ARCHAEOLOGICAL INVESTIGATIONS AT
BISHOP BURTON COLLEGE, YORK ROAD,
BISHOP BURTON, EAST RIDING OF YORKSHIRE

**Assessment Report** 

# Archaeological Investigations at Bishop Burton College, York Road, Bishop Burton, East Riding of Yorkshire

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Site Code: BBC 08

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#### 1. NON-TECHNICAL SUMMARY

- 1.1 Archaeological investigations were undertaken by Pre-Construct Archaeology Limited in July-August 2008 at Bishop Burton College, York Road, Bishop Burton, East Riding of Yorkshire. The central National Grid Reference of the site is SE 9890 4040. The work was commissioned by CAD Associates Limited on behalf of Bishop Burton College ahead of construction of a balancing lake to take surface water run-off.
- 1.2 The village of Bishop Burton is located on the A1079, York Road, *c.* 4.5km west of Beverley. The village core lies on the south side of the through road, with the extensive grounds of Bishop Burton College to the north. The college grounds are of considerable archaeological interest since they occupy the site of a medieval deer park. Well-preserved earthworks ('The Reins') defining the north-western portion of the deer park boundary have scheduled monument status these are considered to be the best surviving boundary earthworks of the period in the East Riding.
- 1.3 The eastern portion of the college grounds occupies particularly undulating ground and the site of the balancing lake development lies within the floor of a small natural valley with the ground rising away from the site to the west and east. The site either adjoins or overlies the projected course of the eastern boundary of the medieval deer park and, in addition, the site lies within an area of medieval farmland and there is evidence from the wider area for prehistoric and Romano-British activity.
- 1.4 Planning permission for the balancing lake development was granted subject to an archaeological condition requiring an approved programme of archaeological work to be undertaken ahead of the scheme. Geophysical survey was undertaken in June 2008 of the entire footprint of the balancing lake which comprises 'upper' and 'lower' ponds and this identified geophysical anomalies potentially indicative of archaeological features within the lower pond area. Three archaeological trial trenches were investigated in July 2008 to test the potential archaeological features and this exposed linear and discrete features, some yielding pottery dating to the later pre-Roman Iron Age or Romano-British period.
- 1.5 Archaeological monitoring of machine removal of topsoil and some underlying colluvial material was then undertaken across the area of the balancing lake, followed by a programme of targeted archaeological excavation, this work continuing into August 2008. The excavation was undertaken across a sub-rectangular area covering *c*. 1,750m² and incorporating two of the trial trenches, the third lying a short distance to the north-west of the main excavation area.
- The earliest evidence for archaeological activity at the site was provided by stuck flint, some recovered from archaeological features, the remainder from the colluvium, and all probably residual in context. More than 50 pieces of struck flint were recovered, the material representing two distinct industries; the earliest pieces comprised the products of a blade-based industry characteristic of Mesolithic or Early Neolithic forms and the later pieces comprised products of a flake-based industry characteristic of Later Neolithic to Early Bronze Age forms.

- 1.7 Part of a substantial feature running NE-SW was exposed below the colluvial deposit adjacent to the western limit of the excavation area. Its dimensions and irregular form suggest that it was probably the terminal of a substantial palaeochannel associated with the valley floor in which the excavation area was sited.
- 1.8 Features of probable Romano-British date were recorded cutting into the colluvium within the central and western parts of the main excavation area. Most notable was a system of substantial parallel ditches extending across the excavation area on a rough NE-SW alignment. Although identified by the geophysical survey and presumed to represent the boundary of the medieval deer park, artefactual material recovered by sample excavation confirmed this far earlier origin for the ditches. The ditches were presumably an important boundary delineation, while an arrangement of postholes, a single pit, and a short length of a much less substantial NE-SW aligned ditch recorded to the west were potentially indicative of habitation during this era.
- 1.9 Evidence for medieval activity at the site was recorded in the form of the remains of a series of ditches and gullies. The central eastern portion of the main excavation area contained an east-west aligned boundary or drainage ditch, defined by a terminal to the west, which produced pottery of late 12th century date. A similar feature slightly to the south represented a re-definition of the ditch and this also yielded artefactual material of late 12th century date. These features presumably represent drainage of the undulating land or possibly delimitation of a land boundary
- 1.10 At one location there was evidence of re-definition during the medieval period of one of the substantial Romano-British boundary ditches. Slightly further west, a ditch running across the full extent of the excavation area, on the same alignment as the Romano-British boundary features, produced a small assemblage of late 12th to 14th century pottery. It is possible that this feature represented part of the eastern boundary of the medieval deer park, although as its alignment is slightly at variance to the postulated line of the deer park boundary, it is perhaps more likely that it represents a boundary relating to usage of the area as farmland in the medieval period. In the south-western part of the excavation area, two shallow, parallel NE-SW aligned gullies, and a similar feature running at right angles, were probably associated with land division; based on their form they have been attributed a medieval period of origin.
- 1.11 Post-medieval activity within the main excavation area was represented by a NW-SE aligned ditch. Terminally-defined to the south-east, this appeared to represent partial re-definition of the medieval boundary at this location. A short linear feature of uncertain purpose in the central portion of the excavation area produced 18th century pottery. Two NW-SE aligned linear features of post-medieval origin were also recorded, one within the evaluation trench located to the north-west of the main excavation area; these probably represent further land boundary definition or drainage activity.

- 1.12 This Assessment Report is divided into three parts. Part A, the Project Summary, begins with an introduction to the site, describing its location, geology and topography, as well summarising the planning and archaeological background to the project. The objectives of the work are then set out, followed by full descriptions of the archaeological methodologies employed during both the field investigations and the subsequent post-excavation work. This part concludes with an illustrated summary of the archaeological remains representing each of the main phases of occupation, and discussions of the archaeological findings.
- 1.13 Part B, the Data Assessment, quantifies the written, graphic and photographic elements of the project archive and contains specialist assessments of all categories of artefactual and biological evidence, with recommendations for any further work in each case. This part then sets out an archaeological summary discussion before summarising the potential for further analysis of all elements of the collected project data.
- 1.14 Part C of the report contains references and acknowledgements and there are three appendices to the report, the third being a selection of photographic plates.

#### 2. INTRODUCTION

## 2.1 General Background

- 2.1.1 This report presents an assessment of the potential for further analysis of data collected during archaeological investigations undertaken by Pre-Construct Archaeology Limited (PCA) at Bishop Burton College, East Riding of Yorkshire. The site, centred at National Grid Reference SE 9890 4040, was located within the eastern portion of the grounds of Bishop Burton College (Figure 1).
- 2.1.2 The archaeological investigations were undertaken between 3rd July and 8th August 2008 in advance of the construction of a balancing lake to take surface water run-off. The work was commissioned by CAD Associates Limited, on behalf of Bishop Burton College, and was undertaken as a planning condition on the recommendation of the Humber Archaeological Partnership (HAP).
- 2.1.3 Ahead of the work, the development area was considered to have particular archaeological potential for remains of the medieval period since the college occupies the site of a medieval deer park and there is also evidence of agricultural activity of this period in the vicinity. The site of the balancing lake, lying on the floor of a small natural valley running roughly north-south through the eastern portion of the college grounds, either adjoins or overlies the projected course of the eastern boundary of the deer park. The north-western portion of the deer park boundary is defined by well-preserved earthworks ('The Reins') that have scheduled monument status.
- 2.1.4 A preliminary phase of archaeological evaluation geophysical survey undertaken by GeoQuest Associates in June 2008 established the probable presence of archaeological features within the development area. Further evaluation involving the investigation of three trial trenches was undertaken by PCA in July 2008 and this revealed linear and discrete features, some containing pottery indicating a possible Romano-British date. Accordingly, the evaluation was extended to cover archaeological monitoring of mechanical removal of topsoil and of some underlying colluvial material across the development area, followed by targeted excavation of archaeological remains thus exposed, this work continuing into August 2008.
- 2.1.5 The excavation area was sub-rectangular in shape, covering *c*. 1,750m², and incorporated two of the trial trenches, with the third located slightly to the north-west (Figure 2). A Project Design¹ for the programme of archaeological work was prepared by PCA and approved by the HAP at the onset of the fieldwork.

<sup>&</sup>lt;sup>1</sup> PCA 2008.

- 2.1.6 The archaeological project herein described has been designed according to the guidelines set out in *Management of Research Projects in the Historic Environment* (MoRPHE),<sup>2</sup> with this Assessment Report setting out a formal review of the data collected during the fieldwork. Since not everything recovered from a site has the same significance and thus the same potential for further study, it is this 'assessment' process that identifies those elements of the site data that require further analysis. The Project Design was the main project document reflecting in MoRPHE terminology the 'Initiation' stage of the project.
- 2.1.7 The completed project archive, comprising written, graphic and photographic records, as well as artefactual material, will be deposited with the East Riding of Yorkshire Museum Service, under the site code BBC 08. The Online Access to the Index of Archaeological Investigations (OASIS) reference number is: preconst1-57118.

### 2.2 Site Location and Description

- 2.2.1 Bishop Burton College lies on the north side of the A1079, York Road, c. 4.5km west of Beverley in the East Riding of Yorkshire (Figure 1). The core of the village of Bishop Burton lies to the south of the road. Situated on the very eastern edge of the Yorkshire Wolds, the undulating land in the immediate vicinity of Bishop Burton is distinguished from the surrounding open farmland by its woodland cover.
- 2.2.2 Bishop Burton College occupies the site of a medieval deer park, the western boundary of which survives in earthwork form (these earthworks and associate buried remains having statutory protection as a scheduled monument) beyond the core elements of the college. Projection to the south-east of the known portion of the eastern boundary of the deer park suggests that it may have traversed the part of the college grounds developed for the balancing lake.
- 2.2.3 For the most part, the eastern portion of the college grounds comprises undulating and previously undeveloped grassland, with light tree cover, part of a rectilinear field system to the north of North End Farm. This is a known area of medieval farmland as evidenced by earthworks of typical ridge and furrow pattern as well as lynchets aligned NE-SW in the immediate vicinity of the area of the balancing lake development. The development itself comprised a connected system of 'upper' and 'lower' ponds, with the lower pond area being the site of the archaeological investigation herein described; this area is centred at National Grid Reference SE 9890 4040 (Figure 2).
- 2.2.4 The excavation area comprised a sub-rectangular area measuring a maximum of *c*. 63m north-south by *c*. 36m east-west, essentially the 'footprint' of the lower pond of the overall balancing lake. This area incorporated two of the archaeological evaluation trenches, with the third located a few metres to the north-west; in total, the area of investigation covered *c*. 1,750m² (Figure 2).

<sup>&</sup>lt;sup>2</sup> English Heritage 2006.



Figure 1. Site location Scale 1:25,000



Figure 2. Site location; detail Scale 1:3,000

## 2.3 Geology and Topography

- 2.3.1 The 'solid' geology of the wider area is chalk formed during the Cretaceous period. The majority of the upland area to the west escaped ice cover in the Devensian period so that there are no glacial deposits on the Wolds themselves. However, at this extreme marginal location, Boulder Clay and alluvial silts and clays generally represent the 'drift' geology.
- 2.3.2 The topography of Bishop Burton and surrounding area is notable for its undulating nature. The village itself, south of the A1079, lies at *c.* 50m OD, while the college grounds, to the north of the road, undulate between *c.* 30m OD and *c.* 50m OD. Lying within the largely undeveloped eastern portion of the college grounds, the balancing lake site was purposefully selected because of its topography since it lies on the floor of a small natural valley that runs roughly north-south, curving slightly to the north-east towards Lambfold Wood.
- 2.3.3 At the time of the archaeological fieldwork, ground level in the area of the two ponds of the balancing lake lay between c. 31.40m OD and c. 32.30m OD, with the ground rising away to the west and east from the site. To the west, a farm road runs along the upper valley side; its surface rises slightly to the south-west, reaching a height of 44.50m OD where the route meets the developed part of the college grounds. To the east, the valley side climbs to a height of c. 45.50m OD in the vicinity of the roughly north-south course of Bishop Burton Road.

#### 2.4 Planning Background

- 2.4.1 A planning application for the development construction of the balancing lake to take surface water run-off from existing and proposed development was submitted to the Local Planning Authority (LPA), the East Riding of Yorkshire Council, in November 2007 (application no. DC/07/0711/STPLF/STRAT). The Humber Archaeology Partnership (HAP) is the body responsible for archaeological development control throughout the county.
- 2.4.2 The HAP advised the LPA that granting of planning permission should be subject to an archaeological condition, thus: 'No development shall take place until the applicant has secured the implementation of a programme of archaeological work, in accordance with a written scheme of investigation which has been submitted by the applicant and approved by the Planning Authority'.
- 2.4.3 This was in line with UK Government advice set out in *Planning Policy Guidance Note 16:*'Archaeology and Planning' (PPG16)<sup>3</sup> and the archaeological policies of the LPA. PPG16 is informed by the principle that archaeology represents a finite and non-renewable resource and that its conservation, either by preservation *in situ* or preservation by record (through archaeological excavation) should be the primary goal of archaeological resource management.

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<sup>&</sup>lt;sup>3</sup> Department of the Environment 1990.

- 2.4.4 The principal justification for the archaeological condition lay in the fact that the site proposed for the balancing lake lies close to earthwork and buried remains which enjoy statutory protection under the Ancient Monuments and Archaeological Areas Act 1979 as a scheduled monument (SAM No. 34699 'The Reins medieval deer park boundary within Park Ends and Oaktree Wood').
- 2.4.5 The scheduled remains lie within the north-western portion of the grounds of Bishop Burton College, while the postulated line of the eastern boundary of the deer park traverses the site of the balancing lake development. In addition, the site lies within an area of medieval farmland, with well-preserved ridge and furrow earthworks and lynchets located in the immediate vicinity. Therefore, it was considered likely that the development would encounter below-ground deposits relating to the occupation of the site during the medieval and later periods. In addition, since Bishop Burton lies within a recognised prehistoric and Romano-British landscape, archaeological remains of these eras could also be reasonably expected at the site.
- 2.4.6 The HAP advised the LPA that a staged scheme of archaeological field evaluation was required to establish the archaeological potential of the site. The first element comprised geophysical survey of the area to be affected by the balancing lake development. This was conducted in June 2008 by GeoQuest Associates in accordance with a Specification<sup>4</sup> compiled by the HAP. Documentation accompanying the Specification explained that: 'the results of the evaluation would provide for: 1) the proper identification and evaluation of the extent, character and significance of the archaeological remains within the application area; 2) an assessment of the impact of the proposed development on the archaeological remains; 3) proposals for the preservation in situ, or for the investigation, recording and recovery of archaeological remains and the publishing of the findings, it being understood that there shall be a presumption in favour of their preservation in situ wherever feasible'.
- 2.4.7 The geophysical survey identified anomalies potentially indicative of sub-surface archaeological features within the area of the balancing lake development. Accordingly, the HAP recommended that the next element of the scheme of works should be archaeological trial trenching to ascertain the nature, date, extent, quality of survival and significance of the remains at the site.
- 2.4.8 The aforementioned Project Design produced by PCA constituted the written scheme of investigation required by the planning condition for the second stage of evaluation. This involved the investigation of three trial trenches in July 2008, this work encountering archaeological features indicative of occupation of the site during the Romano-British period. Accordingly the evaluation was extended to archaeological monitoring of machine removal of topsoil and of some underlying colluvial material across the development area, followed by targeted excavation of all archaeological feature thus exposed, this work continuing into August 2008. This report comprising the results of assessment of potential for further analysis of the site data, as described in MoRPHE.

<sup>&</sup>lt;sup>4</sup> Humber Archaeology Partnership 2008.

### 2.5 Archaeological and Historical Background

- 2.5.1 As previously described, Bishop Burton College occupies the site of a medieval deer park, parts of the boundary of which survive as well-preserved earthworks with scheduled monument status (SAM No. 34699 'The Reins medieval deer park boundary within Park Ends and Oaktree Wood'). While these remains lie to the north-west of the balancing lake development area, effectively delimiting the north-western extent of the college grounds, the postulated line of the eastern side of the deer park runs across the development area.
- 2.5.2 The deer park belonged to the Archbishop of York and is first recorded in 1323. A manorial survey of 1388 refers to the felling of oaks within the park and also mentions a pasture called 'New Park' and refers to the park ditch and its accompanying bank, 'the Reins', parts of which remain visible as earthworks. Medieval deer parks typically contained at least some woodland, interspersed with clearings, to form an ideal habitat for raising, then hunting, deer, the idea being to provide good areas of grazing interposed with areas of cover. Other features found within deer parks included hunting lodges, rabbit warrens, fishponds and enclosures deliberately set aside for game.
- 2.5.3 Deer parks were surrounded by a 'pale', in which stock were corralled, this comprised a substantial bank, probably topped by a palisade and skirted by a ditch. The pale at Bishop Burton is one of the best preserved in East Yorkshire, this being one of the reasons behind the decision to schedule the monument. Much of the northern and western sides of the pale survive as a broad flat-topped bank, some 7m wide, and between 1.0m and 1.5m high. On its outside is a partly infilled ditch, up to 4m wide and 0.50m deep, whilst on the inside of the bank are traces of a second, shallower ditch, 2-3m wide, now mostly infilled, and only typically 0.20m deep.
- 2.5.4 The substantial outer ditch at Bishop Burton is relatively uncommon and varies from most deer park boundaries where the bank has a deep inner ditch a so-called 'deer leap' arrangement designed to allow wild deer to jump into the park but not be able to escape again into the surrounding countryside. The main reason behind the arrangement seen at Bishop Burton may have been deterrence of poachers.
- 2.5.5 Bishop Burton is also an area of medieval farmland, as evidenced by surviving earthworks indicative of agricultural activity in the vicinity of the college grounds. These include not only the typical ridge and furrow earthworks indicative of repeatedly ploughed land but also lynchets running NE-SW. Lynchets are terraces created on steeply-sloping land when ploughing became problematic due to the gradient and necessitated ploughing along the slope resulting in the formation of narrow cultivation terraces. The lynchets at Bishop Burton were mentioned specifically in a 1970s survey of the landscape of the region, such is their prominence. One of the best-preserved of these lynchets survives on the valley side immediately to the north of the balancing lake development area; 19th-century mapping depicts the feature running up to but respecting the eastern course of the park pale.

- 2.5.6 The deer park at Bishop Burton passed into the hands of the Crown in 1542 and it was then leased to Christopher Estofte in 1563. It was certainly in use as grassland and for grazing pigs at that date but it is uncertain whether deer were still kept there. In 1603 the park was sold to Sir William Gee and it remained in the hands of his family until 1780. It was almost certainly redundant as a deer park by the 17th century.
- 2.5.7 As well as the very high potential for medieval and post-medieval remains at the balancing lake site, there was considered good potential for much earlier archaeological remains since the broader landscape is well known for evidence of prehistoric and Romano-British settlement and agricultural activity.
- 2.5.8 Specific evidence for prehistoric activity from the immediate vicinity of the site is largely absent, although there are numerous scheduled monuments relating to the prehistoric period within the wider vicinity, the majority of these referring to burial mounds of various forms. The nearest to the site lies to the south-east and comprises a group of barrows located on Westwood Common (SAM Nos. 26560, 26563-26566 and 26568) and to the south-west near Cow Wold Road, this comprising two round barrows (SAM Nos. 21123 and 21124).
- 2.5.9 As with the prehistoric period, recorded evidence of Romano-British activity from the immediate vicinity of the site is absent. However, within the wider area there are two scheduled sites of the Romano-British period, located to the south-east of the college on Westwood Common. Both survive as earthworks, the first being a sub-rectangular Romano-British defended enclosure (SAM 26569) in Burton Bushes, the second an oval Romano-British defended enclosure and two adjoining fields (SAM 26567) located c. 0.5km south-west of Blackmill.
- 2.5.10 In summary, therefore, the balancing lake development area was considered to have potential for archaeological deposits relating to the use and development of a nationally important site during the medieval and post-medieval periods, farming systems of similar date, with additional potential for evidence of settlement and agriculture of far earlier date.

#### 3. AIMS AND OBJECTIVES

- 3.1 Since construction of the balancing lake was likely to disturb or, probably more likely, destroy any archaeological remains at the site, it was considered that preservation in situ, for example by resiting or re-designing the development, was not a feasible option. Therefore, preservation by record was considered the most appropriate form of mitigation and the broad objectives of the archaeological investigations were:
  - to expose, clean, sample, record, excavate and interpret any archaeological remains located within the footprint of the lower pond of the balancing lake;
  - to locate, recover, identify and conserve (as appropriate) any archaeological artefacts and palaeoenvironmental remains encountered during the investigations;
  - to prepare an Assessment Report summarising the results of the work and setting out the potential for further analysis of each element of the collected data leading to publication of the findings, as appropriate;
  - to prepare and deposit a suitable archive with an appropriate repository.
- 3.2 In specific terms, the archaeological investigations aimed:
  - to characterise anomalies identified during the geophysical survey and to establish whether or not these were of archaeological origin;
  - to record and interpret any archaeological evidence relating to the boundary of the medieval deer park;
  - to record and interpret evidence for changing of site activities from prehistory to the
    post-medieval period, through analysis of deposits to show the taphonomy of their
    components, such as pottery sherds, ceramic building materials, metal objects,
    charred biological remains and faunal remains.

### 4. METHODOLOGY

#### 4.1 Fieldwork

- 4.1.1 All archaeological fieldwork was undertaken at the site in accordance with the relevant standard and guidance document<sup>5</sup> of the Institute for Archaeologists (IfA). PCA is an 'IfA-Registered Organisation'.
- Associates in June 2008 as a first phase of archaeological evaluation of the balancing lake development area. The survey encompassed as much of the proposed balancing lake development area as possible, although its southernmost portion could not be surveyed owing to the presence of large trees, two ponds, a metal tank and steel gate. The unsurveyed area lies within a closed depression and is prone to flooding. The main findings of the survey were identification of a semi-circular geophysical anomaly (f3), thought possibly to be a ditched enclosure c. 18m in diameter and parallel linear anomalies (f2) running NW-SE, these potentially a series of boundary ditches. GeoQuest Associates' report on the geophysical survey should be consulted for further details.
- 4.1.3 A second phase of field evaluation was then conducted by PCA commencing on 3rd July 2008. Three archaeological trial trenches were investigated to test the potential archaeological features identified by the geophysical survey and this exposed linear and discrete features, some yielding pottery dating to the later pre-Roman Iron Age or Romano-British period. On 10th July the next stage in the programme of archaeological work began, this being archaeological monitoring of removal by machine of topsoil and some underlying colluvial material across the entire area of the lower pond in the balancing lake. Machine excavation proceeded to the formation level for the balancing lake or the level at which archaeological remains of significance were first exposed. There followed, beginning on 21st July, a programme of targeted archaeological excavation and recording of the remains thus exposed, this work continuing until 8th August.
- 4.1.4 The area investigated comprised a sub-rectangular trench measuring a maximum of *c*. 63m NE-SW by *c*. 36m NW-SE, with a total area of *c*. 1,750m², this comprising the footprint of the lower pond of the balancing lake and incorporating two of the evaluation trenches (Trenches 1 and 3). Evaluation Trench 2, which measured 16m NE-SW by 2m wide, was located *c*. 7m north-west of the main excavation area. Machine removal of topsoil across the footprint of the upper pond in the balancing lake was subject to archaeological monitoring, although establishment of formation level there did not reach archaeologically sensitive levels so that no archaeological excavation was undertaken in the area of the upper pond.
- 4.1.5 All ground reduction at the site was undertaken by tracked 360° mechanical excavator of *c*.

  13-tonnes size, fitted with a 1.80m wide toothless bucket. This work took place under direct archaeological supervision. All undifferentiated topsoil or archaeologically insignificant material was stripped down, in spits of approximately 100mm thickness, to the top of the first significant archaeological horizon or to the formation level of the balancing lake, whichever came first. Spoil was stored to the east of the balancing lake area.

<sup>&</sup>lt;sup>5</sup> IFA 2001.

- 4.1.6 Archaeological excavation and recording was undertaken in accordance with recognised archaeological practice and following the methodology set out in PCA's 'Field Recording Manual'. Following machine clearance of overburden, the sections and base of the open area were cleaned using hand tools. Excavated features and stratigraphic deposits were recorded in section and drawn at a scale of 1:10. Excavated features were recorded in plan at a scale of 1:20 relative to a site grid established within the excavation area using a Total Station EDM and tied-in to the Ordnance Survey grid.
- 4.1.7 All archaeological features were cleaned with hand tools to facilitate characterisation, excavation and recording. All discrete features such as pits and postholes were initially 50% excavated and recorded in section before being fully excavated for artefact recovery. A minimum of 10% of each linear feature was excavated. Archaeological features were recorded using a 'single context planning' system. All deposits and features were recorded on pro forma context record sheets.
- 4.1.8 A detailed photographic record of the investigations was compiled using SLR cameras. This comprised black and white prints and colour transparencies (on 35mm film), illustrating the principal features and finds in detail and in general context. All photographs of this nature included a clearly visible graduated metric scale. The photographic record also included 'working shots' to illustrate more generally the nature of the archaeological investigations.
- 4.1.9 An already established Temporary Bench Mark (TBM) was utilised throughout the archaeological investigations. It was located on the corner of a drain cover to the north-east of the main excavation area and had a value of 32.80m OD.

## 4.2 Post-excavation

- 4.2.1 In accordance with MoRPHE guidelines, the site data has been assessed for its potential for further analysis in relation to the research aims of the project and any additional questions that have come to light as a result of the fieldwork. This Assessment Report enumerates the different kinds of evidence (stratigraphic, artefactual and palaeoenvironmental) from the site and sets out a formal assessment of the potential of each element of the collected data for further analysis.
- 4.2.2 The stratigraphic data from the site is represented by the written, drawn and photographic records. Post-excavation work involved checking and collating site records, grouping contexts, enhancing matrices, consulting with external specialists and phasing the stratigraphic data. A written summary of the archaeological sequence was then compiled, as described below in Section 5. The contents of the written, graphic and photographic archive are quantified in Section 6.
- 4.2.3 All processing of artefacts and ecofacts was undertaken away from the site. Assessment of artefactual and ecofactual material has been undertaken by suitably qualified personnel. For each category of artefact and ecofact an assessment report has been produced including a basic quantification of the material and a statement of its potential for further analysis and recommendations for such work.

<sup>&</sup>lt;sup>6</sup> PCA 1999.

- 4.2.4 All artefacts recovered from the investigations were treated in an appropriate manner and were cleaned, marked, conserved, bagged, packaged, boxed and stored, as appropriate and in accordance with recognised guidelines.<sup>7</sup>
- 4.2.5 Assemblages of ceramic material, including pottery, tile and fired clay, and faunal remains were recovered, along with 'small finds', comprising iron and flint objects.
- 4.2.6 The palaeoenvironmental sampling strategy was to recover bulk samples from suitable, well-dated archaeological deposits. To this end, 10 bulk samples collected during the fieldwork were sent for an assessment of the potential for survival of biological remains.
- 4.2.7 All materials that required stabilisation were transferred to a specialist conservation facility as soon as possible. The conservation of vulnerable materials commenced with an initial assessment of all recovered artefacts and X-radiography of the metal objects. Quality of preservation was assessed and the long-term conservation and storage needs of all excavated material identified.
- 4.2.8 Survival of all materials recovered during or generated by archaeological projects depends upon suitable storage. The complete project archive, comprising written, drawn and photographic records (including all material generated electronically during post-excavation) and all recovered materials will be packaged for long term curation according to relevant guidelines.<sup>8</sup> An acceptable standard for archives generated by archaeological projects is defined in MoRPHE.<sup>9</sup> The archive will be quantified, ordered, indexed, and internally consistent. The depositional requirements of the receiving body, in this case the East Riding of Yorkshire Museum Service, will be met in full.

<sup>&</sup>lt;sup>7</sup> UKIC 1983; Watkinson and Neal 2001.

<sup>&</sup>lt;sup>8</sup> UKIC 1990.

<sup>&</sup>lt;sup>9</sup> English Heritage op. cit.

#### 5. PHASED SUMMARY OF THE ARCHAEOLOGICAL SEQUENCE

#### 5.1 Phase 1: Natural Sub-stratum (Figure 4)

- 5.1.1 The Boulder Clay that typically represents the drift geology of the area was not generally exposed across the main excavation area, since the depth of machine excavation was limited to the formation level for the lower pond of the balancing lake. However, a deposit that can be regarded as the natural sub-stratum was exposed within Trench 2 during the trial trenching and towards the eastern and southern extent of the main excavation area.
- 5.1.2 The natural sub-stratum, [206], encountered in Trench 2 comprised mid pinkish brown silty clay, recorded at a maximum height of 30.86m OD. Towards the eastern and southern extent of the main excavation area, a similar deposit, [437], comprising mid brownish pink clay with patches of degraded chalk was recorded at maximum and minimum heights of 30.82m OD and 30.59m OD, respectively.

### 5.2 Phase 2: Palaeochannel (Figure 4; Plates 1-2)

- A substantial feature, group number [411], was recorded adjacent to and continuing beyond the western limit of the main excavation area. Only the north-western side of this feature, which may have been NE-SW aligned, was exposed, since to the south-east it was obscured by an extensive colluvial deposit (see Phase 3, below). To the north-east the feature had been truncated. The exposed dimensions of the feature were 12m NE-SW by 5.40m wide by up to 1.60m deep. Two portions of the feature were excavated (assigned context numbers [413] and [479]) and these revealed a very irregular profile, stepped along the north-western side, and a narrow steep-sided channel along the base (Sections 1 and 2, Figure 8; Plates 1 and 2).
- 5.2.2 Within the section of the feature excavated adjacent to the western limit of excavation, that is [413], was a primary fill, [480], up to 1.0m thick comprising mid grey silty clay with frequent manganese flecks. In the section to the north-east, that is [479], the primary fill, [478], comprised mottled light and mid brown silty clay up to 0.95m thick. No artefactual material was recovered from these primary fills. The uppermost fill in the south-western section, [412], comprised reddish brown sandy clayey silt with frequent inclusions of small to large flints, very occasional small sub-rounded pebbles and very occasional charcoal flecks. To the north-east, the uppermost fill, [477], comprised mid brown clayey silt with occasional flint inclusions. A small assemblage of struck flint was recovered from these uppermost fills. This comprised sixteen flakes and flake fragments and one blade with retouch evident on one blade and four flakes, including a possible piercer and a knife (SF 3). The slightly abraded nature of most of the flint recovered indicates that this material was probably redeposited from its original location. Three adjoining sherds of 13th to early 14th century pottery were also recovered from fill [412], these considered to be intrusive.

5.2.3 Based on its irregular profile and the slightly humic mottled composition of its infill, this feature is interpreted as a palaeochannel of uncertain period of origin. It likely formed by water action along the valley in which the main excavation area was located, rather than being the result of anthropogenic activity.

## 5.3 Phase 3: Colluvium (Figure 4)

- 5.3.1 A substantial deposit, assigned context numbers [100], [200], [300], [304], [403] and [476], was observed across the extent of the site. In the southern and western portions of the main excavation area this material was up to *c*. 0.80m thick, where it was observed to overlie the Boulder Clay sub-stratum of Phase 1. In the northern part of the site, the colluvium was observed within a machine-excavated sondage to be at least 1.40m thick, but the full thickness was not ascertained as the material continued below the base of excavation. Thus the colluvium increased in thickness to the north, along the line of the valley in which the main excavation area was situated.
- 5.3.2 A 5m by 5m sample area of the colluvium, [304], located in the central western portion of the main excavation area was hand-excavated specifically for the recovery of struck flint (Figure 4). A maximum thickness of 0.20m of the deposit was excavated within this sample area, to a height of 30.45m OD, this being the formation level for the lower pond in the balancing lake. From the sample area a total of eight struck pieces of flint were recovered, with seven flakes and flake fragments identified (SF 18, 20, 21, 24, 25, 27 and 37) and one chip (SF 23). It was noted that a high proportion of this flint material (75%) was recovered from the northern portion of the sample area; however, due to the small size of the sample area, this concentration may not be representative of the wider area. A blade (SF 30) and four flakes and flake fragments (SF 26, 29, 33 and 37), including an edge trimmed flake, were also collected as surface finds from the colluvium, within the near vicinity of the sample area.
- 5.3.3 Due to the small size of the sample area, it is uncertain whether the flint assemblage represents one or more *in situ* scatters or was simply material that had arrived at this location by some natural means, for example as 'hill wash'. Since the majority of the material was fairly abraded, it is considered probably more likely that the latter is the case.

## 5.4 Phase 4: Romano-British (Figure 5; Plates 3-7)

5.4.1 Five circular and sub-circular features, [102], [104], [440], [442] and [444], were recorded close to the western limit of the main excavation area, forming a roughly north-south alignment. Two of the features, [102] and [104], were recorded cutting through the colluvium and with their fills being of similar colour and composition to that material, definition of their upper sections was problematic. However, the lower portions were far more clearly defined, since these elements cut through the underlying Boulder Clay sub-stratum. To the north, features [440], [442] and [444] were recorded cutting through the natural sub-stratum, although this is considered to be simply the result of the colluvial material being removed by machine close to the limit of excavation and the preferred interpretation is that this cluster of features were broadly contemporary.

- 5.4.2 Feature [104], the southernmost within this group, was roughly circular in plan measuring
  1.56m in diameter and 0.34m deep. Its single fill, [103], yielded a sherd of hand-made 'native tradition' pottery of later pre-Roman Iron Age to Romano-British date.
- 5.4.3 To the north of feature [104] were the remaining four features, [102], [440] (Plate 4), [442] and [444], all roughly circular in shape and measuring between *c*. 0.31m and *c*. 0.68m in diameter and up to 0.55m deep. One sherd of hand-made 'native tradition' pottery was recovered from the single fill, [101], of feature [102].
- 5.4.4 Based on form and dimensions, and the similarity of their silty clay fills, most of these features have been interpreted as postholes, with the larger feature, [104], interpreted as a large posthole or possibly a small refuse pit. The nature of the structure with which the posthole alignment was associated is uncertain it may have been a fence line.
- 5.4.5 A sub-oval feature, [202], measuring 0.78m north-south by 0.31m wide and 0.15m deep, was recorded in Trench 2, located c. 21m NNE of the posthole and pit alignment. No artefactual material was recovered from its single fill, [201]. However, based on its similar form and composition of infill to the aforementioned postholes within the main excavation area, the feature has been interpreted as a posthole of similar period of origin.
- Part of a WNW-ESE aligned linear feature, [106], truncated the colluvial deposit, at a maximum height of 30.67m OD, adjacent to the western limit of the main excavation area. It extended at least 2.20m, continuing beyond the limit of excavation, with an irregularly shaped terminal at its ESE extent, and was 1.25m wide and up to 0.79m deep with near vertical sides and a flat base. A small assemblage of struck flint was recovered from its single fill, [105], comprising five pieces characteristic of Later Neolithic or Early Bronze Age industries. However, the slightly abraded condition of the material suggests that these were residual in context. The feature has been interpreted as the remains of a drainage or boundary ditch; based on stratigraphic position and form, it is presumed to be later pre-Roman Iron Age to Romano-British in date.
- 5.4.7 Substantial linear features, interpreted as land boundary ditches of Romano-British date, were recorded extending across the central portion of the main excavation area on a roughly NW-SE alignment. Two main ditches (group numbers [404] and [408]) were recorded; evidence related to these features is described in detail in the following paragraphs.
- 5.4.8 A short length, 0.90m, of a NW-SE aligned ditch, [467], was recorded cutting into the Boulder Clay sub-stratum in the centre of the main excavation area (Section 4, Figure 9). The feature was heavily truncated, with a surviving width of 0.87m and a depth of 0.39m. It was not observed further to the north-west or to the south-east and thus in both directions it either terminated or had been entirely truncated by later features. No artefactual material was recovered from its generally silty clay fills, [466] and [465]. On the basis of the excavated evidence, it appears that this feature was the only surviving element of a substantial ditch, the earliest in a sequence of similarly aligned ditches, as described below.

- 5.4.9 Ditch [467] had been horizontally truncated by ditch [470], one element of the substantial NW-SE aligned feature assigned group number [404]. The overall feature measured at least c. 35m NW-SE, continuing to the south-east beyond the limit of excavation and with a rounded terminal to the north-west. Up to c. 4.30m wide and with a maximum recorded depth of 1.15m, it had moderately steep to steeply sloping sides and a distinctive broad, flat base (Sections 3-5, Figure 8: Plate 3). No evidence of an associated bank was recorded.
- 5.4.10 A primary silting-up fill, [406] and [469], was observed within two sections excavated across the ditch, assigned context numbers [407] and [470] (Sections 4 and 5, Figure 9), but not within a third section at the terminal of the feature, assigned context number [453]. It generally comprised silty clay, up to 0.40m thick. A small assemblage of pottery was recovered from this primary silting fill, comprising two sherds of hand-made 'native tradition' pottery, one sherd of mid 1st to early 2nd century AD pottery and two sherds of medieval pottery, the latter likely to be intrusive. The upper fill, recorded as [405], [454] and [468], generally comprised sandy silty clay, up to 0.86m thick. It yielded a small pottery assemblage, comprising three sherds of hand-made 'native tradition' pottery and six sherds of Romano-British pottery, including two sherds of 2nd to 3rd century AD samian ware. A small struck flint assemblage, including flakes and chips of broadly prehistoric origin, was also recovered from the ditch, these being residual in context.
- 5.4.11 Located immediately north-east of and running parallel to ditch [404] was a similar substantial feature, group number [408], allocated numbers [410], [448] and [461] in the excavated sections. It is considered unlikely that ditches [404] and [408] were open contemporaneously but there was no evidence to indicate which was the earliest and, again, no evidence of the associated bank was recorded. Ditch [408] was traced for at least 37m NW-SE, continuing beyond the limits of excavation, but was not observed within Trench 2, indicating that it terminated between the main excavation area and Trench 2. The feature was at its widest adjacent to the south-eastern limit of excavation where, as ditch [410], it was up to 6m wide and 2.0m deep and had steeply sloping sides tapering to a narrow concave base (Section 8, Figure 10; Plate 5). There was no evidence of re-cutting in this portion, in contrast to the other two sections excavated across the feature; adjacent to the north-western limit of excavation, the ditch, [448], could have been no more than 4m wide (Section 6, Figure 10; Plate 6). All excavated sections (Sections 6-8) revealed a similar profile with sides stepping down to a narrow concave base. The primary fills, [435], [447] and [460], of varying composition, were up to 0.45m thick. No datable artefactual material was recovered from any of these deposits. A fragment of mussel shell was recovered from a bulk environmental sample taken from fill [447]; this may indicate that either marine or freshwater mussels were being exploited possibly as a food source.
- 5.4.12 The upper fills of ditch [408], allocated numbers [430], [409], [446], [459] and [458], generally comprised silty clay and clay with a combined maximum thickness of up to 2.10m. Three sherds of Roman pottery were recovered from deposits [409] and [458], indicating a depositional date in the 2nd to 4th century AD for these deposits. A group of eleven incomplete Roman nails (SF 13) was recovered from fill [409], possibly representing the remains of a composite object, presumably the organic component having degraded in the acidic soil.

- 5.4.13 A small assemblage of six struck flint flakes and chips were recovered from fills [409] and
  [458], these being residual in context, including an edge trimmed flake, possibly a knife (SF
  2), characteristic of Later Neolithic or Early Bronze Age industries.
- A bulk soil sample taken from the upper fill, [430], of the ditch produced a single charred grain of barley, suggesting food processing of this crop within the wider area, along with a small assemblage of uncharred seeds from ruderal, wetland and wide niche taxa, indicative of open and disturbed ground. Also present was a small deposit of vivianite, this material indicative of former organic material typically associated with human or animal waste, industrial waste deposits and areas rich in iron (see Section 11). One sherd of pottery of Roman origin was also recovered from the soil sample taken from deposit [430].
- 5.4.15 Evidence was recorded to suggest that the NW-SE aligned boundary delineated by ditch [408] had been partially re-defined along its north-eastern edge. This took the form of a ditch, group number [450], allocated numbers [449] and [457] in the excavated portions (Sections 6 and 7, Figure 10). The overall feature measured at least 16m NW-SE, continuing north-west beyond the limit of excavation, and was up to 2.45m wide and 1.85m deep, with a generally narrow U-shaped profile. This ditch was not observed within the sondage across ditch [410] (Section 8, Figure 10), adjacent to the south-eastern limit of excavation, indicating that it terminated before this point. One sherd of 3rd to 4th century AD pottery was recovered from one of its silty clay fills, [445] and [456], indicating a similar period of origin to that of ditch [408]. Ditch [450] has therefore been interpreted as a partial re-cut of ditch [408], presumably cut following silting-up. A bulk soil sample taken from fill [445] contained a small deposit of vivianite, as discussed, this possibly indicative of former organic waste.
- 5.4.16 This group of NE-SW aligned linear features was initially identified by the geophysical survey, and it was postulated that they might represent the substantial outer ditch of the pale of the medieval deer park, the boundary of which survives as an earthwork c. 0.5km to the northwest of the excavation area (Figure 2). While the dimensions of the features are certainly of the order that might be expected for the outer ditch in the pale, their alignment, as excavated, is somewhat at variance with the conjectured line of the deer park boundary. However, it is the artefactual remains recovered from these ditches, particularly the small assemblage of hand-made 'native tradition' pottery and the 2nd to 4th century AD pottery, which effectively rules out any association with the medieval monument and indicates a far earlier period of origin. Precise interpretation of the function of the ditches is not possible given the size of the excavated area, but it is likely that the features functioned as boundary markers, and given the undulating topography of the area in which the excavation area was located, they would also have served to facilitate drainage. It is also possible that they may have had a defensive function.

### 5.5 Phase 5: Medieval (Figure 6; Plate 8)

- 5.5.1 The westernmost edge of Phase 4 ditch was truncated by a roughly NW-SE aligned linear feature, [483]. This was traced in the central portion of the excavation area for a distance of only c. 2.0m, and it was not possible to identify the feature further in plan (although it was possibly recorded as ditch [208] in evaluation Trench 2, where it was not excavated). It had concave sides stepping down to a narrow flat base and was up to 3.40m wide and 1.46m deep (Section 7, Figure 10).
- 5.5.2 While no artefactual material was recovered from the lower clay and sandy clay fills, [464] and [463], of the ditch, five sherds of 12th to 14th century pottery were recovered from its upper silty clay fill, [462], including one sherd of Siegburg Stoneware imported from the Rhineland area of Germany. On the basis of the limited excavation evidence, it is postulated that the feature represents partial re-definition during the medieval period of one of the earlier boundary features in this location; whether or not this activity relates to the deer park boundary is uncertain.
- An approximately east-west aligned linear feature, [429], extended westwards from the eastern limit of the main excavation area for a distance of *c*. 19m with a rounded terminal to the west. This had a broad U-shaped profile and was up to 2.80m wide and 0.76m deep (Section 10, Figure 11). A single sherd of Romano-British pottery was recovered from its primary sandy clayey silt fill, [428], and a bulk sample of this deposit yielded one charred indeterminate cereal grain. A total of nine sherds of pottery were recovered from its upper silty clay fill, [427], including six sherds of medieval pottery, five of which probably originated from the same jug, of late 12th century date. Two sherds of Romano-British pottery were recovered, these considered to be residual in context, in similar fashion to two pieces of struck flint that were also recovered. This feature is interpreted as a possible drainage or boundary ditch of likely medieval origin.
- 5.5.4 The southern edge of ditch [429] was truncated by a parallel feature, [426], which also extended from the eastern limit of excavation for a distance of c. 16m, with a rounded terminal to the west in the vicinity of the terminal of ditch [429]. This had a similar broad U-shaped profile and was up to 2.66m wide and 1m deep. A small assemblage of fifteen sherds of pottery were recovered from its generally silty clay fills, [425], [424] and [423]. This included five sherds of late 12th century pottery, along with five sherds of hand-made 'native tradition' pottery, four sherds of Romano-British pottery and one sherd of samian, all this earlier material considered residual in context, along with one piece of struck flint recovered from fill [424]. Bulk samples taken from each of deposits [425], [424] and [423] produced an indeterminate fragment of bone, an animal tooth and a single charred grain of bread wheat. This feature has been interpreted as a reinstatement during the medieval period of boundary or drainage ditch [429].
- 5.5.5 Ditches [429] and [426] terminated towards the central portion of the excavation area in the vicinity of previously described ditch [483], aligned approximately at right-angles. It is possible, therefore, that ditch [483] may have had a terminal to the south-west in the vicinity of these ditches, and that they may have been associated, for example delimiting the south-western corner of a plot of land.

- 5.5.6 A group of three shallow linear features, [415], [420] and [419], were recorded in the southern portion of the main excavation area. The function of these features is uncertain, but based on form may represent drainage gullies or boundary features. The earliest was a narrow NW-SE aligned feature, [415], recorded for a distance of 12m, continuing south-east beyond the limit of excavation. This had a U-shaped profile and was 0.36m wide and 0.26m deep. No artefactual material was recovered from its single silty clay fill, [414].
- 5.5.7 Truncating the north-western extent of gully [415] was a feature aligned at right angles, group number [420], assigned context numbers [417] and [422] in the excavated sections (Plate 8). This gully measured c. 18m NE-SW, continuing south-west beyond the limit of excavation, and was up to 1.10m wide and 0.45m deep. No artefactual material was recovered from its silty clay fills, [416] and [421]. Located immediately to the north-west of and running parallel to gully [420] was a similar feature, [419], measuring at least 13.60m NE-SW, continuing south-west beyond the limit of excavation, by 0.28m wide and 80mm deep (Plate 8). No artefactual material was recovered from its single silty clay fill, [418]. Together these linear features may have delimited the north-eastern corner of a plot of land.
- 5.5.8 Truncating the north-eastern extent of gully [420] was a NW-SE aligned linear feature, group number [400], assigned context numbers [402], [434], [451] and [472] in the excavated sections. This feature measured at least 41m NW-SE, continuing beyond the limits of excavation to the north-west and south-east, and was up to 2.90m wide and 1.42m deep, becoming significantly narrower and shallower towards the south-eastern limit of excavation where it was only 0.35m wide and 0.12m deep. It was unclear whether this reduction in size was simply the result of modern truncation or reflected its original form. The sections excavated across this feature revealed a varying profile, in the north-west it had steeply sloping sides stepping down to a flat-based slot (Section 9, Figure 11), further south it had a more U-shaped profile (Sections 3 and 4, Figure 9).
- 5.5.9 For most of its length ditch [400] contained one clayey silt fill to which various numbers, [401], [433], [451] and [472], were assigned in the excavated sections. Two fills were recorded in the section adjacent to the north-western limit of excavation where a 0.26m thick clayey sandy silt [436], was overlain by a silty clay fill, [433] (Section 9, Figure 11). Seven sherds of pottery were recovered from fills [433] and [471], comprising six sherds of late 12th to mid 14th century pottery along with one sherd of samian, this considered residual in context.
- 5.5.10 Ditch [400] is interpreted as a land boundary ditch of medieval origin. Whether or not it relates to the outer pale ditch along the eastern boundary of the medieval deer park is uncertain; its alignment is somewhat at variance to the conjectured line of the pale where it survives in earthwork form to the north-west. It may simply relate to agricultural activity of the period, for example, along with the previously described linear features, it may represent part of a field system set out on the undulating ground beyond the deer park.

### 5.6 Phase 6: Post-medieval (Figure 7)

- 5.6.1 Truncating the south-western edge of Phase 4 ditch [400] was a similarly aligned linear feature, group number [484], assigned context numbers [474] and [481] in two distinct sections to be recorded. It was traced for at least 31.20m NW-SE, continuing to the north-west beyond the limit of excavation. It had a generally U-shaped profile (Sections 4 and 9, Figures 9 and 11) and was up to 2.04m wide and 0.62m deep. A single silty clay fill was observed in each of the two recorded sections, deposits [473] and [438], respectively.
- 5.6.2 Fragments of ceramic building material, sherds of 19th century pottery and shards of glass were observed within fill [438], but these were not retained. Post-medieval (17th century or later) ceramic building material was recovered from deposit [473], along with a fragment of late medieval ridge tile and two sherds of medieval pottery, this material considered residual in context. This feature has been interpreted as a field boundary of post-medieval period of origin; it is noteworthy that the feature lay on the same alignment as the previously described medieval and Romano-British boundary features.
- 5.6.3 Recorded in section underlying topsoil at the north-western limit of excavation was a broad U-shaped feature, [482] (Section 6, Figure 10). The excavators noted that, due to its stratigraphic position and relatively low significance, the feature was removed by machine as it crossed the main excavation area. In section, where it truncated the south-western side of Phase 3 ditch [449], the feature measured 3.16m wide and up to 0.67m deep. Its single dark grey silty clay fill, [475], contained occasional bricks and brick fragments indicating a post-medieval date of deposition. This feature is interpreted as either representing reestablishment of an earlier drainage or boundary ditch during the post-medieval period or, perhaps more likely, deliberate infilling of the surviving portion of the underlying earlier ditch.
- 5.6.4 A NW-SE aligned linear feature, [205], truncated the colluvium within evaluation Trench 2. This was 2.71m wide and 0.85m deep, recorded for a distance of 2.20m, continuing beyond the limits of excavation, and had a generally wide U-shaped profile. No artefactual material was recovered from its primary clayey silt fill, [204]. The upper fill, [203], comprised dark greyish brown silty clay, which was similar in composition and contained a similar range of debris to the previously described deposit [475]. The feature is interpreted as representing a boundary or drainage ditch of post-medieval origin. The feature was not observed during machine clearance of overburden across the main excavation area and therefore likely terminated to the south-east of the evaluation trench.
- 5.6.5 Recorded in plan towards the centre of the main excavation area and cutting the south-western edge of ditch [483] was a short section of a roughly NE-SW aligned linear feature, [432]. It was only 1.52m in length and was 0.42m wide and 0.51m deep, with near vertical sides. Although no datable artefactual material was recovered from its primary fill, [455], one sherd of 18th century pottery was recovered from its upper fill, [431]. The function of the feature is uncertain.



Figure 3. All features, all phases Scale 1:300

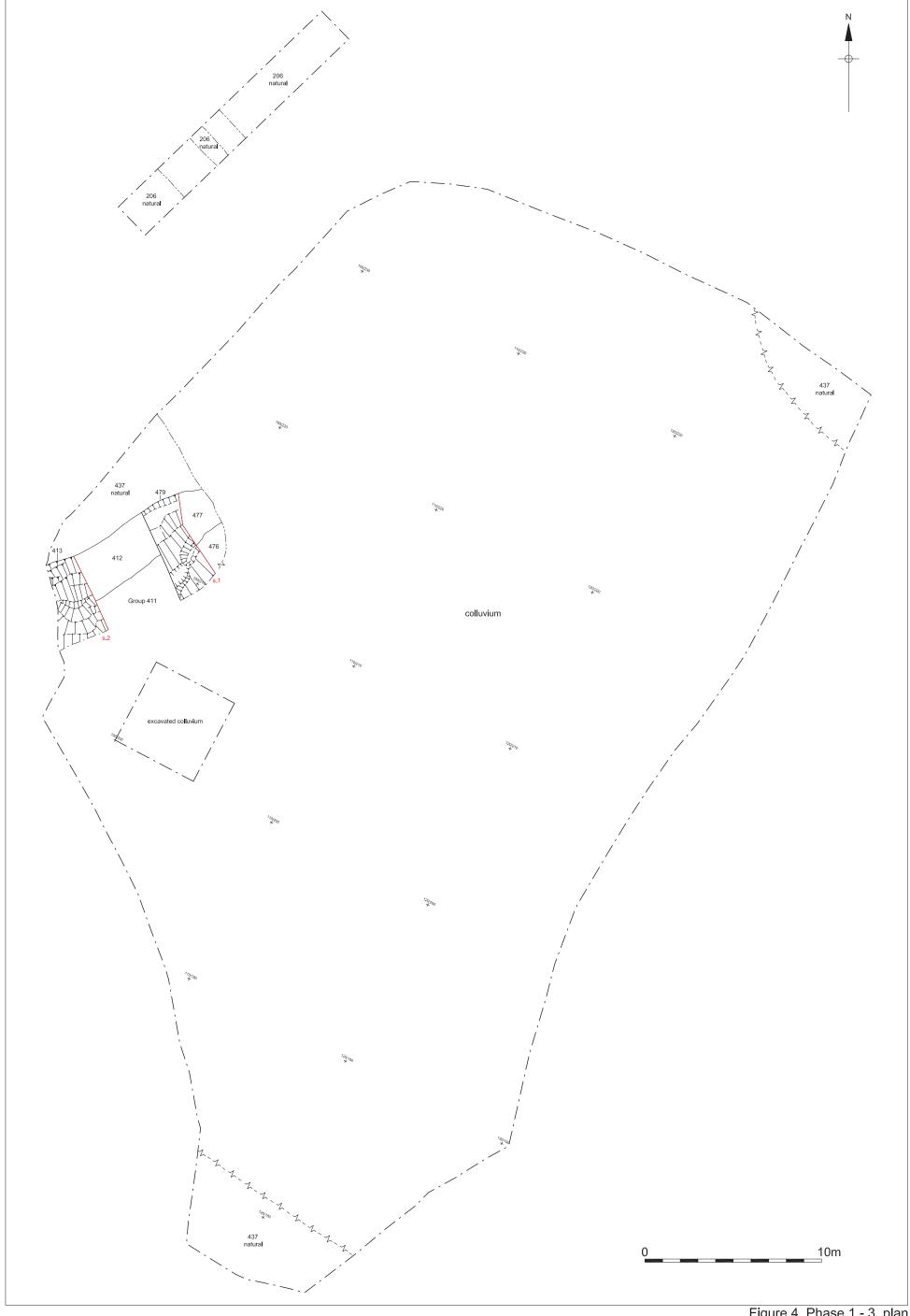


Figure 4. Phase 1 - 3, plan Scale 1:200

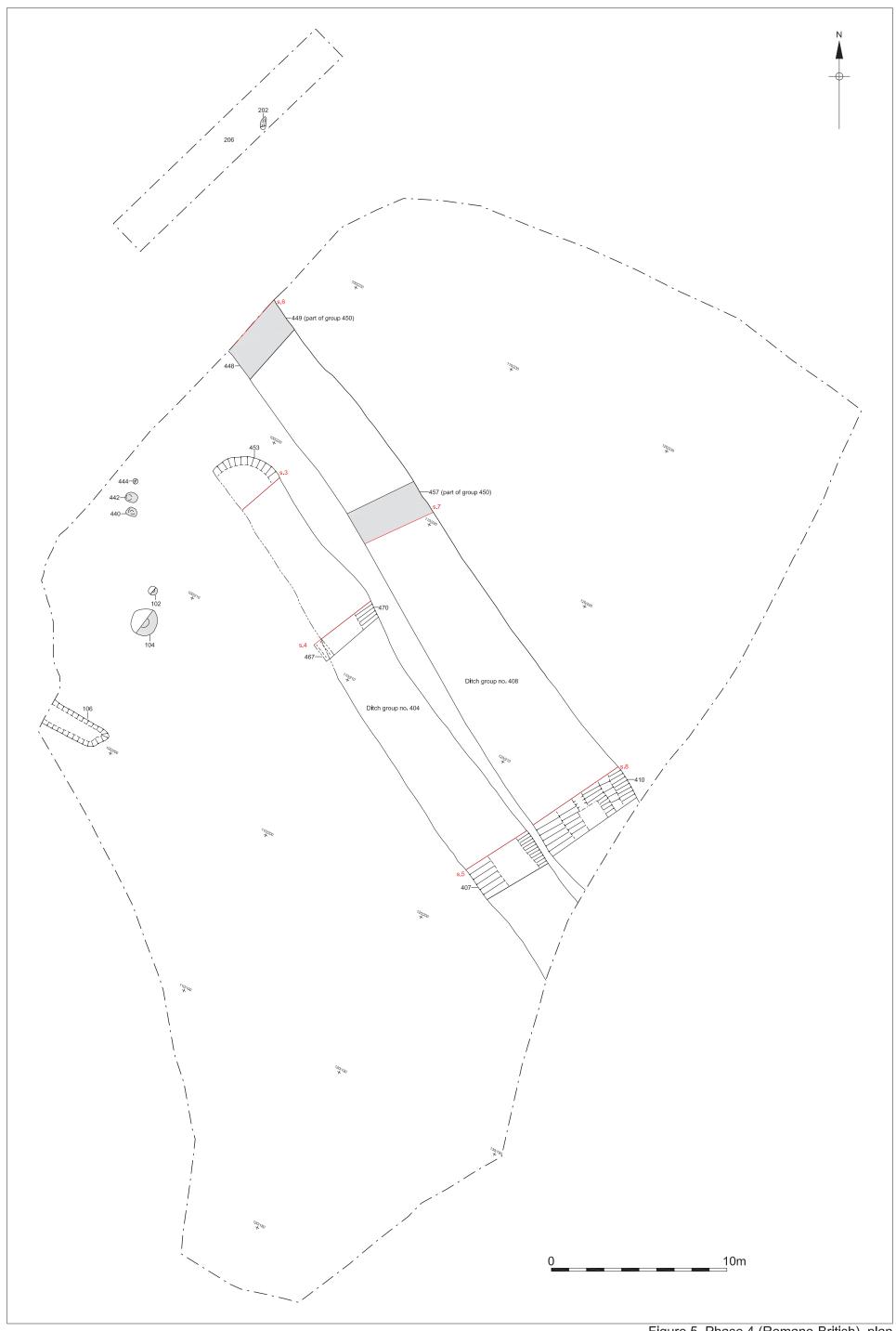


Figure 5. Phase 4 (Romano-British), plan Scale 1:200

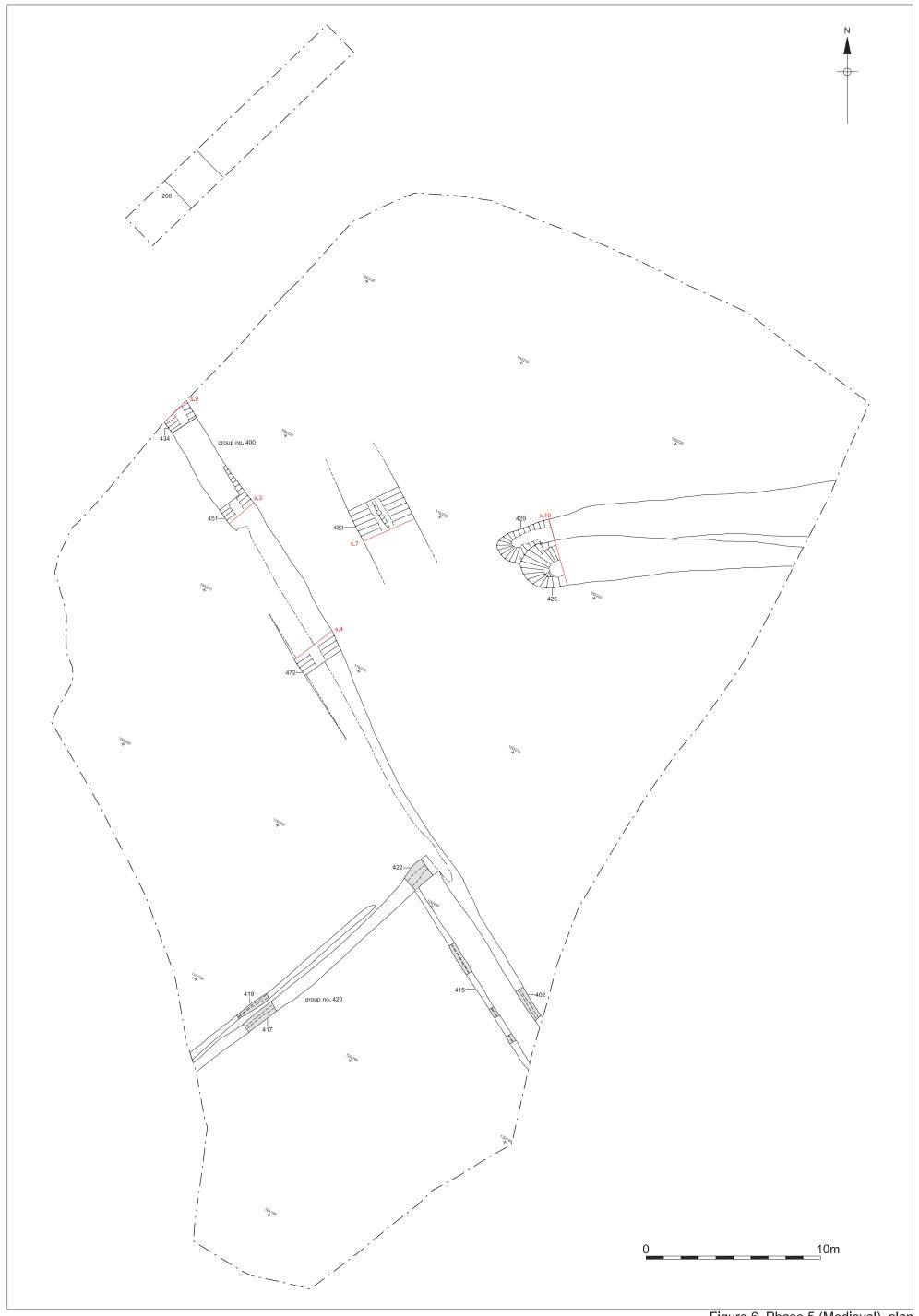


Figure 6. Phase 5 (Medieval), plan Scale 1:200

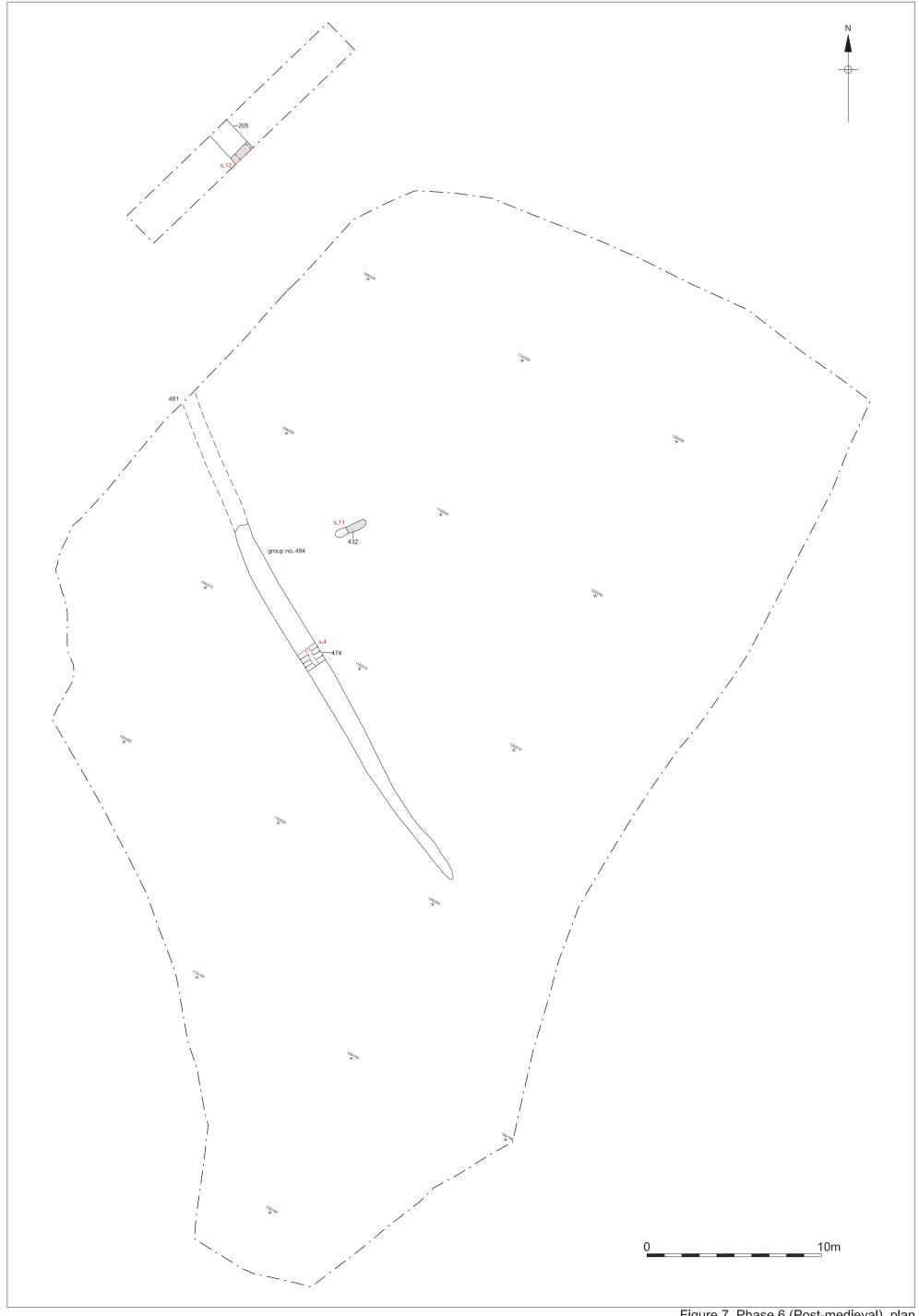
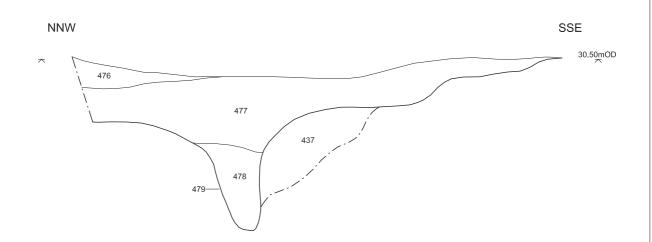
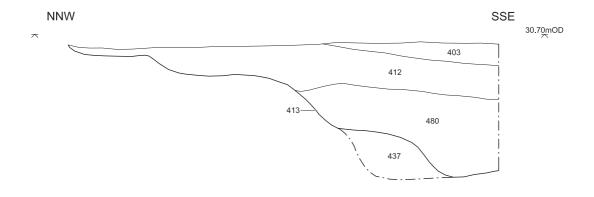


Figure 7. Phase 6 (Post-medieval), plan Scale 1:200



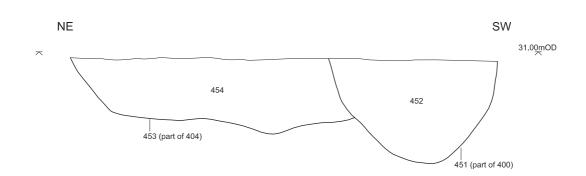
Section 1. WSW facing section across palaeochannel [479], Phase 2.



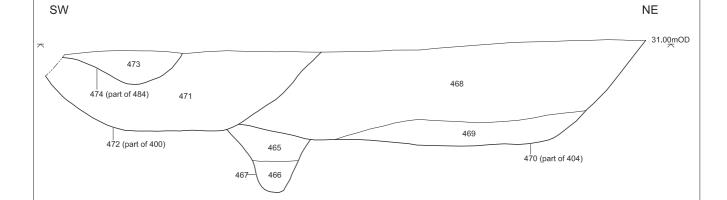
Section 2. WSW facing section across palaeochannel [413], Phase 2.



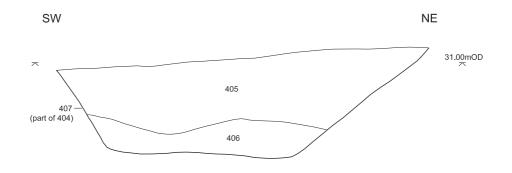
Figure 8. Sections 1 and 2 Scale 1:40



Section 3. North-west facing section across ditches [453], Phase 4 and [451], Phase 5.



Section 4. South-east facing section across ditches [467] and [470], Phase 4. [472], Phase 5 and [474], Phase 6.

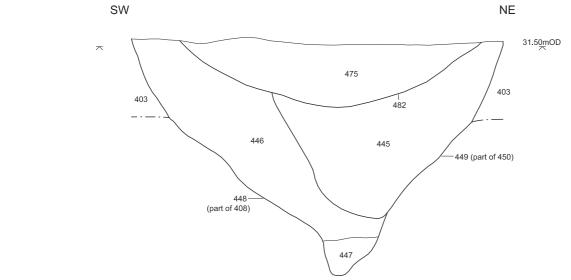


Section 5. South-east facing section across ditch [407], Phase 5.

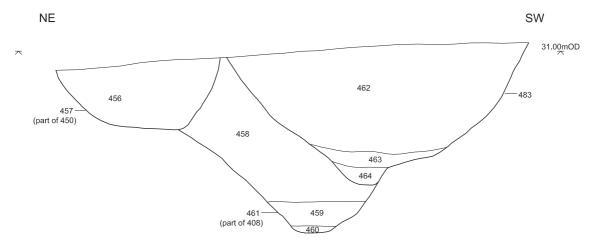


Figure 9. Sections 3 - 5 Scale 1:40

30



Section 6. South-east facing section across ditches [448] and [449], Phase 4 and ditch [482], Phase 6.



Section 7. North-west facing section across ditches [457] and [461], Phase 4 and [483], Phase 5.

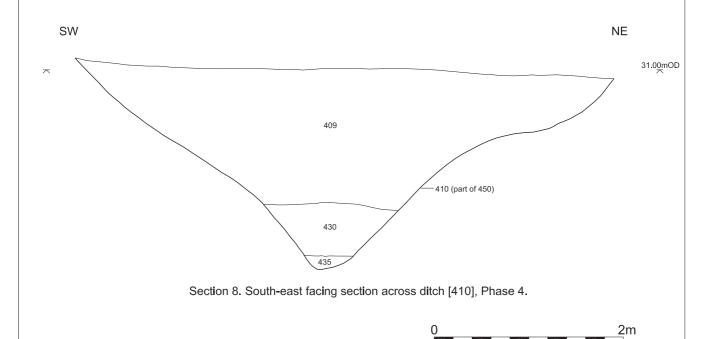
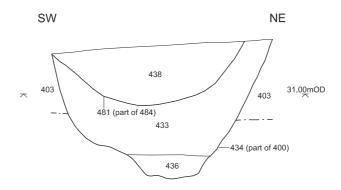
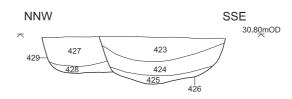


Figure 10. Sections 6 - 8 Scale 1:40

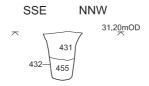
31



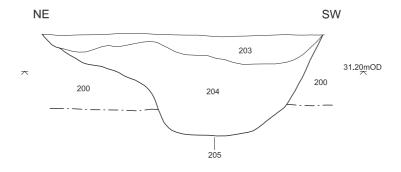
Section 9. South-east facing section across ditch [434], Phase 5 and [481], Phase 6.



Section 10. WSW facing section across ditches [426] and [429], Phase 5.



Section 11. ENE facing section across gully [432], Phase 6.



Section 12. North-west facing section across linear [205], Phase 6.



Figure 11. Sections 9 - 12 Scale 1:40

PART B: DATA ASSESSMENT

# 6. STRATIGRAPHIC DATA

# 6.1 Paper Records

6.1.1 The contents of the paper archive are set out in Table 6.1, as follows:

Item	No.	Sheets
Context register	1	2
Context sheets	102	102
Section register	1	1
Section drawings	29	32
Plans	32	74
Bulk sample register	1	1
Bulk sample sheets	11	11
Small finds register	1	1

Table 6.1: Paper archive contents

# 6.2 Photographic Records

6.2.1 The contents of the photographic archive are set out in Table 6.2, as follows:

Item	No.	Sheets
Colour slide register	2	3
Colour slides	59	4
Monochrome print registers	2	3
Monochrome prints	57	8
Monochrome negatives	57	3

Table 6.2: Photographic archive contents

## 6.3 Site Archive

6.3.1 The complete Site Archive, including the paper and photographic records, is currently housed at the Northern Office of Pre-Construct Archaeology Limited. Bulk samples are currently stored at the offices of Archaeological Services Durham University (ASDU), along with paper and electronic records pertaining to the environmental assessment. The Site Archive will eventually be deposited with East Riding of Yorkshire Museum Service for permanent storage and the detailed requirements of the repository will be met prior to deposition.

# 7. POTTERY

Compiled by: Dr. C.G Cumberpatch

From reports by: Dr. C.G. Cumberpatch, R.S. Leary, P. Mills, M. Ward, L.M. Wastling and J. Young

#### 7.1 Introduction

7.1.1 The pottery assemblage from the investigations at Bishop Burton College was examined by the authors in October 2008. Although small in size, it was extremely diverse in character and included examples of wares spanning the period between the later pre-Roman Iron Age or early Roman period and the 18th century. The following reports and the data tables provide full details of the assemblage.

# 7.2 Hand-made Pottery (C.G. Cumberpatch)

#### 7.2.1 Introduction

7.2.1.1 Nine sherds of hand-made pottery of later prehistoric or early Roman type were amongst the material recovered. All of the sherds were plain body sherds and most showed signs of considerable abrasion. The data are summarised in Table 7.1.

#### 7.2.2 Discussion

- 7.2.2.1 The pottery was classified according to a scheme used in North and East Yorkshire based upon the work of Rigby. 10 The assemblage was split between sherds with a calcareous temper which had been largely leached out, most probably due to the action of acidic ground water (H4 and H1/H4 types) and quartz tempered wares (H2 type) which, although abraded, retained the full complement of inclusions.
- 7.2.2.2 The absence of typologically diagnostic sherds and the lack of any apparent chronological significance to the differences in fabric type largely precluded any firm dating of these sherds. Production of hand-made 'native tradition' wares appears to have continued long after the Roman occupation of eastern Yorkshire and such vessels continued to be used alongside Roman and Romano-British wares. Unless there is a clear stratigraphic distinction between the contexts which produced the hand-made wares and those from which the Romano-British wares were recovered, it is not possible to say whether the sherds indicate the presence of pre-Roman activity on the site. Romano-British and hand-made wares both occurred in contexts [406] and [423] but they were not associated with Roman material in the remaining contexts ([101], [103], [425] and [468]). Given the small size of the assemblage as a whole and the even smaller size of the individual elements, it is difficult to argue that this distinction is in any way significant, at least on the basis of the pottery evidence alone.

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<sup>&</sup>lt;sup>10</sup> Rigby 1980, 1986; see also Didsbury 2006.

Context	Type	No	Wt	ENV	Part	Form	Decoration	Date range	Notes
101	H2 type	1	5	1	BS	Hollow	U/Dec	LPRIA -	A small, abraded sherd containing large (up to 7mm), poorly sorted
						ware		Roman	quartz grit and igneous rock fragments with moderate to abundant
									fine quartz (1 - 2mm)
103	H4 type?	1	6	1	BS	Hollow	U/Dec	LPRIA -	An abraded sherd with abundant fine voids (leached calcareous incs)
						ware		Roman	and abundant very fine angular quartz in a black body
406	H4 type	1	10	1	BS	Hollow	U/Dec	LPRIA -	Highly vesicular (leached shell/calcite) with fine angular quartz grit
						ware		Roman	visible in cross-section; black throughout
423	H2 type	3	18	1	BS	Hollow	U/Dec	LPRIA -	A very heavily abraded body sherd, black with a dull buff margin
						ware		Roman	heavily tempered with poorly sorted large angular quartz grit and
									angular rock fragments
425	H1/H4	1	1	1	BS	Hollow	U/Dec	LPRIA -	A very small vesicular sherd with occasional fine quartz
	type					ware		Roman	
425	H2 type	1	1	1	BS	Hollow	U/Dec	LPRIA -	A fine quartz tempered sherd with occasional rock fragments
						ware		Roman	
468	H2 type	1	9	1	BS	Hollow	U/Dec	LPRIA -	A fine sandy textured sherd containing abundant fine angular quartz
						ware		Roman	grit with some voids at the surface; lacks the coarse component
									typical of many H2 types
Total		9	50	7					

Table 7.1: Hand-made pottery

# 7.3 Romano-British Pottery (R.S. Leary)

#### 7.3.1 Introduction

- 7.3.1.1 A small and very abraded group of 27 sherds of Romano-British pottery was identified amongst the pottery sherds submitted for study with a further three sherds being undiagnostic and undatable. The condition of the sherds was such that very few forms could be identified and only a small number of fabrics were sufficiently diagnostic for anything more than a very broad Roman date.
- 7.3.1.2 Three well known fabrics were present, Dales ware, East Yorkshire calcite-gritted ware and Nene Valley colour-coated ware (National Fabric Reference Collection codes DAH SH, HUNT CG and LNV CC respectively<sup>11</sup>). The remaining wares are of regional significance and are described below.

# 7.3.2 Pottery Fabric Descriptions

7.3.2.1 The fabric of the pottery was first examined by eye and sorted into fabric groups on the basis of colour, hardness, feel, fracture, inclusions and manufacturing technique. Samples of the sherds were further examined under a x30 binocular microscope to verify these divisions. The size of the sample was as large as was felt necessary for each fabric group. National fabric collection codes are given wherever possible. The following terms were used in the catalogue and data table (Table 7.2).

# Colour: narrative description only

#### Hardness: after Peacock (1977)

- soft can be scratched by finger nail
- hard can be scratched with penknife blade
- very hard cannot be scratched

#### Feel: tactile qualities

- smooth no irregularities
- · rough irregularities can be felt
- · sandy grains can be felt across the surface
- leathery smoothed surface like polished leather
- soapy smooth feel like soap

# Fracture: visual texture of fresh break, after Orton (1980)

- smooth flat or slightly curved with no visible irregularities
- irregular medium, fairly widely spaced irregularities
- · finely irregular small, fairly closely spaced irregularities
- laminar stepped effect
- hackly large and generally angular irregularities

<sup>&</sup>lt;sup>11</sup> Tomber and Dore 1998.

#### Inclusions

#### Type: after Peacock (1977)

Frequency: indicated on a 4-point scale - abundant, moderate, sparse and rare where abundant is a break packed with an inclusion and rare is a break with only one or two of an inclusion.

#### Sorting: after Orton (1980)

#### Shape:

- angular convex shape, sharp corners
- · subangular convex shape, rounded corners
- · rounded convex shape no corners
- platey flat

#### Size:

- subvisible only just visible at x30 and too small to measure
- fine 0.1-0.25mm
- medium 0.25-0.5mm
- coarse 0.5-1mm
- very coarse over 1mm

#### 7.3.3 Discussion

- 7.3.3.1 Grey ware: Medium grey ware. Hard with sandy feel and irregular fracture. Moderate, well-sorted medium subangular quartz.
- 7.3.3.2 Fine grey ware: Pale grey, soft with powdery feel and slightly irregular fracture. Moderate, well-sorted, medium-fine subangular quartz.
- 7.3.3.3 Grey vesicular ware: Hard grey with rather harsh feel and irregular fracture. Moderate, ill-sorted medium to coarse angular and subangular vesicles, sparse, coarse subangular grey clay inclusions probably grog, sparse, coarse rounded brown inclusions, moderate, fine subangular quartz and rare, burnt organics, rare, subangular white calcareous inclusions. The vesicles may result from both burnt out organics and dissolved calcareous inclusions. Similar to a fabric used to make deep bowls in the late 1st and early 2nd century in north Lincolnshire and Humberside.<sup>12</sup>
- 7.3.3.4 Grey with rounded calcareous inclusions: Two sherds from context [427] in a hard grey ware contained sparse, well-sorted, medium-fine, rounded white calcareous inclusions and moderate, medium, well-sorted, subangular quartz.
- 7.3.3.5 Oxidised ware: As grey ware but oxidised.
- 7.3.3.6 Fine oxidised ware: A finer fabric with soapy feel and buff core. Fairly smooth fracture with sparse, subangular quartz, rounded white inclusions and sparse fine black inclusions. This fabric is similar to Severn Valley ware but this would be an unexpected fabric in this region and the sherd is not sufficiently diagnostic for certainty.

<sup>&</sup>lt;sup>12</sup> Rigby 1976, figs 76 nos 37-8 and 78 no. 76.

- 7.3.3.7 Very fine oxidised ware: soft pale orange fabric with powdery feel and smooth fracture.

  Sparse visible inclusions of any sort sparse rounded white and orange/brown inclusions and subvisible quartz. Source unknown but most likely to be late 1st to 2nd century in date.
- 7.3.3.8 The pottery indicates a broad date range from the early Roman period in the late 1st to early 2nd century to the mid 4th century. The pottery from context [405] is likely to date to the earlier Roman period, in the late 1st or early 2nd century and the fine oxidised flat rim sherd from context [423] is also likely to belong to this period, although precise dating is not possible with such a small abraded piece. The abraded rim sherd from a wide-mouthed jar found in context [456] gives a later date, in the 3rd or 4th century. Unstratified sherds included a fragment from a painted Nene Valley scroll beaker of late 3rd to 4th century date, <sup>13</sup> a Dales ware rim of 3rd to mid 4th century date but most common at Lincoln after the mid 3rd century <sup>14</sup> and a fragment from a shouldered East Yorkshire calcite-gritted ware jar dating from *c*. AD340/60. <sup>15</sup> The other Roman sherds could not be precisely dated within the Roman period due to their undiagnostic character. The group is too small for statistical analysis. The sherds from context [427] were burnt.

<sup>&</sup>lt;sup>13</sup> Perrin 1999, 96.

<sup>&</sup>lt;sup>14</sup> Darling 1999, 131.

<sup>&</sup>lt;sup>15</sup> Monaghan 1997, 907.

Context	Fabric	Source	Nos	G.	Abrasion	Part	Form	Vessel	Rim D	Rim %	Date	Other
304	oxidised ware		1	3.8	V	bodysherd					uncertain	
405	grey ware		1	5.6	М	bodysherd	closed vessel				RB	
405	oxidised ware		1	1.6	V	bodysherd					uncertain	
405	grey vesicular ware	N. Lincs and Humberside	1	26.7	М	bodysherd	closed vessel	bowl/deep jar			m1-m2	
406	very fine oxidised ware		1	2.2	V	bodysherd					m1-e2	
409	grey ware		1	3.3	M	bodysherd	indented	jar/beaker			3	
409	grey ware		1	9.1	V	incomplete rim sherd	bowl with flat flange rim	bowl/dish	28	3	RB	
423	fine oxidised		1	4.1	V	flange/flat rim	flat rim or flange	bowl/dish	20	4	2?	
424	fine grey ware		1	8.1	А	bodysherds	closed vessel				RB	
424	grey ware		1	4.4	М	bodysherds	jar with single groove	jar			RB	
424	?		1	1.6	V	scrap					?	
427	fine grey ware		1	0.6	V	scrap					RB	burnt
427	grey with moderate medium rounded calcareous inclusions and medium quartz		2	10	М	bodysherds	closed vessel				RB	
428	grey ware		1	2.8	М	bodysherd	closed vessel				RB	
456	grey ware		1	14	V	rim	everted	wide- mouthed jar	28	3	3-4	
458	grey ware		1	4.9	Α	bodysherd					RB	
unstrat	Nene Valley colour-coated ware	Nene Valley	1	8.6	М	bodysherd					L3rd-4th	white painted scrolls
unstrat	fine grey ware		4	94.2	V	bodysherd	closed vessel				RB	
unstrat	grey ware		1	8.5	А	bodysherd	closed vessel				RB	
unstrat	grey ware		4	6.4	V	scraps					RB	
unstrat	Dales ware	N. Lincs and Humberside	1	11.6	V	rim	lid seated rim jar	jar	16	9	3-M4	
unstrat	calcite-gritted (vesicular)	East Yorks	1	14.8	V	bodysherd	shouldered	jar			M4+	

Table 7.2: Romano-British pottery

# 7.4 Samian Ware (M. Ward)

#### 7.4.1 Introduction

- 7.4.1.1 Four small fragments of samian ware were examined, weighing a total of only 4g. There were no sherds representing rims or footrings and therefore the collection registered 0.00 EVES. These fragments represented a minimum of two and a maximum of three vessels, of which at least one was a dish of form 18/31R. All the sherds were from Central Gaulish products that were produced at Lezoux in the Hadrianic-Antonine period; the dish or dishes of form 18/31R will have been produced in the range c. AD 120-160. There were no South Gaulish vessels that might have indicated 1st century activity in the vicinity, but this was an extremely small and possibly unrepresentative sample.
- 7.4.1.2 The poor condition of these small, battered flakes is typical of collections from rural sites, where the material has been subject to environmental and agricultural erosion. This has been noted by the present writer elsewhere. 16

#### 7.4.2 The Assemblage

#### Context [405]

Central Gaulish dish form 18/31R, produced in the period c. AD 120-160. A small flake, taken to be from the same vessel as in context [468]. Weight 0.2g.

#### Context [424]

Central Gaulish vessel of indeterminate form, produced at some point in the wide range *c*. AD 120-200 and most probably in the Antonine period. A small flake, weighing 0.4g.

# Context [468]

Central Gaulish dish form 18/31R, produced in the period c. AD 120-160. A fragment from the junction of wall and base, taken to be from the same dish as the flake in context [405]. Weight 1.9g.

# Context [471]

Central Gaulish dish form 18/31R? produced in the period *c*. AD 120-160. A battered fragment lacking almost all its surfaces, probably (but not certainly) from the same vessel as in contexts [405] and [468]. Weight 1.5g.

# 7.4.3 Discussion

7.4.3.1 Small groups of samian ware have been recorded by the writer at various sites in Yorkshire and Humberside, such as at Driffield, locations on the line of the A1(M),<sup>17</sup> and in Scunthorpe. Full publication of samian ware found in rural locations is important for the expansion of our knowledge of the pottery supply to the Roman North.<sup>18</sup>

<sup>&</sup>lt;sup>16</sup> e.g. Ward 2000, 45, 85, 137; Ward 2002, 77.

<sup>&</sup>lt;sup>17</sup> Ward 2007.

<sup>&</sup>lt;sup>18</sup> see Ward 2000, 14-15.

# 7.5 Shell Tempered Ware (J. Young)

7.5.1 One sherd from the rim of a jar weighing 14g was noted amongst the medieval pottery and was submitted to the author for identification. It proved to be part of the rim of a widemouthed jar in the Lincoln Kiln-type (LKT) fabric. The vessel was decorated with diamond-shaped roller stamping on the rim flange and this allowed it to be dated to the mid 10th century. Shell tempered ware from Lincolnshire has been found on other sites in and around Beverley but this is of particular interest as it is securely identifiable to a specific type and is closely datable.

# 7.6 Medieval Pottery (L. M. Wastling)

## 7.6.1 Introduction and Methodology

- 7.6.1.1 A total of 47 sherds of medieval pottery, with a combined weight of 319g were recovered. The average sherd weight (ASW) was 6.7g. A single fragment of ceramic building material weighing 1g was also present. All pottery was divided into fabrics and subsequently quantified by sherd count and weight. This data was added to an Access database, which formed the basis for the ceramic data tables (Tables 7.3 and 7.4).
- 7.6.1.2 The type series and codes used (Table 7.3) are based on those devised by Watkins for the High Street and Blackfriargate sites in Hull.<sup>20</sup> The data are presented in Table 7.4. The fabric names are either those in common usage or are self-explanatory.

# 7.6.2 Discussion by Context

- 7.6.2.1 The palaeochannel context [412] contained three joining body sherds of a single vessel in Beverley 2 ware and a sherd of a Staxton-Potter Brompton cookpot. A 13th or early 14th century date is tentatively suggested for these ceramics. The remainder of the stratified medieval pottery was recovered from deposits classed as medieval. These are as follows.
- 7.6.2.2 Context [423] produced three sherds of Beverley 1 ware. Two of these had combed wavy decoration, and belonged to two different vessels. Decoration of this type is comparable to that on jugs recovered from the AD 1188 'fire horizon' deposits at Lurk Lane, Beverley.<sup>21</sup>
- 7.6.2.3 From [424] were a sherd of Beverley 1 ware and a sherd which was so abraded that it can only be classed as a medieval orangeware.
- 7.6.2.4 All sherds here referred to as orangeware (ORNG) lie within the regional orangeware tradition as described by Hayfield<sup>22</sup> though they are too worn be directly ascertained to be a Beverley product. This is, however, very likely.

<sup>22</sup> Hayfield 1985, 16.

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<sup>&</sup>lt;sup>19</sup> Young 1989, Young, Vince and Naylor 2005, 47-56.

Watkins 1987, 53-181, with subsequent amendments by Watkins, Didsbury and Wastling.

<sup>&</sup>lt;sup>21</sup> Watkins 1991, 66.

- 7.6.2.5 Deposit [427] produced five sherds of Beverley 1, probably all originating from the same jug, bearing combed wavy line decoration, of the type referred to above (within [423]) and probably of the same vessel as one of the two above. In addition a sherd of York 'G' ware was recovered. This fabric code is used as the Gritty ware originally defined by Holdsworth,<sup>23</sup> and therefore encompasses Pimply ware as used by Watkins in the Lurk Lane report and hereafter.<sup>24</sup>
- 7.6.2.6 The combination of Beverley 1 ware and York Gritty ware suggests a *terminus post quem* (hereafter TPQ) of the late 12th century.
- 7.6.2.7 Context [433] produced a rod handle fragment in Beverley 2 ware, and therefore possessed a potential date range of the 13th up to and including the early to mid14th century.
- 7.6.2.8 Context [462] produced a Beverley 1 jug rim bearing combed wavy line decoration and unglazed except for two spots of clear glaze, plus two sherds of Beverley 2 ware, one externally sooted and probably of a cooking vessel. A further sherd of York 'G' ware was present plus the first of two sherds of the only imported medieval pottery recovered. This is a sherd of Siegburg Stoneware imported from the Rhineland area of Germany and probably part of a narrow-bodied drinking jug. Siegburg Stoneware is a rare component within ceramic groups of the early 14th century in Hull.<sup>25</sup> An early 14th century TPQ is suggested for this context.
- 7.6.2.9 From [468] was a sherd of a Coarse Sandy ware cookpot of the late 13th or 14th century.
- 7.6.2.10 Deposit [469] contained two small body sherds of Beverley 2 ware, plus a scrap of ceramic building material.
- 7.6.2.11 Context [471] also contained Beverley 2 ware, consisting of five relatively thinly potted sherds bearing a glossy suspension glaze.
- 7.6.2.12 Context [473] bore a sherd of the aforementioned Beverley 1 jug with combed wavy line decoration.
- 7.6.2.13 Also present was a very small sherd containing leached out temper, possibly shell. The small dimensions of this sherd (weight 1g) preclude close identification, however if the temper was shell, a Lincolnshire origin would be likely.
- 7.6.2.14 The unstratified pottery consisted mainly of the same fabric make-up as the stratified material. Wares present were York 'G', Beverley 1 and 2, and orangeware, as described above. The unstratified Beverley 1 includes a sherd with combed wavy line decoration. Most of the sherds with this decoration appear to be fragments of the same dispersed jug. In addition to the unstratified sherd this vessel appears in contexts [423], [427] and [473].

<sup>25</sup> Watkins 1987, 136.

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<sup>&</sup>lt;sup>23</sup> Holdsworth 1978, 7.

<sup>&</sup>lt;sup>24</sup> Watkins 1991, 87.

#### 7.6.3 Discussion

- 7.6.3.1 Most of the medieval pottery assemblage derives from the late 12th to the early 14th century. It pre-dates the appearance of Humberware during the 14th century, though received imported Siegburg Stoneware of potential early 14th century date. The material recovered lies within the expected range of ceramics for Beverley and its immediate environs, such as Bishop Burton, during this period.
- 7.6.3.2 As expected at this date, the assemblage is dominated by jug and cookpot sherds. Local products consist of Beverley 1 and 2 jug and cooking vessel sherds, plus a Coarse Sandy ware cookpot. Cookpots originating in North Yorkshire are represented by a sherd of Staxton-Potter Brompton ware and those of York by York 'G ware. Imported pottery is represented by two sherds of a single vessel of Siegburg Stoneware imported from Germany.
- 7.6.3.3 It should be pointed out that the average sherd weight is low and much of the material is abraded. This suggests that the pottery assemblage may have been considerably re-worked before deposition within the contexts from which it was ultimately recovered. This is also borne out by the fact that the same decorated Beverley 1 jug is present in three stratified contexts and the Siegburg vessel mentioned above, within two.
- 7.6.3.4 In the interests of potential ceramic research in the area the assemblage is recommended for retention.

Context	Fabric	Quantity	Wt (g)	Remarks	Joins
				1 with v slight wavy lines (combed), both from same jug, light	?423 & 427,
0	BEV1	2	3	orange-brown glaze, fully-oxidised	473
				soft, abraded. 2 joining body sherds with brown glaze, 1 base,	
0	BEV2	5	59	1 jug handle attachment, 1 body	
0	BEV2	2	10	body sherds	
0	CSAN	1	4	rim of cookpot	
0	ORNG	3	7	v abraded, no surfaces extant, 1 with more sand temper	
0	UNCL	1	1	leached out fine ?shell temper	
0	YORG	1	1		
412	BEV2	3	16	body sherds of the same vessel, all 3 join	
412	STXPB	1	4	externally sooted	
423	BEV1	3	12	3 body sherds: includes 1 with combed décor, 1 from a jug neck - fully-oxidised, light orange-brown glaze	?u/s & 427, 473
424	BEV1	1	1	fully-oxidised	
424	ORNG	1	3	v abraded, no surfaces extant	
				probably all of a single jug: 3 body sherds 2 with combed décor, handle & thumbed handle-attachment -fully-oxidised	
427	BEV1	5	64	variant	
427	YORG	1	6		
433	BEV2	1	32	rod handle	
462	BEV1	1	5	jug rim, combed décor	
462	BEV2	2	7	1 ?jug body sherd, 1 small sherd externally-sooted	
462	SIEG	1	13		?473
462	YORG	1	15		
468	CSAN	1	2	externally sooted	
469	BEV2	2	4		
469	CBM	1	1		
471	BEV2	5	9	suspension glaze	
					?u/s, 423,
473	BEV1	1	1	combed décor - fully-oxidised	427
473	SIEG	1	25		?462

Table 7.3: Medieval pottery

Code	Common name	Comments
BEV1	Beverley ware Phase 1	
BEV2	Beverley ware Phase 2	Watkins 2B
CBM	Ceramic Building Material	Brick and tile
CSAN	Coarse Sandy ware	Mainly cookpots
		Too abraded to attribute to
ORNG	Orangeware tradition	source
SIEG	Siegburg Stoneware	German imnport (Rhineland)
STXPB	Staxton/Potter Brompton ware	
UNCL	Unclassified	
YORG	York 'G' ware	York Gritty ware, Pimply ware

Table 7.4: Codes used in Table 7.3

# 7.7 Early Modern Pottery (C.G. Cumberpatch)

#### 7.7.1 Introduction

- 7.7.1.1 The work produced a single sherd of 18th century pottery, part of the base of a Mottled ware mug or tankard. Mottled ware was manufactured widely and recent work in South and West Yorkshire has established that it was one of the principal products of the 'country potteries' that flourished in the 17th and 18th centuries but which were eclipsed in the 19th century by factory scale production of refined earthenwares.
- 7.7.1.2 The example from context [431] had a creamy buff fabric containing occasional round buff non-crystalline grains, occasional fine red grit and some very fine quartz. The internal and external surfaces were glazed with the exception of the underside of the base. The sherd weighed 12g and represented approximately 9% of the circumference of the base.

## 7.8 Pottery: Summary Discussion

- 7.8.1 Few definite conclusions can be drawn from such a small and diverse assemblage of pottery although it certainly attests to a long history of human activity on and around the site. The earliest ceramic evidence of human activity on the site dates to the later prehistoric or early Roman periods. The co-occurrence of hand-made wares in the local native tradition alongside Romano-British and imported Roman wares means that it is impossible to be certain as to whether activity on the site predated the Roman conquest, although there seems no obvious reason why this should not have been the case.
- 7.8.2 The presence of medieval pottery indicates continued activity on and around the site during the earlier part of the medieval period, with the sherd of Lincoln Kiln type ware pointing to pre-Conquest activity in the area but the absence of such common local types as Humberware suggesting something of a hiatus in activity during the later medieval period. This may be connected with the evidence for the existence of the deer park from the early 14th century onwards rather than farmland. This leaves open the question of the origin of the fragments of ceramic building material, which do not seem to be related, at least chronologically, to any of the pottery from the site.

#### 8. CERAMIC BUILDING MATERIAL

By: P. Mills

#### 8.1 Introduction

- 8.1.1 Some fifteen fragments of medieval ceramic building material, weighing a total of 1277g were presented for study. This group included some eight fragments, 849g, of stratified material. No corners were noted on any of the fragments. The material was made up of three fragments of brick, probably from a single example from context [462] in fabric LZ56. The brick was 48mm thick, and probably had a width of *c*. 115mm. It was slop moulded, which would imply a date in the 16th century or later.
- 8.1.2 The rest of the material comprised roofing tiles. These have an average sherd size of 109g per fragment, typical of small scatters of refuse not usually associated with specific structures. These were in four related fabrics, suggesting that they derive from a number of sources in manufacture and original use. None of the flat tile could be identified further, so could date from the 12th century onwards. There is a ridge tile in TZ03.2 with the remains of a white wash from context [473] which may possibly date from the 15th century or slightly later. There is also an example of pan tile, suggested by a smoothed concave face, from context [473], which would suggest a date in the 17th century or slightly later.
- 8.1.3 In summary, this collection represents a group of later medieval, or possibly post-medieval, brick and tile which probably derives from a number of sites originally before being discarded as refuse and entering the archaeological record here possibly through night soiling, refuse dumping, or patching.

Fabric	Description	No.	Wt. (g)
LZ56	This is a hard reddish yellow brick fabric with a fine to irregular fracture and harsh feel. It has inclusions of occasional limestone and black ironstone rounded inclusions at 1-2mm in a matrix of sparse to moderate fine sand.	3	413
TZ03.1	This is a hard dark red (10R3/6) tile fabric with a very irregular fracture and sandy feel. It has inclusions of abundant sub rounded white quartz at 0.3mm and occasional sub rounded black ironstone at 0.2mm.	1	15
TZ03.2	This is a hard yellowish red (5YR5/6) tile fabric with an irregular fracture and powdery feel. It has inclusions of sparse sub angular limestone at 0.3mm in a fine sandy matrix	3	239
TZ56	This is a hard red (2.5YR5/6) tile fabric with an irregular break and a harsh feel. It has inclusions of moderate rounded black iron stone up to 0.7mm and sparse rounded limestone at 0.3mm.	3	176
TZ56.1	This is a hard red (2.5YR5/6) tile fabric with a fine fracture and powdery feel. It has inclusions of abundant sub rounded black ironstone at 0.15-0.25mm and moderated sub rounded lime stone at 0.2mm.	3	356

Table 8.1: Ceramic building material

# 8.2 Recommendations for Further Work

8.2.1 No further work on the assemblage is required.

## 9. METAL FINDS

# By: M. Gaimster (Conservation by Karen Barker)

# 9.1 Introduction and Methodology

- 9.1.1 Only a few metal finds were retrieved from the excavation, the assemblage comprised two iron objects and a group of iron nails recovered from the same context.
- 9.1.2 All of the metalwork was X-rayed. The metalwork has been stored in a desiccated, less than 15% relative humidity, sealed environment, to limit further degradation.

# 9.2 Iron Objects

9.2.1 The iron assemblage comprised a selection of incomplete Roman nails and parts of two incomplete medieval iron horseshoes, as detailed in Table 9.1 below. The two horseshoes were unstratified; the broad web and rectangular, countersunk nail holes allow them to be identified as medieval Type 3 shoes with a date in the 13th to 14th centuries.<sup>26</sup>

SF No.	Context No.	Identification	Date	Further work?
11	Unstratified	Incomplete iron horseshoe of Clark 1995 Type 3; L c. 130mm, wide web (max 32mm) tapering slightly towards the heel; four nail holes and one nail extant; calkin probably in the form of thickened heel	13th–14th centuries	No
12	Unstratified	Heel fragment of iron horseshoe of Clark 1995 Type 3; calkin probably in the form of thickened heel	13th–14th centuries	No
13	409	Eleven incomplete iron nails	Roman	No

Table 9.1: Small finds

# 9.3 Recommendations for Further Work

9.3.1 No further work on the metalwork assemblage is recommended.

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<sup>&</sup>lt;sup>26</sup> Clark 1995, 96.

#### 10. LITHICS

By: B. Bishop

#### 10.1 Introduction

10.1.1 A total of 51 pieces of struck flint were recovered from the excavations (Table 10.1). This report quantifies the material, describes its basic characteristics, assesses its significance for the further understanding of activity at the site and recommends any further work required to achieve its full research potential.

	Decortication Flake	Chip	Flake	Flake Fragment	Unsystematic Blade	Systematic Blade	Blade-like flake	Retouched Implements	Total
No.	6	7	18	6	2	1	3	8	51
%	11.8	13.7	35.3	11.8	3.9	2.0	5.9	15.7	100

Table 10.1: Quantification of the struck flint

#### 10.2 Methodology

10.2.1 Each piece of struck flint was examined by eye and X10 magnification and catalogued according to a basic typological/technological scheme (Table 10.2). The retouched implements were further examined and described in greater detail (Table 10.3). No statistically based technological, typological or metrical analyses were attempted and a more detailed examination may alter or amend any of the interpretations offered here. All metrical descriptions follow the methodology of Saville.27

#### 10.3 **Description**

10.3.1 The lithic assemblage was not particularly large given the size of the area investigated, nor did it present in any notable concentrations. It contained relatively high proportions of retouched and potentially useable pieces and the presence of decortication flakes and small flakes from core trimming (chips) indicate that the reduction of cores was also occurring although, perhaps surprisingly, no cores were recovered.

#### 10.4 **Raw Materials**

Two main varieties of raw material were utilized. The most commonly used, accounting for 10.4.1 over three-quarters of the assemblage, was a brittle, opaque to very slightly translucent light grey to white nodular flint with a thin rough but weathered cortex. This type of flint comes from the Wolds chalk<sup>28</sup> although the presence of thermal flaws suggests that the material used here was obtained from derived sources.

<sup>&</sup>lt;sup>27</sup> Saville 1980.

<sup>&</sup>lt;sup>28</sup> e.g. Henson 1985; Durden 1995.

10.4.2 The other type used consisted of translucent speckled light grey or light brown flint, also occasionally retaining a thin rough cortex. This type can be found within the glacial tills present across the area and would have been easily obtainable within local alluvial deposits that have eroded the tills.<sup>29</sup> No cores were present but the size of the flakes, which rarely exceeded 50mm, suggests that the raw materials used were of small size.

#### 10.5 Condition

10.5.1 The condition of the assemblage was variable although nearly all of it was slightly abraded and no *in situ* knapping scatters were identified. The pieces from the colluvium or the later ditches (Phases 3-5) were generally in a more abraded condition than those from the palaeochannel (Phase 2) but even these mostly exhibited slight abrasion and they were perhaps most likely to have eroded in rather than being discarded *in situ*.

# 10.6 Technology and Typology

- 10.6.1 No typologically diagnostic pieces were present although considerations of the technological attributes of the assemblage indicated that two distinct industries were present. The earliest pieces were the products of a blade-based industry and included a piercer made on a blade (SF 16) and an unretouched blade (SF 30), both of which were systematically produced and characteristic of Mesolithic or Early Neolithic industries. Other pieces that were likely to belong to this phase of activity included another piercer from context [412] and perhaps some of the blade-like flakes that were present. Interestingly, all of the pieces that were likely to date to these periods were made from glacial till flint and it is possible that the other, otherwise undated, pieces made from this flint belong to these periods.
- 10.6.2 The remainder of the pieces were the product of a flake-based industry. Overall, the flakes were mostly relatively thin and often long, had narrow, plain or dihedral, lightly trimmed striking platforms, and frequently had numerous unidirectional dorsal scars demonstrating repeated successful removals. They were competently produced and reflected a good control over the flaking abilities of the raw materials, and would be most characteristic of Later Neolithic or Early Bronze Age industries.
- 10.6.3 The remainder of the retouched pieces, which included edge trimmed flakes, a piercer made by obliquely truncating a flake, a notched flake and a denticulated flake, although not strictly diagnostic, would also be compatible with a Later Neolithic or Early Bronze Age date.

# 10.7 Significance and Potential for Further Analysis

- 10.7.1 The main significance of the assemblage is that it indicates low-level activity at the site during the Mesolithic/Early Neolithic and the Later Neolithic/Early Bronze Age periods. This activity included both core reduction and the use of tools, the range of tools present suggesting that a variety of activities were undertaken, although due to the small size of the assemblage little further can be said concerning the precise dating or nature of the occupation.
- 10.7.2 Although its further interpretational potential is limited, the assemblage does contribute to the broader appreciation and understanding of the prehistoric inhabitation of the area.

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<sup>&</sup>lt;sup>29</sup>ibid.

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Context	Feature	Phase	Decortication Flake	Chips	Flake	Flake Fragment	Unsystematic Blade	Systematic Blade	Blade-like flake	Retouched	Flint type	Condition	Notes
+ SF 7				1							Till	Abraded	
+ SF 8					1						Till	Slightly abraded	
105	D106	4			1						Wolds	Slightly abraded	
105	D106	4		1							Wolds	Slightly abraded	
105	D106	4				1					Wolds	Slightly abraded	
105 SF1	D106	4			1						Wolds	Slightly abraded	
105 SF5	D106	4	1								Wolds	Slightly abraded	Possibly a natural spall
304 SF18	Colluvium	3			1						Wolds	Abraded	
304 SF20	Colluvium	3			1						Wolds	Slightly abraded	Mis-struck or natural
304 SF21	Colluvium	3			1						Wolds	Abraded	
304 SF23	Colluvium	3		1							Wolds	Slightly abraded	
304 SF24	Colluvium	3			1						Wolds	Slightly abraded	
304 SF25	Colluvium	3				1					Wolds	Slightly abraded	Possibly a natural spall
304 SF26	Colluvium	3								1	Wolds	Slightly abraded	Edge trimmed flake
304 SF27	Colluvium	3			1						Till	Good	
304 SF29	Colluvium	3							1		Wolds	Abraded	Small flake
304 SF30	Colluvium	3						1			Till	Slightly abraded	
304 SF33	Colluvium	3				1					Wolds	Slightly abraded	Possibly a natural spall
304 SF37	Colluvium	3				1					Wolds	Slightly abraded	Possibly a natural spall
405	D407	4	1								Wolds	Abraded	
405	D407	4				1					Wolds	Abraded	
405	D407	4	1			-					Till	Slightly abraded	
405	D407	4		1							Till	Slightly abraded	
405	D407	4		1							Till	Abraded	
409	D410	4			1						Wolds	Slightly abraded	
409	D410	4		1							Wolds	Slightly abraded	
409	D410	4	1	-							Wolds	Good	
409 SF 14	D410	4							1		Till	Good	
409 SF15	D410	4					1				Wolds	Slightly abraded	
412	PC413	2								1	Wolds	Slightly abraded	Denticulate
412	PC413	2	1								Wolds	Good	
412	PC413	2			1						Wolds	Slightly abraded	
412	PC413	2								1	Wolds	Slightly abraded	Obliquely truncated
412	PC413	2									Till	Good	Piercer
412	PC413	2	1								Wolds	Slightly abraded	
412 SF16	PC413	2	Ė							1	Till	Good	Piercer
424	D426	5					1				Wolds	Abraded	. 10.00.
427	D429	5								1	Till	Abraded	Notch
427	D429	5		1						Ė	Wolds	Slightly abraded	
458 SF2	D423	4		Ė						1	Wolds	Abraded	Edge trimmed flake
468	D470	4			1					Ė	Wolds	Abraded	nanc
477	PC479	2			1						Wolds	Slightly abraded	
477	PC479	2			1						Wolds	Slightly abraded	
477	PC479	2			1						Wolds	Slightly abraded	
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Context	Feature	Phase	Decortication Flake	Chips	Flake	Flake Fragment	Unsystematic Blade	Systematic Blade	Blade-like flake	Retouched	Flint type	Condition	Notes
477	PC479	2			1						Wolds	Abraded	
477	PC479	2			1						Wolds	Slightly abraded	
477	PC479	2			1						Wolds	Slightly abraded	
477	PC479	2				1					Wolds	Slightly abraded	
477	PC479	2			1						Wolds	Slightly abraded	
477 SF 4	PC479	2							1		Wolds	Slightly abraded	
477 SF3	PC479	2								1	Till	Slightly abraded	Edge trimmed flake

Table 10.2: Catalogue of struck flint

Context	Feature	Phase	Туре	Form	Dimensions (mm)	Description
427	D429	4	Notch	Flake	38X20X7	Narrow but unsystematic flake with shallow notches cut into both lateral margins
412	PC413	2	Denticulate	Flake	>62X42X15	Thick flake with bulbar end missing and irregular denticulation undertaken bifacially on left margin, plus some worn patches of retouch on opposite margin
412	PC413		Obliquely truncated	Flake	41X22X6	Narrow flake with distal end removed by a heavily retouched acute oblique truncation - piercer?
412	PC413	2	Piercer	Blade	>27X13X5	Unsystematic blade with bulbar end missing and light retouch accentuating a converging distal end
477 SF3	PC479	2	Edge trimmed	Flake	53X40X11	Large partially cortical unrecorticated flake with shallow edge trimming along right dorsal margin and some light retouch/blunting along other margins - knife
458 SF2	D461	4	Edge trimmed	Flake	39X23X7	Narrow flake with some shallow slightly invasive retouch on right dorsal near distal end. Probable knife but flake is generally in an abraded condition
304 SF26	Colluviu m	3	Edge trimmed	Flake	28X17X4	Small flake with shallow slightly invasive retouch on left lateral margin - cutting

Table 10.3: Descriptions of retouched implements

# 11. BIOLOGICAL REMAINS

By: Dr. H. Ranner (ASDU)

#### 11.1 Introduction

11.1.1 Ten sediment samples were submitted to Archaeological Services Durham University for an evaluation of their bioarchaeological potential. The plant macrofossil remains are very limited, but indicate that barley, wheat and beans were being used. A small suite of uncharred seeds in context [430] may indicate former open and disturbed ground with some standing water at the site. There is no evidence for any specific function for any of the features sampled.

#### 11.2 Method

11.2.1 A single tub of each bulk-sample was manually floated and sieved through a 500µm mesh. The residues were described and scanned using a magnet for ferrous fragments. The flots were dried slowly and examined at ×40 magnification. Identification of the plant remains was undertaken by comparison with modern reference material held in the Environmental Laboratory at Archaeological Services Durham University. Plant taxonomic nomenclature follows Stace.<sup>30</sup>

#### 11.3 Results

- 11.3.1 Most of the bulk samples contained flint fragments; one piece recovered from context [425] appeared to have been worked. Small quantities of fire-waste were present throughout, except in context [446]; this was principally charcoal, with coal shale in context [447], and occasional traces of coal, coal shale and charred heather stems. An indeterminate fragment of animal bone and a tooth were present in context [423], and a fragment of mussel shell in context [447]. A single pot sherd was recovered from context [430], and deposits of vivianite were recorded in contexts [430] and [445]. Traces of modern roots, vegetative material, terrestrial snail shell fragments and insect remains were recorded variously in contexts [424], [427], [430] and [445].
- 11.3.2 Context [446] did not produce a flot, and the remaining flots were all relatively small. Single charred grains of barley and cf. bread wheat were present in contexts [430] and [423], respectively, an indeterminate cereal grain in context [428], and a bean in context [424].
- 11.3.3 A small suite of uncharred seeds from ruderal, wetland and wide niche taxa, was recorded in context [430]. The results are presented in Table 11.1, and contexts with material that is potentially suitable for radiocarbon dating are indicated.

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<sup>&</sup>lt;sup>30</sup> Stace 1997.

# 11.4 Discussion and Statement of Potential for Further Analysis

- 11.4.1 The charred food plant remains are very limited, but indicate that barley, wheat and beans were being used. The wheat grain had the morphological characteristics of bread wheat, but in the absence of any diagnostic chaff the presence of this type cannot be confirmed. This particular assemblage of food plant remains, although limited, is typical of medieval deposits in northern England.<sup>31</sup> A fragment of mussel shell in context [447] may indicate that either freshwater or marine mussels were being used.
- 11.4.2 The small deposits of vivianite in contexts [430] and [445] are indicative of former organic material. These crystals are the product of the interaction of phosphate, iron and water in the natural environment and typically occur in association with human remains, human and animal waste deposits, industrial waste deposits and areas rich in iron. The mineral content of context [430] consisted of stiff grey clay near the base of ditch [410], and this may have inhibited drainage in the feature. It is possible, therefore, that the small suite of uncharred seeds in this context are contemporary with the deposit, having been preserved in formerly wet or waterlogged conditions. They are indicative of open and disturbed ground with some standing water.
- 11.4.3 The low levels of fire-waste, charred food plant remains, and bone and shell fragments, suggest a background level of domestic waste; there is no compelling evidence for deliberate waste disposal.

# 11.5 Retention and Disposal

- 11.5.1 Unless required for the recovery of additional material for radiocarbon dating or purposes other than the study of biological remains, all of the remaining unprocessed sediment may be discarded. The plant remains recovered from the processed sub-samples, together with the small amount of hand-collected bone, should be retained as part of the physical archive of the site for the present.
- 11.5.2 All material is currently stored by ASDU (Durham University, South Road, Durham, DH1 3LE), along with paper and electronic records pertaining to the work described here.

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<sup>&</sup>lt;sup>31</sup> Huntley and Stallibrass 1995.

<sup>&</sup>lt;sup>32</sup> McGowan and Prangnell 2006.

Context		406	423	424	425	427	428	430	445	446	447
Sample		1	3	4	5	6	7	2	8	9	10
Material available for radiocarbon dating		( <b>v</b> )	<b>√</b>	(√)	-	-	(√)	-	-	-	-
Volume processed (I)		10	10	8	5	10	6	10	7.5	10	5
Volume of flot (ml)		5	<5	5	<5	<5	5	5	<5	0	10
Volume of flot assessed (ml)		5	<5	5	<5	<5	5	5	<5	0	10
Residue contents (relative abundance)		Ť					Ŭ	Ŭ		Ť	-10
Bone (unburnt)	animal indet. frag.	-	1	-	-	-	-	-	-	-	-
Flint		5	3	4	4	3	4	3	-	1	2
Pot sherds (total no.)		-	-	-	-	-	-	1	-	-	-
Tooth (total no.)	animal indet. frag.	-	1	-	-	-	-	-	-	-	-
Flot matrix (relative abundance)											
Charcoal		2	2	2	2	2	2	1	1	-	-
Coal		1	-	-	-	-	1	-	-	-	-
Coal shale		1	-	-	1	ı	-	-	-	-	3
Flint		2	-	1	ı	ı	1	-	1	-	1
Heather stems (charred)		-	-	1	-	-	1	-	-	-	-
Insecta		-	-	-	-	-	-	1	-	-	-
Mollusca (terrestrial)	shell frags.	-	-	1	-	-	-	1	2	-	-
Mollusca (marine/freshwater)	mussel shell frags.	-	-	-	-	-	-	-	-	-	1
Roots (modern)	_	-	-	-	-	1	-	1	-	-	-
Vegetative material	miscellaneous	-	-	-	-	-	-	2	-	-	-
Vivianite deposits		-	-	-	-	-	-	2	1	-	-
Charred remains (relative abundance)											
(c) Hordeum spp (Barley species)	grain	-	-	-	-	-	-	1	-	-	-
(c) Triticum cf. aestivum (cf. Bread Wheat)	grain	-	1	-	-	-	-	-	-	-	-
(c) Cerealia indeterminate	grain	-	-	-	-	-	1	-	-	-	-
(c) Vicia faba (Bean)	seed	-	-	1	-	-	-	-	-	-	-
Waterlogged remains (relative abundance)											
(r) Polygonum aviculare (Knotgrass)	nutlet	-	-	-	-	-	-	2	-	-	-
(r) Sonchus asper (Prickly Sow-thistle)	achene	-	-	-	-	-	-	2	-	-	-
(r) Urtica dioica (Common Nettle)	achene	-	-	-	-	-	-	1	-	-	-
(w) Ranunculus sardous (Hairy Buttercup)	achene	-	-	-	-	-	-	1	-	-	-
(x) Chenopodium spp (Goosefoot)	seed	-	-	-	-	-	-	2	-	-	-
(x) Cirsium / Carduus spp (Thistles) achene		-	-	-	-	-	-	2	-	-	-
(x) Ranunculus subgenus Ranunculus (Buttercup)	achene	-	-	-	-	-	-	2	-	-	-
(x) Torilis sp (Hedge-parsleys)	fruit	-	-	-	-	-	-	1	-	-	-
(x) Rumex spp (Dock)	nutlet	-	-	-	-	-	-	1	-	-	-

[c-cultivated; r-ruderal; t-woodland; w-wetland; x-wide niche]. Relative abundance is based on a scale from 1 (lowest) to 5 (highest) ( ) there may be insufficient weight of carbon available for radiocarbon dating

Table 11.1: Data from plant macrofossil assessment

#### 12. SUMMARY DISCUSSION

- 12.1 The archaeological investigations conducted ahead of construction of the balancing lake at Bishop Burton College revealed the presence of multi-period archaeological activity. The recorded evidence has been assigned to six phases of geological and archaeological activity, ranging from the earliest, Phase 1, comprising naturally derived geological material through to the latest, Phase 6, comprising archaeological features and deposits of post-medieval date.
- 12.2 Geological material comprised Phase 1, this being the natural sub-stratum. Of varying composition, but generally comprising silty clay and clay, this is typical of the Boulder Clay sub-stratum of the wider area. It was, however, exposed only in small parts of the main excavation area and within evaluation Trench 2, with the formation level for the balancing lake being the overriding factor in the overall depth of excavation.
- 12.3 A substantial NE-SW aligned linear feature was partially exposed adjacent to the western limit of the main excavation area. The irregular profile of this feature, along with the composition of its infill, indicates that it was probably a naturally-derived palaeochannel, this representing Phase 2. Only the north-western side of the feature could be exposed, to the south-east it was masked by an overlying colluvial deposit which did not require full excavation. The precise date at which this feature formed is uncertain but it was probably during prehistory.
- An extensive colluvial deposit, representing Phase 3, was recorded across the main excavation area, for the most part overlying the natural sub-stratum. It was at least c. 0.80m thick in the southern and western portions of the main excavation area, while further north it was observed as being at least 1.40m thick. This increase in thickness of the colluvium reflects the natural topography of the site, with a downward slope from south-east to the north-west along the line of the valley floor in which the balancing lake was constructed. The precise date at which this material accumulated is uncertain but it was probably during prehistory.
- The earliest evidence for anthropogenic activity at the site was represented by an assemblage of 51 pieces of struck flint recovered during the investigations. Of these, 17 pieces were recovered from the Phase 2 palaeochannel and 12 pieces were recovered from the Phase 3 colluvium. The remainder were recovered from features assigned to Phases 4 and 5, and were therefore likely to be residual in context. Although no typological pieces were present within the assemblage, two distinct lithic industries were represented. The earliest of these is a blade-based industry characteristic of Mesolithic or Early Neolithic periods, while the later industry is a flake-based industry characteristic of the Later Neolithic or Early Bronze Age. The majority of the flint material recovered was fairly abraded suggesting that the pieces were residual in context, either derived from erosion or 'hill-wash', as might be expected with the presence of the colluvial material at the site. Although the flint assemblage is considered to be residual, the material contributes a small but nonetheless important amount of information about the wider area during prehistory.

- 12.6 Phase 4 was represented by several features including substantial parallel ditches crossing the central portion of the main excavation area on a NW-SE alignment. The ditches are unlikely to have been open contemporaneously but there was no evidence to indicate which was the earliest; one of the features displayed evidence of partial re-cutting along its eastern side. A small assemblage of pottery, including hand-made 'native tradition' pottery, sherds of Romano-British pottery, and sherds of Roman pottery, was recovered from the ditches, along with a small amount of medieval material, this considered intrusive in context; the likely period of origin for the Phase 4 ditches is the Romano-British period.
- 12.7 The geophysical survey that preceded the investigations herein described identified these substantial boundary features as being of potential archaeological origin and it was postulated that they could represent the eastern side of the medieval deer park at Bishop Burton. Given that the alignment of the ditches within the excavation area is somewhat at variance with the conjectured line of the eastern deer park boundary, this is far from certain, although it is clear that the investigations have demonstrated land management on a significant scale in the area long before the deer park was established. The substantial scale of the ditches could indicate that these ditches had a defensive function and they may have bounded a nearby settlement area of the Romano-British period.
- 12.8 A cluster of discrete features, including a pit and an arrangement of postholes, was recorded in the central-western portion of the main excavation area, with another posthole recorded to the north in Trench 2. The postholes likely represent one or more structures, perhaps a fence line. Two sherds of hand-made 'native tradition' pottery were recovered from these features, and since this type of pottery was recovered in conjunction with Romano-British pottery at the site and thus appears to have been produced and used alongside Romano-British wares, the likely period of origin for these features is the Romano-British period. Based on the available evidence, it is not possible to be more precise about the nature or extent of the activity with which these features are associated. The evidence is certainly too limited to propose a settlement area in the area developed for the balancing lake and, in any case, the topographic situation of the excavation area weighs heavily against this being a viable location for ancient settlement.
- Medieval (Phase 5) activity was represented by various linear boundary or drainage features with pottery evidence narrowing the date of this activity to the late 12th to early 14th century. One land boundary or drainage ditch crossed the main excavation area on the same SE-NW alignment as the Romano-British ditches and there was some evidence to indicate possible re-cutting of one of the earlier features during the medieval period. The alignment of the medieval boundary features encountered during the investigations suggest that these remains were not related to the deer park and simply reflect agricultural activity on the undulating farmland beyond its eastern boundary. The south-western portion of the main excavation area contained narrow linear features running roughly SW-NE and SE-NW and these may have been related to a field system of the period. In the central eastern portion of the excavation area were two roughly east-west aligned ditches, one seemingly a re-definition of the earlier silted-up feature, and both with terminals to the west; these were also clearly related to land management in the medieval period.

12.10 Phase 6 comprised activity of post-medieval date, with NW-SE aligned boundary or drainage ditches again notable amongst this evidence, further underlining the longevity of boundary delineation on this alignment at this particular location. A short linear feature recorded in the central portion of the main excavation area, produced dating evidence indicating an 18th century origin. However, the precise function of this feature is uncertain.

#### 13. SUMMARY OF POTENTIAL FOR FURTHER ANALYSIS

#### 13.1 Introduction

- 13.1.1 Although the archaeological investigations at Bishop Burton College revealed evidence for multi-period activity, this assessment of the archaeological data-set indicates that further analysis of the stratigraphic, artefactual and palaeoenvironmental evidence, for the purposes of an academic publication, is probably **not** warranted. This report should therefore represent an adequate level of reporting on the findings.
- 13.1.2 Prehistoric activity in the near vicinity is attested by the assemblage of struck flint recovered, although all of this material is likely to have arrived at the site by erosion or as 'hill-wash'.

  During the Romano-British period, substantial ditches were excavated on a SE-NW alignment across the line of the valley in which the site is located. Indeed, the predominant theme of the stratigraphic evidence as a whole was linear boundary delineation on this alignment, with such features being attributed to the Romano-British, medieval and post-medieval periods.
- 13.1.3 For all these archaeological eras, however, artefactual material was recovered in relatively small quantities and settlement at this precise location would have been difficult during any archaeological era due to the topographic situation. Discrete features were generally few in number, with just a small amount of evidence for one or more simple structures, perhaps a fence line, of likely Romano-British date. The prehistoric and Romano-British evidence recovered from the site do however contribute important additional information to the archaeological background of the wider area, which places Bishop Burton within a major prehistoric and Romano-British landscape. The medieval evidence is also of some importance, particularly given the location of the excavation area close to the conjectured line of the eastern boundary of the medieval deer park at Bishop Burton.

# 13.2 Summary of Potential for Further Work

#### 13.2.1 Lithics

13.2.1.1 Due to the small size of the assemblage and its evident chronological mixing, no further analytical work is warranted. It is, however, of some significance in that it represents prehistoric activity at the site otherwise only poorly represented in the structural record and thus contributes to the broader understanding of prehistoric activity in the region.

# 13.2.2 Hand-made Pottery

13.2.2.1 No typologically diagnostic sherds were recovered and no significant stratigraphic distinction between contexts containing hand-made wares and Romano-British wares were evident, therefore no further work is recommended on this assemblage.

#### 13.2.3 Samian Ware

13.2.3.1 No further work is recommended on the samian ware.

# 13.2.4 Romano-British Pottery (Excluding Samian Ware)

13.2.4.1 Due to the small size of the assemblage, statistical analysis is unnecessary and thus no further work is recommended on the assemblage of Romano-British pottery. The assessment results can be used to provide dating evidence to inform the chronology of the site.

# 13.2.5 Medieval Pottery

13.2.5.1 As with the Romano-British pottery, the size of the medieval pottery assemblage is too small for statistical analysis, therefore no further work is recommended. The assessment results can be used to provide dating evidence to inform the chronology of the site.

# 13.2.6 Post-medieval Pottery

13.2.6.1 No further work is recommended on the post-medieval pottery assemblage.

# 13.2.7 Ceramic Building Material

13.2.7.1 No further work is recommended on any of this material.

# 13.2.8 Metal Finds

13.2.8.1 No further analysis is recommended for these finds.

# 13.2.9 Biological Remains

13.2.9.1 No further analysis is recommended.

# PART C: REFERENCES AND ACKNOWLEDGEMENTS

#### 17. ACKNOWLEDGEMENTS AND CREDITS

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## **Other Credits**

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Hand-made Pottery: Dr. Christopher Cumberpatch

Romano-British Pottery: Ruth Leary

Medieval Pottery: Lisa Wastling and Jane Young

Samian Ware: Margaret Ward

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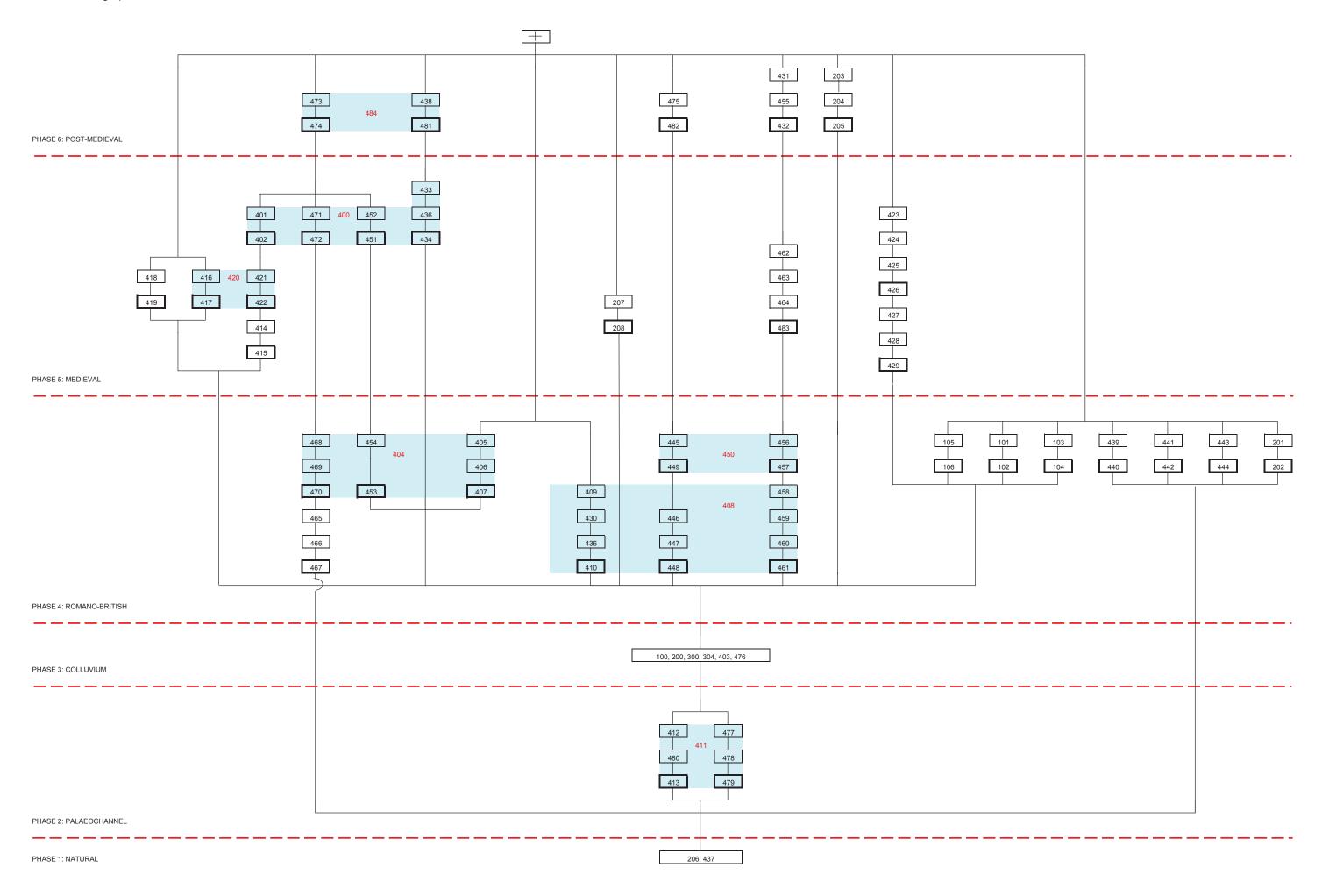
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# APPENDIX 1 STRATIGRAPHIC MATRIX



# APPENDIX 2 CONTEXT INDEX

Context	Phase	Type 1	Type 2	Interpretation
100	3	deposit	layer	colluvium deposit
101	4	deposit	fill	fill of posthole [102]
102	4	cut	discrete	posthole filled by [101]
103	4	deposit	fill	fill of pit [104]
104	4	cut	discrete	pit filled by [103]
105	4	deposit	fill	fill of ditch [106]
106	4	cut	linear	ditch filled by [105]
200	3	deposit	layer	colluvium deposit
201	4	deposit	fill	fill of possible posthole [202]
202	4	cut	discrete	possible posthole filled by [201]
203	6	deposit	fill	fill of ditch [205]
204	6	deposit	fill	fill of ditch [205]
205	6	cut	linear	ditch filled by [203] and [204]
206	1	deposit	layer	natural
207	5	deposit	fill	fill of ditch [208]
208	5	cut	linear	ditch filled by [207]
300	3	deposit	layer	colluvium deposit
304	3	deposit	layer	colluvium deposit
001		иороск	layer	group number comprising [401], [402], [433], [434], [436], [451], [452],
400	5	group	linear	[471] and [472]
401	5	deposit	fill	fill of ditch [402]
402	5	cut	linear	ditch filled by [401]
403	3	deposit	layer	colluvium deposit
+00	0	исрози	layci	group number comprising [405], [406], [407], [453], [454], [468], [469] and
404	4	group	linear	[470]
405	4	deposit	fill	fill of ditch [407]
406	4	deposit	fill	fill of ditch [407]
407	4	cut	linear	ditch filled by [405] and [406]
407	7	Cut	iliteai	group number comprising [409], [410], [430], [435], [446], [447], [448],
408	4	group	linear	[458], [459], [460] and [461]
409	4	deposit	fill	fill of ditch [410]
410	4	cut	linear	ditch filled by [409], [430] and [435]
411	2	group	iiricai	group number comprising [412], [413], [477], [478], [479] and [480]
412	2	deposit	fill	silting of palaeochannel [413]
413	2	cut	linear	palaeochannel filled by [412] and [480]
414	5	deposit	fill	fill of ditch [415]
415	5	cut	linear	ditch filled by [414]
416	5	deposit	fill	fill of ditch [417]
417	5	cut	linear	ditch filled by [416]
418	5	deposit	fill	fill of ditch [419]
419	5	cut	linear	ditch filled by [418]
420	5	group	linear	group number comprising [416], [417], [421] and [422]
421	5	deposit	fill	fill of ditch [422]
422	5	cut	linear	ditch filled by [421]
423	5	deposit	fill	fill of ditch [426]
424	5	deposit	fill	fill of ditch [426]
425	5	deposit	fill	fill of ditch [426]
426	5	cut	linear	ditch filled by [423], [424] and [425]
427	5	deposit	fill	fill of ditch [429]
428	5	deposit	fill	fill of ditch [429]
429	5	cut	linear	ditch filled by [427] and [428]
430	4	deposit	fill	fill of ditch [410]
431	6	deposit	fill	fill of linear feature [432]
432	6	cut	linear	linear feature [432]
433	5	deposit	fill	fill of ditch [434]
434	5	cut	linear	ditch filled by [433] and [436]
435	4	deposit	fill	fill of ditch [410]
436	5	deposit	fill	fill of ditch [434]
437	1	deposit	layer	natural
438	6	deposit	fill	fill of ditch [481]
439	4		fill	fill of posthole [440]
408	14	deposit	Imi	IIII oi bostiloie [440]

Context	Phase	Type 1	Type 2	Interpretation	
440	4	cut	discrete	posthole filled by [439]	
441	4	deposit	fill	fill of posthole [442]	
442	4	cut	discrete	posthole filled by [441]	
443	4	deposit	fill	fill of posthole [444]	
444	4	cut	discrete	posthole filled by [443]	
445	4	deposit	fill	fill of ditch [449]	
446	4	deposit	fill	fill of ditch [448]	
447	4	deposit	fill	fill of ditch [448]	
448	4	cut	linear	ditch filled by [446] and [447]	
449	4	cut	linear	ditch filled by [445]	
450	4	group	linear	group number comprising [445], [449], [456] and [457]	
451	5	cut	linear	ditch filled by [452]	
452	5	deposit	fill	fill of ditch [451]	
453	4	cut	linear	ditch filled by [454]	
454	4	deposit	fill	fill of ditch [453]	
455	6	deposit	fill	fill of ditch [432]	
456	4	deposit	fill	fill of ditch [457]	
457	4	cut	linear	ditch filled by [456]	
458	4	deposit	fill	fill of ditch [461]	
459	4	deposit	fill	fill of ditch [461]	
460	4	deposit	fill	fill of ditch [461]	
461	4	cut	linear	ditch filled by [458], [459] and [460]	
462	5	deposit	fill	fill of ditch [483]	
463	5	deposit	fill	fill of ditch [483]	
464	5	deposit	fill	fill of ditch [483]	
465	4	deposit	fill	fill of ditch [467]	
466	4	deposit	fill	fill of ditch [467]	
467	4	cut	linear	ditch filled by [465] and [466]	
468	4	deposit	fill	fill of ditch [470]	
469	4	deposit	fill	fill of ditch [470]	
470	4	cut	linear	ditch filled by [468] and [469]	
471	5	deposit	fill	fill of ditch [472]	
472	5	cut	linear	ditch filled by [471]	
473	6	deposit	fill	fill of ditch [474]	
474	6	cut	linear	ditch filled by [473]	
475	6	deposit	fill	fill of ditch [482]	
476	3	deposit	layer	colluvium deposit	
477	2	deposit	fill	silting of palaeochannel [479]	
478	2	deposit	fill	silting of palaeochannel [479]	
479	2	cut	linear	palaeochannel filled by [476], [477] and [478]	
480	2	deposit	fill	silting of palaeochannel [413]	
481	6	cut	linear	ditch filled by [438]	
482	6			ditch filled by [475]	
483	5	cut	linear	ditch filled by [475] ditch filled by [462], [463] and [464]	
484	6	_	linear		
404	lo	group	linear	group number comprising [438], [481], [473], [474]	

# APPENDIX 3 PLATES



Plate 1. WSW facing section through palaeochannel [413] (2m scale).



Plate 2. ENE facing section through palaeochannel [479] (2m scale).



Plate 3. NW facing section through ditch [407] (1m x 2m scale).



Plate 4. NW facing section through posthole [442] (0.5m scale).



Plate 5. SSE facing section through ditch [410] (2m scale).



Plate 6. NNW facing section through ditch [448] (2m scale).



Plate 7. NNW facing section through ditches [457] and [461] (2m scale).



Plate 8. WSW facing section through linear features [417] and [419] (0.5m scale).