Löve) and a seed from field gromwell; and remains from the eurytopic taxa orache/goosefoot and grasses. Mollusc shells from terrestrial taxa were common – again, predominantly of open grassland taxa (*Vallonia* species and *Cochlicopa ?lubricella*), with hints of damper more heavily vegetated places (*Carychium*, *Trichia ?hispidia* and *Punctum pygmaeum*) and exposed rock surfaces (*Pupilla muscorum*). Traces of snail eggs and ostracods (freshwater crustaceans) were also recorded and there were some possible aquatic snail fragments (apices of *?Lymnaea* sp.). Occasional indeterminate fragments of calcined bone were recorded, with traces of burnt and unburnt bone, and a single eel vertebra.

Most of the residue (dry weight 6.245 kg) was sand, with the coarser fraction consisting mostly of limestone (to 57 mm) gravel, much of which had concreted sediment and smaller stones adhering. Approximately 20% of the stones over 10 mm showed signs of thermal damage, being reddened and cracked. A little charcoal and calcined bone was left in during sorting.

The charcoal (to 8 mm; 0.8 g) present included a number of small ‘twiggy’ pieces. There was also a little mussel shell (to 28 mm; 3 g) and some snails (to 4 mm; 0.1 g – two *?Lymnaea* sp. apices (freshwater), two *Vallonia ?excentrica*, one *?Oxychilus* sp. apex, three indeterminate slug plates and some additional unidentified land snail shell fragments). The mammal bone (to 73 mm; 10 g) was tiny, calcined fragments, with the exception of two pieces of medium-sized mammal long bone. Small vertebrate remains (to 14 mm; <0.1 g) were sparse and largely undiagnostic; partial identifications that could be made were of indeterminate anuran, small bird, small mammal and rodent. Occasional flake and spheroid hammer scale and a few tiny ?slag particles were present in the magnetic fraction (6.6 g) and there was a single very corroded lump of ferrous material (to 21 mm; 1.7 g).

The microfossil ‘squash’ was almost entirely inorganic, with a trace of organic detritus; no identifiable microfossils were seen.

Context 333 [Made ground on north side of Roman road]

Sample 28/T2 (36 kg/18 litres sieved to 300 microns with washover and microfossil ‘squash’; approximately 50 ml of sediment was retained for the ‘squash’ subsample)

Moist, mid grey-brown (internally) to mid orange-brown (externally), crumbly to unconsolidated (working somewhat soft), silty sand, with stones (2 to 20 mm) and a live earthworm present.

The dry washover (20 ml) was principally charcoal fire waste, with traces of coal, cinder and semi-vitrified fuel waste. Charred plant macrofossils were limited to a few cereal grains, including wheat, and a nutlet from the eurytopic taxon dock (*Rumex*). Mollusc shells from terrestrial (and possibly aquatic – two *?Lymnaea* sp. apex fragments) taxa were common and included some snail eggs. The identified component of the assemblage of terrestrial snails was very similar to others reported above being dominated by *Vallonia* species (open calcareous grassland) and *Trichia ?hispidia* (damp litter in well vegetated places), with some *Pupilla muscorum* (exposed rock). Two individuals of a species not previously recorded, *Ena obscura* (Müller), were also present – “this species lives in relatively undisturbed, shady places mainly on base-rich soils: deciduous woods, hedgerows, scrubland, the base of walls, among rocks” (Kerney 1999, 113). A trace of spheroid hammer scale was recorded.

Over half of the mineral residue (dry weight 17.086 kg) was sand. The coarse fraction included some large pieces of broken, angular limestone (to 70 mm); smaller stones were mainly limestone gravel with occasional flint and chalk. Occasional small sediment concretions were present and included some root pseudomorphs.

There was a little broken mussel shell (to 14 mm; <0.1 g) and a few snails (to 7 mm; 0.2 g – including two *?Lymnaea* sp. apices (freshwater), six *Vallonia ?excentrica*, two *Trichia ?hispidia* and two indeterminate slug plates). A cow carpal bone was the only identifiable element from the fragmented larger vertebrate

remains (to 22 mm; 5 g). A small amount of small vertebrate bone was extracted, including remains of bank vole, field vole (*Microtus agrestis* (L.)) and common frog, together with a few other indeterminate anuran bones. Two pieces of wheel-thrown pottery (to 30 mm; 5 g) were recovered from the residue, together with two corroded ferrous objects (to 14 mm; 1 g). The magnetic material (1.5 g) included flake and spheroid hammerscale.

The microfossil 'squash' was almost entirely inorganic, with a trace of organic detritus; no identifiable microfossils were seen.

PHASE 6: LATE ROMAN – 4TH CENTURY

Context 177 [Possible hearth]

Sample 8/T2 (20 kg/17 litres sieved to 300 microns with washover and microfossil 'squash'; approximately 50 ml of sediment was retained for the 'squash' subsample))

Moist, mid yellow-brown to mid grey-brown, crumbly (working soft), silty sand, with small lumps of mid to dark red-brown silty sand mixed with charcoal and ash (some with layers of pale buff/cream) and stones (2 to 20 mm) present.

The dry washover (110 ml) was principally charcoal fire waste (from mixed taxa, including oak stemwood and roundwood, with some evidence for wood boring beetle), a few thorns from rose/bramble (*Rosa/Rubus*) and blackthorn/hawthorn (*Prunus spinosa/Crataegus monogyna*), and traces of cinder and semi-vitrified fuel waste. The charred plant macrofossils were limited and comprised a single indeterminate cereal grain and a caryopsis from heath-grass (*Danthonia decumbens* (L.) DC. Mollusc shells from terrestrial and freshwater taxa were abundant – this deposit gave the second largest assemblage of identified snails (other than *Cecilioides acicula*) after Context 204 (see above) – with some eggs. The character of the mollusc assemblage was also very similar to that from Context 204. The land snail assemblage was dominated by dry calcareous grassland forms such as *Vallonia costata*, *Vallonia ?excentrica* and *Cochlicopa ?lubricella*, with at least ten records of *Pupilla muscorum* suggesting some areas of exposed rock. There were also moderate numbers of *Trichia ?hispidia*, indicating ground litter in moist, well-vegetated places, and *Carychium* species and *Punctum pygmaeum* were present. Fifteen apex fragments of the aquatic *Lymnaea ?truncatula* were recorded and, in addition, there were two unidentified freshwater planorbis apices and a single *Oxyloma pfeifferi* (which lives in wetlands). Occasional fish bone and traces of small mammal/animal bone elements were recorded, with traces of eggshell. Occasional mineralised fly puparia and fragments of ceramic material were recorded.

Most of the residue (dry weight 8.65 kg) was sand; the rest consisted solely of limestone (to 40 mm). A little eggshell remained after sorting. Two earthworm egg capsules were noted during sorting but not extracted.

Biological remains recovered from the residue were few. A little undiagnostic tooth enamel was present amongst the tiny fragments of mammal bone (to 35 mm; 1.6 g); there was also some charcoal (to 12 mm; 0.3 g) and a small quantity of indeterminate snail shell (to 8 mm; 0.3 g). Bird eggshell (to 12 mm; 8 g) was, however, frequent and relatively unfragmented, which suggests minimal exposure to attritional processes. The majority of the magnetised particles (3.4 g) were burnt stone, but occasional hammerscale was also present.

The microfossil 'squash' subsample was mostly inorganic, with a little organic detritus; no identifiable microfossils were seen.

Hand-collected shell

A small quantity (approximately 926 g) of shell was recovered by hand-collection from 21 deposits (one from Phase 2, four from Phase 3, four from Phase 4, six from Phase 5, five from Phase 6 and one from Phase 8; all but the last being Roman in date), with almost one-third of the remains (299.5 g) from Context 242 (upper fill of pit 241; Phase 5); no other deposit gave more than 80.8 g of shell.

The assemblages were mostly very small and composed largely (or exclusively) of oyster (*Ostrea edulis* L.) shell, with occasional records of other edible marine shellfish – common mussel (*Mytilus edulis* L.) from Context 204 (fill of boundary ditch 205; Phase 2), Context 217 (upper fill of well 299; Phase 3), Context 348 (secondary fill of ditch 346; Phase 4) and Context 322 (fill of well 294; Phase 6), and a single common whelk (*Buccinum undatum* (L.)) from Context 164 (upper fill of pit 163; Phase 5). Preservation of the remains was variable, ranging from very poor to good, but overall was rather poor.

Despite the generally rather poor preservation of the oyster shell, all of those remains representing whole valves, or significant portions thereof, could be identified to side, with almost twice as many left valves (24) as right valves (14) recorded. A little over one-third (14) of the valves could provide biometrical data beyond a simple maximum linear dimension (these additional measurements are presented in Table 13, together with those from two oyster valves recovered from analysis sediment samples). Evidence of the oysters having been opened using a knife or similar implement (as shown by characteristic damage to the shell margins) was noted on at least 71% (but perhaps as much as 81%) of the valves (though in some cases such evidence may well have been rendered inconclusive or lost entirely through deterioration of the shell in the ground). Approximately one-fifth (16-24%) of the valves showed fresh breakage presumably caused during recovery of the remains and this too may have destroyed evidence of opening (some of the bags of shell from individual contexts also contained small flakes of shell showing that the valves had disintegrated further post-excavation and, slightly, during recording).

There was no definitive evidence of damage to the oyster valves by other marine biota (e.g. by polychaete worms or dog whelks) but two (from Context 302 – upper fill of pit 301; Phase 3, and Context 322 – fill of well 294; Phase 6) showed small numbers of encrusting barnacles.

The only terrestrial or freshwater mollusc taxa recorded in the hand-collected shell assemblage were shell fragments of two catholic land snail taxa, *Helix ?aspersa* Müller and *Cepaea ?nemoralis* (L.), from Contexts 348 and 164.

Discussion

Preservation of plant macrofossils was principally through charring, with some mineralisation in Context 302, and anoxic waterlogging in Context 181. Rather few ancient remains were present in the vast majority of the deposits and only the assemblages from the eight deposits selected for analysis (all from Roman phases) were subject to detailed recording. The small assemblages of charred cereal remains were generally poorly preserved with vesicular and vitreous distortion and erosion of diagnostic features, such that about half of the grains could not be identified to type; those that were identified were all wheat, and the presence of spelt wheat was confirmed by the diagnostic glume bases in Contexts 302 (Phase 3) and 334 (Phase 4).

Invertebrates (mollusc, insect and other) were present in most of the deposits examined but typically in small numbers and, with the exception of the remains from Context 181 (primary silting of well 152; Phase 3) which were preserved by anoxic waterlogging, the non-molluscan remains were almost certainly modern contaminants or intrusions. The remains of the burrowing snail *Cecilioides acicula* were also probably intrusive and there were some individuals of other (non-burrowing) snail taxa which were somewhat suspiciously well preserved and may have been contaminants. Overall, the concentrations of remains were rather small and only the snail assemblages from seven of the analysis samples (Contexts

177, 204, 214, 302, 329, 333 and 334) and the insect assemblage from Context 181 were investigated in detail.

Marine shellfish remains were noted in 14 of the sampled deposits and recovered by hand-collection from 21 contexts (some of which overlap with the samples) but the quantities were always small and the assemblage as a whole was insufficient for detailed study or interpretation; standard measurements were taken from those oyster valves which were sufficiently well preserved to provide an archive record, however (see Table 13).

The quantities of vertebrate remains recovered from the deposits were also mostly small. Very few remains of domestic animals were recovered (although these are presumably largely represented in the hand-collected assemblage which was not submitted to PRS and is reported elsewhere). For the most part, the remains recovered from the samples were of small mammals and amphibians, with occasional fish and bird bones, and so largely reflect ecological conditions around the site rather than human activities.

No interpretatively valuable microfossils were detected in any of the sampled deposits.

The weights of the residue fractions (over 10 mm, 1 to 10 mm, less than 1 mm) after sorting were recorded to compare the fills of different features and perhaps identify different deposit formation processes (for residue fraction proportions as percentages see Table 1). For example, the residues from pit 271, ditch 231 and the upper fill of ring ditch gully 375 (all from Phase 1) contained a very high percentage of sand (less than 1 mm) and little larger stone (over 10 mm). This indicates a slow, probably natural, accumulation of sediment. The fills of ditches 195 and 205, together with pit 215 (Phase 2), also fit this profile and a similar process was apparent from the sample from the base of pit 225 (Phase 3). The well fills contained a much higher proportion of larger stone, indicating more rapid, probably deliberate, deposition or sudden collapse of the stone linings of the features; this was particularly evident in Sample 6 (Context 173) from well 148 (Phase 4) and the two samples from within well 121 (Phase 2), Contexts 129 and 144, suggested an initial backfilling event or collapse followed by the deposition of finer material, for example. For pit 163 (Phase 5), the primary and upper fills (Contexts 165 and 164, respectively) also showed a marked contrast between the stony material at the base and the later, more sandy, accumulation.

The following text sections present discussions of the analysis of the biological remains by phase.

PHASE 2: ROMAN – MID 1ST TO MID 2ND CENTURY

The assemblage of charred plant macrofossils from Context 204 (fill of boundary ditch 205) comprised limited remains from cultivated cereals. These were principally grain, some of which could be identified as wheat, with a few items of chaff; diagnostic glume bases indicated the use of emmer and/or spelt wheat. These remains are typical components of assemblages from Iron Age and Roman occupation sites throughout Britain (Greig 1991). Caryopses from brome were identified, and these also occur frequently in Iron Age and Roman deposits in Britain (Godwin 1956); this grass is likely to have been growing as an arable weed. Spelt and emmer wheat were typically dried and stored as spikelets, and then hulled on an as needs basis for domestic use (Hillman 1981) and so, in such relatively small quantities, these remains are likely to represent waste from domestic processing. Charcoal fire waste indicated the presence of a mixed woodland resource, with oak, *inter alia*, selected for fuel. Traces of charred rhizomes/tubers may indicate the former burning of turves, either for fuel or the purging of used construction material, roofing, bedding or animal litter (after Hall 2003). Overall, this assemblage was principally fire waste, with limited food remains, together with traces of animal bone (some burnt) and artefactual material, and is likely to represent a background level accumulation of domestic waste associated with habitation.

The single analysis sample for this phase yielded the largest individual assemblage of identifiable mollusc remains (excluding the burrowing land snail *Cecilioides acicula*) studied. The assemblage was of mixed ecological character containing terrestrial taxa which indicated the presence of both open, dry, calcareous, short-turfed grassland (including areas of exposed rock) and more densely vegetated, damper, areas.

There were also a small number of records of aquatic taxa, although all of these were of the dwarf pond snail *Lymnaea truncatula* (or *L. ?truncacula* apex fragments) which is amphibious and actually spends much of the time out of water. Here, it seems probable that the presence of *Lymnaea truncatula* indicates that boundary ditch 205 held shallow standing water intermittently (perhaps seasonally) through the year. The two ecological components of the terrestrial snail assemblage suggest that lightly vegetated areas of open ground and more densely vegetated (damper and more shaded) areas both existed in and around the ditch; indeed it is likely that the open ground taxa reflect areas of habitation or clearance by other human activity and that the other taxa were exploiting cover provided by vegetation growing within the ditch itself (or perhaps in an adjacent hedge or area of waste ground). There were no molluscs present indicative of more substantial vegetation such as woodland in the immediate vicinity of the ditch.

Hand-collected shell was recovered from a single deposit of this phase, Context 204 again, and amounted to just a few grammes of oyster and mussel shell fragments; presumably derived from human food waste imported from the coast but too little to be of any further interpretative value.

PHASE 3: ROMAN – MID TO LATE 2ND CENTURY

Plant macrofossils from Contexts 181 and 302 have been preserved by charring, anoxic waterlogging and mineralisation. The assemblage of charred plant macrofossils from both contexts comprised remains from cultivated food plants, arable weeds and a few wild plant taxa. The cultivated food plant remains derived from cereals and a single pulse (pea/bean). Some of the cereal grains were identified as wheat and the use of spelt wheat was confirmed by the presence of diagnostic glume bases for this type; typical components of Roman occupation assemblages (Greig 1991). The additional presence of pea/bean is unusual and, although not typical for the period, there are Roman records for this economically useful plant (Greig 1991; Godwin 1956). Again, caryopses from brome were identified, a common arable weed during this period. Charcoal fire waste indicated the continued availability of a mixed woodland resource with ash, *inter alia*, selected for fuel. Traces of charred rhizomes/tubers may, again, indicate the burning of turves; the few charred remains from wetland, heath, ruderal and eurytopic taxa may have been components of the turf assemblages.

The waterlogged assemblage in the well fill, Context 181, provided a rich archive of plant macrofossils preserved by anoxic waterlogging. Remains from cultivated species indicated that coriander and flax were growing in the vicinity, either planted deliberately or growing as opportunistic weeds; both species have been previously recorded in Britain at this time (Godwin 1956). The range of arable weed remains suggested some local cultivation, although these may also have derived from opportunistic plants growing in areas of waste ground about the site, having originally been brought in as contaminants, with processed grain. The diverse range of wetland and aquatic taxa are likely to have been directly associated with the well feature, either in surrounding patches of wet ground and standing water, or maybe invading the feature itself if it had fallen into disuse. The woodland species hazel, white bryony and elder are likely to have been growing as scrub in waste areas at the site. A diverse range of ruderal and eurytopic taxa attest to the presence of open and disturbed ground commonly associated with occupation. This deposit also provided the only insect assemblage from the site (albeit small). In isolation, these remains would have been rather few for interpretation but they did provide valuable support for the more abundant evidence from the plant remains as the identifiable component of the assemblage was dominated by obligate aquatics, notably *Ochthebius* sp?p., and at least two plant-feeding weevil taxa (*Otiorhynchus* sp?p. and *Ceutorhynchus* sp?p.).

The assemblage of mineralised plant remains in Context 302 principally comprised kernels from *Prunus* fruitstones, which are often preferentially preserved in cess deposits (Allan Hall pers. comm.). In addition, the mineralised remains from the arable weed species, fool's parsley and field gromwell are likely to have been ingested along with processed cereals; these are two of the larger arable weed structures, and may have collected on the coarse sieve, along with the prime grain (Hillman 1981). The mineralised seeds and nutlets from ruderal and eurytopic taxa may also have been accidentally ingested with food, or they may have been growing locally, and the cast seed collected in the feature and

subsequently mineralised in an open cess deposit. A possible exception maybe the presence of seeds from a member of the nightshade family (Solanaceae); nightshades have traditionally been used medicinally, although generally poisonous (producing hallucinations, coma and sometimes death), they are useful as gastro-intestinal sedatives in controlled doses (Mabey 1996). The presence of mineralised fly puparia provided additional evidence for former cess material.

The small snail assemblage from Context 302 was predominantly of dry, open ground taxa such as *Vallonia* spp., *Cochlicopa ?lubricella* and *Pupilla muscorum*, with some *Trichia ?hispidia* which would suggest ground litter/herbage in a moist and generally well-vegetated place. This is consistent with the surroundings of a pit intended either as a cess pit or for refuse disposal located at the margins of a settlement/dwelling area.

As in the previous phase, neither of the assemblages was suggestive of primary waste disposal, but rather, background level accumulations of domestic debris associated with occupation. The assemblage of mineralised plant macrofossils in Context 302, together with the crushed fish bones recovered, suggested that this fill was from a cess pit (rather than a general rubbish pit). No intestinal parasite eggs, which would have confirmed a faecal component to the deposit, were detected in the 'squash' subsamples but, overall, the evidence from the biological remains, coupled with the relative dearth of artefactual material recovered, favours the interpretation of pit 301 as (principally) a cess pit (although it has clearly also received some input of other waste).

The fragments of larger mammal bone and fish bone from both deposits are likely to have originated as domestic waste (their presence in Context 181 presumably reflecting that well 152 had fallen into disuse), but the frog/toad and small animal/mammal bones will have derived from individuals inhabiting the surrounding area and caught by the features acting as pitfall traps.

Small quantities of marine shellfish were hand-collected from four deposits of this phase Contexts 181, 217, 268 and 302. Almost all of the remains were of oyster valves (an additional valve was recovered from each of the sediment samples from Contexts 181 and 302), with a little mussel shell, and most of the oyster valves showed evidence of having been opened using a knife or similar implement. These remains presumably derive from human food waste but were too few (a total of only six oyster valves and a total shell weight of just 142.9 g) to be of any significant interpretative value. If the oysters were supplied from a cultivated source then the current evidence suggests that they were most likely imported from the Kent, Essex or Suffolk coasts or the Firth of Clyde (Winder 1992 and pers. comm.). However, Kenward (2009) has speculated that exploitation of local (but as yet unlocated) oyster beds may well have been more widespread along the east coast of England. Certain organisms (e.g. *Polydora* spp. polychaete worms) which infest oysters have known preferred habitats, and this can help to identify the source of the oysters, but unfortunately such evidence was lacking from this assemblage. Mussels are widespread around the coast of Britain and are likely to have been imported from nearby beds around The Wash.

PHASE 4: ROMAN – EARLY TO MID 3RD CENTURY

The assemblage of charred plant macrofossils from both deposits of this phase (Contexts 214 and 334, fill of pit 213 and made ground on the north side of the Roman road, respectively) was broadly similar to that recorded for the previous phases: the cereal remains, including spelt wheat, were again typical for the period, with the arable weeds brome and field gromwell. The charcoal fire waste indicated the continuing availability of a local mixed woodland resource, with the selection of ash and oak, *inter alia*, for fuel, and there were also traces of remains possibly deriving from burnt turves. The assemblage of remains from wild plant taxa, from wetland, heath, ruderal and eurytopic habitats, may have been components of turf assemblages, as suggested before (see above). Again, there were no indications for the large-scale disposal of primary waste, although both deposits yielded some bones from domestic mammals, fish bone, bird eggshell and edible marine shellfish, which most likely represent additional food waste, and also some artefactual debris (e.g. pot sherds). The small mammal and amphibian bones will have derived from

individuals living in local habitats, providing evidence of wet ground and standing water (also reflected in the snail assemblage – see below).

The snail assemblages from the deposits were similar to each other and also similar in character to that from Context 302 (see above). Areas of open, lightly vegetated ground (probably cleared for habitation or associated human activity) and damper areas with more vegetation (presumably marginal to the settlement/road) were, again, indicated. Here, however, some *Lymnaea ?truncatula* were also recovered from each deposit, probably indicating that pit 213 held standing water on occasion (most likely not permanently) and that the ground to the north of the Roman road was subject to saturation and probably some degree of flooding; the latter perhaps explains the repeated need to raise the road level reflected in the archaeology.

A single right oyster valve was hand-collected from deposits of this phase (from Context 171, upper fill of well 148), with the remainder of the marine shellfish recovered being oyster and mussel shell fragments from Contexts 214, 245 and 348 (samples from Contexts 214 and 334 each contributed a few additional mussel valve fragments). These remains, again, presumably derive from seafood imported from the coast but were too few for any further study to be worthwhile. Other mollusc remains in the hand-collected shell assemblage were restricted to fragments representing two individuals of the catholic land snail *Helix ?aspersa* and of no interpretative value.

PHASE 5: ROMAN – MID TO LATE 3RD CENTURY AD

The assemblages of charred plant macrofossils from the two deposits examined (Contexts 329 and 333), were broadly similar to those recorded in previous phases, with remains from wheat, indicating the use of emmer and/or spelt wheat, with arable weeds and a few eurytopic taxa. The charcoal fire waste indicated the continuing availability of a local mixed woodland resource, with the selection of oak, *inter alia*, for fuel, and, again, there was trace evidence for possible burnt turves. As before, there were no indications for the large scale disposal of primary waste, but small quantities of bone (from domestic animals) and artefactual remains representing a background level accumulation of occupation debris.

The mollusc assemblages recovered from the sediment samples were of essentially the same composition as those recorded from the Phase 4 deposits and Context 214 (fill of pit 213; Phase 3), with correspondingly similar implications for habitats in the vicinity of the stone lined oven 297 and the made ground to the north of the Roman road. There were only two *?Lymnaea* sp. apex fragments and no other taxa indicative of wet ground or standing water recorded from Context 333, however, which suggests that the raising of the road level had been successful in making this area generally drier when compared with the results from Phase 4 (Context 334 – see above).

Small quantities of marine shellfish were hand-collected from six deposits of this phase Contexts 164, 228, 242, 247, 249 and 250 (with Context 242 providing the largest individual assemblage from the site amounting to 299.5 g). Almost all of the remains were, again, of oyster valves (with a little mussel shell recovered from the samples from Contexts 329 and 333), and most (at least 76%) of the oyster valves showed evidence of having been opened using a knife or similar implement. Context 164 (upper fill of pit 163) also gave remains of another edible shellfish in the form of a single common whelk (whelks, like mussels, are common off the British coast and this individual probably originated from a nearby coastal settlement). Once again, these remains presumably derive from human food waste but were too few (a total of 21 oyster valves and a total shell weight of approximately 528 g) to be of any interpretative value beyond indicating continuing trade with the coast. Terrestrial snails were also present in the hand-collected shell assemblage from Context 164 but all of the remains were of two catholic taxa, *Helix ?aspersa* and *Cepaea ?nemoralis*, and consequently provided no additional information for ecological reconstruction.

PHASE 6: LATE ROMAN – 4TH CENTURY

The charred plant macrofossil assemblage from Context 177 (possible hearth) was very limited, with evidence for the use of cereals and perhaps the burning of turves. Charcoal fire waste indicated the continued availability of a local mixed woodland resource and the selection of oak, *inter alia*, for fuel; the additional presence of a few charred thorns from rose/bramble and blackthorn/hawthorn, typical scrub/hedgerow taxa, may suggest use of materials acquired during an episode of ground clearance, or perhaps a decline in the level of human activity at the site leading to the casual exploitation of a wider range of locally available resources. As before, there were no indications for significant waste disposal, merely background levels of food debris and artefactual remains.

The sediment sample from Context 177 yielded the second largest assemblage of terrestrial and freshwater molluscs seen from deposits at this site and was very similar in character to those from earlier phases (particularly that from Context 204; Phase 2). The implications for local habitats are, therefore, also very much the same as previously (see above).

Small quantities of marine shellfish were hand-collected from five deposits of this phase Contexts 132, 135, 322, 355 and 364. Almost all of the remains were, once again, of oyster valves (with a little mussel shell from Context 322), and most of these showed evidence of having been opened using a knife or similar implement. These remains presumably derive from human food waste but, other than indicating continued trade with the coast, were too few (a total of just 11 oyster valves and a total shell weight of 235.3 g) to be of any further interpretative value.

Retention and disposal

All of the remains recovered should be retained as part of the physical archive for the site.

Archive

All material is currently stored by Palaeoecology Research Services (Unit 4, National Industrial Estate, Bontoft Avenue, Kingston upon Hull), pending return to the excavator, along with paper and electronic records pertaining to the work described here.

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Table 1. The Hoplands, Sleaford, Lincolnshire: Details of sediment samples. Phase 1 = late Iron Age; Phase 2 = Roman – mid 1st to mid 2nd century AD; Phase 3 = Roman – mid to late 2nd century AD; Phase 4 = Roman – early to mid 3rd century AD; Phase 5 = Roman – mid to late 3rd century AD; Phase 6 = late Roman – 4th century AD; [Phase 7 = 4th century AD and later]; Phase 8 = post-Roman. The ‘Sample type’ column denotes assessment samples as ‘/T’ and analysis samples as ‘/T2’ – note that duplicate assessment samples from Context 164 (both Sample 4) and Context 249 (Sample 11 and another with no sample number assigned) were submitted. The ‘Residue fraction proportions’ column shows the division of the dry residue into three fractions, greater than 10 mm, 1 to 10 mm and less than 1 mm, presented in this order from top to bottom (Note: the percentages are rounded to whole numbers and so will occasionally sum to 99% or 101%).

Phase	Context	Sample	Sample type	Context description	Sediment description	Sample size kg/l	Total residue weight /g	Residue fraction proportions
	109	-	/T	Secondary fill of pit 108	Moist, mid yellow-brown to mid to dark grey-brown, crumbly (working slightly soft), silty sand, with stones (2 to 60 mm) and pot sherds present	1/0.6	436	11 % 21 % 68 %
	230	24	/T	Fill of ditch 231	Moist, mostly mid to dark grey-brown (with some areas of mid yellow-brown), crumbly (working soft), silty sand, with stones (2 to 60 mm) present	1.5/1	713	8 % 16 % 76 %
1	270	17	/T	Fill of pit 269	Wet, mid yellow-brown to mid grey-brown (with frequent small patches of mid orange-brown – possible root trace), slightly silty sand, with stones (2 to 20 mm) present	2.4/1.25	1239	20 % 26 % 54 %
	272	18	/T	Fill of pit 271	Wet, mid yellow-brown to mid grey-brown, soft (working very soft), silty sand, with stones (2 to 20 mm) present	2.3/1	892	4 % 13 % 83 %
	378	19	/T	Upper fill of ring gully 375	Moist, mostly mid to dark grey-brown (occasionally mid to dark yellow-brown), crumbly to unconsolidated (working crumbly and somewhat soft), slightly silty sand, with stones (2 to 20 mm) present	3/1.75	1266	6 % 11 % 83 %
2	129	1	/T	Fill of well 121	Moist to wet, mid grey-brown to mid yellow-brown, soft, sandy silt, with abundant small stones (2 to 6 mm), larger stones (6 to 20 mm) common and larger again stones (20 to 60 mm) present	2/1.25	911	8 % 28 % 65 %
	144	2	/T	Fill of well 121 behind stone lining 141	Wet, light to mid yellow-orange-brown, unconsolidated, sand, with abundant stones (2 to over 60 mm)	2.6/1	2030	27 % 33 % 40 %

Phase	Context	Sample	Sample type	Context description	Sediment description	Sample size kg/l	Total residue weight /g	Residue fraction proportions
	196	21	/T	Fill of ditch 195	Moist, light to mid yellow-brown to mid grey-brown, crumbly to unconsolidated (working somewhat soft), silty sand, with stones (2 to 60 mm) present	1.7/1.25	781	7 % 17 % 75 %
	204	22	/T	Fill of boundary ditch 205	Moist, light to mid yellow-brown to mid grey-brown (with a slight olive cast), crumbly to soft (working soft), silty sand, with stones (2 to 60 mm) present	2.2/1.5	1033	4 % 18 % 78 %
			/T2					4 % 19 % 77 %
	206	23	/T	Fill of possible pit or ditch terminus 207	Moist, mid yellow-brown to mid grey-brown, soft, silty sand (some areas predominantly silt), with stones (2 to 20 mm) present	1.7/1	806	12 % 29 % 59 %
	216	-	/T	Fill of pit 215	Moist, mid yellow-brown to mid grey-brown, crumbly to unconsolidated (working somewhat soft), slightly silty sand, with stones (2 to 20 mm) present	1.6/1	702	3 % 20 % 77 %
3	155	9	/T	Fill of well 152	Moist, mostly mid grey-brown (with some areas of light to mid yellow-brown), soft and slightly crumbly (working soft), sandy silt, with stones (2 to 20 mm) present	1.7/1.25	695	8 % 28 % 64 %
	181	10	/T	Primary silting of well 152	Wet, mix of mid to dark brown to grey-brown fine and coarse herbaceous and woody detritus, amorphous organic sediment and light to mid yellow-brown silty sand	2.6/1	1280	17 % 25 % 58 %
			/T2					37 % 19 % 44 %
	226	-	/T	Re-deposited natural in base of pit 225	Moist, mid to dark grey-brown, crumbly (working soft), sandy silt, with some very thin layers of yellow-brown sand and stones (20 to 60 mm) present	2.3/1.75	977	3 % 8 % 88 %
	302	20	/T	Fill of pit 301	Moist, mid grey-brown, unconsolidated (working slightly soft), slightly silty sand, with	2.3/1.75	1209	8 % 37 %

Phase	Context	Sample	Sample type	Context description	Sediment description	Sample size kg/l	Total residue weight /g	Residue fraction proportions	
4			/T2		stones (2 to 60 mm) common and larger stones (over 60 mm) present	27/25	16551	55 % 14 % 40 % 46 %	
		332	-	/T	Bedding layer for wall 335	2.5/1.5	1445	9 % 24 % 67 %	
		173	6	/T	Fill within shaft of well 148	1.3/1	716	41 % 22 % 37 %	
				/T				9 %	
		214	25		Fill of pit 213	2.3/1.5	1019	20 % 71 %	
				/T2			20/16	10655	6 % 24 % 70 %
		245	26	/T	Fill of pit 244	2.4/1.75	1019	6 % 29 % 66 %	
				/T			2.2/1.5	978	6 % 28 % 66 %
		334	29		Made ground on northern side of Roman road		39/28	21169	11 % 27 % 62 %
		327	31	/T	Fill of well 294	1.7/1	1126	19 % 30 % 51 %	
		328	32	/T	Fill of well 294	1.4/1	814	18 % 30 % 53 %	
	5	164	4	/T	Upper fill of pit 163	Moist, mostly mid grey-brown (with some areas of light to mid yellow-brown), crumbly	2/1.5	890	1 % 48 %

Phase	Context	Sample	Sample type	Context description	Sediment description	Sample size kg/l	Total residue weight /g	Residue fraction proportions
	151	3	/T	Secondary fill of drain 149	Moist, mid grey-brown, crumbly (working soft), sandy silt, with small stones (2 to 6 mm) present	1.6/1.25	605	67 % 5 % 43 % 52 %
6	177	8	/T	Possible hearth	Moist, mid yellow-brown to mid grey-brown, crumbly (working soft), silty sand, with small lumps of mid to dark red-brown silty sand mixed with charcoal and ash (some with layers of pale buff/cream) and stones (2 to 20 mm) present	2/1.5	787	3 % 23 % 74 %
			/T2				20/17	8650
	284	13	/T	Spread of heat affected clay	Moist, mid to dark grey-brown to mid to dark yellow-brown, crumbly to unconsolidated (working crumbly and somewhat soft), silty sand	3/2	1385	18 % 24 % 58 %
8	101	-	/T	'Dark earth' layer	Just moist, mid to dark grey-brown, crumbly (working somewhat soft), sandy silt (?humic or fine charred content present).	1.7/1.5	780	*

* - residue fraction proportions were not recorded for the assessment sample from Context 101 as this was an initial investigation sample collected during the first advisory site visit and the recording protocol had not yet been established.

Table 2. The Hoplands, Sleaford, Lincolnshire: Semi-quantitative records of organic and artefactual remains recovered from the initial 'assessment' samples (includes material from both the residues and the washovers). Key: '+' = present (1-3); '++' = occasional (4-20); '+++ = common (21-50); '++++' = abundant (51-200); '+++++' = super-abundant (201+); 'H'scale' = hammerscale; 'MM' = medium-sized mammal (assumed to be sheep/goat, pig or small cervid); 'indet.' = indeterminate.

Phase	Context	Sample	Finds	Burnt stone	Slag	H'scale (no. of frags)	Molluscs	Insects and other non-mollusc invertebrates	Marine shellfish	Large mammal bone	Small vertebrates	Charcoal	Seeds/grain	Other
1	109	-	Pot (55 g, >20 sherds, two fabrics)	-	-	>80	<i>Cecilioides acicula</i> ++ <i>Trichia</i> sp. +	-	-	MM scapula fragment +	small ?bird +	+++	-	-
1	230	24	Pot x 1	-	-	>100	<i>Cecilioides acicula</i> ++ <i>Trichia</i> ? <i>hispid</i> a + ? <i>Lymnaea truncatula</i> +	-	-	-	-	+	-	eggshell +
1	270	17	-	-	-	>50	Slug plates +	-	-	-	-	-	-	eggshell +
1	272	18	Pot x 5	-	-	>130	-	-	-	indet. +	-	-	-	-
1	378	19	Pot x 1	-	-	>60	-	-	-	-	-	-	-	-
2	129	1	pot x 1 cbm x 1	+	-	>30	<i>Cochlicopa</i> ? <i>lubrica</i> + <i>Trichia</i> sp. + <i>Vitrea crystallina</i> or <i>contracta</i> +	-	mussel +	indet. +	amphibian + ?fish + rodent +	+	charred grain +	-
2	144	2	-	-	-	-	-	-	-	-	-	-	-	-
2	196	21	-	++	-	>100	<i>Cecilioides acicula</i> ++ <i>Cochlicopa</i> sp. + <i>Trichia</i> ? <i>hispid</i> a + <i>Vertigo</i> sp. +	-	mussel +	MM rib and indet. frags ++	immature frog/toad +	+++	grain +	-
2	204	22	-	+	-	>100	<i>Cecilioides acicula</i> + <i>Cochlicopa</i> sp. + <i>Pupilla muscorum</i> + <i>Trichia</i> ? <i>hispid</i> a + <i>Vallonia costata</i> + <i>Vertigo</i> sp. +	-	mussel +	indet. frags, mostly calcined +	fish (rib/fin ray) +	+++	-	eggshell +
2	206	23	-	-	-	>5	Pupillidae + <i>Trichia</i> sp. + <i>Vallonia costata</i> + <i>Vertigo</i> sp. + ? <i>Lymnaea truncatula</i> +	-	-	indet. +	-	++	grain, (puffed) +	-
2	216	-	Pot x 1 (Samian)	-	-	>140	<i>Cecilioides acicula</i> ++ <i>Trichia</i> ? <i>hispid</i> a ++ <i>Vallonia</i> ? <i>excentrica</i> +	-	-	indet. (occasionally calcined) +	-	++	grain (puffed) ++	-

Phase	Context	Sample	Finds	Burnt stone	Slag	H'scale (no. of frags)	Molluscs	Insects and other non-mollusc invertebrates	Marine shellfish	Large mammal bone	Small vertebrates	Charcoal	Seeds/grain	Other
3	155	9	cbm x 2	+	-	>50	+++ (mostly <i>Cecilioides acicula</i> – intrusive)	-	mussel +	inc. calcined fragment +	frog/toad +	+++	-	-
3	181	10	cbm x 1	-	-	>10	++ (mostly fragments but inc. <i>?Lymnaea</i> sp. – aquatic/water margin taxa)	insect fragments inc. occasional beetle sclerites +; earthworm egg capsules +	-	indet. ++	small rodent inc. murid ++ <i>?fish bone</i> +	++	+++ (inc. charred glume base cf. spelt wheat, and waterlogged brassica and weed seeds)	eggshell +
3	226	-	-	-	-	>200	<i>Cecilioides acicula</i> + <i>Trichia ?hispidia</i> + <i>Cochlicopa ?lubrica</i> + <i>Vallonia ?excentrica</i> +	-	-	indet +	-	++	-	eggshell +
3	302	20	Pot x 3, <i>?mortar</i> x 1	-	-	>80	<i>Cecilioides acicula</i> +++ <i>Pupilla muscorum</i> + Pupillidae + <i>?Trichia</i> sp. + <i>Vallonia excentrica</i> + snail eggs	fly puparium +	-	indet. +	frog/toad ++ <i>Sorex</i> sp ++ unidentified bird ++ fish bone ++ (fin rays and ribs, 1 x vert, crushed)	+++	grain, chaff ++	<i>?cess</i> concretions ++
3	332	-	-	-	-	1	Pupillidae +	-	-	-	-	+	-	-
4	173	6	pot x 2 cbm x 1	-	-	>10	++ (mostly unid fragments but inc. <i>Vallonia ?excentrica</i>)	+ (inc. beetle fragments)	mussel +	indet. +	frog (<i>Rana temporaria</i>) ++ small rodent +	+++	-	eggshell +
4	214	25	-	+	x 1 (5 g)	>130	<i>Cecilioides acicula</i> ++ <i>Cochlicopa</i> sp. + <i>Pupilla muscorum</i> + <i>Trichia ?hispidia</i> + <i>Vallonia costata</i> + <i>Vallonia ?excentrica</i> +	-	mussel + <i>?barnacle</i> +	sheep/goat +; indet. frags inc. some calcined ++	frog/toad + small mammal +	++	-	eggshell +
4	245	25	Pot x 2, fired earth/CBM x 1	-	-	>70	<i>Cecilioides acicula</i> + <i>Vallonia ?excentrica</i> + <i>Vertigo</i> sp. + Pupillidae +	-	oyster + mussel +	MM ++ (rib and skull frags)	small rodent ++	++	grain (puffed) +	eggshell ++

Phase	Context	Sample	Finds	Burnt stone	Slag	H'scale (no. of frags)	Molluscs	Insects and other non-mollusc invertebrates	Marine shellfish	Large mammal bone	Small vertebrates	Charcoal	Seeds/grain	Other
4	334	29	Pot x 1	-	-	>90	<i>Cochlicopa</i> sp. + <i>Cochlicopa ?lubrica</i> + <i>Pupilla muscorum</i> + Pupillidae + <i>Vallonia costata</i> + <i>Vallonia ?excentrica</i> ++ <i>Vertigo</i> sp?p ++	-	-	indet ++	-	+	-	-
5	164	4	-	-	x 1 (8 g, glassy)	>40	<i>Cecilioides acicula</i> +++ <i>Trichia ?hispida</i> + <i>?Vallonia</i> sp. +	-	oyster + mussel +	indet. ++	immature frog/toad +	++	charred grain plus possible chaff +	eggshell +
5	164	4	-	+	-	>80	<i>Cecilioides acicula</i> ++ <i>Cochlicopa</i> sp. + <i>Cochlicopa ?lubricella</i> + <i>Pupilla muscorum</i> + <i>Trichia ?hispida</i> ++ <i>Vallonia costata</i> + <i>Vallonia ?excentrica</i> + snail eggs +	-	-	indet. +	-	++	-	eggshell +
5	165	27	Pot x 1	-	-	>70	<i>C. acicula</i> ++ <i>Cochlicopa</i> sp. ++ <i>Cochlicopa ?lubrica</i> + <i>?Oxychilus</i> sp. + <i>Pupilla muscorum</i> + (?mod) <i>Trichia ?hispida</i> +++ <i>Vallonia excentrica</i> ++ (some modern) snail eggs +	-	-	sheep/goat (incisor) +	-	++	-	-
5	247	-	Fired earth x 1, CBM x 1	-	-	>80	<i>Cecilioides acicula</i> + <i>Trichia ?hispida</i> + <i>Vallonia ?excentrica</i> + (?modern)	-	mussel +	sheep/goat ++	small mammal +	++	grain, (puffed) + nutshell (<i>Corylus avellana</i>) + uncharred seeds +	eggshell ++
5	249	-	Pot x 1	-	-	>100	<i>?Trichia</i> sp. +	-	-	indet. +	frog/toad +	+++	grain (puffed) +	eggshell +
5	249	11	Pot x 1	-	-	>80	<i>Trichia</i> sp. ++	-	mussel +	indet. (one	-	+++	+	eggshell +

Phase	Context	Sample	Finds	Burnt stone	Slag	H'scale (no. of frags)	Molluscs	Insects and other non-mollusc invertebrates	Marine shellfish	Large mammal bone	Small vertebrates	Charcoal	Seeds/grain	Other
										charred) +			(x 1, broken)	
5	250	-	-	-	-	>180	<i>Cecilioides acicula</i> + <i>Trichia ?hispid</i> ++ (some ?modern) <i>Vallonia costata</i> +	-	-	++ (some calcined)	immature frog/toad +	++	-	eggshell +
5	295	16	-	-	-	>70	-	-	-	-	-	-	-	chicken-sized bird +
5	329	30	Pot x 3	++	-	>20	<i>Vallonia</i> sp. + Slug plates +	-	mussel +	MM + indet. frags ++	-	-	-	eggshell +
5	333	28	-	-	-	>10	<i>Carychium ?minimum</i> + <i>Cecilioides acicula</i> ++ <i>Cochlicopa</i> sp. ++ <i>Cochlicopa lubrica</i> + <i>Oxychilus</i> sp. + <i>Trichia ?hispid</i> ++ <i>Vallonia costata</i> ++ <i>Vallonia excentrica</i> + <i>?Lymnaea truncatula</i> +	ostracods ++	-	-	-	-	-	-
6	151	3	pot x 1	-	x 2 (5 g)	>100	+++ (mostly <i>Cecilioides acicula</i> – intrusive)	-	oyster +	indet. ++	frog/toad + reptile + small mammal +	+++	grain (charred) +	eggshell +
6	177	8	-	-	x 3 (2 g)	>80	<i>Cecilioides acicula</i> +++ <i>Cochlicopa</i> sp. + <i>Vallonia</i> sp. + <i>Vertigo</i> sp?p. + succineid +	-	-	indet. +	-	+++	-	eggshell +
6	284	13	-	+++	-	>130	-	-	mussel +	indet. ++	rodent + indet. fish +	-	-	eggshell +
6	327	31	-	-	-	>100	<i>Cochlicopa</i> sp. + <i>Trichia</i> sp. + <i>Vallonia costata</i> + <i>Vallonia excentrica</i> +	-	-	-	-	++	+ (grain, seed, poss. glume base frag.)	-
6	328	32	-	-	-	>70	<i>Pupilla muscorum</i> + <i>Vallonia costata</i> +	-	-	indet. +	amphibian +	++	+ (grain,	-

Phase	Context	Sample	Finds	Burnt stone	Slag	H'scale (no. of frags)	Molluscs	Insects and other non-mollusc invertebrates	Marine shellfish	Large mammal bone	Small vertebrates	Charcoal	Seeds/grain	Other
													seeds)	
8	101	-	-	-	-	? (1.3 g)	<i>Cecilioides acicula</i> ++++ <i>Trichia ?hispida</i> ++ <i>Vallonia</i> sp?p ++ <i>Vertigo ?pygmaea</i> +	earthworm egg capsules (mod) + juvenile woodlice (mod) +	?mussel +	indet. +	-	+	charred grain +	eggshell +

Table 3. The Hoplands, Sleaford, Lincolnshire: Microfossil 'squash' subsamples.

Phase	Context	Sample	Context description	Microfossil 'squash' description
1	109	-	Secondary fill of pit 108	Almost entirely inorganic, with a trace of organic detritus; no identifiable microfossils seen
1	230	24	Fill of ditch 231	Almost entirely inorganic, with a trace of organic detritus; no identifiable microfossils seen
1	270	17	Fill of pit 269	Almost entirely inorganic, with a trace of organic detritus; no identifiable microfossils seen
1	272	18	Fill of pit 271	Almost entirely inorganic, with a trace of organic detritus; no identifiable microfossils seen
1	378	19	Upper fill of ring gully 375	Almost entirely inorganic, with a trace of organic detritus; no identifiable microfossils seen
2	129	1	Fill of well 121	Almost entirely inorganic, with a trace of organic detritus; no identifiable microfossils seen
2	144	2	Fill of well 121 behind stone lining 141	Almost entirely inorganic, with a trace of organic detritus (including occasional plant tissue fragments); no identifiable microfossils seen
2	196	21	Fill of ditch 195	Almost entirely inorganic, with a trace of organic detritus; no identifiable microfossils seen
2	204	22	Fill of boundary ditch 205	Almost entirely inorganic, with a trace of organic detritus; no identifiable microfossils seen
2	206	23	Fill of possible pit or ditch terminus 207	Almost entirely inorganic, with a trace of organic detritus; no identifiable microfossils seen
2	216	-	Fill of pit 215	Almost entirely inorganic, with a trace of organic detritus; no identifiable microfossils seen
3	155	9	Fill of well 152	Mostly inorganic, with a little organic detritus; no identifiable microfossils seen
3	181	10	Primary silting of well 152	Approximately equal parts inorganic and organic detritus, with some plant tissue fragments and a few fungal hyphae; no identifiable microfossils seen
3	226	-	Re-deposited natural in base of pit 225	Almost entirely inorganic, with a trace of organic detritus; no identifiable microfossils seen Mostly inorganic, with some organic detritus (appears mineralised) and few fungal hyphae; a second 'squash' subsample taken from possible cess concretions within the processed sediment sample residue contained some mineralised plant tissue fragments; no identifiable microfossils were seen in either of the 'squashes'
3	302	20	Fill of pit 301	Almost entirely inorganic, with a trace of organic detritus; no identifiable microfossils seen
3	332	-	Bedding layer for wall 335	Almost entirely inorganic, with a trace of organic detritus; no identifiable microfossils seen
4	173	6	Fill within shaft of well 148	Mostly inorganic, with a little organic detritus; no identifiable microfossils seen
4	214	25	Fill of pit 213	Wholly inorganic; no identifiable microfossils seen
4	245	26	Fill of pit 244	Almost entirely inorganic, with a trace of organic detritus; no identifiable microfossils seen
4	334	29	Made ground on northern side of Roman road	Almost entirely inorganic, with a little organic detritus; no identifiable microfossils seen
5	164	4	Upper fill of pit 163	Mostly inorganic, with some organic detritus; no identifiable microfossils seen
5	165	27	Primary fill of pit 163	Almost entirely inorganic, with a trace of organic detritus; no identifiable microfossils seen
5	247	-	Fill of pit 246	Almost entirely inorganic, with a trace of organic detritus; no identifiable microfossils seen
5	249	11	Primary fill of pit 248	Almost entirely inorganic, with a trace of organic detritus; no identifiable microfossils seen
5	250	-	Secondary fill of pit 248	Almost entirely inorganic, with a trace of organic detritus; no identifiable microfossils seen
5	295	16	Upper fill of oven 297	Almost entirely inorganic, with a trace of organic detritus; no identifiable microfossils seen
5	329	30	Fill of oven 297	Almost entirely inorganic, with a trace of organic detritus; no identifiable microfossils seen
5	333	28	Made ground on north side of Roman road	Almost entirely inorganic, with a trace of organic detritus; no identifiable microfossils seen
6	151	3	Secondary fill of drain 149	Almost entirely inorganic, with a little organic detritus including a few plant tissue fragments; no identifiable microfossils seen
6	177	8	Possible hearth	Mostly inorganic, with a little organic detritus; no identifiable microfossils seen

Phase	Context	Sample	Context description	Microfossil 'squash' description
6	284	13	Spread of heat affected clay	Almost entirely inorganic, with a trace of organic detritus; no identifiable microfossils seen
6	327	31	Fill of well 294	Almost entirely inorganic, with a trace of organic detritus; no identifiable microfossils seen
6	328	32	Fill of well 294	Almost entirely inorganic, with a trace of organic detritus; no identifiable microfossils seen
8	101	-	'Dark earth' layer	Almost entirely inorganic, with a trace of organic detritus; no identifiable microfossils seen

Table 4. The Hoplands, Sleaford, Lincolnshire: Plant remains from the washovers from analysis samples, with notes on other components. Key: ‘+’ = present (1-3); ‘++’ = occasional (4-20); ‘+++’ = common (21-50); ‘++++’ = abundant (51-200); ‘+++++’ = super-abundant (201+); ‘ch’ = charred ancient remains; ‘w/l’ = ancient remains preserved by waterlogging; ‘m’ = ancient remains preserved by mineralisation. Scores presented in round brackets denote records within the finest washover fraction (0.3 to 2 mm), numerals are raw count data.

Phase				2	3	4	5	6			
Context				204	181	302	214	334	329	333	177
Sample				22/T2	10/T2	20/T2	25/T2	29/T2	30/T2	28/T2	8/T2
Context type				fill of boundary ditch 205	primary silting of well 152	fill of cess/rubbish pit 301	fill of pit 213	made ground on N side of Roman road	fill of stone lined oven 297	made ground on N side of Roman road	possible hearth
processed subsample size (kg/litres)				22/18	45/26	27/25	20/16	39/28	14/10	36/18	20/17
material remaining (ml)				~50	~50	~50	~50	~50	~50	~50	~50
residue size (g)	dry			10471	25000	16551	10655	21169	6245	17086	8650
washover volume (ml)	dry			60	-	100	30	50	130	20	110
washover volume (ml)	wet			-	250	-	-	-	-	-	-
material suitable for radiocarbon dating				cereal grain	cereal grain	cereal grain	cereal grain	cereal grain	cereal grain	cereal grain	ch non-oak roundwood
Plant remains											
Cultivated and associated plants											
Cereals											
<i>Triticum spelta</i> L.	spelt wheat	glume base	ch	-	-	6	-	2	-	-	-
<i>Triticum dicoccum</i> Schübl./ <i>T. spelta</i> L.	emmer/spelt wheat	glume base	ch	1	-	8	-	-	1	-	-
		spikelet fork	ch	-	1	5	-	-	-	-	-
<i>Triticum</i>	wheat	caryopsis	ch	8	2	19	10	16	1	1	-
Cerealia indeterminate	cereal	caryopsis	ch	6	3	11	10	26	2	1	1
Legumes											
<i>Pisum/Vicia</i>	pea/bean	seed	ch	-	1	-	-	-	-	-	-
Other											
<i>Coriandrum sativum</i> L.	coriander	mericarp	w/l	-	+	-	-	-	-	-	-
<i>Linum usitatissimum</i> L.	flax	seed	w/l	-	(+)	-	-	-	-	-	-
Arable weeds											
<i>Aethusa cynapium</i> L.	fool’s parsley	mericarp	w/l	-	(+)	-	-	-	-	-	-
			m	-	++	1	-	-	-	-	-
<i>Agrostemma githago</i> L.	corncockle	seed	w/l	-	+	-	-	-	-	-	-

Phase				2	3	4	5	6			
Context				204	181	302	214	334	329	333	177
Sample				22/T2	10/T2	20/T2	25/T2	29/T2	30/T2	28/T2	8/T2
<i>Betula</i>	birch	fruit	u	-	-	+	-	-	-	-	-
<i>Bryonia dioica</i> Jacq.	white bryony	seed	w/l	-	+	-	-	-	-	-	-
<i>Corylus avellana</i> L.	hazel	nutshell / fragment	w/l	-	++	-	-	-	-	-	-
<i>Prunus domestica</i> L.	plum	kernal	m	-	-	10	-	-	-	-	-
<i>Rubus fruticosus</i> agg.	blackberry	fruitstone	u	-	-	-	-	-	+	-	-
<i>Rubus idaeus</i> L.	raspberry	fruitstone	u	+	-	-	-	-	-	-	-
<i>Sambucus nigra</i> L.	elder	fruit	w/l	-	++(+)	-	-	-	-	-	-
			u	+	-	+	+	-	+	+	+
Heath (including moorland and mountain) taxa											
<i>Danthonia decumbens</i> (L.) DC.	heath-grass	caryopsis	ch	-	-	-	-	1	-	-	1
<i>Rumex acetosella</i> L.	sheep's sorrel	achene	ch	-	-	1	-	-	-	-	-
Ruderal (wasteland and disturbed ground) taxa											
<i>Agrimonia eupatoria</i> L.	agrimony	false fruit	w/l	-	+	-	-	-	-	-	-
<i>Arrhenatherum elatius</i> (L.) P. Beauv. ex J. & C. Presl var. <i>bulbosum</i> (Willd.) St-Amans	onion couch	tuber	ch	-	1	-	-	-	-	-	-
<i>Arctium</i>	burdock	achene	w/l	-	+	-	-	-	-	-	-
<i>Galeopsis speciosa</i> Mill./ <i>G. tetrahit</i> L.	hemp-nettle	nutlet	w/l	-	+	-	-	-	-	-	-
<i>Galium aparine</i> L.	cleavers	seed	ch	-	+	-	-	1	-	-	-
<i>Hyoscyamus niger</i> L.	henbane	seed	w/l	-	(+)	-	-	-	-	-	-
<i>Papaver</i>	poppies	seed	w/l	-	(+)	-	-	-	-	-	-
<i>Persicaria maculosa</i> Gray	redshank	nutlet	m	-	-	1	-	-	-	-	-
<i>Plantago lanceolata</i> L.	ribwort plantain	seed	ch	-	-	1	-	-	-	-	-
<i>Polygonum aviculare</i> L.	knotgrass	nutlet	w/l	-	+	-	-	-	-	-	-
			m	-	-	1	-	-	-	-	-
<i>Potentilla anserina</i> L.	silverweed	achene	w/l	-	(+)	-	-	-	-	-	-
<i>Solanum</i>	nightshades	seed	m	-	-	3	-	-	-	-	-
<i>Stellaria media</i> (L.) Vill.	common chickweed	seed	w/l	-	(+)	-	-	-	-	-	-
<i>Urtica dioica</i> L.	common nettle	achene	w/l	-	(+)	-	-	-	-	-	-
Eurytopic taxa											
Asteraceae	daisy family	achene	w/l	-	(+)	-	-	-	-	-	-
<i>Atriplex/Chenopodium</i>	orache/ goosefoot	seed	ch	-	-	-	-	-	1	-	-
			w/l	-	+(+)	-	-	-	-	-	-

Phase				2	3	4	5	6			
Context				204	181	302	214	334	329	333	177
Sample				22/T2	10/T2	20/T2	25/T2	29/T2	30/T2	28/T2	8/T2
			m	-	-	3	-	-	-	-	-
<i>Carduus/Cirsium</i>	thistle	achene	w/l	-	+(+)	-	-	-	-	-	-
Caryophyllaceae	pink family	seed	w/l	-	+	-	-	-	-	-	-
Fabaceae	pea family	seed	u	-	-	-	-	-	+	-	-
<i>cf. Geum</i>	aven	achene	w/l	-	+	-	-	-	-	-	-
Lamiaceae	dead-nettle family	nutlet	w/l	-	(+)	-	-	-	-	-	-
Poaceae	grass family	caryopsis	ch	-	-	1	1	-	1	-	-
			u	-	-	-	-	+	-	-	-
			m	-	-	1	-	-	-	-	-
<i>Potentilla</i>	cinquefoils	achene	m	-	-	2	-	-	-	-	-
cf. Primulaceae	primrose family	seed	w/l	-	+	-	-	-	-	-	-
<i>Ranunculus</i> subg. <i>Ranunculus</i>	buttercup	achene	ch	-	+	-	-	-	-	-	-
			w/l	-	++(+)	-	-	-	-	-	-
<i>Rumex</i>	dock	nutlet	ch	-	-	1	-	-	-	1	-
Indeterminate		seed	ch	-	-	1	-	-	1	-	-
Indeterminate		seed	w/l	-	+(+)	-	-	-	-	-	-
Indeterminate		seed	u	-	-	+	-	-	+	-	-
Other botanical remains											
bark	undifferentiated		w/l	-	+++	-	-	-	-	-	-
buds	undifferentiated		ch	-	+	-	-	-	-	-	-
			w/l	-	++	-	-	-	-	-	-
mosses	undifferentiated		u	+	-	-	-	-	-	-	-
rhizomes/tubers	undifferentiated		ch	+	++	-	+	++	++	-	-
root material			u	+++	-	++	+++	++++	++	+++	-
thorns (<i>Rosa/Rubus</i>)	rose/bramble		ch	-	-	-	-	-	-	-	+
thorns (<i>Prunus spinosa/Crataegus monogyna</i>)	blackthorn/hawthorn		ch	-	-	-	-	-	-	-	+
			w/l	-	-	-	-	-	-	-	+
vegetative material	indeterminate		u	+	-	-	-	-	+	+	-
wood fragments	undifferentiated		w/l	-	+++	-	-	-	-	-	-
Charcoal											
condition				good	poor	moderate	moderate	moderate	moderate	moderate	good
charcoal (macroscopic <2mm)				++++	+	+++	+++	+++	+++++	++	++++
number of fragments 2-4 mm				++++	+	++	++	++	+++	+	++++
number of fragments >4 mm				+++	+	++	++	++	+++	-	++++

Phase				2	3	4	5	6			
Context				204	181	302	214	334	329	333	177
Sample				22/T2	10/T2	20/T2	25/T2	29/T2	30/T2	28/T2	8/T2
species present											
<i>Alnus/Corylus</i>	alder/hazel	stemwood		-	-	-	-	-	-	-	-
		roundwood		-	-	-	-	-	-	-	-
<i>Fraxinus excelsior</i> L.	ash	stemwood		-	-	y	y	-	-	-	-
<i>Quercus</i>	oak	stemwood		-	-	-	-	y	y	-	y
		roundwood		y	-	-	y	y	-	-	y
diffuse porous taxa	undifferentiated	stemwood		y	-	y	-	y	y	y	y
		roundwood		y	-	-	y	y	y	-	y
		indeterminate		y	-	y	y	y	y	y	y
undifferentiated with evidence of wood-boring beetles				-	-	y	-	y	y	-	y
Other remains											
Animal remains											
Acarina	mites		w/l	-	(+)	-	-	-	-	-	-
ants (Formicidae)	undifferentiated		u	-	-	+	-	-	-	++	+
bone	indeterminate fragments			-	+	++	-	+	+	-	-
bone	frog/toad			+	-	++	-	-	-	-	-
bone	small animal			+	-	++	+	+	-	-	+
bone (calcined)	small mammal			-	-	-	-	-	-	-	-
bone	small mammal			-	-	++	-	-	-	-	+
bone (burnt)	indeterminate fragments			+	+	-	-	-	+	-	-
bone (calcined)	indeterminate fragments			-	-	-	-	-	++	-	-
Diplopoda	millipedes		u	-	-	+	-	-	-	-	-
earthworm	egg capsules		w/l	-	++	-	-	-	-	-	-
earthworm	egg capsules		u	-	-	-	+	+	++	++	+
earthworm	egg capsules		m	-	-	+++	-	-	-	-	-
earthworm	egg capsules (<1mm)		u	-	-	-	+++	++	++	++	++
eggshell	fragments			-	-	-	-	-	-	-	+
fish bone	eel (<i>Anguilla anguilla</i> (L.))	vertebra		-	-	-	-	-	+	-	-
fish bone	undifferentiated	vertebra (chewed)		-	-	-	-	+	-	-	-
fish bone	indeterminate fragments			-	-	+	-	+	-	-	++
fly puparia	undifferentiated		w/l	-	++	-	-	-	-	-	-
fly puparia	undifferentiated		m	-	-	+	-	-	-	-	++
insect remains	undifferentiated		u	-	+	+	-	+	++	+	-

Phase				2	3	4	5	6			
Context				204	181	302	214	334	329	333	177
Sample				22/T2	10/T2	20/T2	25/T2	29/T2	30/T2	28/T2	8/T2
mollusc shell (terrestrial/freshwater)	undifferentiated	entire/fragments		+++++	+	+++++	++++	++++	+++	+++	+++++
mollusc (terrestrial/freshwater)	undifferentiated	eggs		-	-	+	+	+	+	+	++
Ostracoda (freshwater crustaceans)	undifferentiated			-	-	-	-	+	+	-	-
Artefactual and inorganic material											
ceramic material				+	-	-	-	-	+	-	++
coal				-	-	+	-	++	+	+	-
cinder				+	-	-	-	-	-	+	+
clay/daub				-	-	-	-	-	+	-	-
hammerscale (spheriodal)				-	-	-	-	-	-	+	-
mortar/plaster/lime				-	-	-	-	-	+	-	-
nodules (?fungal)			m	-	-	1	-	-	-	-	-
semi-vitrified fuel waste				+	-	-	++	+	++	+	+

Table 5. The Hoplands, Sleaford, Lincolnshire: Mollusc remains from the washovers from analysis samples. Key: f – few (up to 3 individuals); s – some (4 to 20 individuals); m – many (21-50 individuals); v – very many (50-200 individuals); v+ – more than very many (201+ individuals). Figures are counts of minimum numbers of individuals represented. Nomenclature and taxonomic order of presentation follows Kerney (1999).

Phase	2	3		4		5		6
Context	204	181	302	214	334	329	333	177
Sample	22/T2	10/T2	20/T2	25/T2	29/T2	30/T2	28/T2	8/T2
Context description	fill of boundary ditch 205	primary silting of well 152	fill of ?cess/ rubbish pit 301	fill of pit 213	made ground on N side of Roman road	fill of stone lined oven 297	made ground on N side of Roman road	possible hearth
Processed sample size kg /litres	22/18	45/26	27/25	20/16	39/28	14/10	36/18	20/17
<i>Carychium ?minimum</i> Müller	1					3		6
<i>Carychium tridentatum</i> (Risso)	13				1	1		5
<i>Carychium</i> sp. (apex fragments)	2				1	2		1
<i>Lymnaea truncatula</i> (Müller)	10							
<i>Lymnaea ?truncatula</i> (Müller) (mostly apex fragments)	12			4	11			15
? <i>Lymnaea</i> sp. (apex fragments)				4	22	17	2	
<i>Succinea putris</i> (L.)	1							
<i>Oxyloma pfeifferi</i> (Rossmässler)								1
Small succineid (? <i>Oxyloma pfeifferi</i> (Rossmässler))			1	1	2			
Planorbidae – unidentified apices								2
<i>Cochlicopa ?lubrica</i> (Müller)	2				1			1
<i>Cochlicopa ?lubricella</i> (Porro)	20		3	6	10	7	4	20
<i>Cochlicopa</i> sp. (apex fragments)	57		3	10	14	6	3	39
<i>Vertigo pygmaea</i> (Draparnaud)	5							
<i>Vertigo ?pygmaea</i> (Draparnaud)	3		1	2	8	3	3	3
<i>Vertigo pusilla</i> Müller or <i>V. angustior</i> Jeffreys (sinistral)					1			
<i>Vertigo</i> sp. (dextral species) – diagnostic features obscured	15			2	6	3	3	13
<i>Vertigo</i> sp. (apex fragments)			1	2		3		6
<i>Pupilla muscorum</i> (L.)	3		6	7	7	2	7	10
Pupillidae sp. apices	10		2	7	14	2	9	21
<i>Vallonia costata</i> (Müller)	44		2	4	14	3	14	24
<i>Vallonia ?excentrica</i> Sterki	214		18	45	51	24	46	58

Phase	2	3		4		5		6
Context	204	181	302	214	334	329	333	177
Sample	22/T2	10/T2	20/T2	25/T2	29/T2	30/T2	28/T2	8/T2
<i>Vallonia</i> sp. (fragments or with adhering sediment)	15							5
<i>Ena obscura</i> (Müller)							2	
<i>Punctum pygmaeum</i> (Draparnaud)					2	3	1	9
? <i>Aegopinella</i> sp. (apex fragment)	5							
<i>Cecilioides acicula</i> (Müller)	m	f	m	v	v	m	v	v+
? <i>Helicella itala</i> (L.)	1		1	1	2			1
<i>Trichia ?hispida</i> (L.)	46		17	27	41	15	27	27
<i>Cepaea ?nemoralis</i> (L.)								1
<i>Helix ?aspersa</i> Müller (as small shell fragments)							1	
Unidentified land snail shell fragments	v+	f	m	v	m	m	v	v+
Unidentified freshwater snail shell fragments						s		
Snail eggs			s	s	f	f	s	s

Table 6. The Hoplands, Sleaford, Lincolnshire: Terrestrial and freshwater mollusc remains from the residues from analysis samples. Key: f – few (up to 3 individuals); s – some (4 to 20 individuals); m – many (21-50 individuals). Figures are counts of minimum numbers of individuals represented. Nomenclature and taxonomic order of presentation follows Kerney (1999).

Phase	2	3	4		5	
Context	204	181	214	334	329	333
Sample	22/T2	10/T2	25/T2	29/T2	30/T2	28/T2
Context description	fill of boundary ditch 205	primary silting of well 152	fill of pit 213	made ground on N side of Roman road	fill of stone lined oven 297	made ground on N side of Roman road
Processed sample size kg /litres	22/18	45/26	20/16	39/28	14/10	36/18
<i>Bithynia</i> sp. – operculum		1				
? <i>Bithynia</i> sp. (apex fragments)		3				
<i>Lymnaea</i> ? <i>truncatula</i> (Müller) (mostly apex fragments)			2			
? <i>Lymnaea</i> sp. (apex fragments)	3			5	2	2
Small succineid (? <i>Oxyloma pfeifferi</i> (Rossmässler))			2	2		
<i>Cochlicopa</i> sp. (apex fragments)			2	2		
<i>Cochlicopa</i> sp. (non-apex fragment)	1					
<i>Vallonia costata</i> (Müller)				2		
<i>Vallonia</i> ? <i>excentrica</i> Sterki	11		4	8	2	6
<i>Vallonia</i> sp. (fragments or with adhering sediment)	5		1	1		1
? <i>Oxychilus</i> sp. (apex fragment)					1	
<i>Cecilioides acicula</i> (Müller)	1			4		
<i>Trichia</i> ? <i>hispida</i> (L.)	2		2	5		2
<i>Cepaea</i> ? <i>nemoralis</i> (L.)	1	1				
Unidentified land snail shell fragments	m	1	m	s	s	s
Unidentified freshwater snail shell fragments			f			
Unidentified slug 'plates'	2		3	7	3	2

Table 7. The Hoplands, Sleaford, Lincolnshire: Marine shell from the residues from analysis samples. Key: 'CN' = context number; 'SN' = sample number; 'l' = number of left (or lower) valves; 'r' = number of right (or upper) valves; 'i' = number of valves of indeterminate side; 'e' = average erosion score for valves; 'f' = average fragmentation score for valves; 'meas' = estimated number of valves intact enough to be measured; 'kn' = number of valves showing damage characteristic of the oyster having been opened using a knife or similar implement; 'fr' = number of valves showing fresh breakage; 'biota' = number of valves with evidence of damage or encrustation from/by other marine biota; 'wt' = total weight of shell (in grammes); 'mnv' = minimum number of valves; 'mni' = minimum number of individuals.

Phase	CN	SN	Sample size kg/litres	Context details	Oyster valves									Notes	wt
					l	r	i	e	f	meas	kn	fr	biota		
2	204	22/T2	22/18	Fill of boundary ditch 205	0	0	0	-	-	-	-	-	-	Seven mussel (<i>Mytilus edulis</i> L.) valve fragments (mnv = mni = 1) to 23 mm (2.4 g)	2.4
3	181	10/T2	45/26	Primary silting of well 152	1	0	0	1	1	1	1	0	0	One left oyster (<i>Ostrea edulis</i> L.) valve to 66 mm (20.6 g)	20.6
3	302	20/T2	27/25	Fill of pit 301	0	1	0	1	1	1	0	0	0	One right oyster valve to 68 mm (18.9 g); five mussel valve fragments (mnv = mni = 1) to 11 mm (0.1 g)	19.0
4	214	25/T2	20/16	Fill of pit 213	0	0	0	-	-	-	-	-	-	One mussel valve fragment to 10 mm (<0.1 g) only	<0.1
4	334	29/T2	39/28	made ground on N side of Roman road	0	0	0	-	-	-	-	-	-	Six mussel valve fragments (mnv = mni = 1) to 15 mm (0.6 g)	0.6
5	329	30/T2	14/10	fill of stone lined oven 297	0	0	0	-	-	-	-	-	-	Eleven mussel valve fragments (mnv = mni = 1) to 29 mm (2.8 g)	2.8
5	333	28/T2	36/18	made ground on N side of Roman road	0	0	0	-	-	-	-	-	-	Two mussel valve fragments (mnv = mni = 1) to 12 mm (~0.1 g)	~0.1

Table 8. The Hoplands, Sleaford, Lincolnshire: Insect and other non-molluscan invertebrate remains from the paraffin flots from Context 181, Sample 10/T2. Abundance is shown either by figures for counts of minimum numbers of individuals or recorded semi-quantitatively as present (+), common (++) or abundant (+++). Nomenclature and taxonomic order of presentation follows Kloet and Hincks (1964-77).

Ecological codes follow Kenward *et al.* (1986a): oa – certain outdoor taxa, ob – probable outdoor taxa, p – strongly plant-associated taxa, rt – generalized decomposers, w – aquatics

Context	181
Sample	10/T2
Sample volume /litres	26
Sample weight /kg	45
Paraffin flots volume /ml	~25
Oligochaeta sp. (earthworm egg capsules)	+
Diptera spp. (puparia) – at least 2 species represented	+
<i>Pterostichus ?melanarius</i> (Illiger) [oa]	1
? <i>Amara</i> sp.	1
Carabidae sp?p. [ob]	1
? <i>Hygrotus</i> sp. [oa-w]	1
<i>Megasternum obscurum</i> (Marsham) [rt]	2
Hydrophilidae sp. [u]	1
<i>Ochthebius</i> sp?p. [oa-w]	15
Histeridae sp. [u]	1
Aleochariinae spp. [u]	1
Staphylinidae spp. [u]	3
<i>Lathridius minutus</i> (Linnaeus) group	1
<i>Otiorhynchus</i> sp?p. [oa-p]	2
<i>Ceutorhynchus</i> sp?p. [oa-p]	2
?Curculionidae sp. [oa-p]	+
Coleoptera spp. [u]	+
Acarina spp. (mites)	++

Table 9. The Hoplands, Sleaford, Lincolnshire: Vertebrate remains recovered from analysis samples (in both the washover and residue fractions). Fragment counts are recorded semi-quantitatively as: '+' = present (1-3); '++' = occasional (4-20); '+++ = common (21-50); '++++' = abundant (51-200); '+++++' = super-abundant (201+). Minimum numbers of individuals (mni) represented are given where determinable. 'Large mammal' is assumed to be cattle, horse or large cervid, 'medium mammal' is assumed to be sheep/goat, pig or small cervid.

Phase	CN	SN	Large mammal	Small mammal	Bird	Amphibian	Fish
2	204	22	-	indeterminate rodent +	-	indeterminate anuran (frog/toad) ++	flatfish sp. +
3	181	10	sheep/goat + (mni = 1) medium mammal +	house mouse (<i>Mus musculus</i> L.) ++ (mni = 1) bank vole (<i>Clethrionomys glareolus</i> (L.)) + (mni = 1) indeterminate small mammal/rodent +++++	-	common frog (<i>Rana temporaria</i> L.) ++ (mni = 1) indeterminate anuran +++++	eel (<i>Anguilla anguilla</i> (L.)) ++
3	302	20	sheep/goat + (mni = 1) cow + (mni = 1) large mammal ++ medium mammal ++	pygmy shrew (<i>Sorex minutus</i> L.) + (mni = 1) <i>Sorex</i> sp. + <i>Mus</i> sp. + indeterminate small mammal/rodent ++	domestic fowl (<i>Gallus</i> f. domestic) + (mni = 1) indeterminate bird ++	common frog +++ (mni = 3) indeterminate anuran +++++	flatfish sp. ++ eel ++ indeterminate fish +++++
4	214	25	sheep/goat + (mni = 1) medium mammal ++	bank vole + (mni = 1) indeterminate rodent + indeterminate small mammal ++	-	indeterminate anuran ++	?flatfish sp. +
4	334	29	sheep/goat + (mni = 1)	indeterminate small mammal ++	-	common frog + (mni = 1) indeterminate anuran ++	flatfish sp. ++ indeterminate fish ++
5	329	30	medium mammal +	indeterminate small mammal +	small passerine + (mni = 1)	indeterminate anuran +	indeterminate fish +
5	333	28	?bovid + (mni = 1)	bank vole + (mni = 1) field vole (<i>Microtus agrestis</i> (L.)) + (mni = 1) indeterminate rodent +	-	common frog + (mni = 1) indeterminate anuran ++	-

Table 10. The Hoplands, Sleaford, Lincolnshire: Identifiable skeletal elements amongst the vertebrate remains recovered from analysis samples (in both the washover and residue fractions). 'Large mammal' is assumed to be cattle, horse or large cervid, 'medium mammal' is assumed to be sheep/goat, pig or small cervid.

Phase	2	3	3	4	4	5	5
Context	204	181	302	214	334	329	333
Sample	22/T2	10/T2	20/T2	25/T2	29/T2	30/T2	28/T2
Species/Taxon							
LARGE MAMMALS							
?Bovid			incisors				carpal (pisiform)
Large mammal			rib skull fragment long bone fragment				
Sheep/goat		carpal (scaphoid)	incisor	mandible	incisors		
Medium mammal		long bone fragments	long bone fragments caudal vertebra rib sesamoid	vertebra long bone fragments		long bone fragments	
SMALL MAMMALS							
House mouse (<i>Mus musculus</i> L.)		mandible loose molars					
<i>Mus</i> sp.							
Bank vole (<i>Clethrionomys glareolus</i> (L.))		molar		molar			molar
Field vole (<i>Microtus agrestis</i> (L.))							molar
Pygmy shrew (<i>Sorex minutus</i> L.)			mandible				
<i>Sorex</i> sp.			skull scapula femur				
Small mammal/rodent	upper incisor	humerii metapodials phalanges ribs femorae vertebrae tibiae pelves radii ulnae	upper incisor		metapodials	phalanx upper incisor	upper incisor

Phase	2	3	3	4	4	5	5
Context	204	181	302	214	334	329	333
Sample	22/T2	10/T2	20/T2	25/T2	29/T2	30/T2	28/T2
Species/Taxon							
		carpals tarsals upper and lower incisors					
AMPHIBIANS							
Common frog (<i>Rana temporaria</i> L.)		tibia/fibula maxillae scapula	iliae tibia/fibula femorae parasphenoid humerii		scapula		ilium
Indeterminate anuran (frog/toad)	radius/ulna coracoid tibia/fibula	vertebrae metapodials urostyle cranial	vertebrae coracoid		tibia/fibula urostyle humerus	tibia/fibula	vertebra urostyle tibia/fibula
BIRDS							
Domestic fowl (<i>Gallus f. domestic</i>)			tarsometarsus				
FISH							
Eel (<i>Anguilla anguilla</i> (L.))		vertebrae	vertebrae				
Flatfish (species indeterminate)	vertebra		vertebrae articular basipterygium		vertebrae maxilla premaxillae articular preopercular		
?Flatfish				vertebrae			

Table 11. The Hoplands, Sleaford, Lincolnshire: Artefactual remains from the residues from analysis samples. Notation is in the form “number of items/maximum linear dimension (in mm)/total weight (in g)”. Note: Records are for fragments sorted from the residues, i.e. for brick/tile and fired earth for pieces greater than 10 mm and for pottery and metal for pieces greater than 4 mm.

Phase	Context	Sample	Brick/tile	Fired earth	Pottery	Metal (Fe)
2	204	22	-	-	1/38/9	-
3	181	10	-	-	19/42/39	-
3	302	20	2/20/12	1/25/8	20/92/94	11/29/9
4	214	25	-	-	4/65/41	-
4	334	29	-	-	8/28/18	-
5	329	30	-	-	-	1/21/2
5	333	28	-	-	2/30/5	2/14/1
6	177	8	-	-	-	-

Table 12. The Hoplands, Sleaford, Lincolnshire: Hand-collected shell by phase and context. Key: 'CN' = context number; 'l' = number of left (or lower) valves; 'r' = number of right (or upper) valves; 'i' = number of valves of indeterminate side; 'e' = average erosion score for valves; 'f' = average fragmentation score for valves; 'meas' = estimated number of valves intact enough to be measured; 'kn' = number of valves showing damage characteristic of the oyster having been opened using a knife or similar implement; 'fr' = number of valves showing fresh breakage; 'biota' = number of valves with evidence of damage or encrustation from/by other marine biota; 'wt' = total weight of shell (in grammes) – weights marked with an "*" include adhering sediment; 'mnv' = minimum number of valves; 'mni' = minimum number of individuals.

Phase	CN	Context details	Oyster valves									Notes	wt
			l	r	i	e	f	meas	kn	fr	biota		
2	204	Fill of boundary ditch 205	0	0	0	-	-	-	-	-	-	Two oyster (<i>Ostrea edulis</i> L.) valve fragment to 42 mm (3.8 g); one mussel (<i>Mytilus edulis</i> L.) valve fragment to 20 mm (0.6 g)	4.4
3	181	Primary silting of well 152	1	0	0	2	3	0	1	0	0	One left oyster valve (large fragment thereof) to 68 mm (17.2 g)	17.2
3	217	Upper fill of well 299	0	1	0	2	2	0	?1	0	0	One right oyster valve to 70 mm (26.5 g); one oyster valve fragment to 36 mm (3.9 g); one mussel valve fragment to 28 mm (0.7 g)	31.1
3	268	Fill of ditch 267	1	0	0	1	1	1	1	1	0	One left oyster valve to 78 mm (25.0 g)	25.0
3	302	Fill of pit 301	1	1	0	1	2	1	2	0	1	One left and one right oyster valve to 65 mm (30.0 g) – one well preserved barnacle on outer surface of left valve	30.0
4	171	Upper fill of well 148	0	1	0	2	1	1	0	0	0	One right oyster valve to 82 mm (34.5 g)	34.5
4	214	Fill of pit 213	0	0	0	-	-	-	-	-	-	Two oyster valve fragments to 53 mm (11.4 g) only	11.4
4	245	Fill of pit 244	0	0	0	-	-	-	-	-	-	One oyster valve fragment to 45 mm (6.53g) only	6.3
4	348	Secondary fill of ditch 346	0	0	0	-	-	-	-	-	-	One mussel valve fragment to 42 mm (3.5 g); three fragments (mni = 2) of <i>Helix ?aspersa</i> Müller shell to 42 mm (5.3 g). NB: remains in two bags	8.8
5	164	Upper fill of pit 163	1	0	0	3	2	0	1	0	0	Oyster valve to 75 mm (35.7 g); one oyster valve fragment to 41 mm (3.2 g); one common whelk (<i>Buccinum undatum</i> (L.)) to 70 mm (22.4 g); six fragments (mni = 3) of <i>Helix ?aspersa</i> shell to 33 mm (4.5 g*); nine fragments (mni = 9) of <i>Cepaea ?nemoralis</i> (L.) shell to 23 mm (8.5 g*)	74.3*
5	228	Fill of post pipe in posthole 222	0	0	0	-	-	-	-	-	-	One oyster (<i>Ostrea edulis</i> L.) valve fragment to 37 mm (3.6 g) only	3.6
5	242	Upper fill of pit 241	6	7	0	2	2	5	8/?10	2	0	Six left and seven right oyster valves to 85 mm (287.4 g) – three of the left valves with fragments of other oyster valves fused 'back to back' on to their outer surfaces; four oyster valve fragments to 49 mm (12.1 g); some mm-flakes of shell	299.5
5	247	Fill of pit 246	3	1	0	2	2	1	4	1/?2	0	Three left and one right oyster valves to 77 mm (80.8 g)	80.8

Phase	CN	Context details	Oyster valves									Notes	wt
			l	r	i	e	f	meas	kn	fr	biota		
5	249	Primary fill of pit 248	1	0	0	1	3	0	1	1	0	One left oyster valve to 80 mm (30.7 g)	30.7
5	250	Secondary fill of pit 248	2	0	0	2	3	0	2	?1	0	Two left oyster valve to 72 mm (29.7 g); one oyster valve fragment to 40 mm (2.4 g)	32.1
6	132	Fill of ditch 131	2	1	0	1	2	2	2	1	0	Two left and one right oyster valves to 73 mm (72.4 g) – some parts of other oyster valves fused ‘back to back’ onto the outer surface of one of the left valves	72.4
6	135	Upper fill of ditch 133	1	1	0	1	1	2	1	0	0	One left and one right oyster valve to 71 mm (53.5 g); one oyster valve fragment to 54 mm (7.3 g)	60.8
6	322	Fill of well 294	1	0	0	2	1	1	1	0	1	One left oyster valve to 77 mm (16.8 g) with some quite well preserved barnacles on outer surface; one oyster valve fragment to 40 mm (2.9 g) – also with barnacles on outer surface; four mussel valve fragments (mnv = mni = 1) to 27 mm (1.8 g)	21.5
6	355	Fill of ditch 354	3	0	0	1	3	0	2	0	0	Three left oyster valves to 85 mm (49.1 g) – one valve strongly distorted and the largest appears to have grown adjacent to and around a straight object resulting in a groove in the outer shell surface; three oyster valve fragments to 35 mm (0.8 g); a few mm-flakes of shell	49.9
6	364	Fill of pit or posthole 362	1	1	0	3	3	0	1/?2	?1	0	One left and one right oyster valve to 65 mm (28.4 g); one oyster valve fragment to 48 mm (2.3 g)	30.7
8	101	‘Dark earth’ layer	0	0	0	-	-	-	-	-	-	One oyster valve fragment to 30 mm (1.3 g) only	1.3
			24	14	0			14	27/?31	6/?9	2		926.3*

Table 13. The Hoplands, Sleaford, Lincolnshire: Oyster shell measurements – following Claassen (1998, 109). Key: ‘CN’ = context number; ‘SN’ = sample number (a ‘-’ in this column indicates that the remains were hand-collected); ‘LVH’ = left valve height; ‘LVL’ = left valve length; ‘LHW’ = left hinge width; ‘LHL’ = left hinge length; ‘LAS’ = left anterior scar length; ‘LASH’ = left anterior scar height; ‘RVH’ = right valve height; ‘RVL’ = right valve length; ‘RHW’ = right hinge width; ‘RHL’ = right hinge length; ‘RAS’ = right anterior scar length; ‘RASH’ = right anterior scar height; ‘no’ = measurement not obtainable owing to damage to the valve. All measurements are given in millimetres.

Phase	CN	SN	LVH	LVL	LHW	LHL	LAS	LASH	RVH	RVL	RHW	RHL	RAS	RASH
3	181	10/T2	no	no	7.2	16.6	23.5	38.6	-	-	-	-	-	-
3	268	-	no	no	11.3	15.2	22.2	45.0	-	-	-	-	-	-
3	302	-	-	-	-	-	-	-	no	58.2	no	14.8	19.0	34.6
		20/T2	-	-	-	-	-	-	67.6	64.2	4.0	12.6	18.1	36.9
4	171	-	-	-	-	-	-	-	80.5	67.4	10.8	17.3	22.6	45.5
5	242	-	-	-	-	-	-	-	86.5	52.7	9.0	17.2	22.2	51.6
		-	-	-	-	-	-	-	85.1	67.0	8.2	23.3	27.9	50.3
		-	no	no	9.9	20.4	25.0	47.0	-	-	-	-	-	-
		-	no	no	11.6	15.1	22.0	43.0	-	-	-	-	-	-
5	247	-	-	-	-	-	-	-	no	57.1	10.6	17.6	15.7	43.7
6	132	-	no	no	12.3	15.8	26.4	40.6	-	-	-	-	-	-
		-	no	64.5	9.6	17.5	24.0	41.8	-	-	-	-	-	-
6	135	-	71.1	65.5	6.9	15.1	22.2	44.1	-	-	-	-	-	-
		-	-	-	-	-	-	-	-	68.8	64.7	7.7	15.8	22.7
6	322	-	no	no	14.3	13.9	19.5	40.9	-	-	-	-	-	-

Appendix C6

Registered Finds Report

Dr Kevin Leahy, FSA, MIfA

The finds were received in an as found condition and no radiographs were available at the time of initial examination. This archive consisted of 34 items of which eight were copper alloy and 26 iron. The iron objects were corroded, but relatively well preserved, although detail was hidden by corrosion products. Copper alloy objects were in varied states of preservation, some coins were in good condition but with a poor surface, other coins were completely obscured by corrosion products/concretions.

Finds were examined at x10 magnification, sketched and described in detail. Materials were identified visually and dimensions were recorded using vernier callipers. Masses were obtained on an electronic balance to an accuracy of 0.01g.

Discussion

The finds from this site represent a small but useful group of material. Nine of the 34 finds were of types known to have been used during the Roman period but others could only be dated from the context in which they were found. It is particularly helpful that some of the coins were found in useful contexts. While not datable in themselves the 19 nails were all of types for which a Roman date would be appropriate.

Recommendations

It is believed that for most of the small finds from this excavation this report has progressed as far as is necessary. There were, however, some objects which needed x ray examination in order for them to be identified. These were

- (168) <-> A Iron fitting
- (185) <3> Iron object, knife?
- (228) <6> Iron fitting
- (302) <16> Coin (as this represented our primary dating evidence)
- (302) <17> Coin (see above)
- (356) <13> Coin (see above)
- (358) <14> Linch-pin
- (358) <15> Iron strip

Catalogue

Context:	(101)	<1>	
Material	Copper alloy		
Condition:	Corroded, good		
Description:	Coin Obv. Laureate bust right [?] Rev. Two Victories facing each other holding wreaths VICT [ORIAE DD AVGG Q NN]		
Dimensions:	Diameter 15.0mm		
Mass:	1.63g		
Identification:	Nummus of Constantius II or Constans		
Dating of find:	AD 347-8, Reece Period 17		
Context description	Layer, post Roman build up		
Further action	None required		
Context:	(101)	<2>	
Material	Copper alloy		
Condition:	Corroded, poor		
Description:	Coin, Obv. Laureate head, right, blundered inscription Rev. all detail lost		
Dimensions:	20.2mm		
Mass:	2.86g		
Identification:	Barbarous copy of a nummus		
Dating of find:	Fourth century		
Context description	Layer, post Roman build up		
Further action	None required		
Context:	(101)	<->	A
Material	Iron		
Condition:	Corroded, good		
Description:	Fitting, consisting of a central spike either side of which, and parallel to, is a shorter spike.		
Dimensions:	Length 46.5mm, Width 60.2mm, Thickness 10.0mm (maximum)		
Mass:	25.50g		
Identification:	'T' staple, (cf. Manning 1985. 58, Fig 27) (Manning, W H 1985, 'Ironwork' in Draper, J, <i>Excavations by Mr H P Cooper on the Roman Site at Hill Farm, Gestingthorpe, Essex</i> , East Anglian Archaeology Report no 25, Chelmsford		
Dating of find:	Roman		
Context description	Layer, post Roman build up		
Further action	None required, illustrate if published.		
Context:	(101)	<->	B
Material	Iron		
Condition:	Corroded, good		
Description:	Nail, flat oval head 16.0 x 11.5mm, shaft square sectioned, 6.8 x 6.8mm		
Dimensions:	Length 47.0mm		
Mass:	8.41g		
Identification:	Nail		

Dating of find:	Not datable unless from a context
Context description	Layer, post Roman build up
Further action	None required
Context:	(168) <1>
Material	Copper alloy
Condition:	Excellent, unworn
Description:	Coin Obv. Laureate head right ANTONIVS AVG PI – VS [PP] TRP COS II Rev. Reclining male figure, hand resting on a boat and holding a reed. TIBERIS
Dimensions:	Diameter 33.5mm
Mass:	23.21g
Identification:	Sestertius of Antoninus Pius, RIC 643
Dating of find:	AD 139
Context description	Bedding layer for stone surfaces of late Roman building
Further action	None required
Context:	(168) <-> A
Material	Iron
Condition:	Poor, corroded and exfoliating, much detail hidden by corrosion products
Description:	Strip of metal, 16.3 x 3.2mm folded around to form a loop, two ends straight and parallel, separated by what appears to be a small iron block, 21.3 x 19.5 x 9.5mm.
Dimensions:	Length 75.3mm, Width 49.2mm, Thickness 16.3mm
Mass:	52.27g
Identification:	Further examination following x ray examination revealed no additional details of this object and it is best considered to be a strip which may not originally have had this curved shape.)
Dating of find:	Not datable unless from a context
Context description	Bedding layer for stone surfaces of late Roman building
Further action	No further action required, mention and describe in report, no illustration needed.
Context:	(168) <-> B
Material	Iron
Condition:	Corroded but good, all detail hidden
Description:	X ray examination showed this object to be considerably more interesting than it appears on visual examination. It consist of a rectangular sectioned shaft, 9.0 x 8.5mm one end of which has received repeated hammer blows producing a mushroom like expansion. The other end has been flattened and then scrolled around to form a 10.0mm diameter cylinder with an opening down one side.
Dimensions:	Length 74.2mm, Section 12.9 x 11.3mm
Mass:	46.60g
Identification:	Leather workers' ring punch
Dating of find:	Not datable unless from a context
Context description	Bedding layer for stone surfaces of late Roman building
Further action	This is an interesting object which suggests that leather was being worked on this site. Leather workers' ring punches were discussed by Manning (Manning W H 1985 Catalogue

of the Romano-British Iron Tools, Fittings and Weapons in the British Museum, London, pp 42 fig 16). Illustrate from x ray.

Context: (168) <-> C
Material Iron
Condition: Corroded but good,
Description: Nail or bar, all detail obscured but appears to have a rectangular section
Dimensions: Length 55.5mm, Section 10.5 x 6.7mm
Mass: 19.51g
Identification: Nail or bar
Dating of find: Not datable unless from a context
Context description Bedding layer for stone surfaces of late Roman building
Further action None required

Context: (168) <-> D
Material Iron
Condition: Corroded but good
Description: Nail, T shaped head? section obscured
Dimensions: Length 44.4mm, Section 8.6 x 7.2mm
Mass: 6.88g
Identification: Nail
Dating of find: Not datable unless from a context
Context description Bedding layer for stone surfaces of late Roman building
Further action None required

Context: (182) <-> A
Material Iron
Condition: Corroded but good
Description: Nail, square head, 20.7 x 15.4mm, shaft slightly bent, square sectioned 8.2 x 7.9mm
Dimensions: Length 52.2mm
Mass: 15.45g
Identification: Nail
Dating of find: Not datable unless from a context
Context description Possible surface, post dating road, late Roman?
Further action None required

Context: (183) <-> A
Material Iron
Condition: Corroded but good, details hidden
Description: Nail, oval head, 16.7 x 15.0mm, shaft square sectioned 6.9 x 5.7mm
Dimensions: Length 48.7mm
Mass: 10.96g
Identification: Nail
Dating of find: Not datable unless from a context
Context description Yard floor/surface, late Roman?
Further action None required

Context: (185) <3>
Material Iron
Condition: Corroded but good, details hidden
Description: Blade or bar, details obscured, section flat at one end, 15.3 x 7.0mm and more rounded at other, 8.0 x 7.5mm. The x ray revealed this object to be a piece of iron, 68.0mm long, its width tapering 13.2-7.5mm, its thickness tapering 5.5-3.0mm. It is slightly bent along its length giving a sinuous line. The narrow end of the strip is square cut, the wider is angled.
Dimensions: Length 71.0mm
Mass: 15.55g
Identification: Possibly the tang from a knife but more likely to be an off-cut or smithing waste.
Context description Ditch, late Roman?
Dating of find: Not datable unless from a context
Further action No further action required, mention and describe in report, no illustration needed.

Context: (185) <4>
Material Iron
Condition: Corroded but good, details hidden
Description: Heavily corroded fragment, appears to be sheet metal
Dimensions: Length 37.1mm, Width 29.0mm, Thickness 9.0mm
Mass: 17.04g
Identification: Unknown
Dating of find: Not datable unless from a context
Context description Ditch, late Roman?
Further action None required

Context: (228) <5>
Material Copper alloy
Condition: Good, worn
Description: Coin
Obv. Female head right [PLOTINA] AVG – IMP [TRAIANI]
Rev. ? [Fides standing right: FIDES AVGVSTI]
Dimensions: Diameter 24.8mm
Mass: 20.99g
Identification: Sestertius, of Plotina (wife of Trajan) RIC 740
Dating of find: AD 98 – 117
Context description Fill of post-pipe, Roman
Further action None required

Context: (228) <6>
Material Iron
Condition: Heavily corroded but good
Description: Round headed (16.1mm diameter) nail or rivet attached to a curved piece of sheet metal (radius c. 15mm). Section of nail shaft unknown but appears 8.2mm diameter, off-set on head. Shaft 19.3mm long. X-ray examination showed this object to be a nail, its shaft tapering from 5.0 x 4.2 to a point. The shaft is bent around through a little more than 180 degrees following a radius of 7.5mm to form a hook-like curve.
Dimensions: Length 28.0mm, Height 40.8, Thickness 21.1mm
Mass: 17.06g

Identification: Unknown this object appears to have been a nail but its curved shaft is unusual. The curvature seems greater than that seen on a nail which has been clenched over on the underside of the wood. It is possible that this nail had some special, but unknown, function.

Dating of find: Not datable unless found in a context
 Context description: Fill of post-pipe, Roman
 Further action: illustrate if published

Context: (245) <7>
 Material: Iron
 Condition: Corroded with some exfoliation
 Description: Nail, oval head, 20.5 x 13.9mm, shaft square sectioned 8.7 x 8.7mm
 Dimensions: Length 70.0mm
 Mass: 18.62g
 Identification: Nail
 Dating of find: Not datable unless from a context
 Context description: Pit fill, Roman
 Further action: None required

Context: (290) <12>
 Material: Copper alloy
 Condition: Good
 Description: Bar, now bent around to form an open loop, one end tapering and truncated, other flattened and expanding, perhaps originally forming a disc, now 12.0mm wide x 1.5mm thick, with a central hole. General section oval, 5.3 x 4.8mm
 Dimensions: Length 76.4mm, Width 52.5mm
 Mass: 21.07g
 Identification: Unknown
 Dating of find: Not datable except by context
 Context description: Road surface, upper, Roman
 Further action: None required

Context: (290) <-> A
 Material: Iron
 Condition: Corroded, good
 Description: Nail, rectangular T shaped head 28.0 x 15.3mm, shaft square sectioned 12.0 x 11.9mm
 Dimensions: Length 70.0mm
 Mass: 24.83g
 Identification: Nail or rivet
 Dating of find: Not datable unless from a context
 Context description: Road surface, upper, Roman
 Further action: None required

Context: (290) <-> B
 Material: Iron
 Condition: Corroded, poor, some exfoliation
 Description: Nail, round head 16.1mm diameter, shaft section rectangular 9.2 x 5.5mm. Shaft truncated
 Dimensions: Length 17.0mm
 Mass: 6.20g

Identification: Nail
Dating of find: Not datable unless from a context
Context description: Road surface, upper, Roman
Further action: None required

Context: (290) <-> C
Material: Iron
Condition: Corroded, poor, some exfoliation
Description: Nail, too much loss of detail for any meaningful description, shaft square sectioned, 6.8 x 6.8mm

Dimensions: Length 43.9mm
Mass: 7.85g
Identification: Nail
Dating of find: Not datable unless from a context
Context description: Road surface, upper, Roman
Further action: None required

Context: (290) <-> D
Material: Iron
Condition: Corroded, good, some exfoliation
Description: Nail, round head 16.1mm diameter, shaft square sectioned, 7.1 x 7.1mm, lower part bent at 45 degrees, tip missing

Dimensions: Length 43.0mm
Mass: 9.54g
Identification: Nail
Dating of find: Not datable unless from a context
Context description: Road surface, upper, Roman
Further action: None required

Context: (290) <-> E
Material: Iron
Condition: Corroded, good, some exfoliation
Description: Nail or tack, head 10.8mm diameter, shaft square 4.0 x 4.0mm, slightly curved

Dimensions: Length 18.0mm
Mass: 1.68g
Identification: Nail
Dating of find: Not datable unless from a context
Context description: Road surface, upper, Roman
Further action: None required

Context: (292) <-> A
Material: Iron
Condition: Corroded, good
Description: Nail, oval head 14.0 x 12.9mm, shaft square sectioned 6.3 x 6.3mm

Dimensions: Length 68.3mm
Mass: 9.04g
Identification: Nail
Dating of find: Not datable unless from a context
Context description: Dump layer, Roman
Further action: None required

Context: (292) <-> B
Material Iron
Condition: Corroded, good, broken, two pieces
Description: Nail, head missing, rectangular sectioned shaft 12.4 x 9.3mm
Dimensions: Length 47.4mm
Mass: 14.56g
Identification: Nail
Dating of find: Not datable unless from a context
Context description Dump layer, Roman
Further action None required

Context: (302) <16>
Material Copper alloy
Condition: Poor, all detail hidden by corrosion products
Description: Coin (*identified by Sam Moorhead from the x ray*).
Obv. Laureate head right [.....]
Rev. Illegible
Dimensions: Diameter 19.7mm
Mass: 2.66g
Identification: Denarius of Septimius Severus, probably Rome mint
Dating of find: AD 193-211
Context description Pit fill, Roman
Further action List in publication, no illustration required.

Context: (302) <17>
Material Copper alloy
Condition: Corroded, poor, all detail covered by corrosion
Description: Coin (*identified by Sam Moorhead from the x ray*).
Obv. Laureate head/bust right [.....]
Rev. Illegible
Dimensions: Diameter 32.5mm
Mass: 19.42g
Identification: Sestertius of Antoninus Pius, Rome mint
Dating of find: AD 138-61
Context description Pit fill, Roman
Further action List in publication, no illustration required

Context: (302) <-> A
Material Iron
Condition: Corroded, all details hidden by concretions
Description: Nail, no details visible, section?
Dimensions: Length 67.5mm
Mass: 13.93g
Identification: Nail
Dating of find: Not datable unless from a context
Context description Pit fill, Roman
Further action None required

Context: (320) <-> A
Material Iron
Condition: Corroded, good
Description: Nail, head square 15.7 x 15.7mm, shaft square 9.2 x 9.2mm
Dimensions: Length 69.5mm
Mass: 14.01g

Identification: Nail
Dating of find: Not datable unless from a context
Context description: Pit fill, Roman
Further action: None required

Context: (322) <-> A
Material: Iron
Condition: Corroded, poor, all details hidden
Description: Bar or nail, square section 10.5 x 10.5mm
Dimensions: Length 55.3mm
Mass: 13.44g
Identification: Bar
Dating of find: Not datable unless from a context
Context description: Fill of well 294, Roman
Further action: None required

Context: (322) <-> B
Material: Iron
Condition: Corroded, good
Description: Nail, head irregular, c. 17.5mm diameter, square sectioned shaft 8.8 x 8.1mm
Dimensions: Length 36.0mm
Mass: 8.81g
Identification: Nail
Dating of find: Not datable unless from a context
Context description: Fill of well 294, Roman
Further action: None required

Context: (322) <-> C
Material: Iron
Condition: Corroded, poor, concretion and stone adhering, details concealed
Description: Nail, shape hidden
Dimensions: Length 36.0mm
Mass: 10.45g
Identification: Nail
Dating of find: Not datable unless from a context
Context description: Fill of well 294, Roman
Further action: None required

Context: (334) <11>
Material: Bone
Condition: Good, but broken in antiquity
Description: Cylinder cut from the shaft of an animal long bone through which has been cut a central slot, c. 18 x 7mm. The cylinder bears incised decoration consisting of a pair of lines running down the length from the end of the slot and two surviving circumferencial bands of close set crossing lines, their sides marked by double lines. There are traces of wear around the slot and its inner face is highly polished through use. The bone is much damaged having been split down its length to reveal its cancellous inner surface and most of one end being missing.
Dimensions: Length 67.9mm, Width 24.0mm, Thickness 8.1mm

Mass: 10.20g
Identification: The remains of a cheek-piece from a horse bridle. Objects of this type have been discussed by McGregor (1976, 38) [McGregor A, Finds from a Roman Sewer System and an Adjacent Building in Church Street, The Archaeology of York, 17.1, York 1976]. McGregor noted that, while cheek-pieces of this type are found in Roman contexts, they did not form part of normal Roman horse harness and might be seen as 'native'.
Dating of find: Early Roman?
Context description: Layer of made ground on the northern side of Roman road
Further action: Include in the publication, illustration required.

Context: (356) <13>
Material: Copper alloy
Condition: Poor, all detail hidden by corrosion products
Description: Coin (*identified by Sam Moorhead from the x ray*).
Obv. Radiate and cuirassed bust right, IMP [.....]
Rev. ?Mars standing left holding a branch and a transverse spear, possibly MARTIC PACIFERO

Dimensions: Diameter 22.6 x 18.4mm
Mass: 3.72g
Identification: Radiate of Claudius II Gothicus, Cunetio p. 139 cf 2226. (Besly E and Bland R 'The Cunetio Treasure', British Museum Press, 1983)
Dating of find: AD 268-70
Context description: Yard surface or road widening, Roman
Further action: List in publication, no illustration required.

Context: (358) <14>
Material: Iron
Condition: Corroded, good with some exfoliation
Description: Linch-pin, square sectioned pin, 18.5 x 17.1mm expanding to an oval plate, 55.3 x 38.5mm. From the upper side of this springs a hook which turns back over the plate.

Dimensions: Length 148.0mm
Mass: 183.66g
Identification: Linch-pin, this is a common form of Romano-British linch-pin. The x ray confirmed the form of this linch-pin allowing it to be placed in Manning's Type 2b in which the loop is integral with the head (Manning W H 1985 Catalogue of the Romano-British Iron Tools, Fittings and Weapons in the British Museum, London, pp 72-4 fig 20)
Dating of find: Roman
Context description: Yard surface or road widening, Roman
Further action: Illustration required in the publication.

Context: (358) <15>
Material: Iron
Condition: Corroded, good
Description: Strip, one end tapering to a blunt point, its general section 18.2 x 5.5mm. Near to the strip's other, broken, end its width steps-up to 23.7mm, further on its thickness also increasing to 11.0mm. The x ray reveals that the section is bent through 90 degrees forming a 9mm high angle. No traces of nail or rivet

holes were revealed. Splits at this end of the object are difficult to explain, but might point to the object being unfinished and poorly consolidated.

Dimensions:

Length 161.0mm

Mass:

80.70g

Identification:

Unknown

Dating of find:

Not datable except by context

Context description

Yard surface or road widening, Roman

Further action

Illustrate.

Appendix C7

Archaeometallurgical assessment of slag

Dr Roderick Mackenzie

The following report is an assessment of metalliferous slag recovered during archaeological fieldwork carried out at Hoplands, Sleaford. A basic identification of the residues has been carried out and individual pieces have been assessed for their archaeological potential; the results of the assessment are summarised below. It should be noted that no chemical or metallurgical analysis of the residues has been carried out at this stage.

Context No.	Number of fragments	Type of material	Weight
101	1	Iron rich slag, possibly from smithing hearth	185g
101	3	Undiagnostic slag	38g
113	9	Undiagnostic pumice like material	46g
151	1	Undiagnostic pumice like material	3g
212	1	Possible fragment of hearth lining	26g
212	2	Possible iron smithing slag	93g
250	1	Burnt coal	4g
266	1	Possible iron production slag, undiagnostic of production process	52g
322	14	Undiagnostic residue	6g
333	1	Possible iron production slag, undiagnostic of production process	188g

Table 1: Summary of production residues recovered from archaeological fieldwork at Hoplands, Sleaford, Lincs.

General discussion of slag types

In some types of metal production, the slags and residues produced can be easily ascribed to a specific process. However, in other cases, it can be extremely difficult to identify the production source of slags based solely on their morphology (Bachmann 1982:31; McDonnell 2001, 163). For instance, without specific supporting evidence, it is often impossible to ascribe iron production slags to a specific period or production source. A further complicating factor is that metalliferous slag, particularly from post-medieval bulk iron and steel making, has been used historically as levelling material for path, road and railway construction; it is therefore not uncommon to find metalliferous slags well away from their original source. Crushed and powdered 'lime/phosphorus rich' slags have also been used historically by farmers as a manuring agent.

In some cases, scientific analysis can help to determine the process origin of slags, although this is normally only justified where there is supporting archaeological or historical evidence, or the particular slag found is of an archaeometallurgically significant type.

Summary of assemblage

The assemblage does contain some fragments of slag that possibly relate to the smithing of iron; the most notable piece was recovered from context 101, which is described in the context summary as a dark earth layer. Two other fragments of possible smithing slag and a fragment of possible hearth lining were recovered from context 212, which is described as the primary fill of a ditch. It is worth noting that, even though fragments of possible smithing slags were found in the same context, the fragment of hearth lining does not have any residues attached to indicate that it came from a smith's hearth, and it is possible that it is from a 'domestic' hearth.

The nature of the site and archaeological contexts suggests that most, if not all, of the slag relates to the Iron Age/Romano-British period. Most of the material in the assemblage was recovered from backfill or levelling deposits and the low concentrations of residues do not suggest that metal working was an established activity in the area excavated. It seems most likely that the possible iron smithing slag found may have originated from outside the excavated area.

Recommendations

The material in the assemblage is of low archaeological significance and further analytical work is not recommended. The residues can be disposed of in the usual manner.

Bibliography

Bachmann H.G, 1982, *The Identification of Slags from Archaeological Sites*. London: The Institute of Archaeology

McDonnell J.G. 2001, *Dunadd, the site archive, Cardiff Studies in Archaeology Specialist Report No.19*. Cardiff: Cardiff University Available from - http://www.gla.ac.uk/archaeology/resources/dunadd/data/3_1.pdf

Appendix C8 Stone Report

Ruth Shaffrey

A total of 33 fragments of stone were retained during archaeological investigations at Sleaford. The majority of these are unworked, un-modified stones. Four contexts produced stone that is either humanly modified or utilised. The worked stone comprises fragments from an estimated three rotary querns and a single likely tessera.

The querns include lava fragments from two contexts (fills of well 294 and ditch 346); they are all very weathered. The third rotary quern had been reused as packing in posthole 319 (318) it is a lower stone of Millstone Grit. The single likely tessera is approximately square and smooth on one face; it was unstratified (103).

Unless there are numerous tesserae of other materials (e.g. ceramic), the single example found here cannot be used as evidence for a tessellated floor on the site, but is suggestive of Roman buildings in the vicinity. The querns are typical of Roman assemblages. No published account has been made of the use of lava nationally, but it is known to have been introduced with the arrival of the Romans and it is possible that its importation declined in the centuries thereafter. The weathered state of the lava fragments, whilst typical of many Roman sites with certain soil conditions; nevertheless suggest that their original period of use was sometime prior to that of their final deposition.

Ctx	SF	Descrip	Notes	Size	Wt (g)	Lithology	Cont_Type	Date
318		Lower rotary quern fragment	Edges are damaged so diameter is only approximately estimated. Grinding surface is pecked and worn with a slight angle up to a lip round the centre. Base is roughly tooled into dimpled pattern	Measures approx. 400mm diameter x 40 mm thick	1616	Millstone Grit	Upper fill of posthole 319	probably Roman based on site info. Same phase as building 4
103		Tessera	Square tessera with one smooth face	Measures 21 x 22mm	11	Grey quartzite	Unstratified	probably Roman based on site info
323		Fragments of rotary quern	6 fragments, all very small and weathered	Measures	122	Lava	Fill of well 294	probably Roman based on site info
348	9	Rotary quern, upper	very weathered but quite large chunk. Wide rim round circumference, upper face. Noticeably tapered to centre	Measures approx. 400mm diameter x 70mm max thickness	1000	Lava	Secondary fill of ditch 346	probably Roman based on site info

Appendix C9

Glass

Janey Brant

Introduction

An archaeological excavation was carried out by Network Archaeology at The Hoplands, Sleaford in 2009. A small amount of glass was recovered from the deposits revealed. The glass assemblage is shown in Table 1.

Context No.	Small Find No.	No. of fragments	Description	Weight
348	10	1	Fragment of transparent pale green glass from a pillar moulded bowl. The fragment represents part of a tapering rib which would have decorated the whole bowl. Wheel cut groves evident inside. 1st century AD.	3g
<i>Total</i>		<i>1</i>		<i>3</i>

Table 1: Summary of glass recovered from field work

Methodology

One small bag of glass was submitted. Brief notes were made on the condition of the glass and the remains identified to determine the type of object to which the fragments pertain.

Discussion

The glass was recovered from the secondary fill of a boundary ditch. Despite the small size of the fragment its distinctive features make it remarkably diagnostic. Pillar moulded glass bowls are distinctively recognised by their ribbed nature. They were made by a casting process rather than being blown, although the exact process by which they were produced is unknown. Pillar moulded bowls arrived in Britain immediately after the Conquest in 43AD, and were manufactured until the end of the 1st century AD. Some remained in use in the early 2nd century. Pillar moulded bowls range from around 10 to 20 cm in diameter, with both deep and shallow shapes. Unfortunately the fragment is so small ascertaining the size of the vessel this fragment would have formed part of is not possible.

Conclusion

The assemblage does not contain archaeologically significant material.

Recommendations

No further analysis is recommended on the glass assemblage covered by this assessment. The material should be stored in a stable condition and kept for future reference.

NETWORK ARCHAEOLOGY LTD

Site: HOPS 09

Appendix D Catalogue of all finds

Totals

Material	No. of bags	No. of frags	Weight (g)
Animal Bone	94	964	22764
Burnt Bone	23	80	660
CBM	29	77	101
Charcoal	2	20	20
Copper Alloy	8	8	105
Daub	1	1	211
Fired Clay	4	4	36
Flint	1	1	7
Glass	1	1	3
Human Bone	30	395	
Iron	15	27	743
Pottery	119	2078	54293
PPR	11	34	541
Shell	22	82	990
Stone	17	33	4064

Film	Shot	Description	Type
1	1	working shot	Monochrome
1	2	road metalling	Monochrome
1	3	road metalling	Monochrome
1	4	road metalling	Monochrome
1	5	N. facing section of n-s ditch 145	Monochrome
1	6	N. facing section of n-s ditch 145	Monochrome
1	7	stone well 141	Monochrome
1	8	stone well 141	Monochrome
1	9	stone well 141	Monochrome
1	10	w. facing section of drain 140	Monochrome
1	11	general shot of Roman road; looking east	Monochrome
1	12	general shot of Roman road; looking east	Monochrome
1	13	general shot of Roman road; looking east	Monochrome
1	14	general shot of Roman road; looking east	Monochrome
1	15	general shot of Roman road; looking east	Monochrome
1	16	general shot of Roman road; looking east	Monochrome
1	17	general shot of Roman road; looking east	Monochrome
1	18	general shot of Roman road; looking east	Monochrome
1	19	general shot of Roman road; looking east	Monochrome
1	20	general shot of Roman road; looking east	Monochrome
1	21	general shot of s end of site; looking east	Monochrome
1	22	w facing section of pit 121	Monochrome
1	23	w facing section of pit 121	Monochrome
1	24	w facing section of pit 121	Monochrome
1	25	w facing section of features 112 and 108	Monochrome
1	26	w facing section of features 112 and 108	Monochrome
1	27	w facing section of ditch 112	Monochrome
1	28	w facing section of ditch 112	Monochrome
1	29	e facing section of pit 106	Monochrome
1	30	e facing section of pit 106	Monochrome
1	31	w facing section of pit 104	Monochrome
1	32	w facing section of pit 104	Monochrome
1	33	ID shot	Monochrome
1	34	w facing section pit 108	Monochrome
1	35	w facing section pit 108	Monochrome
2	1	working shot	Colour
2	2	road metalling	Colour
2	3	road metalling	Colour
2	4	road metalling	Colour
2	5	N. facing section of n-s ditch 145	Colour
2	6	N. facing section of n-s ditch 145	Colour
2	7	stone well 141	Colour
2	8	stone well 141	Colour
2	9	stone well 141	Colour
2	10	w. facing section of drain 140	Colour
2	11	general shot of Roman road; looking east	Colour
2	12	general shot of Roman road; looking east	Colour
2	13	general shot of Roman road; looking east	Colour
2	14	general shot of Roman road; looking east	Colour
2	15	general shot of Roman road; looking east	Colour
2	16	general shot of Roman road; looking east	Colour
2	17	general shot of Roman road; looking east	Colour
2	18	general shot of Roman road; looking east	Colour
2	19	general shot of Roman road; looking east	Colour
2	20	general shot of Roman road; looking east	Colour

2	21	general shot of s end of site; looking east	Colour
2	22	w facing section of pit 121	Colour
2	23	w facing section of pit 121	Colour
2	24	w facing section of pit 121	Colour
2	25	w facing section of features 112 and 108	Colour
2	26	w facing section of features 112 and 108	Colour
2	27	w facing section of ditch 112	Colour
2	28	w facing section of ditch 112	Colour
2	29	e facing section of pit 106	Colour
2	30	e facing section of pit 106	Colour
2	31	w facing section of pit 104	Colour
2	32	w facing section of pit 104	Colour
2	33	ID shot	Colour
2	34	w facing section pit 108	Colour
2	35	w facing section pit 108	Colour
3	1	n facing section of well 169	Monochrome
3	2	n facing section of well 169	Monochrome
3	3	n facing section of well 169	Monochrome
3	4	n facing section of well 169	Monochrome
3	5	n facing section of well 169	Monochrome
3	6	n facing section of well 169	Monochrome
3	7	robber cut of wall 127	Monochrome
3	8	robber cut of wall 127	Monochrome
3	9	n facing section well 148	Monochrome
3	10	n facing section well 148	Monochrome
3	11	well 152; looking south	Monochrome
3	12	well 152; looking south	Monochrome
3	13	wall 127	Monochrome
3	14	wall 127	Monochrome
3	15	floor surface 160	Monochrome
3	16	floor surface 160	Monochrome
3	17	walls: 123, 124, 125, 126; looking west	Monochrome
3	18	walls: 123, 124, 125, 126; looking west	Monochrome
3	19	walls: 123, 124, 125, 126; looking west	Monochrome
3	20	walls: 123, 124, 125, 126; looking west	Monochrome
3	21	skeleton 159	Monochrome
3	22	skeleton 159	Monochrome
3	23	skeleton 159	Monochrome
3	24	skeleton 159	Monochrome
3	25	skeleton 159	Monochrome
3	26	skeleton 159	Monochrome
3	27	skeleton 159	Monochrome
3	28	skeleton 159	Monochrome
3	29	w facing section well 152	Monochrome
3	30	w facing section well 152	Monochrome
3	31	n facing section ditch 149	Monochrome
3	32	n facing section ditch 149	Monochrome
3	33	n facing section of ditch 145	Monochrome
3	34	n facing section of ditch 145	Monochrome
3	35	n facing section of pit 148	Monochrome
3	36	n facing section of pit 148	Monochrome
4	1	n facing section of well 169	Colour
4	2	n facing section of well 169	Colour
4	3	n facing section of well 169	Colour
4	4	n facing section of well 169	Colour
4	5	n facing section of well 169	Colour

4	6	n facing section of well 169	Colour
4	7	robber cut of wall 127	Colour
4	8	robber cut of wall 127	Colour
4	9	n facing section well 148	Colour
4	10	n facing section well 148	Colour
4	11	well 152; looking south	Colour
4	12	well 152; looking south	Colour
4	13	wall 127	Colour
4	14	wall 127	Colour
4	15	floor surface 160	Colour
4	16	floor surface 160	Colour
4	17	walls: 123, 124, 125, 126; looking west	Colour
4	18	walls: 123, 124, 125, 126; looking west	Colour
4	19	walls: 123, 124, 125, 126; looking west	Colour
4	20	walls: 123, 124, 125, 126; looking west	Colour
4	21	skeleton 159	Colour
4	22	skeleton 159	Colour
4	23	skeleton 159	Colour
4	24	skeleton 159	Colour
4	25	skeleton 159	Colour
4	26	skeleton 159	Colour
4	27	skeleton 159	Colour
4	28	skeleton 159	Colour
4	29	w facing section well 152	Colour
4	30	w facing section well 152	Colour
4	31	n facing section ditch 149	Colour
4	32	n facing section ditch 149	Colour
4	33	n facing section of ditch 145	Colour
4	34	n facing section of ditch 145	Colour
4	35	n facing section of pit 148	Colour
4	36	n facing section of pit 148	Colour
5	1	posthole 232	Monochrome
5	2	posthole 232	Monochrome
5	3	well 229 looking northwest	Monochrome
5	4	well 229 looking northwest	Monochrome
5	5	well 229 looking east	Monochrome
5	6	well 229 looking east	Monochrome
5	7	well 229 looking east	Monochrome
5	8	well 229 looking east	Monochrome
5	9	ditch 221 and 256 looking south	Monochrome
5	10	ditch 221 and 256 looking south	Monochrome
5	11	ditch 221 and 256 looking south	Monochrome
5	12	posthole 222	Monochrome
5	13	posthole 222	Monochrome
5	14	well 210; looking west	Monochrome
5	15	well 210; looking west	Monochrome
5	16	well 210; looking west	Monochrome
5	17	well 210; looking west	Monochrome
5	18	structure 194	Monochrome
5	19	structure 194	Monochrome
5	20	floor 184	Monochrome
5	21	floor 184	Monochrome
5	22	structure 183	Monochrome
5	23	structure 183	Monochrome
5	24	structure and floor 183, 184	Monochrome
5	25	structure and floor 183, 184	Monochrome

5	26	pit 186; looking west	Monochrome
5	27	pit 186; looking west	Monochrome
5	28	well 152; looking south	Monochrome
5	29	well 152; looking south	Monochrome
5	30	skeleton 176	Monochrome
5	31	skeleton 176	Monochrome
5	32	small pit/hearth 177	Monochrome
5	33	small pit/hearth 177	Monochrome
5	34	skeleton 176	Monochrome
5	35	skeleton 176	Monochrome
5	36	skeleton 176	Monochrome
6	1	posthole 232	Colour
6	2	posthole 232	Colour
6	3	well 229 looking northwest	Colour
6	4	well 229 looking northwest	Colour
6	5	well 229 looking east	Colour
6	6	well 229 looking east	Colour
6	7	well 229 looking east	Colour
6	8	well 229 looking east	Colour
6	9	ditch 221 and 256 looking south	Colour
6	10	ditch 221 and 256 looking south	Colour
6	11	ditch 221 and 256 looking south	Colour
6	12	posthole 222	Colour
6	13	posthole 222	Colour
6	14	well 210; looking west	Colour
6	15	well 210; looking west	Colour
6	16	well 210; looking west	Colour
6	17	well 210; looking west	Colour
6	18	structure 194	Colour
6	19	structure 194	Colour
6	20	floor 184	Colour
6	21	floor 184	Colour
6	22	structure 183	Colour
6	23	structure 183	Colour
6	24	structure and floor 183, 184	Colour
6	25	structure and floor 183, 184	Colour
6	26	pit 186; looking west	Colour
6	27	pit 186; looking west	Colour
6	28	well 152; looking south	Colour
6	29	well 152; looking south	Colour
6	30	skeleton 176	Colour
6	31	skeleton 176	Colour
6	32	small pit/hearth 177	Colour
6	33	small pit/hearth 177	Colour
6	34	skeleton 176	Colour
6	35	skeleton 176	Colour
6	36	skeleton 176	Colour
7	1	working shot	Monochrome
7	2	working shot	Monochrome
7	3	working shot	Monochrome
7	4	w facing section pit 273	Monochrome
7	5	w facing section pit 273	Monochrome
7	6	feature 265; looking east	Monochrome
7	7	feature 265; looking east	Monochrome
7	8	neonate/infant skeleton 254	Monochrome
7	9	neonate/infant skeleton 254	Monochrome

7	10	ditch 252	Monochrome
7	11	ditch 252	Monochrome
7	12	ditch 252	Monochrome
7	13	ditch 252	Monochrome
7	14	ne facing section of feature 225	Monochrome
7	15	ne facing section of feature 225	Monochrome
7	16	w facing section though features 215, 195, 231	Monochrome
7	17	w facing section though features 215, 195, 231	Monochrome
7	18	w facing section through features 213, 205, 207	Monochrome
7	19	w facing section through features 213, 205, 207	Monochrome
7	20	s facing section through features 244, 246, 248, 263	Monochrome
7	21	s facing section through features 244, 246, 248, 263	Monochrome
7	22	s facing section through features 244, 246, 248, 263	Monochrome
7	23	s facing section through features 244, 246, 248, 263	Monochrome
7	24	s facing section through features 244, 246, 248, 263	Monochrome
7	25	working shot	Monochrome
7	26	ID shot	Monochrome
7	27	linear 236 and 256	Monochrome
7	28	linear 236 and 256	Monochrome
7	29	pit 241	Monochrome
7	30	pit 241	Monochrome
7	31	pit 240; looking northwest	Monochrome
7	32	pit 240; looking northwest	Monochrome
7	33	nw-se linear 236	Monochrome
7	34	nw-se linear 236	Monochrome
7	35	ID shot	Monochrome
7	36	ID shot	Monochrome
8	1	working shot	Colour
8	2	working shot	Colour
8	3	working shot	Colour
8	4	w facing section pit 273	Colour
8	5	w facing section pit 273	Colour
8	6	feature 265; looking east	Colour
8	7	feature 265; looking east	Colour
8	8	neonate/infant skeleton 254	Colour
8	9	neonate/infant skeleton 254	Colour
8	10	ditch 252	Colour
8	11	ditch 252	Colour
8	12	ditch 252	Colour
8	13	ditch 252	Colour
8	14	ne facing section of feature 225	Colour
8	15	ne facing section of feature 225	Colour
8	16	w facing section though features 215, 195, 231	Colour
8	17	w facing section though features 215, 195, 231	Colour
8	18	w facing section through features 213, 205, 207	Colour
8	19	w facing section through features 213, 205, 207	Colour
8	20	s facing section through features 244, 246, 248, 263	Colour
8	21	s facing section through features 244, 246, 248, 263	Colour
8	22	s facing section through features 244, 246, 248, 263	Colour
8	23	s facing section through features 244, 246, 248, 263	Colour
8	24	s facing section through features 244, 246, 248, 263	Colour
8	25	working shot	Colour
8	26	ID shot	Colour
8	27	linear 236 and 256	Colour
8	28	linear 236 and 256	Colour
8	29	pit 241	Colour

8	30	pit 241	Colour
8	31	pit 240; looking northwest	Colour
8	32	pit 240; looking northwest	Colour
8	33	nw-se linear 236	Colour
8	34	nw-se linear 236	Colour
8	35	ID shot	Colour
8	36	ID shot	Colour
9	1	building and postholes looking west	Monochrome
9	2	building and postholes looking west	Monochrome
9	3	building and postholes looking west	Monochrome
9	4	building and postholes looking west	Monochrome
9	5	building and postholes looking west	Monochrome
9	6	building and postholes looking west	Monochrome
9	7	red clay 289	Monochrome
9	8	red clay 289	Monochrome
9	9	robber trench 287; looking north	Monochrome
9	10	robber trench 287; looking north	Monochrome
9	11	red spread 286	Monochrome
9	12	red spread 286	Monochrome
9	13	working shot of features 279, 214, 241, 231	Monochrome
9	14	working shot of features 279, 214, 241, 231	Monochrome
9	15	w facing section through pit and linear 163, 275	Monochrome
9	16	w facing section through pit and linear 163, 275	Monochrome
9	17	e facing section through pit and linear 241, 231	Monochrome
9	18	e facing section through pit and linear 241, 231	Monochrome
9	19	e facing section of pit and linear 279, 267	Monochrome
9	20	e facing section of pit and linear 279, 267	Monochrome
9	21	red spread	Monochrome
9	22	red spread	Monochrome
9	23	red spread	Monochrome
9	24	wall corner 280	Monochrome
9	25	wall corner 280	Monochrome
9	26	extent of red clay 284	Monochrome
9	27	extent of red clay 284	Monochrome
9	28	post-ex of posthole 281	Monochrome
9	29	post-ex of posthole 281	Monochrome
9	30	posthole 281	Monochrome
9	31	posthole 281	Monochrome
9	32	pre-ex of posthole 281	Monochrome
9	33	pre-ex of posthole 281	Monochrome
9	34	section through features 277, 269; looking south	Monochrome
9	35	section through features 277, 269; looking south	Monochrome
9	36	ID shot	Monochrome
10	1	building and postholes looking west	Colour
10	2	building and postholes looking west	Colour
10	3	building and postholes looking west	Colour
10	4	building and postholes looking west	Colour
10	5	building and postholes looking west	Colour
10	6	building and postholes looking west	Colour
10	7	red clay 289	Colour
10	8	red clay 289	Colour
10	9	robber trench 287; looking north	Colour
10	10	robber trench 287; looking north	Colour
10	11	red spread 286	Colour
10	12	red spread 286	Colour
10	13	working shot of features 279, 214, 241, 231	Colour

10	14	working shot of features 279, 214, 241, 231	Colour
10	15	w facing section through pit and linear 163, 275	Colour
10	16	w facing section through pit and linear 163, 275	Colour
10	17	e facing section through pit and linear 241, 231	Colour
10	18	e facing section through pit and linear 241, 231	Colour
10	19	e facing section of pit and linear 279, 267	Colour
10	20	e facing section of pit and linear 279, 267	Colour
10	21	red spread	Colour
10	22	red spread	Colour
10	23	red spread	Colour
10	24	wall corner 280	Colour
10	25	wall corner 280	Colour
10	26	extent of red clay 284	Colour
10	27	extent of red clay 284	Colour
10	28	post-ex of posthole 281	Colour
10	29	post-ex of posthole 281	Colour
10	30	posthole 281	Colour
10	31	posthole 281	Colour
10	32	pre-ex of posthole 281	Colour
10	33	pre-ex of posthole 281	Colour
10	34	section through features 277, 269; looking south	Colour
10	35	section through features 277, 269; looking south	Colour
10	36	ID shot	Colour
11	1	large posthole 331	Monochrome
11	2	large posthole 331	Monochrome
11	3	posthole 319	Monochrome
11	4	posthole 319	Monochrome
11	5	posthole 316	Monochrome
11	6	posthole 316	Monochrome
11	7	posthole 313	Monochrome
11	8	posthole 313	Monochrome
11	9	posthole 310	Monochrome
11	10	posthole 310	Monochrome
11	11	posthole 307	Monochrome
11	12	posthole 307	Monochrome
11	13	posthole 300; looking se	Monochrome
11	14	posthole 300; looking se	Monochrome
11	15	posthole 300; looking se	Monochrome
11	16	posthole 300; looking se	Monochrome
11	17	oven 297I looking se	Monochrome
11	18	oven 297I looking se	Monochrome
11	19	oven 297I looking se	Monochrome
11	20	oven 297I looking se	Monochrome
11	21	red sand and stone line 320	Monochrome
11	22	red sand and stone line 320	Monochrome
11	23	red sand and stone line 320	Monochrome
11	24	w facing section gully and pit 303 and 301	Monochrome
11	25	w facing section gully and pit 303 and 301	Monochrome
11	26	stone lined pit 297; looking se	Monochrome
11	27	stone lined pit 297; looking se	Monochrome
11	28	stone lined pit 297; looking se	Monochrome
11	29	stone lined pit 297; looking se	Monochrome
11	30	e facing section of well 294	Monochrome
11	31	e facing section of well 294	Monochrome
11	32	working shot	Monochrome
11	33	working shot	Monochrome

11	34	Aisled building; looking west	Monochrome
11	35	Aisled building; looking west	Monochrome
11	36	ID shot	Monochrome
12	1	large posthole 331	Colour
12	2	large posthole 331	Colour
12	3	posthole 319	Colour
12	4	posthole 319	Colour
12	5	posthole 316	Colour
12	6	posthole 316	Colour
12	7	posthole 313	Colour
12	8	posthole 313	Colour
12	9	posthole 310	Colour
12	10	posthole 310	Colour
12	11	posthole 307	Colour
12	12	posthole 307	Colour
12	13	posthole 300; looking se	Colour
12	14	posthole 300; looking se	Colour
12	15	posthole 300; looking se	Colour
12	16	posthole 300; looking se	Colour
12	17	oven 297I looking se	Colour
12	18	oven 297I looking se	Colour
12	19	oven 297I looking se	Colour
12	20	oven 297I looking se	Colour
12	21	red sand and stone line 320	Colour
12	22	red sand and stone line 320	Colour
12	23	red sand and stone line 320	Colour
12	24	w facing section gully and pit 303 and 301	Colour
12	25	w facing section gully and pit 303 and 301	Colour
12	26	stone lined pit 297; looking se	Colour
12	27	stone lined pit 297; looking se	Colour
12	28	stone lined pit 297; looking se	Colour
12	29	stone lined pit 297; looking se	Colour
12	30	e facing section of well 294	Colour
12	31	e facing section of well 294	Colour
12	32	working shot	Colour
12	33	working shot	Colour
12	34	Aisled building; looking west	Colour
12	35	Aisled building; looking west	Colour
12	36	ID shot	Colour
13	1	general shots of wall 407	Monochrome
13	2	general shots of wall 407	Monochrome
13	3	general shots of wall 407	Monochrome
13	4	general shots of wall 407	Monochrome
13	5	general shots of wall 407	Monochrome
13	6	general shots of wall 407	Monochrome
13	7	general shots	Monochrome
13	8	general shots	Monochrome
13	9	general shots	Monochrome
13	10	general shots	Monochrome
13	11	working shots of buildings	Monochrome
13	12	working shots of buildings	Monochrome
13	13	working shots of buildings	Monochrome
13	14	working shots of buildings	Monochrome
13	15	wall 389	Monochrome
13	16	wall 389	Monochrome
13	17	wall 389	Monochrome

13	18	wall 389	Monochrome
13	19	GRP 388	Monochrome
13	20	GRP 388	Monochrome
13	21	GRP 388	Monochrome
13	22	GRP 388	Monochrome
13	23	posthole 384	Monochrome
13	24	posthole 384	Monochrome
13	25	posthole 380	Monochrome
13	26	posthole 380	Monochrome
13	27	s facing section ditch 375	Monochrome
13	28	s facing section ditch 375	Monochrome
13	29	ditches 365-367; looking south	Monochrome
13	30	ditches 365-367; looking south	Monochrome
13	31	wall 130; looking south	Monochrome
13	32	wall 130; looking south	Monochrome
13	33	wall 130; looking north	Monochrome
13	34	wall 130; looking north	Monochrome
13	35	n facing ditch 346	Monochrome
13	36	n facing ditch 346	Monochrome
14	1	general shots of wall 407	Colour
14	2	general shots of wall 407	Colour
14	3	general shots of wall 407	Colour
14	4	general shots of wall 407	Colour
14	5	general shots of wall 407	Colour
14	6	general shots of wall 407	Colour
14	7	general shots	Colour
14	8	general shots	Colour
14	9	general shots	Colour
14	10	general shots	Colour
14	11	working shots of buildings	Colour
14	12	working shots of buildings	Colour
14	13	working shots of buildings	Colour
14	14	working shots of buildings	Colour
14	15	wall 389	Colour
14	16	wall 389	Colour
14	17	wall 389	Colour
14	18	wall 389	Colour
14	19	GRP 388	Colour
14	20	GRP 388	Colour
14	21	GRP 388	Colour
14	22	GRP 388	Colour
14	23	posthole 384	Colour
14	24	posthole 384	Colour
14	25	posthole 380	Colour
14	26	posthole 380	Colour
14	27	s facing section ditch 375	Colour
14	28	s facing section ditch 375	Colour
14	29	ditches 365-367; looking south	Colour
14	30	ditches 365-367; looking south	Colour
14	31	wall 130; looking south	Colour
14	32	wall 130; looking south	Colour
14	33	wall 130; looking north	Colour
14	34	wall 130; looking north	Colour
14	35	n facing ditch 346	Colour
14	36	n facing ditch 346	Colour
15	1	void	Monochrome

15	2	void	Monochrome
15	3	void	Monochrome
15	4	void	Monochrome
15	5	void	Monochrome
15	6	void	Monochrome
15	7	void	Monochrome
15	8	void	Monochrome
15	9	void	Monochrome
15	10	void	Monochrome
15	11	void	Monochrome
15	12	void	Monochrome
15	13	general shots	Monochrome
15	14	general shots	Monochrome
15	15	sondage through wall 407	Monochrome
15	16	sondage through wall 407	Monochrome
15	17	sondage through wall 407	Monochrome
15	18	sondage through wall 407	Monochrome
15	19	sondage through wall 407	Monochrome
15	20	sondage through wall 407	Monochrome
15	21	sondage through wall 407	Monochrome
15	22	sondage through wall 407	Monochrome
15	23	general shots	Monochrome
15	24	general shots; looking east and northeast	Monochrome
15	25	general shots; looking east and northeast	Monochrome
15	26	general shots; looking east and northeast	Monochrome
15	27	general shots; looking east and northeast	Monochrome
15	28	working shots of buildings	Monochrome
15	29	working shots of buildings	Monochrome
15	30	working shots of buildings	Monochrome
15	31	working shots of buildings	Monochrome
15	32	building area; looking west	Monochrome
15	33	building area; looking west	Monochrome
15	34	wall 407; looking west	Monochrome
15	35	wall 407; looking west	Monochrome
15	36	ID shot	Monochrome
16	1	void	Colour
16	2	void	Colour
16	3	void	Colour
16	4	void	Colour
16	5	void	Colour
16	6	void	Colour
16	7	void	Colour
16	8	void	Colour
16	9	void	Colour
16	10	void	Colour
16	11	void	Colour
16	12	void	Colour
16	13	general shots	Colour
16	14	general shots	Colour
16	15	sondage through wall 407	Colour
16	16	sondage through wall 407	Colour
16	17	sondage through wall 407	Colour
16	18	sondage through wall 407	Colour
16	19	sondage through wall 407	Colour
16	20	sondage through wall 407	Colour
16	21	sondage through wall 407	Colour

16	22	sondage through wall 407	Colour
16	23	general shots	Colour
16	24	general shots; looking east and northeast	Colour
16	25	general shots; looking east and northeast	Colour
16	26	general shots; looking east and northeast	Colour
16	27	general shots; looking east and northeast	Colour
16	28	working shots of buildings	Colour
16	29	working shots of buildings	Colour
16	30	working shots of buildings	Colour
16	31	working shots of buildings	Colour
16	32	building area; looking west	Colour
16	33	building area; looking west	Colour
16	34	wall 407; looking west	Colour
16	35	wall 407; looking west	Colour
16	36	ID shot	Colour

Appendix F
OASIS Summary

OASIS DATA COLLECTION FORM: England

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OASIS ID: networka2-103093

Project details

Project name	Hoplands Boston Road Excavation
Short description of the project	Excavation at Hoplands, Boston Road, Sleaford. Roman buildings, burials, wells and a road were revealed
Project dates	Start: 11-01-2010 End: 02-03-2010
Previous/future work	Yes / Not known
Any associated project reference codes	HOPS09 - Sitecode
Any associated project reference codes	LCNCC: 2009.193 - Related HER No.
Type of project	Recording project
Site status	None
Current Land use	Other 14 - Recreational usage
Monument type	ROAD Roman
Monument type	BUILDINGS Roman
Monument type	WELLS Roman
Monument type	BURIALS Roman
Significant Finds	POTTERY Roman
Significant Finds	ANIMAL BONE Roman
Significant Finds	METALWORK Roman
Significant Finds	HUMAN BONE Roman
Investigation type	'Open-area excavation'
Prompt	Direction from Local Planning Authority - PPS

Project location

Country	England
Site location	LINCOLNSHIRE NORTH KESTEVEN SLEAFORD Hoplands, Boston Road, Sleaford

Postcode	NG34 7FX
Study area	0.20 Hectares
Site coordinates	507934 345907 507934 00 00 N 345907 00 00 E Point
Lat/Long Datum	Unknown
Height OD / Depth	Min: 12.50m Max: 13.00m

Project creators

Name of Organisation	Network Archaeology Ltd
Project brief originator	City/Nat. Park/District/Borough archaeologist
Project design originator	Naomi Field Archaeological Consultancy
Project director/manager	Michael Wood
Project supervisor	Gavin Glover
Type of sponsor/funding body	District Council
Name of sponsor/funding body	North Kesteven District Council

Project archives

Physical Archive recipient	The Collection Lincoln
Physical Contents	'Animal Bones','Ceramics','Environmental','Glass','Human Bones','Industrial','Metal','Worked bone','Worked stone/lithics'
Digital Archive recipient	The Collection Lincoln
Digital Contents	'Animal Bones','Ceramics','Environmental','Glass','Human Bones','Industrial','Metal','Stratigraphic','Worked bone','Worked stone/lithics'
Digital Media available	'GIS','Spreadsheets','Text'
Paper Archive recipient	The Collection Lincoln
Paper Contents	'Animal Bones','Ceramics','Environmental','Glass','Human Bones','Industrial','Metal','Stratigraphic','Survey','Worked bone','Worked stone/lithics'
Paper Media available	'Context sheet','Drawing','Matrices','Photograph','Plan','Report','Section'

Project bibliography

1	
Publication type	Grey literature (unpublished document/manuscript)
Title	Hoplands, Boston Road, Sleaford, Archaeological Excavation
Author(s)/Editor(s)	Glover, G
Date	2011
Issuer or publisher	Network Archaeology Ltd
Place of issue or publication	Network Archaeology Ltd Lincoln
Description	A4 spiral bound report with clear plastic cover.

Entered by Mike Wood (michaelw@netarch.co.uk)
Entered on 13 June 2011

OASIS:

Please e-mail [English Heritage](#) for OASIS help and advice

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