# Bridge Lane, Bawtry, Doncaster

**Evaluation and Mitigation Report** 



Ref: 74600.01 March 2012



#### **BRIDGE LANE, BAWTRY, DONCASTER**

#### ARCHAEOLOGICAL EVALUATION AND MITIGATION REPORT

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#### **Archaeological Evaluation and Mitigation Report**

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#### **BRIDGE LANE, BAWTRY, DONCASTER**

#### **Archaeological Evaluation and Mitigation Report**

#### **Summary**

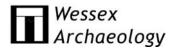
Wessex Archaeology was commissioned by Rural Estates Limited to complete archaeological reporting of a project previously undertaken by ARCUS (University of Sheffield) for Lewis Holdings Limited. The site is a residential development located north of Gainsborough Road (formerly Bridge Lane), Bawtry, centred on National Grid Reference SK 653 928. The investigations were required to meet precommencement planning conditions requested by the South Yorkshire Archaeology Service, advisors to the planning authority, Doncaster Metropolitan Borough Council (DMBC).

Initial evaluation fieldwork and reporting was undertaken by ARCUS in 2006, followed by mitigation excavation and watching brief fieldwork in 2007. This report combines the results of the fieldwork with the results of specialist analyses of artefactual material recovered from the site. Recommendations are also made for further reporting. Four main phases of activity have been identified dating to the medieval, late medieval and post-medieval periods, as well as more recent modern activity. Residual Late Mesolithic or Early Neolithic lithic blades and Roman (primarily abraded) pottery in later contexts also indicates potential prehistoric and Roman activity in the vicinity of the site.

The first main phase of activity (c. 12<sup>th</sup> to 14<sup>th</sup> century) was represented by the insertion of a number of pits and a linear ditch roughly aligned east to west, possibly a boundary between two plots of land running east from Church Street. Two sub-oval pits were identified, one of which contained a timber oak barrel lining. One small and three large sub-rectangular pits were also assigned to this phase of activity. One of the large pits contained a wooden revetment dated to the 13<sup>th</sup> century. The function of the pits was not clear from the excavated evidence.

The second main phase of activity ( $c.14^{th}$  to  $16^{th}$  century) was represented by the recutting of the large revetted pit and the insertion of smaller pits, two sub-rectangular and one circular, and a fence line. To the north and east of the site was a roughly north-south linear ditch. Later in this phase a pond or large pit feature was inserted. Environmental evidence suggests that the ditch and pond may have been open for some time and contained stagnant water. The pond may have been used as a retting pit in hemp production, although the evidence for this is equivocal. Hemp was cultivated for use in the manufacture of rope, canvas, paper and oil from the medieval period through to the beginning of the  $19^{th}$  century. The proximity of the site to the River Idle and wharf may indicate that hemp was being grown to make ropes or canvas for river traffic.

The third main phase of activity (17<sup>th</sup> to 19<sup>th</sup> century), dated to the post-medieval period, was represented by a brick wall located to the east of the site and by what appeared to be the remains of a demolished building or levelling layer located to the north of the site, most likely dating from the 17<sup>th</sup> to 18<sup>th</sup> century. No structures are shown in these areas on the earliest available Ordnance Survey map of 1854, or later maps. Further development included the insertion of a wooden drain in the eastern area of the site, most likely of 18<sup>th</sup> century date. Also assigned to this phase



were two linear features on a similar alignment, probably bedding trenches, and an associated cobbled surface.

Cartographic evidence suggests the site was undeveloped and covered by trees during the later post-medieval period until at least the mid 20<sup>th</sup> century. The final modern 20<sup>th</sup>-century phase of activity was limited to drainage associated with the construction of a house over the central and northern part of the mitigation area and two pits, one a geotechnical trial hole.

The site appears to have lain on the periphery of medieval and post-medieval settlement at Bawtry. The nature of features identified and the site's proximity to the River Idle suggests the features were related to activities that may have been taking place close to the river, perhaps in plots of land running east from Church Street. The low lying nature of the site suggests it was prone to flooding, which is to some extent borne out by the environmental evidence which suggests a local environment of primarily damp marshland. The presence of residual and intrusive material in several contexts further supports the apparent mixing of deposits and the suggestion that some of the features may have been open for some time. Identified plant species indicated disturbed ground, such as that resulting from agriculture or animal husbandry. Charred cereal grains, representative of crop processing or cooking being carried out in the vicinity of the site, were also present.

The results of the archaeological investigations are of local and regional significance and as such it is recommended that a note summarising the results of the work is submitted to an appropriate journal (e.g. Medieval Archaeology or Post-Medieval Archaeology). The archive will be returned to Doncaster Museum, where it will be deposited under Accession Number DONMG:2006.18.



#### **BRIDGE LANE, BAWTRY, DONCASTER**

#### **Archaeological Evaluation and Mitigation Report**

#### Acknowledgements

This report was commissioned by Rural Estates Limited and the project was managed for Wessex Archaeology by Richard O'Neill.

The fieldwork was undertaken by ARCUS staff supervised by Richard O'Neill in 2006 and Owen Raybould in 2007, with the assistance of Katherine Baker, Tim Cobbold, Isabelle Kendall, Owen Raybould, Chris Scurfield and Ashley Tuck.

This report was compiled by Richard O'Neill and Iwona Kozieradzka-Ogunmakin. The illustrations were prepared by Chris Swales. The finds reports were prepared by Dr. Chris Cumberpatch, Dr. Roger Doonan, D. Pitman, Dr. Susie White, Dr. Ian Tyers, Quita Mould, Dr. Benjamin Chan, John Tibbles and Dr. Paul Buckland, Chris Harrison and Dr Ellen Simmons.



#### **BRIDGE LANE, BAWTRY, DONCASTER**

#### **Archaeological Evaluation and Mitigation Report**

#### 1 INTRODUCTION

#### 1.1 Project Background

- 1.1.1 Lewis Holdings Limited commissioned ARCUS (University of Sheffield) to undertake an archaeological evaluation and mitigation of land at Bridge Lane, Bawtry, Doncaster, South Yorkshire (hereafter the 'Site'). The Site is centred on National Grid Reference SK 653 928 (**Figure 1**).
- 1.1.2 Archaeological fieldwork was conducted according to a project design produced by ARCUS (Dransfield 2006) and approved by the South Yorkshire Archaeology Service (SYAS). A brief statement and interim report of the results were issued following completion of the evaluation (O'Neill 2006a and 2006b). The evaluation trenches revealed significant archaeological remains thought to relate to the periphery of medieval settlement at Bawtry, in addition to later features (O'Neill 2007a).
- 1.1.3 The evaluation comprised the machine and hand excavation of three trenches (Figure 1). Subsequent mitigation excavation expanded on Trench 3, which was extended to cover the entire area that was to be disturbed by construction work. An archaeological watching brief was also undertaken during the construction-related groundworks.
- 1.1.4 The evaluation was undertaken in July 2006 followed by mitigation excavation and watching brief in February 2007. Following the closure of ARCUS in 2009, Wessex Archaeology was commissioned by Rural Estates Limited to complete reporting of the archaeological works.

#### 1.2 Planning Background

- 1.2.1 The archaeological works were undertaken in connection with the construction of domestic dwellings (planning application reference number 06/01230/FUL) and were requested by the South Yorkshire Archaeology Service (SYAS) to confirm the presence or absence, character and dating of archaeology on the Site.
- 1.2.2 Project Designs for each stage of archaeological work, detailing the methods and standards to be employed, were prepared by ARCUS (Dransfield 2006; O'Neill 2007b) and approved by SYAS.

#### 1.3 Site Description, Topography and Geology

- 1.3.1 The proposed development area is located to the north of Gainsborough Road (formerly Bridge Lane), Bawtry and to the west of the River Idle within a deep alluvial flood plain. The Site lies some 175m to the east of the Great North Road (A638) as it passes through Bawtry town centre.
- 1.3.2 At the commencement of the evaluation work the area including Trenches 1 and 2 was covered with dense shrubs and occasional trees. Mitigation Area



A/Trench 3 was occupied by a private residence and garden. Ground level sloped from west to east.

1.3.3 The Site is situated on low lying ground at approximately 3m to 5m AOD. The underlying geology is solid sandstone covered by deposits of 'Older River Gravel' and by 'First Terrace' deposits (Geological Survey of Great Britain, Sheet 88, 1969).

#### 2 ARCHAEOLOGICAL BACKGROUND

#### 2.1 Neolithic and Bronze Age periods

2.1.1 Little evidence exists for prehistoric settlement activity in the area during the Neolithic and Bronze Age periods save for isolated find spots, such as three Neolithic stone axes and two characteristic Bronze Age spearheads (Jefferson 2002).

#### 2.2 Iron Age and Roman periods

- 2.2.1 During the later prehistoric and Roman periods the landscape of the Bawtry area underwent substantial changes. Aerial photographic surveys of the Bunter Sandstone geological deposits of South Yorkshire and North Nottinghamshire have identified the area as being rich in cropmarks (Riley 1980). Many of these cropmarks form an extensive landscape of field systems, enclosures and interconnecting trackways. Such cropmarks indicative of field systems and trackways have been identified to the south and west of Bawtry.
- 2.2.2 The Roman period witnessed further changes to the landscape. The development of *Eboracum* (York) as an important military base and town required access which avoided the long ferry crossing of the Humber (Margary 1957). This led to the construction of a road from Lincoln to Doncaster, via Bawtry. This road has been partially located on low lying marshy ground to the east of Bawtry, across the River Idle, before turning north towards Doncaster. The crossing point across the River Idle is still unclear, although it is likely to be close to the centre of Bawtry (Jefferson 2002).
- 2.2.3 The line of the road passes close by Scaftworth Roman fortlet (4<sup>th</sup> century AD), identified by aerial photography, and later investigated by excavation, which lies less than 1km to the east of the Site, north of Gainsborough Road. The fortlet was surrounded by three substantial ditches, although the inner one potentially could be the remains of the robbed out wall (Buckland, 1986). It is possible that this fortlet was constructed to protect the area, and importantly the access through a navigable river from threat (Hey 1979). It has been suggested that there may be an earlier fort in the Bawtry area, given the location of Bawtry on a navigable river and its location lying midway between the forts of Doncaster and Littleborough, perhaps in the grounds of Bawtry Hall (Buckland 1986). Although no evidence has been uncovered to verify this, several finds spots of Roman date have been recorded in the Bawtry area (Jefferson 2002).



#### 2.3 Early Medieval period

2.3.1 There are no sites or finds relating to the early medieval period in the vicinity of the Site. At this time Bawtry is thought to have lain close to the border between the two major Anglo-Saxon kingdoms of Mercia and Northumbria. The neighbouring area of Austerfield to the north held a Synod or council in AD 702 under the supervision of Aldfrith, then king of Northumbria (Beresford 1967).

#### 2.4 Medieval period

- 2.4.1 The first records of the town are found in a charter for Roche Abbey in AD 1199. It was about this time that the Church of St Nicholas was built, as a chapelry of the Benedictine Priory of Blyth (Magilton 1977) just north of the Site, as well as a hospital with a chapel close to the grounds of the present Bawtry Hall. Along with a number of other settlements on navigable rivers a planned new town was developed at Bawtry (Beresford 1967), just to the west of the church. This was the creation of Robert de Vipont during the years 1213 to 1215 (Magilton 1977).
- 2.4.2 The new town was placed between the River and the line of the Roman Road, and the line of the road was diverted into the flat open area of the market (Beresford 1967). The first record for the market is from 1247, although it probably existed from the time of the planned new town. At the same time (1213-1214) a charter was granted for a fair to be held at Bawtry (Sydes and Dunkley 1991).
- 2.4.3 In the Hundred Rolls of 1276 Bawtry is referred to as a port (Hey 1980) and quay, and it was the trade generated through its position, on a meander and at the limit of the navigable River Idle, that created a period of prosperity and development of the town. The position of the docks at this time is thought to have been along the western bank of the Idle, close to the position of the later post-medieval wharf and the Site (Magilton 1977).
- 2.4.4 The trade passing through Bawtry consisted largely of lead and millstones from Derbyshire; metalwares from South Yorkshire were taken to Hull, London and even to the Low Countries (Hey 1986). In return Bawtry imported food, Spanish steel and hides for the tanning industries from London. This level of trade is reflected in the pottery assemblage from excavations in Bawtry which include material from Burgundy, the Low Countries and the Rhineland, dating from the mid 13<sup>th</sup> century onwards (Dunkley and Cumberpatch 1996).
- 2.4.5 By 1379, Bawtry had become a prosperous settlement of some 90 households. By the last quarter of the 13<sup>th</sup> century Bawtry was recognised as borough holding regular markets and fairs (Hey 1980).
- 2.4.6 The growth and prosperity of Bawtry at this time is reflected in the number of recorded medieval sites and find spots in the area. These include elements of surviving structures such as the Church, the Market Cross base and timber framed buildings. Further evidence comes from isolated finds, a bridge on oak piles associated with artefactual evidence, and excavation evidence at Church Street (Dunkley and Cumberpatch 1996) and at the present Masonic Hall (Hadley 2009).



#### 2.5 Post-medieval period

- 2.5.1 The town went into decline during the later medieval period, so much so that by 1540 William Camden wrote that Bawtry was, 'very bare and poore, a poore market town' (Hey 1980). However, the town had re-established itself again as a port and coaching halt on the Great North Road in the 17<sup>th</sup> and 18<sup>th</sup> centuries.
- 2.5.2 The trade of materials from North Derbyshire and South Yorkshire to Hull, London and Europe began to thrive again with an increase in the demand for lead, millstones, coal and industrial goods, which was aided by the improvement of drainage on the river by Cornelius Vermuyden. Imports also increased, so that by the late 1620s 4,000 hides a year were being imported through Bawtry for use by Yorkshire tanneries (Hey 1980).
- 2.5.3 By 1686 Bawtry was a growing town with a market and port, and the town could provide 57 guest beds and the stabling for up to 69 horses (Hey 1980). A general account of Bawtry's commercial activity at this time is provided by Daniel Defoe in his 1724 *Tour Through England and Wales*. Defoe attributed the prosperity of the town to the great post highway and the proximity of the River Idle (Holland 1976):
  - 'the chief centre of exportation of this part of the country, especially for heavy goods, which they bring down hither from the adjacent countries, such as lead, from the lead mines and smelting-houses at Derbyshire, wrought iron and edge-tools, of all sorts, from the forges at Sheffield, and from the country call'd Hallamshire....Also millstones and grindstones, in very great quantities, are brought down and shipped off here, and so carry'd by sea to Hull, and to London, and even to Holland also. This makes Bawtry Wharf be famous all over the south part of the West Riding of Yorkshire, for it is the place whither all their heavy goods are carried, to be embarked and shipped off'.
- 2.5.4 Acts for the navigation of the Derwent in 1719 and the River Don in 1726 were passed, despite the wishes of the people of Bawtry, bringing competition for the River Idle trade. Although the results were not as immediately disastrous as at first feared, the opening of the Chesterfield Canal in 1777 signalled the beginning of the end for Bawtry's river trade as there was no longer a need to transport long distances overland before loading onto boats (Holland 1976).
- 2.5.5 The location of the town on the Great North Road helped maintain some degree of prosperity for Bawtry as a coaching stop. The construction of Bawtry Hall in 1785, to the west of Bawtry, after the Chesterfield Canal was opened, shows that there were still moneyed people living in Bawtry. The construction of the railways, with the line passing through Bawtry being constructed in 1848, saw a decline in traffic along the Great North Road, and with it the end of much passing trade (Hey 1979).
- 2.5.6 Modern Bawtry has many visible reminders of this latter period of prosperity with many buildings surviving from this time (Jefferson 2002). Many properties within the town are of listed status, with the majority having been constructed during the 18<sup>th</sup> and early 19<sup>th</sup> centuries.



#### 2.6 Cartographic evidence

- 2.6.1 Cartographic evidence (**Figure 15**) consulted included William Peck's plan of 1813, and a series of Ordnance Survey maps from 1854 onwards.
- 2.6.2 William Peck's 1813 plan in his book on Bawtry, although not to scale, identifies a number of features of importance within the area, including Scaftworth Roman fortlet to the east of the Site, the wharf, the Church of St Nicholas to the north, the planned grid layout of the town, and a series of ponds to the south and south-west of the Site which appear to be fed by a stream off the Idle. Also shown are Bawtry Hall and Hospital.
- 2.6.3 Ordnance Survey maps from 1854, 1903 and 1929 demonstrate the lack of activity on the Site during this period, when it appears to have remained undeveloped and covered by trees.

#### 2.7 Previous Archaeological Investigations

- 2.7.1 Evaluation on land immediately east of the Site, north of Gainsborough Road, failed to identify evidence of any definitive activity in the area and suggested the medieval wharf was most likely located further north. The Site contained what appeared to be thick riverine deposits which, combined with heavily waterlogging, suggested that the Site may have been too wet for settlement and suitable only for summer grazing (Cumberpatch 1995).
- 2.7.2 Archaeological investigations conducted on 16-20 Church Street identified medieval buildings and burgage plots dating from the 11<sup>th</sup> to 16<sup>th</sup> centuries (Dunkley and Cumberpatch 1996). There was evidence for iron working and industrial activity in the plots to the rear of the street frontage. Additional works carried out south of 20 Church Street (O'Neill 2001) revealed primarily post-medieval activity.
- 2.7.3 Archaeological investigations close to Bawtry Hall have identified a medieval cemetery most likely associated with the medieval hospital or almshouses and a chapel dedicated to St Mary Magdalene. The chapel is thought to have occupied the site of the present Masonic Hall. Three initial burials were uncovered in 2006 (O'Neill and Jackson 2007) and subsequent investigation in 2007 (Hadley 2009) has identified a further 10 burials, one of which was dated to the medieval period.
- 2.7.4 Within the grounds of Bawtry Hall evaluation (PCA 2003) and subsequent mitigation (Chan 2006) revealed a series of post-medieval features containing a small quantity of residual medieval pottery.

#### 3 AIMS AND OBJECTIVES

#### 3.1 Evaluation

3.1.1 The aims of the evaluation works were to establish the presence/absence, extent, condition, character and date of any archaeological deposits within the area affected by the proposed development in order to inform an appropriate mitigation strategy.



#### 3.2 Mitigation

- 3.2.1 The aims of the mitigation works were:
  - to identify, excavate and record any further archaeological remains present to be impacted on by the development;
  - to further investigate features identified in the evaluation trial trenching;
  - to elucidate on the character and date of features identified during initial evaluation works, particularly relating to the medieval settlement of Bawtry;
  - to provide information that will enable the remains to be placed within their local, regional, and national context and for an assessment of the significance of the archaeology of the Site to be made.

#### 4 METHODOLOGY

#### 4.1 Introduction

4.1.1 The methodologies for evaluation and mitigation are contained in the project designs for each phase of work (Dransfield 2006; O'Neill 2007b). These are summarised below.

#### 4.2 Method

4.2.1 The initial proposal for archaeological investigation of the Site was to evaluate three trenches. Two of the trenches measured approximately 10m by 2m and were located over the footprints of new building Plots 2 and 3. Trench 3, measuring approximately 5m by 2m, was located over the footprint of the proposed conservatory in Plot 1. Slight alterations in the location of the trenches were necessary due to existing topographic restrictions. The trenches were machine dug to a depth of c.1m, the level at which archaeological features were encountered. During the mitigation stage of investigation, Trench 3 was expanded (Area A) to cover almost the entire area of new building Plot 1.

#### 5 RESULTS

#### 5.1 Introduction

- 5.1.1 A detailed summary of context information is listed in **Appendix 3**.
- 5.1.2 All contexts (cuts, fills, deposits and structures) were assigned a unique number (100 to 426). Cuts and structures are referred to in the text in squared brackets [], with fills and deposits in rounded brackets (). The results from each trench are discussed individually and the results are summarised in Section 7 below.
- 5.1.3 Archaeological features and deposits identified during the evaluation and mitigation stages of the investigation have been assigned to four broad



phases of human activity on the Site based on analysis of the stratigraphic record and the analysis of artefacts recovered:

Phase A Medieval 12<sup>th</sup> to 14<sup>th</sup> centuries;

**Phase B** Late medieval 14<sup>th</sup> to 16<sup>th</sup> centuries;

Phase C Post-medieval/ early modern 17<sup>th</sup> to 19<sup>th</sup> centuries;

Phase D Modern 20<sup>th</sup> to 21<sup>st</sup> centuries.

#### 5.2 Evaluation Trenches and Mitigation Area A

#### Trench 1

- 5.2.1 Trench 1 was aligned east-west and was located to the north of the Site (**Figures 1-2**). The trench measured 9m by 2m.
- 5.2.2 The earliest recorded archaeological feature was a linear channel/ditch [106] that traversed the central and western sections of the trench from north to south (Figures 2-3; Plate 1). The feature was likely to be the continuation of a channel observed in Trench 2, some 36m to the south. Only the eastern side and possible base of the channel was observed within a 2m long sondage excavated through the feature. The feature measured at least 2m in width and 0.46m in depth, and had a gentle sloping 25° profile. Two wooden oak stakes [108] (Small Finds  $\Delta 3$  and  $\Delta 4$ ) had been driven into the eastern side of the channel on a north-south alignment (Plate 2). The stakes were rectangular in cross-section and measured 0.3m x 0.08m x 0.02m ( $\Delta$ 3) and  $0.2 \text{m} \times 0.06 \text{m} \times 0.04 \text{m}$  ( $\Delta 4$ ). A stake was also observed inserted into the eastern side of the channel in Trench 2. It was not clear whether the stakes had been inserted through the fill (107) of the feature or whether the fill had silted up around them. The channel was filled by a single deposit (107) from which medieval (13th- to 15th-century) and late medieval (15th- to 16thcentury) pottery was recovered, in addition to animal bone and leather (late medieval). Due to the stratigraphic relationship with the overlying deposit (105), and dates assigned to the pottery and leather, this feature has been placed within Phase B.
- 5.2.3 Towards the eastern extent of the trench, a deposit (102) filled a number of shallow hollows (**Figure 3**; **Plate 1**) within the natural geology (101). The hollows covered an area 3m by 2m, were irregular or roughly circular in plan, up to 0.2m in depth. The origin of the features, perhaps derived from water erosion, was not apparent from the excavated evidence. Medieval (13<sup>th</sup>- to 15<sup>th</sup>-century) and late medieval (15<sup>th</sup>- to 16<sup>th</sup>-century) pottery were recovered from deposit (102), in addition to wood. The deposit also contained a large quantity of water-worn pebbles. The deposit (102) contained within the hollows has been placed within **Phase B**.
- 5.2.4 Overlying ditch [106], and deposits (102) and (107), was a layer of sandy clay (105) recorded in the central and western area of the trench. This possible alluvial deposit measured up to 0.47m in depth. Medieval 13<sup>th</sup>- to 15<sup>th</sup>-century pottery was recovered from the deposit, in addition to animal bone, (late medieval) leather and wood.



- 5.2.5 Overlying the alluvial deposit (105) was a layer of rubble (104) which extended across the majority of the trench, petering out towards the east. The deposit, deepest (0.48m) towards the west of the trench, contained a large quantity of mortared hand-made bricks and lumps of mortar, although no definitive structure within the material was identified. Fragments of pantile identified in the ceramic building material assemblage were most likely of post-medieval date. This type of tile was present in England before the 16<sup>th</sup> century but there is no evidence for their manufacture before the 17<sup>th</sup> century. Occasional stone fragments were also observed. Given the absence of buildings in this area of the Site on maps from the 1850s onwards, it seems likely that the rubble was derived from a building of earlier post-medieval/ early modern date (**Phase C**). Alternatively the rubble could have been imported into the Site for use as a levelling layer.
- 5.2.6 A subsoil layer (103), up to 0.25m in depth, overlay the rubble deposit (104) (**Figure 3**). The subsoil contained 18<sup>th</sup>- to early 19<sup>th</sup>-century pottery. A topsoil layer (100), 0.3m in depth, covered the entire trench. The topsoil contained 19<sup>th</sup>-century pottery (**Phase C**).

#### Trench 2

- 5.2.7 Trench 2 was located to the east of the Site. The trench was aligned north-south and measured 10.6m by 2m (**Figures 1** and **4**; **Plate 3**). Natural geology recorded in this trench was compacted sandy clay (210).
- 5.2.8 The earliest archaeological feature recorded in the trench was a linear channel/ditch [212] cut into a natural geology (210) (Figures 5c-d). This north-south aligned feature was assumed to be the continuation of a channel [106] observed in Trench 1 (Phase B). The channel was exposed in two sondages located towards the northern and southern extents of the trench (Plates 5-6). The channel had a minimum width of 1.6m and a depth of 0.45m. Only the eastern side and base of the channel [212] were observed. The eastern side of the feature was gently sloping (c.30°). In the southern sondage, a birch stake [211] (Small Find  $\Delta$ 1) had been driven into the eastern side of the channel, roughly halfway between the upper edge and base of the feature. The stake measured 0.24m in length, was rounded in section (0.03m) and tapered to a point. It was not clear whether the stake had been inserted through the fill (209) of the feature or whether the fill had silted up around it. The function of the stake was uncertain, however, stakes were also observed inserted into the eastern side of the channel in Trench 1. The channel was filled by a single deposit (202/209) of clavey sand. A late medieval date (Phase B) for the channel is assumed on the basis of observed stratigraphy and the dating of the pottery recovered from its fill; 14<sup>th</sup> to early 16<sup>th</sup> century/ 15<sup>th</sup> to 16<sup>th</sup> century (202/209). An 18<sup>th</sup>-century pottery sherd in deposit (202) which may have been derived from the overlying subsoil (201). Also recovered were medieval ceramic building material (flat roof tile and 14th-/15th-century brick) and post-medieval leather in deposit (209) and wood in deposits (202) and (209).
- 5.2.9 An alluvial deposit (217), up to 0.24m in depth, recorded towards the south of the trench, was similar in character to the underlying deposit (209) and produced a single pottery sherd of the 18<sup>th</sup> century date. As both deposits were truncated by a large cut [213] of late medieval date, it is possible that the 18<sup>th</sup>-century pottery was intrusive in deposit (217).



- A large cut feature [213], possibly a pond or substantial pit, was recorded in the northern and central sections of the trench (Figures 4-5a). The feature measured up to 7m in length and at least 1.6m in width and 0.85m in depth. It was cut through earlier deposits (217), (202/209) and the underlying natural (210). The lower deposits were waterlogged and included preserved organic material, notably wood. The earliest fill (214), 0.25m in depth, contained animal bone and ceramic building material. Overlying this was a deposit (203), up to 0.1m in depth, rich in organic material. Of particular note were numerous fragments of wood at the interface with the underlying deposit (214), possibly derived from tree clearance (Plate 4). One large branch appeared to have a worked end (Small Find  $\Delta 2$ ). Pottery of late medieval (15<sup>th</sup>- to 16<sup>th</sup>-century) date was recovered from (203), in addition to animal bone and ceramic building material. Fire-cracked pebbles were also present. Overlying (203) was deposit (204), up to 0.3m in depth. Brick fragments recovered from deposits (203) and (204) were of 14<sup>th</sup> to 15<sup>th</sup> century date, and two fragments of flat roof tile from deposit (204) were of medieval date. Overlying this, towards the top of the feature, was an upper deposit (206), up to 0.5m in depth, from which animal bone and metal were recovered. The fill of the feature was sealed by a subsoil deposit (201). The feature seems to be of late medieval date (Phase B) based on the stratigraphy and dating of the artefactual material recovered from its fill.
- Stratigraphically later was robbed out wall [205], which ran east-west across 5.2.11 the trench, 0.84m from the surface (Figures 4-5a; Plate 3), truncating the upper fill (206) of feature [213]. The wall was observed along a length of 2.02m and measured up to 0.8m in width and 0.3m in height. It was formed of hand-made bricks (averaging 0.22m x 0.12m x 0.06m and 0.17m x 0.15m x 0.08m), and occasional stones, bonded with a lime-rich mortar. No construction cut was visible for the structure. The wall does not appear on the earliest 1850s map of the Site and is therefore presumed to be early 19<sup>th</sup>-century in date. Fragments of decorative brick, possibly from a wallcapping, had been re-used in the structure. Medieval (14<sup>th</sup>- to 15<sup>th</sup>-century) and late medieval/early post-medieval (16th- to 17th-century) pottery, postmedieval ceramic building material (pantile) and metal were recovered from the wall fabric [205]. This would suggest the wall was constructed in the 16<sup>th</sup> or 17<sup>th</sup> century, with the earlier pottery being residual pieces, possibly becoming part of the wall matrix as an aggregate used within the mortar. It was not possible to place the wall structure with absolute certainty within one phase of Site activity as the time period involved seems to span both Phase B and Phase C. However, as the overlying deposits are from Phase C it is most likely that the wall dates from a late sub-phase in **Phase B**.
- Towards the southern extent of the trench, at the base of the subsoil (201), was a linear drainage trench [207] containing a wooden drain (**Figure 5b**; **Plate 6**). The drainage feature truncated an earlier deposit (202) and ran northeast to southwest, 2.5m in length, continuing into the southern trench edge. A hollowed-out section of wood, probably oak, measuring 0.84m in length (minimum), 0.13m in width and 0.06m in depth, was laid along the centre of the trench. Metal strips appeared to have been wedged under the drain to hold it in place. The trench measured up to 0.54m in width and 0.2m in depth and was filled with a gravel deposit (208) containing numerous pottery sherds of 18<sup>th</sup>- to 19<sup>th</sup>-century date, a single fragment of quarry tile of a type in use since the 17<sup>th</sup> century, animal bone, glass, metal, shell and slag. It was likely that this drainage feature was inserted in the 18<sup>th</sup> century.



placing it within **Phase C** of site activity. Wooden drainpipes are known to have fallen out of use in the 18<sup>th</sup> century as it became cheaper and easier to use ceramic pipes.

5.2.13 Overlying the above-mentioned deposits and features was subsoil layer (201), 0.25m in depth, which contained late 17<sup>th</sup>- to 18<sup>th</sup>-century pottery. The upper courses of wall [205] were disturbed by a possible robber trench [215] (**Figure 5a**) cut through subsoil (201) into an underlying alluvial deposit (206). The trench measured 0.91m in width and 0.35m in depth. Animal bone was recovered from the filling (216) of the robber trench, which was sealed by topsoil layer (200). The topsoil (200), 0.4m in depth, contained post-medieval/ early modern 17<sup>th</sup>- to 19<sup>th</sup>-century pottery and a stem fragment of clay tobacco pipe of 19<sup>th</sup>-century date. The topsoil and subsoil have been placed within **Phase C** of site activity.

#### Trench 3 and Mitigation Area A

- 5.2.14 The features investigated in Area A/Trench 3 revealed a fairly prolonged period of activity during the medieval and post-medieval periods (**Figures 6** and **9**). The original Trench 3 measured 4.6m by 2.6m and was orientated northwest-southeast. The mitigation Area A expanded on the previously excavated evaluation Trench 3 (**Figure 2**). Archaeological deposits and features recorded in evaluation Trench 3 were assigned individual context numbers (300 to 347). During the mitigation stage of the investigation archaeological deposits and features were assigned context numbers (326 to 426) (**Appendix 2**). Although context numbers 326 to 347 were duplicated, the phasing of the features based on the finds reports was not affected as the evaluation contexts 326 to 347 were artefactually sterile.
- 5.2.15 A small amount of worked flint was recovered within Area A/Trench 3, as well as a few abraded sherds of Roman pottery (301, 347, 353, 363, 375, 381, 398 and 411). These artefacts appear to be residual pieces in later contexts, but demonstrate likely pre-medieval (prehistoric and/ or Roman) activity in the local area.

#### Phase A - Medieval

- 5.2.16 The earliest phase of activity identified on the Site was represented by two circular pit features [358] (evaluation [309]) and [362], a linear ditch feature [413], and three large probable sub-rectangular pits [419], [389/374] and [410].
- Pit [358] was initially identified during evaluation as two contexts [307] and [309] (Figures 6, 8 and 9; Plate 7). The feature was only fully excavated during mitigation, revealing a single cut feature with a shallow, circular shelf 2m to 2.7m wide at the top leading to a central, barrel-lined [322] shaft 0.8m to 0.6m wide. The feature measured up to 0.96m in depth, 1.68m from current ground level to base of the cut. The pit was filled by deposits (308), (321), (311), (310/359), and (323). The lower part of cut [309] contained a wooden oak barrel lining [322] which was filled with deposits (311) and (310) (Figure 7a; Plates 8, 13-14). Primary deposit (321) was overlain by deposit (311), which contained frequent inclusions of burnt and un-burnt wood. Overlying (311) was deposit (310/359). Overlying (310/359) were deposits (308) and (323). The pottery contained within these deposits would seem to indicate a 12<sup>th</sup> to 13<sup>th</sup> century date for the pit. Initially it seemed as though



(323) was the fill of a re-cut into the pit, however this was difficult to prove due to near homogeneity between deposits (323) and (308).

- 5.2.18 Pit [362] (**Figures 8-9**) was found to have a broadly similar form to pit [358/309] located immediately to the northwest. Pit [362] had a diameter of 2m at the top of the cut and a diameter of 0.8m at the base, and measured up to 0.8m in depth. The profile of this pit was similar to that of [358], having a shallow upper shelf with a narrow central shaft; however, it did not contain a wooden lining. Within cut [362] was a primary deposit (421) containing ferrous slag. Overlying (421) was deposit (363) (**Figure 12c**), containing small amounts of late 11<sup>th</sup>- to 13<sup>th</sup>-century and 13<sup>th</sup>- to 15<sup>th</sup>-century pottery, a single abraded Roman sherd, as well as fairly large pieces of ferrous slag. This latter material is likely to have been deposited when the feature went out of use.
- 5.2.19 Feature [410] (Figures 8-9) located at the northern end of Area A, was most likely part of a large rectangular pit similar to those observed to the south. A length of 5.4m was visible between the east and west baulks. A width of 3.59m was visible between the cut at the southern limit of the feature and the northern baulk. It is likely that this feature continued both east and west, and also extended northwards. Feature [410] was filled by deposits (412) and (411) (Figure 13a). Pottery from the primary fill (412) indicates the feature began to silt up in the 13th century. The secondary fill (411) contained 13<sup>th</sup>- to 15<sup>th</sup>-century material and a single abraded Roman sherd. This may indicate that this feature was still open, but filling up during **Phase B**. A large quantity of animal bone was also recovered from deposit (411), the majority of which belonged to a single female pig. Foetal bones from two pigs were also recovered, most likely deposited in-utero with the pig skeleton. A very small number of horse, sheep/goat and cattle bones were also found in secondary deposit (411). Also recorded in the fill were irregular stones, possibly ballast cobbles, and a single eroded fragment of a roofing slab. The variety of material recovered from the filling of the feature suggests it became a repository for waste.
- 5.2.20 A linear ditch [413], cut into natural (302), ran parallel and immediately to the south of feature [410]. The ditch [413] measured 3.92m in length, 0.98m in breadth and 0.52m in depth (**Figure 13a**), and was filled by a single deposit (414). Deposit (414) was in turn sealed by subsoil deposit (301). A single 15<sup>th</sup>- to 16<sup>th</sup>-century pottery sherd was recovered from the fill (414) of the ditch [413]. It is suggested that the ditch was inserted during **Phase A** but was in use for some time. It is also possible, that the feature was inserted during **Phase B** and was associated with ditches [106] and [212] in Trenches 1 and 2, forming contemporaneous land division and drainage.
- 5.2.21 A very large sub-rectangular feature [389/374], possibly a large pit, or pond was located south of [410]. It was truncated by much later linear features [378], [364] and [401] (**Figure 9**). Feature [389/374] had a length of at least 10m and a width of at least 6.7m; the feature was excavated to a depth of 1.2m upon which excavation ceased due to health and safety considerations. The feature had rounded corners in plan and was found to have a fairly gentle break of slope at the top, with convex sides towards the top of the cut and concave sides nearer to the base. Two slots were placed through feature [389/374]. The northern of the two slots was excavated more fully than the southern due to safety considerations and this revealed a near



flat base to the feature. The lower deposits in the feature (406) and (405) had a high organic content but were relatively free of finds, containing only two pieces of residual worked flint. Overlying these two deposits was (375/390) with a lower organic content than the earlier deposits. This deposit contained pottery of 12<sup>th</sup> to 15<sup>th</sup> century date and a single fragment of probably intrusive 17<sup>th</sup>- to 18<sup>th</sup>-century pottery.

- 5.2.22 South of, and parallel to [389/374], was a large sub-rectangular feature [419] located in the central section of Area A (**Figures 8-9**). The form and function of the feature was to some extent conjectural as the southern parts of the feature lay beyond Area A. However the shape and size of the feature, and its location parallel to [389/374], suggests the features were contemporary. Cut [419] was interpreted as the original cut of the feature and [366] as a later re-cut. A hand-dug sondage was placed through the northwest corner of this feature following the original cut [419] (**Figure 10**). Structural elements retained within the cut feature (**Plate 15**) comprised a sandstone and wood revetment [423], and a series of stakes/posts [424]. Dendrochronological analysis indicated a felling date later than AD 1221 and probably earlier than AD 1257 for wood from the revetment. The wood species was identified as oak and was likely to have been felled in the local area.
- 5.2.23 The only other feature possibly attributable to the first phase of activity was a small rectangular pit feature [415], of unknown function (**Figure 8-9**). The pit [415] had a length of 3.5m, a width of 1.7m, and a depth of 0.4m. It had a sharp break of slope at the top of the cut and sides that sloped at around 45° to a flat base. The pit was filled by deposit (416), which contained pottery of 13<sup>th</sup> to 15<sup>th</sup> century date. Residual finds from the deposit (416) included a single abraded Roman sherd and two pieces of worked flint. The date range of the pottery may indicate the insertion of the cut to have occurred sometime during **Phase A** and the sealing of the feature to have continued into early **Phase B**.

#### Phase B – Late medieval

- 5.2.24 The second phase of activity within Area A was represented by the insertion of a series of postholes represented by group number [388], sub-rectangular pit features [366] and [370], and a circular pit [386] (**Figures 8-9**). This phase of activity is thought to be of 14<sup>th</sup> to 16<sup>th</sup> century date.
- 5.2.25 The two lines of postholes [388] (**Plates 9-11**), fourteen in total, were aligned broadly northeast to southwest [326], [328]/[391], [330], [332] (evaluation [325]), [334] (evaluation [324]), [336] (evaluation [312]), [338]/[393] and [340] (**Figures 8 and 11b**) and northwest to southeast [342], [344]/395, [346]/[397]/[399], [348], [350] and [352] (**Figures 8 and 11c**). Postholes [340] and [342] truncated the earlier **Phase A** pit [362], and postholes [336] and [338] truncated **Phase A** pit [358].
- 5.2.26 Posthole [326] was the southernmost of the exposed postholes and lay partially outside the mitigation area (**Figures 6 and 11b**). Cut [326] was 0.9m wide with a depth of 0.27m. An indentation indicative of a post-pipe was present in the base of the cut of the posthole and was filled by deposit (327) containing pottery of 13<sup>th</sup> to 15<sup>th</sup> century date.



- 5.2.27 Posthole [328]/[391] was immediately north of [326] measuring 0.8m by 0.5m wide and 0.18m deep (**Figures 6 and 11b**). The base included an indentation indicative of a post pipe and was filled by deposit (329) which contained 14<sup>th</sup>- to 15<sup>th</sup>-century pottery and a piece of limestone which may have been used as packing around a post. A re-cut [328] was recorded but this was most likely a horizon between deposits (392) and (329).
- 5.2.28 Posthole [330] was 1m by 0.8m wide and 0.09m deep. There was no post pipe visible in this posthole. Cut [330] was filled by deposit (331), which contained no artefacts.
- 5.2.29 Posthole [332] measured 0.8m by 0.8m with a maximum depth of 0.13m (**Figure 8**). There was no evidence of a post pipe and the cut [332] was filled by deposit (333) which contained late medieval pottery.
- 5.2.30 Evaluation group [325] comprised several cuts [314], [316], [318] and [327] filled by artefactually sterile deposits (315), (317), (319) and (326) respectively (**Figures 6** and **7b**). Deposit (315) filling cut [314] contained four fragments of modern brick that were likely to be intrusive. The largest of the features, cut [316], truncated a further series of small underlying cuts/hollows [343], [345] and [347] filled by sterile deposits (342), (344) and (346). The latter features are likely to represent natural hollows rather then actual cuts.
- 5.2.31 Posthole [334] was located immediately north of [332] and was roughly circular in plan (**Figure 6**). The cut [334] measured 0.8m by 0.8m and had a maximum depth of 0.12m. No post pipe was present. The cut [334] truncated pit feature [358] located to the west.
- 5.2.32 Posthole [334] was part of evaluation group [324]. The initial cut [305], filled by deposit (306), was truncated by a later cut [341] filled by deposit (340). This in turn was truncated by cut [303] which was filled by a deposit (304) containing medieval pottery.
- 5.2.33 Posthole [336] was located immediately north of [334] and was roughly D-shaped in plan. The cut [336] measured 1m by 0.8m with a maximum depth of 0.28m. A post pipe was present in the base of the cut. The cut [336] was filled by deposit (337) which contained ceramic building material possibly placed within the hole as post packing. Cut [336] truncated pit feature [358] located to the west.
- 5.2.34 Posthole [336] represented part of posthole group [312], recorded during the evaluation stage of work. The group comprised a series of cuts, the largest being [338]. Two small cuts [335] and [337] were identified within feature [338], which was later truncated by cut [331]. The deposits associated with this group were artefactually sterile.
- 5.2.35 Posthole [338] was located immediately north of posthole [336] and was oval-shaped in plan (**Figure 6**). The cut [338] measured 0.9m by 0.42m with a maximum depth of 0.08m. No post pipe was present. The cut was filled by deposit (339) which contained ceramic building material, possibly placed in the hole as post packing. Cut [338] truncated pit feature [358] located to the southeast. It was possible, although unlikely, that cut [338] was a re-cut of [393] (**Figure 11b**). Cut [393] measured 0.9m by 0.9m with a maximum



depth of 0.16m. Cut [393] was filled by deposit (394) which contained no artefacts.

- 5.2.36 Posthole [340] was located immediately north of posthole [338/393] and was sub-square in plan. The cut [340] measured 0.6m by 0.8m with a maximum depth of 0.21m (**Figure 7c**). There was no post pipe present. Cut [340] was filled by deposit (341) which contained 14<sup>th</sup>- to 16<sup>th</sup>-century pottery, ceramic building material and fragments of limestone, the latter probably post packing. Cut [340] truncated pit feature [362] located to the northwest.
- 5.2.37 Posthole [342] was the westernmost of the row aligned northwest to southeast (**Figure 8 and 11c**). The cut [342] was oval-shaped in plan, measuring 0.6m by 0.6m with a maximum depth of 0.24m. The cut [342] was filled by deposit (343) which contained 13<sup>th</sup>- to 14<sup>th</sup>-century pottery. Cut [342] truncated pit feature [362] located to the west.
- 5.2.38 Posthole [344]/[395] was located immediately to the southeast of posthole [342] and was sub-rectangular in plan. The cut [344] was potentially a re-cut of an earlier posthole [395]. Cut [344] measured 0.35m by 0.5m with a maximum depth of 0.12m (**Figures 7b and 11c**). Cut [344] was filled by deposit (345) which contained bone and a single piece of residual worked flint (small find  $\Delta$ 2). Cut [395] was likely to have been the original cut for this posthole feature. Cut [395] was rectangular in plan and was filled by deposit (396) which contained no artefacts.
- 5.2.39 Cuts [346] and [399] were initially described as re-cuts of [397], but were most likely indicative of the presence of large posts within the original cut feature [397] (**Figure 11c**). Cut [399] was circular in plan and measured 0.2m by 0.2m with a maximum depth of 0.12m. Cut [399] was filled by deposit (400) which contained no artefacts. Cut [346] was circular in plan measuring 0.2m by 0.2m with a maximum depth of 0.07m. Cut [346] was filled by deposit (347) containing late 13<sup>th</sup>- to 15<sup>th</sup>-century pottery and an intrusive, abraded Roman sherd, as well as a probably intrusive 17<sup>th</sup>-century clay tobacco pipe bowl. The bowl may have been derived from the overlying subsoil deposit (301).
- 5.2.40 Posthole [348] was located immediately to the west of posthole [397]. The cut [348] was sub-circular, measuring 1m by 0.8m with a maximum depth of 0.22m. The cut was filled by deposit (349) containing a single sherd of late  $13^{th}$  to  $14^{th}$ -century date, as well as a single probably intrusive  $18^{th}$ -century pottery sherd, ceramic building material, rounded river pebbles and fragments of limestone. A small, rounded, iron nail head (small find  $\Delta 7$ ) was also recovered from deposit (349).
- 5.2.41 Posthole [350] was located immediately to the southeast of [397] and was sub-circular in plan. The cut [350] measured 0.7m by 0.6m with a maximum depth of 0.13m. Cut [350] was filled by deposit (351) containing two pieces of residual worked flint (small finds  $\Delta 8$  and  $\Delta 9$ ).
- 5.2.42 Posthole [352] was located immediately to the southeast of posthole [348] and lay partially under the eastern baulk. The cut [352] was roughly square in plan measuring 0.6m by 0.7m (visible) with a maximum depth of 0.19m. Cut [352] was filled by deposit (353) containing pottery of 13<sup>th</sup> to 15<sup>th</sup> century date and residual abraded Roman pottery sherds.



- 5.2.43 A large rectangular pit feature [366] was recorded in the southeast section of the mitigation area (Figures 8 and 9), a re-cut of the earlier pit [419] (Figure 11a). The feature had a U-shaped profile with concave sides and a flat base. It measured 8.9m in length, 3.8m in breadth and 1.4m in depth. The primary fill (426) contained 13<sup>th</sup>- to 15<sup>th</sup>-century pottery (Figure 12a). Overlying deposit (426) was deposit (407) which contained leather (Small Find Δ37) and 13<sup>th</sup>- to 15<sup>th</sup>-century pottery. A single sherd of 19<sup>th</sup>-century date was most likely intrusive in this context. Deposit (407) was sealed by deposit (367). This secondary fill of [366] contained large river pebbles, residual flint (Small Finds Δ21, Δ25 and Δ26), pottery (a single sherd of 11<sup>th</sup>- to 13<sup>th</sup>-century date and sherds of 13<sup>th</sup>- to 16<sup>th</sup>-century date), medieval ceramic building material (fragments of brick, flat roof tile and floor tile), and a small fragment of clay tobacco pipe stem of 17<sup>th</sup>-century date; the latter most likely intrusive from a later phase of activity.
- 5.2.44 A sub-rectangular shallow pit feature [403] was located between [419] to the south and [401] to the north. The pit measured 3.6m in length, 0.9m in width and up to 0.05m in depth (**Figure 11a**). The long axis of the feature ran broadly northwest to southeast. The cut [403] was filled by deposit (404), which contained a small piece of late medieval/post-medieval pottery. The feature [403] was truncated to the north by **Phase C** linear feature [401].
- 5.2.45 A small sub-rectangular pit feature [370] was recorded in the central section of the mitigation area. The feature had irregular shape in plan narrowing to the east (**Figure 8**). The feature measured up to 1.99m in length, 0.69m in width and was excavated to a depth of 0.17m (**Figure 14c**). The feature was filled by deposit (371) which contained pottery with a broad date range from the late 13<sup>th</sup> to the 16<sup>th</sup> centuries.
- 5.2.46 Also assigned to this second phase of activity was a circular pit [386] (**Figure 9**) located towards the northern limit of the mitigation area. The pit truncated deposits filling features [410] and [413] (**Figure 13b**) and was circular in plan, measuring 2m by 2m, with a maximum depth of 1.25m. The cut [386] had a U-shaped profile and was filled by a deposit (387) containing large angular sandstone blocks, small river pebbles, two fragments of wood, occasional medieval ceramic building material fragments (flat roof tile) and late 13<sup>th</sup>- to 15<sup>th</sup>-century pottery. The original function of the pit [386] was not clear, however, it may have simply been used for the deposition of waste.

#### Phase C - Post-medieval/ early modern

- 5.2.47 A third phase of activity within the mitigation area was represented by a potential cobbled surface [425] and two parallel linear features [364] and [401] (**Figure 9**) interpreted as bedding trenches.
- 5.2.48 The cobbled surface [425] rested directly on top of deposit (367), the upper fill of feature [366] (**Figure 11a**; **Plate 12**). The surface [425] was located in the extreme southeast corner of the trench, partially underlying the baulk. The surface had a sub-rectangular shape in plan and was characterised by a single layer of smooth, medium-sized river pebbles. The thickness of the surface was no greater than 0.15m across its area. The cobbles may have been laid to form a less boggy, more coherent ground surface over the underlying pit [366].



- 5.2.49 Linear feature [364] was located in the central portion of the expanded Trench 3. It ran broadly northwest to southeast with a length of 10.2m before disappearing under the eastern baulk. The cut [364] had a uniform width of 1.5m and a maximum depth of 0.15m, and was filled by deposit (365) which contained a single piece of 14<sup>th</sup>- to 15<sup>th</sup>-century pottery and a fragment of a clay pipe of 17<sup>th</sup>-century date. The deposit (365) contained inclusions of charcoal, small river pebbles and pieces of burnt sandstone. Cut [364] truncated the filling of earlier feature [374/389].
- 5.2.50 Linear feature [401] was located immediately south of [364] and was almost identical in form (**Figure 11a**). It ran broadly northwest to southeast with a total length of 10m from the western limit of the feature until it disappeared underneath the eastern baulk. The cut [401] had a uniform width of 1.2m and a maximum depth of 0.15m, and was filled by deposit (402) which contained medium-sized river pebbles and large pieces of charcoal. Also contained within (402) was a single pottery sherd dating from the 17<sup>th</sup>- to early 18<sup>th</sup>-centuries.
- 5.2.51 A subsoil deposit (301) was identified beneath the topsoil and above a degraded natural horizon (302). The archaeology present was apparent in the lowest part of the subsoil and was predominantly cut into the degraded natural geology.

#### Phase D - Modern

- 5.2.52 Five features [360], [378], [382], [384] and [408] within Area A have been identified as modern (20<sup>th</sup>-century onwards).
- 5.2.53 Cut [408], a possible pit, truncated the filling of linear [401] (**Figure 14d**), next to and partially underneath the eastern baulk (**Figure 8 and 9**). The feature was sub-rectangular in plan, with steep, straight sides and a flat base. It measured 1.4m in length, 0.5m in width and 0.4m in depth. The cut [408] was filled by deposit (409), which contained ceramic building material and lay directly under the topsoil (300).
- 5.2.54 Three features were associated with drainage for the building covering the mitigation area prior to the commencement of the works. Cut [378] was a linear drainage feature running broadly northwest to southeast across the northern section of the mitigation area. The feature was cut into subsoil deposit (301) and was filled by deposit (379) which contained modern building materials. Also associated with the modern drainage system were two drains [382] and [384] recorded during the evaluation stage of the fieldwork. The drain cuts were filled by deposits (383) and (385) respectively, and contained modern artefactual material.
- 5.2.55 A topsoil layer (300) was present across the entire area. Artefactual material recovered from this layer included predominantly post-medieval pottery, a fragment of medieval flat roof tile, and 18<sup>th</sup>- to 19<sup>th</sup>-century clay tobacco pipe.
- 5.2.56 A modern geotechnical trial hole [360] was dug immediately prior to excavation work on the Site (**Figure 9**).



#### **Unphased features**

- 5.2.57 Three features [354], [356] and [372], possibly postholes, could not be assigned to any of the phases identified above.
- 5.2.58 Cut [354], filled by deposit (355) was a small circular feature located slightly south of postholes [350] and [352] (**Figure 8 and 14a**). It had a diameter of 0.3m and a depth of 0.2m.
- 5.2.59 A small circular feature [356], filled by deposit (357) was located slightly west of posthole [328] (**Figure 8 and 14b**) It had a diameter of 0.3m and a depth of 0.05m.
- 5.2.60 A small sub-circular feature [372], filled by sterile deposit (373), was located north of [370] and lying partially underneath the baulk. It had a diameter of 0.4m and a depth of 0.2m (**Figure 8 and 13c**).

#### 5.3 Watching Brief

5.3.1 A watching brief took place during construction-related groundworks in the areas of Mitigation Area A/ Trench 3 and Trenches 1 and 2. The watching brief provided little additional information due to the unstable and waterlogged nature of the foundation trenches. It is unfortunate that finds appear to have been assigned during this phase of work to evaluation and excavation contexts, perhaps erroneously.

#### 6 FINDS

#### 6.1 Introduction

6.1.1 The evaluation and mitigation works produced a variety of find types of primarily medieval, late medieval and post-medieval date, with a small quantity of residual Roman material also present. Following initial assessments additional analysis was recommended on the pottery, clay tobacco pipes, metal and industrial process residues and animal bones recovered from the Site, and this work is presented here. Reports on the ceramic building materials, stone, lithics and leather recovered from the Site are also included.

## 6.2 Pottery by Dr C. Cumberpatch with a note on the Roman pottery by Ruth Leary

6.2.1 The assemblage comprised medieval and later pottery with a small, residual Roman component totalling 573 sherds weighing 14486 grams and representing a maximum of 517 vessels (**Tables 1** and **2**; Appendix 3). The assemblage consisted largely of wares known from other sites in the area and from the only other site excavated on any scale in the town of Bawtry (Dunkley and Cumberpatch 1996), although with a larger early modern and recent component that was recovered from the latter site.

#### The Roman pottery

6.2.2 A total of eleven sherds of Romano-British pottery (300g) representing a medium, guartz-tempered grey ware were recovered from nine contexts



(Table 2; Appendix 3). The quartz included moderate, sub-rounded and subangular grains of medium size. These could come from the South Yorkshire industry but were not typical of those kilns, which are characterised by abundant sub-rounded quartz; however, grey wares with less common quartz are also known from the kilns. Only four diagnostic sherds were present amongst the grey wares belonging to a developed flanged bowl, a plain rim dish, a club rim deep wide-mouthed bowl, and an indeterminate everted rim. The types are found in the South Yorkshire industry (types B, Cc and Hc-d; Buckland et al. 1980) and the deep bowl is particularly typical of these kilns. The developed flanged bowl form dates to the late 3<sup>rd</sup> to 4<sup>th</sup> century but the other forms are somewhat long-lived. The deep bowls were made throughout the life of the kilns from the mid-2<sup>nd</sup> to the 4<sup>th</sup> century and the simple plain rim dishes have a similarly long life. The absence of other types - Rossington BB1, Dales ware and late wares such as Crambeck, calcite-gritted ware or Nene Valley ware - points to a date range in the 3<sup>rd</sup> or earlier 4th century. This date range fits the non-grey ware sherd, a whiteslipped oxidised mortarium with slag trituration grits of Cantley type. This has a bead rim with stubby swelling flange grooved above the tip. It is an unusual form at Cantley and is similar to an Oxfordshire type (M22 c. AD240-400; Young 2000). A mortarium at Piercebridge in a group, considered to be in the Catterick/Cantley tradition, was also in this form (Evans et al. 2008, no. 85). The pottery was in fairly good condition. The mortarium was scorched along the flange.

#### The medieval pottery

- 6.2.3 The medieval pottery assemblage, like that from the site at 16 20 Church Street, Bawtry, differs from other assemblages from other sites in South Yorkshire by virtue of the presence of a range of regional and European imports. The presence of such wares reflects Bawtry's position on the Great North Road and as one of South Yorkshire's two major inland ports (the other being Doncaster, the only town from where similar assemblages have been reported) and an important site connected with the international trade in lead from the Peak District, the import of wine from south-west France and most probably a wide variety of other raw materials and manufactured goods (Collis 1996; Cumberpatch 1996a).
- 6.2.4 The earliest types of pottery identified in the assemblage were the sherds of Doncaster Hallgate type ware. One sherd of *Hallgate B ware* (context 363) and a larger number of *Hallgate A* and *A1 type ware* sherds appear to indicate activity on the site from the 12<sup>th</sup> century onwards. The products of the Hallgate industry have been described in detail elsewhere (Buckland *et al.* 1979; Cumberpatch *et al.* 1998-9; Cumberpatch 2004a) and are widespread on sites in South and West Yorkshire, but may have been under-reported from Church Street. Of a similarly early date are the *Nottingham Early Green Glazed wares* (Nailor and Young 2001) and most probably some of the generic wares discussed below, notably the *Splash Glazed Sandy ware* from context (363).
- 6.2.5 A considerably larger proportion of the medieval pottery dated to the period between the later 13<sup>th</sup> century and the mid- to late 15<sup>th</sup> century. As with the earlier wares, the majority of these types have been described in detail elsewhere. *Coal Measures Whiteware* (later 13<sup>th</sup> to later 14<sup>th</sup> century), *Coal Measures Purple ware* (later 14<sup>th</sup> to 16<sup>th</sup> century) and the as yet unsourced



Coal Measures Fineware (probably 13<sup>th</sup> to early 14<sup>th</sup> century) were manufactured at two sites in the Don Valley, Firsby Hall Farm (Hayfield and Buckland 1989) and Green Lane, Rawmarsh (Cumberpatch 2004b) and are found on sites across South and West Yorkshire as well as further afield. The broadly contemporary *Humberware* is found even more widely and is known to have been produced at Holme-upon-Spalding Moor and at Cowick (Hayfield 1992; Hayfield and Grieg 1990; Mayes and Hayfield 1980) in East Yorkshire and to have achieved very wide circulation in the region.

- 6.2.6 Regional imports include *Nottingham Reduced Green Glazed ware* and *Nottingham Light Bodied Green Glazed ware* (Nailor and Young 2001), a small number of examples of *Beverley ware* (Watkins 1987 and 1991; Didsbury and Watkins 1992), *Scarborough ware* (Watkins 1987), sherds of the as yet unsourced *East Yorkshire Sandy ware* (Cumberpatch 2002:177-8) and a small number of leached and abraded sherds of *Shell Tempered ware* from Lincolnshire.
- 6.2.7 The unidentified medieval wares have been ascribed generic names which relate to their chief characteristics. Further details are provided in the data tables together with indicative date ranges which are based upon the characteristics of the individual sherds and vessels. The principal groups are *Buff Sandy ware*, *Oxidised Sandy ware*, *Reduced Sandy ware* and medieval *Whiteware* (to be distinguished from the 19<sup>th</sup> century Whitewares described below). While it is possible that these represent as yet unidentified local wares, it is more likely, given the relatively good state of knowledge of medieval pottery from South Yorkshire and north Nottinghamshire, that they are imported wares from eastern England. The wares most likely reached the site via the large scale east coast maritime trade, in which Bawtry played an important part until it was marginalised by improvements to the navigation of the River Don after 1726 and the building of the Chesterfield canal after 1777 (Collis 1996:188).
- The end of the historical medieval period is generally placed in the late 15<sup>th</sup> 6.2.8 to early 16<sup>th</sup> century (between the Battle of Bosworth in 1485 and the end of the process of monastic Dissolution in 1530), but increasing archaeological evidence indicates that changes in material culture had begun sometime before this date, with a move towards pottery distinguished by darker glaze and body colours and the effective end of the medieval pottery tradition. The details of this change in manufacturing practice have been discussed at some length elsewhere (Cumberpatch 2003) and need not be repeated here, other than to note that Boyle's redating of the start of Cistercian ware manufacture to c.1450 (Boyle unpublished) reinforces the argument made by the author by setting the date of the transformation of the medieval pottery tradition even further back in time than envisaged in the paper. The presence of the Coal Measures Purple ware described above and Cistercian ware (the origins of which have recently been redated to c.1450; Boyle unpublished) in the Bawtry assemblage attest to this change, although the quantity of Cistercian ware was very low (contexts 300 and 367). A single sherd of *Purple Glazed Humberware* (context 411) represents the strategy of some potters who adapted existing wares to the requirements of their customers. The Green Glazed Sandy wares (contexts 205 and 420) are probably of a similar 15<sup>th</sup> to 16<sup>th</sup> century date and represent the final expression of the medieval pottery tradition. Perhaps significantly such wares tend to be represented by utilitarian wares, large bowls, dishes and



pancheons, rather than the tablewares of the medieval period (Cumberpatch 1997 and 2002:220-1).

The post-medieval pottery

- 6.2.9 Seventeenth-century pottery was poorly represented in the assemblage with *Blackwares* notable by their absence and *Redwares* (contexts 300 and 402) and *Type 1 Slipwares* (contexts 200 and 371) present in only small quantities. A small number of sherds of *Brown Glazed Coarseware* may be of 17<sup>th</sup>-century date, but this type is notoriously difficult to date and the sherds could equally be of 18<sup>th</sup>-century date.
- 6.2.10 Context (300) produced a sherd of *Tin Glazed Earthenware*. Manufactured in the Netherlands and Britain (in London, Liverpool, Whitehaven, Bristol, Glasgow and Norwich) between the mid-16<sup>th</sup> and mid-18<sup>th</sup> centuries, these wares are difficult to attribute to specific potteries unless sufficient of the hand-painted designs survive to allow a positive identification. This was not the case at Bawtry and the sherd must be considered to be of Anglo-Dutch origin. Assuming that the vessel reached the site via the coasting trade, the Netherlands, Norwich, or London are perhaps the most likely sources.

The early modern (c. 1720 – c. 1840) and recent (c. 1840 – c. 1890) pottery

- 6.2.11 As defined here, the early modern period begins in *c*.1720 with the appearance of *White Salt Glazed Stoneware* (contexts 300 and 349), the first practical and widely available alternative to Chinese porcelain (Edwards and Hampson 2005). The 18<sup>th</sup> century saw the start of industrial scale pottery manufacture and although the country potteries continued to produce vernacular tablewares throughout the 18<sup>th</sup> century (Cumberpatch 2004c and 2006b), the subsequent development of formal tablewares in refined earthenware bodies (*Creamware*, *Pearlware* and *Whiteware* and variants thereof) eventually led to their demise with only a few surviving through to the mid-20<sup>th</sup> century producing mainly utilitarian wares.
- 6.2.12 Vernacular tablewares are represented in the assemblage by a sherd of *Slipware* (context 202), the *Late Blackwares* (contexts 101 and 300), and *Mottled ware* (contexts 201, 202, 208 and 217). Of the *Brown Salt Glazed Stonewares*, few sherds were of typical 18<sup>th</sup>-century type and while some may be of this date, the majority are most probably somewhat later.
- 6.2.13 The precise relationship in terms of the context of use between the formal and vernacular tablewares is poorly understood. Although frequently found together on archaeological sites (as here) and while certainly contemporary in terms of production, whether they were used by different social groups or whether the distinction was one of context (formal tablewares being reserved for public or semi-public occasions while vernacular tablewares were used in more domestic situations) is unclear (Richards 1999; Kowaleski-Wallace 1997). The range of formal tablewares in the assemblage was wide with the types listed above all present with, in addition, variants including *Edged wares* (*c*.1784 *c*.1831; Brooks 2005) and 19<sup>th</sup>-century *Lustre ware* (Gibson 1999) also present. Pearlwares and Whitewares were both present in plain and transfer printed varieties. The range of identifiable transfer printed designs on these wares was limited to



the popular Two Temples pattern while other distinctive patterns remain unidentified, as noted in the data tables.

#### European imports

- 6.2.14 While not as wide as the range of imports identified on the Church Street site, the assemblage from Bridge Lane produced an unidentified sandy ware, probably of European origin (context 426), several types of German stoneware (Gaimster 1997) and a sherd from a Martincamp flask (context 205; Ickowicz 1993). The identifiable German stonewares included Siegburg and Raeren types (contexts 367, 375, 407 and 420). Other unidentified stoneware sherds, most probably of German origin, were noted in contexts (371) and (411). The absence of Frechen-Köln stoneware, the commonest type of German stoneware found in South Yorkshire, is notable but given the small size of the assemblage as a whole should not be over-emphasised.
- 6.2.15 The distribution of Martincamp flasks as presented by Ickowicz (1993:Fig. 5) shows a broad tendency towards an easterly distribution in Britain, with the Bawtry examples (two sherds were identified amongst the Church Street assemblage) falling easily into this pattern.

The pottery and the site

Trench 1

- 6.2.16 Six contexts in Trench 1 produced pottery; 100, 101, 102, 103, 105 and 107. The group from context (100) was exclusively of 19<sup>th</sup>-century date while that from context (101), while probably of the same date, also included earlier, residual material. Context (1030 produced only one small sherd of Creamware. Although dating to *c*.1740 *c*.1820, the possibility that this sherd was residual in character should not be overlooked.
- 6.2.17 Contexts (102), (105) and (107) produced assemblages of later medieval pottery with Humberware and Coal Measures wares predominating. A broad date range within the 13<sup>th</sup> to 15<sup>th</sup> centuries is indicated by the pottery but a closer dating is impossible.

Trench 2

- 6.2.18 Contexts (200), (201), (202), (203), (205), (208), (209), (214), (217) and (288) produced groups of pottery. Contexts (200) and (201) were of 19<sup>th</sup>-century date but included residual sherds of early modern date alongside the later material. Context (288) may be of a similar date. Context (202) produced a small but very mixed group of sherds, the latest of which was a 19<sup>th</sup>-century sherd of Cane Coloured ware. Whether the presence of this sherd can be explained as intrusive is unclear; if it is held to date the group then the medieval and early modern sherds should be considered as residual.
- 6.2.19 Context (208), the fill of a drainage feature produced a mixed assemblage dominated by formal tablewares (Creamware, Pearlware, Edged ware) with smaller quantities of utilitarian ware and a single fragment of 18<sup>th</sup>-century Mottled ware. The latest sherds were fragments of Cane Coloured ware and Lustre ware. The former may be as early as 1795 but are more probably of



19<sup>th</sup>-century date and contemporary with the sherd of Lustre ware. The sherds showed no signs of erosion in a water course suggesting that they had not been affected by the active use of the feature. The homogeneity of the group is of interest and may indicate the relatively rapid accumulation of material.

- 6.2.20 Contexts (214) and (217) each produced single small sherds of pottery. Caution should be employed in using such small groups as an indication of the date range of the features.
- 6.2.21 Contexts (203) and (209) both produced small groups of later medieval wares, predominantly Coal Measures Purple ware but with one sherd of earlier Whiteware from context (203). The pottery from context (205) was somewhat later, with a sherd of Brown Glazed Fineware dating to the 17<sup>th</sup> or 18<sup>th</sup> century and other sherds, including a fragment of a Martincamp flask somewhat earlier.

#### Trench 3 and Mitigation Area A

- 6.2.22 The assemblage from Trench 3 and Mitigation Area A was of a substantial size and was diverse in character. The following notes focus on the larger groups of pottery. Those contexts with very small groups or single sherds are adequately covered in the data tables. The extent of residuality in the larger groups should be noted and appropriate caution exercised when using the smaller groups to suggest date ranges for individual features.
- 6.2.23 Context (300), a topsoil deposit, produced typically mixed assemblage of medieval and later pottery including the only sherd of Tin Glazed Earthenware from the site and two sherds of White Salt Glazed stoneware.
- 6.2.24 A number of discrete features were identified during the evaluative excavation and the subsequent expansion of the area of investigation (Area A).
- 6.2.25 Pit [358] was filled by contexts (308), (321), (311), (310/359) and (323) all of which produced assemblages of medieval pottery and which, in the case of context (359), included a sherd of Brown Glazed Coarseware. Other than this single sherd, there was no evidence of chronological differentiation between the individual contexts, but it may be that the chronological resolution offered by the pottery is insufficiently detailed to permit such differentiation. The medieval assemblage included earlier medieval wares including Hallgate A ware but the majority was of later date with Humberware prominent in all contexts. The presence of Coal Measures Whiteware and the absence of the later purple variant suggested a date range in the 14<sup>th</sup> century rather than the 15<sup>th</sup> century.
- 6.2.26 Of the two fills of pit [362], contexts (421) and (363), only (363) included a ceramic element. This was a mixed group of sherds which included residual Roman greyware and earlier medieval types including Hallgate B and A wares and a sherd of an unidentified splash glazed Sandy ware. These were accompanied by later medieval Humberware and sherds of an unidentified Reduced Sandy ware of later medieval character. A date broadly contemporary with the fill of pit [358] is indicated by this evidence although it



would seem that the process of filling the pit involved the disturbance of earlier deposits and their incorporation in a later deposit.

- 6.2.27 Feature [410], a large sub-rectangular pit, contained two discrete fills, contexts (412) and (411). Both contexts were dominated by Humberware (including a sherd of purple glazed Humberware from context (411)) but each also included a quantity of earlier material. In the case of the Roman sherd from context (411) this was presumably residual, but both contexts also included sherds of Nottingham Early Green Glazed ware (early to mid-13<sup>th</sup> century), with a substantial part of the base and lower body of a jug in context (411) and further joining sherds in context (412). Although context (412) formed the primary deposit in the feature, there was little to distinguish the two contexts in terms of the pottery assemblages.
- 6.2.28 Two contexts, (375) and (390) filled feature [389/374] (earlier deposits, contexts (405) and (406), did not include any pottery) and produced diverse groups of pottery. Both were basically similar with Hallgate A wares dating to the 13<sup>th</sup> century alongside Humberware and unidentified Sandy wares of 13<sup>th</sup> to 15<sup>th</sup> century type. Context (375) included sherds of Roman pottery (including the mortarium fragment) and a piece of Siegburg stoneware. The latest sherd, a piece of unglazed red earthenware of probable post-medieval to early modern date came from context (390). Assuming that this sherd is intrusive into a generally earlier context, the character of the groups, taken together, suggests that the feature either silted up with remarkable slowness or was filled with material derived from mixed deposits elsewhere in the vicinity of the site.
- 6.2.29 The pottery assemblage from the fill of pit [415], context (416), closely resembled that from feature [389/374] in terms of the range of wares to the extent that it also included a residual Roman sherd alongside Hallgate A ware and Humberware. It might be suggested that similar formation processes were responsible for the creation of the deposits in both cases.
- Feature [419], filled by context (420), produced a later medieval assemblage typical of the region which included Coal Measures White and Purple wares, Humberware and sherds of German stoneware. The precise date, speed and character of the transition between Coal Measures White and Coal Measures Purple is unclear and this uncertainty is compounded by the frequent difficulty of distinguishing between the two types (Cumberpatch 2004b) but the presence of the two in the same feature, if it does not imply a more complex process of deposit formation, would suggest a later 14th- or 15<sup>th</sup>-century date for the group as a whole. The presence of a sherd of Green Glazed Sandy ware of probable 15th- to 16th-century date may indicate a later rather than an earlier date but the precise date range of this type is also unclear at least as far as the details are concerned. As a result it is hardly possible to arrive at a definite date for the fill of the feature. In any case, the date of the pottery is considerably later than the dendrochronological date for the timbers from the feature, perhaps suggesting that the feature had been in use for a considerable length of time before it was filled in.
- 6.2.31 A large rectangular pit [366], a recut into an earlier feature [419], produced three groups of pottery from contexts (426), (407) and (367). The group from the primary fill (426) consisted of a small group of later medieval wares;



Humberware, Coal Measures Fineware and Coal Measures Purple ware together with unidentified wares and a possible European (perhaps French) import. Deposit (407) produced a similar group of pottery, although with a higher proportion of Coal Measures Fineware, which seems to be contemporary with the somewhat coarser Coal Measures Whiteware. Humberware, German Stoneware (Siegburg) and a sherd of possible Hallgate a type made up the remainder of the group along with a small sherd of 19<sup>th</sup>-century Whiteware, the latter probably intrusive. The largest group from the feature (context 367) broadly resembled the two earlier groups and included a high proportion of Coal Measures White and Purple wares together with Humberware and unidentified types (Buff, Oxidised and Reduced Sandy wares, Fine Sandy ware and medieval Whiteware). European pottery was represented by sherds of Raeren stoneware and regional imports by the sherd of Nottingham Light Bodied Green Glazed ware. The group also included a small sherd of Cistercian ware, suggesting a date after c.1450, unless the sherd is considered to be intrusive. This could be contemporary with the Coal Measures Purple ware and possibly the Humberware but its presence would seem to suggest that much of the group was residual in character.

- 6.2.32 Three small pits [403], [370] and [386] produced small assemblages of pottery. Only one small sherd was recovered from context (404), the fill of pit [403]. This was unidentified but appeared to be of later medieval or early post-medieval type and can be considered to be broadly contemporary with the fills of other features described here. Contexts (371) and (387), the fills of pits [370] and [387] respectively, produced larger groups, both of rather mixed character. The commonest type in context (371) was Coal Measures Whiteware but the group also included small sherds of Humberware, unidentified German stoneware and, unexpectedly, a sherd of 17<sup>th</sup>- or early 18<sup>th</sup>-century Slipware. Context 387 included a large sherd of Coal Measures Fineware, a piece of Beverley 1 ware (probably contemporary) and sherds of Humberware, possibly slightly later in date.
- 6.2.33 A number of post holes produced small groups of pottery, generally no more than one or two sherds, all of which are detailed in the data tables. Chronologically diagnostic pottery was not abundant and a number of post holes contained unidentified sherds of medieval date (post holes [303], [332], [342], [352]). Others produced pottery of later medieval date including Coal Measures wares and Humberware (post holes [326], [328/391] and [340]). Post hole [348] was unusual in that the pottery associated with it consisted of a sherd of medieval Scarborough ware and a sherd of White Salt Glazed Stoneware (c.1720 c.1780).
- 6.2.34 Only one fill of a more complex group of post holes (cuts [346], [399] and [397]), context (347), included any pottery at all and this was limited to a residual sherd of Roman greyware and a small sherd of Humberware type with white slip externally.
- 6.2.35 A limited number of contexts were attributed to Phase C and little pottery was associated with them. Two linear features, [364] and [401], each produced single sherds of pottery; medieval in the case of [364] (context 365) and late post-medieval in the case of [401] (context 402). Details are given in the data tables. A subsoil layer, context (301), produced a surprisingly homogeneous assemblage consisting of Coal Measures



Fineware and Humberware accompanied by a residual sherd of Roman greyware.

6.2.36 The final phase of activity was represented by five features, none of which produced any pottery. The mixed pottery assemblage from the topsoil deposit, context (300), has been described above.

#### Discussion

- 6.2.37 The pottery assemblage from Bridge Lane is important both in its own right and in the fact that it extends our knowledge of the types of pottery assemblage to be expected from Bawtry. The town has been somewhat marginalised in archaeological accounts of medieval Yorkshire in part because of the much more extensive scale of excavations in Doncaster, a town with which it shares much in view of the fact that both were important inland ports serving southern Yorkshire, north Nottinghamshire and eastern Derbyshire.
- The assemblage contributes little to the discussion of the origins of the town 6.2.38 (Collis 1996:184; Cumberpatch 1996b:192) as it includes very little material earlier than the 13<sup>th</sup> century and in this regard seems to reflect the general picture gained from the larger assemblage from the excavations in Church Street (even allowing for the probable misidentification of some wares from that site). The 13<sup>th</sup>- century material was present across the site but was predominantly residual in character and it would seem that much of the activity represented by the excavated features dates to the 14<sup>th</sup> century or later, with the earlier pottery being residual. The identification and interpretation of residual material and the nature of the formation processes responsible for the creation of medieval sites as excavated are currently the subject of renewed interest (Bryant unpublished; Thorpe, pers. comm.) and this is likely to lead to new methodological responses to the issue which is of critical importance in the interpretation of sites such as the one discussed here.

#### 6.3 Ceramic building material by J. Tibbles

- 6.3.1 A total of 134 fragments of brick and tile were recovered from 25 contexts with a total weight of 16032 gm. Assessment of the assemblage was based on a visual scan of all the retained material. Information regarding the dimensions, shape and fabric of the material was recorded.
- 6.3.2 It should be noted that the diversity of size and colour within brick and tile caused during the manufacturing process must be taken into consideration when comparing examples within collected assemblages and local typologies. The varying sizes and colours can be attributed to the variation in the clays used, shrinkage during drying, firing within the kiln or clamp and the location of the brick/tile within the kiln. The dating of ceramic building material can be highly contentious due to its re-usable nature.
- 6.3.3 The assemblage was examined using a x15 magnification lens, where applicable, to aid dating, though fabric analysis was not undertaken as it was considered beyond the scope of this assessment. Information regarding the dimensions, shape and fabric (where applicable) was recorded and



- catalogued accordingly and a Munsell colour code has been incorporated where appropriate.
- 6.3.4 An assemblage of 46 fragments with a combined weight of 7684gm was submitted for assessment. The majority bore evidence characteristic of their method of hand manufacture, i.e. moulding lips, straw impressions, drying sand, and 'slop' marks.
- 6.3.5 Part bricks are more difficult to date due to the width and thickness corresponding to more then one type. Only four part bricks were identified within the assemblage from Phase B from within the fill (367) of feature [366] and fill (341) of posthole [340].
- 6.3.6 The majority of the brick assemblage (63%) was not dateable due to abraded surfaces and small size; however, the fabric and manufacturing characteristics suggest a medieval date of manufacture. Bricks were manufactured to the shapes required, the standard rectangular shape for common usage and the more specialised shapes to form architectural features around arches, doors, windows and vaults. Bricks and tiles were made in a similar fashion by the insertion of a wad of prepared clay into bottomless moulds, moistened and often covered in sand to facilitate the removal of the formed clay. The excess clay would be struck off and the form tipped out onto a palette board and removed to prepared area of ground until partially dried and ready for firing.
- Dating of bricks is highly contentious due to their re-use nature as a valuable building commodity. At York in 1505 bricks were standardised at 10" x 5" x 2 ½"; Parliament in 1571 decreed that the size of a brick should be 9" x 4 ½" x 2 ¼" and again in 1725 the brick size should be 9" x 4 ½" x 2". It should be noted that although these statutes were binding it would be naive to believe that all tilers/brickmakers adhered strictly to these sizes at all times.
- 6.3.8 Two part bricks from Phase B feature [366] displayed dimensions of ?mm x 132-135mm x 50-52mm (?" x 5 1/4" x 2") conducive with bricks manufactured within the 13<sup>th</sup> to 14<sup>th</sup> centuries (Lloyd 1925; Tibbles forth.). The bricks of lesser width displaying dimensions of ?mm x 110-115mm x 55-60mm (4 1/4-4 1/2" x 2 1/4-2") are later in manufacture. The dating of the latter bricks is inconclusive without length as bricks manufactured with these widths and thicknesses combined range from the 15<sup>th</sup> to 19<sup>th</sup> centuries (Lloyd 1925).
- 6.3.9 The unstratified machine-made brick fragment displayed a single sharp arriss and was of a late 20<sup>th</sup>-century date.
- 6.3.10 An assemblage of 85 fragments of ceramic rooftile, total weight 7611gms, was recovered for examination. Approximately 96% of the tile assemblage comprised of flat tile and 4% pantile.
- 6.3.11 Three types of flat roof tile were identified by their suspension (Types 11, 16 and 26), primarily from within Phase B, and all conducive with medieval manufacture (contexts 104, 204, 205, 209 and 300). Eleven fragments of flat tile representing 9.5% bore residual glaze generally over the lower half of the tile. The general thickness ranged between 10mm-20mm with a mean thickness range of between 14mm-17mm. Two tiles from Phase B (fill (387) and deposit (367) were exceptionally thin with a thickness of 10mm in



- comparison to the mean thickness record. These may represent possible 'special' tiles for a specific building or purpose.
- 6.3.12 Most of the assemblage was of a similar fabric: hard homogenous sandy clay with little or no inclusions, but has been divided into 5 types (1-5) for the provisional identification.
- 6.3.13 Four types of roof tile were identified including examples of flat tile and pantile. A number of tiles exhibited straw marks from their drying stage during manufacture and several displayed finger striations upon the underside. Tile Type 11 has been recorded from within 12<sup>th</sup>- to 14<sup>th</sup>-century contexts at Selby (Tibbles 2006), Type 16 from within 13<sup>th</sup>-century contexts at Beverley (Tibbles 2001) and Type 26 from 12<sup>th</sup>- to 13<sup>th</sup>-century contexts at Doncaster (Tibbles and Tibbles 2004).
- 6.3.14 The building or buildings from which the glazed tiles originated are likely to have had a ridge and gable ended roof. The presence of glazed flat roof tile and ridge tile suggests that the structure may have had glazed tiles along its eaves and or surrounding its smoke vent or 'chimney'. The assemblage of different types of roof tile suggests that as buildings were extended or repaired different tile suppliers were used. Alternatively, the different types may be the result of dumping brought in from close by.
- 6.3.15 Pantiles were imported into Britain by the 16<sup>th</sup> century and there is no evidence for their manufacture in this country before 1700 (Neave 1991). The two fragments from within Phase B are likely to be intrusive, as the manufacturing characteristics tend to suggest a post-medieval date of manufacture and without fabric analysis it is difficult to differentiate between the imported Dutch tiles (Dakpannen) and English pantiles manufactured locally.
- 6.3.16 Three fragments of floor tiles were recovered from Phase B deposit (367). Thickness ranged between 25mm-28mm on the diagnostic fragments. Bevelled edges were present and mortar adhesions were identified on one fragment. Glaze was evident on all three fragments ranging between Dark Olive (5Y/3/2), Dark Yellow Brown (10YR/4/6) and Red (2.5YR/4/6). No decoration or patter was identified on any of the fragments but white slip was evident on two fragments. Dating from such little evidence can only be tentative and suggests a medieval date of manufacture although plain glaze tiles were imported from the Netherlands from the 14<sup>th</sup> century onwards (Stopford 2005).
- 6.3.17 No further work was regarded as necessary on the assemblage, which is of limited evidential value. It was recommended that samples of selected brick and tile should be retained and a selective discard policy implemented prior to deposition of the finds assemblage as whole within the appropriate museum.

# 6.4 Clay tobacco pipes by Dr S. White

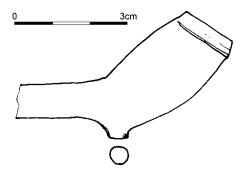
6.4.1 A total of 13 clay tobacco pipe fragments were recovered comprising one bowl and 12 plain stems from six different pipe bearing contexts. What they can say about the consumption and deposition of clay tobacco pipes on the Site is therefore quite limited. No mouthpiece fragments were recovered.



- 6.4.2 The pipe fragments have been individually examined and details of each fragment logged on an Excel spreadsheet (**Table 3**, Appendix 3). The layout of the spreadsheet has been based on the pipe recording system that has been developed at the University of Liverpool (Higgins and Davey 2004). Stem-bores of the bowl fragments and marked stem have been measured to the nearest 64<sup>th</sup> of an inch using a ruler. In the case of the plain stems, only the surface treatment and a count have been given.
- 6.4.3 All of the pipes were recorded and dated before any context descriptions and site notes were examined. This methodology avoids any preconceptions being formed as to the possible date or nature of the various pipe groups while they are being catalogued.
- 6.4.4 Clay tobacco pipes are probably the most useful dating tools for archaeological deposits of post-medieval date. They are found almost everywhere, were short-living and were subject to rapid change in both size and shape. They can often be tied to a specific production site or, at the very least, to a regional centre. Subtle differences in their style and quality enable them to be used as indicators of social status as well as a means by which trade patterns can be studied.
- The pipe assemblage includes just one bowl from context (347), which was the fill of a posthole. The bowl is a spur form of *c*.1650-1680 (**Figure 6.1**), which is relatively unusual for South Yorkshire at this date. The author's recent study of the clay tobacco pipe industry in Yorkshire during the 17<sup>th</sup> and 18<sup>th</sup> centuries has shown that spur forms in South Yorkshire only accounted for approximately 2% of the bowls during the period 1640-1660. This figure does, however, increase to 13% for the period 1660-1690 (White 2004:46-47). The spur bowl from Bridge Lane has been nicely finished. The rim has been internally trimmed and bottered. There is no milling but there is a groove around approximately <sup>3</sup>/<sub>4</sub> of the rim. The spur itself appears to have been trimmed. The bowl is not burnished (or polished) and the stem bore measures <sup>7</sup>/<sub>64</sub>".
- 6.4.6 The remaining 12 fragments are all plain stems. Although plain stems are particularly difficult to date accurately, their general appearance and the size of the stem bore can give an indication of the likely period during which they were produced. Stem dates should always be used with caution since they are much more general and less reliable than dates that can be determined from bowl fragments or from stems that are decorated or marked by known makers. The plain stems from Bridge Lane range in date from the early 17<sup>th</sup> century (a stem of *c*.1610-1710 from context (367)) through to two 19<sup>th</sup>-century stem types with traces of dark green glaze (from contexts (101) and (300)).
- 6.4.7 The glazed fragments are interesting in that they are likely to have come from long-stemmed pipes, which occasionally had a lead-glazed tip to prevent the pipe sticking to the lips of the smoker. The use of lead glaze to coat the tips was introduced at the end of the 18<sup>th</sup> century and was used throughout the 19<sup>th</sup> century, with the glaze colours ranging from a yellowish or green to brown and from thin and translucent to thick and densely coloured. The lead-glazing of pipe mouthpieces went out of fashion around 1910 when the use of lead based glazes was considered to be detrimental to the pipemakers health.



6.4.8 **Figure 6.1**: Spur bowl of *c*.1650-1680 from context 347. Not burnished; rim bottered and internally cut; no milling but a groove visible around  $\frac{3}{4}$  of the rim circumference; stem bore  $\frac{7}{64}$ . (Spur bowl drawn at life size (1:1) by S. White)



- 6.5 Metalwork and process residues by Dr R. Doonan and D. Pitman
- 6.5.1 The assemblage comprised predominantly slag, but also included a number of small ferrous finds and one fragment of copper alloy. Initial assessment (**Table 4**, Appendix 3) was followed by conservation and further recording (x-ray and photography) of selected material.
- 6.5.2 A ferrous knife was recovered from context (365) (**Figures 6.2** and **6.3**). The object measured 117mm in length, 19mm in width, and 15.3g in weight. The blade of the knife is bent midlength to an angle of approximately 70°. The knife appears to have been made from a single stock with no evidence of composite manufacture. Due to its heavily corroded remains, the type of the knife remains undetermined.
- 6.5.3 **Figure 6.2**: X-radiograph of knife from context (365).



6.5.4 **Figure 6.3**: Knife from context (365)



6.5.5 A ferrous cut nail, small find (SF) no. 26 (length 37mm, width 7.7mm and 9.7mm at the head, weigth 3.8g), was recovered from context (367) (Figures 6.4 and 6.5). The object is heavily corroded and slightly bent at its lower third. Based on the visual examination, it is clear that the nail was derived from a nail plate possibly produced from a hand-powered slitting machine. The cut nail presents a rectangular cross-section; its small end is pointed and quite sharp whereas the large end is upset to form the head. The cut faces show correspondingly uniform thickness decreasing to the pointed terminal end. Its sharp point may be indicative of an earlier date; however, without ascertaining whether the material is steel or iron, it is difficult to provide a more precise date of its manufacture. The object is a typical product of a slitting mill. The x-radiograph image offers little detail to assist interpretation.

6.5.6 Figure 6.4: X-radiograph of ferrous cut nail: context (367), SF no. 26

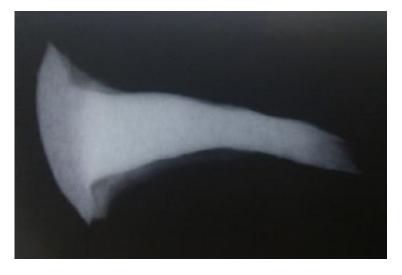


6.5.7 **Figure 6.5**: Ferrous cut nail: context (367), SF no. 26



A ferrous cut nail, SF no. 4 (length 51.5mm, width 7.7mm and 12.2mm at the head, weight 17.2g), was recovered from context (411) (**Figures 6.6** and **6.7**). The object is substantial in form but heavily corroded. It is apparent that the lower portion of the body is missing. It retains the characteristics of a cut nail, although its substantial form suggests that it was produced by a powered machine. The nail presents a rectangular cross-section, with the large end forming a significant head. The cut faces show correspondingly uniform thickness decreasing to the pointed terminal end. It is difficult to date the object more precisely without prior identification of its material (steel or iron). The x-radiograph image adds no significant information to the understanding of the object.

6.5.9 Figure 6.6: X-radiograph of ferrous cut nail: context (411), SF no. 4



6.5.10 Figure 6.7: Ferrous cut nail: context (411), SF no. 4



- 6.5.11 A heavily corroded terminal of a fixing, SF no. 7 (length 21.4mm, width 17.3mm, weight 6.8g), was recovered from context (349). It is likely that this object is a fragment of a nail or similar fixing; however, further speculation is unwarranted due to corrosion and fragmentary preservation.
- 6.5.12 A heavily corroded terminal (head) of a fixing, most likely a nail, SF no. 3 (length 21.4mm, width 17.3mm, weight 6.8g), was recovered from context (410). It is likely that this object is a fragment of a nail or similar fixing but further speculation is unwarranted due to corrosion and fragmentary preservation.
- 6.5.13 A fragment of a corroded ferrous object, SF no. 17 (length 66.4mm, cross-section 2.3mm by 3.1mm, weight 3.7g), was recovered from context (411),. The object presents a rectangular cross-section but must be considered of indeterminate form.
- 6.5.14 A corroded ferrous terminal with a square-headed form (length 34.4mm, terminal dimension 7.0mm by 6.4mm, weight 2.5g) was also recovered from context (411). The object presents a rectangular cross-section of the shaft suggestive of a possible dress fitting. As the object is derived from the same context as the previous fragment, it is possible that the two fragments constitute parts of the same object. The light construction of these fragments could be suggestive of their use in dress or adornment.
- 6.5.15 A heavily corroded ferrous fixing, a possible stud or nail (length 49.8mm, cross-section 9.5mm by 11.2mm, weight 9.9g) was recovered from context (313). The object was not subjected to conservation and, although there is evidence of the head, the form of the object remains indeterminate. The x-radiograph image provides no assistance in its interpretation.
- 6.5.16 A fragment of copper alloy with detail of a rectangular rib, SF no. 27, was recovered from context (420) (**Figure 6.8**). It is apparent that the fragment was derived from a thin sheet embellished with raised profile rib detail. The analysis by XRF has established the alloy type to be a quaternary alloy known as leaded gunmetal, the composition of which is given in **Table 5** (Appendix 3).



## 6.5.17 Figure 6.8: Copper alloy fragment: context (420), SF no. 27



6.5.18 A total of 6.1kg of metalworking slag was examined using current guidelines and research frameworks devised by the Historical Metallurgical Society and English Heritage (Bayley et al., 2001; Bayley et al., 2007). Samples of iron smithing slag from contexts (363) and (411), totalling 3.2kg, were retained. The collection of small finds comprises no objects of significant value and no further work on the assemblage was recommended.

## 6.6 Lithics by Dr B. Chan

- 6.6.1 A full typological catalogue of the material was produced and an assessment of raw materials was conducted. Due to the size of the assemblage no metrical or technological attributes were measured. The following attributes were recorded for each artefact: (1) Context Number; (2) Small Finds Number; (3) Completeness of Artefact; (4) Raw Material; (5) Type of Artefact; and (6) Description of Artefact.
- The full catalogue of the material is contained within **Table 6** (Appendix 3). The assemblage from Bridge Lane consisted of a single scraper, two retouched flakes, five flakes, two pieces of irregular waste, six blades and bladelets and four pieces of unworked flint and stone. The unworked material is not considered to be of significance.
- 6.6.3 The worked material is derived from contexts (301), (351), (359), (367), (405), (406), (411), (412), (416), (420) with one piece being unstratified. No context produced more than two pieces of worked flint.
- 6.6.4 The raw material present within the assemblage was variable. Roughly half of the assemblage appears to have been made from a gravel flint, presumably of local origin. The origin of the rest of the raw material was not known but was represented by a high quality translucent brown flint and an opaque light greyish flint. The majority of the blades within the assemblage were made on this latter material and it was notable that all of the blades were probably made from imported material, which would have been of higher quality than the locally available gravel flints.
- 6.6.5 Given the small size of the assemblage, the potential for the assessment of its technology was limited. In technological terms the assemblage was incomplete as it contained no cores. This combined with the lack of primary flakes suggested that much of the material was imported in a finished or semi-finished state. This was particularly true of the blades and other artefacts made from imported flint.



- 6.6.6 By far the most significant element of the assemblage was represented by the blade component within it. Although the assemblage was small, the number of blades and bladelets is greater than the number of flakes and this must be viewed as significant as this is often not the case even within Early Neolithic assemblages. The blades show signs of intentional and deliberate blade core preparation and removal. There was evidence of butt or platform preparation, primarily through platform trimming and the majority of blades had punctiform butts. The presence of blade scars on the dorsal surface of blades also indicated the intentional "setting up" of cores using the scars of previous removals to produce further blades. Several of the blades also had slight edge damage which may indicate their utilisation in cutting type activities.
- 6.6.7 There was only a single formal tool within the assemblage in the form of a heavily used scraper. In plan the shape of the scraper was heavily skewed towards the left which indicates repeated re-sharpening nearly to the point of exhaustion. Such heavy reworking of a tool is typical of areas where flint was a scarce and therefore curated resource. The scraper itself was of an expedient form and was therefore not dateable.
- 6.6.8 The majority of the assemblage was not chronologically diagnostic. The only securely dateable components of the assemblage were the blades within it. There was no evidence of the snapping of blade or of the presence of microliths so a clear Mesolithic date cannot be assigned. However, given their small form (they are bladelets sensu stricte) these are most probably Late Mesolithic or Early Neolithic in date. The rest of the assemblage contains no chronologically diagnostic types so whether or not it conforms to the same date as the blades is unclear. This is especially the case given the nature of the contexts the material was derived from.
- 6.6.9 The assemblage was small with the majority of it being undiagnostic debitage. Despite this there was a significant blade component within the wider assemblage. Given this an assessment must be made of the contexts from which this material was retrieved. Unfortunately, the majority of flint producing contexts also produced medieval or post-medieval cultural material. Hence it would appear that the majority, if not all, of the assemblage is residual in nature. Despite this the possibility must be considered that any features that contained only flint might be of prehistoric origin.
- 6.6.10 Given the small size of the assemblage and its largely residual nature no further analysis or reporting is recommended. However, despite the residual nature of the material the coherency and relatively high proportion of blades within the assemblage is considered significant. The blades appear to have been made on material imported into the area and this is in keeping with the level of mobility practiced by Late Mesolithic and Early Neolithic populations. Even though much of the material is residual its presence is indicative of activity during the period in the immediate environs of the Site. The contexts of deposition of such activity were presumably disturbed by later landscape processes as well as by medieval and later activity. Should further excavation in the area investigate areas where this same level of disturbance has not occurred the presence of *in situ* Late Mesolithic/Early Neolithic deposits is a definite possibility.



## 6.7 Stone by Dr P. Buckland

- 6.7.1 Two blocks were recovered from context (337): one sub-rounded and as (409) below, the other an angular block of reddish yellow (7.5YR 8/6) to moderate orange pink (10R 7/4) limestone. The poor reaction with 10% HCl indicates that this is a dolomite. Both colour and the presence of scattered small vugs relate this to the Upper Permian Magnesian Limestone which outcrops some 6km to the west of Bawtry in a narrow north-south belt. The lower part of this succession, the Cadeby Formation, provides some of the most widely used building stone in England (Gee 1981).
- 6.7.2 A single angular block (130 x 90 x 50mm) of fine-grained sandstone similar to (409) below was recovered from context (339).
- 6.7.3 Three smaller sub-angular blocks in the same stone from context (363), were slightly more evidently vesicular probably as the result of the solution of evaporite minerals, although no true pseudomorphs are evident on the eroded surface.
- 6.7.4 A sub-rounded block of a reddish yellow (5YR 7/8) fine-grained sandstone (100 x 85 x 50mm) with a pinkish white (7.5YR 8/2) patina over an irregular surface was recovered from context (409). The eroded and patinated surface makes it difficult to source this rock but it can be matched in some of the sandy partings, skerries, in the Triassic Mercia Mudstone Group, which outcrop further south in the Idle catchment. The presence of several blocks implies its transport as building material rather than casual presence from local Quaternary deposits.
- 6.7.5 Several pieces of stone as described above were recovered from context (411). All are again irregular and may be ballast cobbles (cf. Buckland and Sadler 1990), reused in surfaces. In the latter case, sources close to the Trent are probable. One fragment, 25mm thick and roughly wedge-shaped, is in the Upper Magnesian Limestone and may be an eroded fragment of a roofing slab.
- 6.7.6 A lime-rich concretion around soil from context (412) was either from the mixing of mortar or quicklime.
- 6.7.7 An unstratified small, irregular sub-rounded piece of white (N8) limestone was also recovered. The stone is matrix dominated with the voids being formed by the solution of ooliths and small pisoliths. No identifiable or obvious fossils, but the source is most probably in the Middle Jurassic. Stone from quarries on this outcrop either north or south of the Humber or further afield occurs in several churches in the Idle and Don basins and its presence in Bawtry probably reflects the movement of ballast into the port.



## 6.8 Leather by Quita Mould

- 6.8.1 The leather recovered comprises shoe soles and shoe sole repair pieces, known as clumps. Shoe parts of late medieval date were found in contexts (105) and (107); the turnshoe soles are of a shape indicating a date no earlier than the late 14<sup>th</sup> century and no later than the third quarter of the 15<sup>th</sup> century. One turnshoe sole came from (107), the primary fill of a channel [106], while a second turnshoe sole and a repair from a separate shoe came from (105), a dark grey sandy clay layer lying directly above.
- 6.8.2 A fragment broken from a shoe of welted construction dating to the post-medieval period was found in alluvial spread (202), only part of a seam survives and no other diagnostic features are preserved. A clump repair piece found in the same context (202) was made from a re-used turnshoe sole and is clearly cobbling waste. The recovery of shoe parts of medieval/post-medieval date suggests the alluvial spread accumulated over a wide time-span.
- 6.8.3 A catalogue description of the leather is provided below and in **Table 7** (Appendix 3).

## 6.8.4 Context 105

- 1 Leather turnshoe sole for left foot, adult size): Forepart of sole, broken across the lower waist, seat missing. Worn through at the great and little toe joints. Long pointed toe, broken at the tip, estimated toe extension c 30+mm, petal-shaped tread and narrow waist. Edge/flesh seam stitch length 6mm. No sign of repair. Sole now curled as though folded when discarded. Leather cattle hide thickness 3.27mm. Length 180+mm, width tread 73mm, waist max 22mm.
- 2 Leather clump repair seat for right foot, Adult size. Complete seat clump with small area broken away on left side. Tunnel stitching around edge on the flesh side. No pronounced wear. Leather cattle hide thickness 3.93mm. Length 101mm, width 78mm.

## 6.8.5 Context 107 Trench 1

Leather turnshoe sole for left foot, adult size. Forepart of sole, broken across the waist, seat missing. Long, pointed toe with estimated toe extension c.20+mm, petal-shaped tread and medium waist. Edge/flesh seam stitch length 6mm. Broken but no pronounced wear, no sign of repair. Sole now curled as though folded when discarded. Leather cattle hide thickness 3.02mm. Length 192+mm, width tread 82mm, Waist 35mm.

# 6.8.6 Context 202 Trench 2

- 1 Leather clump repair for left foot, Adult size. Complete seat clump made from a re-used turnshoe sole with an edge/flesh seam, stitch length 7.5mm, across the top edge. Tunnel stitching around the edge on the flesh side. Semi-circular notch broken from the left edge. Leather cattle hide thickness 3.38mm. Length 90mm, width 78mm.
- 2 Leather fragment of welted middle sole. Fragment broken from the edge of a welted bottom unit component, likely to come from a middle sole with



remains of a grain/flesh seam along the edge, other edges broken. Grain/flesh holes present from the attachment of sole repair. Leather cattle hide thickness 2.09mm. Length 117+mm, width 32mm.

## 6.9 Wood by Dr lan Tyers

- 6.9.1 Wood samples were recovered from several contexts during the evaluation and mitigation stages of archaeological investigation. These are listed with identifications in **Table 8** (Appendix 3). Of these only a single sample from context (423) was suitable for dendrochronological dating.
- 6.9.2 For the wood identification analysis microscopic cross-sections were taken from each sample in three planes (tangential, radial, and transverse), these were mounted on glass slides with cover slips. The features were then examined at up to 400x magnification and compared with illustrations and keys in Schweingruber (1978).
- 6.9.3 The dendrochronological samples thought suitable for dating were all oak (Quercus). Each tree-ring sample was assessed for the number of rings it contained, and whether the sequence of ring widths could be reliably resolved. For dendrochronological analysis samples need to contain 50 or more annual rings, and the sequence needs to be free of aberrant anatomical features such as those caused by physical damage to the tree whilst it was still alive. Standard dendrochronological analysis methods (see e.g. English Heritage, 1998) were then applied to each suitable sample. The sequence of ring widths in each sample was revealed by preparing a surface equivalent to the original horizontal plane of the parent tree with a variety of bladed tools. The width of each successive annual growth ring was revealed by this preparation method. The complete sequence of the annual growth rings in the suitable samples was then measured to an accuracy of 0.01mm using a micro-computer based travelling stage. The sequence of ring widths was then plotted onto semi-log graph paper to enable visual comparisons to be made between sequences. In addition cross-correlation algorithms (e.g. Baillie and Pilcher 1973) were employed to search for positions where the ring sequences were highly correlated (Tyers 2004). Highly correlated positions were checked using the graphs and, if any of these were satisfactory, new composite sequences were constructed from the synchronised sequences. Any t-values reported below were derived from the original CROS algorithm (Baillie and Pilcher 1973). A t-value of 3.5 or over is usually indicative of a good match, although this is with the proviso that high t-values at the same relative or absolute position needs to have been obtained from a range of independent sequences, and that these positions were supported by satisfactory visual matching.
- 6.9.4 This initial analysis dated the tree-rings present in the datable samples. The correct interpretation of those dates relies upon the character of the final rings in the samples. If a sample ends in the heartwood of the original tree, a *terminus post quem (tpq)* for the felling of the tree is indicated by the date of the last ring plus the addition of the minimum expected number of sapwood rings that may be missing. This *tpq* may be many decades prior to the real felling date. Where some of the sapwood or the heartwood/sapwood boundary survives on the sample, a felling date range can be calculated using the maximum and minimum number of sapwood rings likely to have been present. If bark-edge survives then a felling date can be directly



utilised from the date of the last surviving ring. The sapwood estimates applied here are a minimum of 10 and maximum of 46 annual rings, where these figures indicate the 95% confidence limits of the range. These figures are applicable to oaks from England and Wales.

6.9.5 The wood identifications comprise three small ash (*Fraxinus*) stakes, and a piece of fruitwood (*Pomoideae*; apple/pear/hawthorn type). The oak tree-ring samples comprised four timbers, most of which contain fairly short tree-ring sequences, one of these proved datable (**Tables 9** and **10**, Appendix 3) and it is possible that this sample ends at its heartwood/sapwood boundary. However its poor preservation prevents this from being a certain identification. It was felled after AD 1221, how much later cannot be determined. If it was complete to the start of sapwood, it would suggest that this timber dates from before *c*. AD 1257. Although this data matches widely it is picking up most strongly to the better replicated assemblages. Hence, although there is no reason to suspect the material was not derived in the vicinity of Bawtry, the tree-ring data is not unequivocal over its origin.

## 6.10 Animal bone by Chris Harrison

- 6.10.1 A total of 440 animal bone fragments were recovered by hand collection from 16 contexts (**Tables 11** and **13**, Appendix 3). The majority of the remains were uncovered from deposits from features assigned to Phase A or B. All apart from one roe deer bone belonged to domesticates. The assemblage from each phase is similar and so shall be discussed together.
- 6.10.2 The method adopted for the recording of the assemblage follows a modified version of the system developed by Davis (1992) and Albarella and Davis (1994). Under this system specific zones of each skeletal element are included as 'countable'. In mammals these are: upper and lower teeth (with at least half of the occlusal surface present); mandibles with at least one tooth *in situ*; cranium (zygomaticus); atlas; axis; scapula (glenoid cavity); distal humerus; distal radius; proximal ulna; carpal 3; distal metacarpal; pelvis (ischial part of the acetabulum); distal femur; distal tibia; astragalus; calcaneum; scafocuboid; distal metatarsal; phalanges 1, 2 and 3. Countable fragments were identified to species or species group using the reference collection at the Department of Archaeology, University of Sheffield.
- 6.10.3 Measurable elements were measured using callipers and a measuring board following von den Driesch (1976), Davies (1992) and Albarella and Davies (1994).
- 6.10.4 In addition to these 'countable' elements, other 'non-countable' specimens were recorded. These include horncore, antler, bones with evidence of sawing or bone working, and ribs and vertebrae (recorded as belonging to a small, medium or large sized animal). The preservation state of material from each context was noted and the number of measurable elements and ageable mandibles are also recorded (**Table 12**, Appendix 3).
- 6.10.5 The level of preservation was good throughout most of the assemblage. A small number of bones exhibited longitudinal cracking and surface deterioration suggestive of exposure to weathering. The occurrence of butchery marks was not common. Very good preservation was recorded in contexts (407) and (411) (Phase A). Bone from context (407) was dark



brown in colour and their high level of preservation would be consistent with waterlogging. Well preserved bone from context (411) was mainly comprised of a pig skeleton and the good preservation found in this context is further attested by the recovery of foetal bones. Elements from other species in this context were less well preserved and may have been residual/redeposited. Preservation in context (367) was also variable. The small number of bones from contexts (345) and (359) were less well preserved than the remainder of the assemblage.

- 6.10.6 Evidence of gnawing was rare in the assemblage. Rodent gnawing was recorded on single cattle ulna in context (311), canid gnawing was noted on a bone from context (107), a pig distal humerus in context (407), a sheep radius in context (420), and a horse/donkey metacarpal in context (411). The low levels of gnawing and the good overall preservation of the assemblage (even when the pig skeleton from context (411) is discounted) suggests that the majority of the bone was buried soon after its deposition. Single elements from contexts (367) and (420) were partially coated in iron-pan type concretions.
- 6.10.7 A total of 103 countable elements were uncovered from Phase A, 89 of which represented a pig skeleton and related foetal remains. If the pig skeleton is removed from the count, cattle was the most common species at eight countable elements, followed by horse at three elements, then pig at two, and sheep at one.
- 6.10.8 A total of 20 bones were uncovered from Phase B with cattle the most common at nine elements, followed by horse at five, pig at three and sheep at two, and with roe deer the least represented at one element. Phase C had a total of one horse bone.
- 6.10.9 The assemblage of animal bones from the evaluation was small and made up of only eight countable specimens. Bones from three different taxa were identified (summarized in **Table 11**, Appendix 3). All of the countable specimens came from domestic animals. Equid (*Equus*) bones were most abundant, with less pig (*Sus*) and cattle (*Bos*) also identified. The two horse bones from context (102) appear to articulate and are most likely from the same animal. This gives an indication that this context is probably undisturbed and an area of primary deposition.
- 6.10.10 Evidence that could be used to establish age estimates or mortality profiles of the domestic animals from the evaluation phase of the Site was very limited. No teeth or mandibles appropriate for ageing animals were found. However, both of the bones from context (206) were pig humeri with unfused proximal ends (the epiphysis and diaphysis were present in both cases). It is possible that they belonged to the same animal.
- 6.10.11 In addition to the countable specimens of domestic animals discussed above, a piece of antler was recovered from context (107). As the base of the antler was missing it was impossible to determine whether this had been shed naturally or removed from a dead animal. Chop and cut marks on the antler might suggest antler working.
- 6.10.12 Of the 432 bone fragments from the Mitigation Area A, 116 were counted from eight contexts using the methodology described above. The remainder



of the assemblage was made up of long bone fragments without the diagnostic zones required for counting (MNE/context: 54) and fragments of rib, and vertebrae (NISP: 105)

- 6.10.13 Context (411) (Phase A) contained a large number of pig bones. The majority of these appear to be from an entire pig skeleton. Almost a full set of the major skeletal elements are represented, the exception being some of the phalanges, and their absence is probably a result of collection bias. Many of the elements were shown to articulate with one another. An examination of mandibular canines suggests that the animal was female. A number of bones belonging to at least two pig foetuses were also recovered.
- 6.10.14 The pig skeleton was analysed using tooth eruption and epiphysial fusion data (following Habermehl 1975 and 1985; Grant 1982; Bull and Payne 1982) to ascertain the likely age of the animal at death. The mandibles of the pig exhibited permanent molars 1 and 2 (M1 and M2). M1 was in wear whilst M2 was unworn and appeared to have only just reached full eruption. In addition permanent premolar 4 (P4) was erupting and had displaced deciduous premolar 4 (dp4). This meant that the pig was aged between 6 and 12 months of age at death (Bull and Payne 1982).
- 6.10.15 The majority of the epiphyses belonging to the pig skeleton, found within context (411), were unfused to their respective diaphyses. However, the scapula and pelvis were both fused whilst the distal humerus and phalanx 2 were in the process of fusing. This indicates that the pig was aged between 6 and 12 months (Habermehl 1975 and 1985). As the distal humerus and phalanx 2 were in the process of fusing, it would be reasonable to assume that the pig was aged between 10 and 12 months at death.
- 6.10.16 The pig skeleton from context (411) showed evidence that one of the animal's feet was very deformed, and it is likely that the pig was lame. Two first phalanges, and two second phalanges, were very misshapen and had a lot of abnormal extra bone growth (exostoses), one of the first phalanges also exhibited clear eburnation of the proximal epiphyses. One third phalanx was misshapen. In addition, some slight evidence of extra bone growth was seen on two uncountable carpal/tarsal bones.
- 6.10.17 The foetal remains of at least 2 pigs were uncovered from context (411) and were identified using the University of Sheffield reference collection. Measurement of the long bones revealed that the foetal pigs were around 85 days old at death (Habermehl 1975 and 1985). As the complete pig skeleton exhibited serious injury or disease to its feet and the foetal remains had not reached the end of the gestation period, the foetal remains represent an inutero death not a still birth. It is likely that the weight of pregnancy on the mother pig's misshapen foot could have exacerbated her problematic feet to a point where the pig could no longer walk, resulting in her death.
- 6.10.18 In addition to the pig skeleton other pig bones are present from context (411). Of note is a mandible of an elderly female pig which has a very worn canine, with a large carious lesion just above the cementoenamel junction.
- 6.10.19 If the pig skeleton and foetal material from context (411) is removed from the mitigation analysis, the assemblage becomes relatively small (37 countable elements). The most common species represented at Bawtry is cattle (15



countable bones), followed by and horse (five countable bones). Sheep are represented by three countable elements, pig by two countable bones and Roe deer (*Capreolus capreolus*) by a single element.

- 6.10.20 In addition, context (367) (Phase B) contained a cattle pelvis which exhibited slight bone growth at the top of the acetabulum which continued onto the illium, and may represent stress induced by the animal been subjected to traction.
- 6.10.21 Fusion data of animal long bones has been used, due to the lack of mandibles within the assemblage, as an indicator of the age at which animals died (to understanding of the use of the animals). However, the majority of the long bones were fused (a process that occurs at full adulthood) meaning the age of death cannot be accurately identified beyond indicating that the majority of animals achieved adulthood. This suggests that the economic use of the animals deposited was as working (traction) and for secondary products (milk and wool). The pig skeleton is the only intended food production on site, although its deposition whole may suggest that it was inedible (a result of it possibly being diseased. A sheep mandible was uncovered from context (407) and is from an adult (2.5-4.5 years) animal.
- 6.10.22 The relatively small assemblage from Bridge House Lane, Bawtry, has meant that analysis of the animal remains is speculative. Age and sexing data (fusion, mandible and biometric) have revealed no patterning to the disposed elements. There was very little evidence of butchery in the assemblage. The only butchery marks recorded were a sawn cattle femur from context (407) and a sawn medium mammal sized pelvis fragment from context (365), common butchery marks associated with the quartering of carcasses.
- 6.10.23 This assemblage is relatively small in size, and has limited potential to provide archaeologically meaning. Further analysis is unlikely to provide information regarding the population structure/composition or to expand knowledge of the economic system further than an acknowledgment of the presence of the taxa identified.
- 6.10.24 The animal bone assemblage is not of a large enough size to produce meaningful patterns in the use of animals. However, the data set suggests that the majority of the bones came from animals that had either died as a result of illness or damage or had been subjected to non-meat producing farming techniques. Phases A and B only portrayed one noticeable difference that of the pig skeleton buried during Phase A. However, the idea that the elements found were dumped opportunistically is supported by the anomalous finding of the pig skeleton, as no attempt to butcher it or gnawing was apparent. The lack of excessive erosion in all bones suggests that in both phases the elements buried were done so soon after they were discarded.



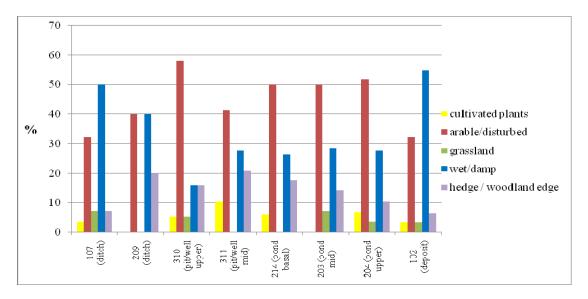
## 6.11 Palaeobotanical samples by Dr Ellen Simmons

- 6.11.1 A total of eight soil samples from evaluation contexts, where preservation of plant macrofossils by waterlogging was exhibited, were selected for analysis. It has unfortunately not been possible to locate samples from the mitigation phase of works.
- 6.11.2 The aim of this analysis was to provide evidence for the nature of the environment in the vicinity of the sampled features, for the nature of the features themselves and if possible, for the diet and economy of the inhabitants of the Site. A sub-sample of soil from each of the samples had previously been processed by wet-sieving for the recovery of waterlogged plant remains whereby soil is gently washed through a stack of sieves. Material was collected in sieves of 2mm, 1mm, 500 µm and 300 µm mesh and stored in alcohol in airtight glass jars.
- 6.11.3 The 2mm fraction was sorted in its entirety. The 1mm, 500μm and 300 μm fractions were randomly sub-sampled with various portions being sorted under a low-power microscope (x7-x45) with the resulting counts of plant material being multiplied to represent that in a whole sample. Identification of the plant material recovered was carried out using modern reference material in the Department of Archaeology, University of Sheffield and various reference works (Berggren 1969; Berggren 1981; Anderberg 1994; Cappers et al. 2006).
- 6.11.4 The material was mostly identified under a low-power microscope, with occasional use of high-power magnification (x100–x400) where needed. 'Minimum' counts of seeds and fruits were recorded. Where straightforward counts were problematic (e.g. material other than fruits and seeds), the material was quantified using a DAFOR abundance scale (D = dominant, A = abundant, F = frequent, O = occasional, R = rare)
- 6.11.5 The preservation of waterlogged plant material in the majority of samples was very good. A wide range of plant species were represented by their seeds, which included many small and delicate seed forms. The samples also contained wood fragments, thorns, mosses, leaf fragments and insect remains. Material in context (203) and in particular (209) was, however, less well preserved with a reduced diversity and density of taxa. Some caution must therefore be exercised when interpreting the assemblages from these contexts.
- 6.11.6 A small number of charred cereal grains were also present in the samples as well as the charred seeds of wild/weed plant species. The charred cereal grains exhibited good preservation, lacking distortion and with fragments of epidermis still remaining (cf. Hubbard and al Azm 1990). The presence of charred wild/weed plant seeds also indicates good levels of preservation by charring.
- 6.11.7 The botanical composition of the samples is given in taxonomic order within approximate habitat groups in **Table 14**. The number of seeds recorded for each species is related to factors such as the number of seeds produced by the plant, the proximity of plants to a feature as well as the abundance of a particular species. Only the presence or absence of species was therefore used to calculate the percentage abundance of ecological groups in each



feature as shown in fig 1. It should be noted that many plant species can be representative of more than one ecological group so caution should be exercised when interpreting **Table 15** (Appendix 3) and **Figure 6.2** below. **Table 15** (Appendix 3) lists specific ecological information for each species for this reason.

6.11.8 **Figure 6.2** – Percentage of numbers of species of plants by ecological grouping in features at Bridge Lane House, Bawtry.



- 6.11.9 Two samples were recovered from sections of ditch in Trenches 1 and 2. Sample 8, recovered from context (107) within ditch [106] in Trench 1, was dated to the late medieval period. Sample 1 was recovered from context (209) within ditch [212] in Trench 2 and also dated to the late medieval period. It is assumed that ditch [106] is a continuation of ditch [212] and while preservation of plant material was better in [106] the assemblages of plant taxa from both features represent broadly similar ecological groups.
- 6.11.10 A high proportion of the plant species in both ditch contexts were representative of damp ground, water margins or aquatic environments. These included water crowfoot (*Ranunculus subgen BATRACHIUM*), celery leaved buttercup (*Ranunculus scleratus*), lesser spearwort (*Ranunculus flammula*), water pepper (*Persicaria hydropiper*) water cress (*Rorippa spp.*), marsh pennywort (*Hydrocotyle vulgaris*), hemlock (*Conium maculatum*), fools water cress (*Apium nodiflorum*), rushes (*Juncus spp.*) and sedges (*Carex spp.*). The presence of water starworts (*Callitriche spp.*) in context (107) and horned pondweed (*Zannichellia palustris*) in both context (107) and (209), in particular, indicates that the ditch was likely water-filled along its whole length. Water flea (*Daphne sp.*) egg cases in context (107) also indicate stagnant water.
- 6.11.11 Disturbed ground such as that resulting from agriculture or animal husbandry was also represented by a wide range of species, many of which are typical crop weeds. These included common poppy (*Papaver rhoeas*), small nettle (*Urtica urens*), fat hen (*Chenopodium album*), redshank/persicaria (*Persicaria maculosa/lapathifolia*), dead nettle (*Lamium album/purpurum*), corn marigold (*Chrysanthemum segetum*) and scented



- mayweed (*Matricaria recutita*). Seeds of the cultivar turnip (*Brassica rapa*) were also present.
- 6.11.12 Nitrogen enrichment of the soil in the vicinity of the ditch, such as that resulting from human or animal waste becoming incorporated into the soil, is indicated by the presence of common nettle (*Urtica dioica*), henbane (*Hyoscyamus niger*) and elder (*Sambucus nigra*).
- 6.11.13 Samples 6 and 7, were recovered from the upper (310) and middle (311) contexts within a barrel pit or timber lined well [309] in Trench 3, which was dated to the early medieval period. Both samples contained an abundant and diverse range of plant remains representing broadly similar habitat groups.
- 6.11.14 The greatest proportions of species in both samples were representative of disturbed ground. These included common poppy, prickly poppy (*Papaver argemone*), small nettle, fat hen, common chickweed (*Stellaria media*), common mouse ear (*Cerastium fontanum*), sheep's sorrel (*Rumex acetosella*), fool's parsley (*Aethusa cynapium*), henbane, dead nettle and hemp nettle (*Galeopsis*). Common nettle, henbane and elder again indicate the presence of nitrogen rich soils.
- 6.11.15 Both samples also contained a high proportion of species representative of damp ground environments, although no aquatic species were represented. The greatest diversity of damp ground species was present in the middle context (311). These included meadow/creeping buttercup (*Ranunculus acris/repens*), celery-leaved buttercup, blinks (*Montia fontana ssp. chondrosperma*), hemlock, wild celery (*Apium graveolens*), fool's water cress, rushes and sedges.
- 6.11.16 The presence of hedgerow or scrub type vegetation was also indicated, particularly in the middle context (311), by the presence of alder (*Alnus glutinosa*), hornbeam (*Carpinus betulus*), bramble (*Rubus fruiticosus AGG*.), blackthorn (*Prunus spinosa*), hawthorn (*Crataegus monogyna*), and elder (*Sambucus nigra*). Grassland is also indicated by lesser stitchwort and vervain (*Verbina officinalis*).
- 6.11.17 The likely proximity of this feature to human habitation is suggested by the presence of small numbers of charred cereal grains, including hulled barley, within both samples. Charred wild/weed plant seeds characteristic of weeds of cultivation such as cornflower (*Centaurea cyanus*), and corn marigold were present in the upper context (311). These are likely to be representative of crop processing or cooking being carried out in the vicinity of the feature, with material becoming charred within the ashes of fires and eventually becoming deposited in the feature, although the wild seeds may also have resulted from dung burnt as fuel or the burning of overgrown vegetation.
- 6.11.18 Three samples, the basal and uppermost of which contained a diverse and well preserved assemblage of plant material, were recovered from the lower (214), middle (203) and upper (204) fills of a feature assumed to be a pond [213], dated to the late medieval period, in Trench 2. Again the compositions of the three samples from this feature were very similar to each other,



- although the preservation, and therefore, the diversity of material in context (203) was poor in comparison to (214) and (204).
- 6.11.19 The largest proportion of species types in all three samples were representative of disturbed ground or agriculture. These included common poppy, prickly poppy, small nettle, fat hen, common chickweed, persicaria, knotweed, sheep's sorrel, henbane, dead nettle, hemp nettle, cornflower and prickly sow thistle (*Sonchus asper*).
- 6.11.20 Also present was a range of semi-aquatic, shallow water and damp ground species in all three samples. These included meadow/creeping buttercup, celery-leaved buttercup, water chickweed (*Myosoton aquaticum*), water pepper, water dock (*Rumex hydrolapathum*), hemlock, wild celery, marsh woundwort (*Stachys palustris*), rushes, many stalked spike rush (*Eleocharis multicaulis*), common club rush (*Schoenoplectus lacustris*) and sedges. Again this range of plant species is representative of damp marshy ground or the margins of water bodies rather than a truly aquatic environment. The presence of water flea egg cases in (204) and (214) do however indicate stagnant water.
- 6.11.21 The basal context (214) was found to contain seeds of trees and shrubs such as silver birch (*Betula pendula*), blackthorn and hawthorn, which were not present in context (203) or (204). Scrub/hedgerow type vegetation was still represented in contexts (203) and (204) in the form of bramble and garlic mustard (*Alliaria petiolata*) which tends to grow in shaded areas near scrub or woodland. Grassland type habitats were also represented by lesser stitchwort (*Stellaria graminea*) and hawkweed oxtongue (*Picris hieracioides*) in the middle and uppermost fills (203) and (204). Charred wheat and spelt wheat grains were also present in the uppermost context (204), while a small number of hemp (*Cannabis sativa*) seeds were present in the basal context (214).
- 6.11.22 Sample 9 was recovered from an organic-rich deposit (102), dated to the late medieval period, which had accumulated in a number of, possibly water worn, hollows in Trench 1. The suggestion that the deposition of this context was related to water processes is supported by the plant material assemblage.
- 6.11.23 A large proportion of the taxa present in the deposit were found to be representative of aquatic shallow water and damp ground taxa. These included meadow/creeping buttercup, celery-leaved buttercup, lesser spearwort, water pepper, water dock, marsh dock, water cress, marsh pennywort, hemlock, cowbane, rushes, bristle club-rush (*Isolepis setacea*) and sedges. Water starworts and horned pondweed in particular indicate standing water with abundant water flea egg cases supporting this and also indicating stagnant water.
- 6.11.24 A diverse range of plant species representative of disturbed ground and agriculture was also present. These included common poppy, small nettle, fat hen, orache, common chickweed, persicaria, sheep's sorrel, henbane, and dead nettle. Nitrogen enrichment of the soil was also indicated by common nettle and elder, and scrub / hedgerow vegetation was represented by bramble.



- 6.11.25 A rich and diverse range of plant material has provided information concerning the nature of some of the features at Bawtry, as well as the general environment in the vicinity of the features. The plant material assemblage in contexts (107) and (209) indicates that ditch [106] and its possible continuation, ditch [212], contained standing, probably stagnant water with a community of damp loving plant species growing along it. The ditch was also surrounded by a well developed community of weeds of cultivation and disturbance suggesting fields were nearby. Nitrogen enrichment of the soil such as that resulting from manuring is also indicated.
- 6.11.26 The environment surrounding the barrel pit or timber lined well feature [309] also seems to have been damp or marshy although the presence of water within the feature is not indicated. Agriculture and disturbance with nitrogen enrichment of the soils is again strongly indicated by a wide variety of plant species.
- 6.11.27 The plant assemblage from the pond type feature [213] generally indicates a somewhat marshy type of environment, perhaps including shallow stagnant pools rather than deep water. A greater variety of plant taxa favouring marshy ground or water margins was present in the basal deposit (214) in comparison to the equally well preserved upper deposit (204) possibly indicating silting up of the pond over time. Silver birch trees and other shrub type vegetation grew around the pond during the deposition of basal context (214), which then may have been cleared or cut back resulting in the deposition of the branches in (203). A diverse community of plant species adapted to disturbance and cultivation also grew in the vicinity of the pond throughout the deposition of material within it.
- 6.11.28 A wide range of plant species which favour damp, marshy or water's edge environments was also present in the deposit (102) which had accumulated in possible water worn hollows. Evidence for standing, probably stagnant water was also present in the deposit. A wide range of plant species also indicates agriculture and disturbance as well as nitrogen rich soils.
- 6.11.29 A small number of hemp (*Cannabis sativa*) seeds were present in the possible deposit relating to water erosion, as well as in the basal layers of the pond. Hemp was widely cultivated in the region in the medieval period for use in the manufacture of rope, canvas, paper and oil (Goodwin 1967). A possible hemp 'retting' pit was excavated on Askham Bog near York (Gearey, 2005), identified due to the large numbers of hemp seeds, along with high hemp pollen concentrations present within the layers of peat.
- 6.11.30 The ideal hemp retting pit is described in Bradshaw *et al.* (1981) as 'a small deep pond unconnected to the local water supply' this was due to the process of retting (or rotting) the hemp stems would contaminate the water and smell unpleasant. Seeds would be beaten out of the hemp plant before the stems were weighed down with branches in a pond, with the seeds then possibly used in the extraction of oil. This is interesting with regard to the branches overlying the basal pond context. It is also worth noting that hemp retting resulted in nitrogen enrichment of the soil (Cox *et al.* 2001).
- 6.11.31 Due to the small numbers of hemp seeds present in the pond and deposit at Bawtry, however, along with lack of additional evidence such as pollen, it cannot be determined whether the use of the pond or the water worn



hollows were connected with hemp retting. It is equally possible that the hemp seeds represent 'escapes' from nearby cultivation. In either case this material provides an addition to the evidence for cultivation of hemp for the manufacture of rope and oil which continued in the region up until the 19<sup>th</sup> century when the industry collapsed due to cheaper imports.

- 6.11.32 A number of the 'wild' plant species present in the samples also represent edible food plants and plants with medicinal uses. Blackthorn, pear, bramble and elder are all fruits commonly found as charred remains on medieval sites and were most likely collected from hedgerows and waste ground (Green 1984). Fat hen, orache, chickweed, sheep's sorrel, nettle and water pepper were all once collected and sometimes cultivated as vegetables (Philips 1983; Lanska 1992). Borage and opium poppy were introduced to Britain as medicinal herbs, probably by the Romans (Alcock 2001). Hemlock, henbane, cowbane, and black nightshade all have medicinal uses, as well as being poisons (Woodward 1990). Although it is impossible to determine whether any of these seeds represent plants harvested for food or medicine it is quite possible that they were utilized by people living in the vicinity.
- 6.11.33 Some indication of the arable economy of the inhabitants of the Site is provided by the presence of charred cereal grains. These included hulled barley and spelt wheat, both typical crops of the period (Grieg 1990).
- 6.11.34 The waterlogged plant material present in various features across the Site indicates that the local environment was strongly affected by disturbance, most likely that caused by human habitation and agriculture. The activity of humans or animals is further indicated by the presence of plants which thrive when soils are enriched with nitrogen. It is also clear that the environment surrounding the features was damp and marshy.
- 6.11.35 Standing, probably stagnant, water was present in ditch sections [106] and [212]. The pond feature [213] was more likely to have been a marshy area, probably with some shallow stagnant water present. It seems that while the basal deposit (214) was forming within the pond, the vicinity was somewhat overgrown with silver birch, hawthorn, blackthorn and elder, and that this vegetation may have subsequently been cleared or cut back. There is also some indication that the pond had filled up somewhat with less areas of shallow water by the time the upper fill (204) was being deposited. Water, also possibly stagnant, was also associated with the formation of deposit (102). The possible well or barrel lined pit [309] was also surrounded by damp marshy ground but no standing water within the feature was indicated.
- 6.11.36 Evidence for hemp cultivation was present in the basal layers of the pond as well as in the deposit (102) accumulated in shallow, possibly water worn, hollows. It could not, however, be determined whether the pond or deposit may have been associated with hemp processing or whether the hemp seeds present represent escapes from nearby hemp cultivation. Seeds were also present from the herbs borage and opium poppy, as well as the cultivar turnip, although these again may be escapes from nearby cultivation. Many of the 'wild' plants and fruits represented in the samples may have been collected as food or medicines. Charred grains of barley and spelt wheat attest to the cultivation and processing of these crops in the vicinity.



## 6.12 Shell

6.12.1 A single fragment of shell was recovered from context (201). It was identified to be a common oyster shell (*Ostrea edulis*) with its upper part displaying evidence of parasites.

## 7 CONCLUSIONS AND RECOMMENDATIONS

#### 7.1 Conclusions

7.1.1 The results from the staged programme of investigation at Bridge Lane, Bawtry suggest four main phases of activity dating from the medieval, late medieval, post-medieval and modern periods. Residual artefactual material of late Mesolithic/Early Neolithic and Roman date suggests the possibility of much earlier activity in the vicinity of the Site. Features and deposits were assigned to specific phases based on analysis of the stratigraphic record and the artefactual material recovered. The dating of material recovered from the features generally correlates well with the stratigraphic evidence, however, the presence of residual or intrusive material was also suggested in a number of instances.

#### Phase A - Medieval

The earliest main phase of activity (c.12<sup>th</sup> to 14<sup>th</sup> century) was represented 7.1.2 by the insertion of a number of pits and a linear ditch roughly aligned east to west, possibly a boundary between two plots of land running east from Church Street. The features were located in the mitigation area to the west of the Site. Two sub-oval pits were identified, one of which contained a timber oak barrel lining. One small and three large sub-rectangular pits were also assigned to this phase of activity, most located on a similar alignment. One of the large pits contained a wooden revetment dated to the 13<sup>th</sup> century. The revetment comprised oak planks held against the cut edge by vertically driven oak posts, and included driven stakes set along a similar orientation to the posts. The function of the pits was not clear from the excavated evidence, although a difference in usage is suggested by the size and form of the features and differences in the material deposited within them. Alternative usages for the larger pits may have been for the soaking of hides given the later importation of large numbers of hides into Bawtry (Hey 1980) or as fish ponds given the presence of ponds to the south and southwest of the Site on later 19th-century mapping, although there was no excavated evidence to substantiate either of these suggestions.

#### Phase B - Late medieval

7.1.3 The second main phase of activity (c.14<sup>th</sup> to 16<sup>th</sup> century) was represented by the re-cutting of the large revetted pit in the mitigation area and the insertion of smaller pits, two sub-rectangular and one circular. In addition a fence line was inserted though the filling of the earlier sub-oval pits. Some of the post-holes associated with the fence-line, which were very shallow, exhibited evidence of recutting. To the north and east of the Site a roughly north-south linear ditch, possibly the same feature, was observed. Birch and oak stakes appeared to have been inserted into the side of the ditch. The ditch may have been formed as part of the same phase of land division and



drainage observed in the earliest phase. Later in this phase a pond or large pit feature was cut through the filling of the ditch. Water worn hollows to the north of the Site also appear to have filled in at this time. Environmental evidence suggests that the ditch and pond may have been open for some time and contained stagnant water. The pond may have been used as a retting pit in hemp production, although the evidence for this was equivocal. Hemp seeds were also present in the water worn hollows. Hemp was cultivated for use in the manufacture of rope, canvas, paper and oil from the medieval period through the beginning of the 19<sup>th</sup> century. The proximity of the Site to the River and wharf may indicate that hemp was being grown to make ropes or canvas for river traffic. The function of the other pits was not clear from the excavated evidence but again a difference in usage may be suggested by the size and form of the features and differences in the material deposited within them.

# Phase 3 - Post-medieval/ early modern

7.1.4 The third main phase of activity (17<sup>th</sup> to 19<sup>th</sup> century) dated to the Post-medieval/ early modern period was represented by a brick wall located to the east of the Site and by, what appeared to be, the remains of a demolished building or levelling layer located to the north of the Site, most likely dating from the 17<sup>th</sup> to 18<sup>th</sup> century. No structures are shown in these areas on the earliest available Ordnance Survey map of 1854, or later maps, showing the Site. Further development included the insertion of a wooden drain in the eastern area of the Site, most likely of 18<sup>th</sup>-century date. Also assigned to this phase were two linear features on a similar alignment, probably bedding trenches, and an associated cobbled surface, in the mitigation area.

## Phase 4 - Modern

- 7.1.5 Cartographic evidence suggests the Site was undeveloped and covered by trees during the later post-medieval period until at least the mid-20<sup>th</sup> century. The final modern 20<sup>th</sup>-century phase of activity was limited to drainage associated with the construction of a house over the central and northern part of the mitigation area and two pits, one a geotechnical trial hole.
- 7.1.6 The Site appears to have lain on the periphery of medieval and post-medieval settlement at Bawtry. The nature of features identified and the Site's proximity to the River Idle suggests the features identified in the earliest phases were related to activities that may have been taking place close to the river, perhaps in plots of land running east from Church Street. This would correlate well with the evidence from excavations at 16-20 Church Street where various activites were taking place in yards to the rear of the street frontage (Cumberpatch 1996).
- 7.1.7 The low lying nature of the Site suggests it was prone to flooding, which is to some extent borne out by the environmental evidence which suggests a local environment of primarily damp marshland. The presence of residual and intrusive material in several contexts further supports the apparent mixing of deposits and the suggestion that some of the features may have been open for some time. Identified plant species are also characteristic of disturbed ground such as that resulting from local habitation, agriculture or



animal husbandry, and charred cereal grains are likely to be representative of crop processing or cooking being carried out in the vicinity.

## 7.2 Recommendations

7.2.1 The results of the archaeological investigations are of local and regional significance and as such it is recommended that a note summarising the results of the work is submitted to an appropriate journal (e.g. *Medieval Archaeology* or *Post-Medieval Archaeology*).

## 8 ARCHIVE

8.1.1 The project archive from the fieldwork has been compiled into a stable, fully cross-referenced and indexed archive in accordance with Appendix 6 of *Management of Archaeological Projects* (2<sup>nd</sup> Edition, English Heritage 1991). The archive is currently held at the offices of Wessex Archaeology, Sheffield, under the project code **74600**. The full list of the contents of this archive is detailed in **Appendix 1** of this report. The project archive will be returned to the Doncaster Museum and Gallery, South Yorkshire (where it will deposited under Accession Number DONMG: 2006.18).

## 9 COPYRIGHT

9.1.1 This report may contain material that is non-Wessex Archaeology copyright (e.g. Ordnance Survey, British Geological Survey, Crown Copyright), or the intellectual property of third parties, which we are able to provide for limited reproduction under the terms of our own copyright licences, but for which copyright itself is non-transferrable by Wessex Archaeology. You are reminded that you remain bound by the conditions of the Copyright, Designs and Patents Act 1988 with regard to multiple copying and electronic dissemination of the report.

## 10 BIBLIOGRAPHY

- Albarella, U. and Davis, S.J.M. 1994. The Saxon and Medieval animal bones excavated 1985-1989 from West Cotton, Northamptonshire. AML Report 17/94.
- Alcock, J. 2001. Food in Roman Britain. Stroud: Tempus.
- Anderberg, A.L. 1994. Atlas of Seeds and Small Fruits of Northwest-European Plant Species with Morphological Descriptions, Part 4: Resedaceae-Umberliferae. Stockholm.
- Baillie, M.G.L. and Pilcher, J.R. 1973. A simple crossdating program for tree-ring research. *Tree Ring Bulletin* 33, pp. 7-14.
- Bayley, J., Crossley D., and Ponting, M. 2008. *Metals and Metalworking: A Research Framework for Archaeometallurgy*. London: Historical Metallurgical Society Occasional Paper No6.



- Bayley, J., Dungworth, D., and Paynter, S. 2001. *Archaeometallurgy*. London: Centre for Archaeology Guidelines 2001/01.
- Beresford, M., 1967 New towns of the Middle Ages: Town plantation in England, Wales and Gascony Lutterworth Press.
- Berggren, G. 1969. Atlas of Seeds and Small Fruits of Northwest-European Plant Species, with Morphological Descriptions, Part 3: Cyperaceae. Stockholm.
- Berggren, G. 1981. Atlas of Seeds and Small Fruits of Northwest-European Plant Species, with Morphological Descriptions, Part 3: Salicaceae-Crucifera. Stockholm.
- Boyle, A. Unpublished. *Cistercian ware pottery in Yorkshire and the East Midlands*. Unpublished PhD thesis, University of Nottingham.
- Bradshaw, R.H.W., Coxon, P., Greig, J.R.A. and Hall, A.R. 1981. New fossil evidence for the past cultivation and processing of hemp (Cannabis sativa L.) in Eastern England. *New Phytologist* 89, pp. 503-510.
- Brooks, A. 2005. *An archaeological guide to British ceramics in Australia* 1788-1901. The Australian Society for Historical Archaeology and La Trobe University Archaeology Program.
- Bryant, V. Unpublished. *The mystery of the missing miskin*. Gerald Dunning memorial lecture. Medieval Pottery Research Group conference, Perth 2010.
- Buckland, P., Dolby, M., Hayfield, C. and Magilton, J. 1979. *The medieval pottery industry in Hallgate, Doncaster*. Doncaster Museums and Arts Service.
- Buckland, P.C., Dolby, M.J. and Magilton, J.R. 1980. The Romano-British pottery industries of South Yorkshire: a review. *Britannia* 11, 145-64.
- Buckland, P.C. 1986. *Roman South Yorkshire: A Source Book*. Department of Archaeology and Prehistory, University of Sheffield.
- Buckland, P.C. and Sadler, J. 1990. Ballast and Building Stone: a Discussion. In D. Parsons (ed.) *Stone quarrying and building in England AD 43-1525.* Philimore: Chichester, pp.114-125.
- Bull, G. and Payne, S. 1982. Tooth eruption and Epiphysial fusion in Pigs and Wild Boar. In B. Wilson, C. Grigson, and S. Payne (eds.), *Ageing and Sexing animal bones from archaeological sites*. British Archaeological Report (British Series) 109, pp. 55-71.
- Cappers, R.T.J., Bekker, R.M., Jans, J.E.A. 2006. *Digital Seed Atlas of the Netherlands*. Barkhuis Publishing: Eelde.
- Chan, B. 2006. Archaeological Mitigation of land surrounding Bawtry Hall, Bawtry, South Yorkshire. Unpublished ARCUS report 944.2.
- Cox, M., Chandler, J., Cox, C., Jones, J. and Tinsley, H. 2001. The archaeological significance of patterns of anomalous vegetation on a raised mire in the Solway estuary and the processes involved in their formation. *Journal of Archaeological Science* 28, pp. 1-18.
- Collis, K. 1996. Documentary evidence. In J.A. Dunkley and C.G. Cumberpatch (eds.), *Excavations at 16-20 Church Street, Bawtry,*



- South Yorkshire. BAR (British Series) 248. Oxford: Tempus Reparatum.
- Cumberpatch, C.G. 1995. An Archaeological Evaluation at Gainsborough Road, Bawtry. *Archaeology in South Yorkshire* 1994-1995, p.53.
- Cumberpatch, C.G. 1996a. The pottery. In J.A. Dunkley and C.G. Cumberpatch (eds.), *Excavations at 16-20 Church Street, Bawtry, South Yorkshire*. BAR (British Series) 248. Oxford: Tempus Reparatum.
- Cumberpatch, C.G. 1996b. *Interpretation and narrative*. In J.A. Dunkley and C.G. Cumberpatch (eds.), *Excavations at 16-20 Church Street, Bawtry, South Yorkshire*. BAR (British Series) 248. Oxford: Tempus Reparatum.
- Cumberpatch, C.G. 1997. Towards a phenomenological approach to the study of medieval pottery. In C.G. Cumberpatch and P.W. Blinkhorn (eds.), *Not so much a pot, more a way of life*. Oxbow Monograph 83. Oxbow Books
- Cumberpatch, C.G. 2002. The pottery. In I. Roberts, *Pontefract Castle Archaeological Excavations 1982-86*. Yorkshire Archaeology 8. West Yorkshire Archaeology Service/English Heritage; 169-226.
- Cumberpatch, C.G. 2003. The transformation of tradition; the origins of the post-medieval ceramic tradition in Yorkshire. Assemblage 7 <a href="http://www.shef.ac.uk/assem/issue7/cumberpatch.html">http://www.shef.ac.uk/assem/issue7/cumberpatch.html</a>
- Cumberpatch, C.G. 2004a. South Yorkshire and north Derbyshire medieval ceramics reference collection <a href="http://ads.ahds.ac.uk/catalogue/specColl/ceramics eh 2003/">http://ads.ahds.ac.uk/catalogue/specColl/ceramics eh 2003/</a>
- Cumberpatch, C.G. 2004b. *Medieval and post-medieval pottery production in the Rotherham area* <a href="http://ads.ahds.ac.uk/catalogue/specColl/ceramics-eh-2003/">http://ads.ahds.ac.uk/catalogue/specColl/ceramics-eh-2003/</a>
- Cumberpatch, C.G. 2004c. *Pottery from excavations at Silkstone, Barnsley, South Yorkshire*. English Heritage Centre for Archaeology Report number 50/2004.
- Cumberpatch, C.G. 2006a. *Medieval and later pottery from Bridge Lane House, Bawtry, South Yorkshire (ARCUS 1033): An assessment.* Unpublished assessment report for ARCUS (University of Sheffield).
- Cumberpatch, C.G. 2006b. *Pottery from excavations at 36, The Boyle, Barwick-in-Elmet (BOY2006)*. Unpublished archive report for the Barwick-in-Elmet Historical Society.
- Cumberpatch, C.G. 2007. Pottery from Gainsborough Road, Bawtry, South Yorkshire (ARCUS 1033b): An assessment. Unpublished assessment report for ARCUS (University of Sheffield).
- Cumberpatch, C.G., Chadwick, A.M., and Atkinson, S. 1998-1999. *A medieval pottery kiln in Hallgate, Doncaster, South Yorkshire*. Medieval Ceramics 22-23; 47-65.
- Davis, S.J.M. 1992. A rapid method for recording information about mammal bones from archaeological sites. *Ancient Monuments Laboratory Report* 19/92.



- Didsbury, P. and Watkins, J.G. 1992. The Pottery. In: D.H. Evans and D.G. Tomlinson, *Excavations at 33-35 Eastgate, Beverley*. Sheffield Excavation Reports 3, 81-121.
- Dransfield, N. 2006. Project Design for an Archaeological Evaluation on Land at Bridge house, Bawtry, South Yorkshire. Unpublished ARCUS report number 1033.1.
- Driesch, A. von den. 1976. *A Guide to the Measurement of Animal Bones from Archaeological Sites*. Cambridge, Massachusetts: Peabody Museum of Archaeology and Ethnology, Bulletin no. 1.
- Dunkley, J.A. and Cumberpatch, C.G. 1996. *Excavations at 16-20 Church Street, Bawtry, South Yorkshire*. BAR (British Series) 248. Oxford: Tempus Reparatum.
- Edwards, D and Hampson, R. 2005. White Salt Glazed Stoneware of the British Isles. Antique Collectors Club.
- English Heritage. 1998. Dendrochronology: guidelines on producing and interpreting dendrochronological dates. English Heritage.
- Evans, J, Hartley, K. and Mills, P. 2008. *The Mortaria*. In H.E.M. Cool and D.J.P. Mason (eds.), *Roman Piercebridge Excavations by D.W. Harding and Peter Scott 1969-81*; 197-207 and D130-48. The Architectural and Archaeological Society of Durham and Northumberland Research Report 7.
- Gaimster, D. 1997. German stoneware 1200-1900. British Museum Press.
- Gearey, B.R., Hall, A.R., Kenward, H., Bunting, M.J., Lillie, M.C. and Carrott, J. 2005. Recent palaeoenvironmental evidence for the processing of hemp (Cannabis sativa L.) in eastern England during the medieval period. *Medieval Archaeology* 49 (1), pp. 317-322.
- Gee, E. 1981. Stone from the medieval limestone quarries of South Yorkshire. In A.Detsicas (ed.), *Collecteana Historica: Essays in Memory of Stuart Rigold*, pp.247-255.
- Gibson, M. 1999. Nineteenth century Lustre ware. Antique Collectors Club.
- Goodwin, 1967. The ancient cultivation of hemp. *Antiquity* 61, pp. 42-49.
- Grant, A. 1982. The use of tooth wear as a guide to the age of domestic ungulates. In B. Wilson, C. Grigson and S. Payne (eds.), *Ageing and Sexing Animal Bone from Archaeological Sites*. British Archaeological Reports (British Series) 109, pp.91-108.
- Green, F.J. 1984. The archaeological and documentary evidence for plants from the medieval period in Britain. In W. Van Zeist and W.A. Casparie (eds.). *Plants and Ancient Man*. Rotterdam: Balkema, pp. 99-114.
- Greig, J.R.A. 1991. The British Isles. In W. Van Zeist *et al. Progress in Old World Palaeoethnobotany.* Rotterdam: Balkema, pp. 299-334.
- Habermehl, K.H. 1975. *Die Altersbestimmung bei Haus- und Labortieren 2. vollständig neubearbeitete Auflage*. Berlin and Hamburg: Paul Parey.
- Habermehl, K.H. 1985. *Die Altersbestimmung bei Wild- und Pelztieren*. 2nd edition Berlin and Hamburg: Paul Parey.



- Hadley, D. 2009. Excavations at the Chapel of St Mary Magdalene, Bawtry, South Yorkshire (June 2007). Unpublished University of Sheffield report.
- Hayfield, C. 1992. Humberware: the development of a late-medieval pottery tradition. In D. Gaimster and M. Redknap (eds.), *Everyday and exotic pottery from Europe*. Oxbow Books.
- Hayfield, C. and Buckland, P. 1989. *Late medieval pottery wasters from Firsby, South Yorkshire*. Transactions of the Hunter Archaeological Society 15; 8-24.
- Hayfield, C. and Grieg, J. 1990. Excavation and salvage work on a moated site at Cowick, South Humberside 1976: Part 2: The finds assemblage. Yorkshire Archaeological Journal 62; 111-115.
- Hey, D. 1979. The Making of South Yorkshire. Moorland Publishing.
- Hey, D. 1980. Packmen, carriers and packhorse roads: Trade and communications in North Derbyshire and South Yorkshire.
- Higgins, D. A., and Davey, P. J. 2004. Draft Guidelines for Using the Clay Tobacco Pipe Record Sheets. In S. D. White (ed.), *The Dynamics of Regionalisation and Trade: Yorkshire Clay Tobacco Pipes c.1600-1800, The Archaeology of the Clay Tobacco Pipe*, XVIII, British Archaeological Reports (British Series) 374, Oxford: Tempus Reparatum, pp:487-90.
- Holland, D. 1976. *Bawtry and the Idle River Trade*. Museum and Art Gallery, Doncaster.
- Hubbard, R.N.L.B. and al Azm, A. 1990. Quantifying preservation and distortion in carbonised seeds; and investigating the history of Friké production. *Journal of Archaeological Science* 17, pp. 103-106.
- Ickowicz, P. 1993. *Martincamp ware: a problem of attribution.* Medieval Ceramics 17; 51-60.
- Jefferson, P. 2002. *Desk Based Assessment of land near Bawtry Hall*. ARCUS Unpublised report 716.1.
- Kowaleski-Wallace, E. 1997. Consuming subjects: Women, shopping and business in the eighteenth century. Columbia University Press.
- Lánská, D. 1992. *The Illustrated Guide to Edible Plants*. London: Chancellor Press.
- Lloyd, N. 1925. A History of English Brickwork. Reprinted 2003.
- Magilton, J.R. 1977. *The Doncaster District: An Archaeological Survey.* A Museums and Arts Service Publication, Chequer Road, Doncaster.
- Margary, I.D., 1957 Roman Roads in Britain. Volume II Phoenix House Ltd.
- Mayes, P. and Hayfield, C. 1980. *A late medieval kiln at Holme-upon-Spalding Moor, North Humberside*. Hull Old Town Report Series No. 4. E.R.A.S. Vol. 6
- Nailor, V. and Young, J. 2001. A fabric type series for post-Roman pottery in Nottingham (5<sup>th</sup> to 16<sup>th</sup> centuries). Unpublished manuscript.



- Neave, D. 1991. Pantiles: their use and manufacture in the Humber Region. In D. Tyszka, K. Miller, and G. Bryant (eds). *Land, People and Landscape. Lincolnshire County Council*, 93-8.
- O'Neill, R. 2001. Archaeological Evaluation on land to the south of 20 Church Street. Unpublished ASWYAS report.
- O'Neill, R. 2006a. *Brief statement of Archaeological Evaluation at Bridge Lane House, Bawtry, South Yorkshire*. Unpublished ARCUS report number 1033.2.
- O'Neill, R. 2006b. *Interim Report of Archaeological Evaluation at Bridge Lane House, Bawtry, South Yorkshire*. Unpublished ARCUS report number 1033.3.
- O'Neill, R. 2007a. Assessment Report of Archaeological Evaluation at Bridge Lane House, Bawtry, South Yorkshire. Unpublished ARCUS report number 1033.4.
- O'Neill, R. 2007b. Project Design for Archaeological Mitigation Works on land north of Gainsborough Road, Bawtry, South Yorkshire. Unpublished ARCUS Project Design 1033b.1.
- O'Neill, R and Jackson, R. 2007. Archaeological Watching Brief at Bawtry Hall, Bawtry, Doncaster, South Yorkshire. ARCUS Unpublished report 944c.1.
- Peck, W. 1813 (reprinted 1992). A Topographical History and Description of Bawtry and Thorne, with the Villages Adjacent.
- Phillips. 1983. Wild Food. London: Pan Books.
- Pre-Construct Archaeology. 2003, Land Adjacent to Bawtry Hall, Tickhill Road, Bawtry, South Yorkshire: An archaeological field evaluation and buildings appraisal. PCA unpublished report.
- Richards, S. 1999. *Eighteenth-century ceramics: Products for a civilised society.* Manchester University Press.
- Riley, D.N. 1980. Early Landscapes from the Air: Studies of crop marks in South Yorkshire and North Nottinghamshire. Department of Archaeology and Prehistory, University of Sheffield.
- Schweingruber, F. H. 1978. *Microscopic wood anatomy* (2nd edition). Fluck-Wirth.
- Stace, C. 1997. *New Flora of the British Isles* (2<sup>nd</sup> edition). Cambridge: Cambridge University Press.
- Stopford. J. 2005. Medieval Floor Tiles of Northern England. Oxbow Books.
- Sydes, R.E. and Dunkley, J. 1991. Excavations in Bawtry. In *Archaeology in South Yorkshire 1990-1991: A review of the work of the South Yorkshire Archaeology Unit.*
- Tibbles, J. Forthcoming. The ceramic and other building materials. In J.Lee, *Excavations at Blanket Row, Hull.*
- Tibbles, J. 2006. *The Ceramic and other Building Materials from Staynor Hall, Selby.* Unpublished JT Ceramic Building Material Developers Report No. 3000.



- Tibble, J. and Tibbles, S. E. 2004. The Ceramic and other Building Materials from Askews Print Shop Doncaster, West Yorkshire. Unpublished JT Ceramic Building Material Developers Report No. 2044.
- Tibbles, J. 2001. The Ceramic Building Material. In R.George, *Trial Excavations At County Hall Beverley, East Riding of Yorkshire*. Unpublished Humber Archaeology Report No.84.
- Tyers, I. 2004. *Dendro for Windows program guide 3rd edition*. ARCUS Report 500b.
- Watkins, J. G. 1987. The Pottery. In: P. Armstrong and B. Ayers (Eds.) Excavations in High Street and Blackfriargate, Hull Old Town Report Series No. 5. East Riding Archaeologist 8, 53-181.
- Watkins, J. G. 1991. *The Pottery*. In: P. Armstrong, D. Tomlinson and D.H. Evans (Eds.) *Excavations at Lurk Lane, Beverley 1979-82*. Sheffield Excavation Report 1, Department of Archaeology and Prehistory, University of Sheffield, 61-103.
- White, S. D. 2004. The Dynamics of Regionalisation and Trade: Yorkshire Clay Tobacco Pipes c1600-1800. In P. Davey and D. A. Higgins (eds.), *The Archaeology of the Clay Tobacco Pipe*, XVIII, British Archaeological Reports (British Series) 374, Oxford: Tempus Reparatum.
- Woodward, M. (ed.). 1990. *Gerard's Herbal: The History of Plants*. London: Studio Editions.
- Young, C.J. 2000. *The Roman Pottery Industry of the Oxford Region*. British Archaeological Reports British Series 43.
- Young, J and Vince A. with Nailor, V. 2005. *A corpus of Anglo-Saxon and medieval pottery from Lincoln*. Lincoln Archaeological Studies No. 7. Oxbow Books.



# 11 APPENDIX 1: ARCHIVE INDEX

File No.	NAR Cat.	Details	Format	No. Sheets
1	-	Index to Archive	A4	3
3	Α	Client Report	A4	116
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1	D	B/W Negatives	Neg	6
1	В	B Trench Matrices		1
FINDS	No. OF BOXES (5: 2 small, 2 medium, 1 large)			

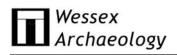


# 12 APPENDIX 2: CONTEXT SUMMARY

Context Number	Trench Number	Context Type	Interpretation
100	Evaluation Trench 1	Layer/Deposit	Topsoil
101	Evaluation Trench 1	Deposit	Natural geology
102	Evaluation Trench 1	Deposit	Fill of natural hollows in 101
103	Evaluation Trench 1	Layer/Deposit	Subsoil
104	Evaluation Trench 1	Layer/Deposit	Rubble from demolition
105	Evaluation Trench 1	Layer/Deposit	Sandy clay below 104
106	Evaluation Trench 1	Cut	Cut channel
107	Evaluation Trench 1	Layer/Deposit	Primary fill of 106
108	Evaluation Trench 1	Structure	Wooden stakes in 106
200	Evaluation Trench 2	Layer/Deposit	Topsoil
201	Evaluation Trench 2	Layer/Deposit	Subsoil
202	Evaluation Trench 2	Layer/Deposit	General alluvial deposit
203	Evaluation Trench 2	Layer/Deposit	Band of black deposit within 202
204	Evaluation Trench 2	Layer/Deposit	Band of mottled clay and black within 203
205	Evaluation Trench 2	Masonry	Brick wall
206	Evaluation Trench 2	Layer/Deposit	Grey deposit with charcoal above 202/203
207	Evaluation Trench 2	Cut	Cut for wooden drainage
208	Evaluation Trench 2	Layer/Deposit	Fill of cut 207
209	Evaluation Trench 2	Layer/Deposit	Fill of channel
210	Evaluation Trench 2	Layer/Deposit	Natural deposit
211	Evaluation Trench 2	Wooden structure	Wooden stakes in base of 212
212	Evaluation Trench 2	Cut	Possible ditch/channel
213	Evaluation Trench 2	Cut	Possible pond
214	Evaluation Trench 2	Layer/Deposit	Grey fill under 203
215	Evaluation Trench 2	Cut	Re-cut for wall 205 robbing
216	Evaluation Trench 2	Layer/Deposit	Fill of cut 215
217	Evaluation Trench 2	Layer/Deposit	Fill above 210, same as 209 in south section of the trench
300	Evaluation Trench 3	Layer/Deposit	Topsoil
301	Evaluation Trench 3	Layer/Deposit	Subsoil
302	Evaluation Trench 3	Layer/Deposit	Natural geology
303	Evaluation Trench 3	Cut	Cut into natural truncating 306
304	Evaluation Trench 3	Layer/Deposit	Fill of cut 303
305	Evaluation Trench 3	Cut	Cut into natural
306	Evaluation Trench 3	Layer/Deposit	Fill of cut 305
307	Evaluation Trench 3	Cut	Cut into natural, irregular shape
308	Evaluation Trench 3	Layer/Deposit	Fill of cut 307
309	Evaluation Trench 3	Cut	Cut for wooden lining/barrel
310	Evaluation Trench 3	Layer/Deposit	Fill of 309 (grey-brown sand)



Context Number	Trench Number	Context Type	Interpretation
311	Evaluation Trench 3	Layer/Deposit	Fill of 309 (brown sand)
312	Evaluation Trench 3	Cut	Cut associated with 07; Group
313	Evaluation Trench 3	Layer/Deposit	Fill of 312; Group
314	Evaluation Trench 3	Cut	Square cut in southern section of the trench
315	Evaluation Trench 3	Layer/Deposit	Fill of cut 314
316	Evaluation Trench 3	Cut	Posthole re-cutting 346, 344 and 342; part of Group 325
317	Evaluation Trench 3	Layer/Deposit	Fill of 316
318	Evaluation Trench 3	Cut	Primary cut under 316; part of Group 325
319	Evaluation Trench 3	Layer/Deposit	Fill of cut 318
320	Evaluation Trench 3	Layer/Deposit	Modern rubble lens visible in section, overlying 317
321	Evaluation Trench 3	Layer/Deposit	Lower deposit of yellow sand in cut 309, underlying 311
322	Evaluation Trench 3	Masonry	Timber lining in 309
323	Evaluation Trench 3	Layer/Deposit	Upper fill of 309
324	Evaluation Trench 3	Group	Group: 303, 304, 305, 306, 328 and 329
325	Evaluation Trench 3	Group	Group: 314-19, 326 and 327
326	Evaluation Trench 3	Layer/Deposit	Fill of 326
327	Evaluation Trench 3	Cut	Posthole, possibly later re-cut by 314; part of Group 325
328	Evaluation Trench 3	Layer/Deposit	Fill of 328
329	Evaluation Trench 3	Cut	Posthole, possibly re-cut by 305; part of Group 324
330	Evaluation Trench 3	Layer/Deposit	Fill of 330
331	Evaluation Trench 3	Cut	Posthole, part of Group 312
332	Evaluation Trench 3	Layer/Deposit	Fill of 332
333	Evaluation Trench 3	Cut	Irregular cut, part of Group 312
334	Evaluation Trench 3	Layer/Deposit	Fill of 334
335	Evaluation Trench 3	Cut	Small cut , part of Group 388
336	Evaluation Trench 3	Layer/Deposit	Fill of 336
337	Evaluation Trench 3	Cut	Posthole, part of group 312
338	Evaluation Trench 3	Layer/Deposit	Fill of 338
339	Evaluation Trench 3	Cut	Posthole; part of Group 312
340	Evaluation Trench 3	Layer/Deposit	Fill of 341
341	Evaluation Trench 3	Cut	Posthole; part of Group 324
342	Evaluation Trench 3	Layer/Deposit	Fill of 343
343	Evaluation Trench 3	Cut	Posthole, part of Group 325
344	Evaluation Trench 3	Layer/Deposit	Fill of 345
345	Evaluation Trench 3	Cut	Posthole; part of Group 325
346	Evaluation Trench 3	Layer/Deposit	Fill of 347
347	Evaluation Trench 3	Cut	Posthole; part of Group 325
326	Mitigation Area A	Cut	Southernmost posthole; part of Group 388



Context Number	Trench Number	Context Type	Interpretation
327	Mitigation Area A	Layer/Deposit	Fill of 326
328	Mitigation Area A	Cut	Posthole, later re-cut of 391; part of Group 388
329	Mitigation Area A	Layer/Deposit	Fill of 328
330	Mitigation Area A	Cut	Posthole; part of Group 388
331	Mitigation Area A	Layer/Deposit	Fill of 330
332	Mitigation Area A	Cut	Posthole; part of Evaluation Group 325 and Mitigation Group 388
333	Mitigation Area A	Layer/Deposit	Fill of 332; backfill from evaluation trench
334	Mitigation Area A	Cut	Posthole, part of Evaluation Group 324 and Mitigation Group 388
335	Mitigation Area A	Layer/Deposit	Fill of 334, backfill from evaluation trench
336	Mitigation Area A	Cut	Posthole; part of Group 312 and 388
337	Mitigation Area A	Layer/Deposit	Fill of 336
338	Mitigation Area A	Cut	Posthole, later re-cut of 393; part of Group 388
339	Mitigation Area A	Layer/Deposit	Fill of 338
340	Mitigation Area A	Cut	Posthole; part of Group 388
341	Mitigation Area A	Layer/Deposit	Fill of 340
342	Mitigation Area A	Cut	Posthole, part of Group 388
343	Mitigation Area A	Layer/Deposit	Fill of 342
344	Mitigation Area A	Cut	Posthole, later re-cut of 395; part of Group 388
345	Mitigation Area A	Layer/Deposit	Fill of 344
346	Mitigation Area A	Cut	Posthole, similar to 399, later re-cut of 397; part of Group 388
347	Mitigation Area A	Layer/Deposit	Fill of 346
348	Mitigation Area A	Cut	Posthole; part of Group 388
349	Mitigation Area A	Layer/Deposit	Fill of 348
350	Mitigation Area A	Cut	Posthole; part of Group 388
351	Mitigation Area A	Layer/Deposit	Fill of 350
352	Mitigation Area A	Cut	Posthole; part of Group 388
353	Mitigation Area A	Layer/Deposit	Fill of 352
354	Mitigation Area A	Cut	Posthole, isolated but near Group 388
355	Mitigation Area A	Layer/Deposit	Fill of 354
356	Mitigation Area A	Cut	Isolated posthole near Group 388
357	Mitigation Area A	Layer/Deposit	Fill of 356
358	Mitigation Area A	Cut	Barrel pit, same as 309
359	Mitigation Area A	Layer/Deposit	Upper fill of 358
360	Mitigation Area A	Cut	Modern geotechnical trial trench
361	Mitigation Area A	Layer/Deposit	Fill of 360
362	Mitigation Area A	Cut	Cut for a wooden barrel 322
363	Mitigation Area A	Layer/Deposit	Fill of 362
364	Mitigation Area A	Cut	Linear cut similar to 401
365	Mitigation Area A	Layer/Deposit	Fill of 364



Context Number	Trench Number	Context Type	Interpretation
366	Mitigation Area A	Cut	Large rectangular re-cut of 419
367	Mitigation Area A	Layer/Deposit	Top fill of 366
368	Mitigation Area A	Void	Void
369	Mitigation Area A	Void	Void
370	Mitigation Area A	Cut	Cut north-west from 364 and 401
371	Mitigation Area A	Layer/Deposit	Fill of 370
372	Mitigation Area A	Cut	Possible posthole north of 370
373	Mitigation Area A	Layer/Deposit	Fill of 372
374	Mitigation Area A	Cut	Large rectangular cut, same as 389; possible pit or pond
375	Mitigation Area A	Layer/Deposit	Top fill of 374
376	Mitigation Area A	Cut	Modern drain from a recently demolished building
377	Mitigation Area A	Layer/Deposit	Fill of 376
378	Mitigation Area A	Cut	Linear cut related to recently demolished house
379	Mitigation Area A	Layer/Deposit	Fill of 378
380	Mitigation Area A	Void	Void
381	Mitigation Area A	Void	Void
382	Mitigation Area A	Cut	Modern drain
383	Mitigation Area A	Layer/Deposit	Modern drain silting
384	Mitigation Area A	Cut	Modern drain
385	Mitigation Area A	Layer/Deposit	Modern drain silting
386	Mitigation Area A	Cut	Circular cut truncating 410 and 413
387	Mitigation Area A	Layer/Deposit	Fill of 386
388	Mitigation Area A	Group	Postholes group: 326, 391, 328, 330, 332, 334, 336, 393, 338, 340, 342, 395, 344, 397, 346, 399, 348, 350, 352
389	Mitigation Area A	Cut	Same as 374
390	Mitigation Area A	Layer/Deposit	Same as 375
391	Mitigation Area A	Cut	Posthole, primary cut, later re-cut by 328; part of Group 388
392	Mitigation Area A	Layer/Deposit	Fill of 391, re-deposited natural material
393	Mitigation Area A	Cut	Posthole, re-cut by 338; part of Group 388
394	Mitigation Area A	Layer/Deposit	Fill of 393
395	Mitigation Area A	Cut	Posthole, re-cut by 344; part of Group 388
396	Mitigation Area A	Layer/Deposit	Fill of 395
397	Mitigation Area A	Cut	Posthole, part of Group 388; later re-cut by 346/399
398	Mitigation Area A	Layer/Deposit	Fill of 387
399	Mitigation Area A	Cut	Re-cut of posthole 397
400	Mitigation Area A	Layer/Deposit	Fill of 399
401	Mitigation Area A	Cut	Linear cut parallel to 364
402	Mitigation Area A	Layer/Deposit	Fill of 401



Context Number	Trench Number	Context Type	Interpretation
403	Mitigation Area A	Cut	Rectangular cut truncated by 401
404	Mitigation Area A	Layer/Deposit	Fill of cut 403
405	Mitigation Area A	Layer/Deposit	Fill of 374
406	Mitigation Area A	Layer/Deposit	Primary fill of cut 374
407	Mitigation Area A	Layer/Deposit	Fill of 366, natural accumulation of organic material
408	Mitigation Area A	Cut	Cut into 401
409	Mitigation Area A	Layer/Deposit	Fill of 408
410	Mitigation Area A	Cut	Probable large rectangular pit parallel to 413
411	Mitigation Area A	Layer/Deposit	Secondary fill of 410
412	Mitigation Area A	Layer/Deposit	Primary fill of 410
413	Mitigation Area A	Cut	Linear cut/ditch in northern extent of Area A
414	Mitigation Area A	Layer/Deposit	Fill of 413
415	Mitigation Area A	Cut	Rectangular cut of possible pit
416	Mitigation Area A	Layer/Deposit	Fill of 415
417	Mitigation Area A	Void	Void
418	Mitigation Area A	Void	Void
419	Mitigation Area A	Cut	Large rectangular cut, possible pit or pond later re-cut by 366
420	Mitigation Area A	Layer/Deposit	Fill of 419
421	Mitigation Area A	Layer/Deposit	Primary fill of possible barrel pit 362
422	Mitigation Area A	Layer/Deposit	Clayey silt fill of 374
423	Mitigation Area A	Structure	Wooden edge reinforcement/revetment
424	Mitigation Area A	Structure	Wooden stakes for revetment
425	Mitigation Area A	Masonry	Cobbled surface
426	Mitigation Area A	Layer/Deposit	Primary fill of 366



#### 13 APPENDIX 3: TABLES

### Table 1 - Ceramics

Tr.	Context	Type	No	Wt	ENV	Part	Form	Decoration	Date range	Notes
1	100	Brown Glazed Coarseware	1	12	1	BS	Pancheon	Brown glaze int	LC18th - C19th	
1	100	Brown Salt Glazed Stoneware	1	18	1	BS	Hollow ware	U/Dec	C19th	
1	100	Brown Salt Glazed Stoneware	1	14	1	Rim	Bowl	Parallel lines of stamped motifs ext	C19th	Typical BSGSW bowl
1	100	Cane Coloured ware	2	23	2	BS	Dish	U/Dec	C19th	
1	100	TP Whiteware	1	5	1	Recessed base	Mug	U/ID floral frieze, probably in the Chinese style	M - LC19th	
1	100	TP Whiteware	1	4	1	BS	Hollow ware	Two Temples	M - LC19th	
1	100	Whiteware	1	35	1	BS	Hollow ware	Raised floral elements & long handle stump w/ painted detail	C19th	Unusual hand painted/moulded decoration ext
1	100	Whiteware	1	4	1	BS	Hollow ware	U/Dec	LC19th - EC20th	
1	101	Brown Glazed Coarseware	1	16	1	BS	?Pancheon	Brown glaze int only	C18th - EC19th	
1	101	Brown Glazed Fineware	1	7	1	BS	Hollow ware	Brown glaze int & ext	C18th - EC19th	
1	101	Coal Measures Whiteware	1	10	1	BS	Hollow ware	Patchy yellow/brown glaze ext	LC13th - EC15th	
1	101	Edged ware	1	41	1	Rim	Plate	Even scallop w/ impressed straight lines	c.1809 - c.1831	See Brooks 2005:41, Figure 4.29
1	101	Late Blackware	1	9	1	BS	Hollow ware	Black glaze int & ext	C18th	
1	101	TP Bone China	2	20	1	Ring foot base	Dish	Pale red TP design int; rural scene	C19th	
1	101	Unglazed Red Earthenware	1	62	1	Base	Jar	U/Dec	C18th - EC19th	Abraded; large jar, not a flowerpot
1	101	Whiteware	1	24	1	Handle	Jug	U/Dec	M - LC19th	



Tr.	Context	Туре	No	Wt	ENV	Part	Form	Decoration	Date range	Notes
1	102	Coal Measures Purple ware	1	5	1	BS	Hollow ware	Mottled green/brown glaze ext	C15th - C16th	
1	102	Coal Measures Whiteware	1	127	1	Strap handle	Jug	Central groove, yellow-green glaze	LC13th - LC14th	Slightly abraded
1	102	Humberware	1	9	1	Base	Hollow ware	U/Dec	LC13th - C15th	
1	102	Humberware type	2	24	2	BS	Hollow ware	U/Dec	LC13th - C15th	Softer than normal and heavily abraded
1	102	Humberware type	1	111	1	Handle & BS	Jug	Patchy green glaze ext	LC13th - C15th	Softer than normal and heavily abraded; prominent perforation through wall and into handle
1	103	Creamware	1	3	1	BS	Plate	U/Dec	c.1740 - c.1820	Flaked
1	105	Coal Measures Whiteware	1	156	1	Spigot hole/BS	Cistern	Impressed circles on spigot hole	LC13th - EC13th	Patchy yellow/green glaze ext
1	105	Humberware	1	7	1	BS	Hollow ware	Patchy green glaze ext	LC13th - C15th	
1	105	Reduced Sandy ware	1	7	1	BS	Hollow ware	Mottled green glaze ext	?C13th - C15th	Unidentified type
1	107	Coal Measures Purple ware	1	80	1	BS	Hollow ware	Thick purple glaze ext	LC15th - C16th	Typical CMP w/ purple pimples int only
1	107	Coal Measures type ware	1	64	1	Rim	Jug	Traces of clear glaze ext	Medieval	A Coal Measures fabric but not one of the typical local types; unidentified regional import
1	107	Humberware	1	18	1	Base	Hollow ware	U/Dec	LC13th - C15th	
1	107	Medieval Whiteware	1	25	1	BS	Hollow ware	Rilled body with bright green flakey glaze	C13th - C15th	Unidentified type; hard, dense pale grey fabric w/ white margins
1	107	Reduced Sandy ware	1	13	1	BS	Hollow ware	Green glaze ext	LC13th - C15th	Probably a slightly sandy Humberware
2	200	Brown Glazed Coarseware	1	8	1	BS	Hollow ware	Brown glaze ext, patchy glaze int	C17th - C18th	Dark red body w/ sparse incs
2	200	Brown Glazed Coarseware	1	36	1	Rod handle	Hollow ware	Brown glaze on top of handle	C17th - C18th	Early BGCW type
2	200	Brown Glazed Coarseware	1	58	1	Base	Hollow ware	Very shiny black glaze int & ext	C18th	Use wear on underside of base; fine orange body
2	200	Brown Glazed Fineware	2	79	2	BS	Hollow ware	Brown glaze int & ext	C17th - C18th	Earlier type of BGFW



Tr.	Context	Туре	No	Wt	ENV	Part	Form	Decoration	Date range	Notes
2	200	Brown Salt Glazed Stoneware	1	14	1	BS	Hollow ware	U/Dec	C19th	
2	200	Slipware type 1	1	17	1	Rim	Dish	Trailed white wavy line on rim	C17th - EC18th	Flaked int
2	200	TP Pearlware	1	501	1	Base	Mug	Unidentified design with an antiquary and classical ruins in a desert	c.1780 - c.1840	See also cxt 208 for a similar design possibly from the same vessel
2	200	TP Whiteware	1	3	1	BS	Hollow ware	Unidentified geometric design	M - LC19th	Surface badly damaged; flaked and chipped
2	200	TP Whiteware	1	1	1	Rim	Flatware	Unidentified geometric design int	M - LC19th	
2	201	Brown Glazed Coarseware	1	61	1	BS	Pancheon	Brown glaze int only	LC18th - C19th	Rilled ext
2	201	Brown Salt Glazed Stoneware	1	92	1	Base	Hollow ware	Stamped and rouletted bands ext	C19th	Use wear on underside of base
2	201	Edged ware	1	13	1	Rim	Plate	Wavy edge, moulded 'Grass' pattern & blue paint	c.1784 - c.1812	See Brooks 2005:41
2	201	Edged ware	3	35	1	BS	Jug/gravy boat	Moulded body w/ Edged ware effect on body	EC19th	Much whiter than contemporary Pearlware
2	201	Mottled ware	1	6	1	BS	Hollow ware	Dark mottled glaze int & ext	C18th	
2	201	TP Whiteware	1	28	1	BS	Cup	Two Temples	M - LC19th	Part of square maker's mark on underside
2	202	Cane Coloured ware	1	13	1	Ring foot base	Hollow ware	U/Dec	C19th	Angular ring foot base
2	202	Coal Measures Purple ware	1	137	1	Rim & handle	Jug	Patchy purple glaze ext	C15th - C16th	Narrow strap handle; stacking scar around top of rim
2	202	Mottled ware	1	3	1	BS	Hollow ware	Mottled glaze int & ext	C18th	Red fabric, not the normal buff colour
2	202	Slipware	1	15	1	BS	Dish	White on red slip internally; feathered slip	C18th	Press-moulded body sherd
2	203	Coal Measures Purple ware	1	38	1	Base	Hollow ware	Patchy glaze int & ext	C15th - C16th	
2	203	Coal Measures Purple ware	1	7	1	BS	Hollow ware	Patchy glaze int & ext	C15th - C16th	
2	205	Brown Glazed Fineware	1	7	1	BS	Hollow ware	Clear glaze w/ some mottling ext	C17th - C18th	



Tr.	Context	Туре	No	Wt	ENV	Part	Form	Decoration	Date range	Notes
2	205	Green Glazed Sandy ware	1	19	1	Rim	Dish	Green glaze int	C15th - C16th	
2	205	Martincamp flask	1	4	1	BS	Flask	U/Dec	C15th - C17th	Red core w/ dark grey ext margin; see Ickowicz 1993
2	208	?Pearlware	2	25	1	Rim	Plate	U/Dec	EC19th	Dished rim profile; could be a very light Whiteware
2	208	Brown Glazed Coarseware	1	69	1	Rim	Pancheon	Brown glaze int only	C18th - C19th	Square sectioned rim w/ pronounced groove ext & flat top
2	208	Brown Glazed Coarseware	3	243	3	Base & BS	Pancheon	Brown glaze int	C18th - C19th	Flat bases, rather thin
2	208	Brown Salt Glazed Stoneware	1	14	1	Base	Hollow ware	U/Dec	LC18th - C19th	
2	208	Cane Coloured ware	1	43	1	Rim	Pie dish	U/Dec	C19th	
2	208	Cane Coloured ware	1	6	1	BS	Hollow ware	U/Dec	C19th	
2	208	Creamware	1	87	1	Ring foot base	Bowl	U/Dec	c.1740 - c.1820	Angular ring foot base
2	208	Creamware	1	31	1	Ring foot base	Large bowl	U/Dec	c.1740 - c.1820	Angular ring foot base
2	208	Creamware	1	18	1	BS	Hollow ware	Band of five raised ridges ext	c.1740 - c.1820	
2	208	Creamware	8	68	8	BS	Hollow ware	U/Dec	c.1740 - c.1820	
2	208	Creamware	2	24	1	Rim	Dish/bowl	U/Dec	c.1740 - c.1820	Narrow everted rim
2	208	Creamware	1	12	1	Rim & spout	Jug	U/Dec	c.1740 - c.1820	
2	208	Creamware	1	17	1	Rim	Dish	U/Dec	c.1740 - c.1820	Thick, sharply everted rim; firing contact scar int
2	208	Creamware	1	19	1	Rim	Dish	U/Dec	c.1740 - c.1820	Narrow sharply everted rim
2	208	Creamware	2	28	2	Rim	Bowl	U/Dec	c.1740 - c.1820	Plain rim
2	208	Edged ware	2	77	1	Profile	Plate	Even scallop impressed straight line	c.1809 - c.1831	See Brooks 2005:41, Fig 4.29;D
2	208	Edged ware	1	7	1	Rim	Plate	Even scallop impressed straight line	c.1809 - c.1831	See Brooks 2005:41, Fig 4.29;D
2	208	Lustre ware	1	3	1	BS	Hollow ware	Gold lustre int., curvilinear design ext	C19th	Fine red fabric
2	208	Mottled ware	1	2	1	Handle &	Mug	Mottled glaze	C18th	Flaked



Tr.	Context	Туре	No	Wt	ENV	Part	Form	Decoration	Date range	Notes
						BS				
2	208	Pearlware	3	125	3	Recessed base	Plate	U/Dec	c.1780 - c.1840	Probably Edged ware
2	208	Pearlware	1	3	1	Base	Flatware	U/Dec	c.1780 - c.1840	Vey light Pearlware
2	208	Pearlware	2	31	1	Rim	Plate	U/Dec	c.1780 - c.1840	Very light Pearlware
2	208	Pearlware	1	9	1	Flat base	Dish	U/Dec	c.1780 - c.1840	Very light Pearlware
2	208	TP Pearlware	1	13	1	Rim	Mug	Unidentified design with classical ruins in a desert setting	c.1780 - c.1840	See also context 200 for a similar design possibly from the same vessel
2	208	TP Pearlware	1	6	1	Footring base	Saucer	Unidentified black printed rural design	c.1780 - c.1840	
2	208	Unglazed Red Earthenware	1	104	1	Rim	Hollow ware	U/Dec	C18th - C19th	Probably a horticultural vessel
2	209	Coal Measures Purple ware	1	149	1	Base	Hollow ware	Patchy brown / purple glaze int & ext	C15th - C16th	
2	209	Coal Measures Whiteware type	1	17	1	BS	Hollow ware	Green glaze ext	LC14th - EC16th	Unusual glaze; pale grey CM fabric
2	214	Yellow Glazed Coarseware	1	1	1	Chip	U/ID	White slip int under clear glaze	C18th - C19th	
2	217	Mottled ware	1	5	1	BS	Hollow ware	Mottled glaze int & ext	C18th	Fine dark red fabric resembling Cistercian ware
2	288	Brown Salt Glazed Stoneware	1	5	1	Rim	Hollow ware	Everted rim w/ incised lines below rim	LC18th - C19th	
2	288	Whiteware	2	2	1	BS	Flatware	U/Dec	M - LC19th	
3	300	Brown Glazed Coarseware type	1	261	1	Base	Jar	Brown glaze int	C19th	Unusual white fabric; use wear on underside
3	300	Brown Glazed Coarseware type	5	91	5	BS	Pancheon	Brown glaze int	C18th - C19th	Normal red fabric
3	300	Brown Glazed Fineware	1	5	1	BS	Hollow ware	Brown glaze int & ext	C18th - C19th	
3	300	Brown Salt Glazed	1	70	1	Rim	Dish	Stamped linear motifs ext	C19th	Everted rim



Tr.	Context	Туре	No	Wt	ENV	Part	Form	Decoration	Date range	Notes
		Stoneware								
3	300	Brown Salt Glazed Stoneware	1	59	1	Rim	Bowl	Stamped linear motifs	C19th	Clubbed beaded rim
3	300	Brown Salt Glazed Stoneware	2	69	2	Rim	Bowl	Incised lines and stamped decoration	LC18th - C19th	Rolled rim; two sherds probably from the same vessel
3	300	Cistercian ware	1	1	1	BS	Hollow ware	U/Dec	c.1450 - c.1600	
3	300	Coal Measures Whiteware	1	7	1	BS	Hollow ware	Mottled yellow/brown glaze int & ext	C14th - EC15th	
3	300	Coal Measures Whiteware	1	14	1	BS	Hollow ware	Spots of clear glaze ext	C14th - EC15th	
3	300	Coal Measures Whiteware	1	8	1	BS	Hollow ware	Patchy clear / pale green glaze ext	C14th - EC15th	
3	300	Coal Measures Whiteware	1	5	1	BS	Hollow ware	Pale green glaze ext	C14th - EC15th	Fine, almost white fabric
3	300	Edged ware	1	1	1	Rim	Plate	Moulded wavy edge with blue paint	c.1810 - c.1830	Flaked & abraded
3	300	Humberware	1	51	1	Base	Hollow ware	Pinched feet, patchy glaze	LC13th - C15th	
3	300	Humberware	1	6	1	BS	Hollow ware	Green glaze ext	LC13th - C15th	
3	300	Humberware	1	4	1	BS	Hollow ware	U/Dec	LC13th - C15th	
3	300	Late Blackware	1	7	1	BS	Hollow ware	Black glaze int only	C18th - C19th	Glaze fuming ext
3	300	Reduced Sandy ware	1	6	1	BS	Hollow ware	Dark green glaze w/ slight mottling	C13th - C15th	
3	300	Redware	2	17	2	Base & BS	Dish	Clear glaze int	C17th - EC18th	
3	300	Stoneware	1	180	1	BS	Flagon	Green finish int & ext	M - LC19th	
3	300	Tin Glazed Earthenware	1	8	1	Rim	Bowl	Blue lines internally on white tin glaze	LC16th - MC18th	
3	300	TP Whiteware	3	3	3	BS	U/ID	Small sherds with unidentifiable designs	M - LC19th	
3	300	Transfer Printed Whiteware	1	36	1	Rim	Mug	Green printed commemorative design	LC19th	Queen Victoria commemorative mug/jug w/ 'HER IN HEALTH & WEALTH LONG TO LIVE' on scroll
3	300	Transfer Printed Whiteware	1	9	1	Base	Plate	Unidentified TP design int	LC19th - EC20th	



Tr.	Context	Туре	No	Wt	ENV	Part	Form	Decoration	Date range	Notes
3	300	Transfer Printed Whiteware	1	16	1	Rim	Plate	TP floral design int	M - LC19th	
3	300	Unglazed Red Earthenware	2	7	2	BS	Hollow ware	U/Dec	Medieval	Fine oxidised sandy ware; probably late medieval
3	300	White Salt Glazed Stoneware	1	42	1	Base	Dish/bowl	U/Dec	c.1720 - c.1780	
3	300	White Salt Glazed Stoneware	1	5	1	Rim	Plate	Feather moulded edge and a wavy rim	c.1720 - c.1780	
3	300	Whiteware	1	2	1	Handle	Cup	U/Dec	M - LC19th	
3	301	Coal Measures Fineware	1	50	1	BS	Hollow ware	Spots of glaze ext	LC13th - EC15th	
3	301	Coal Measures Fineware	1	28	1	BS	Hollow ware	Shiny green glaze ext	LC13th - EC15th	
3	301	Humberware	3	105	3	Base	Hollow ware	U/Dec	LC13th - C15th	
3	301	Humberware	2	18	2	BS	Hollow ware	Green glaze ext	LC13th - C15th	
3	301	Humberware	4	110	4	BS	Hollow ware	Applied and impressed/pinched decoration ext; green glaze	LC13th - C15th	Typical Humberware decoration
3	301	Humberware type	1	23	1	BS	Hollow ware	Green glaze ext	LC13th - C15th	Hard, dark grey possibly secondarily burnt Humberware
3	301	Roman Greyware	1	44	1	Rim	Jar	U/Dec	Roman	See Table 3
3	304	Oxidised Sandy ware	1	1	1	BS	Hollow ware	U/Dec	Medieval	Small abraded body sherds; abundant fine rounded quartz up to 0.1mm
3	304	Oxidised Sandy ware	1	12	1	BS	Hollow ware	U/Dec	Medieval	Abraded sherd; reduced w/ ox margin ext; abundant rounded quarts up to 0.5mm
3	308	?Scarboroug h ware	1	1	1	BS	Hollow ware	Dark green glaze ext	C13th - C14th	Slightly sandier than typical Scarborough ware
3	308	Coal Measures Whiteware	3	99	2	BS	Hollow ware	Mottled green glaze ext	LC13th - LC14th	
3	308	Coal Measures Whiteware	1	98	1	BS	Hollow ware	Impressed lines ext; knife trimmed	LC13th - LC14th	
3	308	Humberware	7	62	7	BS	Hollow ware	Green glaze ext	LC13th - C15th	
3	308	Humberware	1	47	1	Base	Hollow ware	U/Dec	LC13th - C15th	Stacking scar on underside



Tr.	Context	Туре	No	Wt	ENV	Part	Form	Decoration	Date range	Notes
3	308	Humberware type	1	18	1	Base	Hollow ware	White slip ext	LC13th - C15th	Sandy Humberware
3	308	Humberware type	1	2	1	BS	Hollow ware	Patchy green glaze ext	LC13th - C15th	Sandy Humberware
3	308	Oxidised Sandy ware	2	4	2	Flakes	Hollow ware	U/ID	Medieval	Internal flakes; quartz & sparse black grit up to 1mm
3	308	Oxidised Sandy ware	1	6	1	BS	Hollow ware	Patchy mottled green glaze ext	Medieval	Abundant sub-angular quartz grit up to 0.8mm
3	308	Reduced Sandy ware	1	3	1	BS	Hollow ware	U/Dec	Medieval	Overfired reduced sherds
3	310	Coal Measures Whiteware type	1	1	1	BS	Hollow ware	U/Dec	C13th - C14th	Fine white fabric w/ abundant quartz grit & occasional black grit
3	310	Humberware	3	18	3	BS	Hollow ware	Green glaze ext	LC13th - C15th	
3	310	Humberware	3	130	3	BS	Hollow ware	Patchy streaky green glaze ext	LC13th - C15th	
3	310	Oxidised Sandy ware	1	2	1	BS	Hollow ware	Bright green glaze ext	C13th - C15th	Fine orange quartz tempered sandy ware
3	310	Oxidised Sandy ware	2	3	1	BS	Hollow ware	U/Dec	Medieval	Dull orange sherds containing fine quartz up to 0.5mm & large black vesicular grit up to 3mm
3	311	Buff Sandy ware	1	10	1	BS	Hollow ware	U/Dec	LC11th - C13th	Fine buff fabric w/ quartz & round white non-crystalline grit
3	311	Coal Measures Whiteware	1	2	1	BS	Hollow ware	Pale green mottled glaze ext	C14th - C15th	Pale grey fabric w/ abundant quartz & iron-rich grit
3	311	Hallgate A ware	1	3	1	BS	Base	U/Dec	C13th	
3	311	Humberware	1	10	1	BS	Hollow ware	Overfired glaze ext	LC13th - c15th	Blistered
3	311	Humberware	2	39	1	Rim	Jug	Green glaze ext	LC13th - C15th	Pulled spout, flat-topped clubbed rim
3	311	Humberware	5	125	3	BS & handle thumbing	Jug	Green glaze ext	LC13th - C15th	Probably two vessels
3	311	Humberware	12	165	12	BS	Hollow ware	Green glaze ext	LC13th - C15th	
3	311	Humberware	8	312	4	BS	Hollow ware	Green glaze w/ shallow parallel grooves on shoulder	LC13th - C15th	Probably one vessel
3	311	Humberware	10	235	10	BS	Hollow ware	Streaks & runs of green glaze ext	LC13th - C15th	Lower body sherds
3	311	Humberware	1	12	1	Base	Hollow ware	Partial green glaze on underside	LC13th - C15th	Stacking scar on underside
3	311	Humberware	1	69	1	Rim	Jug	Patchy green glaze ext	LC13th - C15th	Pulled spout; pronounced hammerhead rim w/flat top



Tr.	Context	Type	No	Wt	ENV	Part	Form	Decoration	Date range	Notes
3	311	Humberware	1	23	1	BS	Hollow ware	Applied strips, in part impressed	LC13th - C15th	
3	311	Oxidised Sandy ware	1	27	1	BS	Hollow ware	Patchy splashed glaze ext	LC11th - EC13th	Slightly abraded; could be a Doncaster type, cf early Hallgate A types; Sample No. 33
3	312	Shell Tempered ware	1	1	1	BS	Hollow ware	U/Dec	Medieval	Heavily abraded fragment
3	315	Coal Measures Purple ware	1	30	1	BS	Jar	Thumb impressed band around neck; thick purple glaze ext	LC15th - C16th	
3	321	Coal Measures Whiteware	1	3	1	BS	Hollow ware	Mottled green glaze ext	C14th - C15th	Pale grey body w/ abundant quartz grit up to 1mm w/ occasional black grit
3	321	East Yorks Sandy ware type	1	8	1	Rim	Jug	U/Dec	LC13th - C14th	Abraded bright orange sandy ware; probably East Yorkshire
3	321	Humberware	1	2	1	BS	Hollow ware	Green glaze ext	LC13th - C15th	Sample No. 35
3	321	Humberware	2	203	1	BS	Hollow ware	Patchy green glaze ext	LC13th - C15th	Oxidised throughout
3	321	Humberware	4	28	4	BS	Hollow ware	Green glaze ext	LC13th - C15th	
3	321	Humberware	1	24	1	BS	Hollow ware	Applied and impressed strip and green glaze	LC13th - C15th	
3	321	Reduced Sandy ware	1	10	1	BS	Hollow ware	Friable green glaze ext	LC13th - C15th	Sandier than Humberware w/ abundant quartz grit up to 0.5mm
3	323	Hallgate A ware	1	15	1	BS	Hollow ware	Knife trimmed ext	C13th	
3	327	Humberware	1	29	1	BS	Hollow ware	Patchy green glaze ext	LC13th - C15th	
3	327	Oxidised sandy ware	1	6	1	BS	Hollow ware	White slip ext and spots int	C13th - C14th	Possibly Lincoln
3	329	Coal Measures Whiteware	1	36	1	BS	Hollow ware	Mottled brown/yellow glaze	C14th - C15th	Thumb impressed handle stump
3	333	Reduced Sandy ware	1	5	1	BS	Hollow ware	U/Dec	Late Medieval	Dark grey sandy ware w/ moderate fine quartz grit
3	341	Coal Measures Fineware type	3	34	1	Rim	Hollow ware	Everted triangular profiled rim	C14th - C15th	
3	341	Coal Measures Purple ware	1	18	1	BS	Hollow ware	Mottled purple/green gaze ext	C15th - C16th	
3	343	Oxidised Sandy ware	1	3	1	BS	Hollow ware	U/Dec	LC13th - C14th	Buff int & ext, pale grey core; abundant well sorted fine quartz



Tr.	Context	Type	No	Wt	ENV	Part	Form	Decoration	Date range	Notes
3	343	Oxidised Sandy ware	1	5	1	BS	Hollow ware	U/Dec	C13th	Could be Hallgate A; contains abundant rounded quartz grit
3	347	Humberware type	1	5	1	BS	Hollow ware	White slip ext	LC13th - C15th	Sandy Humberware
3	347	Roman Greyware	1	8	1	BS	Hollow ware	U/Dec	Roman	See Table 3
3	349	Scarborough 2 ware	1	2	1	BS	Hollow ware	Green glaze ext	LC13th - EC14th	
3	349	White Salt Glazed Stoneware	1	2	1	BS	Hollow ware	Incised line ext	c.1720 - c.1780	
3	352	Humberware	1	76	1	BS	Hollow ware	Patchy green glaze ext	LC13th - C15th	
3	353	Oxidised Sandy ware	1	1	1	BS	Hollow ware	U/Dec	Undated	Unidentified
3	353	Roman Greyware	1	16	1	Rim	Hollow ware	U/Dec	Roman	
3	359	Brown Glazed Coarseware type	1	4	1	BS	Open vessel	Flaked brown glaze int	C17th - EC19th	Earlier BGCW
3	359	Gritty ware	1	5	1	Rim	Jug	U/Dec	C13th - C15th	Distinctive flat-topped inturned rim; white body with abundant quartz, black grit & white non-crystalline rock frags
3	359	Hallgate A ware	1	2	1	BS	Hollow ware	U/Dec	C13th	
3	359	Hallgate A ware	1	7	1	BS	Hollow ware	U/Dec	C13th	
3	359	Humberware	6	63	6	BS	Hollow ware	Patchy green glaze ext	LC13th - C15th	Fine dark grey reduced Humberware
3	359	Humberware	1	1	1	BS	Hollow ware	Green glaze ext	LC13th - C15th	White slip int
3	359	Humberware	1	57	1	BS	Jug	Green glaze ext	LC13th - C15th	Fine dark grey reduced Humberware; Handle thumbing
3	359	Humberware	2	30	2	Base	Hollow ware	One with pinched feet	LC13th - C15th	Fine Humberware
3	359	Humberware	4	67	4	BS	Hollow ware	Patchy green glaze ext	LC13th - C15th	Sandy Humberware
3	359	Oxidised Sandy ware	1	9	1	Base	Hollow ware	U/Dec	LC11th - C13th	Fine, soft oxidised sandy ware w/ fine quartz & muscovite
3	359	Reduced Sandy ware	1	3	1	BS	Hollow ware	Flakey pale green glaze ext	C13th - EC14th	Probably a Hallgate type
3	362	Hallgate A ware	1	33	1	BS	Hollow ware	White slip ext	C13th	
3	363	Buff Sandy ware	1	23	1	BS	Hollow ware	U/Dec	Medieval	Hard, dense buff body w/ abundant fine rounded quartz up to 0.4mm, occasional white non-crystalline grit up



Tr.	Context	Туре	No	Wt	ENV	Part	Form	Decoration	Date range	Notes
										to 1mm
3	363	Hallgate A ware	1	27	1	BS	Hollow ware	Spots of glaze ext	C13th	
3	363	Hallgate A ware	1	21	1	Base	Hollow ware	Spots of gaze on underside	C13th	
3	363	Hallgate A ware type	2	23	2	BS	Hollow ware	White slip ext	C13th	Abundant sub-angular quartz grit & occasional red non-crystalline grit in an oxidised body
3	363	Hallgate B	1	2	1	BS	Hollow ware	U/Dec	C12th	Small abraded sherd
3	363	Humberware	1	1	1	BS	Hollow ware	Applied and impressed strip and green glaze ext	LC13th - C15th	
3	363	Humberware type	1	180	1	Base	Hollow ware	White slip ext, patchy glaze on underside	LC13th - C15th	Stacking scar on underside; abundant sub-angular quartz grit & sparse red grit
3	363	Humberware type	2	32	1	Rim	Jug	Green glaze ext, ridge below rim	LC13th - C14th	Pulled spout; fine reduced fabric w/ abundant fine quartz grit
3	363	Medieval Whiteware	1	10	1	BS	Hollow ware	Green glaze int & ext	Medieval	Coal Measures clay; pale grey fabric w/ moderate quartz & dark red grit
3	363	Nott. Light Bodied Green Glazed ware	1	5	1	BS	Hollow ware	Bright green glaze ext	E/MC13th - E/MC14th	
3	363	Oxidised Sandy ware	1	2	1	BS	Hollow ware	U/Dec	Medieval	Fine sandy textured sherd; fine quartz & occasional black grit
3	363	Reduced Sandy ware	1	7	1	BS	Hollow ware	Green glaze ext	Medieval	Fine pale grey reduced fabric; unidentified type
3	363	Reduced Sandy ware	1	46	1	Rod handle	Jug	Grooves on top of handle; friable patchy green glaze	C13th - C14th	Probably Doncaster although rod handles are not common in Hallgate A
3	363	Reduced Sandy ware	1	4	1	BS	Hollow ware	Green glaze ext	C13th - C15th	Fine sandy reduced fabric w/abundant quartz grit
3	363	Reduced Sandy ware	1	15	1	BS	Hollow ware	Green glaze ext	C13th - C15th	Hard, dense, pale grey reduced fabric w/ abundant quartz up to 0.5mm
3	363	Roman Greyware	2	41	2	Rim	Jar & bowl	U/Dec	Roman	See Table 3
3	363	Splash Glazed Sandy ware	1	13	1	BS	Hollow ware	Sparse splash glaze ext	LC11th - EC13th	?Hallgate A type
3	363	White Gritty ware	1	16	1	BS	Hollow ware	U/Dec	MC11th - C13th	Bright white fabric w/ quartz and red & black non-crystalline grit; a coal measures fabric but not CMW
3	365	Coal Measures Whiteware	1	40	1	Base	Hollow ware	Patchy mottled glaze int & ext	C14th - C15th	Knife trimmed ext



Tr.	Context	Туре	No	Wt	ENV	Part	Form	Decoration	Date range	Notes
3	367	Buff Gritty ware	1	7	1	Rim	Rim	U/Dec	C14th - C15th	Rounded, inturned rim in a buff body w/ quartz & rounded black grit; ?coal measures clay
3	367	Cistercian ware	1	1	1	Rim	Cup/tyg	Dark glaze int & ext	c.1450 - c.1600	
3	367	Coal Measures Purple ware	3	38	3	BS	Hollow ware	Thick purple glaze ext; impressed lines ext	C15th - C16th	
3	367	Coal Measures Purple ware	3	270	3	BS	Hollow ware	Sparse purple glaze ext	C15th - C16th	
3	367	Coal Measures Purple ware	2	79	1	BS & handle stump	Jug/Jar	Mottled green glaze ext	C15th - C16th	Handle stump
3	367	Coal Measures Purple ware	1	28	1	BS	Hollow ware	Patchy thin purple glaze ext	C14th - C15th	Pale grey reduced throughout
3	367	Coal Measures type ware	1	146	1	Strap handle	Jug	Grooves and ridges on top of handle	C14th - C15th	Buff to dark grey fabric w/ abundant quartz and black grit up to 1mm
3	367	Coal Measures type ware	3	30	3	BS	Hollow ware	Patchy glaze ext	C14th - C15th	Hard body w/ quartz & black grit
3	367	Coal Measures type ware	2	61	2	BS	Hollow ware	Dark green glaze ext, multiple impressed lines ext	C14th - C15th	Ambiguous CM type; hard, dense, reduced body falls between CMW & CMP
3	367	Coal Measures type ware	1	79	1	Base	Hollow ware	Glaze int	C14th - C15th	Discoloured throughout
3	367	Coal Measures Whiteware	1	10	1	BS	Hollow ware	Green glaze ext	C13th	Fine coal measures fabric w/ abundant quartz up to 1mm & occasional black grit
3	367	Coal Measures Whiteware	2	15	2	BS	Hollow ware	U/Dec	C14th - C15th	Hard, dense buff fabric w/ moderate quartz & black grit up to 0.5mm
3	367	Coal Measures Whiteware	1	45	1	Handle	Jug	Patchy green-yellow glaze ext	C14th - C15th	
3	367	Coal Measures Whiteware	1	54	1	Base	Hollow ware	Patchy mottled glaze int & ext	C14th - C15th	Knife trimmed ext
3	367	Coal Measures Whiteware	1	41	1	BS	Hollow ware	Patchy discoloured glaze ext; thin impressed lines ext	C14th - C15th	Overfired
3	367	Coal	1	8	1	BS	Hollow ware	U/Dec	C14th - C15th	Heavily sooted ext; fine white coal



Tr.	Context	Туре	No	Wt	ENV	Part	Form	Decoration	Date range	Notes
		Measures Whiteware type								measures fabric w/ quartz & black grit
3	367	Fine Sandy ware	1	5	1	BS	Hollow ware	Yellow glaze ext with black pellets ext	Medieval	Fine dull orange fabric w/ sparse fine quartz grit
3	367	Hallgate A ware	2	12	2	BS	Hollow ware	U/Dec	C13th	Slightly abraded
3	367	Hallgate A1 ware type	1	8	1	BS	Hollow ware	Sparse splash glaze ext	LC11th - EC13th	Early Hallgate; abraded
3	367	Humberware	1	177	1	Rim & handle	Jug	Grooves on top of strap handle	LC13th - C15th	Probably Cowick, strap handle
3	367	Humberware	25	531	25	BS	Hollow ware	Some w/ green glaze ext	LC13th - C15th	
3	367	Humberware	1	16	1	BS	Hollow ware	Applied curved strip ext under green glaze	LC13th - C15th	
3	367	Humberware	1	18	1	Rim	Jug	U/Dec	LC13th - C15th	Rounded, slightly inturned rim
3	367	Humberware	1	18	1	Base	Hollow ware	Pinched feet	LC13th - C15th	
3	367	Humberware	1	30	1	Rod handle	Jug	Green glaze	LC13th - C15th	
3	367	Humberware type	1	11	1	BS	Hollow ware	White slip ext	LC13th - C15th	Slightly sandy Humberware
3	367	Medieval Whiteware	1	3	1	BS	Hollow ware	Matte yellow-green glaze ext	Medieval	Abundant fine rounded quartz grit in a white body
3	367	Medieval Whiteware	1	22	1	BS	Hollow ware	U/Dec	C14th - C15th	White body, abundantly tempered w/ quartz and round white non-crystalline grit up to 2mm
3	367	Nott. Light Bodied Green Glazed ware	1	7	1	BS	Hollow ware	Bright flakey green glaze ext	E/MC13th - E/MC14th	
3	367	Oxidised Sandy ware	1	9	1	BS	U/ID	Pale green glaze int	?C13th - C14th	Oxidised fabric resembling Hallgate A but internal glaze is unusual
3	367	Raeren stoneware	4	148	3	BS	Hollow ware	Rilled body, dark brown glaze ext	C14th - C16th	Could be Siegburg; prominent rilling ext, shiny brown glaze
3	367	Reduced Sandy ware	1	2	1	BS	Hollow ware			Dense, hard, dark grey w/ pale grey ext margin; fine angular quartz grit up to 2mm
3	367	Reduced Sandy ware	1	2	1	BS	Hollow ware	Friable green glaze ext	C13th - C14th	Fine reduced fabric w/ occasional fine quartz grit
3	367	Reduced Sandy ware	1	14	1	BS	Hollow ware	Dark green glaze ext	C14th - C15th	Very hard, dense reduced body with abundant fine quartz
3	367	Reduced Sandy ware	1	17	1	BS	Hollow ware	Friable green glaze ext	Medieval	Heavily abraded; pale grey throughout w/ moderate, well-sorted fine quartz grit



Tr.	Context	Туре	No	Wt	ENV	Part	Form	Decoration	Date range	Notes
3	371	Coal Measures Whiteware	1	14	1	BS/handle	Hollow ware	Patchy green glaze ext	C14th - C15th	
3	371	Coal Measures Whiteware	1	30	1	Base	Hollow ware	Patchy glaze ext	C14th - C15th	Knife trimmed ext, stacking scar on underside
3	371	Coal Measures Whiteware type	1	6	1	BS	Hollow ware	Friable green glaze ext	C14th - EC15th	Fine white fabric w/ abundant rounded quartz grit up to 0.5mm
3	371	German Stoneware	1	2	1	BS	Hollow ware	Grey finish, rilled body	C15th - C16th	?Frechen-Koln
3	371	Humberware	1	2	1	BS	Hollow ware	U/Dec	LC13th - C15th	
3	371	Slipware type 1	1	3	1	BS	Dish	Trailed white slip under clear glaze int	C17th - EC18th	
3	375	Hallgate A ware	1	14	1	Base	Hollow ware	Spots of glaze on underside	C13th	
3	375	Hallgate A ware	1	16	1	BS	Hollow ware	U/Dec	C13th - C15th	
3	375	Hallgate A ware type	1	36	1	BS	Hollow ware	White slip ext	LC13th - C15th	Unusual white slip
3	375	Humberware	1	21	1	BS	Hollow ware	Patchy green glaze ext	LC13th - C15th	
3	375	Humberware type	1	15	1	BS	Hollow ware	Green glaze ext	LC13th - C15th	Reduced throughout, sandy texture
3	375	Reduced Sandy ware	2	59	1	Rim	Jug	Patchy green glaze ext, misfired	C13th - C14th	Simple pulled spout; possibly a reduced Hallgate vessel
3	375	Roman Greyware	1	17	1	Base	Hollow ware	U/Dec	Roman	See Table 3
3	375	Roman mortarium	1	118	1	Rim	Mortarium	White slip ext	Roman	See Table 3
3	375	Siegburg stoneware	1	48	1	Base	Tankard/mu g	Brown iron wash ext	C14th - C15th	Typical 'elephants foot' base; See also context 420
3	381	Roman Greyware	1	12	1	BS	Hollow ware	U/Dec	Roman	See Table 3
3	387	Beverley 1 ware	1	5	1	BS	Hollow ware	Dark green glaze ext	C13th - EC14th	
3	387	Coal Measures Fineware	11	135	1	Handle & BS	?Jug	Mottled green glaze ext	LC13th - LC14th	Probably one vessel; hard, fine CM fabric but much finer than normal CMW
3	387	Humberware	1	18	1	BS	Jug	Impressed lines ext	LC13th - C15th	
3	387	Humberware type	1	2	1	BS	Hollow ware	Rouletted pattern ext under green glaze	LC13th - C15th	Slightly sandier than normal
3	387	Reduced	5	103	4	BS	Hollow ware	Patchy thin green glaze ext	C13th - C15th	Hard, dense, reduced sandy ware w/



Tr.	Context	Туре	No	Wt	ENV	Part	Form	Decoration	Date range	Notes
		Sandy ware								abundant fine quartz up to 0.5mm
3	387	Sandy ware	2	16	2	BS	Hollow ware	U/Dec	Medieval	Abundant rounded quartz grit up to 1mm, mainly finer
3	390	Coal Measures Whiteware type	1	6	1	Rim	Jug	Patchy green glaze ext	C14th - C15th	Fine buff to pale grey fabric w/ abundant fine round quartz & occasional black grit
3	390	East Yorks Sandy ware type	2	3	2	BS	Hollow ware	U/Dec	C12th - C13th	May be Beverley, one heavily abraded
3	390	Hallgate A ware	1	7	1	BS	Hollow ware	Mottled green glaze ext	C13th	
3	390	Hallgate A ware	1	27	1	Base	Hollow ware	Patchy green glaze ext	C13th	Sample No. 11
3	390	Nott Reduced Green Glazed ware	1	33	1	Base	Hollow ware	Patchy green glaze ext	C13th - C15th	Splayed base
3	390	Oxidised Sandy ware	1	3	1	BS	Hollow ware	Thin, sparse clear/green glaze ext	C13th - C14th	Fine dark orange fabric w/ fine quartz
3	390	Reduced Sandy ware	1	15	1	BS	Hollow ware	Dark green glaze ext w/ metallic glaze strip ext	C13th - C15th	Fine reduced sandy ware w/ fine quartz grit
3	390	Reduced Sandy ware	1	9	1	BS	Hollow ware	U/Dec	C13th - C14th	Hard, dense, reduced fabric w/ abundant fine quartz grit; Sample No. 11
3	390	Unglazed Red Earthenware	1	35	1	BS	Hollow ware	Red slip int & ext	C17th - C18th	Fine buff fabric w/ occasional round non-crystalline grit
3	398	Roman greyware	1	13	1	BS	Hollow ware	Impressed line	Roman	See Table 3
3	349 PH12	Humberware	1	4	1	BS	Hollow ware	Green glaze ext	LC13th - C15th	PH12
3	349 PH12	Shell Tempered ware	1	4	1	Rim	Hollow ware	U/Dec	Medieval	
3	U/S	Humberware	1	28	1	BS	Hollow ware	U/Dec	LC13th - C15th	U/S Backfill evaluation trench 3
4	402	Redware	3	83	3	Base & BS	Hollow ware	Clear glaze int	C17th - EC18th	Flaked internally
4	404	Oxidised Sandy ware	1	6	1	BS	Hollow ware	Small spots of dark glaze int & ext	Late Med/Post- med	Red fabric w/ fine black incs
4	407	Coal Measures Fineware type	1	17	1	BS	Hollow ware	Dark green glaze ext	C13th - C14th	Buff fabric w/ abundant fine sub- rounded quartz and black grit; not standard CM ware



Tr.	Context	Туре	No	Wt	ENV	Part	Form	Decoration	Date range	Notes
4	407	Coal Measures Fineware type	1	9	1	BS	Hollow ware	Mottled green glaze ext	C14th - C15th	White to pale grey body with abundant quartz and occasional black grit
4	407	Coal Measures Fineware type	1	9	1	BS	Hollow ware	Mottled brown glaze	C14th - C15th	Buff body with quartz and non- crystalline black grit up to 1mm
4	407	Coal Measures Purple ware	3	133	3	BS	Hollow ware	Patchy purple glaze ext	C15th - C16th	
4	407	Coal Measures Whiteware	1	21	1	Rim	Jug	U/Dec	C14th - C15th	Finely finished flat-topped clubbed rim
4	407	Hallgate A ware ?	1	5	1	BS	Hollow ware	Spot of dark glaze ext	C13th	
4	407	Humberware	4	61	4	BS	Hollow ware	Three plain and one green glazed sherd	LC13th - C15th	
4	407	Humberware	1	19	1	Rim	Jug	White slip under green glaze	LC13th - C15th	Slightly sandy Humberware fabric
4	407	Siegburg stoneware	1	6	1	Base	Tankard/mu q	Pinched base	C14th - C15th	See also cxt 420 but does not join
4	407	Transfer Printed Whiteware	1	2	1	BS	?Bowl	Chinese landscape int	M - LC19th	
4	411	Beverley 2 ware type	2	37	1	BS	Hollow ware	Dark green glaze with metallic pellet decoration	MC13th - EC14th	
4	411	Buff Sandy ware	1	8	1	BS	Hollow ware	U/Dec	Medieval	Buff-white body w/ moderate fine quartz sand
4	411	Coal Measures Purple type ware	1	8	1	BS	Hollow ware	Mottled green glaze ext	C14th - C15th	Fine, hard, semi-vitrified reduced fabric w/ quartz & fine black grit
4	411	Coal Measures Whiteware	1	10	1	BS	Hollow ware	Spots of thin glaze ext	C14th - C15th	Very white fabric
4	411	Coal Measures Whiteware	1	5	1	BS	Hollow ware	Patchy brown glaze ext	C14th - EC15th	Buff fabric w/ quartz & black iron-rich grit up to 0.5mm
4	411	East Yorks Sandy ware	2	10	2	BS	Hollow ware	Bright green glaze on white slip	C13th - C14th	Bright orange fine sandy fabric resembling Beverley
4	411	Humberware	1	65	1	BS	Hollow ware	Pinched feet	LC13th - C15th	Large jug or jar
4	411	Humberware	1	43	1	Rim	Jug	Green glaze ext	LC13th - C15th	Oxidised throughout
4	411	Humberware	1	13	1	Rim	Jug	Green glaze ext w/ grooves ext	LC13th - C15th	Flat-topped hammerhead rim; reduced



Tr.	Context	Туре	No	Wt	ENV	Part	Form	Decoration	Date range	Notes
										throughout
4	411	Humberware	3	25	3	BS	Hollow ware	Patchy green glaze ext	LC13th - C15th	
4	411	Humberware	1	45	1	Base	Hollow ware	U/Dec	LC13th - C15th	Oxidised ext, reduced int
4	411	Humberware	1	9	1	BS	Hollow ware	U/Dec	LC13th - C15th	
4	411	Humberware	1	8	1	BS	Hollow ware	Thin white slip ext	LC13th - C15th	
4	411	Humberware	1	2	1	BS	Hollow ware	Green-brown glaze ext	C13th - C15th	Fine reduced body
4	411	Medieval Whiteware	1	5	1	BS	Hollow ware	Green glaze ext	Medieval	Pinkish white fabric w/ moderate/abundant well-sorted round quartz grit & black incs up to 1mm, mainly finer
4	411	Medieval Whiteware	1	4	1	BS	Hollow ware	U/Dec	Medieval	Heavily sooted ext; moderate fine quartz grit & fine red grit
4	411	Nottingham Early Green Glazed ware	11	861	1	Base & BS	Jug	Thin patchy pale green glaze ext	E - MC13th	See also context 412
4	411	Oxidised Sandy ware	1	22	1	Base	Hollow ware	U/Dec	C13th - C15th	Knife trimmed ext; abundant rounded quartz sand; possibly a Humberware type
4	411	Oxidised Sandy ware	1	8	1	BS	Hollow ware	Clear glaze ext	C13th - C15th	A fine, even sandy ware of unidentified type w/ quartz up to 0.1mm, rarely larger
4	411	Oxidised Sandy ware	2	3	2	BS	Hollow ware	U/Dec	C13th - C14th	Possibly Hallgate A
4	411	Purple Glazed Humberware	1	14	1	BS	Hollow ware	Rilled ext w/ patchy purple glaze ext	C15th	Reduced throughout
4	411	Reduced Sandy ware	1	6	1	BS	Hollow ware	Patchy mottled green glaze ext	C13th - C15th	Hard, dense reduced fabric w/ abundant quartz grit up to 0.8mm; ?Doncaster
4	411	Reduced Sandy ware	1	19	1	BS	Hollow ware	Misfired green glaze ext	C13th - C15th	Fine quartz tempered reduced body; abundant round quartz up to 0.5mm
4	411	Roman Greyware	1	6	1	BS	Hollow ware	U/Dec	Roman	See Table 3
4	411	Unidentified import (?German)	1	3	1	Rim	Bottle	Rilled neck below rim	C14th - C16th	Buff stoneware body
4	412	Beverley 2 ware	2	26	2	BS	Hollow ware	Dark green glaze ext	LC13th - EC14th	
4	412	Humberware	1	11	1	Base	Hollow ware	Patchy glaze ext	LC13th - C15th	
4	412	Humberware	1	38	1	BS	Hollow ware	Unglazed	LC13th - C15th	



Tr.	Context	Type	No	Wt	ENV	Part	Form	Decoration	Date range	Notes
	412	• • • • • • • • • • • • • • • • • • • •		45		BS			LC13th - C15th	
4		Humberware	2	_	2	_	Hollow ware	Patchy green glaze ext		
4	412	Humberware	1	74	1	Strap handle	Jug	Patchy green glaze	LC13th - C15th	
4	412	Humberware	1	32	1	BS	Hollow ware	Dark green glaze ext	LC13th - C15th	Sandy Humberware type fabric containing quartz
4	412	Humberware type	1	13	1	BS	Hollow ware	Dark green glaze ext	LC13th - C15th	Streak of glaze ext; abundant quartz grit & occasional black grit
4	412	Nottingham Early Green Glazed ware	13	180	8	BS	Hollow ware	Thin pale green glaze ext	E - MC13th	Probably one vessel; quartz & fine black grit; see also context 411 & 416
4	414	Coal Measures Purple ware	1	93	1	Base	Hollow ware	Patchy purple glaze on underside of base	C15th - C16th	
4	416	Hallgate A ware	1	11	1	Base	Hollow ware	U/Dec	C13th	
4	416	Hallgate A ware	4	30	4	BS	Hollow ware	U/Dec	C13th	
4	416	Humberware	1	82	1	Rod handle	Jug	Mottled green glaze	LC13th - C15th	
4	416	Humberware	2	31	2	BS	Hollow ware	U/Dec	LC13th - C15th	Sandy Humberware; cf. Holme-on- Spalding Moor
4	416	Nottingham Early Green Glazed ware	1	10	1	BS	Hollow ware	Thin pale green glaze ext	E - MC13th	See also contexts 411 & 412
4	416	Oxidised Sandy ware	2	21	2	BS	Hollow ware	Bright green glaze ext	C13th - C14th	One buff, one red w/ abundant rounded quartz grit up to 0.5mm; unidentified type
4	416	Roman Greyware	1	28	1	BS	Hollow ware	U/Dec	Roman	See Table 3
4	416	Shell Tempered ware	1	6	1	BS	Hollow ware	U/Dec	Medieval	Abraded, leached Shell Tempered ware
4	416	Hallgate A ware	1	11	1	Base	Hollow ware	U/Dec	C13th	
4	416	Hallgate A ware	4	30	4	BS	Hollow ware	U/Dec	C13th	
4	416	Humberware	1	82	1	Rod handle	Jug	Mottled green glaze	LC13th - C15th	
4	416	Humberware	2	31	2	BS	Hollow ware	U/Dec	LC13th - C15th	Sandy Humberware; cf. Holme-on- Spalding Moor
4	416	Nottingham Early Green Glazed ware	1	10	1	BS	Hollow ware	Thin pale green glaze ext	E - MC13th	See also contexts 411 & 412
4	416	Oxidised	2	21	2	BS	Hollow ware	Bright green glaze ext	C13th - C14th	One buff, one red w/ abundant



Tr.	Context	Туре	No	Wt	ENV	Part	Form	Decoration	Date range	Notes
		Sandy ware								rounded quartz grit up to 0.5mm; unidentified type
4	416	Roman Greyware	1	28	1	BS	Hollow ware	U/Dec	Roman	See Table 3
4	416	Shell Tempered ware	1	6	1	BS	Hollow ware	U/Dec	Medieval	Abraded, leached Shell Tempered ware
4	420	Coal Measures Purple ware	2	157	2	BS	Hollow ware	Patchy purple glaze int & ext	15th - C16th	
4	420	Coal Measures Purple ware	1	63	1	BS	Hollow ware	Spots of purple glaze ext, patchy pale green glaze int.	C14th - C15th	Pale grey reduced body, knife trimmed ext
4	420	Coal Measures Whiteware	7	117	4	BS	Hollow ware	Impressed grooves ext, mottled yellow/brown glaze	C14th - C15th	Cream body w/ the normal range of abundant quartz & red/black non- crystalline grit
4	420	Coal Measures Whiteware	1	34	1	BS	Hollow ware	Impressed lines ext	C14th - C15th	Cream body ext, pale grey int w/ glaze fuming
4	420	Coal Measures Whiteware	1	12	1	BS	Hollow ware	Clear mottled glaze ext	C14th - C15th	Cream/white body w/ abundant fine quartz, fine non-crystalline red and white grit
4	420	Coal Measures Whiteware	1	21	1	BS	Hollow ware	U/Dec	C14th - C15th	Fine CM type ware, buff external surface, reduced int
4	420	Coal Measures Whiteware type	1	23	1	Rim	Jug/jar	U/Dec	C14th - C15th	Flat-topped rim; white fabric w/ abundant quartz & sparse red & common white non-crystalline grit
4	420	Coal Measures Whiteware type	1	2	1	BS	Hollow ware	U/Dec	C14th - C15th	White fabric w/ abundant quartz & sparse red & common white non-crystalline grit
4	420	Green Glazed Sandy ware	2	51	1	BS	Dish/bowl	Green glaze int only	LC15th - C16th	Sooted ext
4	420	Humberware	8	134	8	BS	Hollow ware	Green glaze ext, patchy on some sherds	LC13th - C15th	
4	420	Humberware	1	29	1	Rim	Jug	Rilled neck below hammerhead rim	LC13th - C15th	
4	420	Humberware	1	41	1	Base	Jug/Jar	Pinched feet	LC13th - C15th	
4	420	Oxidised Sandy ware	1	22	1	Rim	Hollow ware	U/Dec	Medieval	Small round beaded rim; very fine oxidised sandy fabric w/ occasional quartz grains



Tr.	Context	Type	No	Wt	ENV	Part	Form	Decoration	Date range	Notes
4	420	Oxidised Sandy ware	1	7	1	BS	Hollow ware	U/Dec	Medieval	Thin reduced internal margin, otherwise oxidised; abundant sub- angular quartz grit up to 0.5mm
4	420	Oxidised Sandy ware	1	4	1	BS	Hollow ware	U/Dec	Medieval	Fine sandy textured fabric; sooted ext
4	420	Raeren type stoneware	2	45	2	BS	Hollow ware	Rilled body, brown salt glaze	C14th - C16th	Brown to pale grey stoneware body
4	420	Reduced Sandy ware	1	15	1	BS	Hollow ware	Dark brown glaze ext	C13th - C15th	Very hard, dense, reduced body w/ moderate fine quartz grit; unidentified type
4	420	Reduced Sandy ware	1	5	1	BS	Hollow ware	Thin green glaze ext	C13th - C14th	Fine pale grey fabric w/ fine quartz sand
4	420	Reduced Sandy ware	1	3	1	BS	Hollow ware	Friable green glaze ext	?C13th	A fine pale grey reduced fabric; possibly Doncaster
4	420	Shell Tempered ware	1	4	1	BS	Hollow ware	U/Dec	Medieval	Leached and heavily abraded
4	420	Siegburg stoneware	1	71	1	Base	Mug/tankard	Brown iron wash on buff body	C14th - C15th	Distinctive 'elephant foot' base; buff stoneware body; see also cxt 375, probably the same vessel
4	422	Humberware type	1	8	1	BS	Hollow ware	Green glaze ext	LC13th - C15th	Sandy textured fabric w/ abundant fine sub-rounded quartz
4	426	Coal Measures Fineware	1	16	1	Rim	Jug	Green-brown glaze ext	C14th - C15th	White to buff fabric w/ rounded quartz & red non-crystalline grit up to 1mm and finer
4	426	Coal Measures Purple ware	1	61	1	BS	Hollow ware	Purple glaze ext	C15th - C16th	Patchy purple glaze ext
4	426	Humberware	2	584	1	Rim & handle	Jug	Green glazed ext	LC13th - C15th	Small pulled spout; narrow strap handle
4	426	Oxidised Sandy ware	1	18	1	BS	Hollow ware	White slip ext	C13th - C15th	Possibly a sandy Humberware w/ abundant fine quartz up to 1mm, mainly finer
4	426	Unidentified Import	1	34	1	Base	Hollow ware	Pinched feet	Medieval	Unusual fine buff sandy fabric; possibly a European import
U/ID	U/S	Redware	1	46	1	Rim	Dish	Clear glaze int	C17th - EC18th	Clubbed rim
		Total	573	144 86	517					



## Table 2 – Roman pottery

Context	Ware	No	Weight	Abrasion	Part of vessel	Form description	Spot date	Vessel type	Rim Diam	Rim %	Condition	Decoration	Motif	Position
301	GRB	1	44.3	Abraded	Rim sherd	Wide-mouthed deep bowl with small bead rim	MC2nd - MC4th	Deep bowl	28	8				
347	GRB	1	8.2	Moderate	Body sherd	Closed vessel	C2nd - C4th					Groove	Single	Outside body
353	GRB	1	16.5	Moderate	Profile	Plain rimmed dish	C2nd - C4th, opt3?	Dish	20	3				-
363	GRB	1	34.5	Very abraded	Rim sherd		LC3rd - C4th	В	24	8				
363	GRB	1	6.2	Very abraded	Rim sherd	Everted	C1hd - C4th	Jar	15	5				
375	GRB	1	17	Moderate	Simple base sherd	Turned	C2nd - C4th	Jar						
375	MOWS	1	115.3	Moderate	Rim	Bead rim with stubby flange	LC3rd - 4th	Mortarium	30	8	Scorched flange			
381	GRB	1	11.5	Abraded	Body sherd	•	C2nd - C4th							
398	GRB	1	12.2	Abraded	Body sherd	Closed vessel	C2nd - C4th					Groove	Single	Outside body
411	GRB	1	6.4	Moderate	Body sherd	Closed vessel	C2nd - C4th							
416	GRB	1	28.2	Moderate	Body sherd	Closed vessel	C2nd - C4th					Groove	Single	Outside body
	Total	11	300.3											·



Table 3 - Clay tobacco pipe

Cxt	В	S	М	Date	Heel	64	Bur	X	M4	Rim	TT	TF	Cname	Sname	Other	P	T	М	Dec/Modification	Fig	Comments
101		3		1800- 1910																	Three C19th plain stems one with traces of dark green glaze.
200		1		1800- 1900																	Plain stem of C19th type.
300		1		1720- 1780																	Plain burnished stem of C18th type.
300		5		1800- 1900																	Group of plain stems of C19th type. One has traces of dark green/brown glaze.
347	1			1650- 1680	S	7	0	-	0	IB										1	Spur bowl of mid C17th type.
365		1		1650- 1700																	Plain stem of late C17th type.
367		1		1610- 1710																	Plain stem fragment with large bore, most probably early to mid C17th.
	1	12	0	= 13																	Total

The table is arranged in context number order. The count of bowls (B), stems (S) and mouthpieces (M) is then given. This is followed by the date range for the particular fragment(s). With pipe bowls the presence of a heel (H) or spur (S) is noted. The size of the stem bore, recorded in 64<sup>ths</sup> of an inch is given in the column headed 64. Any burnishing (Bur) is noted and graded (F = Fine, G = Good, A = Average, P = Poor, 0 = not burnished) together with the presence or absence of an internal bowl cross (X) any milling (M4, where the numbers 1-4 represent between 1 and 4 quarters of the rim circumference having been milled) and the rim finish (C = Cut, B = Bottered, W = Wiped). In the case of mouthpieces the type of tip (TT; C = Cut, N = Nipple) and the tip finish (TF; GG = Green Glaze) is recorded. The next six columns record any marks and notes the Christian name (CN) and surname (SN) or initials. The position (P), type (T) and method of creation (M) are then recorded for any marks. Finally any comments are included on the individual pieces or group. For a full explanation of the codes used see Appendix B below.



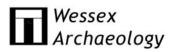
Table 4 - Metal and production residues

Context No.	SF No.	Number of pieces.	Description	Weight
Unstrat		1	Fragment of corroded nail	-
363		18	Undiagnostic/possible iron smithing slag*	3400g
349	7	1	Fragment of ferrous object*	-
361		1	Undiagnostic slag	162g
361		1	Smithing slag, possibly fragment from base of smithing hearth	328g
363		1	Undiagnostic slag	148g
365	41	1	Ferrous knife*	-
367	26	1	Iron nail	-
367		1	Undiagnostic/possible smithing slag	90g
387		2	Probable iron smithing slags*	1040g
410	3	1	Ferrous terminal*	-
411	4	1	Iron nail with square head*	-
411		1	Probable iron smithing slag*	24g
411	17	1	Ferrous object*	-
420	27	1	Small fragment of copper/bronze, possibly a fragment of decorative jewellery or fitting*	
420		1	Probable iron smithing slag*	26g
420		1	Probable iron smithing slag*	196g

<sup>\*</sup>indicates where items require further analysis, or should be retained for the site archive.

Table 5 - Composition of SF No. 27

Element	Wt%
Cu	69.39
Sn	6.90
Pb	12.50
Zn	6.24
As	0.72
Sb	0.48



# Table 6 – Lithics (flint and stone)

Context	SF No	Completeness	Raw Material	Туре	Description	
301	1	Complete	Light Grey Flint	Bladelet	Small blade made on a patinated light grey flint. The blade was produced from a blade core and has a punctiform butt with indications of platform trimming. Right-angled flake scars on the dorsal tip of the bladelet suggests either core rotation or perhaps further shaping/preparation of the blade core. Slight edge damage potentially indicates utilisation of the blade.	
345	2	Complete	Gravel Flint	Natural	Though the piece may potentially be a chunk or irregular waste from knapping it is considered most likely that it is a naturally thermally fractured piece of flint.	
351	9	Incomplete	Unclear	Flake	Proximal half of a small broken flake. The flint appears heavily patinated to white and is heavily burnt.	
351	8	Complete	Light Grey Brown Flint	Irregular Waste	Small chunk of worked flint.	
359	14	Complete	Unclear	Natural	A small naturally fractured piece of flint.	
359	6	Complete	Light Grey Brown Flint	Scraper	Intact end and side scraper. Some of the scraper retouch on its lateral margin is heavy and nearly creates a denticulated edge. The tool is heavily asymmetrical in plan with its tip slanting heavily towards the left. This is indicative of heavy use and repeated retouching of the tool until near exhaustion.	
367	25	Complete	Gravel Flint	Retouched Flake	Small flake made from gravel flint with a small area of retouch on its distal tip.	
367	21	Incomplete	Light Grey Flint	Bladelet	Proximal half of a small bladelet. Some indication of platform trimming to produce a small (punctiform) butt. Blade scars on dorsal surface suggest it was produced from a formal blade core.	
375	20	Incomplete	Light Grey Flint	Bladelet	The distal portion of a broken blade. Identification as a blade is tentative due to the missing portion of the flake.	
405	18	Incomplete	Gravel Flint	Flake	A broad and squat secondary flake made on brown gravel flint. A small portion of the distal tip of the flake is missing. Approximately 50% of the dorsal surface is covered in cortex.	
406	24	Incomplete	Grey Flint	Bladelet	The distal portion of a broken blade. Blade scars on the doral surface suggest it was produced from a prepared core. The directions of the scars also suggest it was produced from an opposed platform blade core. A slight amount of edge damage probably indicates utilisation. The raw material is of fine quality.	
410	16	Complete	Chert?	Natural	A natural piece of probable chert	
411	5	Complete	Light Grey Brown Flint	Irregular Waste	Small chunk of worked flint.	
412	15	Incomplete	Opaque Grey Flint	Flake	A broken broad flake that was removed from a nodule with heavy thermal flaws.	
416	22	Complete	Translucent Brown Flint	Blade	A small blade made on a high quality translucent flint of unknown origin. Small flake scars on the dorsal surface may indicate	



Context	SF No	Completeness	Raw Material	Туре	Description
					some attempt at cresting prior to the removal of the blade.
416	23	Complete	Light Grey Flint	Bladelet	Bladelet with blade-like flake scars on its dorsal surface. The distal tip contains cortex and indicates it to be a secondary flake. Produced from a formal blade core.
420	28	Incomplete	Gravel Flint	Flake	An elongate flake made on brown gravel flint. The proximal portion of the flake is missing. The piece is of near blade proportions but is recorded as a flake as it lacks indications of regular or intentional guiding of the removal. Some of the dorsal flake scars suggest that the flake came from a multi-platform core.
US	13	Incomplete	Quartzite pebble	Natural	A small broken portion of a quartzite pebble. There is no indication of flaking or retouch to suggest the stone had been modified anthropogenically.
US	10	Incomplete	Possible chalk flint	Flake	Proximal half of a large broad flake made from a nodule with thermal flaws on its exterior surface. Flint is white though it is unclear if this is its colour or is due to patination.

### Table 7 - Leather

Context	Quantity	Description	Provisional date of context
105	2	Leather; one possible sole with stitching, one heel with stitching	Medieval
107	1	Leather; part of sole, evidence of stitching	Medieval/late medieval
202	3	Leather; one heel piece, one fragment and one upper with stitching	Medieval/late medieval

### Table 8 - Wood recovered

Context	Number	Description	Identifications
102	3	Small fragments: possibly part of a stake	
105	4	Small worked fragments	
107	1	Long flat piece SF3	Quercus
107	1	Wooden Stake SF4	Quercus
202	1	Possible part of stake	Quercus
209	8	Parts of stake	
211	8	Wooden stake SF1	cf. Betula
311	1	Flat piece	
311	4	Wooden staves of barrel SF36	Quercus
322	6	Degraded wooden staves from barrel lining SF35	Quercus
387		Wood found in base of pit SF29	
423		Wooden post SF31	Fraxinus
423	3	Wooden stakes SF32	Fraxinus
423	1	Split wooden plank SF33	Quercus
423	1	Wooden plank SF34	Quercus
424	1	Wooden stake SF30	Pomoideae



Table 9 – Bar diagram showing the calendrical position of the dated medieval treering sequence (the interpreted felling date range is also shown)

Arcus 1033		Span of ring sequ	ences	
Bawtry	423		AD1221-5	57?
Calendar Years	AD1150	AD1200	AD1250	Ţ

Table 10 - Details of the analysed oak (Quercus) dendrochronological samples

Context/ Sample	Size (mm)	Rings	Sap Rings	Date of measured sequence	Interpreted result
322	80 x 15	76	-	undated	-
322	100 x 20	59	-	undated	-
423	275 x 50	89	?H/S	AD1123-1211	AD1221-1257?
423	155 x 50	72	-	undated	-

KEY. H/S heartwood/sapwood boundary.

Table 11 – Summary of the animal bone from evaluation

Context	Bos	Sus	Equus	Total
102	1		2	3
200			1	1
202	1(1)			1
206		1		1
206		1		1
209			1	1
Total	2(1)	2	4	8(1)

Table 12 – Summary of ageable mandibles and measurable bones

Context		Ageable Measurable bones							
	Bos	Sus	TOTAL	Bos	Ovis/ Capra	Sus	Equus	Capreolus capreolus	TOTAL
367				1					1
407	1		1	3				1	4
411		4	4		1	5	1		7
420				2			1		3
TOTAL	1	4	5	6	1	5	2	1	15

Table 13 – Summary of animal bone from Trench 1 and 2 and Mitigation Area A/Trench 3 (non-countable long bone fragments are in brackets)

			Count	able bone	es				Unce	ountable b	ones		
Context		Ovis/			Conroclus			Verte	ebrae			Ribs	
(Phase)	Bos	Capra	Sus	Equus	Capreolus capreolus	TOTAL	Large Mammal	Medium Mammal	Small Mammal	TOTAL	Large Mammal	Medium Mammal	TOTAL
102 (B)	1			2		3							
200 (C)				1		1							
202 (B)	1					1							
206 (B)			2			2							
209 (B)				1		1							
311 (A)	1 (1)					1 (1)							
321 (A)							1			1			2
339 (B)	1					1							
341 (B)				2 (1)		2 (1)							
359 (A)	1 (1)					1 (1)							
365 (C)		(1)				(1)							
367 (B)	2 (4)	1(2)	1			4 (6)	2			2	2		6
407 (B)	3 (2)	1 (1)	(3)		1	5 (6)							
411 (A)	5 (4)	1 (1)	91 (30)	2 (1)		99 (36)		29	5	34		74	142
414 (A)	(1)					(1)							
420 (A)	2	(1)		1		3 (1)							
TOTAL	17 (13)	3 (6)	94 (33)	9(2)	1	124 (54)	3	29	5	37	2	74	150

<sup>\*</sup> Data presented in the table does not include all the fragments (440) submitted for analysis.



Table 14 – Waterlogged plant macrofossils (evaluation only)

CONTEXT NUMBER	102	107	203	204	209	214	310	311
SAMPLE NUMBER	9	8	4	5	1	3	6	7
CUT / FEATURE NUMBER		106	213	213	212	213	309	309
FEATURE TYPE	Deposit	Ditch	Pond	Pond	Ditch	Pond	Pit / well	Pit / well
PROVISIONAL DATE	Medieval/late medieval	Medieval/late Medieval	Late Medieval	Late medieval	Medieval/late medieval	Late Medieval	Medieval	Medieval
SAMPLE VOLUME (ml)	100	250	250	100	20	250	50	250
Non-seed material (scored on DAFOR scale)								
Mosses		R	R	0		R		
Round wood	0	0	R	R		Α	R	0
Other wood fragments	Α	Α	D	D	D	D	0	D
Bark fragments				R				
Thorns	0	R	R	F		0	R	
Bud scale		0		0		0	R	0
Wood charcoal	F	F	0	F	F	0	Α	F
Herbaceous plant roots/stems	D	F	R	0	Α	0	0	Α
Leaf fragments	0	0	R	F		F		
Nutshell fragment indet.	4	14				3	3	2
Invertebrate material								
Coleoptera	0	R	0	F		0	0	
Fly puparia		0				R	0	
Water flea egg cases	Α	Α		0		0	R	
Earthworm egg capsules	F	0	0	А	0	Α	F	0
Seeds/fruits/nuts (scored as minimum counts, C = charred)								
Cultivated plants								
Hemp (Cannabis sativa)	6					3.5		1
Opium poppy (Papaver somniferum ssp.								8



CONTEXT NUMBER	102	107	203	204	209	214	310	311
SAMPLE NUMBER	9	8	4	5	1	3	6	7
CUT / FEATURE NUMBER		106	213	213	212	213	309	309
FEATURE TYPE	Deposit	Ditch	Pond	Pond	Ditch	Pond	Pit / well	Pit / well
PROVISIONAL DATE	Medieval/late medieval	Medieval/late Medieval	Late Medieval	Late medieval	Medieval/late medieval	Late Medieval	Medieval	Medieval
SAMPLE VOLUME (ml)	100	250	250	100	20	250	50	250
Somniferum)								
Turnip ( <i>Brassica rapa</i> )		4						
? Spelt wheat grain (cf. Triticum spelta charred)				1				
Wheat grain indet (Triticum indet. charred)				2				
Barley grain indet (hulled) (Hordeum sp. charred)								4
Cereal grain indet (charred)						2	1	
Arable/disturbed ground species								
Common poppy (Papaver rhoeas)	4	8		6		16		16
Prickly poppy (Papaver argemone)			64				16	
Common fumitory (Fumaria officinalis)				1				
Common nettle (Urtica dioica)	78			89	5	224	28	256
Small nettle (Urtica urens)	2	68		2		16	10 + 4 (C)	168
Fat Hen (Chenopodium album type)	28	20		10		128	112	92
Orache (Atriplex sp.)	4			2				
Common chickweed (Stellaria media)	16		384	288		208	34	8
Common mouse-ear (Cerastium fontanum)								8
Corn spurrey (Spergula arvensis)	16						8 (C)	
Pale persicaria (Persicaria lapathifolia/maculosa)	12	21		17		781		
Knotgrass (Polygonum arenastrum/aviculare)		12		2		6		16
Sheep's sorrel (Rumex acetosella)	12		32	58		48	24 (C)	16
Common mallow (Malva sylvestris)	1					1		
Flixweed (Descurainia sophia)			128					
Charlock (Sinapis arvensis)						51		



CONTEXT NUMBER	102	107	203	204	209	214	310	311
SAMPLE NUMBER	9	8	4	5	1	3	6	7
CUT / FEATURE NUMBER		106	213	213	212	213	309	309
FEATURE TYPE	Deposit	Ditch	Pond	Pond	Ditch	Pond	Pit / well	Pit / well
PROVISIONAL DATE	Medieval/late medieval	Medieval/late Medieval	Late Medieval	Late medieval	Medieval/late medieval	Late Medieval	Medieval	Medieval
SAMPLE VOLUME (ml)	100	250	250	100	20	250	50	250
Cut-leaved Crane's-bill (Geranium dissectum)						48		
Fool's parsley (Aethusa cynapium)					1		5	4
Henbane (Hyoscyamus niger)	20	8		2	21	146		21
Black nightshade (Solanum nigrum ssp. nigrum)						34		
Borage (Borago officinalis)						4		
White/red dead nettle (Lamium album/purpurum)	4	8		42	1	33	30	246
Dead nettle sp. (Lamium sp.)				10		16	14	
Large flowered/common/bifid hemp nettle (Galeopsis speciosa/tetrahit/bifida)			32	4		3		16
Cornflower (Centaurea cyanus)			1				2 (C)	
Prickly sow-thistle (Sonchus asper)			34			48		
Corn marigold (Chrysanthemum segetum)		12		4			6 (C)	
? Scented mayweed (cf. Matricaria recutita)		68						
Grassland species								
Lesser stitchwort (Stellaria graminea)		8	32					
Field pepperwort (Lepidium campestre)								
Vervain (Verbina officinalis)		8						
Self-heal (Prunella vulgaris)								
Hawkweed oxtongue (Picris hieracioides)				2				
Aquatic / damp ground species								
Water crowfoot ( <i>Ranunculus</i> subgen. BATRACHIUM)		4						
Meadow/creeping buttercup (Ranunculus acris/repens)	9	13		3		25		48



CONTEXT NUMBER	102	107	203	204	209	214	310	311
SAMPLE NUMBER	9	8	4	5	1	3	6	7
CUT / FEATURE NUMBER		106	213	213	212	213	309	309
FEATURE TYPE	Deposit	Ditch	Pond	Pond	Ditch	Pond	Pit / well	Pit / well
PROVISIONAL DATE	Medieval/late medieval	Medieval/late Medieval	Late Medieval	Late medieval	Medieval/late medieval	Late Medieval	Medieval	Medieval
SAMPLE VOLUME (ml)	100	250	250	100	20	250	50	250
Celery-leaved buttercup (Ranunculus sceleratus)	88	64		526	7	144		8
Lesser spearwort (Ranunculus flammula)	10	328						
Blinks (Montia fontana ssp. chondrosperma)	8							8
Water chickweed (Myosoton cf. aquaticum)				16				
Water-pepper (Persicaria hydropiper)	7	1				4		
Water dock (Rumex hydrolapathum)	2					1		
Marsh dock (Rumex palustris)	11							
Water-cress (Rorippa sp.)	16	16						
Marsh pennywort (Hydrocotyle vulgaris)	4	4						
Hemlock (Conium maculatum)	4			1	2	61	5	36
Wild celery (Apium graveolens)			48			65	4	
Fool's water cress (Apium nodiflorum)		4						8
Cowbane (Cicuta virosa)	1							
Marsh woundwort (Stachys palustris)						17		
? Water starworts (cf. Callitriche spp.)	48	464						
? Marsh lousewort (cf. Pedicularis palustris)								
? Trifid Bur-marigold (cf. Bidens tripartita)			1					
Horned pondweed (Zannichellia palustris)	18	128			2			
Rush (Juncus spp.)	144	80	576	128	2			36
Common spike-rush (Eleocharis cf. palustris)		4						
Many stalked spike-rush (Eleocharis cf. multicaulis)				12				
Common club-rush (Schoenoplectus cf. lacustris)				4				
Bristle club-rush (Isolepis setacea)	8	72						8



CONTEXT NUMBER	102	107	203	204	209	214	310	311
SAMPLE NUMBER	9	8	4	5	1	3	6	7
CUT / FEATURE NUMBER		106	213	213	212	213	309	309
FEATURE TYPE	Deposit	Ditch	Pond	Pond	Ditch	Pond	Pit / well	Pit / well
PROVISIONAL DATE	Medieval/late medieval	Medieval/late Medieval	Late Medieval	Late medieval	Medieval/late medieval	Late Medieval	Medieval	Medieval
SAMPLE VOLUME (ml)	100	250	250	100	20	250	50	250
Sedge (Carex sp.) ovoid	6	20		28		213		8
Sedge (Carex sp.) trigonous	50	16 + 8 (C)	32	48		25	6	80
Sedge (Carex sp.) perigynium						15		
Hedgerow/woodland edge species								
Alder seed (Alnus glutinosa)								16
Silver birch bract (Betula pendula)						36		
Silver birch seed (Betula pendula)						304		
? Hornbeam seed (cf. Carpinus betulus)			1					4
Garlic mustard (Alliaria petiolata)				2				
Bramble (Rubus fruiticosus agg.)	54	4		5	1	22	4	18
Lady's mantle (Alchemilla vulgaris AGG.)		64						
Blackthorn ( <i>Prunus spinosa</i> )						1		4
? Pear (cf. Pyrus communis)			1					
Hawthorn (Crataegus monogyna)						1		6
Elder (Sambucus nigra)	16			24	42	256	52	216
Nipplewort (Lapsana comunis ssp. comunis)							2	
Unclassified								
Curled/clustered/broad leaved dock (Rumex crispus/conglomerates/obtusifolius)	13			10		35	4	50
Dock (Rumex sp.)				32				
Rumex sp. fruiting tepals						1		
Violet / pansy (Viola sp.)						1		
Vetch/pea (Vicia/Lathyrus)								



CONTEXT NUMBER	102	107	203	204	209	214	310	311
SAMPLE NUMBER	9	8	4	5	1	3	6	7
CUT / FEATURE NUMBER		106	213	213	212	213	309	309
FEATURE TYPE	Deposit	Ditch	Pond	Pond	Ditch	Pond	Pit / well	Pit / well
PROVISIONAL DATE	Medieval/late medieval	Medieval/late Medieval	Late Medieval	Late medieval	Medieval/late medieval	Late Medieval	Medieval	Medieval
SAMPLE VOLUME (ml)	100	250	250	100	20	250	50	250
Clover/Medick (Trifolium/Medicago)	6	4.5	35					
Speedwells (Veronica spp.)	10	56						
Small grass (Poaceae <2mm)		4	224				2 (C)	
Large grass (Poaceae >2mm)		4						

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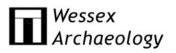


Table 15 – Detailed ecological information for plant taxa (cf. Stace 1997)

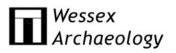
Species name	ann/per/bien	seed shed	plant height	Habitat
Water crowfoot ( <i>Ranunculus</i> subgen. BATRACHIUM)	annual	3cca srica	plant neight	aquatic or semi terrestrial
Meadow/creeping buttercup (Ranunculus acris/repens)	perennial herb		up to 5cm / up to 60cm	damp meadows and pastures on calcareous and circum-neutral soils / wet grasslands, woods, stream sides, marshes and dune slacks and as a weed
Celery-leaved buttercup (Ranunculus sceleratus)	annual		10-60cm	in or by slow streams, ditches and shallow ponds
Lesser spearwort (Ranunculus flammula)	perennial		8-50cm	wet places
Common poppy (Papaver rhoeas)	annual		60 (80) cm	arable ground, roadsides and waste places
Prickly poppy ( <i>Papaver argemone</i> )	annual		to 45cm	arable fields and waste places on light soils
Common fumitory (Fumaria officinalis)	annual		10-40cm	cultivated land on lighter soils, waste places
Hemp (Cannabis sativa)	annual		to 2.5m	grown for fibre, casual on waste ground
Hop (Humulus lupulus)	perennial climber		up to 8m	hedgerows scrub and fen carr
Common nettle (Urtica dioica)	perennial	aug-oct	to 1.5m	hedge banks, woods, grassy places, fens, where animals defecate
Small nettle (Urtica urens)	annual	aug-sept	to 60cm	cultivated and waste ground
Silver birch bract (Betula pendula)	tree	july-aug	to 30m	forming woods on light, mostly acid soils, especially heath land.
Silver birch seed (Betula pendula)				
? Hornbeam seed (cf. Carpinus betulus)	tree		to 32m	forming woods and copses on clay soils
Fat Hen (Chenopodium album type)	annual	aug-oct	to 1.5m	waste places and cultivated land
Orache (Atriplex sp.)				
Blinks (Montia fontana ssp. chondrosperma)	annual		2-50cm	light acid soils, usually sandy or gravelly. high water table, many kinds of damp places from streams to seasonally damp hollows
Common chickweed (Stellaria media)	annual	march-oct	15-40cm	weed of cultivated ground, open ground, roadsides and waste places
Lesser stitchwort (Stellaria graminea)	perennial		to 80cm	grassy, often dry places
Water chickweed (Myosoton cf. aquaticum)	perennial		to 1m	marshes, ditches and banks of water-courses
Corn spurrey (Spergula arvensis)	annual	june-sept	40 (60)cm	sandy cultivated ground
Redshank/Pale persicaria ( <i>Persicaria</i> maculosa/lapathifolia)	annual	july- oct/aug- nov	80cm/1m	waste, cultivated and open ground



Species name	ann/per/bien	seed shed	plant height	Habitat
Water-pepper (Persicaria hydropiper)	annual		to 75cm	damp places and shallow water, often shaded
Knotgrass (Polygonum arenastrum/aviculare)	annual	june-oct	to2.5m	all sorts of open ground
Sheep's sorrel (Rumex acetosella)	perennial			heathy open ground, short grassland and cultivated land
Water dock (Rumex hydrolapathum)	perennial		to 2m	by lakes, rivers, canals, ditches and marshes
Curled/clustered/wood dock ( <i>Rumex</i> crispus/conglomerates/sanguineus)	perennial		1 (2)m	waste, rough, cultivated land/damp places, grassy or bare esp. by ponds or rivers/damp shady places, mostly in woods or hedgerows or by water
Broad-leaved dock (Rumex obtusifolius)	perennial	aug-dec	1 (1.2)m	grassland, by roads and rivers, waste and cultivated ground.
Marsh dock (Rumex palustris)	biennial/perennial		60 (100)cm	edges of ponds, ditches, gravel pits and in marshy fields
Dock (Rumex sp.)				
Rumex sp. fruiting tepals				
Common mallow (Malva sylvestris)	perennial		to 1m	waste and rough ground, by roads and railways
Violet (Viola sp.)				
Flixweed (Descurainia sophia)			to 1m	roadsides, rough and waste ground
Garlic mustard (Alliaria petiolata)	biennial	july-aug	to 1.2m	rough ground, hedgerows and shady places
Water-cress (Rorippa sp.)				damp places, by streams, pond sides,
Field pepperwort (Lepidium campestre)	annual		to 60cm	open grassland, banks, walls, waysides and arable fields
Turnip (Brassica rapa)				occasional by streams or rivers as a relic of cultivation
Charlock (Sinapis arvensis)	annual	aug-nov	1 (1.5)m	arable and wasteland, tips and roadsides
Bramble (Rubus fruiticosus agg.)	shrub			all sorts of habitats, scrub
Lady's mantle (Alchemilla vulgaris AGG.)	perennial		60 (80)cm	damp rich grassland, woodland margins and ridges
Blackthorn ( <i>Prunus spinosa</i> )	shrub	sept-oct	to 4m	hedges, scrub and woods
? Pear (cf. Pyrus communis)	shrub or tree	sept-oct	up to 20m	hedges and field margins
Hawthorn (Crataegus monogyna)	shrub or tree	sept-oct	10 (15)m	wood boarders, scrub and hedges
Vetch/pea (Vicia/Lathyrus)				
Clover/Medick ( <i>Trifolium/Medicago</i> )				
Cut-leaved Crane's-bill (Geranium dissectum)	annual	july-oct	to 60cm	grassy and stony ground, waste places and cultivated ground
Marsh pennywort (Hydrocotyle vulgaris)	perennial		to 30cm	in bogs, fens and marshes, and at sides of lakes
Fool's parsley (Aethusa cynapium)	annual		1 (1.5m)	cultivated and waste ground



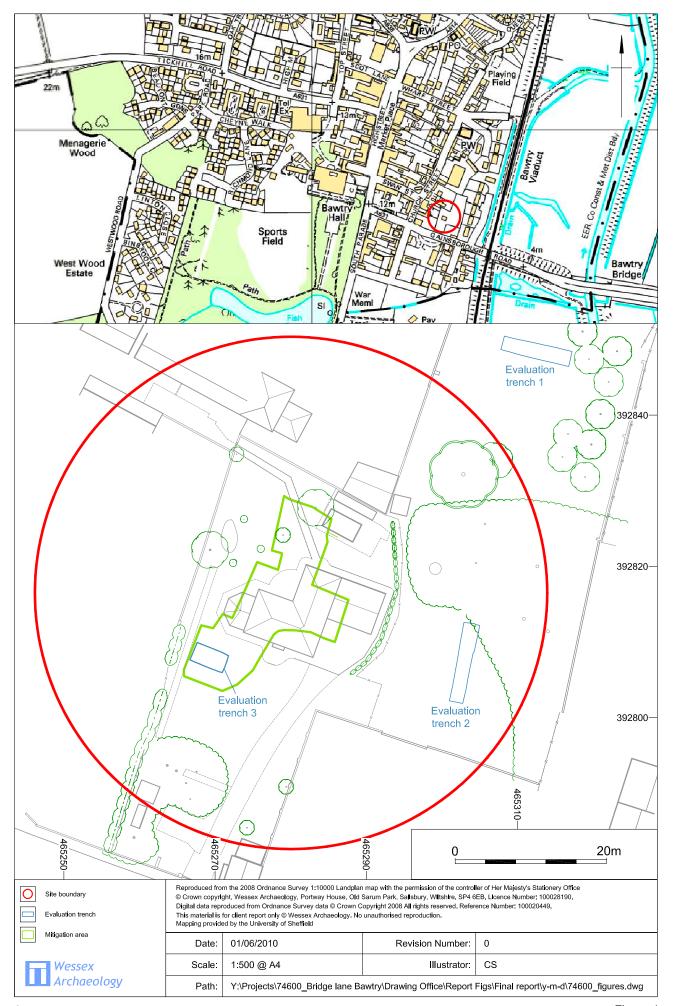
Species name	ann/per/bien	seed shed	plant height	Habitat
Hemlock (Conium maculatum)	biennial	july-aug	to 2.5m	damp ground, roadsides, ditches and waste ground
Wild celery (Apium graveolens)	biennial		to 1m	damp barish, usually brackish places, usually near the sea
Fool's water cress (Apium nodiflorum)			to 1m	ditches, marshes and by lakes and rivers
Cowbane (Cicuta virosa)	perennial		to 1.5m	ditches, marshy fields, pond sides
Henbane ( <i>Hyoscyamus niger</i> )	annual		to 80cm	rough and waste ground esp. manured by rabbits or cattle
Black nightshade (Solanum nigrum ssp. nigrum)	annual	july-aug	to 70cm	waste and cultivated ground
Borage (Borago officinalis)	annual		to 60cm	rough ground and waysides, grown as a herb
Vervain (Verbina officinalis)	perennial		to 75cm	barish ground and rough grassy places
Marsh woundwort (Stachys palustris)	perennial		to 1m	damp places, by rivers and ponds, and on rough ground
White/red dead nettle (Lamium albun/purpirum)	perennial/annual			hedge banks, waysides and rough ground/cultivated and waste ground
Red dead nettle (Lamium purpurum)				
Dead nettle sp. (Lamium sp.)				
Large flowered/common/bifid hemp nettle (Galeopsis speciosa/tetrahit/bifida)	annual	july-oct	to 1m	arable land and waste places
Self-heal (Prunella vulgaris)	perennial		to 30cm	grassland, lawns, wood-clearings, rough ground
? Water starworts (cf. Callitriche spp.)				lakes, rivers, ponds, ditches
Speedwells (Veronica spp.)				
? Marsh lousewort (cf. Pedicularis palustris)	annual to biennial		to 60cm	wet heaths and bogs
Elder (Sambucus nigra)	shrub or tree	aug-sept	to 10m	hedges, woods, waste or rough ground esp. on manured soils
Cornflower (Centaurea cyanus)	annual	july-sept	to 80cm	naturalised in cornfields
Nipplewort (Lapsana comunis ssp. comunis)	annual	june-oct	to 1m	open woods, hedgerows, waste and rough ground
Cat's ear / smooth cat's ear ( <i>Hypochaeris</i> radicata/glabra)	perennial		60cm/40cm	grassy open ground
Hawkweed oxtongue (Picris hieracioides)	biennial to perennial		to 1m	grassland and open or rough ground, usually calcareous soils
Prickly sow-thistle (Sonchus asper)			to 1.5m	waste and cultivated ground, roadsides
Corn marigold (Chrysanthemum segetum)	annual		to 60cm	weed of arable fields, waste places, and waysides
? Scented mayweed (cf. Matricaria recutita)	annual	june-sept	to 60cm	waste, rough and cultivated ground
? Trifid Bur-marigold (cf. Bidens tripartita)	annual		to 75cm	by ponds and streams, and in ditches and marshy fields



Species name	ann/per/bien	seed shed	plant height	Habitat
Horned pondweed (Zannichellia palustris)				rivers, streams, ditches or ponds, fresh or brackish
Rush (Juncus spp.)				bogs, fens, marshes, damp ground
Common spike-rush (Eleocharis cf. palustris)	perennial		to 75cm	in or by ponds, marshes, ditches or riversides
Many stalked spike-rush ( <i>Eleocharis cf. multicaulis</i> )	perennial		to 40cm	bogs and wet peaty places, usually on acid soils
Common club-rush (Schoenoplectus cf. lacustris)	perennial		to 3m	in shallow water of lakes, ponds, slow rivers, canals and dykes
Bristle club-rush (Isolepis setacea)	annual		15 (30) cm	on wet open or semi-closed ground in ditches fens marshes and dune slacks
Sedge (Carex sp.) ovoid				
Sedge (Carex sp.) trigonous				
Sedge (Carex sp.) perigynium				
Small grass (Poaceae <2mm)				
Large grass ( <i>Poaceae</i> >2mm)				



## 14 FIGURES AND PLATES



Site location Figure 1

Figure 2

2m

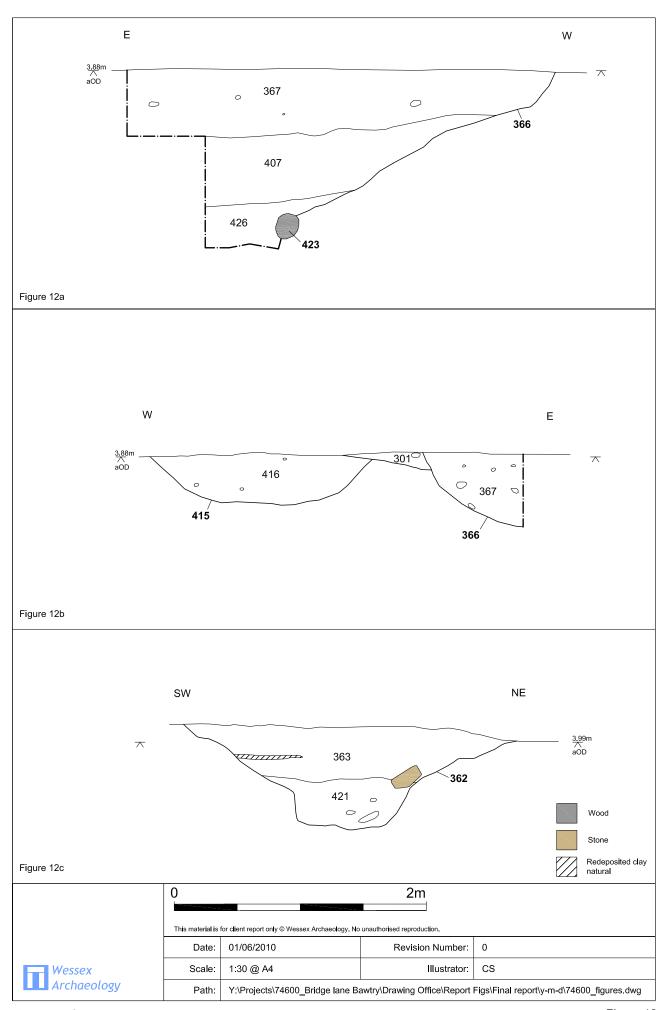
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Figure 4

Figure 5

Figure 6

Mitigation: post excavation plan of revetting in feature 366/419



Mitigation: Sections Figure 12

Figure 13

Figure 14

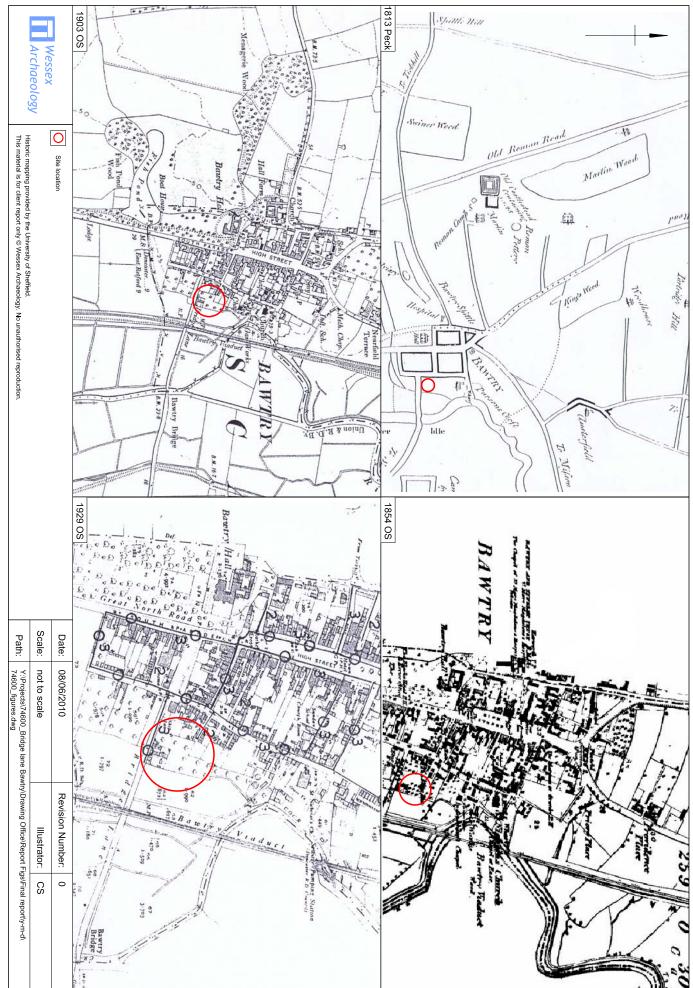


Figure 15



Plate 1: Trench 1, looking west, showing the north - south channel 106 (top centre) and natural hollows 102 (foreground).



Plate 2: Trench 1, looking west, showing stakes 108 (small finds 3 and 4) in eastern side of channel 106.

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Plate 3: Trench 2 (post ex), looking south, showing pond 213 (left) overlain by wall 205 (centre).



Plate 4: Trench 2, looking east, showing organic material, possibly tree clearance, at interface of deposits 214 and 203, within pond 213. Small find 2 is in the left of the picture.

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Plate 5: Trench 2, looking north. Northern sondage through channel/ditch 212 (left) and pond 213 (right).



Plate 6: Trench 2, looking south. Southern sondage through channel/ditch 212. Also showing the later wooden drainage feature 207.

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Plate 7: Trench 3, looking west, showing large pit 307 and barrel/well 309 (centre right), also the north-south alignment of post hole clusters 312, 324 and 325 (foreground).

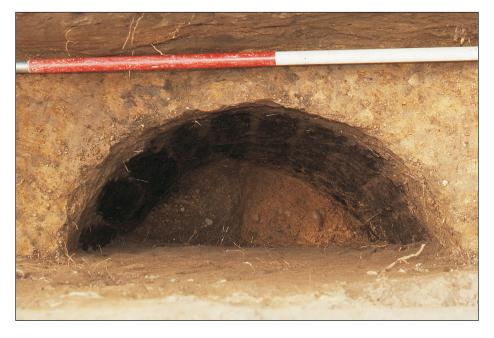


Plate 8: Trench 3, looking south. The timber lined barrel/well 322 within cut 309 and pit 307.

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Plate 9: East-west aligned postholes in group 388, view facing west.



Plate 10: North-south aligned postholes in group 388, view facing north.

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Plate 11: Posthole group 388 and barrel pit 358, view facing north east.



Plate 12: North facing section showing cobbles 325.

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Plate 13: Barrel pit 358, view facing east.



Plate 14: Detail of barrel pit 358.

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