

Early Iron Age & Medieval to modern settlement remains at Harvest Way, Barnwell Cambridge



Post-Excavation Assessment and Updated Project Design



November 2015

Client: Aspen New Homes Ltd

OA East Report No: 1632

OASIS No: oxfordar3-207609

NGR: TL 4635 5887

Early Iron Age and medieval to modern settlement remains at Harvest Way, Barnwell, Cambridge

Post-excavation Assessment and Updated Project Design

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Report Date: November 2015

Report Number: 1632
Site Name: 9-15 Harvest Way
HER Event No: CHER ECB3941
Date of Works: February-June 2014
Client Name: Aspen New Homes Ltd
Client Ref: 15159a
Planning Ref: 11/0219/FUL
Grid Ref: TL 4635 5887
Site Code: CAMEAG14
Finance Code: CAMEAG14
Receiving Body: CCC Stores

Accession No:

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Date: August 2015

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Summary

Archaeological excavation by Oxford Archaeology East extending over an 2440.9m² area was conducted at 9-15 Harvest Way, Barnwell, Cambridge (TL 4635 5887) between 3rd February and 27th June 2014 in advance of 75 apartments and shop frontages with associated services and access routes. This work followed on from a trench evaluation within the site (Atkins 2013b).

A crouched burial of a male adult with its head located to the north was found within five metres of Newmarket Road and was radiocarbon dated to 800-546 cal BC. Small parts of further human remains were found residually in contexts dating from the medieval to Victorian periods. Fragments of a probable prehistoric field system(s) was also uncovered and could be Iron Age in date.

For the medieval period the evidence indicates a densely populated site beginning in the 13th century and probably instigated by the Prior of Barnwell to provide services for the Monks and Lay Brothers. Features include evidence of several timber framed buildings with associated floors, hearths, wells and pits. Many of the buildings were associated with groups of industrial or craft working features such as clay-lined tanks and possible kilns.

A large assemblage of finds was recovered from the medieval period features including pottery, animal bones and personal items.

In the period immediately following the Dissolution the density of occupation apparently reduced, possibly due to amalgamation of properties to form a smaller number of larger holdings. Of particular interest is a property that may be the site of a high status building, later referred to as the "old manor". A cess-pit or latrine associated with this building was constructed from a large number of architectural fragments, presumably taken from the dissolved priory.

A possible inn and stable complex built in brick in c.17th century was built in the middle of the site and burnt down in the early 18th century, possibly as a direct result of a fire documented in 1731. The cellar of this building contained an interesting artefact collection including stone ware flagons, candles/lamps and clay tobacco pipes.

The evidence suggests that wholesale rebuilding using clunch took place in the mid 18th century, possibly as a result of the fire.

In the 1820s and 1830s there was an increase in buildings within the site. There were up to three pubs (George, Shamrock and Black Bull) fronting Newmarket Road, and infilling of the eastern half of the site with two yards (Shamrock Passage and Brown's Yard) with terraced houses fronting both. Later in the 19th century Leeke Street was built, followed by Harvest Way. During the 19th century small scale industry including specialist glass making was taking place on the site.

The housing and associated small scale industries continue into the 20th century, only being replaced in the 1960s when Newmarket Road was widened and the vacant land was redeveloped for commercial industry with the erection of industrial units.

1. INTRODUCTION

1.1 Project Background

- 1.1.1 An archaeological excavation was conducted at 9-15 Harvest Way, Barnwell, Cambridge (TL 4635 5887: Fig. 1), which this took place after an archaeological evaluation found important remains within the site (Atkins 2013b). The excavation was undertaken in accordance with a Written Scheme of Investigation prepared by OA East (Connor 2013b).
- 1.1.2 The development proposal comprises the construction of residential development for 75 apartments with associated services and access routes. The proposed development covers the whole development site although the basement (car park) will cover only the majority of the site. The development footprint is estimated to be 2600 sq. metres.
- 1.1.3 This assessment has been conducted in accordance with the principles identified in English Heritage's guidance documents *Management of Research Projects in the Historic Environment*, specifically *The MoRPHE Project Manager's Guide* (2006) and *PPN3 Archaeological Excavation* (2008).
- 1.1.4 OA East was commissioned to produce a method statement of proposed archaeological works within the site (Connor 2013a). Firstly, a watching brief by Rob Atkins took place when most of the ground level concrete slabs and layers of hardcore/brick rubble sub-bases were removed, which reduced most of the level within the site by c.0.5m. Only the ground level at the south-western corner of the site was not removed as this tarmac area formed the base for a compound during the excavation (Fig. 2).
- 1.1.5 The second stage of archaeological work comprised an archaeological evaluation, which took place between 28th October and 11th November 2013. Six evaluation trenches were placed across the site comprising a c.5% sample of the site by area (Atkins 2013b). The evaluation found medieval to modern features had survived with only a minimal amount of truncation. Successive uses of the site have largely built on top of and not through earlier deposits, leaving well stratified and complex remains. Evidence for medieval structures in the form of post holes were found adjacent to the present Newmarket Rd frontage in all three trenches (1, 2 and 3) located here. Post-medieval post holes were found in Trenches 1 and 6, and in Trench 2 clunch (chalk) building foundations were found associated with clay floors. In addition the remains of 19th century brick buildings were uncovered in all trenches except one and there was also part of brick structure with an associated external cobbled courtyard found in Trench 4. A plethora of medieval, post-medieval and 19th century pits and wells, some of them of substantial size, were recorded across the site. There was also clear evidence for surviving post-medieval and Victorian layers. Overall the evaluation demonstrated that there is excellent potential for survival of large artefact assemblages from a wide range of features and layers and faunal and plant remains were also seen to have good potential.
- 1.1.6 Due to the significance of the remains, Andy Thomas, Senior Archaeologist at the County Council, proposed the whole site should be excavated and this began on the 3rd February 2014 continuing to the 27th June. The whole site was excavated except a c.13m by c.5m area located at the extreme south-western corner of the site where there was extensive modern truncation. During the excavation human remains were uncovered and these were left undisturbed until a licence of removal had been obtained dated 4th March. A relatively large collection of moulded stone was also uncovered and these stone pieces were assessed on site by Dr Mark Samuel. About one-third of

these stone pieces were left on site to be reused in the subsequent development. The remainder were temporary taken to OA East store for further analysis.

- 1.1.7 The site archive is currently held by OA East and will be deposited with the appropriate county stores in due course.

1.2 Geology and Topography

- 1.2.1 The development area is located on drift geology comprising 3rd Terrace Gravels and the underlying solid geology consists of Lower Chalk (British Geological Survey 1981). Terrace gravels were encountered throughout the site including at the base of the wells. Only a relatively few small chalk lenses were found in various parts of the site and these were all located more than 2.5m below the former ground level.
- 1.2.2 The River Cam flows approximately 300m to the north of the development area at a height of c.4.9mOD. From the river to the site, there is a gradual rise in ground level towards Newmarket Road, where it is at 12.80m OD at the Newmarket Road frontage gradually declining to 12.6m OD adjacent to Harvest Way.
- 1.2.3 The water table was encountered only within the extreme eastern part of the site within three medieval wells at c.7.9mOD, but was not found within the wells within the middle and western parts of the site despite these features being excavated to their base as low as c.6.8mOD. Water levels on the CAU excavations adjacent to the east were between c.8.5m OD (Newman 2013, fig. 11) and c.9.5m OD (Newman 2013, fig. 21). The water level for the middle and western areas of the site have been adversely affected for some unknown reason.

1.3 Archaeological and Historical Background

Earlier Prehistoric-Bronze Age

- 1.3.1 The Cambridgeshire Historic Environment Record (CHER) lists a number of prehistoric finds in the vicinity of the proposed development area, although none from the site itself (Fig. 1). They comprise three Palaeolithic abraded hand axes, elephant, hippopotamus and other animal bones recovered by a gravel digger in 1862, 100m to the west of the development area. These remains are in the Sedgewick Museum (CHER 04531). An excavation 300m to the north-west found the area on the southern bank of the River Cam had been exploited between the Mesolithic and Bronze Age (CHER ECB 03402; Atkins 2012a). Here, a background scatter of Mesolithic flint was recovered as well as at least four Early Neolithic pits with evidence of flintworking. An Early Bronze Age type "A" Abercromby Beaker was found 300m to the north-west (CHER 04623). The gravel terraces of the river Cam are thought to have been particularly favoured for prehistoric settlement (Fox 1923), although in heavily built up areas the evidence for this period is often obscured or destroyed.
- 1.3.2 Away from the River Cam, a background scatter of 26 worked flint dating from Mesolithic to Late Bronze Age (or possibly into the Iron Age) as well as 18 unworked burnt flints were recovered in residual contexts at a recent excavation directly to the east of the site (Eastern Gate Hotel; CHER 03733; Newman 2013). No contemporary features were found in this excavation. An undated prehistoric object was recovered directly to the south (CHER 04625). Three residual Early Neolithic flints comprising a core and a blade were found within the evaluation and subsequent excavation 150m to the east but again no contemporary features (CHER ECB 03873; Atkins 2012b and 2013a).

Iron Age

- 1.3.3 Part of a Mid to Late Iron Age settlement was found 150m to the east at Coldham's Lane (Atkins 2013a), but it does not seem to continue westwards as only two tree throws in CAU's excavation at the Eastern Gate Hotel site directly to the east of the site were tentatively dated as later prehistoric (Newman 2013). Possibly also relevant was a copper Ptolemaic coin dated 323-285BC found in a Barnwell gravel pit, but its location recorded vaguely in Fox (1923, 86 and map 3) and also the HER which places it at TL 46 58 (CHER 04577; not illustrated).
- 1.3.4 The results of an excavation 300m to the north-west suggested that ploughed fields were located close to the riverside possibly from the Late Iron Age onwards (Atkins 2012a).

Roman

- 1.3.5 Excavation at Eastern Gate directly to the east of the current site found a scatter of 12 Roman pottery sherds but this is likely to have been the result of manuring (Newman 2013). Evidence of Roman arable farming was found 0.3km to the north-west, represented by a ploughshare, a harness fitting, and a scatter of pottery and coins within a colluvium layer (Atkins 2012a). The Roman town of Cambridge (*Duroliponte*) lies c.2.5km to the west of the site.

Saxon

- 1.3.6 Two Early to Mid Saxon ditches, a residual cruciform brooch and clay loom weight (Early/Mid Saxon) were found in the CAU excavations at Eastern Gate directly to the east (Newman 2013) and these were interpreted as further evidence for a Anglo-Saxon settlement and/or cemetery in the near vicinity. No other definite Saxon artefacts have been found within 1km of the site, although Fox (1923, 245) notes stray Anglo-Saxon find(s) from Barnwell that are now housed in the Ashmolean Museum, but records no further information. In his map of the area (map G), Fox recorded a possible Saxon settlement in Barnwell, which may suggest the artefact(s) could have been recovered from this location.
- 1.3.7 No Late Saxon remains have been found within the area of the site.

Medieval

Barnwell Priory and its lay settlement

- 1.3.8 The site lies within the former lay settlement of medieval Barnwell Priory, with the priory (CHER 04653a and b) being located on the other side of Newmarket Road to the north of the proposed development area. Barnwell Priory was founded by Augustinian Canons in 1092 at a site near Cambridge Castle and moved to its present site in 1112. The new location was within the fields of Cambridge located c.1km to the east of the historic core of the City of Cambridge (Fig. 9).
- 1.3.9 Maitland makes the point that by the survey of 1279, the priory would have had an agricultural village which was detached from the main town, with lay houses established to meet the priory's demand for labour on the large tracts of arable land it had acquired (Maitland 1964, 148 and 183). Within the priory there was a parochial church, dedicated to St Andrew the Less (CHER 05043) that was built for the lay settlement. St Andrew the Less parish church is not mentioned in the 1279 survey, but this is probably a mistake as the present fabric in the building belongs to the early 13th century (Salzman 1967, 126). This suggests the lay settlement outside the priory was significant enough to need a church by the early 13th century. The rentals for 1483-

1524 record that Barnwell was the smallest ward for Cambridge and the one which paid the least subsidy (*ibid*, 113).

- 1.3.10 Barnwell Priory's wealth was partly due to the large number of assets it had been given, along with the acquisition of many other holdings, including houses in Cambridge. Its economic policy was the main reason it was attacked in 1381 during the Peasants Revolt. The priory was singled out, "partly to affirm rights of driftway and pasture in meadows which the priory had enclosed" (Lee 2005, 82). This may imply that the priory was acquiring more common land.
- 1.3.11 The Priory grew in size and stature with 30 canons in the 13th century, including 17 officers and the clerical subsidy of 1379 indicates 17 canons including officers and at the time of the Poll Tax of 1512 there were 11 servants (Palmer 1931, 43). The priory's importance can be seen in that it was the main place of residence when royalty visited Cambridge, including King John, Henry III, Edward II, Richard II (and his court), as well as the bishops of Ely in the 15th and early 16th century (Salzman 1967, 244-6). The location of the priory outside but near Cambridge, and the fact that it was very wealthy with many fine buildings, was presumably the reason it often housed visitors of importance. One of the areas of revenue of the priory was St Barnwell's Fair, which was granted to the canons of Barnwell in 1211 (*Ibid*, 236).
- 1.3.12 The site fronted a medieval roads on its northern side which led from Cambridge to Newmarket and was called Barnwell Cawsey from at least 1574 (Reaney 1973, 46).
- 1.3.13 Until recently no archaeological work had occurred within the lay settlement, although some extremely limited investigations had taken place within the priory precinct (e.g. Haigh 1986). In the last five years, however four excavations and an evaluation have been undertaken within the lay settlement and a small excavation adjacent and to the west of it (Atkins 2012a; Atkins 2013a; Atkins forthcoming a and b; Newman 2013; House 2013). The closest to the subject site was adjacent to the east by CAU at Eastern Gate (Newman 2013). The site was characterised by regular medieval property divisions, with different activities being represented such as tanning in each plot.
- 1.3.14 Excavations c.30m to the west at Newmarket Road found medieval/late medieval building(s), pits and ditches (Atkins forthcoming a; CHER 04263). At Coldhams Lane 150m to the east, an excavation found occupation dating from c.AD 1200 and appears to have straddled parts of two former house property plots fronting Newmarket Road (Atkins 2015) with up to six wells nearly 50 pits of various sizes and types, including two which had been clay lined and a brick cess-pit and possible back plot structures. An evaluation c.100m to south-west at No. 30 Occupation Road found medieval quarry pits suggesting, occupation of the settlement and priory continued here (House 2013).
- 1.3.15 Excavations 0.3km to the north-west found evidence that land reclamation along the edge of the river had started in the medieval period and soil continued to be deposited here for several hundred years (Atkins 2012a). A rich assemblage of artefacts was recovered from this soil, including metal work and slag from smithing activities, pottery and building materials, possibly originating from the priory and/or the lay settlement.

Post-Dissolution/post-medieval

- 1.3.16 Maitland (1964,192) has suggested that after the priory's Dissolution in 1538, most of the lots were bought by John Lacy, a farmer, who leased the former priory lands and tithes for some years, although various lots were purchased by Dr Legh (Danckwerts 1980, 211). The descent of Lacy acquisitions can probably be traced: in 1550 the priory and its lands were granted to Sir Antony Browne and resold twice in three years, the last time to Dr Thomas Wendy of Haslingfield in 1553 (*ibid*, 211-12). It was considered

too far out of town to become a college and Thomas's heir removed much of its stone for use in a new chapel at Corpus Christi College (Salzman 1967, 256). The farmland probably became Barnwell Priory Farm which was owned by Thomas Panton II at the time of the 1807 Act of Enclosure. It was auctioned off in 1809 when the area of the farm roughly corresponded with the 391 acres the Prior of Barnwell is said to have held in 1279, leading to the suggestion that the abbey farm was probably the core of the former Barnwell Priory estate (Danckwerts 1980, 212 and fig. 1).

- 1.3.17 In 1728 St Andrew the Less had a population of 181, the smallest of the 14 Cambridge parishes (Hampson 1934, 77). There was a large fire in 1731 which destroyed 50 dwellings in the village (Bowtell MSS, Downing College IV/821), presumably the majority of the houses. In 1749 there were 48 houses recorded in the parish of St Andrew the Less, suggesting that there may have been a slight decline after the fire. In contrast by 1801 there were 79 houses recorded, showing that the population was increasing steadily.

Recent excavations

- 1.3.18 All four excavations within the lay settlement seem to show continuity but a decline in the level of occupation – presumably as a result of the loss of the priory as the main employer. Excavations by CAU directly to the east of the current site at Eastern Gate found that there may have been a decrease in use on the site in the mid 16th to 18th centuries, and an amalgamation of the former medieval plots (Newman 2013). The post-medieval building remains did not survive as well due to modern activity, but included many pits. There were a few clunch buildings at the southern end of the plots, the location of which suggests there may have been a back lane here in this period.
- 1.3.19 An excavation at Coldhams Lane found a period of abandonment after Dissolution when the site may have been converted to pastoral farming (Atkins 2015). The site was reoccupied in c. AD 1650, although occupational evidence initially comprised make-up layers, but in the 18th century probable houses fronted Coldhams Lane. In the excavation at Newmarket Road c.30m to the west there were 16th century clunch features (latrine and well), which may have been associated with a possible farmhouse owned by the manor which had been part of the Barnwell Priory estate (Atkins forthcoming a). Evidence of increasing activity from the 18th century was found at this site. In the excavations 0.3km to the north-west, at Cambridge Regional College, two minor areas of late 16th/early 17th century quarrying were recorded, presumably relating to local use in building construction but for the most part the area was used for agriculture, including sheep grazing (Atkins 2012a).
- 1.3.20 The lay settlement was located to the south of the priory and to the south of a main road from the east into Cambridge called Barnwell Cawsey from at least 1574 (Reaney 1973, 46), now Newmarket Road. The subject site is located within the core of the former lay settlement and has a frontage along the Newmarket Road although the medieval frontage is likely to have been slightly further to the north (Newmarket Road having been widened in modern times). Evidence for individual properties have been found in two excavations to the east of the site (Atkins 2013; Newman 2013). Both sites included several properties (up to three and six plots respectively) averaging at just under 8m wide. The back lane also seems to have developed its own frontage since excavations immediately to the east found evidence for frontages along this road (Newman 2013).
- 1.3.21 The excavation 150m to the east found occupation dating from c.AD 1200 to the modern day (Atkins 2012b; Atkins 2013a). Pits and wells were by far the most common

features. The relationship of the settlement to Barnwell Priory continues to be an important research question as several features contained artefacts and materials that were apparently associated with the priory. The excavations directly to the east (Newman 2013) showed that late 12th or 13th century settlement here included wide scale craft and industrial activities. Many wells (including one chalk clunch lined) and pits were found primarily in the back of the properties. Some of the pits were possibly linked to tanning as some were clay lined and contained horncores in their backfills. There was a decline in the site from the 15th century. The site was characterised by property divisions, with differences in activities apparent in each plot.

- 1.3.22 Excavations 300m to the north-west found evidence for land reclamation along the edge of the river had started in the medieval period and soil continued to be deposited here for several hundred years (Atkins 2012a). A rich assemblage of artefacts was recovered from this soil including metal work and slag from smithing activities, pottery and building materials, possible originating from the priory and/or the lay settlement. An evaluation 100m to south-west at 30 Occupation Road found medieval quarry pits suggesting the influence of the settlement and priory continued here (House 2013).

Post-Dissolution Barnwell

- 1.3.23 After the priory's Dissolution in 1538, Maitland (1964, 192) has suggested, most of the lots were bought by John Lacy, a farmer, who leased the former priory lands and tithes for some years, although various lots were purchased by Dr Legh (Danckwerts 1980, 211). The Lacy acquisitions can probably be traced: in 1550 the priory and its lands were granted to Sir Antony Browne and resold twice in three years, the last time to Dr Thomas Wendy of Haslingfield in 1553 (*ibid*, 211-12). It was considered too far out of town to become a college and Thomas' heir removed much of its stone for use in a new chapel at Corpus Christi College (Salzman 1967, 256). The farmland probably became Barnwell Abbey Farm which was owned by Thomas Panton II at the time of the 1807 Act of Enclosure. It was auctioned off in 1809 when the area of the farm roughly corresponded with the 391 acres the Prior of Barnwell is said to have held in 1279, leading to the suggestion that the abbey farm was probably the core of the former Barnwell Priory estate (Danckwerts 1980, 212 and fig. 1).
- 1.3.24 The village itself continued after Dissolution. The parish church is directly opposite the excavation area. The location of any manor is possibly within the site. Keynes (1947) noted that in 1848 a portion of the Old Manor House of Barnwell was rented to be used as Mendicity House, a homeless nightshelter (see below). Mendicity House was within the excavation area and so the Victorian reference seems to suggest the old manor house was also located here.
- 1.3.25 In 1728 St Andrew the Less had a population of 181, the smallest of the 14 Cambridge parishes (Hampson 1934, 77). There was a large fire in 1731 which destroyed 50 dwellings in the village (Bowtell MSS, Downing College IV/821), presumably the majority of these houses. In 1749 there were 48 houses recorded in the parish of St Andrew the Less, suggesting that there may have been a slight decline after the fire. In contrast by 1801 there were 79 houses recorded showing population was increasing steadily.
- 1.3.26 Between 1801 and 1841 the population of the parish of St Andrew the Less grew dramatically from 252 to 9,486 (Salzman 1967, 138). This expansion comprised both the 'joining' of Cambridge and Barnwell village as well as infilling plots within the village itself. The resultant buildings in Barnwell were of mixed industrial and residential character (RCHME 1988, 366). To aid this expansion, further demolition and robbing of

the remaining Barnwell Priory structures took place in the early 19th century. The details of the post-medieval use within the site can be partly traced from late 18th and 19th century records and plans.

Documentary research by Jemima Woolverton

- 1.3.27 This documentary research primarily comprised visits to the Cambridgeshire Records Office, University Library and the Central Library. Nineteenth century maps are referred to but none have been included as figures for this PXA.

Early 19th century to c.1840 land usage

- 1.3.28 Up to the end of the 18th century Cambridge was encircled by fields and commons, including the Barnwell Field extending from the river below Jesus College to Coe Fen and the Western Fields (RCHME 1988: lviii). The open fields were subject to rights of common which rendered it necessary that they be cultivated as arable land (CUL MS Doc 621/30). Pemberton and several other promoters for the bill for enclosing lands in the parish of St Andrew the Less wrote that this lack of enclosed land made it inconvenient for those living in Cambridge to keep cows and horses (CUL MS Doc 621/30). Accordingly, they petitioned parliament in 1806-7 to enclose Barnwell, following the enclosure of St Giles parish in 1802 (CUL MS Doc 621/30).
- 1.3.29 In 1763 the Barnwell Priory estate passed to the Panton family (Danckwerts 1980: 218). Thomas Panton II, a horse jockey and Turfite known as 'Polite Tommy Panton' took ownership of the estate in 1782 (Danckwerts 1980, 218). However he probably did not live at Abbey House after his father's death and his 'only interest in Barnwell was to get it enclosed' (Danckwerts 1980, 218; CUL MS Doc.127). He was entitled to sell part of the estate to pay for enclosure expenses, and some of this was put up for sale in November 1808, but he died during the transaction, meaning that his successors Peter Lord Gwydir, his wife the Right Honourable Priscilla Baroness Willoughby of Eresby and her son the Right Honourable Peter Robert Drummond Burrell and his wife completed the transaction (Danckwerts 1980: 218; CUL MS Doc.127). The commissioners for enacting the Inclosure Act were Joseph Truslove and William Custance (CUL MS Doc.127). An advert for the sale of Freehold Estate of the manor of Barnwell parish in November 1809 does not include our site. Following the Inclosure Act of 1807, the property award for Barnwell was released in 1811, subdividing the open fields around Barnwell (Newman 2013: 130). Two maps were created for our site: the 1807 map which numbers the plots, and the 1813 parish map which names the owners of each of the plots (not illustrated; Table 1). These are detailed in the following table, taken from the Awards Book and the maps and show that five plots running north-south from Newmarket Road (one of which 34/35 was sub-divided) were within the Harvest Way excavation area (Table 1).

Plot No.	Names of Proprietors	Description
32	Olivia Palmby	6a, 1r, 20p
33	Richard Foster	1r, 31p
33a	Samuel Bullock	1r, 31p
34/35	James Pretlove	not in Awards Book
36	St John's College	not in Awards Book
37	Francis Forlow	Messuage and Premises

Table 1: List of owners and plots within the excavation area recorded from enclosure documents and maps

- 1.3.30 Both the 1807/11 enclosure and 1813 parish maps show a row of buildings running along Newmarket Road, and a row of buildings running along what is now Harvest Way, but this does not seem to be a street at this time (not illustrated). Plots 32 and 34/35 also have buildings extending N-S from the houses fronting Newmarket Road. The enclosure maps and Awards Book tell us who owned the land at time of enclosure, but give little information about who lived there or the land usage.
- 1.3.31 The Palmby family were landowners in Barnwell before the Inclosure Act. Edward Palmby was connected to the Bird Bolt pub to the west of the site, owned by Benet/Corpus Christi College (CCCC 09/17/18) ? Olivia (Olive) Palmby was leased 33 acres and 2.5 roods from Corpus Christi in 1795 on a 21 year lease (CCCC09/17/21). The listings in CUL MS Doc 621/4 suggest this is probably the plot of land immediately to the west of the site on the 1811 map, listed as 'Benet College', meaning that Olivia Palmby in effect had two plots of land adjacent to each other (CUL MS Doc 621/4).
- 1.3.32 Richard Foster is listed as the owner of Plot 33 and was one of the four overseers of the poor in Barnwell St Andrew the Less parish at time of Inclosure (CRO Q/RD/z6, 187). He was an extensive landowner across Cambridge. He claimed his rights to common stray land across Cambridge in a document from 23rd November 1807 (CUL MS Doc 621/174). In the parish of St Andrew the Less he laid claim to a 'freehold messuage or tenement' public house called the George with a broad gateway and yard, now occupied by Mr Henry Fuller (CUL MS Doc 621/174). This is plausibly the pub later known as the George and Dragon, which we know also had a yard behind it. He seems to been a great owner of pubs, since he also laid claim to public houses known as the Black Lion and the Hare and Hounds in Barnwell (and many others across the town), and he also laid claim to the right of way over 'Stirbitch' Fair Green and Garlic Row since he was the owner of Chesterton Ferry (CUL MS Doc 621/174). The vibe we get from these documents is that all the big landowners of the time were fighting over this new land becoming available.
- 1.3.33 Samuel Bullock is listed as the owner of Plot 33a. A Samuel Bullock is listed as a Baker and Flour Dealer in the 1823-4 Pigot Directory of Cambridgeshire (C.47.2.), a fact confirmed by an advert for the sale of freehold premises at a bakehouse on St Andrews Street in 1850 which used to belong to Samuel Bullock and Son (CUL Maps PSQ.x.18.159). He does not appear to have lived in the parish of St Andrew the Less, although there were several other Bullocks living in the parish, for example a 'Bullock' in the 1841 St Andrew the Less census. He seems to have been a considerable landowner, since there are several case notes for the Cambridge Town Court of Pleas in the 1830s and 40s in which he is the plaintiff for outstanding debts. There were two Samuel Bullocks so not all these records refer to the same person: a record in 1833 of Samuel Bullock bringing a case against William Edmunds lists him as 'Samuel Bullock the elder', and other records list a 'Samuel Bullock the younger' (CB/12/7/137). A record dating to 1839 lists him as deceased; several of the court cases seem to be posthumous, with the cases brought by his partner, William Ekin (CB/12/10/39, CB/12/20/30).
- 1.3.34 James Pretlove is listed as owner of Plot 34/35 on the 1811 Enclosure Map. However there is no evidence that he was actually given this land. On a document dating to c.1800 (though possibly a bit later), Samuel Bullock, Richard Foster, Olivia Palmby, St John's College and Benet College (leasing to Olivia Palmby) are listed as having common rights allowed in this area in the village of Barnwell, but Pretlove is notably absent from this list, and the consecutive numbering does not show there being a plot here at all (CUL MS Doc 621/40). CUL MS Doc 621/39 shows that James Pretlove

made no claims to the land being enclosed (CUL MS Doc 621/39). However, on 28 November 1808 James Pretlove wrote an angry letter to the Inclosure Commissioners objecting that lands that should have been awarded to him 'in light of four ancient messuages and tenements' in the parish of St Andrew the Less were given to T Tate instead of him (CUL MS Doc 621/277). So maybe Plot 34 on the 1811 Enclosure Map did not actually belong to James Pretlove, but to T Tate instead. James Pretlove is recorded as living in Barnwell in the 1802 Cambridge Poll Book.

- 1.3.35 The buildings running along Newmarket Road in the 1807/1811 enclosure map are probably the same as those present on the later maps of the 19th century. The buildings running along the south side are present on the 1810 OS map, and seem to form part of a large square building or courtyard (not illustrated). The western 'wing' of this is probably the malthouse marked on the 1888 1st Edition Ordnance Survey map, but what the eastern wing represents is a mystery. The southern buildings marked on the 1807/11 Inclosure Map probably represent outbuildings belonging to the properties, since there seems to be no access to them from the south, as where Harvest Way now lies seems to be simply a boundary line rather than a road or trackway.
- 1.3.36 The so called 1832 parish map of St Andrew the Less (but pre-dates the 1830 Baker map; CRO TR B69/P10) shows four plots within the development area. Two of the plots (Plot 33a and 34/35) recorded at enclosure have amalgamated by/in the 1820s. In the middle of this new amalgamated plot there was a long north-to south line of building(s), which is possibly a stylised depiction of the St George and Dragon pub - see below). The buildings within the other plots (32, 33 and 36), including along what became Harvest Way, seem not to have changed since the 1813 plan.
- 1.3.37 The 1830 Baker's map shows that there was considerable changes within the site. The former plots at enclosure have seemingly gone. At least six long north to south buildings fronting from Newmarket Road and extended a considerable distance back towards to what became Harvest Way. One very long north to south building extended from Harvest Way 2/3rds of the way to Newmarket Road.

Occupation from c. 1840- 1900

- 1.3.38 The 1840 and 1858 Rowe maps are the first to record the site in some detail as he was commissioned to draw properties connected to sewerage links. Census records for the parish also begin in 1841, but it is difficult to determine which houses they refer to. Accordingly, records dating from 1851 are more useful in determining both property numbers and names of residents. These are listed in Table 1 and represent census records from 1851, 1861, 1871, 1881 and 1891. This not only gives us an idea of the families and occupations of those living on the site, but through cross-comparing the records it has been possible to identify which houses the records are referring to even when the house numbers have not been supplied or are highly variable from census to census. By cross-comparing the census records with the RR Rowe Sewerage Plan of 1840 it has also been possible to roughly assign house numbers to properties according to their relative positioning to fixed points such as the streets Shamrock Passage and Brown's Yard (not illustrated).

Shamrock Passage

- 1.3.39 Shamrock Passage is in Plot 34/5, and appears to the respect the Western boundary of the plots marked on the 1807 map. It is not listed on the 1841 census, but we know that it did exist, since it is first named on the RR Rowe 1840 map (CB4/19/1/1-12). It may be represented, but unlabelled, on the 1820s (1832 parish map) and 1830 Baker's

map. An 1850 advert lists freehold premises on Sun Street to be sold by auction by Wentworth and Son in December 1850:

'Barnwell Lot 2: Six Freehold houses, with large yard etc, known as the 'Blackbirds' Estate, and situated behind the Shamrock public house, near Barnwell Old Church, as let to Mrs Hard, at the low annual rent of Fifteen Pounds, subject to a small land-tax of about 8s' (CUL Maps. PSQ.x.18.159).

1.3.40 This is almost certainly the area known later as Shamrock Passage – and helps explain where the street gained its name. Presumably the pub was on the front of Newmarket Road, meaning that there were three pubs on our site at this time: The Black Bull (later the Heart of Oak), the George (and Dragon) and the Shamrock. The 1851 census numbers the properties 4-7, the 1861 census numbers them 1-7, the 1871 and 1881 censuses number them 1-8, and only 6 are accounted for on the 1891 census. This suggests that a maximum of 8 properties were used as dwellings during this period, and potentially several of them were amalgamated or renovated during the later period, perhaps as a result of the improvements of the Cambridge Improved Industrial Dwellings Company in the late 1870s and 1880s.

1.3.41 Very few documentary sources survive for Shamrock Passage. Of these is one referring to Fanny P Wallis who in 1886 completed a poll of owners and ratepayers to say that she had four houses on Shamrock Passage. These were Freehold, sole interest, and she received £17-0-0 for them from Chapple, Redform, Jones and others (CB/2/CC/19/6/351). The musician Harry Jones is listed as living at 6 Shamrock Yard in the 1881 and 1891 censuses, with a housekeeper in the 1891 census. Elizabeth Redfarn, laundress, lived at an unnumbered property in Shamrock Yard in 1891 with her son. Since a Daniel Redfern lived at 5 Brown's Yard in 1881, it is likely this is the same family as the 'Redform' described in Fanny Wallis' account, just with variable spellings!

Brown's Yard

1.3.42 Brown's Yard does not appear to be on the Inclosure maps of 1807 and 1813, but there does seem to be an opening between buildings leading to what later became Brown's Yard. It first appears in a credible form on the 1830 Baker Map, and is more clearly illustrated on the 1840 and 1858 RR Rowe maps. This layout persists into the mid twentieth century, when it is demolished.

1.3.43 Twelve Brown's Yard properties are listed on the 1851 census, and numbers 8-14 are listed on the 1861, although most of these were unoccupied. From 1871 onwards only 8 properties are listed on the site – no doubt because buildings were really far too small to house 12 domestic units. Brown's Yard is probably one of the 'blind alleys' and properties 'unfit for human habitation' described by the Cambridge Improved Industrial Dwellings Company when they bought the land in the late 1870s (Keynes 1947: 142). Who Brown was and what he used his yard for remains a mystery.

The Black Bull (76 Newmarket Road)

1.3.44 The Black Bull pub is on Plot 36, partly within the site. The first reference we have found to it is on the 1851 census, where it is one of the few named properties. The tenant was James Low, who was a victualler and hay dealer. James lived with his wife, Margaret Low, son Richard Low, two other children, one lodger and his mother in law Ann Fuller, who was the former inn keeper. On the 1861 census the Black Bull is numbered 76 Newmarket Road, and the 'publican and carter' is Margaret Low, now a widow. She lived in the pub with her son Richard Low (32) who was a brewer, and a servant who was the housekeeper. On the 1871 census the pub at 76 Newmarket Road

is named simply the 'Bull', and the proprietor is now Christopher Thurston, brickmaker and publican. He had three lodgers, one of whom was Richard Lowe (sic), who is listed as an 'unemployed brewer'. It is interesting to read between the lines: maybe Margaret Low had died and the pub had been taken over by a new landlord, but Richard Low refused to move out of the family home! There seems to be few other reasons why an unemployed brewer would be living in a pub. By the 1881 census, the Black Bull seems to have stopped being a pub, since an Edward Bollow, labourer on a brickyard, is listed as living there. However on the 1991 census the house has returned to use as a public house, renamed the 'Heart of Oak', with Emma Warren listed as the innkeeper, living with her adult daughter.

Grocers (77 Newmarket Road)

- 1.3.45 77 Newmarket Road (to the east of the Black Bull), and probably just beyond the excavation area also seems to have continuity of use from 1861-1891, since the property is consistently occupied by a succession of grocers and general dealers. In its strategic position on the main road and next to the pub, it probably made a very useful convenience store for the people of Barnwell!

George and Dragon (69 Newmarket Road)

- 1.3.46 The George and Dragon public house is on Plot 33/33a. Houses are depicted on Newmarket Road on the 1807 and 1813 maps, and although the George and Dragon is not labelled, we know there was a pub called the George on the site from Richard Foster's claims in 1807 (CUL MS Doc 621/174). From 1851 to 1891 there was considerable change in ownership/tenancy listed on the censuses for the George and Dragon. On the 1851 census, William Maile is listed as innkeeper living with his wife and a servant, but in 1861 Richard Thurlbourn is publican, living with his wife, two servants (a dairymaid and rag sorter), and 26 lodgers. The George and Dragon appears to be a large property on the 1885 1st Edition OS map, and presumably was this large in 1861 to accommodate such a large number of people; this does not explain why there are so few occupants in 1851, unless the building was extended in the intervening period. In 1871 William Weston was the publican, and had 9 lodgers and 10 servants: such a large number of servants suggests the pub was receiving considerable custom in this period. In 1881 Phillip Bells was the publican, living with his wife, 4 servants and 12 lodgers. On the 1885 First Edition OS map, the building is listed as the George and Dragon Coffee Tavern, and the 1891 census also lists this building as a 'Coffee Tavern', tenanted by Charles J Ball, Stationer's Assistant, living with his wife, 4 children, a servant and 2 lodgers. It would accordingly seem that the George and Dragon was converted from a public house into a coffee tavern at some point between 1881 and 1885.
- 1.3.47 A building with the same footprint as the George and Dragon remains on the 1954 OS map; this building was demolished in the 1960s redevelopment of the site.

George and Dragon Yard

- 1.3.48 Numbers 1-3 George and Dragon Yard first appear on the 1881 census. The yard and buildings may have existed before this point and the naming of the yard may mark the transition of general George and Dragon lodging houses into independent dwellings. The limitations of the Rowe 1840 and 1858 maps make it difficult to prove this. Open space representing the George and Dragon Yard exists through to the 1954 OS map, but is unlabelled.

Leeke Street

- 1.3.49 The entrance to what became Leeke Street (Plot 32) can be seen on maps as far back as the 1807/11 map and the 1813 parish map. Originally it was just the gap between two houses, with the house to the west probably being Mendicity House (66 Newmarket Road- see below), and the entrance leading to a yard and gardens behind Mendicity House – the open space visible on Olivia Palmby's plot on the 1813 map. This short street precursor to Leeke Street is most visible on the 1840 and 1858 RR Rowe maps. Leeke Street first appears in its full form on the 1885 First Edition Ordnance Survey (OS) map, and is on the 1894 Cambridge Sewerage Sections. This ties in with what we know about the redevelopment of Mendicity House and environs c.1878-1881.

Mendicity House (66 Newmarket Road)

- 1.3.50 66 Newmarket Road is on Plot 32. After the Napoleonic Wars (1803 – 1815) unemployment and the high price of food caused widespread vagrancy (Keynes 1947, 135). Beggars congregated on the Backs in Cambridge, asked students for money and stole out of college rooms. As a result, a *Society for the Suppression of Mendicity* (beggary) or *Anti-Mendicity Society* was founded in 1819, seeking to actively repress beggary by arresting and convicting perpetrators (Keynes 1947, 136). By 1838, the activities of this society seem to have lapsed, and in 1847 a new society of the same name abandoned the repressive approach and now aimed to assist artisans or labourers journeying in search of work by supplying them with a meal and shelter for the night (Keynes 1947, 137).
- 1.3.51 To this end, in February 1848 the committee rented a portion of the Old Manor House in Barnwell, owned by a Cambridge broker called Thomas Parker, to receive needy travellers (Keynes 1947: 137, 140). It was known as 'Mendicity House' and was run by a resident Constable and Matron (Keynes 1947: 137). On the 1851 census, Robert Scholes is listed as Master of Mendicity House, and Sarah Hill as Mistress, and there were 24 lodgers present at the time of the census (labourers, stonemasons, a carpenter and a dressmaker). From 1848-54, Mendicity House received more than 12,000 travellers, an average of 40 per week (Keynes 1947: 137). An agreement exists from 1855 in which Reverend Sparkes Bellett Seaby rented the yard behind Mendicity House containing a children's schoolroom, workshop and outbuildings from the Parker family for the use of a school or Sunday school (CRO P24/25/13). Clearly Mendicity House had multiple functions in this period.
- 1.3.52 A map dated 1873 recorded presumably land owned by Parker including Mendicity property (not illustrated). This map recorded that all properties fronting Leeke Street (west, south and eastern sides) as well as two adjacent properties fronting Newmarket Road to the west were part of this sale - they were sold as four plots (8-11). Plot 12 was seemingly the western side of Shamrock Passage and Newmarket Road.
- 1.3.53 On the 1861 census, Thomas Ralling is the head tenant, listed as a General Commission Agent, living with his wife, mother and 7 lodgers (4 labourers, 2 smiths and 1 seaman). It seems that Mendicity House was essentially what we would call a 'homeless nightshelter' today, providing food and lodging. It is not wholly dissimilar to the way Jimmy's Nightshelter operates on East Road today, founded over a hundred years later.
- 1.3.54 Keynes writes that Mendicity House operated for more than 20 years, and the census records suggest that Mendicity House was dissolved by 1871, when it is listed as unoccupied. Octavius Parker, the grandson of Thomas Parker, who had owned

Mendicity House from 1865, died with debts so considerable that all his property was sold to pay his creditors (Keynes 1947, 140). Accordingly, Mendicity House and nearby poor cottage houses were advertised in 1878, and enterprising town and university people quickly formed a group called the *Cambridge Improved Industrial Dwellings Company Ltd.* to buy this and other property (Keynes 1947, 141). Their aim was to replace the appalling and unsanitary housing currently available in Barnwell with decent tenements, so as to encourage responsible tenant behaviour (Keynes 1947, 142).

- 1.3.55 The *Anti-Mendicity Society* was dissolved and reformed as the *Cambridge Charity Organization Society (Anti-Mendicity Society)* in 1879, with the same committee, due to the belief that their current works, although relieving the immediate needs of beggars, was not solving the ultimate problem (Keynes 1947, 138).

Late 19th century redevelopment - after closure of Mendicity House

- 1.3.56 Leeke Street was extended to the south after the 1873 sale. Keynes in 1947 (page 144) recorded that eleven cottages were built in the garden behind Mendicity House on a new (extended) road named Leeke Street. The street was named after a vicar of the parish - Edward Tucker Leeke, vicar of St Andrew the Less parish from 1869 –1877 before taking up posts in Lincoln Cathedral. The building work was completed by the time of the 1881 census, when houses 1-18 Leeke Street are recorded. And so one experiment in social housing ended and another began. We know that the land for the houses was sold/given by the Parker and Cain family in 1879 due to a later document about houses on Leeke Street:

Indenture of Conveyance dated 4 March 1879 and made between Clarissa Parker of the 1st part Olivena Parker, Mary Ann Parker, Joseph Cain, Caroline Ann Cain and Agnes Parker of the second part and the Cambridge Improved Industrial Dwellings Company of the third part." (K515/SP/Cam/1633-34).

Occupation from c. 1900-1960

- 1.3.57 The site usage remained fairly static through the first half of the twentieth century. There was, however considerable change to the west of the site (CAU 2013 excavation). A resident of Godesdone Road at the beginning of WW2 recalled that there, 'was an abattoir, cows used to come up from the Common to be taken there, after this came a fire station, then the offices. Next door was Abbey Tyres and next to that the public house called The Bell Inn which was very old with a large garden at the back' (Barbara Stepney pers. comm.)

Shamrock Passage

- 1.3.58 By the 1927 OS map, the area around Shamrock Passage had opened out with the demolition of several buildings to the west side. It seems to contain even fewer buildings on the 1954 Ordnance Survey map.

Brown's Yard

- 1.3.59 Brown's Yard continues in its mid-nineteenth century form into the twentieth century, and seems to cover a very similar footprint on the 1927 OS map to before. On the 1954 Ordnance Survey map it contains an extra outhouse in the courtyard to the south-east. In F.T. Unwin's account of life in the 1920s in Barnwell it is described as 'a small sunless alley off Newmarket Road' (Unwin 1991: 9).

Leeke Street

- 1.3.60 There is little change to Leeke Street and the surrounding area from c.1879 to redevelopment in the late 1960s; the area layout is replicated almost exactly on the 1903 Second Edition OS, 1927 Third Edition OS or on the 1951 OS maps. An auction of several of the freehold investments on Leeke Street in 1939 provides an insight into the facilities these properties possessed:

"Auction of 9, 10, 11, 12, 13, 14, 15, 16, 17 Leeke Street on 8/2/1939 freehold investments. Sold by executors of George Clark deceased. Sold subject to the existing tenancies.

Lot 5 - 9, 10, 11, 12 Leeke Street

Well built of brick with tiled roofs and each containing: Living room with cottage range Scullery with sink and copper, Coalplace and WC, Large bedroom with fireplace and gas and water laid in. No 11 has a Register fireplace in living room. Frontage 49'4", Depth 23'1", or thereabouts. Let to Mr E Binge, Mr McLurg, Mrs Munson and Mr Dench on weekly tenancies at rents of 5/-, 5/-, 4/-, and 5/- respectively amounting to £49 80 per annum. Landlord paying rents.

Lot 6 - 13, 14, 15, 16, 17

Well built of brick with tiled roofs and each containing front sitting room with fireplace, living room with range, copper and sink, coalplace, pantry, WC, two bedrooms with fireplace and gas and water laid in. Nos 13, 14 and 15 have a scullery with sink and copper in addition. There is a passage between Nos 15 and 16 over which is a Right of Way to these cottages and other property. Small Gardens in rear and Back Entrance. Frontage 72'7", Depth 51'9" or thereabouts. Let to Messrs W Cash, M Cash, F Brown, Miss Gayler and Mr Howard on weekly tenancies at rents of 6/-, 5/3, 5/6, and 5/-, amounting in all to £70 17 0 per annum. Landlord paying rates. (K515/SP/Cam/1633-34).

- 1.3.61 Without maps showing the house numbers, it is difficult to know which houseplots on the 1885 (and other maps) these refer to. However, what is evident is that there were two classes of house, with those listed in Lot 6 being larger and superior in quality. Leeke Street and the surrounding area seems to have been a very poor area of Cambridge if F.T. Unwin's account is correct. He describes it as a small culdesac with 15 houses on each side c. 1910 (Unwin 1991, 8). A rag and bone man, a fishmonger, a boot repairer, a coal merchant, a bookmaker and an escapologist lived there; the rest were casual labourers, usually out of work (Unwin 1991: 8). He describes the whole street as a rat infested 'damp trap' (Unwin 1991, 23). He also describes walking down a passage between the houses to the back of a row of houses, and how there was a timberyard to one side of Leeke Street at this point – it is difficult to know which side of the street he is referring to, however (Unwin 1991, 27).
- 1.3.62 A 1964 photograph of Leeke Street survives (CRO CB/2/SE/4/1/60/11; not illustrated). It shows a narrow road with cobbled guttering, with terraced houses on the east (left) side subdivided by an alleyway leading to the backs of the properties (as shown on the 1st Edition 1885 map). The end of the street is blocked off by a wall, and it appears that the street was a culdesac. Accordingly, as suspected Harvest Way can have been neither a road nor a bridleway in this period, unless it was on the other side of the wall. A house directly at the end of the street can be seen in the distance behind the wall – probably one of the detached houses built on New Street which are shown on the 1954 OS map.

- 1.3.63 Another (undated) photograph of Leeke Street can be viewed on page 16 of Unwin's 1991 account, which refers to a derelict shop on the corner as Pink's the florist. Two pictures taken along Newmarket Rd in October 1959 show partial views of the florist shop inscribed in capitals as A Pink above a large six paneled window. There was a general dealer called Stephen Pink living at 1 Leeke Street on the 1881 census, so it is plausible that descendents of the same family were living and trading on the same site whenever this photograph was taken.

1960s Redevelopment

- 1.3.64 Newman (2013) states of the CAU site to the immediate east, that 'in 1968, all domestic occupation ceased and the area was solely given over to industrial warehousing' (Newman 2013, 136). This seems to have occurred within our site in roughly the same time period. A series of photographs charting the A45 Newmarket Road improvement from East Road to Leeke Street in 1970-71 show Newmarket Road being widened to increase capacity. All former buildings on the site had been demolished and subsequently two large new factory blocks were built on the site.
- 1.3.65 The westernmost factory was named as Cambridge Refrigeration Technology on googlemaps and was situated to the west of Leeke Street. The factory to its right was the Corona Soft Drinks Factory. These two factories in turn were demolished in 2013 prior to the archaeological work.

1.4 Acknowledgements

- 1.4.1 The author would like to thank Ashbury Construction Services Ltd who commissioned and funded the archaeological work especially Alan Lythell and Richard Pippard. Alan helped greatly with the smooth running of the project, dealt with the health and safety and even helped excavate a few features. The site was machined largely by Wayne and Richard Wells from G. D'Amore. Anglian Demolition helped clear the site including a large fuel tank. The project was managed by Aileen Connor who also edited this report. Andy Thomas, Senior Archaeologist at Cambridgeshire County Council monitored the evaluation on behalf of the planning authority.
- 1.4.2 Rob Atkins directed excavations with Stuart Ladd and Peter Boardman supervising with Matt Brooks, David Browne, Zoe Ui Choileáin, Zoe Clarke, Nick Cox, Hannah Cutler, John Diffey, Steve Graham, Andy Greef, Kat Hamilton, Toby Knight, Adele Lord, Kat Nicholls, Rhiannon Philip, Chris Swain, Daria Tsybaeva, Julie Walker, Robin Webb and Jemima Woolverton. Stuart Ladd surveyed the site and placed historic maps into GIS. Steve Critchley kindly metal detected the site. Report illustrations were by Stuart Ladd with Charlotte Davies and Gillian Greer.
- 1.4.3 Steve Wadeson supervised artefact processing and also reconstructed many of the near complete pottery vessels found. Rachel Fosberry supervised the processing of the environmental assemblages including the waterlogged wood recovered. Rhiannon Philip floated the bulk environmental samples. I am grateful to Craig Cessford and Richard Newman of CAU for constructive comments during a site visit as well as supplying copies of relevant CAU reports.
- 1.4.4 I am grateful for specialist analysis from Peter Boardman, Craig Cessford, Zoë Ui Choileáin, Chris Faine, Carole Fletcher, Rachel Fosberry, Antony Haskins, Chris Howard-Davis, Rhiannon Philip, Mairead Rutherford, Mark Samuels, Lexi Scard, Ruth Shaffrey, David Smith and Jemima Woolverton.

2. PROJECT SCOPE

- 2.1.1 The Project will comply with the Written Scheme of Investigation (Connor 2013b).
- 2.1.2 Previous evaluation work on the site by OAE (Atkins 2013b) will be included with the results of the excavation in the analysis and reporting stage. Overall the Harvest Way excavation was in an area of 2440.9m² and had c.3600 contexts assigned. This compares to the Coldhams Lane excavation 150m to the east by OA East which was within a 522.3m² area and 650 contexts were assigned (Atkins 2013a; Atkins 2015), Newmarket Road 50m to the west was within a 260.31m² and and there were 458 contexts assigned.(Atkins forthcoming). The CAU excavation at Eastern Gate Hotel was directly to the east with excavation in an 1867.5m² area which had c.2400 contexts (Newman 2013). It is presently uncertain whether there will be a joint publication, but promising comments and suggestions were made after contact with CAU took place at the end of 2014.
- 2.1.3 In addition, a further small evaluation has taken place at Occupation Road within the lay settlement (House 2013). A small excavation at Brunswick directly to the west of Barnwell Priory and outside the lay settlement also had material from the settlement deposited as levelling up layers/manure scatters (Atkins 2012a).
- 2.1.4 Where data from other relevant excavations is published such as at Brunswick 0.3km to the north-west (Atkins 2012a) or otherwise accessible (e.g. Cessford 2007), it will be included within the analysis and reporting stage as comparative material. The area around the Grand Arcade and presently at Barnwell lay settlement have been the only two major areas of excavations producing medieval to modern features within Cambridge. There is great scope for comparison between the adjacent four main Barnwell lay settlement excavations (collectively 0.509 ha) with the Grand Arcade site (0.7ha). The former four were within the eastern fields of Cambridge, which was directly controlled by this important priory. It is likely to have been influence by the town of Cambridge itself in the medieval period (such as trade), but in the post-medieval period, after the priory was Dissolved, the town's influence presumably increased greatly. In the early 19th century it became a suburb of Cambridge.
- 2.1.5 Documentary sources will be consulted and used to place the project in its historical context.

3. INTERFACES, COMMUNICATIONS AND PROJECT REVIEW

- 3.1.1 The major excavation by the Cambridge Archaeological Unit to the west of Coldhams lane/south of Newmarket Road is relevant to this project and every effort will be made to interface with the CAU with regard to publication of results.
- 3.1.2 Project communications will largely be by email/phone, it is not anticipated that general meetings to discuss findings will be needed, although the Project Manager/Project Officer will ensure all members of the team are kept informed of progress and results.
- 3.1.3 The project will be subject to internal OAE quality control processes throughout its life and will be subject to review/approval by CCCHET at key reporting stages *i.e.* post-excavation assessment and updated project design and full grey literature.

4. ORIGINAL RESEARCH AIMS AND OBJECTIVES

4.1 Research Objectives

4.1.1 The Written Scheme of Investigation (WSI) suggested the relevant research themes for this site based on the evaluation results (Connor 2013b). The research objectives were written with reference to the regional research agenda and strategy for the eastern counties (Brown and Glazebrook (2000) updated by Medlycott (2011)). The WSI noted that the subject site lay close to the medieval priory of Barnwell, within the heart of its lay settlement, adjacent to open fields. The influences on the landscape here it thought were likely to be complex. The relevant research themes for the site included:

- The impact of the development of towns on the surrounding countryside
- Trade and industry
- The influence of monasteries on urban and rural landscapes
- Continuity and change from medieval to post-medieval

The key research aims of this project relate to medieval crafts, trades and industry, rubbish disposal and the influence of religious houses (Barnwell Priory) on the landscape.

Research objectives that may be addressed by this investigation include:

- *The origins, longevity and layout of individual properties;* there is evidence from the evaluation that it will be possible to identify individual properties and distinguish them from one another. There is high potential for finding contemporary dating evidence to use as a means of establishing a chronology for the site and individual properties.
- *Inter and intra site comparison between contemporary properties.* There is high potential to make comparisons across a wide range of properties on this and the adjacent hotel site. On the adjacent site at least 6 individual properties could be identified, it is thought likely that a further 9 will be identifiable on the subject site and these 15 properties can then be compared with those found slightly further to the east at Coldham's Lane
- *The relationship of the properties to Barnwell priory and the settlement of Barnwell.* Artefacts and features that are likely to have associations with Barnwell Priory have been found on both the adjacent hotel site and Coldhams Lane site, it is likely therefore that there will be similar finds here. In addition it is likely that the influence of the priory on the fortunes of the settlement will be discernible by close analysis of the material remains.
- *Trades, crafts, industries;* there is a clear indication that evidence for specialist trades are likely to be present as represented by an alembic (distillation vessel) found in the evaluation.

Specific questions that might be answered include:

- How many properties can be identified and what is their chronology?
- What trades and crafts were being carried out on the properties?
- Is there any evidence for social organisation, health, wealth and can differences be discerned?
- What was the relationship of the Barnwell settlement to Cambridge and to Barnwell Priory?

- In what ways did that relationship change/develop after the Dissolution?
- What factors influenced the decline of Barnwell settlement and growth of the Cambridge suburb?
- What was the extent and character of medieval and post-medieval activity in the area and how did it sit in the wider context of Barnwell Priory and the settlement identified to the east?
- Using the spectrum of environmental techniques appropriate for this aspect of investigation, can the landscape and its transformation brought about by the settlement's inhabitants and due to natural events be modelled?

5. SUMMARY OF RESULTS

5.1 Introduction

- 5.1.1 Phasing of the site is based on both stratigraphic matrix (using computer software *stratify*) and datable finds. The phasing is consistent with the adjacent, recently excavated sites on Newmarket Road (Newman 2013; Atkins forthcoming b). For the purpose of assessment a single phase has been assigned for each of the prehistoric, medieval, post-medieval and modern periods. This assessment has shown that there is sufficient evidence to establish more precise and secure phasing.
- 5.1.2 For Assessment, the evaluation records have been integrated with the excavation records.
- 5.1.3 The results (below) should be read in conjunction with both Appendix A, which is a context summary (Table 6), and the site plans (Figs 3-7).
- 5.1.4 The site phases are as follows:
- | | |
|-----------------|--------------------------|
| Period 1 | Prehistoric |
| Period 2 | c.AD 1200-c.1538 |
| Period 3 | c.AD 1538-c.1800 |
| Period 4 | c.AD 1800-present |
- 5.1.5 The evaluation and excavation together produced 3571 contexts (Table 2). Of these 16 contexts were dated to Period 1 (0.45% of the total), 1432 contexts to Period 2 (40.07%), 1259 contexts to Period 3 (35.23%), 732 to Period 4 (20.47%) and 132 contexts are unphased (3.67%).

5.2 Period 1 Prehistoric

Human Burial(s)

- 5.2.1 The only definite prehistoric feature was a crouched burial (**1273**), located within five metres of Newmarket Road in the centre of the site (Fig. 3). An adult male between 40-48 years old with head to the north was placed in an oval pit. A radiocarbon date produced a date: 800-546 cal BC (95.4% probability) Suerc- 53420 (GU34302). There was no evidence the burial had been placed within a mound, although later medieval to modern truncation may have removed it. Near to this burial were small parts of further human remains found in later features, but it is uncertain whether they were contemporary with this burial or came to the site as disturbed remains from the medieval priory.

Possible prehistoric field system(s)

- 5.2.2 Fragments of sinuous ditches may be evidence for prehistoric land division. One of the ditches (at least 10m long) was located less than 10m to the east of burial **1273**. The second on the eastern side of the excavation area was at least 15m long. The ditches were stratigraphically the earliest features on the site but other than a few animal bone fragments in the latter, both ditches were devoid of finds.

5.3 Period 2 Medieval (c.AD.1200-1538)

Medieval features comprised almost half of the context record and were found across the entire site (Fig. 4). The earliest features were probably field or new property boundaries which only survived as intermittent ditches or fragments of ditches near Newmarket Road. Medieval features survived best in the western and central parts of the site, only the deeper features survived at the eastern side of the site suggesting truncation had a more detrimental effect here. Evidence for timber structures was found throughout, most notably at the western and central areas near Newmarket Road where they were found associated with remains of clay floors. Back plot activity survived everywhere in the form of multiple pits and specialist features such as wells, ovens and tanks.

Ditched enclosures

- 5.3.1 Fragments of a series of ditched enclosures were located along the Newmarket Road boundary of the site. Although severely truncated they were similar in orientation and size. Finds included a small number of abraded medieval pottery sherds and fragments of animal bone. Stratigraphically they were the earliest of the medieval features. The lack of finds suggests that the features were not directly associated with settlement. They may have been boundaries to small fields or possibly they were dug to set out new properties that were later built on and occupied. The full extent of the enclosures was not revealed by the excavation and it is likely they continued beneath the modern course of Newmarket Road which was widened to the south in the 1960s.
- 5.3.2 The best preserved enclosure was located at the western end of the site and comprised three ditches, enclosing an internal space at least eight metres across (**42/44, 1677/1679/1681/1683** and **1372**). Elsewhere the ditches were much more fragmentary (**1430, 2270, 1896, 2225, 2177**).

Buildings and other structures

- 5.3.3 Groups of post holes, some associated with clay floors and/or stone walls, appear to be evidence for seven timber buildings along the Newmarket Road boundary of the site (Buildings 1-7 in Fig. 4). None of the post holes formed an obvious building footprint but their association with probable floors and their regular, c. five metre spacing suggests they represent a row of detached buildings, possibly houses. In addition to the south (rear) of Building 3 another group of post holes may be evidence for a workshop or other outbuilding (Structure 1).
- 5.3.4 These buildings appear to end at around 15m from the eastern edge of the site although this is almost certainly a result of truncation rather than a real change in land-use. However, roughly parallel to the site's eastern boundary was a line of post holes (**1593, 1724, 1726** and **1836**) that may represent a fenced boundary.
- 5.3.5 A few other post holes have been assigned to Period 2, but they formed no coherent groups and further analysis is unlikely to be informative.

Building Number	Context Numbers	Associated Specialist Features
1	Post holes: 18, 22, 30, 32	
2	Post holes: 1301, 1654, 1656, 1660, 1662	Well: 3388 kiln/oven/hearth: 3370
3	Post holes: 1114, 1116, 1118, 1120, 1122, 1124, 126, 118, 1318, 1322, 1326, 1329, 131, 1333, 1336, 1338, 1395, 1397, 1401, 1405	Well: 784 Oven/hearths: 1414, 1415, 1416, 1417 Structure 1 Post holes: 2258, 2438, 2464, 2466, 2468, 2471
4	Post holes: 62, 64, 66, 1471, 1473, 1475, 1477, 1479, 1481, 1483, 1508, 1516	Well 1463 Kiln/oven/hearth: 2452, 2455, 2855, 3168, 3384
5	Post holes 1735, 1737, 1739 wall 1591	Tanks: 2851, 3074/3137 and 3076)(3280
6	Clay floor: 921, 1613	Wells: 2412, 1747, 1750, 1927, 114/2554, 1939/3160 Kiln/oven/hearth: 2604 Tank: 2701
7	Post holes: 6, 8, 10, 1997, 1999, 2001, 2071	

Specialist features

- 5.3.6 Specialist features included seven oven/kilns, five tanks and ten wells (see table below). In several instances all three feature types occurred together and this combination of water collection/storage and heat could be indicative of a wide range of activities such as brewing, baking, metal working or other specialist tasks.
- 5.3.7 The occupants of Building 6 may also have carried out more specialised tasks since three wells (**2412, 1747** and **1750**) lay in close proximity in contrast to other wells dating to this period which were located away from the dwellings.
- 5.3.8 Building 7 was also unusual in that no post holes were associated with its clay floor, again raising the possibility of a specialist activity
- 5.3.9 Other specialist features included a number of ovens/kilns associated with clay lined pits or tanks. These were all located some distance to the rear of the buildings and were often close to wells.
- 5.3.10 All the medieval wells were deep earth-cut pits, no lining survived in any, although presumably they were originally timber lined. Three of the wells (**114/2554, 1927** and **1939**) were waterlogged at the base and a number of wooden objects were recovered from them. Several of the wells produced good assemblages of finds, especially pottery.

Pits

- 5.3.11 Pits were a common feature type during the medieval period and this site is no exception. The pits will be valuable for the finds assemblages they contain, and they provide an indicator of land division as they appear to be clustered into roughly rectangular groups that correspond with the identified buildings. It may be possible to assign function to some of the pits, for example some of the larger more irregular pits may have been dug to extract sand and gravel, however, there are few other indicators of original function and the majority ended as rubbish pits, even if that was not their original purpose.

Buried soil layer

- 5.3.12 A medieval soil layer (garden or cultivation soil) survived in fragments across the site, finds from these contexts are unlikely to be useful for detailed analysis but may be used as an indicator of date. The distribution of the contexts identified as a buried soil will be useful in terms of determining the detail of land-use, for example it may be possible to distinguish between hard surfaces and areas used for growing food plants.

5.4 Period 3 c.AD 1538-c.1800

Features assigned to Period 3 are almost as numerous as for Period 2 indicating that the site continued to be densely occupied after the dissolution. Property divisions identified in the medieval period continued in use and became better defined in the 17th and 18th centuries. Several houses, out-buildings and associated features such as wells, pits and specialist features belong to this period, some of which may originate in the medieval period (Fig. 5). Of particular note was a c. 17th-century brick-built cellar that showed evidence that it had suffered severe fire damage in the early 18th century. At approximately the same time or a little later several of the houses and other buildings appear to have been re-built. This may be direct evidence of a known historical event; the 1731 fire of Barnwell. During analysis it will therefore be possible to divide Period 3 into at least two phases, using the fire as a useful indicator of date. The earliest post-medieval features date to the very late 16th or early 17th century as evidenced by the presence of distinctive Cistercian type pottery.

Buildings along Newmarket Road

- 5.4.1 Several of the properties identified as medieval may have continued in use and have been remodeled as several of the buildings showed evidence for the addition of a stone or brick built chimney stack. In some cases the buildings may have been completely replaced. These refurbished/replacement buildings have been identified as Buildings 8-10 and 13-20, all occupying similar positions to an earlier building along the northern, Newmarket Road, edge of the site. In all cases only the backs of the buildings were located within the site. As with the earlier buildings, these structures were at least partially timber-framed (as shown by the number of post holes) and in some cases remnants of clay floors had survived. In several cases more than one phase of building was identified, for example building 9 was replaced by Building 14 and Building 10 was replaced by Building 15.
- 5.4.2 Of particular note was Building 8 at the western edge of the site which was distinguished by the presence of a stone lined cess-pit (1424), which was 4.4m deep and constructed from clunch (chalk), limestone, brick and tile, several of the stone pieces are architectural fragments and as such are particularly important for the interpretation of Barnwell Priory from where they must have originated. The cess-pit was backfilled in the early 17th century and the interesting finds assemblage includes

some near complete Cistercian type vessels as well as an assemblage of plant remains preserved by waterlogging.

- 5.4.3 A sloping cobbled surface surrounded by red brick walls on three sides occupied an area to the north of the cess-pit and adjacent to Building 8. It may have been a yard or cellar, probably dating to the early 17th century. It was clearly built for a specific function, perhaps for loading and unloading goods or as a temporary holding pen for livestock.
- 5.4.4 To the rear of this plot was a group of post holes that may represent an out-building.
- 5.4.5 Documentary evidence suggests that a building known as the “old manor” may have occupied this area of the site and the Enclosure map shows an 'L' shaped building here that may represent the “manor”.
- 5.4.6 Buildings (9-10 and 13) were probably broadly contemporary with Building 8 and built in the later 16th or 17th century, all fronting Newmarket Road and occupying similar positions to earlier medieval buildings. There was slight evidence (a small number of post holes) that another timber building may have been sited on the plot later occupied by Building 17. Several were associated with specialist features such as wells.

Buildings 11 and 12 – possible Inn and stable complex

- 5.4.7 Building 12 along with a cellar and possible stable occupied the plot that was documented as a public house (The George) at the time of Enclosure in the early 19th century. The associated cellar was built from red brick of probable 17th century date with later alterations. The cellar was well preserved, with some of its walls standing to 1.7m high, with signs of in-situ burning. The remains of a window opening were located in its northern wall and was probably the origin of a large quantity of window glass in the backfill. Impressions of brick on the mortar bed indicated the flooring material used and removed prior to backfilling. The cellar was backfilled with a large assemblage of domestic material including stone ware flagons, candles/lamps and clay tobacco pipes, much of it showing signs of heat damage suggesting the building had been damaged by a major fire. The date of the artefacts is consistent with the documented fire of AD1731. The inn may have been at least partially rebuilt after the fire (Building 16) and access to the rear of the property was provided by cobbled pathways (1763, 2198) on either side of Building 16. Both of which are depicted on the early 19th century Enclosure map.
- 5.4.8 A possible timber building (Building 11) was identified to the south of the cellar, apparently occupying a roughly rectangular area of approximately 12m by 10m. Its position would suggest an outbuilding associated with Building 12 rather than a dwelling in its own right. Fragments of brick in some of the post holes suggest that the structure may have continued in use into the 17th or 18th century. The timber building was apparently replaced by a red brick structure that may have been added to as there appears to be more than one phase of building. The later phase perhaps contemporary with the alterations made to the cellar.
- 5.4.9 This group of buildings was somewhat more substantial than any of the other buildings on the site and it is likely that it represents more than a domestic building complex, it is suggested that given the later documentary evidence it is likely to have been an inn with associated stabling.

Boundary ditch

- 5.4.10 A single large north to south ditch to the south of Building 13 appears to have divided the site into two. It was backfilled in the 18th century with moderate quantities of

domestic waste and although overlain by Building 18 a later wall appears to respect it suggesting the property division continued to be significant.

Buildings post-1731?

- 5.4.11 Buildings 14-18 appear to be later replacements or refurbishments of the timber buildings (9-10, 12 and 13) along Newmarket Road. These all had similar characteristics, being partly built in clunch with internal chimney stacks and with evidence for clay floors. It is possible that they were built as a result of the fire of AD1731, further analysis may be able to confirm.
- 5.4.12 Building 17 was associated with other features including a possible fence line comprising three post holes and a red brick well that had remained as a void, although capped.
- 5.4.13 Building 18 occupied the plot that was documented as the Shamrock pub at the time of the Enclosure in the early 19th century. Internal features associated with this building included a chimney stack, clay floor and evidence for a hearth
- 5.4.14 At the east end of the site Buildings 19 and 20 survived as fragmentary red brick walls and clay floor. Boundary walls extended from the buildings to the south and possibly represent a passage. A brick built cellar was located to the rear of Building 19, possibly indicating an outbuilding or even further dwellings here. A well located between the buildings may have served one or both.

Other features

- 5.4.15 The only other features were a few isolated post holes and a small number of pits, although some of these were large and may have been dug to extract sand and gravel, their main value is the material in their backfills. Of particular interest was the evidence for deliberate cultivation and/or levelling and further work on these contexts may assist with improving the stratigraphic phasing.

Building Number	Context Numbers	Associated Specialist features
8	Post holes: 20, 24, 28, 34, 38, 46, 50, 1177, 1179, 1191, 1193, 1195/1658, 1201, 1203, 1205, 1209, 1213, 1216, 16/1238, 1240, 1242, 1254, 1307, 1664, 1666, 1673, 1692, 1713 Wall: 1176 Floor: 1206, 1207, 1257, 1258, 1285	Cess-pit: 1424 Yard/cellar 449, 1143, 1147, 1206, 1207, 1260, 1370, 2193, 220, 401/1145/1252, 425, 800/1111 Out-building: 3147, 3150, 3373, 3528, 3543, 3561 and 3583
9	Post holes: 436, 442, 479, 488, 497, 512, 814, 2411, 2457, 2459, 2462	Oven/hearth: 2254 Well: 660
10	Post holes: 631, 751, 759, 761, 1093, 1095, 1097, 1099, 1101, 1103, 1105, 1107, 1343, 1345, 1347, 1349, 1351, 1353, 1355, 1357 Floor: 666-669, 671, 674, 690.	Well: 1456
11	Post holes: 110, 2091, 2763, 2818, 2821, 2875, 2877, 2879, 2881, 2884, 2948, 2968, 2971, 3030, 3032,	

Building Number	Context Numbers	Associated Specialist features
	3034, 3036, 3038, 3041, 3043, 3045, 3051, 3053, 3055, 3057, 3063, 3068, 3070, 3072, 3143, 3153, 3156, 3158, 3171, 3178, 3180, 3182, 3185, 3187, 3189, 3256, 3257, 3260, 3261, 3263, 3310, 3312	
12 (cellar)	Walls: 547/553, 2061, 2062, 792/2060	Well or quarry pit: 1577
12 (stable)	Walls: 2760, 2758, 239, 1082, 792/1083/2798	
13	Post holes: 709, 711, 716, 802, 804, 806, 808, 2106, 2108, 2112, 2114, 2116, 2127, 2129, 2131, 2141, 2143, 2145, 2151	
14	Walls: 569, 461, 418/571, 563 Chimney stack: 462/465/492 Floor: 431 – 435, 451, 458, 459, 475, 477, 493, 500-503, 508-10, 513, 1248, 1257, 1258, 1468, 1507, 2268	Oven: 463/481 Hearth: 485
15	Walls: 412/595/636/1548, 584, 1423 Chimney stack: 747 Floor: 582, 586, 588, 649, 725, 742, 743	
16	Walls: 56/528, 556, 525, 539/545, 553, 558 Chimney stack: 76 Floor: 53, 75, 77/530/557, 79, 527, 531, 857, 1486-90, 1512	
17	Walls: 813, 626, 623 Chimney stack: 627 Floor: 811, 812, 1563	Wells: 1510, 931
18	Walls: 319/734, 317, 720, 719, 705 Chimney stack: 617 Floor: 618, 620, 701, 720, 721, 722, 1561	Well: 262 Hearth: 691 Boundary wall: 131/259/1078
19	Walls: 325/876 Floor: 878, 882, 909, 944, 945	Cellar: 1052/1054/2474 Boundary wall: 942/955/1780
20	Wall: 886 Floor: 861, 863	Well: 868

5.5 Period 4 c.AD 1800-present

5.5.1 Approximately 20% of the total contexts are dated as 19th century and have been phased to Period 4. For this period the documentary records are a useful resource that

can help to interpret the archaeological record. Maps provide a visual record of the buildings on the site and Census records can provide names and occupations of inhabitants. Property boundaries are recorded on the Enclosure map along with the name of the owner, these plots (32-37) have been used to help interpret the 19th century archaeological data and are shown on Figure 6.

- 5.5.2 From the middle of the 19th century onwards there is evidence that the site became increasingly crowded. Lanes and passages were built so that the rear of properties could be accessed and more houses built, for example Brown's Yard and Shamrock Passage at the east end of the site. Some of the earlier timber and clunch buildings continued to be used, whilst others were demolished and replaced with brick. The Census records also show that houses that would once have held only one family were turned into homes for large numbers of occupants, for example Mendicity House. The latter was eventually pulled down and its land redeveloped as Leeke Street in an attempt to improve the housing conditions in this part of Cambridge. Some of the better 19th century houses continued to be occupied until the 1960s when Newmarket Road was widened and the area was taken over for industrial use.
- 5.5.3 Six plots recorded on the Enclosure map fall within the excavated area, these were all in different ownerships, including plot 36 which belonged to St John's College. It will be possible to document a reasonably detailed history of the development of each plot by drawing together the documentary record with the excavated evidence.
- 5.5.4 The archaeological evidence for this period largely comprises the fragmentary brick foundations of houses, outbuildings and associated services such as drains along with a number of wells and cellars.. Of particular interest is the development of Plot 32 (owned by Olivia Palmby at Enclosure) which appears to have been a large but decaying property that was taken over by the Mendicity Society in the mid 19th century. The society used it as a "night shelter" and the property was later demolished to make way for better housing stock (including Leeke Street) built by the Cambridge Housing Improvement Society. Features associated with this plot include several pits, three wells, one (**1089**) lined with locally produced yellow bricks and post holes that may be evidence for out-building associated with this property.
- 5.5.5 Foundations for a range of buildings in Plot 33a (Samuel Bullock) may be a successor to the The George Inn, first identified in Period 3. By the 19th century it had expanded and became known as the George and Dragon and later the Coffee House Tavern. Features associated with this range included a cellar, a cess-pit and several wells. The cellar has provided a particularly interesting assemblage of finds including:
- 5.5.6 Building 18 may have continued in use on Plot34/35 (owned by James Pretlove), just to the east of the George and Dragon, and may be the site of the Shamrock pub. Although little remained of the actual building, a well was found associated with it. Evidence for a passage and associated houses was found to the rear of this building and these correspond well with Shamrock passage as documented on 19th century maps and Census returns.
- 5.5.7 St John's College is shown as the owner of Plot 36 at Enclosure, later becoming Brown's Yard. Remains of the yard included a passage leading to it, a cellar, floor surfaces and foundations of small buildings that are likely to have been dwellings.
- 5.5.8 Shamrock passage and Brown's yard may have been built by the same company as they are documented as the "Blackbird's Estate". There is good documentary evidence for the construction of these dwellings, detailed phasing will therefore be possible. These buildings were demolished in the late 1960s.

1970s developments (Fig. 7)

- 5.5.9 The 1970s development included the construction of two large industrial units on concrete ground beams. In places these beams reached a considerable depth and together with a toilet block, lift shaft, a large diesel tank and a network of concrete drains caused considerable truncation in isolated areas.

Unphased features (Fig. 8)

- 5.5.10 About 50 features are presently unphased, where possible these will be assigned to phase for the final report.

6. FACTUAL DATA AND ASSESSMENT OF ARCHAEOLOGICAL POTENTIAL

6.1 Stratigraphic and Structural Data

The Excavation Record (evaluation and excavation)

- 6.1.1 All hand written records have been collated and checked for internal consistency, and the site records have been digitally recorded using *MS Access* Database software. The quantification list of evaluation and excavation records have been recorded (Table 2). A preliminary matrix of the site has been digitally compiled using *Stratify* software.

Type	Quantity	
	Evaluation	Excavation
Context registers	12	99
Context records	262	3309
Plan registers	1	3
Section registers	1	13
Sample registers	2	40
Object Registers	1	15
Plans	6 x 1:50	3 x 1:10 10 x 1:20 85 x 1:50
Sections	23 x 1:10	264 x 1:10 257 x 1:20 4 x 1:50
Black and white films	1 x 36	3 x 36
Digital photographs	75	c. 1500

Table 2: *Quantification of excavation records*

Finds and Environmental Quantification

- 6.1.2 All finds have been washed, quantified, catalogued and stored in archival quality bags and boxes. Total quantities of the finds and ecofact categories are listed in Table 3. Environmental samples were collected from 7 contexts in the evaluation all 20L. At excavation there were 187 bulk samples with 13 <10L, 41 at 10L, 96 at 20L, 26 at 30L, 9 at 40L and 1 at 50L. There were also seven monoliths from four features.

- 6.1.3 Five samples were taken from a the Late Bronze Age/Early Iron Age inhumation (Period 1). In the medieval period (Period 2), 14 samples were from ovens/hearths, five from clay lined features, three from ditches, 74 from pits, 22 samples were waterlogged deposits and these came from six wells and two pits. In the post-medieval period (Period 3) 14 samples were taken from pits, 10 from layers, 10 from wells and 13 from cess-pit 1424.

Artefacts	Number and/or weight
Lithics	21 worked flints and 4 burnt flints
Silver	1 coin
Copper alloy objects including coins	Evaluation produced 2 objects; Excavation 201 fragments (c.169 objects)
Lead	27 fragments comprising c.24 objects
Iron objects	Evaluation 8 objects; Excavation 531 objects
Metalworking residues	Excavation 6.372kg
Bone objects	Evaluation 1 object; Excavation 31 fragments representing 26 objects
Miscellaneous small finds in other materials	9 objects
Glass (vessel and window)	26.106kg
Stone objects	52 Whet stones, 15 quern, 4 vessel, 6 other
Architectural stone	548 pieces
Wood	20 pieces
Pottery (all periods)	Evaluation 208 sherds (3.255kg); Excavation (392.185kg)
Brick (all periods)	Evaluation 26 fragments (4.833kg); Excavation 244 fragments (88.997kg)
Post-medieval floor brick	Evaluation 1 fragment (0.66kg); Excavation 16 fragments (7.351kg)
Decorative brick	Evaluation 1 fragment (0.601kg); Excavation 2 fragments (3.056kg)
Medieval floor tiles	Evaluation 2 fragments (0.279kg); Excavation 31 fragments (3.516kg)
Ceramic peg tile	Evaluation 46 fragments (1.707kg); Excavation 4809 fragments (266.094kg)
Ridge tile	22 fragments (3.194kg)
Pan-tile	31 fragments (3.291kg)
? Stove tile	1 fragment (0.018kg)
Drain	8 fragments (2.923kg)
Roman tegula	Evaluation 1 fragment (0.083kg); Excavation 2 fragments (0.488kg)
Clay tobacco pipe	Evaluation 4 stem fragments; Excavation 878 pieces (weighing 3.578kg)
Fired Clay/daub	Evaluation 8 fragments (0.329kg); Excavation 113 fragments (22.061kg)
Human remains	1 burial (Period 1); fragments in five contexts (Periods 2 and 4)

Artefacts	Number and/or weight
Animal remains	Evaluation 50 fragments – with 34 fragments identifiable to species (2.2kg); Excavation 139kg, 4747 fragments (2347 identifiable to species; 1342 medium and long mammal bones and 1058 unidentifiable
Environmental samples	Evaluation 7 bulk samples taken; Excavation 187 bulk samples and seven monolith tins
Shells (marine)	Evaluation 15 oyster shell fragments (93g); Excavation 24.9kg

Table 3: *Quantification of artefacts and ecofacts*

Range and Variety

- 6.1.4 Features and layers on the site included a Late Bronze Age/Early Iron Age inhumation burial and fragmentary ditches of a probable prehistoric field system. In the medieval period there were fragments of enclosure ditches, post hole buildings,, 12 industrial features (ovens/kilns and clay lined pits/tanks), wells, a considerable number of pits and a buried soil layer. In the post-medieval period there was evidence for timber, stone and brick buildings, at least one of which may have been high status as it was associated with a stone cess-pit, other buildings included a brick inn and stable complex, as well as buildings with stone chimney bases and a brick cellar. In Period 4 five of the post-medieval buildings fronting Newmarket Road continued in use with only a few internal alterations. Four new brick buildings were built fronting Newmarket Road including a pub/coffee house complex and related yard and buildings, a well, a cess-pit, remains of several streets (Leeke Street, Brown's Yard, Shamrock Passage) and buildings including a cellar fronting onto these routeways. Three other brick buildings, two structures, five other wells and some pits.

Condition

- 6.1.5 Preservation of features varied across the site, but was on the whole fairly good. The remains compare favourably to excavations at Coldhams Lane (Atkins 2013a), the adjacent CAU Eastern Gate site (Newman 2013) and the Newmarket Road site (Atkins forthcoming b). The main area where this Harvest Way site was better preserved was its structural remains for all periods. Medieval to modern buildings were found including some floor layers for all periods, five had foundations of chimney stacks and the use of some rooms could be identified. External courtyards and routeways were also recorded. The least well preserved area of the site was at the eastern end and the south-western end was very disturbed by modern foundations and services and was consequently not excavated.
- 6.1.6 The major truncation was caused by the foundations and associated services of two late 1960s industrial buildings, particularly damaging in isolated areas were a diesel tank and a lift shaft.
- 6.1.7 The site was generally dry and free draining so organic materials did not survive on the whole, unless charred. The water table was only encountered in the eastern area of the site at the base of three deep wells. Preservation at the base of the wells was very good and several wooden objects had survived.

6.2 Documentary and Cartographic Research

Primary and Published Sources

- 6.2.1 A documentary search was carried out at the Cambridgeshire Record Office (CRO) (see Section 1.3.27-1.3.65). There are few primary records concerning Barnwell Priory and virtually nothing is recorded of its lay settlement. Using secondary sources such as Maitland (1964) and Danckwert (1980), a general view of the priory and its associated settlement is possible.
- 6.2.2 The CRO holds a modest quantity of records for the parish of St Andrew the Less. The Record Office itself states that the relatively few documents surviving from the Overseers to the Poor have been greatly damaged by damp in antiquity. Dr Stokes in his 1911 article wrote of St Andrew the Less parish, "the old parochial books of this parish are unfortunately lost (with the exception of a few certificates and magistrates orders) or mislaid (Stokes 1911, 100).
- 6.2.3 The ownership of the site is well documented at Enclosure in the early 19th century and the records for this period have already been consulted. In addition there are some 17th and 18th century documents known to exist for the area (for example CCCC 09/17/18) A small part of the site was owned by St John's College (Plot 36) at Enclosure and it is entirely likely the archives of this college may hold records on this plot.
- 6.2.4 Cartographic sources have been consulted and there are no pre-Enclosure (c.1808-1812) maps of the site. The cartographic evidence for the 19th and early 20th century is extremely good, comprising eight maps dating from 1807/1812 to 1924. The map evidence is useful for interpretation of the 19th century development of the site.

Statement of potential

- 6.2.5 It is likely that documentary work at the Record Office, St John's College, Central Library (Cambridge), and the University Library will bring new results which will aid understanding of the post-medieval and modern settlement (see Section 8.3 below). No further work on the cartographic evidence is recommended but recommendations for documentary research is made in Section 9.3.

6.3 Artefact Summaries

Metal objects

Summary

- 6.3.1 A single silver artefact (coin) was found. Two hundred and three copper-alloy fragments comprising c.169 objects largely dating to Periods 2-4 were found including 14 coins, 4 jettons, 19 buckles, 14 buttons, c.34 dress pins, strap mounts, thimbles, weights, rings and other objects. About 24 lead objects dating to Periods 2-3 and unstratified were found with Periods 2 and 3 objects largely derived for the most part from the day-to-day use of lead within buildings including lead comes and offcuts used in windows, but also other objects such as weights. Five hundred and thirty-nine iron objects were found largely dating to Periods 2 and 3. The assemblage has not been x-rayed, but it seems to have a relatively limited range with most items derived from structures on the site such as nails, or reaching it in material dumped from elsewhere. Very few personal items were found except blades.

Statement of Potential

- 6.3.2 The copper alloy has moderate potential, but the lead and ironwork has very little potential to contribute further to the dating, interpretation and understanding of day-to-

day activities on the site with the exception for the latter of ironwork from Period 3 cellar fill 1907 which perhaps warrants being studied in more detail. Some objects will help provide evidence of trade and industry and will provide some help in regional research aims concerning the connections between our lay settlement site and the priory.

Industrial residue

Summary

- 6.3.3 A total of 6.4kg of industrial residue was recovered not from primary features but as 'background' deposition within medieval and post-medieval features. The remains largely comprised small fragments of non-blast furnace ferrous smelting activity.

Statement of Potential

- 6.3.4 No further work is recommended.

Worked stone

Summary

- 6.3.5 A moderate to large collection of seventy-nine worked stone objects were recovered comprising 52 whetstones, 15 quern/millstones, four vessel, six other (including a lamp, disc and processors) and two structural items.

Statement of potential

- 6.3.6 The assemblage has considerable potential to contribute to our understanding of the status and nature of activity on site. Some objects such as millstones provide some help in regional research aims concerning the connections between the lay settlement site and the priory (see Section 4).

Flint

Summary

- 6.3.7 A very small collection of twenty-one worked and four burnt flints were found as secondary deposits in medieval to modern features and layers.

Statement of potential

- 6.3.8 This assemblage holds no additional potential, no further work is recommended.

Glass

- 6.3.9 There was a moderate assemblage of vessel and window glass (26.106kg). A single definite medieval glass fragment with the vast majority of the collection dating to Periods 3 and 4. Most comprised vessel glass with the bulk of which was natural black glass bottles. Interesting groups include a large number of Period 3 burnt window glass from cellar **1906** of Building 12 which probably derives from an inn probably destroyed in the 1731 fire of Barnwell, an assemblage of bottle and drinking glasses from cellar **2474**, Building 19 which may also be from another inn/pub. Small scale specialist Period 4 glass craft working took place in a house on Shamrock Passage (pit **2199**).

Statement of potential

- 6.3.10 Some of the glass assemblage is important as a few groups can inform us of usage and activities within the site (see Section 4). Further work is recommended.

Post-Roman pottery

Summary

- 6.3.11 A considerable post-Roman pottery assemblage was recovered comprising 141.442kg (medieval), 68.223kg (post-medieval) and 180.506kg (c.AD post 1800 to present). There was a small quantity of Late Saxon to early medieval sherds, but mostly the medieval assemblage dated to the High medieval period with some notable primary assemblages in some well groups. The late medieval pottery component (22.531kg) was less, but moderate quantities of post-medieval include notable assemblages from cess-pit **1424** and an interesting number of drinking vessels from inn cellar **1906**. Likewise there was a number of large post-1800 assemblages within pits. A few vessels associated with Cambridge Colleges were also found.

Statement of potential

- 6.3.12 The post-Roman pottery has considerable potential to date, interpret and understand the day-to-day activities on the site. The assemblage has the potential to aid local, regional and national priorities and can contribute to understanding pottery consumption and usage within Barnwell. Further work is recommended.

Clay pipe

Summary

- 6.3.13 Eight hundred and eighty-two clay pipe fragments (3.588kg) spanned the period c.mid 17th to mid/late 19th century. Thirteen pipe makers can be identified, and several pipes were decorated with masonic symbols. Eight contexts produced assemblages of five or more pipes including inn cellar **1906**.

Statement of potential

- 6.3.14 The assemblage is locally and regionally important. There is at least moderate potential to date, interpret and understand the day-to-day activities on the site. Further work is recommended.

Architectural stone

Summary

- 6.3.15 A large collection of 546 architectural fragments (clunch, Barnack and Ketton) almost certainly came from the former Barnwell Priory after Dissolution. The vast majority of the assemblage was recovered from a mid/late 16th century cess-pit **1424**, probably attached to a post-medieval manor and some from pit **2724**. Some of the building stone can be dated to building phases within the priory.

Statement of potential

- 6.3.16 The assemblage has potential to inform us of building usage within the former Barnwell Priory. Further work is recommended.

CBM and fired clay/daub

Summary

- 6.3.17 A large collection of CBM was recovered or recorded on site collectively 5364 fragments (409.464kg). Late medieval brick had been reused in the construction of cess-pit **1424**, and elsewhere medieval brick was used in later buildings and structures. One of the few pre mid 18th features which used 'new' bricks was the c.17th century inn cellar **2062**. In the mid 18th century orange/red bricks were used in various buildings and features and yellow gault bricks were used from c.AD 1800 to late 19th

century in buildings throughout the site. 33 medieval floor tile fragments and a lot of the roof tiles are likely to have originated from the priory and discarded in the lay settlement. A notable primary assemblage of roof tile from pit **3478** may mean at least one building in the lay settlement was roofed with tile. Fired clay was recovered from remains of two oven/kiln former superstructures, but mostly was found as residual small fragments. Floor brick and pan-tile roof tile were used from the 18th/19th century within the site.

Statement of potential

- 6.3.18 The CBM has some potential to date, interpret and understand the day-to-day activities on the site.

Worked bone and miscellaneous small finds

Summary

- 6.3.19 Parts of twenty-seven worked bone or ivory objects and eight miscellaneous objects were recovered with these dating from the medieval to the modern. Two of the bone objects had broadly ecclesiastical connections (a stylus and a bone bead).

Statement of potential

- 6.3.20 The worked bone and miscellaneous small finds have limited potential, when considered in conjunction with other material classes, to contribute to the interpretation and understanding of daily life on the site. They are not particularly diagnostic in terms of dating, but if considered in conjunction with other broadly contemporary finds from the site, could contribute to a refinement of the dating framework.

Wood

Summary

- 6.3.21 Twenty fragments were recovered from two waterlogged medieval wells.

Statement of potential

- 6.3.22 The worked bone finds have limited potential, when considered in conjunction with other material classes, to contribute to the interpretation and understanding of daily life on the site. They are not particularly diagnostic in terms of dating. Other than conservation and species identification no further work is recommended.

6.4 Environmental Summaries

Human skeletal remains

- 6.4.1 A Late Bronze Age/Early Iron Age inhumation burial was found and a few bone fragments were found in five contexts dating from the medieval to modern. It is uncertain whether these relate to disturbed prehistoric burials and/or were from burials formerly located in the priory.

Statement of potential

- 6.4.2 The LBA/IA burial is of interest as burials of this date are not common, however, the burial has been fully recorded and dated and no further work is recommended.

Faunal Remains

Summary

- 6.4.3 A large collection of 4757 animal bone fragments (141kg) with 2381 identifiable to species, 1342 medium and long mammal bones and 1074 unidentifiable. The vast

majority of the identifiable fragments were recovered from medieval context with these consisted largely of domestic mammals (sheep, cattle and pig). Domestic mammals also dominate the Period 3 material.

Statement of Potential

- 6.4.4 The assemblage will provide evidence of diet and food supplies. Further work is recommended.

Environmental Remains

Summary

- 6.4.5 One hundred and ninety-four bulk samples were taken mostly from medieval and post-medieval pits and wells. Many of the samples had small to moderate plant remains preserved by carbonisation although several had moderate or good quantity of remains. Waterlogged samples from two medieval wells provided good waterlogged plant materials. The samples provided evidence for production and processing of food and the nature of the disposal of human, animal and industrial waste.

Statement of Potential

- 6.4.6 Samples will provide valuable evidence of diet and food supplies and help answering some regional research aims concerning the connections between the lay settlement site and the priory as well as its relationship with local markets (see Section 4). Further work is recommended.

Pollen

Summary

- 6.4.7 Six pollen samples were analysed with pollen present in all but one of the sub-samples. Only one of the sub-samples from a cess-pit contained sufficient pollen to warrant analysis, but half of the count comprised grass pollen. It is likely the pollen derived from materials such as straw, human faces or animal dung, which became incorporated into the pit sediments.

Statement of potential

- 6.4.8 It is therefore suggested that analysis of this sub-sample is unlikely to provide any additional information, other than perhaps a greater abundance, and possible greater diversity of herbs. Consequently, no further pollen work is suggested.

Insect

Summary

- 6.4.9 Two samples of pre-processed mineralised fly puparia and one bulk, waterlogged sample from medieval features were submitted for insect analysis. The Coleopteran assemblage from an upper fill of well **1927** suggests that a range of settlement materials and stabling waste was deposited into this feature. The mineralised remains of fly puparia found in pits **2125 and 1558** clearly indicate that these features were cess-pits.

Statement of potential

- 6.4.10 The backfill of three features were found to have been used for waste disposal, indicating how some medieval features were in filled at the end of its productive life. No further work is suggested on the insect remains.

Shell

Summary

- 6.4.11 A moderate assemblage of shell (24.9kg) were recovered from the excavation and these almost entirely came from Periods 2 and 3 contexts. Oyster dominated the assemblage (95.4%) with small quantities of mussel, cockle and a few whelk.

Statement of Potential

- 6.4.12 The assemblage provides evidence of diet and food supplies and can be used in conjunction with other data. No further work is recommended.

7. UPDATED RESEARCH AIMS AND OBJECTIVES

7.1 Introduction

- 7.1.1 The original research aims of the project recorded in the WSI (and copied in Section 4 above), were based on the evaluation results which had found significant deeply stratified archaeological remains from the medieval to modern periods.
- 7.1.2 The excavation also found some prehistoric remains which comprised a burial and part of a probable field system. These are of interest as they add to the corpus of known sites for this period, but there is insufficient evidence from this one site to add anything to the research frameworks for this period.
- 7.1.3 For the medieval to modern periods, the excavation found more than the evaluation predicted (Atkins 2013b). Of particular note is the relatively large quantity of architectural stone derived from Barnwell Priory. The notable quantity of primary deposited artefacts from several features dating to the medieval to modern periods means that some of the assemblages (such as pottery) may be classified as at least regionally important. The preliminary documentary suggests there was probably a manor within the site in the post-medieval period. The uncovering of a large stone cess-pit suggest a post-Dissolution building of some status – perhaps the manor house mentioned in a Victorian account. The finds from within the cess-pit – several near-complete Cistercian-type vessels and other artefacts gives us important glimpses into the life of the manor. The documentary evidence for the site is far more significant than was envisaged with parts of the site (Plot 32 on western side) are also likely to have records which relate to it which date from the early 17th century. At evaluation stage it was uncertain if waterlogged conditions survived within the site but the recovery of waterlogged remains from within three wells has given three new artefact and ecofact assemblages with wood, insect and pollen remains represented.

7.2 Regional research objectives

- 7.2.1 The interesting medieval and post-medieval remains within the site can answer several regional research aims and have been amalgamated into two main sub-headings:
- 1) *What were the reasons for formation of the medieval settlement?*
- 7.2.2 All the regional research agendas emphasise how little we know of when, how and why medieval settlements were formed. In the case for the Harvest way site there are three or so research questions which can be substantially answered (it also combines the first and third research objectives from Section 4 above). For ease in this PXA these three have been linked:

"the origins and development of the different rural settlement types need further research...more data will add to our understanding of the way places appear, grow, shift and disappear" (Medlycott 2011, 70).

"what is the relationship between rural and urban sites?...there is scope for significant development in our understanding between towns and their hinterlands" (ibid, 70).

The role of monasteries on settlements is seen as needing more study (Ayres 2000, 29 and 31).

- 7.2.3 These research questions are helped by several medieval documents surviving concerning Barnwell as well as four archaeological excavations and an evaluation which have recently taken place within the former Barnwell lay settlement. These consist of the present site, the CAU excavation at Eastern Gate Hotel adjacent to the east, (Newman 2013), at Coldhams Lane 150m to the east (Atkins 2015), and 30m to the west at Newmarket Road (Atkins forthcoming b) and an evaluation 100m to the south-west (House 2013). In addition a small excavation took place adjacent to the west of the priory within fields, but had artefacts from the priory deposited within this site, possibly as levelling layers (Atkins 2012a).
- 7.2.4 There are documents which show that the original founding of Barnwell Priory took place near to Cambridge Castle in 1092, but it proved too small an area and this led to the priory being re-sited within 20 years of this date in AD 1112 on a greenfield site where previously there had just been a hermit (Maitland 1964). Barnwell is an interesting and relatively rare case of a priory growing wealthy enough to found a whole 'village' on its own probably from its beginning. The CAU report on Eastern Gate Hotel (Newman 2013, 121-2) has given a few other comparable examples such as at that at Royston, where the lay settlement was seemingly founded by Augustinian canons also on the site of a hermitage but also where there had been no pre-existing settlement (Munby 1977; Semmelman 1998, 15). Overall, Barnwell was different from most settlements with the regional research agendas emphasising how little we know when, how and why medieval settlements were formed and emphasising the need for more research into these areas (e.g. Medlycott 2011, 70).
- 7.2.5 The four excavations within Barnwell lay settlement found no evidence of Late Saxon or Saxo-Norman occupation. Similarly no evidence of Late Saxon or Saxo-Norman occupation has been found within excavations 300m to the north-west of the site (Atkins 2012a). Based on current evidence the archaeological investigations appear to support the statement that this was a greenfield site. Sir Cyril Fox's suggestion of a possible Saxon settlement c.100m to the west of the Harvest Way site (Fox 1923, map G), is now shown as unlikely and had been based on relatively thin evidence of stray find(s). Similarly this is true concerning a couple of Anglo-Saxon stray finds were also recovered at Eastern Gate (Newman 2013). This Barnwell lay settlement is unusual as 'target work in Cambridgeshire has confirmed a Late Saxon origin for many existing settlements' (Medlycott 2011, 70).
- 7.2.6 Excavations at this excavation at Harvest Way and Newmarket Road suggest that there may have been medieval enclosures fronting Newmarket Road prior to the establishment of domestic settlement here (Atkins forthcoming). The lack of precise dating from the few sherds of pottery recovered from these features does not allow us to say whether these enclosures were contemporary with the founding of the priory in AD 1112, but it is likely. If there was an attached lay settlement for the priory at this time, its position is therefore unknown. It is possible that the lay helpers were living either in Cambridge, or possibly in part of the precinct of the priory.

- 7.2.7 The lay settlement, overlay these agricultural enclosures and seems to have been established as a new foundation on the southern side of Newmarket road c.90 years after the priory was founded here. It is likely that this Barnwell lay settlement was planned in c.AD 1200 – it seems too co-incidental that all four excavations over a c.250m distance have evidence of occupation only from this date. It may also be significant that the lay church (St Andrew the Less) seems to have been built at this same date with fabric dating from the early 13th century (Salzman 1967, 126; CHER 05043).
- 7.2.8 Results of all four excavations within the lay settlement seem to suggest a long linear settlement fronting the southern extent of Newmarket Road which was founded in c.AD 1200. The extent of the settlement is uncertain, but seems to have initially been at least c.300m long, although the western and eastern limits have not been found. The excavation within the present site indicates that this settlement continued to the east of this site. The furthest west where remains have been found so far is in an evaluation at No. 30 Occupation Road (House 2013), where possible quarry pits were found c.50m to the south of Newmarket Road and the eastern extent was at Coldhams Lane (Atkins 2015). The archaeological evidence seems to suggest that the settlement only comprised a single street – houses did not front Coldhams Lane (Atkins 2015) and this route-way was therefore used only as a connecting road to other settlements etc. including Cherry Hinton and the fields.
- 7.2.9 A comparison to Barnwell settlement is Howes hamlet/village settlement which was established in c.AD 1150-1210 on a greenfield site along the Huntingdon Road, c.1km to the north of Cambridge town and partly within Cambridge fields (Cessford 2014). It was thought that Howes may have been a settlement which catered for travellers and hunting (*ibid*, 53). The Barnwell and Howes settlements were built at a time when the population in Britain was expanding and settlements were growing in size, so the need for new accommodation was a priority, even it took up agricultural areas. One of the differences between the two settlements was that Barnwell was built by a religious order whereas Howes was presumably by a lay manor.
- 7.2.10 In the Harvest Way site remains of seven medieval buildings, roughly equally spaced apart, with pits seem to form clear north to south lines behind these buildings although no linear boundaries defining the postulated plots. Other evidence for similar plots were found in the other three excavations to the east and west. At the CAU excavation directly to the east, where there were up to six plots between 6.9m and 7.8m wide (excluding Plot 6 which was up to 13.5m wide; Newman 2013, 15 and fig. 29), and two each at Coldhams Lane and Newmarket Road (Atkins 2015; Atkins forthcoming). This layout is similar to the Grand Arcade excavations within Cambridge where 17 plots were suggested (Newman 2013, fig. 29) and also at Chesterton (Cessford with Dickens 2004; Newman 2014, fig. 16). Excavation at Neath Farm, Cherry Hinton and at Howes were very different and were based on square or sub-square enclosures with five plots were recorded at the latter site (Newman 2013, fig. 29; Cessford, 2014). Barnwell lay settlement therefore comprised burgage plots, which was rectangular 'urban' or 'village core' type plots which compares with the enclosure type which was 'hamlet' or 'village-edge' (Cessford 2014, 52). Burgage plots were a property-type that occurred almost ubiquitously in urban and suburban contexts across England during the Middle Ages (Conzen 1960; Slater 1981).
- 7.2.11 In all four Barnwell excavations the plot boundaries were hypothesised by house remains and linear lines of features to their rear. The plot boundaries themselves have not survived in the archaeological record, but this is not surprising as burgage plots

boundaries from the 13th and 14th centuries in the main comprised stake and wattle fences (Hall and Hunter-Mann 2002, 807-10) and hedges (Bowsher et al 2007, 23).

- 7.2.12 Barnwell Priory and its lay settlement success in the High medieval period may have led to an increase in its size, or at least its power. Originally Barnwell ward had been combined with the Saxon Barnwell suburb located just outside the town next to King's Ditch more than 1km to the west, with its own church of St Andrew the Great (Taylor 1999, fig. 22). In the 1279 survey both areas were counted as one (Newman 2013). In contrast, by the late medieval period Barnwell was important enough to form a ward in its own right, albeit the smallest in Cambridge (Maitland 1964).
- 7.2.13 The building of the priory and subsequently the lay settlement on a large open greenfield site, unlike the former site near the castle, allowed this new settlement to be planned. The substantial amount of fields around it meant it was free to expand or change how it wanted without major restrictions or hindrances from neighbours or other industries around it.
- 7.2.14 The lay settlement's location opposite the precinct wall presumably allowed the priory to control and organise its workers. The lay church was within the precinct wall which meant that the monks would be able to oversee the lay settlement without having to travel any distance. It is interesting to note that Barnwell Priory had a reputation as a 'harsh landowner' (Salzman 1967, 91 point 74). The houses being located directly opposite the priory meant the workers did not have to travel far either to their work in the priory itself or in the fields directly to the south. The latter was important as by the late medieval period the priory controlled most of the agricultural land in the vicinity of the settlement. For this reason the former medieval Cambridge East Field was later also referred to as Barnwell Field in some documents.
- 7.2.15 This location for Barnwell's lay settlement therefore makes economic sense. Similar examples of this prudent policy can be seen in other nearby monasteries at this date, both in terms of efficiency and the need for direct control. Bury St Edmund's Abbey, under Abbot Samson (1182-1211), took all but two of the manors back into direct control: 'since most of the abbey's income came from its landed property, to manage it directly and efficiently was obviously the wiser policy rather than farming it out to tenants, some of whom were in any case inefficient, at fixed uneconomic rents' (Gransden 2007, 24-25).
- 7.2.16 This positioning of both the priory and its later lay settlement may have been instrumental in their success. Over its 400 year history the priory became one of the most powerful and richest religious houses' in the East Anglian area. This was a favourable location: it was a separate settlement to Cambridge, more than 1km outside the town itself but within its hinterland (its eastern Field) and therefore very close to this prosperous town, on the main road to Newmarket and adjacent to the navigable River Cam.
- 7.2.17 The siting of the priory outside, but very near Cambridge, and the fact that it was very wealthy with many fine buildings, was presumably the reason it often housed visitors of importance. It was, for example, the main place of residence when royalty visited Cambridge from at least the early 13th century with King John, Henry III, Edward II, Richard II (and his court), as well as the bishops of Ely in the 15th and early 16th century and even parliament had been held here (Salzman 1967, 244-6). These guests needed to be looked after by the priory and its servants – the lay people. The priory had acquired substantial wealth by at least the early 13th century – one of its areas of revenue was St Barnwell's Fair, which was granted to the canons of Barnwell in 1211

but was already important by this date. The location next to this main road and importantly the River Cam, also allowed the priory to export and import commodities easily and cheaply (see below).

2) Trade and industry

- 7.2.18 *Trade and industry is the second research objective from Section 4 (above). This covers Medlycott's aim that "The production and processing of food for urban markets is a key element in understanding the relationship between towns and their hinterlands...the interchange between rural food supplies and urban industrial and craft products was essential for both town and village or hamlet." (Medlycott 2011, 71). In the 2000 research framework it was stipulated under research topics that, "Priority should be given to the detailed examination of good animal bone and charred cereal deposit...this analysis would be useful as it may determine whether there was specialisation and surplus production in a rural community with the remainder presumably being sold off (Wade 2000, 25).*
- 7.2.19 Within the backplots of the seven suggested 'burgage' plots at Harvest Way there was evidence for concentrated trade and industry in probably all seven, but there were different types in the various backplots. The assessment of charred cereal remains from the Harvest Way excavation, suggest that there is the possibility that there had been a commercial aspect in the production and processing of food at that site (see Fosberry Appendix C.3). This may been happening at the Coldhams Lane site where crops were being grown/produced in these backplots as well as possibly some stock as well although on this site it was not certain whether this activity was only for their own consumption or was in part for sale at market and/or the priory itself (Atkins 2015). The Coldhams Lane site had evidence from pollen, insect and waterlogged environmental seeds recovered from two medieval wells (**190** and **481**), which showed that the two backplots had been a largely cleared landscape with some weeds found, but had been primarily used as agricultural land with areas of probable composting and farm waste with possibly a local cultivation of strawberries, cabbage, and even carrots and parsnip.
- 7.2.20 At Harvest Way a backplot structure (Structure 1) behind Building 3 with four possible internal hearths may suggest specialist activity occurred here, but presently it is uncertain what. In addition to this structure at least two further plots (both directly to the east of Structure 1) had significant types of other industrial activity. Across the excavation twelve features (ovens/kilns and clay lined pits/tanks) were recovered and all were located within the middle of the backplots often very close to wells. Nine of these were located in two adjacent plots Behind Buildings 4 and 5. The evidence seems to point to crops being soaked and possibly burnt. Similar clay-lined tanks were found at Eastern Gate Hotel e.g. Newman 2013, fig. 15), but none of these type features were found either at Coldhams Lane or at Newmarket Road (Atkins 2015; Atkins forthcoming).
- 7.2.21 These kilns/ovens were not through metal working itself (the small amounts industrial residue (see Peter Boardman Appendix B.2) and lead metalworking slag and offcuts (see Howard-Davis Appendix B.1) suggest these were dumped material from the priory. Similar metal working background scatters were found at the excavation at Coldhams Lane (Atkins 2015) and 300m to the north-west of Brunswick (Atkins 2012a) with similar material from the latter two sites suggests they may have come from the same priory forge/furnace.

- 7.2.22 At Eastern Gate Hotel there was probable evidence for tannery activities in some of its backplots (Newman 2013, 114), but this industrial process was not found at Harvest Way, Coldhams Lane or Newmarket Road.
- 7.2.23 It is presently not certain whether the relatively large number of number of whetstones recovered at Harvest Way is due to their use in workshops on site, or they were just artefacts deposited from the priory. Structure 1 above was the only backplot structure found on the site and so this possible suggestion (see Shaffrey, Appendix B.3) needs further analysis. Some of the objects found at Harvest way does seem to suggest there was specialists trades – for example an alembic (distillation) vessel was found.
- 7.2.24 Many quarry pits were found within Harvest Way (as well as all three other excavations; (Newman 2013; Atkins 2015; Atkins forthcoming) and the evaluation (House 2013). A couple of the plots did not have many quarry pits, showing that whilst this activity was widespread, it was not uniform. The terrace gravels extracted from the quarry pits was presumably for use for surfaces such as roads including in the priory?
- 7.2.25 A list of occupations of principal tenants in Barnwell in 1279, 1295 and 1309-10 has been taken from two medieval sources the *Liber Memorandum Ecclesie de Bernwelle* and the *Rotuli Hundreorum* and this was included in the Eastern Gate Hotel site report (Newman 2013, table 64). A variety of professions were recorded although it should be noted that the named individuals did not necessary reside within their respective property plots, as it was relatively common for principal tenants to sub-let messuages surviving the medieval period (*ibid*, 120).
- 7.2.26 The animal bone assemblage recovered from Harvest Way was large for both the medieval and post-medieval periods (see Faine, Appendix D.2). For the medieval period there were 1434 'countable' bones which consisted largely of domestic animals, with sheep/goat at 35.9% of the total, along with smaller numbers of cattle and a relatively large number of pig whereas horse and dog were scarce. These percentages were similar to the assemblage recovered from the Eastern Gate site (Newman 2013, 113). In all moderate to large quantities of animal bone were recovered from the other three Barnwell excavations and the importance is therefore enhanced. The Barnwell assemblages can be compared with other local sites and there seems to have been differences, for example at both Howes and Heath Farm, Cherry Hinton the horse numbers were far higher (Cessford and Slater forthcoming; Cessford 2014, 53).

3) Continuity and change from medieval to post-medieval

- 7.2.27 The third research objective from Section 4 asks whether there was continuity and change from medieval to post-medieval. Barnwell lay settlement is likely to have been severely affected by the Dissolution. The Priory would have directly employed lay people within its precinct as well as probably purchased produce and goods from the lay settlement grew or made in their back plots (and common land), although it did have a nearby market in Cambridge (1km) away. This would have been compounded by immediate instability of the manor of Barnwell (comprising former priory land) which was sold three times between 1538 and 1553 (the manor was mostly kept in contact, although there was some fragmentation as some lots were bought by Dr Legh (Danckwerts 1980, 211). The main Abbey land portion was firstly acquired by John Lacey, but finally was brought by Dr Wendy who took over the manor in 1553. He was a doctor who had attended Henry VIII, is likely to have had little knowledge of farming and was based at Haslingfield many kilometres from Barnwell and also owned other land and property elsewhere. It is likely, therefore he was was an absentee landlord who was mainly interested in enjoying his new Haslingfield manor and park:

presumably he leased out the Barnwell land and therefore had little interest in helping Barnwell village itself.

- 7.2.28 This Harvest Way site is directly opposite the parish church and seems to have been, in part the focus for a new manor. The main manor was presumably the 16th century Abbey House which is still standing to the north-west of the site. But the western quarter of the Harvest Way site seems to also have a new manor house built also in the immediate post-Dissolution period. The existing medieval Buildings (1 and 2) were dismantled and replaced by a new substantial largely timber manor built with an attached large stone lined cess-pit (Building 8). Victorian records record this as the site of an old manor (see Section 1.3.24).
- 7.2.29 It is uncertain how many of the other medieval buildings continued at Harvest Way, although the former medieval plot boundaries (as seen in Buildings 3, 4, 5, 6 and 7) seem to have been maintained in this part of the site, albeit the buildings were later replaced at some stage by Buildings (9, 10, 12, 17 and 18). This is in contrast to excavations by CAU directly to the east of the current site at Eastern Gate where there may have been a decrease in use on the site in the mid 16th to 18th centuries, and an amalgamation of the former medieval plots from the six former medieval plots into three larger units, one was a farmstead, and another a brewery and/or public house (Newman 2013). Excavations at Coldhams Lane have shown there is likely to have been a period of abandonment coinciding with the Dissolution of Barnwell Priory in the mid 16th century until c.1650. when the site was probably given out to pastoral farming (Atkins 2015) and there was a reduction in activity in the Newmarket Road side to the west (Atkins forthcoming).
- 7.2.30 It is interesting to note that whilst Barnwell village survived, the hamlet of Howes located on Huntingdon Road in the northern Cambridge fields did not – it declined from the early/mid 15th century and ceased by the early/mid 16th century (Cessford 2014).
- 7.2.31 At some time after the Dissolution at Harvest Way an inn was built in the centre of the site (possibly Building 11, but certainly brick Building 12). This inn was almost certainly established by some time in the 17th century and included a brick built cellar and a later brick possible stable complex to the rear (overlying a former timber building(s) (Building 11). In the area between the Newmarket Road and the Harvest Way excavations, documentary evidence records an early post-medieval inn complex, the Bird Bolt, which dates from at least 1603 and large quantities of records are held by Corpus Christi College on this property (see Section 1.3.31). The Bird Bolt also had a brick cellar (survived until 1959) which is similar to the one excavated at Harvest Way. At the Newmarket Road excavation, two early post-medieval clunch structures (possible latrine and a well) were presumably part of a notable nearby domestic structure, possibly a farmhouse located on former Barnwell Priory estate land (Atkins forthcoming).
- 7.2.32 Barnwell village in the early post-medieval period therefore seems to have changed in character from medieval domestic buildings (albeit using their backplots for trade) to a village where farming and pleasure seems to be its business (two manor houses, a manor farm, at least three inns and several domestic buildings). The documentary records states that there were 67 properties in Barnwell in c.1625 (Newman 2013, table 66). Honor Ridout in her book on Cambridge and Stourbridge Fair notes that early post-medieval writers recorded their journeys to the fair. One noted that Borough Officials started in Cambridge and when they went through Barnwell they passed the abbey farmhouse and a little cluster of houses and pubs (Ridout 2011, 15).

- 7.2.33 The evidence points to a high percentage of pubs/inns alongside some relatively wealthy occupants/buildings. Entertainment was obviously a major industry for post-medieval Barnwell. The reasons for so many inns probably lies in the holding of two nearby major medieval markets: at Midsummer Common and at the former leper hospital (Stourbridge Fair). Both continued into the post-medieval period and were regionally or even of national importance. The latter lasted up to a month and brought in traders and buyers from all over England and beyond. Barnwell was also adjacent to a major road and river and therefore was an extremely important location for travelling (including wool carriers). The latter is attested from excavations 0.3km to the north-west of the site where artefacts and documentary records suggests it is likely this area was used as a meeting place for carriers before selling their wool in Cambridge (Atkins 2012a, 21). It is thus not surprising that in the 18th century Barnwell was known as 'Bawdy-Barnwel' in a poem written by Edward Ward in 1700 (and quoted by Newman 2013, 128-9).
- 7.2.34 The 1731 fire in Barnwell purporting to have destroyed 50 houses. This fire seems to have resulted in at least one of the inns burning down at the Harvest Way site suggesting it affected the more central part of the village (Atkins forthcoming a). New boundaries were constructed along buildings with clunch foundations that fronted Newmarket Road. Five such buildings, all with a very similar chimney stack, roughly equidistant within this site may suggest there was a planned rebuilding in this area, perhaps rebuilt following this devastating fire.

Post-medieval to modern

"The growth and impact of towns on the landscape needs to be further studied" (Medlycott 2011, 79)

Important aspects that have been largely overlooked in recording the historic urban environment include the development of 19th/20th century housing, the economic and social influences of town" (Medlycott 2011, 80)

- 7.2.35 The excavations at Harvest Way (and the other three excavations in the lay settlement) will be able to answer these two linked regional research topics (not previously recorded as research aims in the site's WSI).
- 7.2.36 A significant part of the excavation results comprised archaeological remains post-dating the Enclosures 1808-1812. In this period Barnwell rapidly changed from being a separate village to a Cambridge suburb. A small population is recorded for Barnwell (St Andrew the Less parish) in 1801 with just 252 people (79 houses) - the lowest of 14 parishes which made up Cambridge. It grew to 411 in 1811; 2211 in 1821; 6651 in 1831; 9486 people (1953 properties) in 1841 and 11776 in 1851 (Salzman 1967, 138). By the 1830s the former village of Barnwell had been become a suburb of Cambridge. Cambridge Borough (and university) expanded from 10087 people in 1801 to 24453 in 1841, a rise of 242% (*ibid*, 138). The expansion of Cambridge between 1801 and 1841 took place largely in St. Andrew the Less parish where there was a rise in population of 9234 whereas in the other 13 parishes (and university) combined saw a rise of just 5132 people.
- 7.2.37 The expansion can be seen within Harvest Way – in the 1820s and 1830s there was a large increase in buildings within the site. There were up to three pubs (George, Shamrock and Black Bull) fronting Newmarket Road, and infilling of the eastern half of the site with two yards (Shamrock Passage and Brown's Yard) with terrace houses fronting both. Later in the western side Leeke Street was built, and along the southern extent houses fronting what later became Harvest Way. Some small scale industrial use

took place with evidence for specialist glass making. The whole of the former village of Barnwell was similarly affected – former backplots were infilled and congested with houses across the whole former village. This can be seen in all four excavations where former backplots were rapidly rebuilt with terrace houses and small industrial activities were undertaken such as glass making at Harvest Way (Newman 2013; Atkins 2015; Atkins forthcoming). The net effect was that the land between Cambridge and into Barnwell became the slum and lesser industrial area of the new greater Cambridge in the 19th century (RCHME 1988, 366).

- 7.2.38 The question therefore needs to be looked at in detail. Measuring and trying to understand increase in population is important as towns in Britain expand (or contract) depending on different local circumstances. In the first four decades of the 19th century the national increase in population was about two-thirds (Hopkins 1989, 78). Using the population data (above), it can be seen that Cambridge expanded by four times the national average. This is especially marked considering the stagnation in population in the town between 1750 and 1801 (virtually no increase in population and well below the national average). If the population growth in St Andrew the Less parish is taken out of the equation, the Cambridge growth in population was below the national average. The population rise in St Andrew the less parish was a rise of more than 50 times the national average. This extraordinary increase in population needs to be considered – indeed there may have been several factors (some interlinked) which led to this growth.
- 7.2.39 Firstly, up to the end of the 18th century Cambridge was encircled by fields and commons, including the Barnwell Field extending from the river below Jesus College to Coe Fen and the Western Fields (RCHME 1988: lviii). The open fields were subject to rights of common which rendered it necessary that they be cultivated as arable land (CUL MS Doc 621/30). After Enclosure this changed. At the same time in c.1808, Panton land (former Barnwell Priory estate) went from being in long term ownership since 1763 by a family owner to being sold off in many plots to people, at least most of whom, presumably had no attachment and wanted to make a large profit.
- 7.2.40 In addition another factor would have been that the two great fairs which Barnwell relied on diminished in size from at least the mid 18th century. After problems in 1802 at Stourbridge Fair, Ridout (2011, 86) states that it continued, but was a shadow of its former self. Barnwell had benefited greatly from these fairs and therefore with money reduced there was presumably an incentive to look elsewhere to compensate. There was therefore less incentive to keep backplots to grow produce/rear stock.
- 7.2.41 Thirdly, It has been long recognised by economic and social historians that an active building trade can boost the trade (and population) of a town. "the building trades were active in all areas of expansion, it is often possible to correlate regional bursts of industrial growth with new housing. Moreover the output of the builders represented a very high proportion of new capital" (Checkland 1979, 165). It was not therefore not a coincidence that in Barnwell a brickworks was located, from at least c.1800, less than 200m to the east of the site (recorded on the 1807-12 Enclosure Map). Two or three separate brickworks are recorded on the 1830s and 1840s maps around this Barnwell area to the north-east and east of the site. The brickworks were located there because there was good clay beds for brick making, proximity to the river and a major road for transportation. Significantly the brickworks were very close to a large area where there was to be a very large growth in population/housing. The bricks therefore were relatively cheap to produce and did not need to be transported far to where people wanted to sell land and build houses. These economic factors related directly to the brick/building industry and were a major reason for expansion in this part of Cambridge.

This concentration of brickmaking is well-known from elsewhere e.g. at Northampton four adjacent brick kilns were recorded in the far northern segment of the town and these accounted for over half of Northampton's brickmakers. This location was an area of good clay beds, next to the turnpike road in an area which saw the greatest housing expansion within the town in the 19th century (Atkins 2002, 97).

- 7.2.42 Fourthly, there was a need for working class houses and labour to meet the overall increase in Cambridge. Such accommodation and industry could not be placed in the centre of Cambridge which comprised middle class colleges who wanted their area maintained to a high standard (this policy can be clearly seen in having the new railway located well away from the town centre). Instead of infilling Cambridge centre itself, the backplots of Barnwell were rapidly congested with houses across the whole village.

"Serious work is required on material cultural studies of the post-medieval and particular modern periods, including pottery, brick, tile, glass and clay tobacco pipes." (Medlycott 2011, 78).

- 7.2.43 The Harvest Way post-medieval and modern assemblages of pottery, brick, tile, glass and clay pipe were all notable for their large quantity and their good condition (see Atkins, Cessford and Fletcher, Appendices B.6, 7 and 9). Good assemblages were recovered from well datable inn and cellar deposits (including one notable group dated to the fire of Barnwell 1731). Cessford has stated that the clay-pipe including new previously unknown masonic groups and the collection should be viewed as of regional importance.
- 7.2.44 It is likely using documentary and cartographic evidence that specific features (and their artefact and ecofact) assemblages will be tied to specific people (especially from the mid 19th century when trade directories and census details are reasonably good. The excavation found minor glass making took place on the site, as well as other industries. The excavation results can be compared with remains found at Eastern Gate (Newman 2013) and Newmarket Road (Atkins forthcoming B).
- 7.2.45 It was noticeable that few features dated to the late 19th or 20th century - it was in this period that waste was taken from the town and disposed of outside (and not within the site itself). This will limit what can be analysed concerning the people and activities at Harvest Way in this 'modern' period. That being said cartographic evidence suggests there was continuity in the site from the late 19th century until the 1960s when the site was redeveloped for industry and road widening.

8. METHODS STATEMENTS FOR ANALYSIS

8.1 Stratigraphic Analysis

- 8.1.1 The basic stratigraphic analysis has been completed for this site. An MS Access Database has been created for all contexts and finds.
- 8.1.2 Final phasing will take into consideration all of the finds data and more detailed analysis of the spatial and stratigraphic record. Dates provided by finds (particularly pottery) will be checked, refined and altered where necessary to provide final phasing. This will take place after receipt of full reports on the artefacts. It is anticipated that each period will then be sub-divided into a series of more tightly dated phases.
- 8.1.3 The project database will be updated to include the final phasing and this will be used as the basis for analysis.

8.1.4 Given the proximity of several other investigations it is intended to ensure that phasing is compatible with adjacent sites to enable ease of comparison.

8.1.5 Illustrations will comprise phase plans including details of complex areas, section drawings and photographs of key features, particularly wells. For Period 4, maps will provide a base for interpretation of features.

8.2 Documentary Research

8.2.1 The University Library, Cambridge will be visited in order to consult a number of key documents including an 18th century tithe roll of the parish (Doc. 1375) a Terrier dated 1591 (Add Mss 6919) and records related to Inclosure 1779, 1801-1819 (Doc 621 and doc 127-31).

8.3 Artefactual Analysis

8.3.1 All the artefacts have been assessed (Appendices B.1-B.11), databases have been created and linked to the context database. Further analysis is recommended as follows:

8.3.2 Metal Objects: The silver coin should be conserved and an archive entry needs to be completed. For the remaining objects, after X-ray and cleaning, archive catalogue entries should be completed and research on the local and regional comparisons

8.3.3 Worked stone. Full recording required. Some may need further analysis (with c.3 thin sections) to determine provenance. Research will be needed to focus on parallels and likely function.

8.3.4 Glass. Further study is needed on the assemblage including lampworking glass

8.3.5 Post-Roman pottery. Further work is needed in studying assemblage including possible refits. Identification of new forms and traits are likely. The pottery linked to Cambridge Colleges should be sent to a specialist.

8.3.6 Clay tobacco pipe. Further work cataloguing pipes proposed for illustration.

8.3.7 Architectural Stone. Further analysis of stone including petrological analysis.

8.3.8 CBM: Comparison with other locally excavated material of similar date is recommended if available.

8.3.9 Worked bone and miscellaneous small finds. Archive catalogue entries need to be completed and research on the local and regional comparisons.

8.3.10 Wood. Conservation of at least three objects. Archive catalogue entries need to be completed and research on the local and regional comparisons. Species identification should be undertaken.

8.3.11 The catalogue and reports on the remaining artefact types (flint and industrial residue) have been completed and no further work is recommended.

8.3.12 Illustrations are recommended as follows: Approximately 71 copper alloy, lead and iron objects, c.15 worked stone objects, c. 50 pottery vessels, c.10 tobacco pipe bowls and stems, 15 architectural stones, three brick/tiles, 25 worked bone and miscellaneous small finds. Wooden artefacts have been drawn

8.4 Ecofactual Analysis

8.4.1 All ecofactual remains have been assessed (Appendices C1-C5) and further work is recommended as follows:

- 8.4.2 Faunal remains. Further work is on the assemblage including research on the local and regional comparisons.
- 8.4.3 Environmental samples. Processing of additional soil from eight bulk samples. Full analysis of 18 samples.
- 8.4.4 The catalogue and reports on the remaining ecofactual types (human bone, pollen, insect remains and shell) have been completed and no further work is recommended.

9. REPORT WRITING, ARCHIVING AND PUBLICATION

9.1 Report Writing

Tasks associated with report writing are identified in Table 5

9.2 Storage and Curation

- 9.2.1 Excavated material and records will be deposited with, and curated by, Cambridgeshire County Council in appropriate county stores under the Site Code CAMEAG 14 and the county HER code ECB 3941. A digital archive will be deposited with OA Library/ADS. CCC requires transfer of ownership prior to deposition (see Section 11). During analysis and report preparation, OA East will hold all material and reserves the right to send material for specialist analysis.
- 9.2.2 The archive will be prepared in accordance with current OA East guidelines, which are based on current national guidelines

9.3 Publication

- 9.3.1 It is proposed that the results of the project should be published as an Oxford Archaeology monograph. The publication synopsis will be submitted on completion of the Archive Report.

10. RESOURCES AND PROGRAMMING

10.1 Project Team Structure

Name	Initials	Project Role	Establishment
Aileen Connor	AC	Project manager/content editor	OA East
Rob Atkins	RA	Author	OA East
Elizabeth Popescu	EP	Editor	OA East
TBC		Faunal remains	OA East
Carole Fletcher	CF	Post- Roman pottery and glass	OA East
Rachel Fosberry	RF	Environmental samples	OA East
Chris Howard-Davis	CHD	Small finds	OA North
Mark Samuels	MS	Architectural stone	Freelance
Ruth Shaffrey	RS	Worked stone objects	OA South
Rob Atkins	RA	Documentary	OA East
Craig Cessford	CC	Pottery from Cambridge Colleges	Freelance
Illustrators	ILL	Illustrations/report formatting	OA East

Table 4: *Project Team*

10.2 Stages and Tasks

Task No.	Task	Staff
Project Management		
1	Project management	AC + EP
2	Liaison with relevant staff and specialists, distribution of relevant information and materials	RA
Stage 1: Stratigraphic analysis		
3	Final pottery dating	CF
4	Finalise site phasing	RA
5	Add final phasing to database	RA
6	Compile group and phase text	RA
7	Compile overall stratigraphic text and site narrative to form the basis of the full/archive report	RA
8	Review, collate and standardise results of all final specialist reports and integrate with stratigraphic text and project results	RA
Illustration		
9	Digitise selected sections	III
10	Prepare draft phase plans, sections and other report figures	III
11	Select illustrations for inclusion in the report	RA
Documentary research		
12	Research at University Library etc.	RA
Artefact studies		
13	Metal small finds. Work after conservation and X rays	CHD
14	Worked stone. Further work after thin sections	RS
15	Glass. Further work	CF
16	Post-Roman pottery full report	CF
17	Architectural stone. Full report after petrological analysis	MS
18	Worked bone and miss small finds full report	CHD
19	Wood. Full report after identification and conservation	CHD
Environmental Remains		
20	Faunal remains full report	TBC
21	Environmental samples full report after additional processing	RF
22	Pollen	
23	Insect	
Stage 2: Report Writing		
24	Integrate documentary research	RA
25	Write historical and archaeological background text	RA
26	Edit phase and group text	RA
27	Compile list of illustrations/liaise with illustrators	RA + III
28	Write discussion and conclusions	RA
29	Prepare report figures	RA
30	Collate/edit captions, bibliography, appendices etc.	RA
31	Produce draft report	RA
32	Internal edit	AC + EP
33	Incorporate internal edits	RA
34	Final edit	RA
35	Submit draft full archive report to CCC archaeologist for approval	RA
36	Await any comments, make changes where appropriate	RA

Table 5: *Task list for full archive report*

10.3 Project Timetable

- 10.3.1 It is anticipated that once this PXA has been formally approved in writing by the CCC HET, the full archive report will be ready for submission within 12 months.

11. OWNERSHIP

- 11.1.1 The ownership of the archive (paper and artefacts) will pass to Cambridgeshire County Council after the project has been published.

APPENDIX A. CONTEXT SUMMARY WITH PROVISIONAL PHASING

Cxt	Same as	Cut	Tr	Category	Feature Type	Function	Lth	Bth	Dth	Ph
1		1 3	cut		pit		0	1.45	0.9	2
2		1 3	fill		pit		0			2
3		3 3	cut		pit		0	1	0.26	2
4		3 3	fill		pit		0			2
5		3 3	fill		pit		0			2
6		6 3	cut		post hole	?Building 7	0	0.65	0.42	2
7		6 3	fill		post hole	?Building 7	0			2
8		8 3	cut		post hole	?Building 7	0	0.6	0.48	2
9		8 3	fill		post hole	?Building 7	0			2
10		10 3	cut		post hole	?Building 7	0	0.6	0.11	2
11		10 3	fill		post hole	?Building 7	0			2
12			layer				0			4
13		14 1	fill		pit		0			2
14		14 1	cut		pit		0.98	0.7	0.32	2
15		16 1	fill		?post hole	Building 8	0			3
16	1238	16 1	cut		?post hole	Building 8	0.55	0.25		3
17		18 1	fill		post hole	Building 1	0			2
18		18 1	cut		post hole	Building 1	0.65	0.38	0.17	2
19		20 1	fill		?post hole	Building 8	0			3
20		20 1	cut		?post hole	Building 8	0.63	0.42	0.25	3
21		22 1	fill		post hole	Building 1	0			2
22		22 1	cut		post hole	Building 1	0.3	0.25	0.14	2
23		24 1	fill		?post hole	Building 8	0			3
24		24 1	cut		?post hole	Building 8	0.6	0.45	0.42	3
25		26 1	fill		pit		0			2
26		26 1	cut		pit		1.2	0.35	0.5	2
27		28 1	fill		post hole	Building 8	0			3
28		28 1	cut		post hole	Building 8	0.55	0.5	0.14	3
29		30 1	fill		post hole	Building 1	0			2
30		30 1	cut		post hole	Building 1	0.7	5	0.2	2
31		32 1	fill		post hole	Building 1	0			2
32		32 1	cut		post hole	Building 1	0.65	0.55	0.19	2
33		34 1	fill		post hole	Building 8	0			3
34		34 1	cut		post hole	Building 8	0.6	0.5	0.2	3
35		36 1	fill		pit		0			2
36	1199	36 1	cut		pit		0	0.75	0.35	2
37		38 1	fill		post hole	Building 8	0			3
38		38 1	cut		post hole	Building 8	0.42	0.4	0.21	3
39		40 1	fill		pit		0			2
40		40 1	cut		pit		1.5	1.4	0.33	2
41		42 1	fill		ditch		0			2
42	1218	42 1	cut		ditch		0	0.74	0.52	2
43		44 1	fill		ditch		0			2
44	1220	44 1	cut		ditch		0	0.6	0.3	2
45		46 1	fill		post hole	Building 8	0			3
46		46 1	cut		post hole	Building 8	0	0.38	0.2	3
47		48 1	fill		pit		0			2
48		48 1	cut		pit		0	0.75	0.15	2
49		50 1	fill		post hole	Building 8	0			3
50		50 1	cut		post hole	Building 8	0	0.35	0.32	3
51		2	layer		floor	Building 15	0		0.08	4

Cxt	Same as	Cut	Tr	Category	Feature Type	Function	Lth	Bth	Dth	Ph
52			2	layer			0			2
53			2	layer	floor	Building 15	0			3
54			2	layer			0			3
55			2	layer			0			4
56		56	2	structure	wall	Building 15	0	0.55		3
57			2	layer			0		0.12	4
58		59	2	fill	pit		0			2
59		59	2	cut	pit		0	0.9	0.58	2
60			2	layer			0			2
61		62	2	fill	post hole	Building 4	0			2
62		62	2	cut	post hole	Building 4	0.28	0.21	0.19	2
63		64	2	fill	post hole	Building 4	0			2
64		64	2	cut	post hole	Building 4	0.6	0.3	0.26	2
65		66	2	fill	post hole	Building 4	0			2
66		66	2	cut	post hole	Building 4	0.28	0.26	0.15	2
67	10000		2	layer	natural		0			0
68		69	2	fill	pit		0			2
69		69	2	cut	pit		2	1.75	0.63	2
70		71	2	fill	pit		0			2
71		71	2	cut	pit		0	0.95	0.22	2
72	55		2	layer			0		0.22	4
73			2	layer			0		0.13	2
74			2	layer			0		0.14	3
75			2	layer	floor	Building 16	0		0.2	3
76		76	2	structure	wall	Building 16	0	0.32	0.2	3
77	530		2	layer	floor	Building 16	2.75	0.75	0.08	3
78			2	layer	levelling layer		2.9	0.75	0.25	3
79			2	layer	floor	Building 16	0			3
80	3286	80	5	cut	pit		3	2.3	2.3	2
81		80	5	fill	pit		0	1.4	0.22	2
82		80	5	fill	pit		0	0.6	0.22	2
83		80	5	fill	pit		0	0.6	0.04	2
84		80	5	fill	pit		0	0.6	0.12	2
85		80	5	fill	pit		0		0.04	2
86		80	5	fill	pit		0	1.25	0.2	2
87		80	5	fill	pit		0		0.14	2
88		80	5	fill	pit		0	2.14	0.3	2
89		80	5	fill	pit		0	1.7	0.28	2
90		80	5	fill	pit		0	2.2	0.9	2
91		91	5	cut	pit		1.5	0.5	1.5	2
92		91	5	fill	pit		0		0.5	2
93		91	5	fill	pit		0		0.4	2
94		91	5	fill	pit		0		0.8	2
95		95	5	cut	pit		3.9	3.25	1.3	2
96		95	5	fill	pit		0		0.5	2
97		95	5	fill	pit		0		0.2	2
98		95	5	fill	pit		0		0.8	2
99	3133	99	5	cut	pit		0	3.8	3.2	2
100		99	5	fill	pit		0		0.3	2
101		99	5	fill	pit		0		0.35	2
102		99	5	fill	pit		0		0.5	2
103		99	5	fill	pit		0	2.3	0.77	2
104		105	4	fill	pit		0			2
105	108	105	4	cut	pit		0.85	0.35	0.17	2

Cxt	Same as	Cut	Tr	Category	Feature Type	Function	Lth	Bth	Dth	Ph
106		4	layer	floor or capping			2.2		0.29	2
107		108 4	fill	pit			0			2
108	2447	108 4	cut	pit			0.85	0.65	0.51	2
109		110 4	fill	post hole	Building 11		0			3
110		110 4	cut	post hole	Building 11		0.8	0.6	0.2	3
111		112 4	fill	pit			0			2
112		112 4	cut	pit			0			2
113		114 4	fill	well			0			2
114	2554	114 4	cut	well			0	1.8	0.45+	2
115		116 4	fill	pit			0			2
116		116 4	cut	pit			0			2
117		118 4	fill	pit			0			2
118		118 4	cut	pit			2.1	0.8	0.84	2
119		120 4	fill	pit			0			2
120		120 4	cut	pit			0			2
121		122 4	fill	pit			0			2
122		122 4	cut	pit			0.75	0.6	0.4	2
123		124 4	fill	pit			0			2
124		124 4	cut	pit			1.16	0.5	0.46	2
125		126 4	fill	post hole			0			2
126		126 4	cut	post hole			0	0.3	0.14	2
127		128 4	fill	pit			0			4
128	2199	128 4	cut	pit			1.4	1.4	0.4	4
129		131 4	structure	wall	Boundary		0	0.16	0.4	3
130		131 4	fill	wall foundation	Boundary		0			3
131		131 4	cut	wall foundation	Boundary		0	0.8	0.4	3
132		133 4	fill	pipe trench			0			4
133		133 4	cut	pipe trench			0	1	0.6	4
134	1078	131 4	structure	wall (disturbed)	Boundary		5.2	0.3	0.4	3
135		4	?layer				0		0.36	4
136		138 4	structure	wall foundation	1970s factory		0	0.24	0.2	4
137		138 4	structure	cement foundation	1970s factory		3.2	1.1	0.2	4
138		138 4	cut	wall and cement foundation	1970s factory		0	1.2	0.4	4
139		4	layer				0		0.15	4
140		4	layer				0		0.28	4
141		142 4	fill	pipe trench			0			4
142		142 4	cut	pipe trench			0	0.4	0.5	4
143		4	layer	cobbled surface	George and Dragon yard		0.9	1.2	0.12	4
144	12	4	layer				0		0.4	4
145	1080	145 4	structure	wall foundation	Building 28		3.2	0.4	0.4	4
146		4	layer				0		0.15	3
147		4	layer				0		0.15	3
148		4	layer				0		0.4	4
149		4	layer				0		0.06	4
150		150 4	structure	wall foundation	Building 28		0	0.4	0.4	4
151		4	layer				0		0.1	4
152		4	layer				0		0.06	4
153		124 4	fill	pit			0			2
154		4	layer				0		0.16	3
155		156 6	fill	?ditch			0			2
156		156 6	cut	?ditch			0	0.3	0.32	2
157		158 6	fill	?post hole			0			2

Cxt	Same as	Cut	Tr	Category	Feature Type	Function	Lth	Bth	Dth	Ph
158		158	6	cut	?post hole		0	0.46	0.38	2
159		160	6	fill	pit		0			3
160		160	6	cut	pit		0	0.72	0.3	3
161		162	6	fill	pit		0			3
162		162	6	cut	pit		0	1	0.2	3
163		164	6	fill	pit		0			2
164	2515	164	6	cut	pit		0	0.96	0.27	2
165		166	6	fill	post hole		0	0.36	0.14	2
166		166	6	cut	post hole		0.54	0.36	0.14	2
167		168	6	fill	pit		0			2
168		168	6	cut	pit		1.4	1.1	0.45	2
169		170	6	fill	pit		0			2
170		170	6	cut	pit		0	0.6	0.31	2
171		172	6	fill	pit		0			2
172		172	6	cut	pit		0	1.2	0.4	2
173		176	6	fill	ditch	boundary	0			3
174		176	6	fill	ditch	boundary	0			3
175		176	6	fill	ditch	boundary	0			3
176	816 830 2020 2620 2590 2620	176	6	cut	ditch	boundary	0	0.6	0.3	3
177		177	6	fill and cut	?wall foundation	Shamrock Passage	0	0.92	0.4	4
178		178	6	structure	wall foundation	Shamrock Passage	0	0.42	0.72	4
179		179	6	fill and cut	pipe trench		0	0.6	0.28	4
180			6	layer			0		0.4	4
181		183	6	fill	pit		0			4
182		183	6	fill	pit		0			4
183		183	6	cut	pit		0	0.48	0.46	4
184		185	6	fill	pit		0			4
185		185	6	cut	pit		0	1.25	0.15	4
186			6	layer			0		0.13	4
187			6	layer	floor		0		0.15	4
188		189	6	fill	pit		0			4
189		189	6	cut	pit		0	0.3	0.35	4
190			6	layer			0		0.2	4
191			6	layer			0		0.2	4
192			6	layer	floor		0		0.1	4
193			6	layer			0		0.4	3
194			6	layer	?floor		0		0.42	3
195		196	6	fill	pit		0			2
196		196	6	cut	pit		1.2	0.8	0.16	2
197			6	layer			0		0.34	3
198			6	layer			0		0.1	3
199			6	layer			0		0.3	3
200			6	?layer			0		0.46	3
201		202	6	fill	pit		0			4
202		202	6	cut	pit		0	1.02	0.48	4
203		204	6	fill	?pit		0			3
204		204	6	cut	?pit		0	1	0.1	3
205			6	layer			0		0.12	4
206			6	layer			0		0.18	3
207			6	layer			0		0.26	3
208		160	6	fill	pit		0			3
209		260	6	fill	pit		0			3
210		260	6	fill	pit		0			3

Cxt	Same as	Cut	Tr	Category	Feature Type	Function	Lth	Bth	Dth	Ph
211		260	6	fill	pit		0			3
212			6	layer			0		0.3	3
213			1	layer			0		0.25	3
214			1	layer			0		0.2	4
215			1	layer			0		0.2	3
216			1	layer			0		0.25	3
217			1	layer			0		0.05	4
218			1	layer			0		0.25	4
219		219	1	structure	wall foundation	Buildings 23/4	0	0.45	0.19	4
220		220	1	structure	?wall foundation	?corral	0	0.65	0.2	3
221	300	222	1	fill	post hole or pit		0			4
222	301	222	1	cut	post hole or pit		0	0.43	0.4	4
223		224	1	fill	post hole or pit		0			4
224		224	1	cut	post hole or pit		0	0.8	0.42	4
225		226	1	fill	post hole or pit		0			4
226		226	1	cut	post hole or pit		0	0.4	0.55	4
227		228	1	fill	well	Building 22	0			4
228		228	1	cut	well	Building 22	0	1	1	4
230			5	layer			0		0.28	3
231		232	5	fill	post hole or pit		0			2
232		232	5	cut	post hole or pit		0	0.4	0.14	2
233		99	5	fill	pit		0			2
234		99	5	fill	pit		0			2
235		99	5	fill	pit		0			2
236			5	layer			0		0.24	3
237			5	layer			0		0.4	3
238			5	layer			0		0.2	3
239			5	structure	wall foundation	Boundary	0	0.7	0.35	3
240		241	5	fill	pipe trench		0			4
241		241	5	cut	pipe trench		0	0.58	0.48	4
242		243	5	fill	pipe trench		0			4
243		243	5	cut	pipe trench		0	1.08	1.1	4
244			3	layer			0		0.16	4
245			3	layer			0		0.21	4
246			3	layer			0		0.38	3
247		248	3	fill	post hole		0			4
248		248	3	cut	post hole		0	0.42	0.44	4
249		250	3	fill	post hole or pit		0			4
250		250	3	cut	post hole or pit		0	0.64	0.49	4
251			3	layer			0		0.32	4
252			3	layer			0		0.2	2
253		254	3	fill	pipe trench		0			4
254		254	3	cut	pipe trench		0	1.04	0.82	4
255		256	3	fill	pipe trench		0			4
256		256	3	cut	pipe trench		0		0.64	4
257			6	?layer			0		0.2	2
258		259	6	fill	wall trench	Boundary	0			3
259		259	6	cut	wall trench	Boundary	0.9	0.42	0.26	3
260		260	6	cut	well or pit		1.2	0.55	0.34	3
261			6	layer			0		0.34	2
262		262	3	fill and cut	well		0			3
300		301		fill	wall	Buildings 22/3	6.8	0.3	0.15	4
301		301		cut	wall	Buildings 22/3	6.8	0.3	0.15	4
302		303		fill	stone wall	Building 21	10	0.4		4

Cxt	Same as	Cut	Tr	Category	Feature Type	Function	Lth	Bth	Dth	Ph
303		303	cut	wall	wall	Building 21	10	0.4		4
304		305	fill	wall	wall	Buildings 21/22	8	0.25	1.2	4
305		305	cut	wall	wall	Buildings 21/22	8	0.25	1.2	4
306		307	fill	wall	wall	Building 21	8	0.3		4
307		307	cut	wall	wall	Building 21	8	0.4		4
308		309	fill	wall	wall	Building 21	1.08	0.4		4
309		309	cut	wall	wall	Building 21	1.08	0.4		4
310		311	fill	brick drain	drainage	drainage	1.5	0.3		4
311		311	cut	drain	drainage	drainage	1.5	0.3		4
312		313	fill	wall	wall	Building 24	4.5	0.3		4
313		313	cut	wall	wall	Building 24	4.5	0.3		4
314		315	fill	wall	wall	Building 24	3.7	0.26		4
315		315	cut	wall	wall	Building 24	3.7	0.26		4
316		317	fill	wall	wall	Building 18	0.95	0.4		3
317		317	cut	wall	wall	Building 18	0.95	0.4		3
318		319	fill	wall	wall	Building 18	5.45	0.4		3
319		319	cut	wall	wall	Building 18	5.45	0.4		3
320		321	fill	wall	wall	Building 18	2	0.5		3
321		321	cut	wall	wall	Building 18	2	0.5		3
322		0	layer	floor	floor	Shamrock Passage	0.8	0.75		4
323		0	layer	floor	floor	Shamrock Passage	1	0.6		4
324		325	fill	wall	wall	Building 19/Boundary	6.3	0.2		3
325	876	325	cut	wall	wall	Building 19/Boundary	6.3	0.2		3
326		327	fill	wall	wall	Brown's Yard	5.4	0.5		4
327		327	cut	wall	wall	Brown's Yard	5.4	0.5	0.4	4
328		329	fill	soak away	soak away	Plot 37	0.8	0.8	0.5	4
329		329	cut	soak away	soak away	Plot 37	0.8	0.8	0.5	4
330		331	fill	drain	drain	Plot 37	3	0.25		4
331		331	cut	drain	drain	Plot 37	3	0.25		4
332		333	fill	wall	wall	?Building, plot 37	4.4	0.45		4
333		333	cut	wall	wall	?Building, Plot 37	4.4	0.45		4
334		335	fill	wall	wall	?Building, Plot 37	6.4	0.4		4
335		335	cut	wall	wall	?Building, Plot 37	6.4	0.4		4
336		337	fill	wall	wall	Brown's Yard	0	0.42	0.3	4
337		337	cut	wall	wall	Brown's Yard	0	0.42	0.3	4
338		339	fill	wall	wall	Brown's Yard	0	0.3	0.1	4
339		339	cut	wall	wall	Brown's Yard	0	0.3	0.1	4
340		341	fill	wall	wall	George and Dragon	2.6	0.5		4
341		341	cut	wall	wall	George and Dragon	2.6	0.5		4
342		343	fill	wall	wall	Shamrock Passage	3.2	0.3		4
343		343	cut	wall	wall	Shamrock Passage	3.2	0.3		4
344		345	fill	wall	wall	Brown's yard	0	0.43	0.3	4
345	337	345	cut	wall	wall	Brown's Yard	0	0.43	0.3	4
346		0	layer	surface (external)	surface (external)	Brown's Yard	7	2.5		4
347		348	fill	wall	wall	Brown's Yard	0	0.25		4
348		348	cut	wall	wall	Brown's Yard	0			4
349		350	fill	wall	wall	Brown's Yard	0	3.5	0.15	4
350	348 381	350	cut	wall	wall	Brown's Yard	0			4
351		0	layer	surface (internal)	surface (internal)	Brown's Yard	3	1		4
352		0	layer				1.2	1	0.1	4
353		353	fill/cut	drain pipe	drain pipe		0			4
354		355	fill	wall	wall	Brown's Yard	0	0.35	0.2	4
355		355	cut	wall	wall	Brown's Yard	0	0.35	0.2	4
356		357	fill	wall	wall	Brown's Yard	0	0.3		4

Cxt	Same as	Cut	Tr	Category	Feature Type	Function	Lth	Bth	Dth	Ph
357	390	357	cut	wall	wall	Brown's Yard	0		0.3	4
358		359	fill	wall	wall	Shamrock Passage	0	0.3		4
359		359	cut	wall	wall	Shamrock Passage	0			4
360		0	layer	floor	floor	Shamrock Passage	0			4
361		0	layer	mortar	mortar	Shamrock Passage	2.3	2.3	0.03	4
362		363	fill	wall	wall	Shamrock Passage	0	0.3		4
363		363	cut	wall	wall	Shamrock Passage	1.8	0.8		4
364		365	fill	wall	wall	Shamrock Passage	0	0.35	0.2	4
365	387	365	cut	wall	wall	Shamrock Passage	0	0.35	0.2	4
366		0	fill	concrete wall	concrete wall	Shamrock Passage	0			4
367		368	fill	wall	wall	Shamrock Passage	0	0.24		4
368	389	368	cut	wall	wall	Shamrock Passage	0			4
369		370	fill	wall	wall	Brown's yard	0	0.35		4
370	380	370	cut	wall	wall	Brown's Yard	0	0.35		4
371		372	fill	wall	wall	Brown's Yard	0	0.25		4
372	378	372	cut	wall	wall	Brown's Yard	0	0.25		4
373	337 345	373	masonry	wall	wall	Brown's Yard	0	0.6		4
374	339	374	masonry	wall	wall	Brown's Yard	0			4
375		375	masonry	structure	structure	Brown's Yard	1.2	1	0.09	4
376	378 379	376	masonry	wall	wall	Brown's yard	0			4
377		377	masonry	wall	wall	Brown's Yard	0			4
378	372	378	masonry	wall	wall	Brown's Yard	0	0.23		4
379		379	masonry	wall	wall	Brown's Yard	0	0.23		4
380	370	380	masonry	wall	wall	Brown's Yard	0	0.6		4
381	348 350 355	381	masonry	wall	wall	Brown's Yard	0			4
382		382	masonry	wall	wall	Brown's Yard	0.8			4
383		383	masonry	wall	wall	Brown's yard	4.75	0.52		4
384		384	cut	wall	wall	Shamrock Passage	0			4
385		385	masonry	wall	wall	Shamrock Passage	1.75	0.3		4
386	1017	386	masonry	wall	wall	Shamrock Passage	2.25	0.3		4
387	365	0	fill	wall	wall	Shamrock Passage	0			4
388		388	cut	wall	wall	1960s	0			4
389	368	389	masonry	wall	wall	Shamrock Passage	0			4
390	357	390	masonry	wall	wall	Brown's Yard	0			4
391		0	fill	concrete wall	concrete wall		0			4
392		392	masonry	floor	floor	Brown's Yard	0			4
393		375	fill	wall	wall	Brown's Yard	0			4
394		394	masonry	wall	wall	Building 28	3.5	0.3		4
395	150	395	masonry	wall	wall	Building 28	7	0.3		4
396		396	masonry	wall	wall	Building 28	7	0.6		4
397		397	masonry	wall	wall	George and Dragon Yard	1	0.3		4
398	143	0	layer	surface (external)	surface (external)	cobbled path?	3.5	1.5		4
399		399	cut	wall foundation trench	wall foundation trench	?Corral	0			3
400		399	fill	wall	wall	?Corral	0		0.9	3
401		399	masonry	wall	wall	?Corral	4	0.4		3
402		0	layer	levelling	levelling		0		0.95	3
403		0	layer	levelling	levelling		0		0.65	3
404		0	layer	levelling	levelling		0		0.55	3
405		405	masonry	wall	wall	corral	3	1		3
406		0	fill	floor	floor	Brown's Yard	1.15	0.5	0.1	4
407		0	layer				0.9	0.5	0.15	4
408	213	0	layer				0.9	0.5	0.48	3
409		0	layer				0.9	0.5	0.6	3

Cxt	Same as	Cut	Tr	Category	Feature Type	Function	Lth	Bth	Dth	Ph
410		0		layer			1	1	0.35	4
411		0		layer	surface (external)	cobbled floor?	1	1		3
412	595	412		masonry	wall	Building 15	4.7	0.2	0.16	3
413		0		layer			0.88		0.05	3
414		0		layer			0.77		0.15	3
415		514		layer	backfill		0	0.9	0.03	3
416		0		layer	levelling		0	1.57	0.1	3
417		0		layer	floor		0	0.53	0.04	3
418		0		fill	wall	Building 14	0	0.4	0.09	3
419		0		layer	floor		0	0.42	0.08	3
420		0		layer	?levelling		0	0.6	0.1	3
421		0		layer			0			3
422		0		layer	levelling		0.32	0.21	0.11	3
423		423		masonry	wall	Building 22	2.5	0.3		4
424		424		masonry	wall	?Corral	1	0.3		3
425		425		masonry	wall	?Corral	1.5	0.3		3
426		0		layer	levelling		0		0.4	3
427		0		layer	levelling		0		0.68	3
428	219	428		masonry	wall	Building 23/4	6.5	0.5		4
429		430		fill	pit		1	1.05	0.35	3
430		430		cut	pit		1	1.05	0.35	3
431		0		layer	?floor	Building 14	1.5		0.2	3
432		0		layer	?floor	Building 14	2.6		0.28	3
433		0		layer	?floor	Building 14	4		0.2	3
434		0		layer	surface (internal)	Building 14	4		0.2	3
435	568	0		layer	floor	Building 14	0.7	2.5	0.1	3
436		436		cut	post hole	Building 9	0	0.09	0.23	3
437		436		fill	post hole	Building 9	0	0.09	0.23	3
438		0		layer	levelling		0.09	0.9	0.07	3
439		0		layer			0.13		0.12	3
440		0		layer			0.43		0.11	3
441		0		layer			0.34		0.13	3
442		442		cut	post hole	?Building 9	0	0.08	0.13	3
443		442		fill	post hole	?Building 9	0	0.08	0.13	3
444		0		layer	levelling		0	0.28	0.12	3
445		0		layer	levelling		0	0.4	0.08	3
446		0		layer	layer		0	0.92	0.27	3
447		447		masonry	wall	Building 14	5	0.54	0.2	4
448		0		layer	layer		0	0.6	0.08	3
449		0		layer	surface	?Corral	0	0.6	0.12	3
450		0		layer	layer		0	1.35	0.04	3
451		0		layer	clay surface	?Building 14	0	1.98	0.25	3
452		452		cut	pit		0	0.45	0.11	3
453		452		fill	pit		0	0.45	0.11	3
454		0		layer	levelling		0		0.4	3
455		456		fill	pipe		0	0.34	0.4	4
456		456		cut	pipe trench		0	0.34	0.4	4
457		0		layer			0	2.21	0.1	3
458		0		layer	floor	Building 14	0.48	0.3	0.08	3
459		0		layer	surface (internal)	Building 14	0	0.6	0.12	3
460		0		layer	surface (internal)	internal supporting base (for shelving etc)	0			3
461		461		masonry	wall	Building 14	0	0.1	0.28	3
462		462		masonry	chimney	Building 14	1.1	1	0.38	3

Cxt	Same as	Cut	Tr	Category	Feature Type	Function	Lth	Bth	Dth	Ph
463		463		masonry	oven	Building 14	0.36	0.24	0.18	3
464		465		fill	foundation trench	Building 14	0	0.6	0.35	3
465		465		cut	chimney	Building 14	1.1	0.6	0.35	3
466		0		layer	buried soil	garden soil	0	0.93	0.36	2
467		523		fill			0	0.15	0.1	3
468		474		fill	pit		0			3
469		0		layer			1.2	0.6	0.25	3
470		473		fill	pit		0	0.87	0.22	3
471		473		fill	pit		0	0.83	0.12	3
472		473		fill	pit		0	1	0.22	3
473		473		cut	pit		1.63	1.8	0.34	3
474		474		cut			0			3
475		0		layer	floor	Building 14	0			3
476		476		cut	foundation trench		0.2	0.32	0.13	3
477		0		layer	floor	Building 14	0		0.15	3
478		479		fill	post hole	?Building 9	0	0.27	0.16	3
479		479		cut	post hole	?Building 9	0	0.27	0.16	3
480		0		layer	buried soil		0		0.2	3
481		481		masonry	wall of oven	Building 14	1.5	0.58	0.08	3
482		0		layer			1.5	0.45	0.01	3
483		485		fill	hearth	Building 14	1.5	0.45	0.03	3
484		485		fill	hearth	Building 14	1.5	0.58	0.04	3
485		485		cut	hearth	Building 14	1.5	0.58	0.03	3
486		488		fill	post hole	?Building 9	0	0.32	0.16	3
487		488		fill	post hole	?Building 9	0	0.26	0.07	3
488		488		cut	post hole	Building 9	0	0.42	0.17	3
489		0		layer	floor		0	1.78	0.02	3
490		492		fill	foundation trench	Building 14	0	0.46	0.03	3
491		492		fill	foundation trench	Building 14	0	0.59	0.2	3
492		492		cut	foundation trench	Building 14	0	0.59	0.23	3
493		0		layer	floor	Building 14	0	1.68	0.03	3
494		0		layer			0		0.08	3
495		497		fill	post hole	?Building 9	0	0.32	0.13	3
496		497		fill	post hole	?Building 9	0	0.28	0.1	3
497		497		cut	post hole	Building 9	0	0.32	0.19	3
498		0		layer			0	0.3	0.04	4
499		0		layer			0	0.6	0.04	4
500		515		layer	floor	Building 14	0	0.78	0.04	3
501		515		layer	floor	Building 14	0		0.03	3
502		515		layer	floor	Building 14	0	1.36	0.12	3
503		515		layer	floor	Building 14	0	0.73	0.03	3
504		515		layer			0	1.16	0.02	3
505		507		fill	pit		0	0.64	0.09	4
506		507		fill	pit		0	0.52	0.07	4
507		507		cut	pit		0	0.69	0.13	4
508		0		layer	floor	Building 14	0		0.03	3
509		0		layer	floor	Building 14	0	0.78	0.02	3
510		0		layer	floor	Building 14	0	0.78	0.02	3
511		512		fill	post hole	Building 9	0	0.21	0.17	3
512		512		cut	post hole	Building 9	0	0.21	0.17	3
513		0		layer	floor	Building 14	0	1.14	0.02	3
514		514		cut	surface (external)	lane	1	0.9	0.15	3
515		515		cut	pit?		0		0.16	3
516		517		fill	post hole		0	0.19	0.2	4

Cxt	Same as	Cut	Tr	Category	Feature Type	Function	Lth	Bth	Dth	Ph
517		517	cut		post hole		0	0.19	0.2	4
518		507	fill		pit		0	0.33	0.02	4
519		519	cut		pit	quarry	0	0.73	0.98	2
520		519	fill		pit	quarry	0		0.98	2
521		0	layer		levelling		0		0.49	3
522		0	layer		levelling		0		0.32	3
523		523	cut				0			3
524		0	layer		floor		1.75	1	0.12	3
525		525	masonry		wall	Building 16	0.8	0.35	0.25	3
526		0	layer				0			3
527		0	layer		floor	Building 16	0			3
528		528	masonry		wall	Building 16	1.4	0.35	0.25	3
529		0	layer				0	0.58	0.03	3
530	77	0	layer		floor	Building 16	0.75	0.5	0.05	3
531		0	layer		floor	Building 16	0.5	0.5	0.1	3
532		533	fill		pit		1.8	1	0.75	4
533	1451	533	cut		pit	Building 16	1.8	1	0.75	4
534		534	masonry		wall		2.76	1.07	0.24	4
535		534	fill		wall		1.5	0.25	0.23	4
537		538	fill		drain		1.75	0.6	0.16	4
538		538	cut		drain		1.75	0.6	0.16	4
539		539	masonry		wall	Building 16	0			3
540		541	fill		trench		0			4
541		541	cut		trench		0			4
542		543	cut		toilet block	Building 16, St George PH	0			4
543		543	cut		toilet block	Building 16, St George PH	0			4
544		544	masonry				0			4
545		545	masonry		wall	Building 16	0			3
546	429	430	fill		pit		1.1	0.65	0.3	3
547		547	masonry		wall	Building 12	0.5		0.28	3
548		548	cut		ditch		0	1	0.55	3
549		548	fill		ditch		0		0.54	3
550		0	fill		layer		0		0.23	3
551		0	fill		layer		0		1.17	3
552		548	fill		ditch		0		0.54	3
553		553	masonry		wall	Building 16	2.6	0.6		3
554		0	layer				0	0.6	0.1	4
555		0	fill		pit		0		0.42	3
556		556	masonry		wall	Building 16	0.75	0.3		3
557	77	0	fill		floor	Building 16	2.5	1		3
558		558	masonry		wall	Building 16	1.2	0.6		3
559		559	masonry		wall	Building 16	0.48	0.13	0.16	3
560		560	cut		ditch		0		1	3
561		560	fill		ditch		0		1	3
562		560	fill		ditch		0		0.55	3
563		563	masonry		wall	Building 14	5.25	0.13	0.1	3
564		0	layer		hearth		0.28	0.63	0.12	3
565		0	layer		dump		0	0.96	0.24	3
566		0	layer		buried soil		0	0.95	0.24	3
568		0	layer		surface (external)		0			2
569		569	masonry		wall	Building 14	5.5	0.43	0.1	3
570		570	masonry		wall	room	0.84	0.24	0.13	3
571		571	masonry		wall	Building 14	9.5	0.7	0.2	3
572		572	masonry		wall	Building 14	1.47	0.46	0.1	3

Cxt	Same as	Cut	Tr	Category	Feature Type	Function	Lth	Bth	Dth	Ph
573		0		layer			3	2.5		3
574		574		cut	pit		0	0.7	0.15	3
575		574		fill	pit		0	0.26	0.08	3
576		574		fill	pit		0.28	0.7	0.07	3
577		574		fill	pit		0.37	0.7	0.06	3
578		0		masonry	large stone	?	0.47	0.2	0.22	3
579		579		masonry	wall		3	0.35	0.1	4
580		580		cut	drain		0	1		4
581		582		fill	drain		0.55	0.53	0.13	4
582		582		cut	drain		0.55	0.53	0.13	4
583		0		layer	floor	Building 15	1.3	0.32	0.06	3
584		584		masonry	wall	Building 15	0.56	0.21	0.14	3
585		0		layer	levelling		0.8	0.2	0.1	3
586		0		layer	floor	Building 15	0.3	0.28	0.1	3
587		0		layer	levelling		0.6		0.1	3
588		0		layer	floor	Building 15	2.4	0.15	0.05	3
589		0		layer			0	0.65	0.05	3
590		0		layer			0	0.3	0.05	3
591		0		fill			0	0.45	0.12	3
592		0		layer	surface (external)		0	0.35	0.08	3
593		0		layer			0	1.1		3
594		0		layer			0	0.9	0.15	3
595 412		595		masonry	wall	Building 15	0			3
596		0		layer			1	0.5	0.07	3
597		0		layer			2.5	2.5	0.08	3
598		598		masonry	wall	George and Dragon	0	0.35	0.2	4
599		598		masonry	doorway	George and Dragon	0	0.35	0.2	4
600		0		masonry	floor		0			4
601		0		layer	floor		0.5	0.5	0.07	4
602		0		layer	floor		0.5	0.5	0.02	4
603		605		fill	structure		0.25	0.3	0.2	4
604		605		fill	structure		0	0.44	0.22	4
605		605		cut	foundation trench		0	0.45	0.22	4
606		606		masonry	wall	Building 15	0.9	0.4		4
607		607		masonry	wall	Building 15	1.7	0.4		4
608		609		fill	foundation trench		1.2	0.8	0.3	3
609		609		cut	foundation trench		1.2	0.8	0.3	3
610		611		fill	pit		1	0.28	0.54	3
611 648 1110		611		cut	pit		1	0.28	0.54	3
612		0		layer			1.2	0.8	0.35	3
613		609		fill	foundation trench		0	0.53	0.03	3
614		615		fill			0.35	0.25	0.19	3
615		615		cut			0.35	0.25	0.19	3
616		619		fill	pit		0.8	0.75	0.06	3
617		617		masonry	chimney stack/wall	Building 18	2.5	2.5	0.5	3
618		0		layer	floor	Building 18	2.25	1	0.02	3
619		619		cut	pit		0.8	0.75	0.06	3
620		0		layer	floor	Building 18	1.5	2	0.3	3
621		621		masonry	wall	Building 28	0			4
622		622		masonry	wall	Building 28	0	0.36	0.22	4
623		623		masonry	wall	Building 17	3.1	0.48	0.28	3
624		624		masonry	wall	Building 28	2.55	0.5		4
625		625		masonry	wall	Building 28	0	0.48		4

Cxt	Same as	Cut	Tr	Category	Feature Type	Function	Lth	Bth	Dth	Ph
626		626		masonry	wall	Building 17	1.3	0.4		3
627		627		masonry	wall/chimney stack	Building 17	3.3	0.58	0.14	3
628		628		cut	pit		0	0.55	0.35	4
629		628		fill	pit		0	0.55	0.35	4
630		0		layer	garden soil		0		0.35	3
631		631		cut	post hole	Building 10	0	0.39	0.08	3
632		631		fill	post hole	Building 10	0	0.39	0.08	3
633		633		cut	pit		0	0.95	0.15	4
634		633		fill	pit		0	0.95	0.15	4
635		636		fill	foundation trench	Building 15	1.07	0.32	0.42	3
636		636		cut	foundation trench	Building 15	1.07	0.32	0.42	3
637		648		fill	pit		0			3
638		648		fill	pit		0	1.2	1	3
639		648		fill	pit		0	1.2	1	3
640		648		fill	pit		0	1.2	1	3
641		648		fill	pit		0	1.2	1	3
642		648		fill	pit		0	1.2	1	3
643		648		fill	pit		0	1.2	1	3
644		648		fill	pit		0	1.2	1	3
645		648		fill	pit		0	1.2	1	3
646		648		fill	pit		0	1.2	1	3
647		648		fill	pit		0	1.2	1	3
648 611		648		cut	pit		5	1.2	1	3
649		0		layer	floor	Building 15	0		0.2	3
650		660		fill	well		0	0.4	0.34	3
651		660		fill	well		0		0.2	3
652		660		fill	well		0		0.2	3
653		660		fill	well		0		0.2	3
654		660		fill	well		0		0.2	3
655		660		fill	well		0	0.96	0.36	3
656		660		fill	well		0	1.04	0.4	3
657		660		fill	well		0	0.65	0.1	3
658		660		fill	well		0	0.6	0.12	3
659		660		fill	well		0			3
660		660		cut	well	?Associated with Buildings 9/10	0	1.06	1	3
661		661		cut	pit		0	0.45	0.2	3
662		661		fill	pit		0	0.35	0.04	3
663		661		fill	pit		0	0.44	0.08	3
664		661		fill	pit		0	0.36	0.01	3
665		661		fill	pit		0	0.36	0.14	3
666		0		layer	floor	Building 10	0	0.48	0.08	3
667		0		layer	floor	Building 10	0		0.06	3
668		0		layer	floor	Building 10	0		0.06	3
669		0		layer	floor	Building 10	0		0.06	3
670		0		layer			0		0.13	3
671		0		layer	floor	Building 10	0	0.56	0.02	3
672		0		layer			0			3
673		0		layer			0			3
674		0		layer	floor		0		0.04	3
675		0		layer			0		0.17	3
676		0		layer			0		0.17	3
677		0		layer			0		0.17	3

Cxt	Same as	Cut	Tr	Category	Feature Type	Function	Lth	Bth	Dth	Ph
678		682	fill		pit		0	0.63	0.29	2
679		682	fill		pit		0	0.48	0.03	2
680		682	fill		pit		0	0.42	0.2	2
681		682	fill		pit		0	0.33	0.09	2
682		682	cut		pit		0	0.63	0.47	2
683		684	fill		post hole		0	0.31	0.5	2
684		684	cut		post hole		0	0.31	0.5	2
685		687	fill		post hole		0	0.2	0.31	2
686		687	fill		post hole		0	0.17	0.04	2
687		687	cut		post hole		0	0.2	0.35	2
688		0	layer		build-up		0		0.25	3
689		0	layer				0		0.25	3
690		0	layer		floor	Building 10	0		0.03	3
691		0	layer		hearth?	Building 18	1.5	2		3
692		692	masonry		wall	Building 28	3.85	0.5	0.12	4
693		0	layer		levelling		0.82	0.5	0.05	4
694		0	layer		levelling		0.82	0.6	0.07	4
695		695	masonry		wall	Building 18	3.8	0.1	0.08	4
696		0	layer		floor	Building 18	3.8	1.17	0.04	4
697		0	layer		levelling		3.8	2.68	0.16	4
698		0	layer		levelling		3.8	2.68	0.12	4
699		700	fill		drain		4.85	0.45	0.2	4
700		700	cut		drain		4.85	0.45	0.2	4
701		0	layer		surface (internal)	Building 18	3.8	1.8		3
702		0	layer		levelling		3.3	1.1	0.1	3
703	697	0	layer		levelling		4	0.4	0.1	3
704		0	layer		levelling		1	0.85	0.1	3
705		705	masonry		wall	Building 18	4.8	0.25	0.2	3
706		0	layer		hearth	Building 18	0.4	0.45		3
707		709	fill		post hole	Building 13	0.3	0.27	0.1	3
708		709	fill		post hole	Building 13	0.02	0.01	0.02	3
709		709	cut		post hole	Building 13	0.33	0.29	0.1	3
710		711	fill		post hole	Building 13	0.24	0.2	0.07	3
711		711	cut		post hole	Building 13	0.24	0.2	0.07	3
712		713	fill		drain		1.8	0.15		4
713		713	cut		drain		1.8	0.15		4
714		0	layer		levelling		1.1	3.8		3
715		716	fill		post hole	Building 13	0.28	0.28	0.16	3
716		716	cut		post hole	Building 13	0.28	0.28	0.16	3
717		0	layer		levelling		0.98	0.36	0.1	4
718		718	masonry		wall	Building 18	1.6	0.45	0.23	4
719	705	719	masonry		wall	Building 18	1.5	0.4	0.2	3
720		720	masonry		wall	Building 18	2	0.3		3
721		0	layer		floor	Building 18	2	0.6	0.1	3
722		0	layer		floor	Building 18	0		0.05	3
723	724	0	layer				0		0.2	3
724	723	0	layer				1.1	1	0.15	3
725		0	layer		floor	Building 15	1.1	1	0.18	3
726		0	layer		buried soil		0		0.25	2
727		746	fill		post hole		0	0.1	0.3	4
728		729	fill		manhole		0.8	0.8	0.37	4
729		729	cut		manhole		0.8	0.8	0.37	4
730		830	fill		ditch	boundary	1.3	0.6	0.2	3
731		830	fill		ditch	boundary	1.4	1	0.34	3

Cxt	Same as	Cut	Tr	Category	Feature Type	Function	Lth	Bth	Dth	Ph
732		830		fill	ditch	boundary	1	1.4	0.7	3
733		733		cut	pit	quarry?	1.18		1.18	3
734		734		masonry	wall	Building 18	5	0.15	0.1	3
735		0		layer	layer		0.75	0.9	0.18	4
736		0		layer	levelling		0		0.28	3
737		737		cut	pit		0	2	1.1	2
738		737		fill	pit		0			2
739		739		cut	well	Building 28	0	0.8	1.1	4
740		739		fill	well	Building 28	0			4
741		739		fill	well	Building 28	0			4
742		0		layer	floor	Building 15	1.68		0.1	3
743		0		layer	floor	Building 15	1.3	1	0.16	3
744		768		fill			0.72		0.04	3
745		768		fill			0.7		0.18	3
746		746		cut	post hole		0	0.1	0.3	4
747		747		masonry	wall	Building 15	2.7	0.5		3
748		749		fill	foundation trench		2.7	0.5	0.46	3
749		749		cut	foundation trench	structural	2.7	0.5	0.46	3
750		751		fill	post hole	Building 10	0	0.28	0.42	3
751		751		cut	post hole	Building 10	0	0.28	0.42	3
752		0		layer	levelling		1.58		0.2	3
753	466 480	0		layer			1.64		0.2	3
754		755		fill	pit		1.84	0.58	0.36	3
755		755		cut	pit		1.84	0.58	0.36	3
756		0		layer			1.92	0.8	0.24	3
757	753 753	0		layer			0	1.1	0.32	3
758		759		fill	post hole	Building 10	0	0.3	0.28	3
759		759		cut	post hole	Building 10	0	0.3	0.28	3
760		761		fill	post hole	Building 10	0	0.22	0.24	3
761		761		cut	post hole	Building 10	0	0.22	0.24	3
762	633	762		cut	pit		0	0.8	0.34	4
763		762		fill	pit		0		0.34	4
764		764		masonry	wall	?Building 28	4.5	0.64	0.19	4
765		765		masonry	wall	Building 28	6.5	0.72	0.2	4
766		0		layer	levelling		0	3	0.2	4
767		767		masonry	wall	Building 18	0.8	0.3	0.15	4
768		0		cut	construction		0.7		0.2	3
769		784		fill	well		0	1.59	0.09	2
770		784		fill	well		0	1.59	0.09	2
771		784		fill	well		0	1.59	0.09	2
772		784		fill	well		0	1.6	0.07	2
773		784		fill	well		0	0.73	0.02	2
774		784		fill	well		0	0.94	0.1	2
775		784		fill	well		0	0.88	0.14	2
776		784		fill	well		0	0.49	0.05	2
777		784		fill	well		0	1.82	0.07	2
778		784		fill	well		0	1.71	0.16	2
779		784		fill	well		0	1.45	0.28	2
780		784		fill	well		0	1.4	0.02	2
781		784		fill	well		0	0.31	0.16	2
782		784		fill	well		0	0.73		2
783		784		fill	well		0	0.64		2
784		784		cut	well		1.84		0	2

Cxt	Same as	Cut	Tr	Category	Feature Type	Function	Lth	Bth	Dth	Ph
785		786		fill	pit		0		0.44	3
786		786		cut	pit		0		0.44	3
787		0		layer			0		0.12	3
788		0		layer			0		0.06	2
789		0		layer			0		0.13	2
790		790		masonry	wall		0.8	0.8		4
791		2059		fill	pit		0		0.54	2
792	2060	792		masonry	wall	Building 12	0	0.31		3
793		793		masonry	wall	Building 28	0.95	0.23	0.13	4
794	621	794		masonry	wall	Building 28	0	0.3	0.18	4
795		795		masonry	wall	Building 28	0	0.3	0.22	4
796		796		masonry	wall	Building 28	1.3	0.36	0.14	4
797		797		masonry	structure	Building 28	1.55		0.2	4
798		798		masonry	wall	Shamrock Passage	1.1	0.3	0.08	4
800	1111	800		masonry	wall	?Corral	0	0.29		3
802		802		cut	post hole	Building 13	0	0.26	0.12	3
803		802		fill	post hole	Building 13	0	0.26	0.12	3
804		804		cut	post hole	Building 13	0	0.33	0.2	3
805		804		fill	post hole	Building 13	0	0.33	0.2	3
806		806		cut	post hole	Building 13	0	0.35	0.15	3
807		806		fill	post hole	Building 13	0	0.35	0.15	3
808		808		cut	post hole	Building 13	0	0.32	0.23	3
809		808		fill	post hole	Building 13	0	0.32	0.23	3
810		0		layer			0			3
811		0		layer	floor	Building 17	0			3
812		0		layer	floor	Building 17	0			3
813		813		masonry	wall	Building 17	0			3
814		814		cut	post hole	Building 9	0.2	0.16	0.18	3
815		814		fill	post hole	Building 9	0		0.18	3
816	176 830 2020 2620 2590 2620	816		cut	ditch	boundary	1.8	1.15	0.95	3
817		816		fill	ditch	boundary	1.8	0.7	0.2	3
818		816		fill	ditch	boundary	1.8	0.9	0.6	3
819		816		fill	ditch	boundary	0	0.9	0.1	3
820		816		fill	ditch	boundary	0	0.6	0.1	3
821		821		cut	pit		0	0.6	0.6	3
822		821		fill	pit		0	0.6	0.6	3
823		0		layer			1	0.7	0.2	4
824		824		cut	grave (cat)	Building 28	0.27	0.26	0.1	4
825		824		fill	grave (cat)	Building 28	0.27	0.26	0.1	4
826		0		layer	mortar		0			4
827		827		masonry	floor	Building 28	0			4
828		0		layer	buried soil		0			2
829		830		fill	ditch	boundary	1		0.94	3
830	176 816 2020 2590 2620	830		cut	ditch	boundary	1	1.16	0.13	3
831		733		fill	pit		0		0.5	3
832		733		fill	pit		0.94	0.5	0.62	3
833		733		fill	pit		0.9	0.3	0.32	3
834		733		fill	pit		0		0.6	3
835		0		fill	?pit		0.9	0.5	0.24	3
836		0		layer			0.8	0.7	0.14	3
837		0		layer			0	0.6	0.04	3
839		0		layer			2	0.28	0.16	3

Cxt	Same as	Cut	Tr	Category	Feature Type	Function	Lth	Bth	Dth	Ph
840		0		layer			0	0.38	0.13	3
842		0		layer	levelling		0		0.4	3
843		0		layer	levelling		0		0.4	3
844		0		layer	levelling		4	3	0.19	3
845		0		layer			0.7	0.44	0.22	3
846		848		fill	drain		0	0.13	0.1	4
847		848		masonry	drain		0	0.22	0.07	4
848		848		cut	drain		0	0.22	0.1	4
849		0		layer			0.88		0.3	3
851		0		layer			0		0.12	3
852		0		layer			0		0.1	3
853		0		layer			0		0.1	3
854		0		layer			0		0.08	3
855		0		layer			0		0.12	3
857		0		layer	floor	Building 16	0		0.05	3
858		0		layer	buried soil		0		0.2	2
859		859		cut	floor	Building 20	0		0.3	3
860		859		fill	buried soil		0		0.08	3
861		859		fill	floor	Building 20	0		0.26	3
862		859		fill	burnt dump		0.4	0.3	0.06	3
863		859		fill	floor	Building 20	0.8	0.64	0.1	3
864		864		cut	modern intrusion		0	0.36	0.62	4
865		864		fill	modern fill		0	0.36	0.62	4
866		868		fill	well		0		0.58	3
867		867		masonry	well		0	0.25	0.1	3
868		868		cut	well	Associated with Building 20	0		0.58	3
869		0		layer			0		0.13	3
870		0		layer	levelling		0		0.08	4
871		0		layer	surface (external)	Plot 36	1.8	1.4	0.06	4
872		0		layer	mortar		1.8	1.4	0.06	4
873		0		layer	dump		1		0.3	4
874		874		cut	pit		0.7			4
875		874		fill	pit		0.7			4
876	325	876		fill/cut	wall	Building 19/Boundary	0			3
877		0		layer			0			3
878		0		layer	floor	Building 19	0		0.04	3
879		879		fill/cut	wall	Boundary	0		0.22	3
880		881		fill	wall foundation	Boundary	0		0.12	3
881		881		cut	wall foundation trench	Boundary	0		0.12	3
882		883		fill	floor	Building 19	0			4
883		883		cut	floor	Building 19	1.1		0.18	4
884		0		layer	levelling		1.2	1	0.56	3
885		0		layer			0			2
886		886		cut	wall	Building 20	0	0.11	0.07	3
887		887		cut	wall	Plot 36	0		0.38	4
888		889		fill	pit		0	1.3	1	3
889		889		cut	pit		0	1.3	1	3
890		893		fill	pit		0		1.2	3
891		891		cut	pit		0		1.3	3
892		891		fill	pit		0		1.3	3
893		893		cut	pit		0	1	1.2	3
894		0		layer			0		0.2	4
895		0		layer	floor	Plot 36	2		0.22	4

Cxt	Same as	Cut	Tr	Category	Feature Type	Function	Lth	Bth	Dth	Ph
896		0		layer			0		0.45	3
897		0		layer			0		0.44	3
898		0		layer	levelling		0		0.58	3
899		955		fill	well		0		0.6	3
900		900		cut	pit		0			3
901		900		fill	pit		0			3
902		903		fill	post hole		0	0.1	0.22	3
903		903		cut	post hole		0	0.1	0.22	3
904		905		fill	pit		0.9	0.7	0.18	3
905		905		cut	pit		0.9	0.7	0.18	3
906		0		layer			0		0.08	3
907		0		layer	levelling		0		0.25	3
908		0		layer			0		0.2	2
909		0		layer	floor	Building 19	0		0.08	3
910		874		fill	pit		0.6		0.45	4
911		874		fill	pit		0		0.15	4
912		912		cut	?pit		0.97	0.35	0.32	2
913		912		fill	?pit		0.97	0.35	0.32	2
914		914		cut	pit		0.8		0.32	3
915		914		fill	pit		0.8		0.32	3
916		0		layer			1.1	0.8	0.05	3
917		0		layer	levelling		1.05		0.11	3
918		918		cut	drain		0	0.68	0.14	4
919		918		fill	drain		0	0.53	0.12	4
920		918		fill	drain		0	0.68	0.14	4
921		0		layer	floor		1.63	0.47	0.19	2
922		0		layer	levelling		0	0.47	0.03	2
923		923		cut	pit		0.82	0.47	0.15	2
924		923		fill	pit		0.82	0.47	0.15	2
925		0		layer			0.5		0.03	4
926		931		fill	well	Building 17	2.48	2.14	0.6	3
927		931		fill	well	Building 17	0		0.06	3
928		931		fill	well	Building 17	0		0.41	3
929		931		fill	well	Building 17	0		0.2	3
930		931		fill	well	Building 17	0	0	0	3
931		931		cut	well	Building 17	2.84	2.14	1.16	3
933		0		layer			0		0.18	3
934	884	0		layer			0		0.24	3
935		0		layer			0		0.06	3
936		0		layer	buried soil		0		0.09	2
937		0		layer			0		0.09	3
938		938		cut	pit		0.4		0.22	3
939		938		fill	pit		0.4		0.22	3
940		0		layer	levelling		0		0.28	3
941	955	941		cut	wall	Building 19/Boundary	0	0.66	0.5	3
942		941		fill	wall	Building 19/Boundary	0	0.68	0.6	3
943		941		fill	wall	Building 19/Boundary	0	0.34	0.18	3
944		0		layer	floor	Building 19	0		0.08	3
945		0		layer	floor	Building 19	0		0.04	3
946		0		layer	buried soil		0		0.03	3
947		0		layer			0		0.19	4
948		0		layer	rubble		0		0.2	3
949		0		layer	garden soil		0		0.18	2
950		950		cut	drain		0	0.3	0.2	4

Cxt	Same as	Cut	Tr	Category	Feature Type	Function	Lth	Bth	Dth	Ph
951		950		fill	drain		0	0.3	0.2	4
952		0		layer	demolition		10	8	0.2	4
953		0		layer			0		0.1	3
954		0		layer			0		0.05	2
955	941	955		cut	wall	Boundary	0	0.5	0.6	3
956		955		fill	wall	Boundary	0		0.5	3
957		955		fill	wall	Boundary	0		0.25	3
958		958		cut	wall		0		0.3	3
959		965		fill	ditch		0		0.66	4
960		965		fill	ditch		0		0.32	4
961		0		layer	floor		0		0.28	4
962		0		layer	floor		0		0.22	4
963		0		layer			0		0.22	4
964		0		layer			0		0.04	4
965		965		cut	ditch		0	0.3	0.68	4
966		2609		fill	pit		0		0.7	4
967		0		layer	floor		0		0.18	4
968		969		fill	pit		0		0.98	3
969		969		cut	pit		0		0.98	3
970		0		layer	levelling		0		0.09	3
971		0		layer	levelling		0		0.04	3
972		973		fill	post hole		0.5	0.2	0.2	3
973		973		cut	post hole		0.5	0.2	0.2	3
974		974		cut	wall	Shamrock Passage	0		0.23	4
975		0		layer			1.8	1.4	0.24	4
976		0		layer			0		0.2	3
977		0		layer			0		0.24	3
978		0		layer			0		0.2	4
979		0		layer			0		0.2	3
980		0		layer	levelling		0		0.12	3
981		0		layer			0		0.13	3
982		0		layer			0		0.14	2
983		985		fill	pit		2.4	1.3	0.1	3
984		985		fill	pit		0		0.1	3
985		985		cut	pit		2.4	1.3	0.17	3
986		987		fill	pit		1.07	0.5	0.34	3
987		987		cut	pit		1.07	0.5	0.34	3
988		989		fill	pit		0.62	0.26	0.32	3
989		989		cut	pit		0.62	0.26	0.32	3
990		991		fill	pit		0.76	0.6	0.46	2
991		991		cut	pit		0.76	0.6	0.46	2
992		993		fill	pit		0.68		0.52	2
993	1503	993		cut	pit		0.68		0.52	2
994		995		fill	pit		0.66		0.44	2
995		995		cut	pit		0.66		0.44	2
996		0		layer			0		0.87	3
997		0		layer			0		0.19	3
998		0		layer			0		0.08	2
999		0		layer	garden soil		0		0.3	2
1000		0		layer			0		0.1	3
1001		1001		cut	wall	Building 28	0	0.2	0.2	4
1002		1002		cut	wall	Building 28	0	0.45	0.2	4
1003	394	1003		cut	wall	Building 28	0	0.45	0.2	4
1004		0		layer			0		0.2	2

Cxt	Same as	Cut	Tr	Category	Feature Type	Function	Lth	Bth	Dth	Ph
1005		0		layer			0		0.06	4
1006		0		layer			0		0.05	3
1007		1010		fill	pit		0.96		0.2	4
1008		1010		fill	pit		1.15		0.05	4
1009		1010		fill	pit		1.15		0.22	4
1010	2494	1010		cut	pit		1.15		0.46	4
1011		1012		fill	wall	Building 28	0	0.3	0.22	4
1012	795	1012		cut	wall	Building 28	0	0.3	0.22	4
1013		1014		masonry	wall	Building 28	0	0.84	0.1	4
1014	796	1014		cut	wall	Building 28	0	0.84	0.08	4
1015		1014		fill	wall	Building 28	0	0.84	0.08	4
1016		1024		fill	pit		0		0.15	3
1017	386	1017		cut	wall		0	0.3	0.22	4
1018		1024		fill	pit		0		0.15	3
1019		1033		fill	pit		0		0.18	3
1020		1033		fill	pit		0.45		0.18	3
1021		1033		fill	pit		0.35		0.2	3
1022		1033		fill	pit		0.2		0.3	3
1023		1033		fill	pit		0.8		0.35	3
1024		1024		cut	pit		0		0.2	3
1025		0		layer			0		0.15	3
1028		0		layer			0		0.28	3
1029		0		layer			0		0.25	3
1030		1033		fill	pit		0.45		0.15	3
1031		1033		fill	pit		0		0.05	3
1032		1033		fill	pit		0		0.22	3
1033		1033		cut	pit		0		0.4	3
1034		0		layer			0		0.02	3
1035		0		layer			0	0.65	0.15	3
1036		1036		cut	wall	St George extension	0	0.22		4
1037		0		layer			0		0.22	3
1038		0		layer	levelling		0		0.1	3
1039		0		layer	levelling		0		0.2	2
1040		1042		fill	pit	quarry	0		0.7	3
1041		1042		fill	pit	quarry	0		1.38	3
1042		1042		cut	pit	quarry	0	0.87	1.38	3
1043		1051		fill	well	Building 18	0.8	0.7	0.08	4
1044		1051		fill	well	Building 18	0.88		0.22	4
1045		1051		fill	well	Building 18	0.77		0.43	4
1046		1051		fill	well	Building 18	0.6		0.16	4
1047		1051		fill	well	Building 18	0.72		0.29	4
1048		1051		fill	well	Building 18	0.7		0.12	4
1049		1051		fill	well	Building 18	0.71		0.13	4
1050		1051		fill	well	Building 18	1.3		1.1	4
1051		1051		cut	well	Building 18	1.3		1.1	4
1052	2474	1052		cut	wall of cellar	Building 19	0	0.3	0.62	4
1053		1053		cut	wall		0	0.33		4
1054		1052		fill	wall of cellar	Building 19	0	0.35	0.66	4
1055		0		layer			0		0.1	3
1056		0		layer			0		0.25	3
1057		0		layer			0		0.16	2
1058		1058		cut	pit		0.96		0.32	2
1059		1058		fill	pit		0.7	0.4	0.08	2
1060		1058		fill	pit		0.96	0.44	0.14	2

Cxt	Same as	Cut	Tr	Category	Feature Type	Function	Lth	Bth	Dth	Ph
1061		0		layer	levelling		0		0.1	3
1062		1062		cut	pit		1	0.7	0.35	3
1063		1062		fill	pit		0.6		0.03	3
1064		1062		fill	pit		0.5		0.06	3
1065		1062		fill	pit		1	0.7	0.18	3
1066		1062		fill	pit		1	0.7	0.12	3
1067		0		layer			0		0.1	3
1068		1068		cut	pit		1	0.64	0.66	3
1069		1068		fill	pit		1	0.64	0.66	3
1070		1070		cut	wall	Shamrock Passage	0	0.3	0.08	4
1071		1070		fill	wall	Shamrock Passage	0	0.3	0.08	4
1072		0		layer			1.8		0.01	3
1073		1073		cut	wall	Shamrock Passage	0	0.3	0.2	4
1074		0		layer			8.75	2	0.15	4
1075		1075		cut	1960s building		6.25	0.3	0.13	4
1076		1075		fill			6.25	0.3	0.13	4
1077		0		layer			0			3
1078	131	1078		cut	wall	Boundary	0	0.22	0.6	3
1079		1079		cut	wall	Shamrock Passage	0	0.25		4
1080		1080		masonry		Building 28	0	0.35		4
1081	145	1081		masonry	wall	Building 28	0	0.25		4
1082		1082		masonry	wall	Building 12	0	0.3	0.14	3
1083	792	1083		masonry	wall	Building 12	0	0.3	0.4	3
1084		0		layer	levelling		1.4	1	0.15	4
1085		0		layer	levelling		2	1	0.08	3
1086		0		layer	levelling		2	1	0.1	3
1087		0		layer	levelling		0.8	0.5	0.14	4
1088		0		layer			0.5		0.24	4
1089		1089		cut	well	Plot 32	1.6		0.95	4
1090		1089		fill	of foundation cut for well	Plot 32	1.6		0.95	4
1091		1089		masonry	well	Plot 32	0	1	0.15	4
1092		1089		fill	well	Plot 32	0	0.8	0.95	4
1093		1093		cut	post hole	Building 10	0.3		0.14	3
1094		1093		fill	post hole	Building 10	0.3		0.14	3
1095		1095		cut	post hole	Building 10	0.24		0.16	3
1096		1095		fill	post hole	Building 10	0.24		0.16	3
1097		1097		cut	post hole	Building 10	0.26		0.16	3
1098		1097		fill	post hole	Building 10	0.26		0.16	3
1099		1099		cut	post hole	Building 10	0.25		0.17	3
1100		1099		fill	post hole	Building 10	0.18		0.05	3
1101		1101		cut	post hole	Building 10	0.33		0.21	3
1102		1101		fill	post hole	Building 10	0.33		0.21	3
1103		1103		cut	post hole	Building 10	0.22		0.08	3
1104		1103		fill	post hole	Building 10	0.22		0.08	3
1105		1105		cut	post hole	Building 10	0.34		0.17	3
1106		1105		fill	post hole	Building 10	0.34		0.17	3
1107		1107		cut	post hole	Building 10	0.22		0.18	3
1108		1107		fill	post hole	Building 10	0.22		0.18	3
1109		1099		fill	post hole	Building 10	0.17		0.14	3
1110		1110		cut	pit		2	1.5	0.9	3
1111	800	1111		masonry	wall	Corral	0	0.28	0.5	3
1112		1112		cut	pit		2.8	2	0.48	4
1113		1112		fill	pit		0		0.48	4

Cxt	Same as	Cut	Tr	Category	Feature Type	Function	Lth	Bth	Dth	Ph
1114		1114		cut	post hole	Building 3	0.3		0.11	2
1115		1114		fill	post hole	Building 3	0.3		0.11	2
1116		1116		cut	post hole	Building 3	0.32	0.3	0.19	2
1117		1116		fill	post hole	Building 3	0		0.19	2
1118		1118		cut	post hole	Building 3	0.35	0.29	0.22	2
1119		1118		fill	post hole	Building 3	0		0.22	2
1120		1120		cut	post hole	Building 3	0.35	0.12	0.2	2
1121		1120		fill	post hole	Building 3	0		0.2	2
1122		1122		cut	post hole	Building 3	0.25	0.21	0.09	2
1123		1122		fill	post hole	Building 3	0		0.09	2
1124		1124		cut	post hole	Building 3	0.32	0.3	0.18	2
1125		1124		fill	post hole	Building 3	0		0.18	2
1126		1126		cut	post hole	Building 3	0.25		0.35	2
1127		1126		fill	post hole	Building 3	0.25		0.35	2
1128		1128		cut	pit		0.42	0.4	0.18	2
1129		1128		fill	pit		0.42	0.4	0.18	2
1130		1130		cut	pit		0.95		0.65	2
1131		1130		fill	pit		0.8		0.23	2
1132		1130		fill	pit		0.95		0.4	2
1133		1133		cut	pit		1.25		0.25	3
1134		1133		fill	pit		1.1		0.1	3
1135		1133		fill	pit		1.2		0.25	3
1136		1112		fill	pit		0		0.4	4
1137	403			layer			0		0.22	3
1138				layer			0		0.3	3
1139	402			layer			0		0.5	3
1140				layer			2.63	1.03	0.3	3
1141	1137 403			layer			3.96		0.24	3
1142	1139 402			layer	levelling		4.06		0.08	3
1143	1147 1260 2193			layer	surface (external)	Corral	1.34		0.08	3
1144				layer	surface (external)	Corral	3.3		0.04	3
1145	401	1145		masonry	wall	Corral	0	0.26	0.4	3
1146		1146		cut	foundation trench	Corral	6	5	0.4	3
1147	1143 1260 2193			layer	surface (external)	Corral	2			3
1148		1148		cut	post hole	?structure, plot 32	0.27		0.15	4
1149		1148		fill	post hole	?structure, plot 32	0.27		0.15	4
1150		1150		cut	post hole	?structure, plot 32	0.33		0.21	4
1151		1150		fill	post hole	?structure, plot 32	0.33		0.21	4
1152		1152		cut	post hole	?structure, plot 32	0.28		0.11	4
1153		1152		fill	post hole	?structure, plot 32	0.28		0.11	4
1154		1154		cut	post hole	?structure, plot 32	0.3		0.14	4
1155		1154		fill	post hole	?structure, plot 32	0.3		0.14	4
1156		1156		cut	post hole	?structure, plot 32	0.28		0.19	4
1157		1156		fill	post hole	?structure, plot 32	0.28		0.19	4
1158		0		layer			0		0.1	3
1159		0		layer			0		0.2	3
1160		1160		cut	post hole		0.2		0.1	2
1161		1160		fill	post hole		0.2		0.1	2
1162		1164		fill	post hole		0.38	0.3	0.12	0
1163		1164		fill	post hole		0.25		0.11	0
1164		1164		cut	post hole		0.38	0.3	0.23	0
1165		1167		fill	post hole		0.33	0.27	0.2	0
1166		1167		fill	post hole		0.27		0.1	0
1167		1167		cut	post hole		0.33	0.27	0.25	0

Cxt	Same as	Cut	Tr	Category	Feature Type	Function	Lth	Bth	Dth	Ph
1168		1170		fill	post hole		0.22	0.2	0.09	0
1169		1170		fill	post hole		0.18		0.11	0
1170		1170		cut	post hole		0.22	0.2	0.2	0
1171		1173		fill	post hole		0.33	0.28	0.13	0
1172		1173		fill	post hole		0.27		0.33	0
1173		1173		cut	post hole		0.33	0.28	0.46	0
1174		1175		fill	post hole		0.32	0.2	0.16	0
1175		1175		cut	post hole		0.32	0.2	0.16	0
1176		1176		cut	wall	Building 8	0		0.4	3
1177		1177		cut	post hole	Building 8	0	0.22	0.35	3
1178		1177		fill	post hole	Building 8	0	0.2	0.35	3
1179		1179		cut	post hole	Building 8	0.35		0.3	3
1180		1179		fill	post hole	Building 8	0.35		0.3	3
1181		311		fill	drain		0.5		0.4	4
1182		1182		cut	wall	Building 21	0	0.4	0.2	4
1183		1183		cut	wall	?Building 21	0	0.3	0.4	4
1184		1183		fill	wall	?Building 21	0	0.3	0.4	4
1185		1185		cut	pit		1.2		0.4	4
1186		1185		fill	pit		1.2		0.4	4
1187		1187		cut	pit		1	0.4	0.2	4
1188		1187		fill	pit		1	0.4	0.2	4
1189		1189		cut	pit		0.6	0.35	0.05	4
1190		1189		fill	pit		0.6	0.35	0.05	4
1191		1191		cut	post hole	Building 8	0	0.3	0.27	3
1192		1191		fill	post hole	Building 8	0	0.3	0.27	3
1193		1193		cut	post hole	Building 8	0.34	0.25	0.11	3
1194		1193		fill	post hole	Building 8	0.34	0.25	0.11	3
1195		1195		cut	post hole	Building 8	0.43	0.31	0.22	3
1196		1195		fill	post hole	Building 8	0.43	0.31	0.22	3
1198	35 36	1199		fill	pit		1	0.7	0.4	2
1199	35 36	1199		cut	pit		1	0.7	0.4	2
1200		1201		fill	post hole	Building 8	0.21		0.2	3
1201		1201		cut	post hole	Building 8	0.21		0.2	3
1202		1203		fill	post hole	Building 8	0.2		0.19	3
1203		1203		cut	post hole	Building 8	0.2		0.19	3
1204		1205		fill	post hole	Building 8	0.3		0.25	3
1205		1205		cut	post hole	Building 8	0.3		0.25	3
1206		0		layer	floor	?Building 8	1.7	1.6		3
1207		0		layer	floor	?Building 8	0			3
1208		1208		cut	post hole	Building 8	0			3
1209		1208		fill	post hole	Building 8	0			3
1210		1210		cut	pit		2.5	2.1	0.52	4
1211		1211		cut	pit		1.55	1.3	0.33	4
1212		1212		cut	pit		1	0.75	0.2	3
1213		1213		cut	post hole	Building 8	0.7		0.26	3
1214		1214		cut	pit		2.1		0.56	2
1215		1216		fill	post hole	Building 8	0.3		0.18	3
1216		1216		cut	post hole	Building 8	0.3		0.18	3
1217		1218		fill	ditch		3.3	1.03	0.42	2
1218	42	1218		cut	ditch		3.3	1.03	0.42	2
1219		1220		fill	ditch		3.3	0.7	0.23	2
1220	44	1220		cut	ditch		3.3	0.7	0.23	2
1221		1221		cut	?store	Building 14	1.95	0.9	0.5	4
1222		1221		fill	?store	Building 14	1.95	0.9	0.5	4

Cxt	Same as	Cut	Tr	Category	Feature Type	Function	Lth	Bth	Dth	Ph
1223		1221		masonry	?store	Building 14	1.9	0.25	0.48	4
1224		1221		masonry	floor of ?store	Building 14	1.4	0.7		4
1225		1221		fill	?store	Building 14	1.95	0.9	0.5	4
1226		1210		fill	pit		0		0.5	4
1227		1212		fill	pit		0		0.2	3
1228		1211		fill	pit		0		0.33	4
1229		1213		fill	post hole	Building 8	0		0.26	3
1230		1213		fill	post hole	Building 8	0		0.26	3
1231		1214		fill	pit		0		0.25	2
1232		0		layer			3.25		0.3	4
1233		0		layer			0		0.15	3
1234		0		layer	levelling		3.9		0.25	3
1235		0		layer			5.3	5	0.25	3
1236		0		layer			1.9		0.24	3
1237		0		layer			1	0.9	0.3	3
1238	16	1238		cut	post hole	Building 8	0.19		0.2	3
1239		1238		fill	post hole	Building 8	0.19		0.2	3
1240		1240		cut	post hole	Building 8	0.25		0.16	3
1241		1240		fill	post hole	Building 8	0.25		0.16	3
1242		1242		cut	post hole	Building 8	0.17		0.19	3
1243		1242		fill	post hole	Building 8	0.17		0.19	3
1244		784		fill	well		0.34		0.17	2
1245		784		fill	well		1.7		0.2	2
1246		784		fill	well		1.7		0.2	2
1247		784		fill	well		0			2
1248		0		layer	floor	Building 14	1	0.8	0.04	3
1249		1249		cut	wall	Plot 32	0	0.6	0.4	4
1250		1252		fill	wall	Corral	1.54	0.24	0.21	3
1251		1252		fill	wall	Corral	0	0.17	0.28	3
1252	401	1252		cut	wall	Corral	0	0.24	0.21	3
1253		1254		fill	post hole	Building 8	0.45		0.16	3
1254		1254		cut	post hole	Building 8	0.45		0.16	3
1255	26	1255		cut	pit		1.2		0.28	2
1256		1255		fill	pit		1.2		0.28	2
1257		0		layer	floor	Building 8	0.48	0.33	0.04	3
1258		0		layer	floor	Building 8	0.7		0.05	3
1259		0		layer	surface (external)	?Leeke Street	1.1	1	0.1	4
1260	1147 1249	0		layer	surface (external)	Corral	0			3
1261		1262		fill	pit		1.25		0.08	2
1262		1262		cut	pit		1.25		0.08	2
1263		1264		fill	ditch		2.8	0.63	0.34	2
1264		1264		cut	ditch		2.8	0.63	0.34	2
1265		1267		fill	ditch		2.8	1.6	0.39	2
1266		1267		fill	ditch		0.7		0.03	2
1267		1267		cut	ditch		2.8	1.6	0.41	2
1268		1270		fill	post hole		0.38	0.3	0.09	0
1269		1270		fill	post hole		0.31	0.16	0.12	0
1270		1270		cut	post hole		0.38	0.3	0.21	0
1271		1273		fill	grave		1.33	1.07	0.3	1
1272		1273		HSR	skeleton		0			1
1273		1273		cut	grave		1.33	1.07	0.3	1
1274		1274		cut	pit		0.55	0.4	0.39	3
1275		1274		fill	pit		0		0.39	3
1276		1214		fill	pit		0		0.52	2

Cxt	Same as	Cut	Tr	Category	Feature Type	Function	Lth	Bth	Dth	Ph
1277		1214		fill	pit		0		0.56	2
1278	1523	1528		layer			1.15		0.25	2
1279		1281		fill	pit		0		0.25	2
1280		1281		fill	pit		0		0.25	2
1281		1281		cut	pit		0.75		0.5	2
1282		0		layer			1.05	1	0.15	3
1283		1284		fill	post hole		0.45		0.31	2
1284		1284		cut	post hole		0.45		0.31	2
1285		0		layer	floor	Building 8	1.2	0.85	0.05	3
1286		1335		fill	pit		0		0.33	2
1287		1288		fill	pit		1.5	1.25	0.58	3
1288		1288		cut	pit		1.5	1.25	0.65	3
1289		1290		fill	pit		0.9	0.5	0.13	3
1290		1290		cut	pit		0.9	0.5	0.13	3
1291		1293		fill	pit		1	0.18	0.07	4
1292		1293		fill	pit		1.2	1.1	0.22	4
1293		1293		cut	pit		1.2	1.1	0.22	4
1294		1295		fill	post hole		0.33	0.31	0.11	2
1295		1295		cut	post hole		0.33	0.31	0.11	2
1296		1297		fill	pit		1.1		0.16	4
1297		1297		cut	pit		1.1		0.16	4
1298		1299		fill	pit		0.5		0.23	3
1299		1299		cut	pit		0.5		0.23	3
1300		0		layer			2.4		0.5	3
1301		1301		cut	post hole	Building 2	0.7	0.48	0.23	2
1302		1301		fill	post hole	Building 2	0.7	0.48	0.23	2
1303		1303		cut	pit	quarry	2	1.25	0.78	2
1304		1305		fill	ph or pit	Plot 32	0.4		0.09	4
1305		1305		cut	ph or pit	Plot 32	0.4		0.09	4
1306		1307		fill	post hole	Building 8	0.3	0.25	0.06	3
1307		1307		cut	post hole	Building 8	0.3	0.25	0.06	3
1308		1309		fill	post hole or pit	Plot 32	0.54	0.4	0.07	4
1309		1309		cut	post hole or pit	Plot 32	0.54	0.4	0.07	4
1310		1311		fill	ditch		0	0.3	0.11	2
1311		1311		cut	ditch		0	0.3	0.11	2
1312		1303		fill	pit	quarry	0			2
1313		1303		fill	pit	quarry	0			2
1314		1303		fill	pit	quarry	0			2
1315		1315		cut	pit		1.1		0.13	3
1316		1315		fill	pit		0			3
1317	757	0		layer			1.12	1	0.2	3
1318		1318		cut	post hole	Building 3	0.75	0.65	0.36	2
1319		1318		fill	post hole	Building 3	0.75	0.65	0.28	2
1320		1318		fill	post hole	Building 3	0		0.12	2
1321		1318		fill	post hole	Building 3	0		0.06	2
1322		1322		cut	post hole	Building 3	1.5		0.66	2
1323		1322		fill	post hole	Building 3	0			2
1324		1322		fill	post hole	Building 3	0			2
1325		1322		fill	post hole	Building 3	0			2
1326		1326		cut	post hole	Building 3	0			2
1327		1326		fill	post hole	Building 3	0			2
1328		1326		fill	post hole	Building 3	0			2
1329		1329		cut	post hole	Building 3	0			2
1330		1329		fill	post hole	Building 3	0			2

Cxt	Same as	Cut	Tr	Category	Feature Type	Function	Lth	Bth	Dth	Ph
1331		1331	cut		post hole	Building 3	0			2
1332		1332	fill		post hole	Building 3	0			2
1333		1333	cut		post hole	Building 3	0			2
1334		1334	fill		post hole	Building 3	0			2
1335		1335	cut		pit		1		0.33	2
1336		1336	cut		post hole	Building 3	0.4	0.23	0.26	2
1337		1336	fill		post hole	Building 3	0			2
1338		1338	cut		post hole	Building 3	0.23		0.25	2
1339		1338	fill		post hole	Building 3	0			2
1340		1340	cut		pit		0.7		0.1	2
1341		1340	fill		pit		0			2
1342		1343	fill		post hole	Building 10	0			3
1343		1343	cut		post hole	Building 10	0.2		0.09	3
1344		1345	fill		post hole	Building 10	0			3
1345		1345	cut		post hole	Building 10	0.2		0.14	3
1346		1347	fill		post hole	Building 10	0			3
1347		1347	cut		post hole	Building 10	0.17		0.11	3
1348		1349	fill		post hole	Building 10	0			3
1349		1349	cut		post hole	Building 10	0.17		0.12	3
1350		1351	fill		post hole	Building 10	0			3
1351		1351	cut		post hole	Building 10	0.12		0.06	3
1352		1353	fill		post hole	Building 10	0			3
1353		1353	cut		post hole	Building 10	0.15		0.1	3
1354		1355	fill		post hole	Building 10	0			3
1355		1355	cut		post hole	Building 10	0.34		0.1	3
1356		1357	fill		post hole	Building 10	0			3
1357		1357	cut		post hole	Building 10	0.38		0.14	3
1358		1359	fill		ditch		0			2
1359	1265	1359	cut		ditch		0	0	0.25	2
1360		1361	fill		post hole		0			2
1361		1361	cut		post hole		0.36		0.23	2
1362		1362	cut		pit	quarry	1.65		1.2	2
1363		1362	fill		pit	quarry	0			2
1364		1362	fill		pit	quarry	0			2
1365		1362	fill		pit	quarry	0			2
1366		1362	fill		pit	quarry	0			2
1367		1362	fill		pit	quarry	0			2
1368		1362	fill		pit	quarry	0			2
1369		1362	fill		pit	quarry	0			2
1370		0	layer		surface (external)	Corral	1.3		0.1	3
1371		0	layer				1.4		0.15	3
1372		1372	cut		ditch		0	0.7	0.3	2
1373		1372	fill		ditch		0			2
1374		1375	fill		post hole		0			0
1375		1375	cut		post hole		0.34	0.32	0.05	0
1376		1377	fill		post hole		0			3
1377		1377	cut		post hole		0.5		0.24	3
1378		1380	fill		pit	?quarry	1.2	0.9	0.4	2
1379		1380	fill		pit	?quarry	1.2	1	0.3	2
1380		1380	cut		pit	?quarry	1.2	1	0.58	2
1381		0	layer		?		0		0.06	3
1382		1383	fill		pit		0.7		0.18	3
1383		1383	cut		pit		1		0.26	3
1384		1385	fill		pit		0.7		0.14	3

Cxt	Same as	Cut	Tr	Category	Feature Type	Function	Lth	Bth	Dth	Ph
1385		1385	cut		pit		0.7		0.14	3
1386		1386	cut		pit		1.8	0	0.86	4
1387		1387	cut		pit		1.8	0.92	0.46	4
1388		1387	fill		pit		0		0.46	4
1389		1386	fill		pit		0		0.42	4
1390		1386	fill		pit		0			4
1391		1391	cut		post hole	?Corral	0.3		0.13	3
1392		1391	fill		post hole	?Corral	0			3
1393		1288	fill		pit		1.4	1.25	0.12	3
1394		1383	fill		pit		0.6		0.1	3
1395		1395	cut		post hole	Building 3	0.25		0.12	2
1396		1395	fill		post hole	Building 3	0			2
1397		1397	cut		post hole	Building 3	0.36		0.2	2
1398		1397	fill		post hole	Building 3	0			2
1399	1124	1399	cut		post hole	Building 3	0.3		0.11	2
1400		1399	fill		post hole	Building 3	0			2
1401		1401	cut		post hole	Building 3	0.26		0.12	2
1402		1401	fill		post hole	Building 3	0			2
1403	1118	1403	cut		post hole	Building 3	0.2		0.08	2
1404		1403	fill		post hole	Building 3	0			2
1405		1405	cut		post hole	Building 3	0.3		0.2	2
1406		1405	fill		post hole	Building 3	0			2
1407		0	layer		floor	Building 15	0		0.14	3
1408	1235	0	layer		levelling		4	3	0.2	3
1409		0	layer		levelling		0.42		0.16	3
1410		1413	fill		pit		1.54		0.66	2
1411		1413	fill		pit		1.24		0.46	2
1412		1413	fill		pit		0.2		0.86	2
1413		1413	cut		pit		1.8	1.5	1.02	2
1414		1414	cut		?oven		2.3	0.23	0.2	2
1415		1415	cut		oven or hearth		1.02	0.56	0.03	2
1416		1416	cut		?oven/hearth		0			2
1417		1417	cut		?oven/hearth		0			2
1418			layer		floor		0		0.18	3
1419		1415	fill		oven/hearth		1.02	0.56	0.03	2
1420		1420	cut		pit	?quarry	2		1.93	2
1421		1413	fill		pit		1.06		0.06	2
1422		1413	fill		pit		1.2		0.2	2
1423		1423	cut		wall	Building 15	0	0.4	0.08	3
1424		1424	cut		cess-pit	Building 8	2		4.4	3
1425		1424	fill		cess-pit	Building 8	0			3
1426		1424	fill		cess-pit	Building 8	0			3
1427		1424	fill		cess-pit	Building 8	0			3
1428		1424	fill		cess-pit	Building 8	0			3
1429		1424	fill		cess-pit	Building 8	0			3
1430		1430	cut		ditch		0	0.55	0.1	2
1431		1430	fill		ditch		0			2
1432		1424	masonry		cess-pit	Building 8	0			3
1433		1424	fill		cess-pit	Building 8	0			3
1434		1420	fill		pit	?quarry	0			2
1435		1436	fill		pit		0			2
1436		1436	cut		pit		0.65		0.55	2
1437		1437	fill/cut		?pit/ph		0.4		0.2	2
1438		1420	fill		pit	?quarry	0			2

Cxt	Same as	Cut	Tr	Category	Feature Type	Function	Lth	Bth	Dth	Ph
1439		1420	fill		pit	?quarry	0			2
1440		1420	fill		pit	?quarry	0			2
1441		1420	fill		pit	?quarry	0			2
1442		1420	fill		pit	?quarry	0			2
1443		1420	fill		pit	?quarry	0			2
1445		1445	cut		?post hole		0.3		0.7	0
1446		1445	fill		?post hole		0			0
1447		1447	cut		pit		0.7		0.93	2
1448		1447	fill		pit		0			2
1449		1450	fill		post hole		0			2
1450		1450	cut		post hole		0.45		0.4	2
1451	533	1451	cut		pit	?quarry	2	1.8	0.8	4
1452		1451	fill		pit	?quarry	0			4
1453		1451	fill		pit	?quarry	0			4
1454		1451	fill		pit	?quarry	0			4
1455	2183	1455	cut		wall	Building 16	0			4
1456		1456	cut		well	?Building 10	1.5	1.2	4.52	3
1457		1456	fill		well	?Building 10	0			3
1458		1456	fill		well	?Building 10	0			3
1459		1456	fill		well	?Building 10	0			3
1460		1456	fill		well	?Building 10	0			3
1461		1461	cut		pit		0.8		0.4	3
1462		1461	fill		pit		0			3
1463		1463	cut		well		1.05		4.1	2
1464		1463	fill		well		0			2
1465		1463	fill		well		0			2
1466		1463	fill		well		0			2
1467		1463	fill		well		0			2
1468		0	fill		floor	Building 14	5		0.2	3
1469		1451	fill		pit	?quarry	0			4
1470		1471	fill		post hole	Building 4	0			2
1471		1471	cut		post hole	Building 4	0.3		0.25	2
1472		1473	fill		post hole	Building 4	0			2
1473		1473	cut		post hole	Building 4	0.25		0.25	2
1474		1475	fill		post hole	Building 4	0			2
1475		1475	cut		post hole	Building 4	0.3		0.2	2
1476		1477	fill		post hole	Building 4	0			2
1477		1477	cut		post hole	Building 4	0.3		0.35	2
1478		1479	fill		post hole	Building 4	0			2
1479		1479	cut		post hole	Building 4	0.2		0.08	2
1480		1481	fill		post hole	Building 4	0			2
1481		1481	cut		post hole	Building 4	0.25		0.2	2
1482		1483	fill		post hole	Building 4	0			2
1483		1483	cut		post hole	Building 4	0.1		0.15	2
1484		1484	cut		pit		0			4
1485		1484	fill		pit		0			4
1486		0	layer		floor	Building 16	0.48	0.4	0.01	3
1487		0	layer		floor	Building 16	0.75	0.4	0.05	3
1488		0	layer		floor	Building 16	1	0.4	0.03	3
1489		0	layer		floor	Building 16	0.6			3
1490		0	layer		floor	Building 16	2.3	2		3
1491		1491	cut		post hole		0.48		0.28	2
1492		1491	fill		post hole		0			2
1493	990	1506	fill		pit	quarry	0			2

Cxt	Same as	Cut	Tr	Category	Feature Type	Function	Lth	Bth	Dth	Ph
1494	992	1503		fill	pit	quarry	0			2
1495		1503		fill	pit	quarry	0			2
1496		1503		fill	pit	quarry	0			2
1497		1503		fill	pit	quarry	0			2
1498		1503		fill	pit	quarry	0			2
1499		1503		fill	pit	quarry	0			2
1500		1503		fill	pit	quarry	0			2
1501		1503		fill	pit	quarry	0			2
1502		1503		fill	pit	quarry	0			2
1503	993	1503		cut	pit	quarry	2.6	2.35	1.56	2
1504		1505		fill	pit	?quarry	0			2
1505	995	1505		cut	pit	?quarry	0.82	0.65	0.9	2
1506	991	1506		cut	pit		2.66		0.28	2
1507		1507		layer	floor	Building 14	5		0.32	3
1508		1508		cut	post hole	Building 4	0.35	0.3	0.11	2
1509		1508		fill	post hole	Building 4	0			2
1510		1510		cut	well		0			3
1511		1510		fill	well		1.3			3
1512				layer	floor	Building 16	0.9	0.4	0.04	3
1513		1513		cut	?hollow		2.66	0.96	0.2	2
1514		1515		fill	?hollow		0			2
1515		1513		fill	?hollow		0			2
1516		1516		cut	post hole	Building 4	0.4	0.35	0.12	2
1517		1516		fill	post hole	Building 4	0			2
1518		1518		cut	pit		0.75	0.6	0.24	2
1519		1518		fill	pit		0			2
1520		1520		cut	pit	?quarry	0		0.95	2
1521		1520		fill	pit	?quarry	0			2
1522		0		layer	?floor		0.6	0.4	0.02	3
1523	1278	1528		fill	pit		0			2
1524		1528		fill	pit		0			2
1525		1528		fill	pit		0			2
1526		1528		fill	pit		0			2
1527		1528		fill	pit		0			2
1528		1528		cut	pit		1.4		0.64	2
1529		1535		fill	pit	quarry	0			2
1530		1535		fill	pit	quarry	0			2
1531		1535		fill	pit	quarry	0			2
1532		1535		fill	pit	quarry	0			2
1533		1535		fill	pit	quarry	0			2
1534		1535		fill	pit	quarry	0			2
1535		1535		cut	pit	quarry	2.8	1.4	1.1	2
1536		542		fill	?store	Building 16	2.5		0.33	4
1537		542		layer	floor	Building 16	1.1		0.2	4
1538		1538		masonry	wall	Building 16	0			4
1539		1544		fill	pit		0			2
1540		1544		fill	pit		0			2
1541		1544		fill	pit		0			2
1542		1544		fill	pit		0			2
1543		1544		fill	pit		0			2
1544		1544		cut	pit		1.15		0.76	2
1545		1546		fill	pit	?quarry	0			2
1546		1546		cut	pit	?quarry	1.36	1.12	0.34	2
1547		1548		fill	wall foundation	Building 15	0			3

Cxt	Same as	Cut	Tr	Category	Feature Type	Function	Lth	Bth	Dth	Ph
1548	412	1548		cut	wall foundation	Building 15	0			3
1549		0		layer			15	10	0.35	3
1550		1551		fill	?ditch		0			2
1551		1551		cut	?ditch		2.75	0.5	0.05	2
1552		1552		cut	pit		2	1.5	0.68	2
1553		1553		cut	?post hole		0.3	0.2	0.06	3
1554		1553		fill	?post hole		0			3
1555		1555		cut	pit		0.46	0.4	0.24	3
1556		1555		fill	pit		0			3
1557		1555		fill	pit		0			3
1558		1552		fill	pit		0			2
1559		1552		fill	pit		0			2
1560		1552		fill	pit		0			2
1561		0		layer	floor	Building 18	2	2		3
1562		0		layer	levelling		2.7	1.17	0.07	3
1563		0		layer	?floor	Building 17	3.8	0.8		3
1564		1565		fill	pit		0			3
1565		1565		cut	pit		0.83		0.48	3
1566		1567		fill	pit		0			2
1567		1567		cut	pit		0			2
1568		0		layer	levelling		3.7	2.7	0.35	3
1569		1570		fill	pit		0			3
1570		1570		cut	pit		0.77	0.56	0.14	3
1571		1571		cut	pit		1.1	0.8	0.62	4
1572		1571		fill	pit		0			4
1573		1573		cut	pit		1.05	0.9	0.13	3
1574		1573		fill	pit		0			3
1575		1576		fill	post hole	?Building	0.33	0.26	0.08	3
1576		1576		cut	post hole	?Building	0			3
1577		1577		cut	well or pit	?Associated with Building 12	2.05		1.2	3
1578		1577		fill	well or pit		0			3
1579		1577		fill	well or pit		0			3
1580		1577		fill	well or pit		0			3
1581		1577		fill	well or pit		0			3
1582		1577		fill	well or pit		0			3
1583		1577		fill	well or pit		0			3
1584		1577		fill	well or pit		0			3
1585		1577		fill	well or pit		0			3
1586		1621		fill	pit	?quarry	0			2
1587		1577		fill	well or pit	?Associated with Building 12	0			3
1588		1588		cut	pit		1.71	1.2	0.1	3
1589		1588		fill	pit		0			3
1590		0		layer			1.25	0.6	0.65	3
1591		1591		cut	wall	?Building 5	2.4	0.3	0.18	2
1592		1592		cut	post hole		0.23		0.09	3
1593		1593		cut	post hole	?Fence line	0.33		0.25	2
1594		1593		fill	post hole	?Fence line	0			2
1595		1599		fill	pit	quarry	0	0.76	0.12	2
1596		1599		fill	pit	quarry	0	2.1	0.71	2
1597		1599		fill	pit	quarry	0	1.23	0.22	2
1598		1599		fill	pit	quarry	0	1.63	0.13	2
1599		1599		cut	pit	quarry	0	2.38	0.84	2

Cxt	Same as	Cut	Tr	Category	Feature Type	Function	Lth	Bth	Dth	Ph
1600		1601		fill	pit		1.2	1.1	0.32	3
1601		1601		cut	pit		1.2	1.1	0.32	3
1602		1603		fill	pit		0.8	0.5	0.2	3
1603		1603		cut	pit		0.8	0.5	0.2	3
1604		1605		fill	post hole		0	0.22	0.18	3
1605		1605		cut	post hole	structural?	0	0.22	0.18	3
1606		1606		cut	post hole	structural	0	0.23	0.18	3
1607		1606		fill	post hole		0	0.23	0.18	3
1608		1609		fill	post hole		0.28	0.25	0.22	4
1609		1609		cut	post hole		0.28	0.25	0.22	4
1610		1611		fill	pit		1.1	0.56	0.24	3
1611		1611		cut	pit		1.1	0.56	0.24	3
1612		0		layer	levelling		3.8	2.5	0.15	2
1613		0		layer	floor	Building 6	4	3.3	0.05	2
1614		0		layer	levelling		0.75	0.32	0.11	2
1615		1616		fill	pit	burial for pet	0.27	0.2	0.21	4
1616		1616		cut	pit	burial for pet	0.27	0.2	0.21	4
1617		1618		fill	pit		0.5	0.36	0.25	4
1618		1618		cut	pit		0.5	0.36	0.25	4
1619		1621		fill	pit	quarry	0			2
1620		1621		fill	pit	quarry	0		0.8	2
1621		1621		cut	pit	quarry	0	2	2.48	2
1622	1679 1683 1711	1622		cut	ditch	boundary?	0.65	0.75	0.15	2
1623		1622		fill	ditch	boundary	0		0.15	2
1624		1624		cut	pit		1.12	0.56	0.1	4
1625		1624		fill	pit		1.12	0.56	0.1	4
1626		1626		cut	structure	Plot 36, cess-pit/soakaway?	1.09	0.81	0.42	4
1627		1626		fill	structure	Plot 36	0.85	0.6	0.42	4
1628		1621		fill	pit	quarry	0		0.64	2
1629		1621		fill	pit	quarry			1	2
1630		1630		cut	pit		1.02	0.15	0.5	2
1631		1630		fill	pit		0	1.02	0.5	2
1632		1632		cut	pit/post hole		0	0.28	0.1	2
1633		1632		fill	pit/post hole		0	0.28	0.1	2
1634		1638		fill	pit	quarry	0.94		0.72	2
1635		1638		fill	pit	quarry	0.76		0.06	2
1636		1638		fill	pit	quarry	0.74		0.22	2
1637		1638		fill	pit	quarry	0.66		0.27	2
1638		1638		cut	pit	quarry	3.5	2	1.22	2
1639		1644		fill	pit	quarry	5.5	2	0.46	2
1640		1644		fill	pit	quarry	5.5	2	0.74	2
1641		1644		fill	pit	quarry	1.74	0.7	0.24	2
1642		1644		fill	pit	quarry	0	0.58	0.12	2
1643		1644		fill	pit	quarry	1.7	0.9	0.5	2
1644		1644		cut	pit	quarry	5.5	2	1.76	2
1645		1645		cut	pit		1	0.56	0.26	4
1646		1645		fill	pit		0		0.26	4
1647		1647		cut	pit		0.5	0.99	0.45	4
1648		1647		fill	pit		0.2	0.58	0.32	4
1649		1647		fill	pit		0	0.77	0.22	4
1650		1650		cut	pit		1	1.03	0.42	2
1651		1650		fill	pit		0		0.42	2
1652		1650		fill	pit		0		0.21	2
1653		1654		fill	post hole	Building 2	0	0.4	0.12	2

Cxt	Same as	Cut	Tr	Category	Feature Type	Function	Lth	Bth	Dth	Ph
1654		1654	cut		post hole	Building 2	0	0.4	0.12	2
1655		1656	fill		post hole	Building 2	0	0.55	0.13	2
1656		1656	cut		post hole	Building 2	0	0.55	0.13	2
1657		1658	fill		post hole	Building 8	0.52	0.4	0.24	3
1658	1195	1658	cut		post hole	Building 8	0.52	0.4	0.24	3
1659		1660	fill		post hole	Building 2	0	0.34	0.11	2
1660		1660	cut		post hole	Building 2	0	0.34	0.11	2
1661		1662	fill		post hole	Building 2	0.5	0.4	0.22	2
1662		1662	cut		post hole	Building 2	0.5	0.4	0.22	2
1663		1664	fill		post hole	Building 8	0	0.45	0.11	3
1664		1664	cut		post hole	Building 8	0	0.45	0.11	3
1665		1666	fill		post hole	Building 8	0.75	0.4	0.47	3
1666		1666	cut		post hole	Building 8	0.75	0.4	0.47	3
1667		1668	fill		ditch		1.85	0.35	0.18	3
1668		1668	cut		ditch		1.85	0.35	0.18	3
1669		1670	fill		ditch		0.39	0.3	0.33	2
1670		1670	cut		ditch		0.39	0.3	0.33	2
1671		1672	fill		post hole		0.22	0.28	0.18	2
1672		1672	cut		post hole		0.22	0.28	0.18	2
1673		1673	cut		post hole	Building 8	0	0.35	0.1	3
1674		1673	fill		post hole	Building 8	0	0.35	0.1	3
1675		1675	cut		pit		0	0.9	0.58	2
1676		1675	fill		pit		0	0.9	0.58	2
1677	1681	1677	cut		ditch	boundary	3	0.54	0.4	2
1678		1677	fill		ditch	boundary	0		0.4	2
1679	1622 1683 1711	1679	cut		ditch	boundary	3	1.1	0.38	2
1680		1679	fill		ditch	boundary	0		0.38	2
1681	1677	1681	cut		ditch	boundary	0	0.54	0.2	2
1682		1681	fill		ditch	boundary	0		0.2	2
1683	1622 1679 1711	1683	cut		ditch	boundary	0	0.94	0.41	2
1684		1683	fill		ditch	boundary	0		0.42	2
1685		1685	cut		post hole		0	0.48	0.2	0
1686		1685	fill		post hole		0		0.2	0
1687		1688	fill		pit		0	0.7	0.25	2
1688		1688	cut		pit		0	0.7	0.25	2
1689		1690	fill		pit		0			3
1690		1690	cut		pit		0			3
1691		1692	fill		post hole	Building 8	0.45	0.3		3
1692		1692	cut		post hole	Building 8	0.45	0.3		3
1695		1621	fill		pit	quarry	0		0.24	2
1696		1621	fill		pit	quarry	0		1.2	2
1697		1621	fill		pit		0		2.48	2
1698		1699	fill		pit		0.44	0.47	0.24	2
1699		1699	cut		pit		0.44	0.47	0.24	2
1700	2225	1700	cut		ditch		1	0.52	0.35	2
1701		1700	fill		ditch		1	0.4	0.1	2
1702		1700	fill		ditch		1	0.45	0.1	2
1703		1700	fill		ditch		1	0.52	0.2	2
1704		1704	cut		post hole		0.3	0.2	0.1	2
1705		1704	fill		post hole		0.3	0.2	0.1	2
1706		1706	cut		pit	quarry	2.1	1.1	1.15	2
1707		1707	cut		pit		1.5	0.3	0.55	2
1708		1621	fill		pit	quarry	0		1.46	2
1709		1741	fill		pit		0		0.4	3

Cxt	Same as	Cut	Tr	Category	Feature Type	Function	Lth	Bth	Dth	Ph
1710		1741		fill	pit		0		0.4	3
1711	1622 1679 1683	1711		cut	ditch	boundary	1	0.9	0.25	2
1712		1711		fill	ditch	boundary	1	0.9	0.25	2
1713		1713		cut	post hole	Building 18	0	0.25	0.3	3
1714		1713		fill	post hole	Building 18	0	0.25	0.3	3
1715		1715		cut	post hole	Building 18	0	0.31	0.12	3
1716		1715		fill	post hole	Building 18	0	0.31	0.12	3
1717		1868		fill	pit	quarry	0		0.26	2
1718		1719		fill	drain		2	0.6	0.23	4
1719		1719		cut	drain		2	0.6	0.23	4
1720		1720		cut	grave	dog burial	0.5	0.3	0.16	3
1721		1721		fill	grave	dog burial	0.5	0.3	0.16	3
1722		1722		cut	post hole	structural?	0	0.3	0.17	2
1723		1722		fill	post hole		0	0.3	0.17	2
1724		1724		cut	post hole	?Fence line	0	0.28	0.1	2
1725		1724		fill	post hole	?Fence line	0	0.28	0.1	2
1726		1726		cut	post hole	?Fence line	0	0.25	0.12	2
1727		1726		fill	post hole	?Fence line	0	0.25	0.12	2
1728		1706		fill	pit	quarry	0			2
1729		1706		fill	pit	quarry	2	1.1	0.7	2
1730		1644		fill	pit	quarry	1.6		0.3	2
1731		1707		fill	pit		1.5	0.3	0.55	2
1732		1733		fill	post hole		0	0.35	0.38	0
1733		1733		cut	post hole		0	0.35	0.38	0
1734		1734		cut	post hole	Building 5	0	0.38	0.18	2
1735		1735		cut	post hole	Building 5	0	0.25	0.14	2
1736		1735		fill	post hole	Building 5	0		0.14	2
1737		1737		cut	post hole	Building 5	0.37	0.27	0.37	2
1738		1737		fill	post hole	Building 5	0		0.36	2
1739		1739		cut	post hole	Building 5	0	0.3	0.12	2
1740		1739		fill	post hole	Building 5	0		0.12	2
1741		1741		cut	pit	quarry	0	0.5	0.91	3
1742		1747		fill	well		1.78	0.9	0.12	2
1743		1747		fill	well		2.26	0.97	0.43	2
1744		1747		fill	well		1.74	0.84	0.08	2
1745		1747		fill	well		1.46	0.68	0.26	2
1746		1747		fill	well		1.42	0.52	0.25	2
1747		1747		cut	well		1.78	2.26	4.6	2
1748		1748		cut	pit		2.2	1.4	0.4	2
1749		1748		fill	pit		2.2	1.4	0.4	2
1750		1750		cut	well		0	1.1	4.2	2
1751		1750		fill	well		0	1.1	0.5	2
1752		1750		fill	well		0	1.1	0.1	2
1753		1753		cut	ditch		0.6	0.93	0.28	2
1754		1753		fill	ditch		0		0.13	2
1755		1753		fill	ditch		0		0.21	2
1756		1756		cut	pit	quarry	1.95	1.55	1.06	2
1757		1756		fill	pit	quarry	0	1.4	0.41	2
1758		1756		fill	pit	quarry	0		0.17	2
1759		1756		fill	pit	quarry	0		0.26	2
1760		1756		fill	pit	quarry	0		0.19	2
1761		1756		fill	pit	quarry	0		0.17	2
1762		1756		fill	pit	quarry	0		0.18	2
1763		0		layer	surface (external)	pathway	0	1	0.15	3

Cxt	Same as	Cut	Tr	Category	Feature Type	Function	Lth	Bth	Dth	Ph
1764		0	layer		levelling?		0		0.25	2
1765		1765	cut		drain?	sewage	1	0.5	0.4	4
1766		1765	fill		drain?	sewage	1	0.5	0.4	4
1767		1767	cut		pit		0	1.66	0.4	3
1768		1767	fill		pit		0	0.98	0.16	3
1769		1767	fill		pit		0	0.94	0.24	3
1770		1767	fill		pit		0	0.8	0.24	3
1771		1741	fill		pit	quarry	0		0.88	3
1772		1741	fill		pit	quarry	0		0.87	3
1773		1741	fill		pit	quarry	0		0.75	3
1774		1741	fill		pit	quarry	0		0.62	3
1775		1741	fill		pit	quarry	0		0.91	3
1776		1776	cut		drain		10	0.3	0.5	4
1777		1777	cut		pit		0	1.53	0.38	4
1778		1777	fill		pit		0	1.53	0.38	4
1779		1777	fill		pit		0	0.55	0.22	4
1780		1780	cut		wall	Building 19/Boundary	0	0.75	0.27	3
1781		1780	fill		wall	Building 19/Boundary	0	0.75	0.24	3
1782		1780	fill		wall	Building 19/Boundary	0	0.75	0.03	3
1783		1783	cut		pit	quarry	0	2.11	1.76	2
1784		1783	fill		pit	quarry	0	2.11	1.06	2
1785		1786	fill		post hole/pit?		0.35		0.2	0
1786		1786	cut		post hole/pit?		0.35		0.2	0
1787		1788	fill		post hole		0	0.3	0.2	0
1788		1788	cut		post hole		0	0.3	0.2	0
1789		1790	fill		post hole		0	0.4	0.18	0
1790		1790	cut		post hole		0	0.4	0.18	0
1791		1747	fill		well		0.52	1.18	0.05	2
1792		1747	fill		well		0.52	0.56	0.04	2
1793		1747	fill		well		0.52	1.14	0.12	2
1794		1794	cut		pit		0	1.22	1.2	2
1795		1794	fill		pit		0		0.46	2
1796		1794	fill		pit		0		0.34	2
1797		1797	cut		pit		2.16	0.65	0.2	2
1798		1797	fill		pit		0		0.2	2
1799		1734	fill		post hole		0	0.38	0.18	2
1800		1800	cut		pit		0	0.7	0.67	3
1801		1800	fill		pit		0	0.15	0.52	3
1802		1800	fill		pit		0	0.78	0.68	3
1803		1803	cut		pit		0	1.1	0.34	2
1804		1803	fill		pit		0	1.1	0.34	2
1805		1805	cut		pit		0.9	0.76	0.21	2
1806		1805	fill		pit		0.9	0.76	21	2
1807		1807	cut		stake hole	structural	0	0.2	0.15	2
1808		1807	fill		stake hole		0	0.2	0.15	2
1809		1783	fill		pit	quarry	0	2.11	0.72	2
1810		1814	fill		pit	?quarry	0	1.4	0.34	4
1811		1814	fill		pit	?quarry	0	1.06	0.04	4
1812		1814	fill		pit	?quarry	0	1.06	0.38	4
1813		1814	fill		pit	?quarry	0	0.73	0.1	4
1814		1814	cut		pit	quarry?	0	1.6	0.58	4
1815		0	layer		levelling?		5	4.2	0.27	4
1816		1820	fill		pit	quarry	0	2.36	0.96	4
1817		1820	fill		pit	quarry	0	1.34	0.2	4

Cxt	Same as	Cut	Tr	Category	Feature Type	Function	Lth	Bth	Dth	Ph
1818		1820		fill	pit	quarry	0	1.8	0.55	4
1819		1820		fill	pit	quarry	0	1	0.46	4
1820	1822	1820		cut	pit	quarry	2.65	2.36	1.5	4
1821		1822		fill	pit	?quarry	0	0.65	0.44	0
1822		1822		cut	pit	?quarry?	0	0.65	0.44	0
1823		1824		fill	pit	?quarry	0	2.65	0.5	0
1824		1824		cut	pit	?quarry?	0	0.64	0.5	0
1825		1829		fill	pit	?quarry	0	2.57	0.62	0
1826		1829		fill	pit	?quarry	0	1.97	0.2	0
1827		1829		fill	pit	?quarry	0	1.42	0.29	0
1828		1829		fill	pit	?quarry	0	1.16	0.06	0
1829		1829		cut	pit	?quarry?	0	2.53	1.5	0
1830		1830		cut	pit		1.65	0.98	0.32	0
1831		1830		fill	pit		0		0.32	0
1832		1832		cut	post hole		0.51	0.26	0.24	3
1833		1832		fill	post hole		0		0.32	3
1834		1885		fill	pit	cess	1	1	0.08	4
1835		1885		fill	pit	cess	1.5	1.02	0.006	4
1836		1836		cut	post hole	?Fence line	0.4	0.48	0.13	2
1837		1836		fill	post hole	?Fence line	0		0.13	2
1840		1841		fill	pit?		1.45	0.4	0.4	3
1841		1841		cut	pit?		1.45	0.4	0.4	3
1842		0		layer		Levelling	2.88	0.82	0.1	3
1843		1853		fill	pit	quarry	2.34	1.02	0.48	2
1844		1853		fill	pit	quarry	1.38		0.08	2
1845		1853		fill	pit	quarry	0	1.2	0.48	2
1846		1848		fill	pit	quarry	1.2	0.9	0.5	2
1847		1848		fill	pit	quarry	0	0.98	0.78	2
1848		1848		cut	pit	quarry	1.5	0.92	1.06	2
1849		1850		fill	pit		0	0.72	0.28	3
1850		1850		cut	pit		0.85	0.72	0.28	3
1851		1853		fill	pit	quarry	2.34	0.86	0.7	2
1852		1853		fill	pit	quarry	0	0.1	0.38	2
1853		1853		cut	pit	Quarry	2.15	1.6	1.3	2
1854		1857		fill	pit		0	1.7	0.18	2
1855		1857		fill	pit		0	0.62	0.06	2
1856		1857		fill	pit		0	1.68	1.04	2
1857		1857		cut	pit		0	1.68	1.1	2
1858		1858		cut	pit		0.6	0.4	0.23	3
1859		1858		fill	pit		0			3
1860		1861		fill	post hole		0.42	0.41	0.31	3
1861		1861		cut	post hole	?Structural	0			3
1862		1794		fill	pit		0		0.31	2
1863		0		layer	floor		0			3
1864		1865		fill	post hole		0	0.4	0.38	0
1865		1865		cut	post hole	structural	0	0.4	0.38	0
1867		1853		fill	pit	quarry	0.32	0.72	0.5	2
1868		1868		cut	pit	Quarry	0	1.1	0.8	2
1869		1868		fill	pit		0		0.88	2
1871		1794		fill	pit		0		0.05	2
1872		1881		fill	pit		0		0.15	3
1873		1881		fill	pit		0		0.15	3
1874		1881		fill	pit		0		0.2	3
1875		1881		fill	pit		0		0.3	3

Cxt	Same as	Cut	Tr	Category	Feature Type	Function	Lth	Bth	Dth	Ph
1876		1881	fill		pit		0		0.1	3
1877		1881	fill		pit		0		0.1	3
1878		1881	fill		pit		0		0.04	3
1879		1881	fill		pit		0		0.08	3
1880		1881	fill		pit		0		0.05	3
1881		1881	cut		pit		0			3
1882		1883	fill		post hole		0	0.3	0.22	0
1883		1883	cut		post hole	Structural	0	0.3	0.22	0
1884		1885	fill		pit	cess?	0		0.29	4
1885		1885	cut		pit	cess?	0.85	1.13	0.29	4
1886		1887	fill		post hole		0	0.55	0.25	0
1887		1887	cut		post hole	structural	0	0.55	0.65	0
1888		1424	fill		pit	cess	0			3
1889		71	fill		pit		0		0.26	2
1890		1890	cut		post hole	?Fence line	0	0.2	0.2	3
1891		1890	fill		post hole	?Fence line	0	0.2	0.2	3
1892		1887	fill		post hole		0	0.4	0.35	0
1893		1887	fill		post hole		0	0.35	0.55	0
1894		1894	cut		post hole	Structural	0	0.6	0.28	2
1895		1894	fill		post hole		0	0.6	0.28	2
1896		1896	cut		ditch		0	0.63	0.2	2
1897		1896	fill		ditch		0	0.63	0.2	2
1898		1898	cut		post hole		0	0.56	0.23	3
1899		1898	fill		post hole		0			3
1900		1898	fill		post hole		0		0.23	3
1901		1901	cut		pit	Quarry	0	1.3	1.11	3
1902		1901	fill		pit	quarry	0		1.11	3
1903		1901	fill		pit	quarry	0		0.7	3
1904		1901	fill		pit	quarry	0		0.61	3
1905		1901	fill		pit	quarry	0		0.52	3
1906		1906	cut		cellar	?inn, Building 12	0		0.25	3
1907		1906	fill		cellar	?inn, Building 12	0	3	0.25	3
1908		1906	fill		cellar	?inn, Building 12	0	3	0.3	3
1909		1906	fill		cellar	?inn, Building 12	0	3	0.2	3
1910		1906	fill		cellar	?inn, Building 12	3		0.1	3
1911		1906	fill		cellar	?inn, Building 12	0	3	0.1	3
1912		1913	fill		pit	quarry	0		0.6	2
1913		1913	cut		pit	Quarry	1.7	0.8	0.6	2
1914		1914	cut		pit	Quarry	0	1.9	1.4	4
1915		1914	fill		pit	quarry	0	1.64	1.4	4
1916		1914	fill		pit	quarry	0	1.16	0.36	4
1917		1927	fill		well		0	1.48	0.08	2
1918		1927	fill		well		0	1.32	0.05	2
1919		1927	fill		well		0	1.55	0.02	2
1920		1927	fill		well		0	1.21	0.18	2
1921		1927	fill		well		0	1.49	0.24	2
1922		1927	fill		well		0	0.34	0.25	2
1923		1927	fill		well		0	1.56	0.43	2
1924		1927	fill		well		0	1.5	0.1	2
1925		1927	fill		well		0	1.5	0.22	2
1926		1927	fill		well		0	1.47	0.15	2
1927		1927	cut		well		0	1.62	4.12	2
1928		1929	fill		pit		1.22	0.9	0.17	3
1929		1929	cut		pit		1.22	0.9	0.17	3

Cxt	Same as	Cut	Tr	Category	Feature Type	Function	Lth	Bth	Dth	Ph
1930		1931	fill		post hole		0	0.46	0.26	2
1931		1931	cut		post hole	structural	0	0.46	0.26	2
1932		1939	fill		well		0	1.65	0.3	2
1933		1939	fill		well		0	1.81	0.12	2
1934		1939	fill		well		0	0.24		2
1935		1939	fill		well		0	1.06	0.22	2
1936		1939	fill		well		0	1.24	0.12	2
1937		1939	fill		well		0	1.72	0.49	2
1938		1939	fill		well		0	1.72	0.68	2
1939	3160	1939	cut		well		0	1.81	4.4	2
1940		1940	cut		pit	Quarry	0	2.4	1.84	2
1941		1940	fill		pit	quarry	3.54	2.4	0.4	2
1942		1942	cut		pit	quarry	0	0.8	1.16	2
1943		1942	fill		pit	quarry	0		1.16	2
1944		1942	fill		pit	quarry	0		0.91	2
1945		1942	fill		pit	quarry	0		0.58	2
1946		1942	fill		pit	quarry	0		0.5	2
1947	2015 2053 2083 2088	1947	cut		ditch	?enclosure	0	1.5	0.44	1
1948		1947	fill		ditch	?enclosure	0	1.5	0.44	1
1949		1949	cut		pit		2	1.75	0.44	3
1950		1949	fill		pit		2	1.75	0.44	3
1951		1951	cut		pit	?Quarry	3.3	1.5	1.26	3
1952		1951	fill		pit	?quarry	0	1.2	0.1	3
1953		1951	fill		pit	?quarry	0	0.78	0.16	3
1954		1951	fill		pit	?quarry	0	1.5	0.4	3
1955		1951	fill		pit	?quarry	0		0.2	3
1956		1951	fill		pit	?quarry	0		0.08	3
1957		1951	fill		pit	?quarry	0		0.39	3
1958		1951	fill		pit	?quarry	0		0.3	3
1959		1951	fill		pit	?quarry	0	0.54	0.21	3
1961		0	layer				2.8	2.3	0.14	3
1963		1940	fill		pit	quarry	0.3		0.2	2
1964		1940	fill		pit	quarry	1.3		0.1	2
1965		1940	fill		pit	quarry	1.16		0.12	2
1966		1940	fill		pit	quarry	0.3		0.05	2
1967		1940	fill		pit	quarry	1.08		0.14	2
1968		1940	fill		pit	quarry	3.2		0.2	2
1969		1969	cut		pit	quarry	3.15	2.15	0.4	2
1970		1969	fill		pit	quarry	3.1		0.2	2
1971		1969	fill		pit	quarry	3.15		0.3	2
1972		1969	fill		pit	quarry	0.75		0.08	2
1973		1969	fill		pit	quarry	0.7		0.1	2
1974		1975	fill		ditch	?enclosure	0	1.22	0.14	0
1975		1975	cut		ditch	?enclosure	0	1.22	0.14	0
1976		1977	fill		Room	Building 27	2.2	1.8	0.26	4
1977	2771	1977	cut		Room	Building 27	2.4	1.8	0.18	4
1978		1986	fill		pit	quarry	0	2.08	0.28	2
1979		1986	fill		pit	quarry	0	1.3	0.44	2
1980		1986	fill		pit	quarry	0	1.3	0.52	2
1981		1986	fill		pit	quarry	0	1.3	0.52	2
1982		1986	fill		pit	quarry	0	2.2	0.22	2
1983		1986	fill		pit	quarry	0	1.58	0.8	2
1984		1986	fill		pit	quarry	0	0.48	0.1	2
1985		1986	fill		pit	quarry	0	0.48	0.68	2

Cxt	Same as	Cut	Tr	Category	Feature Type	Function	Lth	Bth	Dth	Ph
1986		1986		cut	pit	quarry	2.8	2	2.5	2
1987		1989		fill	pit		1.54		0.56	2
1988		1989		fill	pit		1.52		0.3	2
1989		1989		cut	pit		0	1.25	0.86	2
1990		1991		fill	post hole		0	0.5	0.16	0
1991		1991		cut	post hole	structural	0	0.5	0.16	0
1992		1993		fill	post hole		0.75	0.75	0.28	2
1993		1993		cut	post hole	structural	0.75	0.75	0.28	2
1994		1995		fill	pit		2.25	1	0.36	4
1995		1995		cut	pit		2.25	1	0.36	4
1996		1997		fill	post hole	Building 7	0.5	0.3	0.3	2
1997		1997		cut	post hole	Building 7	0.5	0.3	0.3	2
1998		1999		fill	post hole	Building 7	0.32	0.43	0.13	2
1999		1999		cut	post hole	Building 7	0.32	0.43	0.13	2
2000		2001		fill	post hole	Building 7	0.28	0.34	0.19	2
2001		2001		cut	post hole	Building 7	0.28	0.34	0.19	2
2002		2002		cut	pit	quarry	0	1.15	0.98	2
2003		2002		fill	pit		0		0.98	2
2004		2004		cut	pit	Quarry	0	1.75	1.15	2
2005		2004		fill	pit		0		1.15	2
2006		2006		cut	drain	sewage pipe junction	0		1.15	4
2007		2006		fill	drain	sewage	0		1.15	4
2008		2001		fill	post hole		0			2
2009		2010		fill	pit		0	0.58	0.34	4
2010		2010		cut	pit		1	0.58	0.34	4
2011		2012		fill	wall		0	0.36	0.32	3
2012	1780	2012		cut	wall	foundation	0	0.36	0.32	3
2013		2015		fill	ditch	?enclosure	0	0.62	0.42	1
2014		2015		fill	ditch	?enclosure	0	0.62	0.06	1
2015	1947 2053 2083 2088	2015		cut	ditch	?enclosure	0	0.64	0.46	1
2016		2020		fill	ditch	boundary	0	1.1	0.16	3
2017		2020		fill	ditch	boundary	0	1.04	0.06	3
2018		2020		fill	ditch	boundary	0	0.87	0.38	3
2019		2020		fill	ditch	boundary	0	0.59	0.2	3
2020	176 816 830 2590 2620	2020		cut	ditch	boundary	0	1.1	0.79	3
2021		1969		fill	pit	quarry	1.9		0.6	2
2022		1969		fill	pit	quarry	2.3		0.3	2
2023		1969		fill	pit	quarry	1		0.1	2
2024		2061		fill	building	?inn, Building 12	4		0.25	3
2025		2061		fill	building	?inn, Building 12	3.25	0.92	0.28	3
2026		2061		fill	building	?inn, Building 12	1.25		0.14	3
2027		2061		fill	building	?inn, Building 12	0		0.49	3
2028		2061		fill	building	?inn, Building 12	3.82		0.49	3
2029		2061		fill	building	?inn, Building 12	0			3
2030		2061		fill	building	?inn, Building 12	2.5		0.3	3
2031		2061		fill	building	?inn, Building 12	3.51		0.22	3
2032		0		layer	levelling layer	structural	0		0.45	3
2033		2096		fill	pit	quarry	0		0.39	2
2034		2034		cut	post hole	structural	0	0.2	0.23	2
2035		2034		fill	post hole		0	0.2	0.23	2
2036		2036		cut	post hole	?Building	0	0.31	0.16	3
2037		2036		fill	post hole	?Building	0	0.31	0.16	3
2038		2038		cut	pit	Quarry	0	1.84	1.02	2

Cxt	Same as	Cut	Tr	Category	Feature Type	Function	Lth	Bth	Dth	Ph
2039		2038		fill	pit	quarry	0	1.2	0.6	2
2040		2040		cut	pit	quarry	2.1	1.4	1.16	2
2041		2040		fill	pit	quarry	0	1.1	0.74	2
2042		2042		cut	pit	quarry	0	1.42	1.28	4
2043		2042		fill	pit	quarry	0	1.42	1.28	4
2044		2044		cut	pit	quarry	0	0.74	0.7	4
2045		2044		fill	pit	quarry	0	0.8	0.28	4
2046		2046		cut	pit	quarry	0	0.74	0.62	4
2047		2046		fill	pit	quarry	0	0.74	0.62	4
2048		2048		cut	pit	quarry	0	1.5	0.68	4
2049		2046		fill	pit	quarry	0	1.5	0.68	4
2050		2051		fill	pit		0	0.68	0.32	3
2051		2051		cut	pit		0.75	0.68	0.32	3
2052		2053		fill	ditch	?enclosure	0	1	0.42	1
2053	1947 2015 2083 2088	2053		cut	ditch	?enclosure	0	1	0.42	1
2054		2059		fill	pit		1.93	1.3	0.32	2
2055		2059		fill	pit		0	1.01	0.36	2
2056		2059		fill	pit		0	0.5	0.46	2
2057		2059		fill	pit		0	0.92	0.7	2
2058		2059		fill	pit		0	0.72	0.17	2
2059		2059		cut	pit		0	1.3	1.37	2
2060		2060		cut	wall	?inn, Building 12	0			3
2061		2061		cut	wall	?inn, Building 12	3.95	0.92	0.6	3
2062		2062		cut	wall	?inn, Building 12	2.3		1.7	3
2063		1940		fill	pit	quarry	0		0.7	2
2064		1940		fill	pit	quarry	0.95		0.14	2
2065		1969		fill	pit	quarry	0.95		0.1	2
2066		2272		fill	pit	quarry	0			2
2067		1969		fill	pit	quarry	0	1.16	0.9	2
2068		2068		cut	pit		0.8		0.23	2
2069		2068		fill	pit		0		0.23	2
2070		2071		fill	post hole	Building 6	0.38	0.38	0.2	2
2071		2071		cut	post hole	Building 6	0	0.38	0.2	2
2072		2075		fill	post hole		0.4	0.38	0.2	0
2073		2075		fill	post hole		0.35	0.1	0.15	0
2074		2075		fill	post hole		0.25	0.43	0.32	0
2075		2075		cut	post hole	structural	0.4	0.48	0.48	0
2076		1906		fill	floor	?inn, Building 12	0	3	0.05	3
2077		2061		fill	cellar	?inn, Building 12	0	1.5	1.1	3
2078		2061		fill	cellar	?inn, Building 12	0	1.1	0.55	3
2079		1907		fill	cellar	?inn, Building 12	0	1.4	0.4	3
2080		1907		fill	cellar	?inn, Building 12	0	0.8	0.4	3
2081		0		layer			0	1.25	0.07	3
2082		2083		fill	ditch	?enclosure	0.5	0.36	0.28	1
2083	1947 2015 2053 2088	2083		cut	ditch	?enclosure	0	0.36	0.28	1
2084		2085		fill	ditch	?enclosure	0	1	0.2	1
2085		2085		cut	ditch	?enclosure	0	1	0.2	1
2086		2088		fill	ditch	?enclosure	0	1.1	0.22	1
2087		2088		fill	ditch	?enclosure	0	0.45	0.3	1
2088	1947 2015 2053 2083	2088		cut	ditch	?enclosure		1.1	0.5	1
2089		2090		fill	foundation trench	Building 12	0	0.3	0.25	3
2090		2090		cut	foundation trench	Building 12	0	0.3	0.25	3
2091		2091		cut	post hole	Building 11	0	0.2	0.19	3
2092		2091		fill	post hole	Building 11	0	0.2	0.19	3

<i>Cxt</i>	<i>Same as</i>	<i>Cut</i>	<i>Tr</i>	<i>Category</i>	<i>Feature Type</i>	<i>Function</i>	<i>Lth</i>	<i>Bth</i>	<i>Dth</i>	<i>Ph</i>
2093		2038	fill		pit	quarry	0	1.84	0.56	2
2094		2044	fill		pit	quarry	0	0.84	0.44	4
2095		2040	fill		pit	quarry	0	1.2	0.6	2
2096		2096	cut		pit	quarry	0	1.22	1.38	2
2097		2096	fill		pit	quarry	0		1.52	2
2098		2096	fill		pit	quarry	0		1.18	2
2099		2096	fill		pit	quarry	0		1.14	2
2100		2096	fill		pit	quarry	0		0.62	2
2101		2102	fill		drain	pipe trench	0	0.41	0.38	4
2102		2102	cut		drain	pipe trench	0	0.41	0.38	4
2103		2104	cut		drain	pipe trench	0	0.47	0.28	4
2104		2104	cut		ditch	pipe trench	0	0.43	0.28	4
2105		2106	cut		post hole	Building 13	0.24	0.21	0.04	3
2106		2106	cut		post hole	Building 13	0.24	0.21	0.04	3
2107		2108	fill		post hole	Building 13	0.43	0.32	0.17	3
2108		2108	cut		post hole	Building 13	0.43	0.32	0.17	3
2109		2109	cut		post hole	?Fence line	0.21	0.17	0.28	3
2110		2109	fill		post hole	?Fence line	0.21	0.17	0.28	3
2111		2112	fill		post hole	Building 13	0	0.29	0.26	3
2112		2112	cut		post hole	Building 13	0	0.29	0.26	3
2113		2114	fill		post hole	Building 13	0	0.18	0.11	3
2114		2114	cut		post hole	Building 13	0	0.18	0.11	3
2115		2116	fill		post hole	Building 13	0	0.28	0.21	3
2116		2116	cut		post hole	Building 13	0	0.28	0.21	3
2117		1424	fill		cess-pit	Building 8	0		0.1	3
2118		1424	fill		cess-pit	Building 8	0			3
2119		1424	fill		cess-pit	Building 8	0		0.1	3
2120		2120	cut		stake hole	?inn, Building 12	0	0.08	0.11	3
2121		2120	fill		stake hole	?inn, Building 12	0	0.08	0.11	3
2122		2122	cut		stake hole	?inn, Building 12	0	0.08	0.22	3
2123		2122	fill		stake hole	?inn, Building 12	0	0.08	0.23	3
2124		2125	fill		pit		0	1.8		2
2125		2125	cut		pit		1.8			2
2126		2127	fill		post hole	Building 13	0	0.3	0.06	3
2127		2127	cut		post hole	Building 13	0	0.3	0.06	3
2128		2129	fill		post hole	Building 13	0	0.25	0.1	3
2129		2129	cut		post hole	Building 13	0	0.25	0.1	3
2130		2131	fill		post hole	Building 13	0	0.25	0.1	3
2131		2131	cut		post hole	Building 13	0	0.25	0.1	3
2132		2132	cut		post hole	?Fence line	0	0.27	0.06	3
2133		2132	fill		post hole	?Fence line	0	0.27	0.06	3
2134		2136	fill		pit	?cess	1.05	1.65	0.05	3
2135		2136	fill		pit	?cess	1.55	1.65	0.25	3
2136		2136	cut		pit	?cess	1.55	1.65	2	3
2137		2139	fill		pit		2.5	0.9	0.2	3
2138		2139	fill		pit		1.2	0.9	0.1	3
2139		2139	cut		pit		2.5	0.9	0.28	3
2140		2141	fill		stake hole	Building 13	0	0.3	0.1	3
2141		2141	cut		stake hole	Building 13	0	0.3	0.1	3
2142		2143	fill		post hole	Building 13	0	0.33	0.3	3
2143		2143	cut		post hole	Building 13	0	0.33	0.3	3
2144		2145	fill		post hole	Building 13	0.5	0.47	0.26	3
2145		2145	cut		post hole	Building 13	0.5	0.47	0.26	3
2146		2147	fill		ditch	boundary	0	0.5	0.34	2

Cxt	Same as	Cut	Tr	Category	Feature Type	Function	Lth	Bth	Dth	Ph
2147	2177	2147		cut	ditch	boundary	0	0.5	0.34	2
2148		1424		fill	cess-pit	Building 8	0		0.1	3
2149		1424		fill	cess-pit	Building 8	0			3
2150		2151		fill	stake hole	Building 13	0	0.2	0.11	3
2151		2151		cut	stake hole	Building 13	0	0.2	0.11	3
2152		2153		fill	pit		1	0.4	0.09	2
2153		2153		cut	pit		1	0.4	0.09	2
2154		2154		cut	pit		1.2	1.1	0.65	2
2155		2154		fill	pit		1.2	1.1	0.5	2
2156		2154		fill	pit		0.6		0.2	2
2157		2157		cut	pit		2.4	1.5	0.55	3
2158		2157		fill	pit		2.4	1.5	0.33	3
2159		2157		fill	pit		0.7		0.12	3
2160		2157		fill	pit		1.12		0.08	3
2161		2157		fill	pit		0.65		0.12	3
2162		2157		fill	pit		0.7		0.15	3
2163		2173		fill	pit		0.65		0.3	2
2164	1009	2165		fill	pit		0	1	0.46	4
2165		2165		cut	pit		1	1	0.46	4
2166		2167		fill	floor?	Shamrock Passage	0	1	0.22	4
2167		2167		cut	?floor	Shamrock Passage	1.25	1	0.22	4
2169		2172		fill	Pit		0	0.82	0.12	2
2170		2172		fill	pit		0	0.48	0.48	2
2171		2172		fill	pit		0	0.7	0.06	2
2172		2172		cut	pit		0	1.02	0.26	2
2173		2173		cut	pit		0	0.7	0.3	2
2174		2174		cut	pit		0.68	0.55	0.4	2
2175		2174		fill	pit		0.68	0.55	0.4	2
2176		2177		fill	ditch	boundary	0	0.52	0.44	2
2177	2147	2177		cut	ditch	boundary	0	0.52	0.44	2
2178				layer	surface (external)	?Pathway	0.8	0.1	0.09	3
2179		2096		fill	pit	quarry	0		0.7	2
2180		2096		fill	pit	quarry	0		0.84	2
2181		0		layer			0		0.45	2
2182		2182		cut	building	Building 16, Toilet	2	1.88	1.06	4
2183		2183		masonry	building	Building 16, Toilet	2	0.18	1.04	4
2184		2182		fill	floor	Building 16	2	1.88		4
2185		2182		fill	building	Building 16	2	1.88	0.4	4
2186		2182		fill	building	Building 16	0		0.54	4
2187		2182		fill	building	Building 16	0			4
2188		2188		cut	cellar	Shamrock Passage	2.6			4
2189		2188		masonry	cellar	Shamrock Passage	27	1.25	0.95	4
2190		2188		fill	cellar	Shamrock Passage	2.5	0.25	0.3	4
2191		2188		fill	cellar	Shamrock Passage	2.2	0.25	0.3	4
2192		2188		fill	cellar	Shamrock Passage	2.32	0.25	0.6	4
2193		0		layer	surface (external)	Corral	3	3	0.26	3
2194		2194		cut	drain		1.5	0.2		4
2195		2195		cut	drain		15	0.4		4
2196		2199		fill	cess-pit	Building 28	1.68	1.74	0.32	4
2197		2199		fill	cess-pit	Building 28	1.38	1.33	1	4
2198		2199		masonry	wall	Building 28	1.6	1.55	1.12	4
2199		2199		cut	pit	Building 28	1.68	1.74	1.27	4
2200		2200		cut	pit		0.9	0.8	0.5	2
2201		2200		fill	pit		0.9	0.8	0.5	2

Cxt	Same as	Cut	Tr	Category	Feature Type	Function	Lth	Bth	Dth	Ph
2202		2202	cut		pit		1	0.7	0.1	3
2203		2202	fill		pit		1	0.7	0.1	3
2204		2204	cut		post hole	structural	0	0.35	0.18	4
2205		2204	fill		post hole		0	0.35	0.18	4
2206		2206	cut		post hole	structural	0	0.25	0.3	0
2207		2206	fill		post hole		0	0.25	0.3	0
2208		2208	cut		pit		0	1	0.8	3
2209		2208	fill		pit		0	1	0.8	3
2210		2208	fill		pit		0	0.85	0.7	3
2211		2211	cut		pit	Quarry	0			3
2212		2211	fill		pit	quarry	0	0.8	1	3
2213		2211	fill		pit	quarry	0	0.8	0.1	3
2214		2211	fill		pit	quarry	0	0.8	0.7	3
2215		2215	cut		pit		0	0.9	0.75	4
2216		2215	fill		pit		0	0.9	0.75	4
2217		1456	fill		well		1.2	1	1.5	3
2218		2219	fill		pit		1.1	0.8	1	2
2219		2219	cut		pit		1.1	0.8	1.32	2
2220		2220	cut		pit		1.1		0.35	2
2221		2220	fill		pit		0		0.35	2
2222		2223	cut		pit		1.06	1	0.4	3
2223		2222	fill		pit		0		0.4	3
2224		2188	fill		floor	Shamrock Passage	2.3	0.79	0.03	4
2225	1700	2225	cut		ditch		1	0.5	0.3	2
2226		2225	fill		ditch		0		0.3	2
2227		2227	cut		post hole	structural	0	0.15	0.05	0
2228		2227	fill		post hole		0		0.05	0
2229		2136	fill		pit	?cess	1.6	0.8	0.08	3
2230		2136	fill		pit	?cess	1.6	0.75	0.05	3
2231		2136	fill		pit	?cess	0	0.95	0.25	3
2232		2136	fill		pit	?cess	1.6	1	0.75	3
2233		2136	fill		pit	cess	0	0.65	0.38	3
2234		2136	fill		pit	?cess	0	0.5	0.35	3
2235		2136	fill		pit	?cess	0	0.6	0.15	3
2236		2136	fill		pit	?cess	0		0.25	3
2237		2237	cut		pit	quarry	0		1.6	2
2238		2237	fill		pit	quarry	0		1.6	2
2239		2237	fill		pit	quarry	0		1.28	2
2240		2237	fill		pit	quarry	0		1.14	2
2241		2237	fill		pit	quarry	0		0.96	2
2242		2237	fill		pit	quarry	0		0.82	2
2243		2237	fill		pit	quarry	0		0.63	2
2244		2237	fill		pit	quarry	0		0.6	2
2246		0	layer			levelling	0		0.42	3
2247		0	layer			levelling	0		0.36	3
2248		1456	fill		well		1	1	2.45	3
2249		1456	fill		well		1	1	0.5	3
2250		2250	cut		pit		1.3		1.2	0
2251		2254	fill		oven/kiln	?Building 9	0	0.6	0.12	3
2252		2254	fill		oven/kiln	?Building 9	0	0.62	0.1	3
2253		2254	fill		oven/kiln	?Building 9	0	0.6	0.06	3
2254		2254	cut		oven/kiln	?Building 9	1.85	1.25	0.2	3
2255		0	layer		buried soil		3.5	1	0.28	3
2256		2258	fill		post hole	Structure 1	0	0.32	0.56	2

Cxt	Same as	Cut	Tr	Category	Feature Type	Function	Lth	Bth	Dth	Ph
2257		2258		fill	post hole	Structure 1	0	0.1	0.56	2
2258		2258		cut	post hole	Structure 1	0	0.42	0.56	2
2259		2259		cut	well	Plot 33	0	1	4.2	4
2260		2259		fill	well	Plot 33	0	1	4.2	4
2261		2250		fill	pit		1.2		0.28	0
2262		2250		fill	pit		1.25		0.35	0
2263		2250		fill	pit		0.85		0.1	0
2264		2250		fill	pit		1.05		0.1	0
2265		2250		fill	pit		1		0.8	0
2266		2250		fill	pit		0.6		0.15	0
2267		2250		fill	pit		0.8		0.2	0
2268		0		layer	floor	Building 14	0		0.12	3
2269		2270		fill	ditch	boundary	0	0.54	0.4	2
2270	2289 2405	2270		cut	ditch	boundary	0	0.54	0.4	2
2271		0		layer			0	3.5	0.22	2
2272		2272		cut	pit	quarry	2.25	1.5	1.5	2
2273		1940		fill	pit	quarry	0.3	0.3	0.32	2
2274		1969		fill	pit	quarry	0	1.4	0.4	2
2275		2275		cut	pit	quarry	3.7	2.3	0.84	2
2276		2275		fill	pit	quarry	0	0.8	0.1	2
2277		2275		fill	pit	quarry	0	0.7	0.1	2
2279		2272		fill	pit	quarry	0	0.3	0.08	2
2280		2272		fill	pit	quarry	0	0.4	0.16	2
2281		2272		fill	pit	quarry	0	0.5	0.3	2
2282		2272		fill	pit	quarry	0	0.4	0.06	2
2283		2272		fill	pit	quarry	0	0.4	0.18	2
2284		2275		fill	pit	quarry	3.7	2.1	0.5	2
2285		2275		fill	pit	quarry	3.7	2.1	0.3	2
2286		2286		cut	pit	quarry	2	0.3	0.8	2
2287		2286		fill	pit	quarry	2	0.3	0.68	2
2288		2286		fill	pit	quarry	2	0.3	0.12	2
2289	2270 2405	2289		cut	ditch	boundary	0	0.45	0.35	2
2290		2289		fill	ditch	boundary	0	0.45	0.35	2
2291		2291		cut	drain		0			4
2292		2293		fill	drain		0	1.4	0.4	4
2293	2403 3265 3284	2293		cut	drain		0	1.4	0.4	4
2294		2295		fill	pit		1.2	1	0.4	3
2295		2295		cut	pit		1.2	1	0.4	3
2296		2296		cut	post hole	structural	0	0.35	0.3	0
2297		2296		fill	post hole		0	0.35	0.3	0
2298		2299		fill	pit		0	0.6	0.4	2
2299		2299		cut	pit		0	0.6	0.4	2
2300		2302		fill	pit	quarry	0	0.8	0.3	2
2301		2302		fill	pit	quarry	0	0.5	0.3	2
2302		2302		cut	pit	quarry	0	0.6	0.6	2
2303		2304		fill	post hole		0	0.2	0.15	4
2304		2304		cut	post hole	structural	0	0.2	0.15	4
2305		2308		fill	pit	quarry	1.96	0.92	0.68	2
2306		2308		fill	pit	quarry	0	0.3	0.2	2
2307		2308		fill	pit	quarry	1.3	0.8	0.3	2
2308		2308		cut	pit	quarry	2.3	2.7	0.78	2
2309		2318		fill	pit	quarry	2.8		0.38	2
2310		2318		fill	pit	quarry	2.48		0.34	2
2311		2318		fill	pit	quarry	2.86		0.2	2

Cxt	Same as	Cut	Tr	Category	Feature Type	Function	Lth	Bth	Dth	Ph
2312		2318	fill		pit	quarry	3.04		0.24	2
2313		2318	fill		pit	quarry	0	2.3	0.26	2
2314		2318	fill		pit	quarry	0	2.78	0.16	2
2315		2318	fill		pit	quarry	0	1.3	0.24	2
2316		2318	fill		pit	quarry	0	0.92	0.48	2
2317		2318	fill		pit	quarry	0	0.92	0.48	2
2318		2318	cut		pit	quarry	0	3.5	1.56	2
2319		2318	fill		pit	quarry	0	0.96	0.64	2
2320		2318	fill		pit	quarry	0	0.96	0.06	2
2321		2318	fill		pit	quarry	0	1.32	0.1	2
2322		1747	fill		well		0		4.6	2
2323		2452	fill		oven/hearth		0	0.89	0.05	2
2324		2327	fill		pit		0.5	1.46	0.46	4
2325		2367	fill		pit		0.5	1.17	0.27	0
2326		2367	fill		pit		0.13	1.04	0.24	0
2327		2327	cut		pit		0.5	1.46	0.46	4
2328		1463	fill		well		0	0.95	0.3	2
2329		1463	fill		well		0	0.9	0.4	2
2330		2452	fill		oven/hearth		2.23	1.31	0.06	2
2331		1424	fill		cess-pit	Building 8	0			3
2332		1424	fill		cess-pit	Building 8	0			3
2333		1424	fill		cess-pit	Building 8	0			3
2334		1424	fill		cess-pit	Building 8	0			3
2335		1424	fill		cess-pit	Building 8	0			3
2336		1424	fill		cess-pit	Building 8	0			3
2337		1424	fill		cess-pit	Building 8	0			3
2338		1424	fill		cess-pit	Building 8	0			3
2339		1424	fill		cess-pit	Building 8	0			3
2340		1424	fill		cess-pit	Building 8	0			3
2341		1424	fill		cess-pit	Building 8	0			3
2342		1424	fill		cess-pit	Building 8	0			3
2343		1424	fill		cess-pit	Building 8	0			3
2344		1424	fill		cess-pit	Building 8	0			3
2345		1424	fill		cess-pit	Building 8	0			3
2346		1424	fill		cess-pit	Building 8	0			3
2347		1424	fill		cess-pit	Building 8	0			3
2348		1424	fill		cess-pit	Building 8	0		0.6	3
2351		2353	fill		pit	quarry	2.1		1.95	2
2352		2353	fill		pit	quarry	0	0.4	0.2	2
2353		2353	cut		pit	quarry	2.1	1.65	1.95	2
2354		2452	fill		oven/hearth		3.05	1.12	0.11	2
2355		2355	cut		pit	?Quarry?	0	1.7	1.2	3
2356		2194	fill		drain		0	1.7	1.2	4
2357		2355	fill		pit	?quarry	0		0.26	3
2358		2355	fill		pit	?quarry	0		0.18	3
2359		2355	fill		pit	?quarry	0		0.36	3
2360		2355	fill		pit	?quarry	0		0.16	3
2361		2355	fill		pit	?quarry	0		0.3	3
2362		2362	cut		pit		0	0.6		2
2363		2362	fill		pit		0	0.6	0.94	2
2364		2364	cut		pit		0	1.02		2
2365		2364	fill		pit		0		0.28	2
2366		2364	fill		pit		0		0.68	2
2367		2367	cut		pit		0			0

Cxt	Same as	Cut	Tr	Category	Feature Type	Function	Lth	Bth	Dth	Ph
2369		1456		fill	well		0	1	0.6	3
2370		1456		fill	well		0	0.78	0.42	3
2371		1456		fill	well		0	0.48	0.05	3
2372		2373		fill	post hole		0.4	0.4	0.7	2
2373		2373		cut	post hole		0.4	0.4	0.7	2
2374		2377		fill	pit	quarry	1.2	0.6	0.1	2
2375		2377		fill	pit	quarry	1.2	0.8	0.3	2
2376		2377		fill	pit	quarry	1.2	1.3	0.9	2
2377		2377		cut	pit	quarry	1.6	1.2	0.9	2
2378		2380		fill	pit	quarry	0	1.2	0.28	3
2379		2380		fill	pit	quarry	0	1	0.74	3
2380		2380		cut	pit	quarry	0	1.5	0.86	3
2381		2381		cut	Pit	quarry	2.1		0.66	2
2382		2382		cut	pit	quarry	0.8	0.7	0.45	2
2383		2061		fill	cellar	?inn, Building 12	5	0.3	0.4	3
2384		2387		fill	pit	quarry	0	1.7	0.18	3
2385		2387		fill	pit	quarry	0	1.66	0.16	3
2386		2387		fill	pit	quarry	0	1.74	1	3
2387		2387		cut	pit	quarry	1	1.74	1	3
2388		2388		cut	pit		0	1.2	0.4	3
2389		2388		fill	pit		0	1.2	0.1	3
2390		2388		fill	pit		0	1.2	0.3	3
2391		2391		cut	pit		0	0.9	0.3	2
2392		2391		fill	pit		0	0.9	0.3	2
2393	2609	2393		cut	pit	quarry	0			4
2394		2479		fill	pit	quarry	0	0.44	0.16	2
2395		2452		fill	Oven/hearth		1.01	0.66	0.09	2
2396		2452		fill	Oven/hearth		0.42	0.41	0.02	2
2397		2393		fill	pit	quarry	1.75	1.75	0.2	4
2398		2393		fill	pit	quarry	1.75	1.75	0.85	4
2399		2474		fill	cellar	Building 19	1	0.75	0.2	3
2400		2403		fill	ditch	boundary	1.5	1.2	0.3	4
2401		2403		fill	ditch	boundary	0	1	0.3	4
2402		2403		fill	ditch	boundary	0	1	0.3	4
2403	2293 3265 3284	2403		cut	ditch	boundary	0	1.2	1	4
2404		2405		fill	ditch	boundary	0.2	0.3	0.1	2
2405	2270 2289	2405		cut	ditch	boundary	0	0.3	0.1	2
2406		2407		fill	stake hole		0.1	0.13	0.09	3
2407		2407		cut	stake hole	structural	0.1	0.13	0.09	3
2408		2409		fill	pit		0.33	0.9	0.46	4
2409		2409		cut	pit		0.33	0.9	0.46	4
2410		2411		fill	post hole	Building 9	0.33	0.64	0.22	3
2411		2411		cut	post hole	Building 9	0.33	0.64	0.22	3
2412		2412		cut	well		0	1.42	4.6	2
2413		2413		cut	pit	quarry	0	0.9	1.2	2
2414		1456		fill	well		0	0.75	0.3	3
2415		2452		fill	oven/hearth		0	0.47	0.04	2
2416		2417		fill	ditch		0		0.12	2
2417		2417		cut	ditch		0			2
2418		2381		fill	pit	quarry	0		0.66	2
2419		2381		fill	pit	quarry	0		0.6	2
2420		2381		fill	pit	quarry	0		0.58	2
2421		2382		fill	pit		0		0.21	2
2422		2382		fill	pit		0		0.45	2

Cxt	Same as	Cut	Tr	Category	Feature Type	Function	Lth	Bth	Dth	Ph
2423		2412	fill		well		0		1.62	2
2424		2412	fill		well		0		0.18	2
2425		2412	fill		well		0		0.24	2
2426		2412	fill		well		0		0.52	2
2427		2412	fill		well		0		0.54	2
2428		2412	fill		well		0		1.22	2
2429		2413	fill		pit	quarry	0		0.78	2
2430		2413	fill		pit	quarry	0		0.8	2
2431		2413	fill		pit	quarry	0		0.88	2
2432		2413	fill		pit	quarry	0		0.91	2
2433		2413	fill		pit	quarry	0		1.1	2
2434		2413	fill		pit	quarry	0		1.18	2
2435		2452	fill		kiln/oven		1.83	0.5	0.07	2
2436		2452	fill		kiln/oven		2.85	0.98	0.24	2
2437		2438	fill		post hole	Structure 1	0.4	0.4	0.25	2
2438		2438	cut		post hole	Structure 1	0.4	0.4	0.25	2
2439		2447	fill		pit		0	1	0.2	2
2440		2447	fill		pit		0	1.28	0.1	2
2441		2447	fill		pit		0	1	0.12	2
2442		2447	fill		pit			2.1	0.4	2
2443		2447	fill		pit		0	0.6	0.2	2
2444		2447	fill		pit		0	0.7	0.1	2
2445		2447	fill		pit		0	1.14	0.22	2
2446		2447	fill		pit		0	0.9	0.08	2
2447	108	2447	cut		pit		2.1	1.5	1	2
2448		2449	fill		post hole		0	0.3	0.3	2
2449		2449	cut		post hole	structural	0	0.3	0.3	2
2450		2450	cut		pit	quarry	1.2	0.8	1.2	2
2451		2450	fill		pit	quarry	1.2	0.8	1.2	2
2452		2452	cut		kiln/oven		2.92	0.97	0.24	2
2453		2453	layer				0		0.24	2
2454		2455	fill		kiln/oven		2.74	0.67	0.08	2
2455		2455	cut		kiln/oven		2.74	0.67	0.08	2
2456		2457	fill		post hole	Building 9	0	0.4	0.5	3
2457		2457	cut		post hole	Building 9	0			3
2458		2459	fill		post hole	Building 9	0	0.5	0.57	3
2459		2459	cut		post hole	Building 9	0	0.5	0.59	3
2460		2462	fill		post hole	Building 9	0	0.3	0.4	3
2461		2462	fill		post hole	Building 9	0	0.1	0.4	3
2462		2462	cut		post hole	Building 9	0	0.4	0.4	3
2463		2464	fill		post hole	Structure 1	0.4	0.3	0.3	2
2464		2464	cut		post hole	Structure 1	0.4	0.3	0.3	2
2465		2466	fill		post hole	Structure 1	0.3	0.35	0.2	2
2466		2466	cut		post hole	Structure 1	0.3	0.35	0.2	2
2467		2468	fill		post hole	Structure 1	0	0.3	0.2	2
2468		2468	cut		post hole	Structure 1	0	0.3	0.2	2
2469		2471	fill		post hole	Structure 1	0	0.2	0.1	2
2470		2471	fill		post hole	Structure 1	0	0.4	0.2	2
2471		2471	cut		post hole	Structure 1	0	0.4	0.2	2
2472		2474	fill		cellar	Building 19	0.85	1.55	1.1	3
2473		2474	fill		cellar	Building 19	0	1.5	0.95	3
2474	1052	2474	masonry		walls of cellar	Building 19	3	2.2	1.2	3
2475		2475	cut		pit		1.3	0.6	0.45	3
2476		2475	fill		pit?		1.3	0.6	0.45	3

Cxt	Same as	Cut	Tr	Category	Feature Type	Function	Lth	Bth	Dth	Ph
2477		2475	fill		pit?		1.3	0.6	0.45	3
2478		2479	fill		pit		0	0.44	0.08	2
2479		2479	cut		pit		0	0.44	0.24	2
2480		2480	cut		pit	quarry	0	1	0.32	2
2481		2480	fill		pit	quarry	0		0.32	2
2482		2482	cut		pit		1.8	1.4	0.5	2
2483		2482	fill		pit		1.8	1.9	0.3	2
2484		2482	fill		pit		1.8	1.4	0.2	2
2485		2485	cut		pit	quarry	1.7	1.25	1.8	2
2486		2486	cut		pit	quarry	2.95	2.65	1.12	2
2487		2486	fill		pit	quarry	0		0.18	2
2488		2486	fill		pit	quarry	0		0.52	2
2489		2486	fill		pit	quarry	0		0.19	2
2490		2486	fill		pit	quarry	0		0.18	2
2491		2486	fill		pit	quarry	0		0.1	2
2492		2486	fill		pit	quarry	0		0.41	2
2493		2486	fill		pit	quarry	0		0.52	2
2494		2494	cut		pit		2.75	3.1	0.81	4
2495		2494	fill		pit		0		0.81	4
2496		1940	fill		pit	disuse	0			2
2497		1940	fill		pit	quarry	0	1	0.2	2
2498		1940	fill		pit	quarry	0	0.8	0.15	2
2499		1969	fill		pit	quarry	0			2
2500		1969	fill		pit	quarry	0			2
2501		2272	fill		pit	quarry	0	0.5	0.14	2
2502		2272	fill		pit	quarry	0	0.9	0.25	2
2503		118	fill		pit		0		0.2	2
2504		118	fill		pit		0		0.6	2
2505		118	fill		pit		0		0.26	2
2506		118	fill		pit		0		0.34	2
2507		2507	cut		post hole		0.5	0.45	0.21	0
2508		2507	fill		post hole		0		0.21	0
2509		1463	fill		well		0		2.4	2
2510		1463	fill		well		0		2.16	2
2511		1463	fill		well		0		3.52	2
2512		1463	fill		well		0		3.96	2
2513		1463	fill		well		0		4.1	2
2514		2514	fill/cut		drain		0			4
2515	164	2515	cut		pit		1.25	0.95	0.42	2
2516		2515	fill		pit		0	0.95	0.3	2
2517		2515	fill		pit		0	0.95	0.04	2
2518		2515	fill		pit		0	0.95	0.14	2
2519		2519	cut		pit		1.9		0.21	3
2520		2519	fill		pit		0		0.25	3
2521		2519	fill		pit		1.9		0.04	3
2522		2519	fill		pit		0		0.16	3
2523		2528	fill		pit	quarry	0	1.2	0.3	2
2524		2528	fill		pit	quarry	0			2
2525		2528	fill		pit	quarry	0	0.7	0.19	2
2526		2528	fill		pit	quarry	0	1.78	0.44	2
2527		2528	fill		pit	quarry	0	1.1	0.2	2
2528		2528	cut		pit	quarry	0	1.36	0.78	2
2529		2530	fill		pit	quarry	0	1.4	0.6	2
2530		2530	cut		pit	quarry	0	1.4	0.6	2

Cxt	Same as	Cut	Tr	Category	Feature Type	Function	Lth	Bth	Dth	Ph
2531		2533		fill	pit		0	0.74	0.1	2
2532		2533		fill	pit		0	0.6	0.36	2
2533		2533		cut	pit		0	0.6	0.36	2
2534		2536		fill	pit		0	0.6	0.76	2
2535		2536		fill	pit		0	0.2	0.6	2
2536		2536		cut	pit		0	0.8	0.76	2
2537		2537		cut	post hole	structural	0	0.23	0.07	0
2538		2537		fill	posthole		0		0.07	0
2539		2539		cut	post hole	structural	0	0.22	0.08	0
2540		2539		fill	post hole		0		0.08	0
2541		2541		cut	post hole	structural	0	0.22	0.1	0
2542		2541		fill	post hole		0		0.1	0
2543		2543		cut	pit		0.64	0.56	0.68	0
2544		2543		fill	pit		0		0.68	0
2545		2545		cut	post hole	structural	0.4	0.36	0.19	0
2546		2545		fill	post hole		0		0.19	0
2547		2545		fill	post hole		0	0.28	0.13	0
2548		2548		cut	post hole		0.45	0.45	0.21	4
2549		2548		fill	post hole		0		0.21	4
2550		2550		cut	post hole		0.45	0.3		4
2551		2550		fill	post hole		0		0.23	4
2552		2552		cut	post hole		0.4	0.33	0.38	0
2553		2552		fill	post hole		0		0.38	0
2554	114	2554		cut	well		0	2	4.1	2
2555		2554		fill	well		0		0.5	2
2556		2554		fill	well		0		0.15	2
2557		2554		fill	well		0	1.5	0.5	2
2558		2554		fill	well		0	1.6	0.6	2
2559		2559		cut	pit	quarry	2.2		1.28	2
2560		2560		cut	pit	quarry	1.5		0.8	2
2561		2569		masonry	well	Building 28	1.45	1.3	1.3	4
2562		2560		fill	pit		0	1.3	0.54	2
2563		2560		fill	pit		0		0.73	2
2564		2560		fill	pit		0		0.8	2
2565		2559		fill	pit		0		1.06	2
2566		2559		fill	pit		0		1.08	2
2567		2559		fill	pit		0		1.28	2
2568		2569		fill	well	Building 28	0			4
2569		2569		cut	well	Building 28 cut	0	1.4		4
2570		2560		fill	pit	quarry	0			2
2571		2560		fill	pit	quarry	0		0.78	2
2572		2574		fill	post hole		0	0.32	0.14	0
2573		2574		fill	post hole		0	0.04	0.05	0
2574		2374		cut	post hole	structural	0	0.32	0.15	0
2575		0		layer	modern build up		0	1.35	0.06	4
2576		2577		fill	pit		0	1.67	0.24	3
2577		2577		cut	pit		0	1.67	0.24	3
2578		2580		fill	pit	quarry	0	1.66	0.35	3
2579		2580		fill	pit	quarry	0	1.49	0.3	3
2580		2580		cut	pit	quarry	0	1.66	0.65	3
2581		2584		fill	pit	quarry	0	2.5	0.82	3
2582		2584		fill	pit	quarry	0	0.39	0.11	3
2583		2584		fill	pit	quarry	0	0.88	0.07	3
2584		2584		cut	pit	quarry	0	2.5		3

Cxt	Same as	Cut	Tr	Category	Feature Type	Function	Lth	Bth	Dth	Ph
2585		2588		fill	pit	quarry	0	0.94	0.48	3
2586		2588		fill	pit	quarry	0	1	0.21	3
2587		2588		fill	pit	quarry	0	0.8	0.38	3
2588		2588		cut	pit	quarry	0	1.09	0.78	3
2589		2590		fill	ditch	boundary	0	1.23	0.66	3
2590	176 816 830 2020 2620	2590		cut	ditch	boundary	0	1.23	0.66	3
2591		2590		fill	ditch	boundary	0	0.59	0.02	3
2592		2590		fill	ditch	boundary	0	0.59	0.02	3
2593		2590		fill	ditch	boundary	0	0.58	0.28	3
2594		2595		fill	pit	cess	0	0.92	0.83	0
2595		2595		cut	pit	cess-pit	0	0.92	0.83	0
2596		2599		fill	pit	cess	0	0.14	0.45	0
2597		2599		fill	pit	cess	0	0.24	0.25	0
2598		2599		fill	pit	cess	0	0.67	0.22	0
2599		2599		cut	pit	cess-pit	0	0.92	1.12	0
2600		2601		fill	pit	?quarry	0	0.5	0.06	3
2601		2601		cut	pit	?quarry	0	0.5	0.06	3
2602		2603		fill	pit	quarry	0	0.73	0.2	3
2603		2603		cut	pit	quarry	0	0.73	0.2	3
2604		2604		cut	oven/kiln		0	1.3	0.5	2
2605		2604		fill	oven/kiln		0	0.25	0.5	2
2606		2604		fill	oven/kiln		0	0.1	0.5	2
2607		2604		fill	oven/kiln		0	1	0.5	2
2608		2609		fill	pit	quarry	5	3	1.2	4
2609	2393	2609		cut	pit	quarry	5	3	1.2	4
2610		2610		cut	pit	quarry	0	2.5	1.28	3
2611		2610		fill	pit	quarry	0	1.68	1.28	3
2612		2612		cut	pit		0	2.4	1.12	3
2613		2612		fill	pit		0	2.3	0.54	3
2614		2612		fill	pit		0	1.88	0.24	3
2615		2612		fill	pit		0	1.9	0.42	3
2616		2612		fill	pit		0	1	0.3	3
2617		2618		fill	pit		0	0.25	0.55	2
2618		2618		cut	pit		0	0.25	0.55	2
2619		2620		fill	ditch	boundary	0	1.2	0.51	3
2620	176 816 830 2020 2590	2620		cut	ditch	boundary	0	1.2	0.15	3
2621		2621		fill	pit		0	1	0.49	2
2622		2622		cut	pit		0	1	0.49	2
2623		2623		cut	pit	quarry	0	1.82	0.78	2
2624		2624		cut	pit	quarry	0	1.22	0.8	2
2625		2625		cut	pit	quarry	0		0.32	2
2626		0		layer	hollow		1	2.3	0.2	3
2627		0		layer	burnt layer		0	3	0.2	3
2628		2630		fill	pit		0.5	0.8	0.46	2
2629		2630		fill	pit		0.5	0.8	0.22	2
2630		2630		cut	pit		0	0.98	0.68	2
2631		2636		fill	pit	quarry	1	1.36	0.3	3
2632		2636		fill	pit	quarry	1	1.32	0.3	3
2633		2636		fill	pit	quarry	1	0.5	0.18	3
2634		2636		fill	pit	quarry	1	1	0.81	3
2635		2636		fill	pit	quarry	1	0.63	0.69	3
2636		2636		cut	pit	quarry	1	1.4	1.33	3

Cxt	Same as	Cut	Tr	Category	Feature Type	Function	Lth	Bth	Dth	Ph
2638		2623	fill		pit	quarry	0		0.26	2
2639		2623	fill		pit	quarry	0		0.77	2
2640		2623	fill		pit	quarry	0		0.76	2
2641		2624	fill		pit	quarry	0		0.46	2
2642		2624	fill		pit	quarry	0		0.62	2
2643		2624	fill		pit	quarry	0		0.81	2
2644		2624	fill		pit	quarry	0		0.54	2
2645		2624	fill		pit	quarry	0		0.8	2
2646		2624	fill		pit	quarry	0		0.6	2
2647		2625	fill		pit	quarry	0		0.32	2
2648		2649	fill		pit	quarry	0	0.79	0.32	3
2649		2649	cut		pit	quarry	0	0.79	0.32	3
2650		0	layer		hollow		0	0.6	0.04	3
2651		2651	cut		pit	quarry	0	2.38	1.32	4
2652		2651	fill		pit	quarry	0		0.08	4
2653		2651	fill		pit	quarry	0		0.36	4
2654		2651	fill		pit	quarry	0		0.12	4
2655		2651	fill		pit	quarry	0		0.2	4
2656		2651	fill		pit	quarry	0		0.5	4
2657		2747	fill		pit	quarry	2	1.02	0.44	4
2659		2659	cut		pit		4	2.6	0.6	3
2660		2659	fill		pit		4	2.6	0.3	3
2661		2651	fill		pit	quarry	0		0.46	4
2662		2662	cut		post hole	structural	0	1.1	0.19	2
2663		2662	fill		post hole		0	1.1	0.19	2
2664		2665	fill		pit		0	1.7	0.9	2
2665		2665	cut		pit		0	1.7	0.9	2
2666		0	layer		build up	levelling	0			3
2667		2671	fill		pit	quarry	0	1.12	0.6	2
2668		2671	fill		pit	quarry	0	1.76	0.54	2
2669		2671	fill		pit	quarry	0	0.88	0.3	2
2670		2671	fill		pit	quarry	0	1.64	0.48	2
2671		2671	cut		pit	quarry	4.7	3.5	1.32	2
2672		2682	fill		pit	quarry	0	1.14	0.36	2
2673		2682	fill		pit	quarry	0	2.42	0.36	2
2674		2682	fill		pit	quarry	0	3.3	0.5	2
2675		2682	fill		pit	quarry	0	2.1	0.08	2
2676		2682	fill		pit	quarry	0	2.42	0.4	2
2677		2682	fill		pit	quarry	0	2.1	0.3	2
2678		2682	fill		pit	quarry	0	1.14	0.22	2
2679		2682	fill		pit	quarry	0	3.48	0.62	2
2680		2682	fill		pit	quarry	0	1.98	0.8	2
2681		2682	fill		pit	quarry	0	1.88	0.46	2
2682		2682	cut		pit	quarry	4.5	1.6	1.56	2
2685		2671	fill		pit	quarry	0	0.6	0.1	2
2686		2671	fill		pit	quarry	0	0.92	0.23	2
2687		2671	fill		pit	quarry	0	0.86	0.26	2
2688		2671	fill		pit	quarry	0	0.8	0.1	2
2689		2695	fill		pit	quarry		3.6	0.55	2
2690		2695	fill		pit	quarry	0	2.48	0.18	2
2691		2695	fill		pit	quarry	0	3.7	0.46	2
2692		2695	fill		pit	quarry	0	2.06	0.96	2
2693		2695	fill		pit	quarry	0	1.04	0.2	2
2694		2695	fill		pit	quarry	0	2.18	0.8	2

Cxt	Same as	Cut	Tr	Category	Feature Type	Function	Lth	Bth	Dth	Ph
2695		2695	cut		pit	quarry	2.15	4.4	1.52	2
2696		2697	fill		pit		0	0.98	0.46	2
2697		2697	cut		pit		0	0.98	0.46	2
2698		2659	fill		pit		0	2	0.28	3
2699		2699	cut		pit		1.2	1.2	1	2
2700		2699	fill		pit		1.2	1.2	1	2
2701		2701	cut		clay lined tank		0	0.6	0.5	2
2702		2701	fill		clay lined tank		0	0.6	0.5	2
2703		2703	cut		pit	cess	0	1.2	1.45	2
2704		2703	fill		pit	cess	0	1.2	1.45	2
2705		2705	cut		pit	cess	0	1.4	0.7	2
2706		2705	fill		pit	cess	0	1.4	0.7	2
2707		2713	fill		pit		0	1.9	0.7	2
2708		2713	fill		pit		0	0.75	0.6	2
2709		2713	fill		pit		0	0.5	0.55	2
2710		2713	fill		pit		0	0.55	0.05	2
2711		2713	fill		pit		0	0.75	0.08	2
2712		2713	fill		pit		0	1.35	0.2	2
2713		2713	cut		pit		0	2.9	0.9	2
2714		2714	cut		pit	quarry	3.7	3	1.3	2
2715		2714	fill		pit	quarry	0.9		0.2	2
2716		2714	fill		pit	quarry	3.7	3	1.3	2
2717		2714	fill		pit	quarry	3.2		1	2
2718		2714	fill		pit	quarry	1.5		0.22	2
2719		2714	fill		pit	quarry	1.05		0.4	2
2720		2720	cut		post hole	structural		0.6	0.6	0
2721		2720	cut		pit			0.6	0.6	0
2722		2722	cut		pit		1.66	1.56	0.8	4
2723		2722	fill		pit		0	0.5	0.1	4
2724		2722	fill		pit		1.66	1.66	0.8	4
2725		2725	cut		pit	quarry	1.7	0.64	1.4	2
2726		2725	fill		pit	quarry	0.9	0.4	0.18	2
2727		2725	fill		pit	quarry	1.1	0.6	0.2	2
2728		2725	fill		pit	quarry	1.4	0.6	0.1	2
2729		2725	fill		pit	quarry	1.4	0.6	0.1	2
2730		2725	fill		pit	quarry	1.4	0.6	0.1	2
2731		2725	fill		pit	quarry	1.4	0.6	0.1	2
2732		2725	fill		pit	quarry	1.4	0.6	0.8	2
2733		2733	cut		cellar	Building 28	2.6	1.9	0.95	4
2734		2733	masonry		cellar wall	Building 28	0			4
2735		2735	cut		pit		2.8	1.9	0.95	4
2736		2735	fill		pit		0		0.95	4
2737		2737	cut		pit		0	1.7	0.25	2
2738		2737	fill		pit		0	1.7	0.25	2
2739		2739	cut		pit	quarry	0	2.1	0.75	2
2740		2739	fill		pit	quarry	0	2.1	0.25	2
2741		2739	fill		pit	quarry	0	2.1	0.7	2
2742		2742	cut		post hole	structural	0	0.5	0.6	3
2743		2742	fill		post hole		0	0.5	0.6	3
2744		0	layer				0		0.38	3
2745		2701	fill		clay lined tank		0	0.5	0.5	2
2746		0	layer				3.75	1.25		3
2747		2747	cut		pit		0	1.02		4
2748		2748	masonry		wall	Building 12	0			3

Cxt	Same as	Cut	Tr	Category	Feature Type	Function	Lth	Bth	Dth	Ph
2749		2833		masonry	wall	Building 26/7	0			4
2750		2750		masonry	wall	Building 27	2	0.2		4
2751		2751		cut	pit	rubbish pit	1.05	0.98	0.79	4
2752		2751		fill	pit		1.05	0.98	0.79	4
2753		2754		fill	wall foundation trench	Leeke Street	0	0.7	0.09	4
2754	2775	2754		cut	wall foundation trench	Leeke Street	0	0.7	0.09	4
2755		2750		masonry	floor	Building 27	1.15	1	0.8	4
2756		0		layer	backfill		2	1.5	0.2	4
2757		2757		masonry	drain/soakaway	Building 27	5	0.16		4
2758	2760	2758		masonry	wall	?stable, Building 12	1.4	0.25		3
2759		0		layer	levelling for floor?		1.6	0.8	0.1	4
2760	2758	2760		masonry	wall	?stable, Building 12	1.5	0.25	0.1	3
2761		2761		cut	post hole	structural	0	0.66	0.18	2
2762		2761		fill	post hole		0	0.66	0.18	2
2763		2763		cut	post hole	Building 11	0	0.35	0.3	3
2764		2763		fill	post hole	Building 11	0	0.35	0.3	3
2765		2765		cut	pit		0		0.27	4
2766		2765		fill	pit		0.75	0.45	0.27	4
2767		0		layer	buried soil		0.75	0.5		3
2768		2768		masonry	wall	Building 27	2	0.16	0.08	4
2769		2769		masonry	wall	Building 27	2	0.16	0.1	4
2770		2770		masonry	wall	Building 27	2	0.35	0.12	4
2771		2771		masonry	wall	Building 27	2	0.35	0.1	4
2772		2772		cut	post hole	Building 27	0	0.33	0.22	0
2773		2772		fill	post hole		0	0.33	0.22	0
2774		2775		fill	wall foundation trench	Leeke Street	0	0.61	0.12	4
2775	2754	2775		cut	wall foundation trench	Leeke Street	0	0.61	0.12	4
2776		2777		fill	Burial	dog	0.4	0.22	0.34	3
2777		2777		cut	grave	dog	0.4	0.22	0.34	3
2778		2779		masonry	wall	Plot 34/35	2.2	0.25	0.12	4
2779		2779		cut	wall foundation	Plot 34/35	2.2	0.25	0.06	4
2780		2785		fill	pit	quarry	0.8	1.54	0.12	3
2781		2785		fill	pit	quarry	0.8	1.5	0.4	3
2782		2785		fill	pit	quarry	0.8	1.46	0.38	3
2783		2785		fill	pit	quarry	0.8	1.42	0.6	3
2784		2785		fill	pit	quarry	0.8	1.13	0.26	3
2785		2785		cut	pit	quarry	0.8	1.56	1.1	3
2786		2789		fill	pit	quarry	0.8	0.3	0.3	3
2787		2789		fill	pit	quarry	0.8	0.3	0.75	3
2788		2789		fill	pit	quarry	0.8	0.24	0.56	3
2789		2789		cut	pit	quarry	0.8	0.24	0.56	3
2790				layer			0.8	1.7	0.05	4
2791		2791		cut	wall foundation trench	Building 26	0	0.21	0.48	4
2792		2791		masonry	wall	Building 26	0	0.22	0.48	4
2793		2791		fill	wall foundation trench	Building 26	0	0.21	0.21	4
2794		2791		fill	wall foundation trench	Building 26	0	0.21	0.17	4
2795		0		layer	buried soil		0	0.83	0.22	3
2796				layer	floor	Building 26	0	0.9	0.19	4
2797		0		masonry	floor	Building 26	0	1.3		4

Cxt	Same as	Cut	Tr	Category	Feature Type	Function	Lth	Bth	Dth	Ph
2798	1083	2798		masonry	wall	Stable, Building 12	1.3	1.1	0.3	3
2799		0		layer	levelling		0		0.2	3
2800		0		layer	levelling		0		0.15	3
2801		0		layer			0		0.2	2
2802		2802		masonry	drain	drainage	0	0.25	0.4	4
2803		0		layer	cobbles	courtyard, Plot 33	2	2	0.01	4
2804		0		layer	levelling		0		0.15	4
2805		2805		cut	manhole	Drain, Plot 33	1.8	1.5		4
2807		0		layer			1.2	1.2	0.5	4
2808		2808		masonry	post pad?	Plot 33	0.44	0.4	0.35	4
2809		0		layer	bedding layer?		0		0.05	4
2810		2811		fill	wall foundation trench	Leeke Street	0	0.86	0.26	4
2811		2811		cut	wall foundation trench	Leeke Street	0	0.86	0.26	4
2812		0		layer	levelling		0.9		0.14	4
2813		0		layer	levelling		1.7	0.7	0.2	4
2814		0		layer	floor	building	1.34	1.5	0.1	4
2815		2816		fill	post hole		0	0.31	0.24	4
2816		2816		cut	post hole	structural	0	0.31	0.24	4
2817		0		layer	levelling		1.7	1.5	0.14	4
2818		2818		cut	post hole	Building 11	0	0.2	0.21	3
2819		2818		fill	post hole	Building 11	0	0.15	0.13	3
2820		2818		fill	post hole	Building 11	0			3
2821		2821		cut	post hole	Building 11	0	0.2	0.21	3
2822		2821		fill	post hole	Building 11	0	0.13	0.04	3
2823		2821		fill	post hole	Building 11	0	0.05	0.04	3
2824		0		layer			1.5	1.7	0.52	3
2825		0		layer	floor	?Building	0	0.4	0.18	3
2826		2827		fill	drain		0		0.3	4
2827		2827		cut	drain		0		0.3	4
2828		0		layer	bedding layer	?Building	0		0.12	3
2829		0		layer			0		0.07	3
2830		0		layer			0		0.1	3
2831		0		layer			0		0.04	3
2832		0		layer	floor	building	0.7	0.3	0.08	4
2833		2833		cut	wall foundation trench	Building 26/7	1	0.3	0.3	4
2834		2833		fill	wall foundation trench	Building 26/7	1	0.3	0.3	4
2835		2870		fill	wall foundation trench	Building 26/7	0.57	0.45	0.13	4
2836		2840		fill	wall foundation trench	Building 26/7	0			4
2837		0		layer	floor		0.8	0.4	0.15	3
2838		0		layer	levelling		0.8	0.38	0.17	3
2839		0		layer	buried soil		0.8	1	0.08	2
2840		2840		cut	wall foundation trench	Building 26/7	0.57	0.31	0.08	4
2841		0		layer	levelling		0.7	0.3	0.17	3
2842		0		layer			1	0.8	0.08	4
2843		2843		cut	pit		0.2		0.17	4
2844		2843		fill	pit		0.2		0.17	4
2845		2849		fill	pit	quarry	0	0.94	0.21	0
2846		2849		fill	pit	quarry	0	1.72	0.22	0
2847		2849		fill	pit	quarry	0	1.92	0.14	0

Cxt	Same as	Cut	Tr	Category	Feature Type	Function	Lth	Bth	Dth	Ph
2848		2849	fill	pit	quarry		0	1.2	0.3	0
2849		2849	cut	pit	quarry		2.34	1.56	0.4	0
2850		3002	fill	pit			0.68	0.62	0.2	3
2851		2851	cut	clay lined tank			1.65	1.4	0.8	2
2852		1939	fill	well			0		0.34	2
2853		1939	fill	well			0		0.28	2
2854		1939	fill	well			0		0.8	2
2855		2855	cut	oven/kiln			2.85	1.5	0.32	2
2856		2855	fill	oven/kiln			2.3	1.5	0.19	2
2857		2855	fill	oven/kiln			2.7	1.5	0.12	2
2858		2855	fill	oven/kiln			1.25	1.5	0.1	2
2859		2855	fill	oven/kiln			1.2	1.5	0.06	2
2860		1927	fill	well			1.4	1.38	0.88	2
2861		1927	fill	well			0.4	1.56	0.5	2
2862		1927	fill	well			0.56	0.38	0.28	2
2863		2996	fill	pit			2.1	0.75	0.16	2
2864		2864	cut	pit			0	1.1	1.3	2
2865		2864	fill	pit			0	1.1	1.3	2
2866		2554	fill	well			0	1.64	0.6	2
2867		2554	fill	well			2.4	1.64	1.3	2
2868		2851	fill	clay lined tank			1.5	1.3	0.8	2
2869		2412	fill	well			0	1	1.2	2
2870		2870	cut	wall robber trench	Building 26/7		0.57	0.45	0.13	4
2871		2871	cut	pit	quarry		1.9		2	2
2872		2871	fill	pit	quarry		1.9		0.72	2
2873		2871	fill	pit	quarry		1.9		1.3	2
2874		2875	fill	post hole	Building 11		0			3
2875		2875	cut	post hole	Building 11		0	0.4	0.12	3
2876		2877	fill	post hole	Building 11		0	0.7	0.12	3
2877		2877	cut	post hole	Building 11		0	0.7	0.12	3
2878		2879	fill	post hole	Building 11		0	0.4	0.14	3
2879		2879	cut	post hole	Building 11		0	0.4	0.14	3
2880		2881	fill	post hole	Building 11		0	0.3	0.25	3
2881		2881	cut	post hole	Building 11		0	0.3	0.25	3
2882		0	layer				0.8	0.8	0.1	4
2883		0	layer				0.8	0.8	0.2	4
2884		2884	cut	post hole	Building 11		0.48	0.48	16	3
2885		2884	fill	post hole	Building 11		0.48	0.48	0.16	3
2886		2886	masonry	wall	Building 25		0	0.23	0.2	4
2887		0	layer				0.8	0.8	0.22	4
2888		0	layer				0.8	0.8	0.12	4
2889		0	layer				0			4
2890		0	layer				0.8	0.8	0.2	3
2891		0	layer				0.8	0.08	0.11	3
2892		2892	cut	pit or ditch			0.8	0.49	0.59	3
2893		0	fill	pit or ditch			0			3
2894		0	layer	buried soil			0.4	0.8	0.29	2
2895		2896	fill	pit			0	0.6	0.06	4
2896		2896	cut	pit			0	0.6	0.06	4
2897		2897	masonry	wall	Leeke Street		0	0.54	0.2	4
2898		2920	fill	wall	Leeke Street		0	0.68	0.26	4
2899		2902	fill	foundation trench	Leeke Street		3.3		0.18	4
2900		2900	masonry	wall	Leeke Street		3.4	0.2	0.12	4
2901		2902	fill	wall foundation	Leeke Street		2.34		0.08	4

Cxt	Same as	Cut	Tr	Category	Feature Type	Function	Lth	Bth	Dth	Ph
					trench					
2902		2902	cut	wall foundation	trench	Leeke Street	3.56	0.25	0.4	4
2903		2905	fill	drain			0	0.5	0.34	4
2904		2905	masonry	drain			1.5	0.4	0.34	4
2905		2905	cut	drain			1.5	0.5	0.34	4
2906 3008		0	layer	levelling			3.7		0.3	4
2907		0	layer				0	0.9	0.1	3
2908		2908	masonry	wall	Leeke Street		10		0.6	4
2910		2911	fill	wall foundation	trench	Leeke Street	0	0.34	0.5	4
2911		2911	cut	wall foundation	trench	Leeke Street	0		0.86	4
2912		0	layer	levelling			0	1.7	0.1	3
2913		2913	cut	well			0	1.9	4.4	3
2914		2913	fill	well			0	1.2	0.7	3
2915		2913	fill	well			0	1.2	0.3	3
2916		2913	fill	well			0	0.6	0.4	3
2917		2913	fill	well			0	1	0.7	3
2918		2913	fill	well			0	1.3	0.5	3
2919		2913	fill	well			0	1.5	0.7	3
2920		2920	cut	wall	Leeke Street		0.68	0.3	0.26	4
2921		2851	fill	clay lined tank			1.65	1.4	0.8	2
2922		2923	fill	pit			0	0.62	0.25	3
2923		2923	cut	pit			0.89	0.75	0.4	3
2924		2924	masonry	wall	Stable, Building 12		0			3
2925		0	layer				0			2
2926		2926	cut	wall foundation	trench	Leeke Street	2	0.7	0.5	4
2927		2926	fill	wall foundation	trench	Leeke Street	2	0.7	0.5	4
2928		2928	cut	pit			0.8	1	0.5	4
2929		0	layer				0.8		0.33	3
2930		0	layer				0		0.1	3
2931		0	layer				1.15	1	0.1	4
2932		0	layer				0		0.12	4
2933 2940		0	layer				0		0.1	4
2934		0	layer				0		0.05	4
2935		0	layer				0		0.1	4
2936		0	layer				0		0.05	4
2937		0	layer				0		0.3	4
2938		2928	fill	pit			0.7	1	0.28	4
2939		2928	fill	pit			0.7		0.25	4
2940 2933		0	layer				0		0.08	4
2941		0	layer				0		0.1	4
2942		0	layer				0		0.25	4
2943		2944	fill	pit			0.2	0.5	0.25	4
2944		2944	cut	pit			0.2	0.5	0.25	4
2945		2946	fill	pit			1.25	0.96	0.64	4
2946		2946	cut	pit			1.25	0.96	0.64	4
2947		2948	fill	post hole	Building 11		0.2	0.2	0.24	3
2948		2948	cut	post hole	Building 11		0.2	0.22	0.24	3
2949		2953	fill	pit	quarry		1.45	1.6	0.4	2
2950		2953	fill	pit	quarry		0.75	1.2	0.42	2
2951		2953	fill	pit	quarry		0.5	1.6	0.28	2

Cxt	Same as	Cut	Tr	Category	Feature Type	Function	Lth	Bth	Dth	Ph
2952		2953		fill	pit	quarry	1.45	1.66	0.71	2
2953		2953		cut	pit	quarry	1.45	1.7	0.83	2
2954		2956		fill	pit	quarry	0.9	3	0.5	2
2955		2956		fill	pit	quarry	2	3	0.6	2
2956		2956		cut	pit	quarry	2	3	1.1	2
2957		2958		fill	pit		0.75	1.36	0.48	3
2958		2958		cut	pit		0.75	1.36	0.48	3
2959		2960		fill	pit	quarry	0.8	1.26	0.98	2
2960		2960		cut	pit	quarry	0.8	1.26	0.98	2
2961		2962		fill	pit	quarry	0.5	0.72	0.7	3
2962		2962		cut	pit	quarry	0.5	0.72	0.7	3
2963		2865		fill	pit		0.55	0.22	0.44	2
2964		2965		fill	pit		0.55	0.44	0.3	2
2965	3118	2965		cut	pit		0.55	0.44	0.56	2
2966		2968		fill	post hole	Building 11	0.25	0.35	0.2	3
2967		2968		fill	post hole	Building 11	0.25	0.35	0.26	3
2968		2968		cut	post hole	Building 11	0.25	0.35	0.45	3
2969		2960		fill	pit	quarry	0.4	1.26	0.6	2
2970		2971		fill	post hole	Building 11	0.25	0.45	0.45	3
2971		2971		cut	post hole	Building 11	0.25	0.4	0.45	3
2972		0		layer	buried soil		1	0.42	0.32	2
2973		2973		cut	pit		1.2	1.2	0.5	2
2974		2973		fill	pit		1.2	1.2	0.5	2
2975		2975		cut	pit		1.2	1.2	0.3	2
2976		2975		fill	pit		1.2	1.2	0.5	2
2977		2956		fill	pit		1.1	3	0.6	2
2978		2978		cut	pit		0	0.5		2
2979		2978		fill	pit		0	0.56		2
2980		2978		fill	pit		0	0.56	0.36	2
2981		2978		fill	pit		0		0.26	2
2982		2978		fill	pit		0	0.56	0.2	2
2983		2983		cut	pit		1	0.36		3
2984		2983		fill	pit		0		0.56	3
2985		2983		fill	pit		0	0.3	0.1	3
2986		2986		cut	pit		2	2.56		2
2987		2986		fill	pit		0		0.52	2
2988		2986		fill	pit		0	1.94	0.38	2
2989		0		layer			5	3.64	0.24	3
2990		2990		cut/fill	pit		1	0.75		0
2991		2991		cut/fill	pit		0.75	0.75		0
2992		2992		cut/fill	pit		0.75	0.5		0
2993		2993		masonry	wall	Leeke Street	2.1	0.21		4
2994		0		masonry	surface (external)	Leeke Street	2.1	0.85		4
2995				masonry	surface (external)	Leeke Street	1.3	0.4	0.11	4
2996		2996		cut	pit	quarry	2.4	2.75		2
2997		2996		fill	pit	quarry	2.2	0.75	0.16	2
2998		2996		fill	pit	quarry	1.8	0.75	0.1	2
2999		2996		fill	pit	quarry	2.3	0.78	0.38	2
								5		
3000		2996		fill	pit	quarry	1	0.75	0.14	2
3001		2996		fill	pit		2.36	0.7	0.66	2
3002		3002		cut	pit		0.68	0.62	0.2	3
3003		3003		masonry	wall	Leeke Street	3.5	0.22	0.07	4
3004		3004		masonry	wall	Leeke Street	3	0.32	0.1	4

Cxt	Same as	Cut	Tr	Category	Feature Type	Function	Lth	Bth	Dth	Ph
3005		3005		masonry	wall	Leeke Street	1.5	0.6	0.2	4
3006	3005	3006		masonry	wall	Leeke Street	0			4
3007	3005	3007		masonry	wall	Leeke Street				4
3008	2906	0		layer	build up		0			4
3009		99		fill	pit	quarry	0	1.45	0.8	2
3010		99		fill	pit	quarry	0	1.05	0.3	2
3011		99		fill	pit	quarry	0	1	0.08	2
3012		3013		fill	wall foundation trench	Leeke Street	0	0.64	0.31	4
3013		3013		cut	wall foundation trench	Leeke Street	0	0.64	0.31	4
3014		3015		fill	drain		0	0.3	0.23	4
3015		3015		cut	drain		0	0.3	0.23	4
3016		3017		fill	drain		0	0.71	0.7	4
3017		3017		cut	drain		0	0.71	0.7	4
3018		0		layer	layer	levelling	0		0.18	4
3019		0		layer	layer	levelling	0		0.15	4
3020		0		layer	layer	levelling	0		0.15	4
3021		0		layer	layer	levelling	0		0.2	4
3022		0		layer	layer	levelling	0		0.04	4
3023		0		layer	layer	levelling	0		0.15	4
3024		0		layer	layer	levelling	0		0.33	3
3025		3027		fill	pit	quarry	0	4.1	0.47	4
3026		3027		fill	pit	quarry	0	1.43	0.6	4
3027	3334	3027		cut	pit	quarry	0			4
3028		2996		fill	pit	quarry	2.38	0.64	0.14	2
3029		3030		fill	post hole	Building 11	0	0.6	0.16	3
3030		3030		cut	post hole	Building 11	0	0.6	0.16	3
3031		3031		fill	post hole	Building 11	0	0.2	0.24	3
3032		3032		cut	post hole	Building 11	0	0.2	0.24	3
3033		3034		fill	post hole	Building 11	0	0.35	0.2	3
3034		3034		cut	post hole	Building 11	0	0.35	0.2	3
3035		3036		fill	post hole	Building 11	0	0.4	0.14	3
3036		3036		cut	post hole	Building 11	0	0.4	0.14	3
3037		3038		fill	post hole	Building 11	0	0.2	0.09	3
3038		3038		cut	post hole	Building 11	0	0.2	0.09	3
3039		3041		fill	post hole	Building 11	0	0.4	0.24	3
3040		3041		fill	post hole	Building 11	0	0.4	0.46	3
3041		3041		cut	post hole	Building 11	0	0.4	0.46	3
3042		3043		fill	post hole	Building 11	0	0.2	0.11	3
3043		3043		cut	post hole	Building 11	0	0.2	0.11	3
3044		3045		fill	post hole	Building 11	0	0.4	0.15	3
3045		3045		cut	post hole	Building 11	0	0.4	0.15	3
3046		2996		fill	pit	quarry	0.78	0.7	0.16	2
3047		2996		fill	pit	quarry	0.5	0.7	0.18	2
3048		2996		fill	pit	quarry	0.7	0.7	0.12	2
3049		2996		fill	pit	quarry	0.7	0.7	0.12	2
3050		2996		fill	pit	quarry	0			2
3051		3051		cut	post hole	Building 11	0	0.34	0.29	3
3052		3051		fill	post hole	Building 11	0	0.34	0.29	3
3053		3053		cut	post hole	Building 11	0	0.12	0.28	3
3054		3053		fill	post hole	Building 11	0	0.12	0.28	3
3055		3055		cut	post hole	Building 11	0	0.33	0.14	3
3056		3055		fill	post hole	Building 11	0	0.33	0.14	3

Cxt	Same as	Cut	Tr	Category	Feature Type	Function	Lth	Bth	Dth	Ph
3057		3057	cut		post hole	Building 11	0	0.35	0.14	3
3058		3057	fill		post hole	Building 11	0	0.35	0.14	3
3059		2923	fill		pit		0.8	0.1	0.25	3
3060		2923	fill		pit		0			3
3061		3061	cut		pit	quarry	2	1.5	0.6	2
3062		3061	fill		pit	quarry	0	1.5	0.6	2
3063		3063	cut		post hole	Building 11	0.4	0.33	0.18	3
3064		3063	fill		post hole	Building 11	0.4	0.33	0.18	3
3065		3065	cut		pit	quarry	2.05	1.3	1.15	3
3066		3065	fill		pit	quarry	2.05	1.3	0.88	3
3067		3065	fill		pit	quarry	0	0.7	0.3	3
3068		3068	cut		post hole	Building 11	0	0.3	0.07	3
3069		3068	fill		post hole	Building 11	0	0.3	0.07	3
3070		3070	cut		post hole	Building 11	0.22	0.22	0.09	3
3071		3070	fill		post hole	Building 11	0.22	0.22	0.09	3
3072		3072	cut		post hole	Building 11	0.5	0.5	0.24	3
3073		3072	fill		post hole	Building 11	0.5	0.5	0.24	3
3074	3137	3074	cut		clay lined pit		0			2
3075	3134	3074	fill		clay lined pit		0			2
3076		3076	cut		clay lined pit		1.8	1.15	0.84	2
3077		3076	fill		clay lined pit		1.8	0.04		2
3078		3076	fill		clay lined pit		1.8	1.11	0.84	2
3079		3079	cut		drain		0		0.34	4
3080		2923	fill		pit		0	0.56	0.2	3
3081		3081	cut		pit	quarry	2	1.8	2.4	2
3082		3081	fill		pit	quarry	0			2
3083		3081	fill		pit	quarry	0			2
3085		3081	fill		pit	quarry	0			2
3086		2412	fill		well		0	1	0.05	2
3087		2412	fill		well		0	1	0.08	2
3088		2412	fill		well		0	1	0.35	2
3089		2412	fill		well		0	0.72	0.16	2
3090		2412	fill		well		0	0.95	0.07	2
3091		3092	fill		pit		0.8	0.6	0.29	3
3092		3092	cut		pit		0			3
3093		3093	cut		pit	quarry	0	1.7	1.14	2
3094		3093	fill		pit	quarry	0	1.7	1.14	2
3095		3095	cut		pit	quarry	0	1.36	1.2	2
3096		3095	fill		pit	quarry	0	1.36	1.2	2
3097		3097	cut		pit	quarry	0	2	0.6	2
3098		3097	fill		pit	quarry	0	2	0.6	2
3099		3099	cut		pit	quarry	0	1.46	1.14	2
3100		3099	fill		pit	quarry	0	1.24	0.16	2
3101		3099	fill		pit	quarry	0	1.34	0.42	2
3102		3099	fill		pit	quarry	0	1.46	0.64	2
3103		3103	cut		pit	quarry	0	1.1	1.24	2
3104		3103	fill		pit	quarry	0	1.1	0.14	2
3105		3103	fill		pit	quarry	0	1.1	0.1	2
3106		3103	fill		pit	quarry	0	1.1	0.22	2
3107		3103	fill		pit	quarry	0	1.1	0.2	2
3108		3103	fill		pit	quarry	0	1.1	0.54	2
3109		3109	cut		pit	quarry	3	3.84	2.2	2
3110		3109	fill		pit	quarry	0	0.6	0.06	2
3111		3109	fill		pit	quarry	0	0.82	0.04	2

Cxt	Same as	Cut	Tr	Category	Feature Type	Function	Lth	Bth	Dth	Ph
3112		3109	fill		pit	quarry	0			2
3113		3109	fill		pit	quarry	0	1.02	0.04	2
3114		3109	fill		pit	quarry	0	0.82	0.1	2
3115		3109	fill		pit	quarry	0	2.4	1	2
3116		3109	fill		pit	quarry	0		0.2	2
3117		3109	fill		pit	quarry	0		0.2	2
3118	2965	3118	cut		pit		1.7	1.26	1.04	2
3119		3118	fill		pit		0	1.26	0.5	2
3120		3118	fill		pit		0	1.26	0.32	2
3121		3118	fill		pit		0	1.16	0.2	2
3122		3125	fill		pit	quarry	0.8	2.52	0.26	2
3123		3125	fill		pit	quarry	0.8	1.82	0.26	2
3124		3125	fill		pit	quarry	0.7	1.6	0.48	2
3125		3125	cut		pit	quarry	0.7	1.6	0.7	2
3126		3127	fill		pit	quarry	0.8	0.9	0.4	2
3127		3127	cut		pit	quarry	0.8	0.9	0.4	2
3128		2412	fill		well		0	1.39	0.28	2
3129		2412	fill		well		0	1.39	0.24	2
3130		2412	fill		well		0	1.07	0.27	2
3131		2412	fill		well		0	0.64	0.08	2
3132		2412	fill		well		0	0.76	0.11	2
3133	99	3133	cut		pit	quarry	2	1.4	0.92	2
3134		3133	fill		pit	quarry	2	1.4	0.64	2
3135		3133	fill		pit	quarry	2	1.4	0.04	2
3136		3133	fill		pit	quarry	2	1.4	0.3	2
3137		3137	cut		clay lined tank		0	1.1	1.12	2
3138		3137	fill		clay lined tank		0	1.1	0.8	2
3139		3137	fill		clay lined tank		0	0.5	0.08	2
3140		3137	fill		clay lined tank		0	1	0.12	2
3141		3137	fill		clay lined tank		0	0.9	0.2	2
3142		3137	fill		clay lined tank		0		0.04	2
3143		3143	cut		post hole	Building 11	0.2	0.2	0.15	3
3144		3143	fill		post hole	Building 11	0.2	0.2	0.15	3
3145		2554	fill		well	structural	0	0.1	0.3	2
3146		2554	fill		well		2.4	2.55		2
3147		3147	cut		post hole	structure, manor plot	0.4	0.36	0.26	3
3148		3147	fill		post hole	structure, manor plot	0.4	0.36	0.16	3
3149		3147	fill		post hole	Structure, manor plot	0.25	0.25	0.1	3
3150		3150	cut		post hole	Structure, manor plot	0	0.7	0.35	3
3151		3150	fill		post hole	Structure, manor plot	0.62	0.7	0.35	3
3152		3150	fill		post hole	Structure, manor plot	0.65	0.6	0.13	3
3153		3153	cut		post hole	Building 11	0	0.55	0.31	3
3154		3153	fill		post hole	Building 11	0	0.52	0.31	3
3155		3153	fill		post hole	Building 11	0	0.1	0.21	3
3156		3156	cut		post hole	Building 11	0	0.58	0.2	3
3157		3516	fill		post hole	Building 11	0	0.58	0.2	3
3158		3158	cut		post hole	Building 11	0	0.34	0.08	3
3159		3158	fill		post hole	Building 11	0	0.34	0.08	3
3160	1939	3160	cut		well		1.64	2.22	4.4	2
3161		3160	fill		well		1.64	1.52	0.72	2
3162		3160	fill		well		1.64	1.92		2
3163		3160	fill		well		1.64	0.84		2
3164		0	layer				0			3
3165		3168	fill		oven/hearth		0.5	0.96	0.28	2

Cxt	Same as	Cut	Tr	Category	Feature Type	Function	Lth	Bth	Dth	Ph
3166		3168		fill	oven/hearth		0.5	0.92	0.06	2
3167		3168		fill	oven/hearth		1.3	1.3	0.38	2
3168		3168		cut	oven/hearth		1.3	1.3	0.38	2
3169		3204		fill	pit		0.3	0.66	0.42	2
3170		0		layer			0.4	0.65	0.07	2
3171		3171		cut	post hole	Building 11	0.15	0.45	0.18	3
3172		3171		fill	post hole	Building 11	0.15	0.45	0.18	3
3173		1927		fill	well		1.62	0.81	0.13	2
3174		1927		fill	well		1.62	0.81	0.07	2
3175		1927		fill	well		1.62	0.78	0.11	2
3176		1927		fill	well		1.62	0.82	0.08	2
3177		1927		fill	well		1.62	0.98	0.22	2
3178		3178		cut	post hole	Building 11	0	0.31	0.38	3
3179		3178		fill	post hole	Building 11	0	0.31	0.38	3
3180		3180		cut	post hole	Building 11	0	0.43	0.2	3
3181		3180		fill	post hole	Building 11	0	0.43	0.2	3
3182		3182		cut	post hole	Building 11	0.48	0.39	0.27	3
3183		3182		fill	post hole	Building 11	0.48	0.39	0.1	3
3184		3182		fill	post hole	Building 11	0.48	0.39	0.1	3
3185		3185		cut	post hole	Building 11	0	0.48	0.2	3
3186		3185		fill	post hole	Building 11	0	0.48	0.2	3
3187		3187		cut	post hole	Building 11	0	0.5	0.05	3
3188		3187		fill	post hole	Building 11	0	0.5	0.05	3
3189		3189		cut	post hole	Building 11	0	0.17	0.06	3
3190		3189		fill	post hole	Building 11	0	0.17	0.06	3
3191		3191		cut	pit		0.8	0.45	0.35	2
3192		3191		fill	pit		0.8	0.45	0.35	2
3193		3193		cut	pit		0.79	0.41	0.29	2
3194		3193		fill	pit		0.79	0.41	0.29	2
3195		3195		cut	pit		0.9	0.36	0.17	3
3196		3195		fill	pit		0.9	0.36	0.17	3
3197		3197		cut	pit		0	0.72	0.3	3
3198		3197		fill	pit		0	0.72	0.3	3
3199		3199		cut	pit		1.4	0.75	0.86	2
3200		3199		fill	pit		0		0.2	2
3201		3199		fill	pit		0.7	0.8	0.08	2
3202		3199		fill	pit		1.1	0.75	0.7	2
3203		3199		fill	pit		0			2
3204		3204		cut	pit		0.3	0.66	0.42	2
3205		3212		fill	pit	quarry	0.8	1	0.4	2
3206		3212		fill	pit	quarry	0.8	0.8	0.5	2
3207		3212		fill	pit	quarry	0.45	0.36	0.48	2
3208		3212		fill	pit	quarry	0.5	0.3	0.12	2
3209		3212		fill	pit	quarry	0.5	0.58	0.1	2
3210		3212		fill	pit	quarry	0.5	0.32	0.8	2
3211		3212		fill	pit	quarry	0.82	0.38	0.6	2
3212		3212		cut	pit	quarry	0.75	0.9	0.74	2
3213		2554		fill	well		2	1.76	0.3	2
3214		3081		fill	pit	quarry	0			2
3215		3215		cut	pit	quarry	1.5	1	1.3	2
3216		3215		fill	pit	quarry	0		0.1	2
3217		3215		fill	pit	quarry	0		1.1	2
3218		3218		cut	pit		1	0.6	0.8	2
3219		3218		fill	pit				0.4	2

Cxt	Same as	Cut	Tr	Category	Feature Type	Function	Lth	Bth	Dth	Ph
3220		3218	fill		pit				0.35	2
3221		3221	cut		pit		0.75	0.75	0.6	2
3222		3222	fill		pit		0.75	0.75	0.6	2
3223		3223	cut		pit		2	1.2	0.7	2
3224		3223	fill		pit				0.5	2
3225		3223	fill		pit		0		0.4	2
3226		3226	cut		pit		0.8	0.8	0.5	2
3227		3226	fill		pit		0.8	0.8	0.5	2
3228		3228	cut		pit		0.8	0.5	0.4	2
3229		3228	fill		pit		0.8	0.5	0.4	2
3230		3230	cut		pit		0.8		1	2
3231		3230	fill		pit		0		1	2
3232		3364	fill		pit		1.44		0.46	3
3233		3238	fill		pit	quarry	0.86	0.84	0.62	2
3234		3238	fill		pit	quarry	0.76	0.44	0.1	2
3235		3238	fill		pit	quarry	1.14	1	0.34	2
3236		3238	fill		pit	quarry	0.98	0.76	0.4	2
3237		3238	fill		pit	quarry	0.98	0.44	0.22	2
3238		3238	cut		pit	quarry	2		2.2	2
3239		3240	fill		pit	quarry	0	0.7	0.92	2
3240		3240	cut		pit	quarry	0	0.7	0.92	2
3241		0	layer		levelling		0	0.74	0.18	2
3242		3245	fill		pit	quarry	0	1.5	0.35	0
3243		3245	fill		pit	quarry	0	1.3	0.1	0
3244		3245	fill		pit	quarry	0	1.2	0.9	0
3245		3245	cut		pit	quarry	0	1.5	1.35	0
3246		3212	fill		pit	quarry	0.5	0.26	0.16	2
3247		1939	fill		well		0	1.14	0.16	2
3248		1939	fill		well		0	1.45	0.1	2
3249		1939	fill		well		0	1.28	0.18	2
3250		1939	fill		well		0	1.73	0.21	2
3251		1939	fill		well		0	1.13	0.19	2
3252		1939	fill		well		0	1.23	0.1	2
3253		1939	fill		well		0	0.91	0.17	2
3254		3257	fill		post hole	Building 11	0.1	0.17	0.1	3
3255		3256	fill		post hole	Building 11	0.1	0.1	0.07	3
3256		3256	cut		post hole	Building 11	0	0.1	0.07	3
3257		3257	cut		post hole	Building 11	0	0.17	0.1	3
3258		3261	fill		post hole	Building 11	0.1	0.26	0.08	3
3259		3260	fill		post hole	Building 11	0.03	0.07	0.08	3
3260		3260	cut		post hole	Building 11	0.03	0.07	0.08	3
3261		3261	cut		post hole	Building 11	0.1	0.26	0.08	3
3262		3263	fill		post hole	Building 11	0.15	0.25	0.9	3
3263		3263	cut		post hole	Building 11	0.15	0.25	0.9	3
3264		3265	fill		ditch	boundary?	1.25	0.76	0.45	4
3265	2293 2403 3284	3265	cut		ditch	boundary?	2.5	0.76	0.45	4
3266		2554	fill		well	disuse	0	1.86	0.32	2
3267		2554	fill		well	slump	0	0.1	0.56	2
3268		2554	fill		well	disuse	1	1.2	0.14	2
3269		2554	fill		well	disuse	0	1.4	0.4	2
3270		3271	fill		pit		2.1	1.3	0.37	4
3271		3271	cut		pit		2.1	1.3	0.37	4
3272		3273	fill		pit		0	1.3	0.18	4
3273		3273	cut		pit		0	1.3	0.18	4

Cxt	Same as	Cut	Tr	Category	Feature Type	Function	Lth	Bth	Dth	Ph
3274		3280		fill	clay lined tank		0	1.8	0.18	2
3275		3280		fill	clay lined tank		0	0.9	0.16	2
3276		3280		fill	clay lined tank fill		0	1.9	0.4	2
3277		3280		fill	clay lined tank		0	4.2	0.4	2
3278		3280		fill	clay lined tank		0	1.98	0.14	2
3279		3280		fill	clay lined tank		0	3.2	0.6	2
3280		3280		cut	clay lined tank		4.2	1	0.7	2
3281		3280		fill	clay lined tank			1	0.1	2
3282		0		layer			0		0.16	4
3283		3284		fill	ditch	boundary?	0	0.4	0.4	4
3284	2293 2403 3265	3284		cut	ditch	boundary?	0	0.5	0.4	4
3285		3286		fill	pit	quarry	0		0.37	2
3286	80	3286		cut	pit	quarry	0		0.37	2
3287		3288		fill	post hole		0	0.4	0.28	0
3288		3288		cut	post hole		0	0.4	0.28	0
3289		3290		fill	pit		0		0.25	2
3290	3336	3290		cut	pit		0		0.25	2
3291		1927		fill	well		2.44	2.1	0.36	2
3292		1927		fill	well		2.44	2.06	0.32	2
3293		1927		fill	well		2.44	1.14	0.12	2
3294		1927		fill	well		2.44	1.14	0.12	2
3295		1927		fill	well		2.44	1.88	0.12	2
3296		1927		fill	well		2.44	1.42	0.2	2
3297		1927		fill	well		2.44	2	0.26	2
3298		3212		fill	pit	quarry	0.5	0.4	0.22	2
3299		3299		cut	pit		1.7	0.75	0.64	2
3300		3299		fill	pit		0		0.3	2
3301		3299		fill	pit		0		0.36	2
3302	3485	3302		cut	pit	?quarry	1.8	1		2
3303		3302		fill	pit	?quarry	0		0.42	2
3304		3302		fill	pit	?quarry	0		0.18	2
3305		3280		fill	clay lined tank		1.4		0.06	2
3306		0		layer			1.2		0.2	3
3307		3308		fill	pit		1		0.2	3
3308		3308		cut	pit		1		0.2	3
3309		3310		fill	post hole	Building 11	0.56		0.2	3
3310		3310		cut	post hole	Building 11	0.56		0.2	3
3311		3312		fill	pit		1.2		0.6	3
3312		3312		cut	pit		1.2		0.6	3
3313		3314		fill	post hole	Building 11	0			3
3314		3314		cut	post hole	Building 11	0.8		0.15	3
3315		0		layer			6	4.5	0.3	4
3316		0		layer			2.66		0.45	4
3317		0		layer			1.35		0.33	4
3318		0		layer			3.5		0.51	4
3319		3325		fill	?well	Plot 32	1.36		0.43	4
3320		3325		fill	?well	Plot 32	1.36		0.35	4
3321		3325		fill	?well	Plot 32	0.97		0.28	4
3322		3325		fill	?well	Plot 32	1.32		0.27	4
3323		3325		fill	?well	Plot 32	1.27		0.14	4
3324		3325		fill	?well	Plot 32	1.21			4
3325		3325		cut	?well	Plot 32	1.36		0.9	4
3326		3334		fill	pit		3.64		0.63	4
3327		3334		fill	pit		4.3		0.42	4

Cxt	Same as	Cut	Tr	Category	Feature Type	Function	Lth	Bth	Dth	Ph
3328		3334		fill	pit		2.6		0.62	4
3329		3334		fill	pit		2.45		0.23	4
3330		3334		fill	pit		1.73		0.21	4
3331		3334		fill	pit		1.13		0.21	4
3332		3334		fill	pit		0		0.12	4
3333		3334		fill	pit		4.17		0.1	4
3334	3027 3389 3491	3334		cut	pit		6	4	1.31	4
3335		3336		fill	pit		2.5	1.6	0.43	2
3336	3290	3336		cut	pit		2.5	1.6	0.43	2
3337		3338		fill	pit or post hole		0.5		0.46	0
3338		3338		cut	pit or post hole		0.5		0.46	0
3339		0		?layer	?pit		0		0.31	2
3340		3342		fill	drain		0		0.3	4
3341		3342		fill	drain		0		0.04	4
3342		3342		cut	drain		0		0.36	4
3343		0		layer			0.8		0.04	4
3344		3342		fill	drain		0.8		0.22	4
3345		3351		fill	pit		1.25		0.2	2
3346		3351		fill	pit		1.55		0.53	2
3347		3351		fill	pit		1.4		0.47	2
3348		3351		fill	pit		2.3		0.77	2
3349		3351		fill	pit		1.3		0.42	2
3350		3351		fill	pit		0			2
3351		3351		cut	pit		2.15		1.72	2
3352		3354		fill	pit	?quarry	1.2		0.4	2
3353		3354		fill	pit	?quarry	2		0.9	2
3354		3354		cut	pit	?quarry	2.5		1.48	2
3355		3355		cut	pit		2.34		0.56	2
3356		3355		fill	pit		0		0.32	2
3357		3355		fill	pit		0		0.24	2
3358		3358		cut	?post hole		0.25		0.11	0
3359		3358		fill	?post hole		0.25		0.11	0
3360		3360		cut	?post hole		0.19		0.16	0
3361		3360		fill	?post hole		0.19		0.16	0
3362		3362		cut	?post hole		0.49		0.17	2
3363		3362		fill	?post hole		0.49		0.17	2
3364		3364		cut	pit		0		0.46	3
3365		3351		fill	pit		1.3		0.8	2
3366		3354		fill	pit	?quarry	2.25		0.98	2
3367		3354		fill	pit	?quarry	1.1		0.1	2
3368		3354		fill	pit	?quarry	1.5		0.27	2
3369		3354		fill	pit	?quarry	1.2		0.28	2
3370		3370		cut	oven		1.8	1	0.3	2
3371		3370		fill	oven		1.8	0.95	0.08	2
3372		3370		fill	oven		1.5	0.95	0.02	2
3373		3373		cut	?post hole	structure, manor plot	0.55	0.5	0.42	3
3374		3373		fill	?post hole	structure, manor plot	0.55	0.18	0.4	3
3375		3373		fill	?post hole	structure, manor plot	0.55	0.32	0.44	3
3376		3354		fill	pit	?quarry	1.15		0.52	2
3377		3354		fill	pit	?quarry	1.5		0.56	2
3378		3354		fill	pit	?quarry	0.7		0.36	2
3379		3381		fill	pit		2	1.8	0.7	2
3380		3381		fill	pit		2.1	1.7	0.98	2
3381		3381		cut	pit		2.2		0.98	2

Cxt	Same as	Cut	Tr	Category	Feature Type	Function	Lth	Bth	Dth	Ph
3382		3384		fill	oven		1.2	1	0.08	2
3383		3384		fill	oven		1.2	1	0.03	2
3384		3384		cut	oven		1.7		0.08	2
3385		3351		fill	pit		1.15		0.21	2
3386		3388		fill	well		1.49		0.9	2
3387		3388		fill	well		1.42		0.98	2
3388		3388		cut	well		1.49		4.9	2
3389	3334 3491	3389		cut	pit		1.8		1.28	4
3390		3389		fill	pit		1.8	0.66	0.55	4
3391		3389		fill	pit		1.8	0.66	0.7	4
3392		3392		cut	pit		1.3	0.45	0.33	2
3393		3392		fill	pit		1.3	0.45	0.15	2
3394		3392		fill	pit		1.3	0.45	0.03	2
3395		3392		fill	pit		1.3	0.45	0.15	2
3396		0		layer			1.3	0.8	0.1	2
3397		3397		cut	pit		1.32		1.28	2
3398		3397		fill	pit		0		0.36	2
3399		3397		fill	pit		0		0.88	2
3400		3400		cut	drain		0	0.6	0.5	4
3401		3400		fill	drain		0	0.6	0.5	4
3402		3402		cut	drain		0	0.6	0.3	4
3403		3402		fill	drain		0	0.6	0.3	4
3404		3405		fill	pit		1.7	0.2	0.44	3
3405		3405		cut	pit		1.7		0.44	3
3406		3370		fill	oven		1.1	1	0.04	2
3407		3370		fill	oven		0.9	0.7	0.04	2
3408		3409		fill	pit		1.6	1.42	0.43	4
3409		3409		cut	pit		1.6	1.42	0.43	4
3410		3411		fill	post hole	?fence	0.23		0.5	3
3411		3411		cut	post hole	?fence	0.23		0.5	3
3412		3414		fill	post hole	?fence	0.32		0.07	3
3413		3414		fill	post hole	?fence	0.32		0.18	3
3414		3414		cut	post hole	?fence	0.32		0.24	3
3415		0		layer			0		0.12	3
3416		3420		fill	pit		1.63		0.42	2
3417		3420		fill	pit		1.79		0.71	2
3418		3420		fill	pit		1.76		0.16	2
3419		3420		fill	pit		2.9		1.25	2
3420		3420		cut	pit		3.3	2.9	2.25	2
3421		3422		fill	pit	?quarry	1.13		0.51	2
3422		3422		cut	pit	?quarry	1.13		0.51	2
3423		3425		fill	pit	?quarry	0.72		0.31	2
3424		3425		fill	pit	?quarry	1.31		0.75	2
3425		3425		cut	pit	?quarry	1.31		0.89	2
3426		0		layer			2.5		0.38	3
3427		3428		fill	pit	?quarry	0.96		0.34	2
3428		3428		cut	pit	?quarry	0.96		0.34	2
3429		3430		fill	pit	quarry	1.51		0.69	2
3430		3430		cut	pit	quarry	1.51		0.69	2
3431		3434		fill	pit	quarry	1.29		0.39	2
3432		3434		fill	pit	quarry	1.31		0.29	2
3433		3434		fill	pit	quarry	0.86		0.12	2
3434		3434		cut	pit	quarry	1.42		0.72	2
3435		3439		fill	pit	quarry	0.54		0.41	2

Cxt	Same as	Cut	Tr	Category	Feature Type	Function	Lth	Bth	Dth	Ph
3436		3439	fill		pit	quarry	0.64		0.34	2
3437		3439	fill		pit	quarry	0.66		0.32	2
3438		3439	fill		pit	quarry	0.54		0.12	2
3439		3439	cut		pit	quarry	0.73		1.11	2
3440		3444	fill		pit	quarry	1.49		0.41	2
3441		3444	fill		pit	quarry	1.25		0.32	2
3442		3444	fill		pit	quarry	1.26		0.14	2
3443		3444	fill		pit	quarry	0.96		0.26	2
3444		3444	cut		pit	quarry	1.49		1.06	2
3445		3449	fill		pit	quarry	0.86		0.37	2
3446		3449	fill		pit	quarry	0.8		0.26	2
3447		3449	fill		pit	quarry	0.69		0.18	2
3448		3449	fill		pit	quarry	0.52		0.12	2
3449		3449	cut		pit	quarry	0.86		0.93	2
3450		3370	fill		oven		1	0.9	0.17	2
3451		3451	cut		pit		3	1.69	1.62	2
3452		3451	fill		pit		1.02	0.9	0.12	2
3453		3451	fill		pit		1.16	0.94	0.03	2
3454		3451	fill		pit		3	1.69	0.68	2
3455		3451	fill		pit		0.75	0.62	0.19	2
3456		3451	fill		pit		1	0.78	0.04	2
3457		3451	fill		pit		3	1.6	0.49	2
3458		3451	fill		pit		3	0.88	0.08	2
3459		3451	fill		pit		3	1.58	0.31	2
3460		3451	fill		pit		3	1.6	0.3	2
3461		3451	fill		pit		3	0.85	0.43	2
3462		3451	fill		pit		3	0.67	0.05	2
3463		3451	fill		pit		3	1.42	0.22	2
3464		3451	fill		pit		3	1	0.06	2
3465		3451	fill		pit		3	0.93	0.21	2
3466		3451	fill		pit		1.12	0.41	0.03	2
3467		3451	fill		pit		1.08	0.35	0.13	2
3468		3470	fill		well		0		0.5	2
3469		3470	fill		well		0		0.5	2
3470		3470	cut		well		1.3		4.7	2
3471		3478	fill		pit	?quarry	0		0.2	2
3472		3478	fill		pit	?quarry	0		0.1	2
3473		3478	fill		pit	?quarry	0		0.05	2
3474		3478	fill		pit	?quarry	0		0.3	2
3475		3478	fill		pit	?quarry	0		0.6	2
3476		3478	fill		pit	?quarry	0		0.5	2
3477		3478	fill		pit	?quarry	0			2
3478		3478	cut		pit	?quarry	4	3.3	3	2
3479		3481	fill		pit		0			2
3480		3481	fill		pit		0			2
3481		3481	cut		pit		0		2.3	2
3482		3485	fill		pit	?quarry	0			2
3483		3485	fill		pit	?quarry	0			2
3484		3485	fill		pit	?quarry	0			2
3485	3302	3485	cut		pit	?quarry	0			2
3486		3486	cut		pit		1.5	1.1	0.6	2
3487		3486	fill		pit		1.2	1.1	0.6	2
3488		3488	cut		pit		1.2		1.16	2
3489		3488	fill		pit		1.2		0.49	2

Cxt	Same as	Cut	Tr	Category	Feature Type	Function	Lth	Bth	Dth	Ph
3490		3488	fill		pit		1.1		0.7	2
3491	3334 3389	3491	cut		pit	quarry	0			4
3492		3491	fill		pit	quarry	0			4
3493		3486	fill		pit		0.9	0.3	0.54	2
3494		3488	fill		pit		0.28		0.8	2
3495		3496	fill		pit		1.8		0.71	2
3496		3496	cut		pit		1.8		0.71	2
3497		3498	fill		pit		1		0.48	2
3498		3498	cut		pit		1		0.48	2
3499		3499	cut		pit	?quarry	2.9	2.8	2.6	2
3500		3499	fill		pit		0		0.4	2
3501		3499	fill		pit		0		0.4	2
3502		3499	fill		pit		0		0.4	2
3503		3503	cut		pit		2.25	1.8	0.94	3
3504		3503	fill		pit		0		0.36	3
3505		3503	fill		pit		0.3		0.16	3
3506		3503	fill		pit		1.8		0.1	3
3507		3503	fill		pit		2.25	1.8	0.4	3
3508		3516	fill		pit	quarry	0.97		0.22	2
3509		3516	fill		pit	quarry	1.79		0.19	2
3510		3516	fill		pit	quarry	1.43		0.17	2
3511		3516	fill		pit	quarry	1.75		0.11	2
3512		3516	fill		pit	quarry	0.71		0.08	2
3513		3516	fill		pit	quarry	1.62		0.28	2
3514		3516	fill		pit	quarry	1.73		0.38	2
3515		3516	fill		pit	quarry	1.39		0.2	2
3516		3516	cut		pit	quarry	1.81		1.08	2
3517		3519	fill		pit	quarry	0		0.3	2
3518		3519	fill		pit	quarry	0		0.37	2
3519		3519	cut		pit	quarry	0		0.5	2
3520		3527	fill		pit	quarry	1.02		0.39	2
3521		3527	fill		pit	quarry	1.15		0.49	2
3522		3527	fill		pit	quarry	0.63		0.21	2
3523		3527	fill		pit	quarry	0.52		0.11	2
3524		3527	fill		pit	quarry	0.48		0.2	2
3525		3527	fill		pit	quarry	0.45		0.12	2
3526		3527	fill		pit	quarry	0.42		0.1	2
3527		3527	cut		pit	quarry	1.15		1.38	2
3528		3528	cut		post hole	structure, manor plot	0.7		0.9	3
3529		3528	fill		post hole	structure, manor plot	0.7		0.9	3
3530		3533	fill		pit		0		0.52	2
3531		3533	fill		pit		0		0.7	2
3532		3533	fill		pit		0		0.32	2
3533		3533	cut		pit		2.1	1.55	1.14	2
3534		3537	fill		pit		0			2
3535		3537	fill		pit		0			2
3536		3537	fill		pit		0			2
3537		3537	cut		pit		1.6		0.6	2
3538		3539	fill		pit or post hole		0.6		0.5	2
3539		3539	cut		pit or post hole		0.6		0.5	2
3540		3543	fill		post hole	structure, manor plot	0.31		0.07	3
3541		3543	fill		post hole	structure, manor plot	0.37		0.12	3
3542		3543	fill		post hole	structure, manor plot	0.58		0.22	3
3543		3543	cut		post hole	structure, manor plot	0.66		0.22	3

Cxt	Same as	Cut	Tr	Category	Feature Type	Function	Lth	Bth	Dth	Ph
3544		3557	fill		pit	quarry	2.01		0.21	2
3545		3557	fill		pit	quarry	2.16		0.14	2
3546		3557	fill		pit	quarry	0.84		0.16	2
3547		3557	fill		pit	quarry	1.03		0.08	2
3548		3557	fill		pit	quarry	1.04		0.05	2
3549		3557	fill		pit	quarry	0.87		0.05	2
3550		3557	fill		pit	quarry	1.84		0.33	2
3551		3557	fill		pit	quarry	2.81		0.32	2
3552		3557	fill		pit	quarry	1.26		0.04	2
3553		3557	fill		pit	quarry	2.42		0.23	2
3554		3557	fill		pit	quarry	2.48		0.36	2
3555		3557	fill		pit	quarry	1.88		0.18	2
3556		3557	fill		pit	quarry	0.52		0.02	2
3557		3557	cut		pit	quarry	2.64		1.49	2
3558		3561	fill		post hole	structure, manor plot	0.36		0.13	3
3559		3561	fill		post hole	structure, manor plot	0.44		0.11	3
3560		3561	fill		post hole	structure, manor plot	0.39		0.27	3
3561		3561	cut		post hole	structure, manor plot	0.56		0.27	3
3562		3563	fill		post hole		0.2		0.08	2
3563		3563	cut		post hole		0.2		0.08	2
3564		3564	cut		post hole		0.36		0.34	0
3565		3564	fill		post hole		0.36		0.34	0
3567		3568	fill		pit		0.2		0.7	2
3568		3568	cut		pit		0		1.3	2
3569		3499	fill		pit		0.6		0.28	2
3570		3499	fill		pit		1.46		0.7	2
3571		3574	fill		pit		2.02		0.4	2
3572		3574	fill		pit		2.06		0.54	2
3573		3574	fill		pit		1.88		0.52	2
3574		3574	cut		pit		2.06		0.92	2
3575		3575	cut		pit or post hole		0.5		0.15	0
3576		3575	fill		pit or post hole		0.5		0.15	0
3577		3557	fill		pit	quarry	2.43		0.23	2
3578		3578	cut		well	Plot 37	0		3.5	4
3579		3578	fill		well	Plot 37	0			4
3580		3581	fill		pit or post hole		0.5		0.37	0
3581		3581	cut		pit or post hole		0.5		0.37	0
3582		3583	fill		post hole	structure, manor plot	0.55		0.25	3
3583		3583	cut		post hole	structure, manor plot	0.55		0.25	3
3584		3388	fill		well		1.18		0.28	2
3585		3388	fill		well		1.22		1.02	2
3586		3388	fill		well		0.32		0.1	2
3587		3388	fill		well		1.26		0.44	2
3588		3388	fill		well		0.47		0.18	2
3589		3589	cut		pit	?quarry	2.6		2.5	4
3590		3589	fill		pit	?quarry	0		0.1	4
3591		3589	fill		pit	?quarry	0		0.3	4
3592		3589	fill		pit	?quarry	1.65		0.15	4
3593		3589	fill		pit	?quarry	0.25		0.2	4
3594		3589	fill		pit	?quarry	0.4		0.3	4
3595		3589	fill		pit	?quarry	0.5		0.5	4
3596		3589	fill		pit	?quarry	2.6		0.7	4
3597		3597	cut		pit		1.1		1	4
3598		3597	fill		pit		0		0.45	4

Cxt	Same as	Cut	Tr	Category	Feature Type	Function	Lth	Bth	Dth	Ph
3599		3597	fill		pit		0.3		0.2	4
3600		3600	cut		pit		1.1		1	4
3601		3600	fill		pit		0.55		0.17	4
3602		3600	fill		pit		0.4	0.4	0.25	4
3603		3600	fill		pit		1.15	0.45	0.3	4
3604		3600	fill		pit		1	0.4	0.4	4
3605		3605	cut		pit		3.2	3	0.35	4
3606		3605	fill		pit		0			4
3607		3609	fill		pit		2.17		0.75	4
3608		3609	fill		pit		0		0.92	4
3609		3609	cut		pit		2.17		1.56	4
3610		3470	fill		well		0			2
3611		3481	fill		pit		0			2
3612		3481	fill		pit		0			2
3613		3478	fill		pit	?quarry	0			2
3614		3614	cut		drain		3.6	1	0.35	4
3615		3614	fill		drain		0			4
3616		3589	fill		pit	?quarry	0		0.2	4
3617		3589	fill		pit	?quarry	0		0.25	4
3618		3600	fill		pit		0.2		0.5	4
3619		3620	fill		slot or ditch	?boundary ditch	0	0.3	0.1	0
3620		3620	cut		slot or ditch	?boundary ditch	1.45	0.3	0.1	0
3621		3597	fill		pit		0.8	0.15	0.1	4
3622		3597	fill		pit		0.9	0.2	0.15	4
3623		3568	fill		pit		0.3		0.4	2
3624		3624	cut		pit		1.96		0.51	2
3625		3624	fill		pit		0			2
3626		3470	fill		well		0			2
3627		3470	fill		well		0			2
3628		3470	fill		well		0			2
3629		3470	fill		well		0			2
3630		3633	fill		pit		1	0.7	0.41	4
3631		3633	fill		pit		0		0.55	4
3632		3633	fill		pit		0		0.4	4
3633		3633	cut		pit		1	0.7	1.3	4
3634		3635	fill		pit		0		0.8	4
3635		3635	cut		pit		0		0.8	4
3636		3388	fill		well		1.69		0.27	2
3637		3388	fill		well		1.94		0.36	2
3638		3388	fill		well		2		0.18	2
3639		3388	fill		well		1.8			2
3640		3388	fill		well		1.76		0.08	2
3641		3388	fill		well		1.7		0.12	2
3642		3388	fill		well		1.62		0.3	2
3643		3388	fill		well		1.29			2
3644		3388	fill		well		0			2
10000	67	0	layer		natural		0			0

Table 6: *Context list*

APPENDIX B. FINDS REPORTS

B.1 Metal small finds

By Chris Howard-Davis

Silver

Quantification

- B.1.1 There was a single, poorly preserved and fragmentary, silver coin.

Methodology

- B.1.2 Every fragment was examined, assigned a preliminary identification and, where possible, date range. An outline database was created, using Microsoft Access 2000 format, and the data recorded (context, small finds number, material, category, type, quantity, condition, completeness, maximum dimensions, outline identification, brief description, and broad date) serve as the basis for the comments below. The state of preservation (condition) was assessed on a broad four point system (namely poor, fair, good, excellent).

Date range and evaluation

- B.1.3 The single coin fragment was found unstratified. It has not been dated.

Conservation

- B.1.4 The coin is well packed, but requires specialist cleaning in order to facilitate identification

Potential

- B.1.5 Although dependent on the final identification and dating of Sf 419, it is unlikely that this coin has any real potential to contribute further to the dating, interpretation and understanding of specific activities on the site.

Proposed further work

- B.1.6 The coin should be examined by an expert and the archival catalogue entry should be completed, and a brief note report prepared for inclusion into any proposed publication.

Complete archive catalogue entries	1 hour	Coin expert
Cleaning	0.5 day	Conservator

Copper alloy

Quantification

- B.1.7 In all, 203 fragments of fine metalwork, representing probably 169 objects, were submitted for assessment. Most were from stratified contexts spanning Periods 2 to 4, but 34 items were unstratified. Condition varied, but was generally fair to good, although many of the objects were covered with a hard, crystalline corrosion product, which, at this stage, made identification very difficult and generally provisional.

Methodology

- B.1.8 Every fragment was examined, assigned a preliminary identification and, where possible, date range. An outline database was created, using Microsoft Access 2000

format, and the data recorded (context, small finds number, material, category, type, quantity, condition, completeness, maximum dimensions, outline identification, brief description, and broad date) serve as the basis for the comments below. The state of preservation (condition) was assessed on a broad four point system (namely poor, fair, good, excellent).

Date range and distribution

- B.1.9 Although there were 14 coins and 4 jettons, only one can, as yet, be identified with confidence, being a farthing of 1822, found unstratified. There is a significant number of medieval and early post-medieval finds, reflecting the periods of activity identified from other sources of information. Cellar fill 1907 produced more material than any other individual context (27 items, c 16% of the items represented), with a marked concentration on the late seventeenth to mid-eighteenth century.

Evaluation

- B.1.10 The assemblage is of interest, with a marked emphasis at all periods, on items associated with personal appearance and apparel. There are 19 buckles (11.2% of the estimated number of items) and 14 buttons (8.2%), along with small numbers of aglets and other belt fittings, which altogether comprise 23% of the objects examined. In addition, there is a large group of dress pins (c 34; c 20% of the items) many of which would have been used to secure clothing and feminine headwear (Beaudry 2006, 14), as well as in sewing. Interestingly there were also six thimbles, although all were recovered unstratified.
- B.1.11 Nine of the 14 coins and one jetton (Sf 51) were unstratified, but included the only one from the site to be readily identifiable, being Sf 35, a farthing of 1822. Period 2 contexts produced only one coin and one probable jetton; the former (Sf 202), from quarry 1940 (fill 1941) being unidentifiable, and the latter (Sf 332) from quarry 2096 (fill 2033) probably of early post-medieval date.
- B.1.12 In Period 3, jettons (Sf 94, Sf 123, Sf 222), all most likely to be early post-medieval, come from floor 75, pit 1741 (fill 1710), and cellar fill 1907, respectively. Probable coins (Sf 44, Sf 223, Sf 290) come from the fill (732) of boundary ditch 830, cellar fill 1907, and well 1456 (fill 2248) respectively. A single coin came from Period 4 layer 214, and is, again, unidentifiable.
- B.1.13 Items of personal attire are almost completely confined to buckles and buttons, with 19 buckles and 14 buttons noted within the assemblage, along with a handful of other associated items. Only two of the buckles come from Period 2 contexts, and both are medieval forms. Sf 490, from quarry 3354 (fill 3353) is a complete, but broken, plain double oval frame, and Sf 503, from pit 3351 (fill 3346) is also a double oval frame, this time incomplete. The surviving loop has knobs. Although not precisely dateable, double frames were perhaps most common in the late fourteenth and fifteenth centuries (Egan and Pritchard 1991, 53), continuing into the sixteenth (Whitehead 2003). There is, in addition, the cast pin from an annular buckle or brooch (Sf 47) from buried soil 828. A relatively early form, these are mostly dated to the mid-fourteenth to the mid-fifteenth century (Whitehead 2003).
- B.1.14 Period 2 also produced three examples of embossed decorative strap mounts. Sf 131, from levelling layer 1612 is octagonal in form, and can be paralleled amongst medieval examples from London (Egan and Pritchard 1991, fig 122). Sf 129, from quarry 1638 (fill 1636) is round with four perforated lobes on its perimeter, and embossed with a rather cheerful long-tailed feline. Sf 411, from quarry 2725 (fill 2732), is rectangular. Sheet copper alloy mounts such as these appear in the early thirteenth century and

continue, probably into the sixteenth century (*op cit*, 162). Sf 133, from Period 2 surface 1613, has tentatively been identified as a belt plate or reinforcement of some kind. Sf 382, from pit 2665 (fill 2664) is a strap end of medieval form.

- B.1.15 It seems likely that buckle Sf 95, with a rectangular frame and buckle plate from Period 3 floor 75 is of medieval date (perhaps c 1350-1400), although the form is long-lived (Whitehead 2003), and could possibly be later. The group of decorative shoe buckles from Period 3 cellar fill 1907 (Sf 194, Sf 195, Sf 209, Sf 210) are all of late seventeenth to mid eighteenth century in date. Both Sf 195 and Sf 209 have stud chapes, allowing them to be fixed to the shoe, and can thus be dated c 1660-1720 (Whitehead 2003). A small, plain, riveted buckle plate (Sf 173) comes from the same context. A double oval frame (Sf 331) of the same general date, came from Period 3 quarry 2355 (fill 2359). Another eight buckles were found unstratified and most are likely to be of similar date. A plain strap end (Sf 381) was found unstratified, and cannot be dated with any accuracy.
- B.1.16 Lace tags, most typically of fourteenth-century or later date (Egan and Pritchard 1991, 284), came from Period 3 floor 79 (Sf 263) and quarry 1741 (fill 1771; Sf 320). Where discernible, these examples have edge-to-edge seams, suggesting that they might be post-medieval (Oakley 1979)
- B.1.17 Only one, poorly preserved button (Sf 623) was recovered from a Period 2 context, layer 954. It cannot be dated with any accuracy. Most of the buttons associated with Period 3 came from cellar fill 1907, which produced six examples (Sf 192, Sf 193, Sf 213, Sf 214, Sf 215, Sf 264). It is possible that Sf 213, a hollow-cast hemispherical button with integral loop, could be of late medieval date, but most of the group are effectively contemporary with the buckles from the same deposit, placing them in the late seventeenth to mid-eighteenth century. Sf 264, however, a stamped four-hole sew-through button inscribed 'Parfitt Cambridge' is without doubt considerably later. Sf 43, from boundary ditch 816 (fill 818) is probably of eighteenth-century date, but Sf 410, inscribed 'Kettering Co op' which is from pit 2659 (fill 2660) is considerably later, post-dating the foundation of the Kettering Industrial Co-operative Society in 1866.
- B.1.18 Three more buttons came from Period 4 contexts, all of them (Sf 105 from the fill of structure 1221; Sf 349 from pit 1995 (fill 1994); Sf 558 from quarry 3589 (fill 3595) are late in date, Sf 558 probably being of nineteenth or early twentieth century date. Two further, probably modern, buttons were recovered unstratified (Sf 10, Sf 11).
- B.1.19 There were, in addition, a plain tapering sheath, provisionally identified as a sword or dagger chape (see, for instance Howard-Davis 2008, fig 268) from Period 3 cesspit 1424 (fill 2344), and a fragment of a probably early post-medieval rowel spur (Sf 291) was unstratified.
- B.1.20 There was also a considerable number of dress pins; their distribution is shown in Table 7 below. Where discernible, they are, for the most part of the wound wire head type, some or them crimped into a spherical head, suggesting a date generally before the nineteenth century. Such pins were used extensively in sixteenth and seventeenth-century dress, for instance to secure ruffs and headwear, and this seems a likely origin for many of the pins from the site. They were, however, also used in dressmaking and sewing, and albeit they are all unstratified, there are five thimbles and a sewing ring from the site.

Period	Feature	Context	SF	No objects	No frags
2	Well 1939	1937	201	1	1
2	Quarry 1969	2021	232	1	1
2	Quarry 2038	2039	233; 234	2	3
2	Quarry 1940	2063	573	1	1

Period	Feature	Context	SF	No objects	No frags
2	Quarry 2486	2493	317	1	1
2	Pit 3076	3078	576	1	1
2	Pit 3451	3461	536	1	1
2	Pit 3574	3571	541	1	1
3	?Well 1577	1584	127	1	2
3	Cess-pit 1424	2119	246	1	1
3	Cess-pit 1424	2333	330	1	1
3	Cess-pit 1424	2336	329; 572	2	2
3	Cess-pit 2136	2232	318	3	6
3	Quarry 2355	2359	314	1	1
3	Pit 3002	2850	415, 575	2	2
3	Pit 3503	3507	517, 519, 577	12	12
4	Layer	214	65	1	1
4	Pipe trench 350	455	26	1	1

Table 7: *Distribution of pins*

- B.1.21 The thimbles include at least one medieval example (Sf 13), and a second example (Sf 93) is likely to be early post-medieval, perhaps seventeenth century. The remainder, taller, and made from sheet metal (SF 37, SF 90, SF 97, SF 547), are probably eighteenth-century or later.
- B.1.22 Most of the remainder of the identifiable objects are day-to-day household types. Those most easily identifiable, for instance spigot handles Sf 22 and Sf 33, teaspoon Sf 15 and late medieval/early post-medieval crotal bells Sf 255 and Sf 418, were all found unstratified.
- B.1.23 A tentatively identified vessel fragment came from Period 2 quarry 1940 (fill 2498), but nothing else from Period 2 seemed to have a domestic origin.
- B.1.24 Period 3 cellar fill 1907 produced two relatively small pan weights (Sf 191, Sf 217), a drop handle (Sf 265), and small copper alloy nails and tacks (Sf 196, Sf 197, and Sf 321), but no other recognisable objects. More small nails were from pit 3503 (fill 3507).
- B.1.25 Drop handle Sf 109, with a threaded screw fixing, is presumably a late item, found on Period 3 external surface 1260, as is a second, substantial handle from 2632 (Sf 376). A small round lock plate (Sf 171) from pit 1741 (fill 1710) is post-medieval or later.
- B.1.26 Six small plain rings, used for a wide range of purposes, all came from Period 3 contexts, three of them (Sf 211, Sf 212, Sf 224) from cellar fill 1907, one (Sf 225) from boundary ditch 2020 (fill 2018), one (sf 315) from cesspit 2136 (fill 2135), and one (Sf 92) from floor 620.
- B.1.27 A small ferrule, part-filled with lead, came from Period 4 structure 1221 (fill 1225). Probably the latest copper alloy find from the site, Sf 30, from Period 4 pit 628 (fill 629) is part of a telephone or wireless radio (Gecophone) patented by GEC. The General Electric Corporation was founded in 1889, and continues in existence to today.
- B.1.28 A few small drips and runs of solidified metal might point to limited metal-working in Periods 2 (SF 284, Sf 625) and 3 (Sf 218, Sf 114), but they are insufficient to comment upon beyond mentioning their presence.
- B.1.29 As with any copper alloy assemblage, many fragments remain unidentified, especially in view of the dense corrosion products. Others are small fragments of sheet metal, some cut into strips, or triangles presumably offcuts from use to some other purpose.

Conservation

- B.1.30 The finds are well packed, but a significant number of them require cleaning and the removal of corrosion products before provisional identifications can be confirmed.

Potential

- B.1.31 The fine metalwork has moderate potential to contribute further to the dating, interpretation and understanding of day-to-day activities on the site.

Proposed further work:

- B.1.32 The entire assemblage would benefit from x-ray. Archival catalogue entries should be completed, and a discursive report prepared for inclusion into any proposed publication.

The lead

Quantification

- B.1.33 Twenty-seven fragments of lead, representing probably 24 objects, plus a large number of small amorphous drips (not quantified) were submitted for assessment. Most were from stratified contexts, but four were recovered unstratified. Lead was only recovered from contexts assigned to Periods 2 and 3, with its complete absence from Period 4 being surprising, if not an artefact of on-site collection policies. Condition varied, but was generally good.

Methodology:

- B.1.34 Every fragment was examined, assigned a preliminary identification and, where possible, date range. An outline database was created, using Microsoft Access 2000 format, and the data recorded (context, small finds number, material, category, type, quantity, condition, completeness, maximum dimensions, outline identification, brief description, and broad date) serve as the basis for the comments below. The state of preservation (condition) was assessed on a broad four point system (namely poor, fair, good, excellent).

Date range and distribution

- B.1.35 As is often the case with lead artefacts, few were chronologically diagnostic. Apart from the large numbers of small drips from Period 3 pits 573 and 574, there were no particular concentrations of finds.

Evaluation

- B.1.36 Very few of the lead fragments were from recognisable objects. Material from Period 2 appeared, for the most part, to derive from the day-to-day use of lead within buildings. Most obvious of these were two small fragments of milled lead came (Sf 543) from pit 3574. Although milled came was first produced in the fourteenth century (Knight 1985), the deep H-section of these fragments suggests a post-medieval date. It is possible that Sf 189, from quarry 1868 (fill 1717), a fragment of cast strip, was intended to be used to produce came. Three cut fragments of sheet (Sf 170, Sf 259, Sf 364), from the fill (1684) of boundary ditch 1683, the fill (2098) of pit 2096, and the fill (1941) of quarry 1940 respectively, are most likely to be offcuts generated by the use of sheet lead in construction, as are the three small rolls of sheet (Sf 183), one of them chisel-cut, from 1796, the fill of pit 1794.
- B.1.37 Only one Period 2 object can be associated with daily life. A small cast plug (Sf 569) of a type commonly used to repair ceramic vessels, came from a fill (3643) of well 3388.

Although a small fragment of pottery remains visible within the plug, it cannot be characterised, and cannot contribute towards dating.

- B.1.38 The range of lead objects from Period 3 is broadly similar, deriving mainly from the structural use of lead. A short fragment of thin milled sheet (Sf 135 and Sf 205) came from pit 985 (fill 983) and cellar fill 1907, and if not window came *per se*, must be closely associated. Twisted and folded fragments of sheet (Sf 42, from layer 810) and twisted strip (Sf 24 and Sf 110), from levelling layer 422 and floor 1285, are most likely to be offcuts, and solidified drips of melted metal come from cellar fill 1907 (Sf 204), pit 473 (fill 471, Sf 452), and pit 474 (Sf 52 from fill 576 and Sf 453 from fill 577). An oddly-shaped annular fragment (Sf 369) from pit 2612 (Sf 2614) could also have been formed by a spill of molten metal.
- B.1.39 A single heavily corroded pan weight came from the fill (1907) of inn cellar 1906, and two almost identical, but unidentifiable, objects, both heavy lunate objects with a small knob on their upper surfaces (Sf 428, Sf 429) and presumably lids or closures of some kind, came from levelling layer 3024.
- B.1.40 Now crushed, a small half-round vessel, likely to be of pewter, and found unstratified (Sf 21) has been identified a food or water container from a bird cage. See, for instance Egan 2005, fig 124.617, where the type is given a date of the late seventeenth century at the latest. Other unstratified finds comprise a plain oval label (Sf 18), a roughly cast conical weight (Sf 99), and a bag seal (Sf 39) the inscription perhaps indicating a date of 1817.

Conservation

- B.1.41 The finds are well packed and in general require no further conservation, although bird cage container Sf 21 would benefit from cleaning.

Potential

- B.1.42 The lead has no real potential to contribute further to the dating, interpretation and understanding of specific activities on the site.

Proposed further work

- B.1.43 Archival catalogue entries should be completed, and a brief note, including comment on the bird trough, prepared for inclusion into any proposed publication.

The ironwork

Quantification

- B.1.44 In all, 539 fragments of ironwork were submitted for assessment. At this stage in the analysis, and in the absence of x-rays, no attempt has been made to estimate the number of objects represented. Most were from stratified contexts within Periods 2 and 3 (32.5% and 64% respectively), with only a small number from Period 4, and only one which was recovered unstratified. Condition varied only slightly, and was generally poor, all of the objects being obscured by ferrous corrosion products, which, at this stage, made identification very difficult and generally provisional. The chronological distribution of ironwork is shown in Table 8.

	Total ironwork	Nails			Other		
		No frags	%age total ass	%age period ass	No frags	%age total ass	%age period ass

Period 1	0	0	-	-	0	-	-
Period 2	175	128	23.7	73.1	47	8.7	26.8
Period 3	345	265	49.1	76.8	80	14.8	23.2
Period 4	17	9	1.6	53	8	1.5	47
Unstrat	2	0	-	-	2	-	-
Total	539	402	74.5		137	25.5	

Table 8: *Distribution of ironwork from the site by period*

Methodology

- B.1.45 Every fragment was examined, assigned a preliminary identification and, where possible, date range. No x-radiography was undertaken as this stage in the analysis. An outline database was created, using Microsoft Access 2000 format, and the data recorded (context, small finds number, material, category, type, quantity, condition, completeness, maximum dimensions, outline identification, brief description, and broad date) serve as the basis for the comments below. The state of preservation (condition) was assessed on a broad four point system (namely poor, fair, good, excellent).

Date range and distribution

- B.1.46 As is often the case, the majority of the ironwork is effectively undateable, being, for the most part simple and long-lived forms. The few horseshoes offer some potential for general dating, but otherwise the ironwork is dated from its context, rather than *vice versa*. There was no ironwork from Period 1 contexts, and very little from Period 4. It is not, however, certain as to whether the latter is an artefact of selective collection from the latest contexts on the site.
- B.1.47 Particular concentrations of ironwork were unusual, with even as many as 10 objects from a single context being rare. Period 3 Cellar fill 1907, however, stands out, with well over 100 items. This echoes the concentration of other material groups in the same deposit, and presumably reflects the long-term use of the cellar for storage and/or the haphazard accumulation of unwanted items.

Evaluation

- B.1.48 The assemblage seems to have a relatively limited range, with almost nothing standing out as diagnostic of specific activity, with most of the recognisable items deriving from structures on the site, or reaching it in material dumped from elsewhere.
- B.1.49 As is apparent from Table 8, the ironwork from Period 2 was dominated by nails, and nail fragments, with 56 contexts producing at least one, but only eight producing more than five, and none more than nine, perhaps suggesting that nailed structures, furniture or fittings were rare. To these can be added a small number of other structural items, for instance the L-shaped pintle or wall hook from well 784 (fill 1246).
- B.1.50 There was only one item of apparel from this Period, a small round-framed buckle (Sf 514) from quarry 3478 (fill 3474). Although not of a particularly diagnostic form (possibly c 1350 on), it reflects the presence of a number of later medieval objects in Period 2 contexts.
- B.1.51 Most of the remaining ironwork from Period 2 is effectively unidentifiable being small fragments of sheet, narrow strip, or amorphous lumps. There are, however, small blade fragments (identified by their distinctive triangular cross-section) from quarry 1940 (fill 1968), quarry 2096 (fill 2097), quarry 2272 (fill 2502), and well 1927 (fill 3297). Their presence in these features perhaps indicated that all were at some time receiving domestic refuse. A square plate from pit 3451 (fill 3456) has been provisionally identified as a lock plate, and fragments of narrow iron strip (Sf 511) from well 1927 (fill

3297) seem likely to be fragmentary hoops from a stave-built vessel, perhaps even a bucket.

- B.1.52 The bulk of the ironwork assemblage (64%) was recovered from Period 3 contexts. Of these c 77% are nails, and no doubt derive from structures associated in some manner with the site. As seen in Period 2, there were very few dense concentrations of nails, with only three out of 44 contexts producing more than five nail fragments (16 from pit 3503 (fill 3507) and eight from well 1456 (fill 1457). That seen in cellar fill 1907, which produced in excess of 160 nails, can be regarded as exceptional for the site. Other probable structural items include three hinge fragments from cellar fill 1907 (Sf 146, Sf 148, Sf 155) and a fourth fragment, from a strap hinge (Sf 128) from well 1577 (fill 1584); a wall hook (Sf 79) from pit 430 (fill 546); a large staple (Sf 144) from cellar fill 1907; a looped pin (Sf 156) from the same context; and a large spike (Sf 596) from pit 628 (fill 629). Although not strictly structural, a large key with a kidney-shaped bow (Sf 430), from levelling layer 3024, is probably of seventeenth century date.
- B.1.53 There are no obvious personal items beyond the limited number of blade fragments, which might be regarded as personal possessions. Where sufficient survived, these could be identified as seventeenth century types, with a straight back and long narrow triangular blades; Sf 248 was recovered from cesspit 1424 (fill 2117) and Sf 378 from quarry 2636 (fill 2634). Other less diagnostic fragments come from cellar fill 1907 (Sf 160), well 1456 (Sf 270; fill 1459), and Sf 71 from pit 430 (fill 546). Sf 242, from foundation 2090 (fill 2089) appears to be a relatively small curving blade, and could possibly be a reaping or pruning hook or similar agricultural tool. It seems likely that Sf 521 is also part of the blade of an, as yet unidentified, tool, coming from pit 3503 (fill 3507).
- B.1.54 In Period 3 there is, for the first time, is slight evidence for the presence of horses on the site, although there were only four fragments of horseshoe. That from well 1456 (fill 2369) is probably a medieval form and can be regarded as potentially residual. That from cesspit 1424 (Sf 250; fill 2149) is probably early post-medieval; a second fragment (Sf 334) from the same context is undiagnostic. The fragment (Sf 174) from cellar fill 1709 is a late type, probably contemporary with other material from the cellar. A large rectangular buckle (Sf 149) from the same fill seems most likely to derive from horse harness, as does a smaller oval one (Sf 27) from layer 494. The scarcity of horse gear might be regarded as surprising in view of the interpretation of one of the structures on the site as an inn.
- B.1.55 A small and disparate group of other iron objects, probably all best regarded as household objects, came from cellar fill 1907. These included a jar lid (Sf 207), chain links (Sf 627), a large deep cylindrical collar (Sf 157), a less substantial collar or ferrule (Sf 208), and a corner reinforcement (Sf 158), the flaring shape of which might suggest that it was intended to be decorative. As already discussed with regard to Period 2, a large proportion of the assemblage remains unidentified, comprising various fragments of strip, sheet, wire, etc.
- B.1.56 Although there was only a small group from Period 4 contexts, it seems relatively varied, and alongside the ubiquitous nails, there was a vessel fragment (Sf 49) from well 931 (fill 927), and although it was not possible to be conclusive at this stage, it seems likely to be of cast rather than wrought iron, placing it firmly in the post-medieval or modern period. A second item, Sf 395, from backfill 2756 is clearly cast iron. A single blade fragment (Sf 142) is from pit 10110 (fill 1009).

Conservation

B.1.57 The finds are well packed, but the entire assemblage requires x-ray before identifications can be confirmed and refined.

Potential

B.1.58 The ironwork has very little potential to contribute further to the dating, interpretation and understanding of day-to-day activities on the site. The assemblage from cellar fill 1907 stands out, and perhaps warrants being studied in more detail.

Proposed further work:

B.1.59 The entire assemblage would benefit from x-ray. Archival catalogue entries should be completed, and a discursive report prepared for inclusion into any proposed publication.

B.2 Industrial residue

By Peter Boardman

Introduction and methodology

- B.2.1 A total of 6.4kg of industrial residue was recovered from the hand excavation (Table 9). The majority of the assemblage consists of small fragments of non-blast furnace ferrous smelting activity.
- B.2.2 Context 1795 contains a partial plano-convex base fragment but was not the primary depositional area.
- B.2.3 The large fragment recovered from context 2607 appears to be fuel as slag consisting of un-combusted fuel, ash and vitrified clay. It has little metallic content to it. This would suggest that it does not originate from a metallic working area, either smelt or smithy. The feature from which it was recovered was a kiln and is probably the place of origin.
- B.2.4 Context 707 contains a mixed assemblage of ferrous smelting slag and three small fragments of thin, very dense ferrous slag with vitrified clay attachments. This is indicative of smithy furnace lining. The mix of both smithy and smelting material indicates that this feature is not the primary location for the assemblage.
- B.2.5 All other industrial residue material recovered from other contexts (see table below) was from ferrous smelting activities, none of which can be identified to have taken place on site.
- B.2.6 All the material recovered excluding that recovered from 2607 is a product of ferrous working mostly smelting with a small amount of smithing. None of the material recovered, except 2607, is a result of primary deposition areas and no features on site can be identified as be associated with metal working activities or structures.
- B.2.7 The assemblage can be said to be the result of 'background' deposition and indicates that ferrous extraction and working took place some where in the vicinity of, but not on the site. If further work takes place in the local area the potential of metal working should be considered during excavation but at this time no further analysis is required with this particular assemblage.

Ctxt	Period	Feature type	Object Name	Wt (kg)	Identification	Comments
1531	2	?	Metal-working debris	0.05	Ferrous smelting debris	non-primary deposit

Ctxt	Period	Feature type	Object Name	Wt (kg)	Identification	Comments
1764	2	layer	Metal-working debris	0.20	Ferrous smelting debris	non-primary deposit
1795	2	pit	Metal-working debris	1.14	Ferrous smelting debris	Partial PCB
1796	2	pit	Metal-working debris	0.15	Ferrous smelting debris	non-primary deposit
1970	2	pit	Metal-working debris	0.01	Ferrous smelting debris	non-primary deposit
2218	2	pit	Metal-working debris	0.01	Ferrous smelting debris	non-primary deposit
2372	2	post hole	Metal-working debris	0.05	Ferrous smelting debris	non-primary deposit
2607	2	oven/kiln	kiln residue	0.59	kiln remnants?	primary deposit
2664	2	pit	Metal-working debris	0.97	Ferrous smelting debris	some smithing residue
2955	2	pit	Metal-working debris	0.31	Ferrous smelting debris	non-primary deposit
2997	2	pit	Metal-working debris	0.03	Ferrous smelting debris	non-primary deposit
3088	2	well	Metal-working debris	0.03	Ferrous smelting debris	non-primary deposit
3202	2	pit	Metal-working debris	0.01	Ferrous smelting debris	non-primary deposit
3417	2	pit	Metal-working debris	0.20	Ferrous smelting debris	non-primary deposit
3419	2	pit	Metal-working debris	0.08	Ferrous smelting debris	non-primary deposit
3442	2	pit	Metal-working debris	0.08	Ferrous smelting debris	non-primary deposit
3459	2	pit	Metal-working debris	0.09	Ferrous smelting debris	non-primary deposit
3531	2	pit	Metal-working debris	0.15	Ferrous smelting debris	non-primary deposit
				4.15		
707	3	post hole	Metal-working debris	1.34	Ferrous smelting debris	non-primary deposit
732	3	Ditch	Metal-working debris	0.02	Ferrous smelting debris	non-primary deposit
754	3	pit	Metal-working debris	0.12	Ferrous smelting debris	non-primary deposit
818	3	Ditch	Metal-working debris	0.04	Ferrous smelting debris	non-primary deposit
917	3	layer	Metal-working debris	0.01	Ferrous smelting debris	non-primary deposit
1141	3	layer	Metal-working debris	0.02	Ferrous smelting debris	non-primary deposit
1147	3	layer	Metal-working debris	0.14	Ferrous smelting debris	"SF 103
1239	3	post-hole	Metal-working debris	0.08	Ferrous smelting debris	non-primary deposit
2025	3	Cellar, Building 12	Metal-working debris	0.26	Ferrous smelting debris	non-primary deposit
2137	3	pit	Metal-working debris	0.14	Ferrous smelting debris	non-primary deposit
2616	3	pit	Metal-working debris	0.06	Ferrous smelting debris	non-primary deposit
				2.23		
1113	4	pit	Metal-working debris	0.02	Ferrous smelting debris	non-primary deposit

Table 9: *Catalogue of slag*

B.3 Worked stone

By Ruth Shaffrey

Summary and Quantification

- B.3.1 A total of 79 pieces of stone were retained during the excavation and subsequently presented for assessment. The objects are mostly whetstones and querns but a few

other items were also found including mortars, a lamp and a rotating grindstone (Table 10).

Category	Number
Whetstone	52
Quern	15
Vessel	4
Other	6
Structural	2
Total	79

Table 10: *Quantification of worked stone*

Methodology

- B.3.2 The stone was rapidly assessed for potential but was not recorded. Key details affecting further analysis were noted so that subsequent work could be reliably costed.

Description

- B.3.3 The assemblage contains a significant number of whetstones (52). These can be broadly divided into three groups: Group A (schist), Group B (sandstone) and Group C (slate). The schist hones here are generally very crudely produced; many appear to have exploited unfinished pieces of schist and there are none of the finely made, pierced examples. Some of the schist pieces, although classified as whetstones for assessment purposes, do not appear to have been used or reworked. This, combined with the crude nature of most examples, indicates that the raw material was being imported to Cambridge (as has been observed in other towns). The implication is that there may have been a whetstone making workshop within the settlement. The vast majority of these whetstones are from medieval (Period 2) contexts.
- B.3.4 Group B forms a coherent group of very well made whetstones in stark contrast to the schist examples. Small pierced examples are notable by their absence and, although the whetstones cover a fairly wide range of profiles and cross sections, they appear broadly consistent in size, being large hand holdable stones. Chunky square sectioned whetstones are particularly common. The sandstones exploited vary from medium to coarse grained sandstones, some being coarser grained than is typical for whetstones. None have been petrographically examined at this stage and will require further analysis in order to assign them to lithological groups.
- B.3.5 Group C comprises a small group of slate whetstones, perhaps better classified as touchstones. A single rotating grindstone was also recovered (SF 89); these are more commonly found in urban than rural contexts, so we might have expected there to be more than one example given the number of whetstones. However, this is something that can be investigated more at analysis stage as well as looking at their presence in Cambridge.
- B.3.6 A total of fifteen quern/millstone fragments were recovered. As these have not been recorded or measured, it is not possible to determine how many of these are fragments from mechanically operated mills, however from their sheer size it is clear that at least two of them are from millstones. A single stone is of Millstone Grit, the remainder being of Lava. It will be worth examining the circumferences of these carefully to ensure none have been reused as rotating whetstones or kickstones (which resemble querns very

closely). Millstones were recovered from Period 3 and 4 contexts whilst querns were also found in Period 2 contexts. This suggests the mill is of post-medieval date, however, this will be investigated further when all the querns and millstones have been fully recorded. It is possible that the querns and or millstones relate to brewing, rather than flour production.

- B.3.7 Four examples of vessels were recovered. These include a fragment of ocatagonal lamp, comparable to a 13th century example from Canterbury (Frere and Stow 1983, 183), but from a post-medieval context here; one definite mortar, and two possible mortars or bowls. Four other items of stone comprise two rubbed stones, one disc and one unusual dimpled stone. Further work will be needed on the rubbed and dimpled stones to determine function. These might be best viewed as processors along with one other stone (SF 560). A single weight was also recovered (SF 506). Two final pieces of stone, both oolitic limestone, appear to be structural but will need further recording.

Ctxt	SF	Function	Notes	Lithology
1246		Quern	?Quern/Mill Stone Fragments	Lava
3124		Quern	?Quern/Mill Stone Fragments	Lava
1941		Quern	?Quern/Mill Stone Fragments.	Lava
2033		Whetstone raw material	Raw material	Norwegian Rag schist
2187		Possible whetstone	Worked Stone.	Stone
2197		Marble or whetstone	Worked Stone.	Stone
2249		Artefact	Worked Stone. Rubbed / oncave	Sandstone
2311		Stone	?Quern/Mill Stone Fragments.	Lava
3078		Whetstone	Unshaped raw material that is slightly worn on one face and thus probably used	Norwegian Rag
3096		Stone	?Quern/Mill Stone Fragments.	Lava
1285	111	Whetstone raw material	No evidence that this crude lump has been used for sharpening or shaped but it is a the raw material so may indicate manufacture	Norwegian Rag
75	115	Whetstone	Neat long example with one surviving end (rough).	Norwegian Rag
1457	116	Whetstone	Square section.	Sandstone
1499	118	Whetstone	Small neat whetstone. One original end, other damaged.	Norwegian Rag
1504	119	Whetstone	Good example of bulbous ended whetstone. One (fat) original end.	Norwegian Rag
1709	124	Whetstone	Square section.	Sandstone
1709	125	Whetstone	Good flat example. One side is flat but the stone is tapered so that the second side is pointed.	Norwegian Rag
1584	126	Quern		Lava
1757	152	Whetstone		Sandstone
520	153	Artefact	Burnt stone artefact with polished surface	Paludina limestone
1843	161	Disc	Roughly shaped disc,? Re-used Roofing Tile	Sandstone
1843	162	Whetstone	Slightly irregular but generally rounded cross section. One probable original end, one damaged end	Norwegian Rag
2033	163	Whetstone	Square section, well made but unusually coarse.	Coarse sandstone
1994	164	Whetstone	Square section	Coarse sandstone
1994	165	Whetstone	Square section, neat	Sandstone
2100	166	Whetstone	Roughly formed rectangular whetstone	Norwegian Rag

Ctxt	SF	Function	Notes	Lithology
2100	167	Whetstone	Rounded oval section. Rough original end. Not especially shaped but probably used	Norwegian Rag
2100	168	Whetstone	Roughly triangular section, not shaped	Norwegian Rag
1907	203	Whetstone	Square section.	Sandstone
99999	221	Mill Stone	Unstrat: ?Quern/Mill Stone.	Lava
1907	237	Whetstone	Does not look especially well shaped but it has definitely been used as it is smooth on some sides	Norwegian Rag
2089	239	Whetstone	Square section, neat.	Sandstone, coarse
812	240	Whetstone	Long bulbous and slightly irregular whetstone. Grooves from point sharpening	Norwegian Rag
2089	241	Whetstone		Sandstone
455	25	Whetstone	Not especially shaped or worked but is well used on two flat faces	Norwegian Rag
2163	254	Quern	?Quern/Mill Stone	Lava
2191	261	Whetstone	Well used, interesting shape.	Slate
546	28	Whetstone	Square section.	Sandstone
2117	287	Whetstone/touchstone	?Whetstone, Pierced. Possibly a writing slate originally? Check date	Slate
2197	292	Whetstone	Worn stone, possibly natural	Stone
2098	323	Whetstone	Neat with square section.	Micaceous sandstone
2801	324	Whetstone	Very neat square section, tapered to a point.	Sandstone
2348	335	Mill Stone		Lava
2496	339	Whetstone	Rectangular form and section, Deep grooves one one face	Norwegian Rag
1968	356	Quern	?Mill Stone.	Lava
1994	358	Whetstone	Oval section, unusually coarse.	Coarse sandstone
1994	363	Whetstone	?Whetstone. Grooved down one side.	Sandstone
2312	371	Quern	?Mill Stone.	Lava
2311	372	Whetstone	Roughly triangular cross section, bulbous at one end	Norwegian Rag
2616	373	Whetstone	Concave faces, square section.	Sandstone
99999	38	Whetstone	Unstratified. Tapered end.	Sandstone
2628	380	Quern	?Quern/Mill Stone.	Lava
99999	383	Structural	Unstrat: Worked.	Oolitic limestone
779	40	Whetstone	Small whetstone, flat with one well worn side	Norwegian Rag
787	41	Whetstone/touchstone	?Whetstone.	Slate
2774	412	Artefact	?Whetstone	Micaceous sandstone
99999	421	Whetstone	Rounded whetstone, bulbous	Norwegian Rag
2386	463	Quern	?Quern/Mill Stone.	Lava
3269	464	Possible mortar	Small Quern Fragment.	Stone
2197	471	Mill Stone	Re-used, covered in Mortar	Lava
3277	487	Whetstone	Edge fragment from a Whetstone. Not especially shaped but a little used	Norwegian Rag
3353	500	Whetstone raw material	Unshaped piece of schist. Unused or worked	Norwegian Rag
3353	501	Whetstone	Good example of a long slim whetstone	Norwegian Rag
3269	506	Weight	Worked Stone Artefact, Re-worked.	Stone
3269	507	Structural	Worked Stone.	Oolitic limestone

Ctxt	SF	Function	Notes	Lithology
3502	539	Whetstone	Square section,	Sandstone
3502	540	Whetstone	Square sectioned with flat faces and generally sharp arrises	Norwegian Rag
3460	545	Whetstone	Neat flat long whetstone. Appears to have both its original ends	Norwegian Rag
3460	549	Whetstone	Rectangular flat lump, not shaped but apparently used on one side	Norwegian Rag
3457	550	Whetstone	Small roughly shaped whetstone used along the edges	Norwegian Rag
3326	557	Mill Stone	Rynd chase.	Millstone Grit
3643	559	Artefact	Dimpled both sides, interesting object needs properly recording.	Clunch
3638	560	Processor		Shelly limestone
779	57	Quern		Lava
3460	570	Whetstone	Crude elongate lump that does not appear to have been shaped. However it has been used	Norwegian Rag
1233	81	Mortar		Oolitic limestone
593	82	Lamp	?Stone, sooting on inner surfaces. Octagonal flat bottomed lamp	Clunch
1407	83	Vessel	?Stone Mortar Frag. Vessel	Oolitic limestone
1449	88	Whetstone raw material	Not used or shaped but a whetstone raw material	Stone
610	89	Rotating grindstone		Sandstone
317	321 2	Rotary quern		Lava

Table 11: *Catalogue of worked stone*

Statement of Potential

- B.3.8 The assemblage of worked stone has considerable potential to contribute to our understanding of the status and nature of activity on site for example the lamp may be suggestive of high status while other objects are indicative of other types of activity (the disc and processors). The whetstones are particularly significant since there are so many and since they comprise two distinct groups possibly indicating different types of work. The querns may be domestic in origin, though the presence of the millstones certainly indicates the presence of a mill nearby. It is possible that that the mill was connected to the brewery and the environment evidence will need to be reviewed in relation to this possibility. Analysis of the stones will therefore help us understand how grinding was organised in the settlement.

Recommendations for further work

- B.3.9 Further work will consist of the full recording of all the objects, ensuring that function and lithology are recorded as well as wear patterns, dimensions etc. Some of the whetstones may need further analysis (thin sections) to determine provenance. Research for the report will need to focus on parallels and likely function for the uncommon objects.
- B.3.10 The querns and whetstones will form the focus of the publication report, although all the objects will be described, discussed and placed in their local and regional context. The querns will need to be closely examined in order to check whether any fragments are adjoining as well as determining how many of them are from mechanically operated millstones. Although most were probably recovered from contexts of reuse, it will be worth investigating their spatial and chronological distribution on site to understand the likely date of any mill. The whetstones will need assigning to geological class, where possible.

Spatial and chronological analysis should help us understand the significance of the difference between the two distinct groups of tools. Do they represent different jobs/ a change over time/ or different workshops? What do the differences and the nature of the whetstones tell us about industrial activity on site? Some discussion will need to take place with the small find specialist about what sorts of iron tools were used on site as the nature of the iron assemblage may help explain the limited variety, but significant number of whetstones.

- B.3.11 A selection of objects will need to be illustrated including an example of the range of whetstones present, estimated at about 10 items, the more complete quern and millstone examples as well as the lamp and dimpled stone, approximately 15 items in total.

B.4 Flint

By Anthony Haskins

Introduction

- B.4.1 A small assemblage of 25 flints (21 worked and four burnt) were recovered from 19 features and two layers dating to Periods 2-4 and these were from across the site. Twenty derived from Period 2 features, four from Period 3 features and layers and a single example came from a Period 4 well.
- B.4.2 The flint was assessed for typological and chronological indicators to see whether the material added to the interpretation of the site.

Methodology

- B.4.3 For the purposes of this report individual artefacts were scanned and then assigned to a category within a simple lithic classification system (Table 12). Unmodified flakes were assigned to an arbitrary size scale in order to identify the range of debitage present within the assemblage. Edge retouched and utilised pieces were also characterised. Beyond this no further detailed metrical or technological recording was undertaken during the analysis due to the residual nature and small size of the assemblage.

Quantification

TYPE	SUB TYPE	CLASSIFICATION	Totals
	<i>Platform at Right Angles</i>	<i>Blade</i>	1
	<i>secondary</i>		6
flakes (>25mm <50mm)	<i>tertiary</i>		2
flakes (>10mm <25mm)	<i>tertiary</i>		3
All blades	<i>secondary</i>		1
	<i>tertiary</i>		4
Retouched tools		Misc. retouched Flake	1
		Scraper	2
		Awl	1
burnt flint (all types)			4
		Totals	25

Table 12: *Flint quantification*

Results

- B.4.4 The flint was primarily struck from a dark greyish-brown to brownish-black opaque flint of reasonable quality with a mid brownish-yellow chalky cortex. Several pieces were struck from an opaque yellowish-brown flint with a similar cortex and one larger flake was formed on a semi translucent yellowish-grey flint with a number of grey inclusions within the material.
- B.4.5 A single heavily worked and exhausted platform at right angles blade core was recovered from the excavation. The core had been worked in a structured fashion into the body of the flint towards an area of surviving cortex. The small size of the core suggests that larger nodules of raw material were not available and the core is likely to be of Neolithic date.
- B.4.6 The debitage recovered from the assemblage is made up of a number of blades and narrow flakes, with only a large flake from context (2330) standing out as a large thick squat flake. It is likely that the material is primarily of earlier Neolithic date, with at least one flake of later prehistoric date. All the recovered material was in an abraded state and is likely to have been found in secondary depositional contexts.
- B.4.7 Several recognisable tool forms were recovered from the excavation. These include two fragments of scrapers, one a broken horseshoe scraper (from context 1917) of Neolithic date with abrupt and semi-abrupt retouch around the surviving margins and a second small side and end scraper (from context 3128) potentially of a slightly later date. A single awl from context 3367 was also recovered with an area of abrupt retouch near the proximal end and applied from the ventral surface into the dorsal surface to form the point. Finally a single flake (from context 3349) showed signs of retouch but did not confirm to common tool types and is most likely a tool of expedience.

Discussion

- B.4.8 The abraded nature of the assemblage would suggest that the assemblage is residual in nature and has been recovered from secondary depositional contexts. The majority of the assemblage is made up of narrow flakes and blades and is likely to be of Neolithic date. However, several elements within the assemblage are likely to be of later prehistoric date. The tool forms and core also fit this suggested date range. It is therefore likely the material derived from a nearby Neolithic and later prehistoric occupation or land use.

Conclusion

- B.4.9 This is a multi-period assemblage primarily of Neolithic date, but with elements of later prehistoric date recovered from secondary depositional contexts, suggesting that Neolithic and later prehistoric occupation or land-use occurred nearby.

B.5 Glass

by Carole Fletcher

- B.5.1 Archaeological works produced a moderate assemblage of glass weighing 26.106kg, of which the majority is vessel glass, the bulk of which are natural black glass bottles. The glass is catalogued in Table 13. A single fragment of medieval painted window glass, SF622, was recovered from pit **204**, the painted glass design has not been identified and the fragment is not recorded in the bulk catalogue. Several fragments of glass window in very poor condition may also be medieval. There are also examples of later

window glass including three large shards of bullseye or bullion glass from layer 2937. This type of glass (bullseye) is from the centre of a large circular sheet of glass, known as crown glass and was commonly made until the 19th century, the crown was cut into panes or quarries, which were diamond or square, and the bullion with its pontil mark left at the end of the process. This bullion was the cheapest part of the glass and was used in the houses of the lower classes. Some fragments of window glass from various contexts show evidence of having been leaded.

- B.5.2 Some of the glass recovered from cellar **1906**, context 1907, has been exposed to considerable heat, enough to cause distortion and devitrification, suggesting a high temperature fire. This may be evidence of the fire that, in 1731, destroyed 50 dwellings in the village of Barnwell.
- B.5.3 The assemblage also contains a small but significant collection of glass from drinking vessels of various periods including an optically-blown mesh, cylindrical beaker. The preliminary assessment indicates that several of the drinking glasses had been deposited some time after the form went out of use, suggesting a level of curation. This is also the case with some of the bottles.
- B.5.4 The most unusual find was from pit **2199**, context 2197, from which were recovered fragments of fine, hollow tubes of glass used in lampworking to produce glass baubles. No other evidence of glass working was recovered from the assemblage and this material may relate to craft working.

Methodology

- B.5.5 The glass was scanned and briefly catalogued, the majority of material has not been weighed as individual vessels. The glass which is not closely datable should be dated by association with the pottery and other material with which it was found.

Potential

- B.5.6** Comparison of this assemblage with material from adjacent sites would provide a broader understanding of the usage of glass vessels across the Barnwell settlement, especially in the 18th and 19th-20th centuries. Documentary research may help establish the use of buildings and the occupations of residents and relate these to the material recovered from cellars and pits on the properties.
- B.5.7 Additionally, there may be evidence of the fire of 1731 that destroyed part of the village, as some glass shows evidence of burning at temperatures that have distorted and partially devitrified the material.

Further work

- B.5.8 The drinking glass assemblage is worthy of further study and should be fully recorded. The fragments of lampworking glass should be fully recorded by a specialist.
- B.5.9 The bottle glass should be more fully catalogued and the complete and near complete bottles fully described. Bottle contents and manufacturer should be identified (where possible) for the 19th-early 20th century bottles. Comparison of the assemblage with assemblages from adjacent excavations should be considered. The more complete window glass shards from context 3621 should be examined and dated if possible. The medieval window glass SF622 should be recorded.

Glass catalogue

Ctxt	Form	Wt (kg)	Description	Overall Date
78	Bottle	0.474	Base shards in poor condition, heavily iridised and flaking	18th century
214	Bottle	0.047	Body shard natural black glass	19th century
214	Bottle	0.017	Miniature square/rectangular bottle broken at neck. Most likely held perfume or some other valuable material	19th or 20th century
218		0.001	Glass	Not closely datable
410	Bottle	0.004	Body shard from a natural black glass vessel	Not closely datable
455	Bottle	0.038	Shards from the neck of a natural black glass bottle	Late 18th and 19th century
537	Bottle	0.068	Shard from the base of a natural black glass and partial base shard from an aqua blue-green glass bottle	Not closely datable
537	Window glass	0.004	Shard of clear near colourless glass	Not closely datable, may be 19th and 20th century
540	Bottle	0.738	Glass bottle, almost complete.	
540	Window glass	0.001	Small shard of blue-green glass very thin	Not closely datable
632	Bottle	0.007	Small shard from a natural black glass bottle	Not closely datable
697	Bottle	0.086	Shard from a natural black glass bottle and fragments from a moulded meat paste jar	20th century
728		0.016	Car headlight fragment	20th century+
731	Bottle	0.019	A shard from a clear relatively colourless glass medium-sized phial with coarse pontil mark	18th century
732	Bottle	0.390	Base with coarse pontil mark from a clear green glass phial and shards from natural black glass bottle, including the neck and rim of a dark olive green/natural black glass English utility glass bottle	Late 18th and 19th century
732	Window glass	0.004	Shard of clear blue-green heavily iridised glass	Not closely datable
818	Handle	0.020	Handle from a natural black glass vessel	17th -18th or 19th-century
818	Bottle	0.176	Neck from cylindrical glass bottle and neck and upper part of shoulders from a tapered necked cylindrical mould-blown bottle	Late 18th-early 19th century
818	Window glass	0.022	Shards of what appear to be quarries, the edges of the leading can be seen showing they are irregular shaped	Not closely datable, but likely 18th or 19th century
822	Bottle	0.015	Shard of natural black glass	Not closely datable
853	Window glass	0.002	Single shard of heavily iridised green glass, much surface flaking that still bears evidence of having been leaded	Not closely datable
870	Bottle	0.015	Shard of olive green glass	Not closely datable
983	Bottle	0.285	Shards of natural black glass	Not closely datable
984	Window glass	0.010	Fragments of glass in exceptionally poor condition	Not closely datable
1005	Bottle	0.008	Shard of mid to dark olive green glass	Not closely datable
1009	Bottle	0.019	Shards from a mid to dark olive green bottle and from a natural black glass bottle	Not closely datable
1009	Window glass	0.003	Two shards of pale clear blue-greenish glass, fairly heavily iridised	Not closely datable
1043	Bottle	0.025	Shards from several glass vessels, two are slightly blue green, heavily iridised and probably 19th century. The third is a small clear fragment of colourless glass	19th century or later
1043	Window glass	0.015	Single large shard of glass with rounded edge possibly a fragment of muff/cylinder or crown glass, second fragment of clear almost colourless glass	Possibly 18th century
1044	Bottle	0.043	Fragment from the base of a natural black glass bottle	18th century
1044	Window glass	0.004	Single shard of glass with rounded edge, suggesting that it is muff/cylinder or crown glass	Possibly 18th century
1045	Bottle	0.002	Shard from a dark olive green bottle	19th-20th-century
1092	Bottle	0.728	Complete mid olive-green press moulded bottle with embossed lettering that reads Bailey & Tebbutt Brewers Cambridge. Comes complete with internal screw top that has lost part of its seal	Late 19th-20th-century
1092	Bottle	0.636	Complete clear slightly blue-green tinted Codd-type bottle marked Star Brewery Cambridge Ltd	19th century

Ctxt	Form	Wt (kg)	Description	Overall Date
1141	Bottle	0.036	Neck shard from a natural black glass bottle	Late 17th or early 18th century but could be later
1225	Bottle	0.047	Shards from a natural black glass bottle neck and base from a small clear colourless glass phial with pontil mark	18th-century
1225	Window glass	0.006	Shards of slightly blue-green iridised glass	Not closely datable
1239	Window glass	0.003	Single shard of clear near colourless glass in reasonable condition. Very few faults in the glass	Not closely datable
1259	Bottle	0.037	Base fragment from a natural black glass bottle	18th-19th century
1260	Bottle	0.141	Fragments of base from one or more natural black glass vessels bottles	Not closely datable
1296	Window glass	0.007	Single shard of glass, probably from either a sheet of cylinder or crown glass	Possibly 18th century
1304	Bottle	0.060	Shard of dark olive green/natural black glass bottle	Most likely 19th-20th century
1389	Bottle	0.101	Partial base shard and kick from a natural black glass bottle	17th/18th century
1457	Vessel	0.004	Vessel glass	Not closely datable
1460	Bottle	0.216	Base shard from a natural black glass bottle cylindrical in type	19th century
1485	Window glass	0.002	Fragment of flat clear slightly blue-green glass	Not closely datable
1536	drinking glass	0.058	Flat base with slight traces of polished out pontil scar from a cylindrical vessel	18th-19th century
1569	Vessel	0.004	Shards of clear almost colourless glass	Not closely datable
1572	Marble	0.008	Glass marble from a Codd-type bottle	19th century
1574	Drinking glass	0.016	Single shard from the stem of a drinking glass	18th century
1608	Bottle	0.012	Fragment of brown moulded glass vessel, it is a fragment of a brown bottle from the Cambridge Soda Water Company	19th or 20th century
1612	Bottle	0.007	Shard most likely from a natural black black glass bottle	Not closely datable
1614	Bottle	0.013	Heavily encrusted shard most likely a basal kick from a small bottle	Not closely datable
1619	Bottle	0.035	Shard of clear colourless press-moulded cylindrical bottle	19th-20th-century
1619	Window glass		Fragment of thick flat clear colourless glass	Not closely datable
1651	Bottle	0.007	Fragment from a clear near colourless press moulded glass vessel embossed with the partial word P A T, most likely representing 'patented'	19th-20th century
1778	Bottle	0.395	Shards from the base and body of one or more naturally black glass bottle bottles, a generic dark olive slightly flared at the base suggesting mould-blown and cylindrical	Late 18th-19th century
1784	Window glass	0.001	Two fragments of window glass in very poor condition, may be medieval	? Medieval/not closely datable
1907	Window glass	0.041	Shards of what originally may have been flat window glass, that have been distorted and partially devitrified by heat	Not closely datable
1907	Window glass	0.031	Shards of what originally may have been flat window glass, that have been distorted by heat	Not closely datable
1907	Bottle	0.005	Base shard from a relatively small glass phial in clear blue-green glass with a small pontil mark of the type common in the 18th century.	18th century
1907	Glass of unknown form	0.021	Shards of clear blue-green glass that have been warped and distorted by heat	Not closely datable
1907	Glass slag	0.062	Slag-like fragments that are distorted warped and devitrified glass that has been exposed to high temperatures	Not closely datable
1907	Bottle	0.965	Various shards of English natural black glass bottles, rounded wide bases with obvious pontil scars, fragments of upper body and a single example of a string rim. A number of shards have been heavily affected by heat/fire	Late 17th and early 18th
1907	Bottle	0.018	Shards of English natural black glass bottle that have been heavily affected by heat/fire	Not closely datable
1907	Window glass	0.311	Large number of fragments of window glass cut into quarries of various sizes. There is some degree of grozing on a few fragments. All the larger fragments show evidence of positioning of the lead, the majority appear to be diamond-type quarries with an occasional triangle and some irregular shapes. All show	17th-18th century

Ctxt	Form	Wt (kg)	Description	Overall Date
			evidence of weathering and the majority are corroded to some degree, although none are completely opaque. The majority appear to have been originally clear glass, but with a slightly greenish cast	
1907	Window glass	0.003	Shard of clear near colourless glass, very thin, appears to have lost much of its surface through patination flaking off	Not closely datable
1976	Bottle	0.026	Fragment from a clear near colourless press-moulded cylindrical or torpedo-shaped soda/sparkling water bottle	19th-20th century
1994	Bottle	0.857	Base shards and part of the upper wall of a natural black glass bottle	Late 18th early 19th-century
1994	Bottle	0.563	Base and neck from a natural black glass bottle	Late 18th early 19th-century
2016	Window glass	0.007	Several fragments of slightly greenish window glass in poor condition	Not closely datable
2018	Bottle	0.329	Neck and rim, and body shards from a small almost clear colourless glass phial	18th century
2018	Window glass	0.002	Single shard of heavily flaky iridised glass, appears to be clear but green tinged. Also shards including base fragments and neck fragment in a mid to pale olive green glass 18th century	18th century
2024	Bottle	0.007	Shard of mid to dark olive green glass bottle	Not closely datable
2025	Vessel	0.001	Small shards of thin walled olive green vessel glass	Not closely datable
2025	Drinking glass	0.024	Body shards and base with shallow kick of clear near colourless glass with slight green tint from an optically blown mesh cylindrical beaker	First half of the 17th century
2028	Window glass	0.004	Single shard of slightly greenish glass in poor condition	Not closely datable
2043	Bottle	0.017	Fragment from a dark olive green or natural black glass bottle	Not closely datable
2043	Window glass	0.003	Two shards of clear slightly green tinted thin glass	Not closely datable
2045	Bottle	0.030	Neck shard from an olive green glass bottle	19th or 20th century
2047	Bottle	0.062	Heavily patinated shards of natural black glass bottle	Not closely datable
2047	Window glass	0.001	Single shard of glass, appears yellow due to iridescence and patination	Not closely datable
2135	Bottle	0.007	Heavily abraded and patinated shard of pale olive green glass, most likely from a bottle	Not closely datable
2137	Bottle	0.066	Two shards of natural black glass bottle base	17th or 18th century
2158	Bottle	0.017	Shard from the base of a clear nearly colourless glass small bottle or large phial and a shard from a natural black glass bottle	18th century
2187	Window glass	0.004	Single shard of greenish glass	Not closely datable
2192	Window glass	0.045	Fragments of window glass in reasonable condition	18th and 19th century
2192	Bottle	0.807	English flat octagonal bottle	18th century (c.1740)
2192	Bottle	6.080	A number of semi-complete and partial dark olive green, olive green and/or natural black glass bottles. The majority of the bottle glass is natural black glass of cylindrical vessels	Some bottles may be mid 18th but overall c.1780- 1810
2192	Bottle	0.090	A number of clear near colourless bottle shards were also recovered, the majority of which are relatively small and medium sized phials	18th-century
2192	Bottle	0.069	Two fragments from a very obviously press-moulded bottle or bottles. Seams can be seen on the shoulder and neck of one fragment and the base of the other fragment where an open pontil scar is also visible. The base fragment fragment is embossed with on one side ELIXIR and on the reverse. YARD LONDON.	19th century
2197	Bottle	0.047	Pale blue press-moulded glass bottle very fragmentary arm obviously for perfume or something similar very decorative	19th or 20th century
2197	Bottle	0.038	Base from a natural black glass bottle slightly flaring at the base suggesting mould-blown with very definite pontil mark	Late 18th- 9th century
2197	Bottle	0.018	Base from a natural black glass bottle, cylindrical, straight sided and where there might otherwise have been a pontil mark there is a mould-blown mark	19th-20th-century
2197	Bottle/Jar	0.404	Base shard	19th or 20th century

Ctxt	Form	Wt (kg)	Description	Overall Date
2197	Lamp working glass	0.009	Lampworking: clear glass fragments of hollow fine rods. One of the longer fragments at the end has traces of what would have been a blown globe, others show evidence of twisting and manipulation.	19th century
2197	Lampworking glass	0.026	Lampworking: clear glass fragments with white latimo threads, some iridescent material flaking from the surface	19th century
2197	Lampworking glass	0.015	Lampworking: green glass fragments of hollow tubes, fragments of twisted rolled and expanded glass. The glass is exceptionally fragile and somewhat iridescent	19th century
2197	Lamp working glass	0.026	Lampworking: thin hollowed tubes of blue glass with evidence of blowing and twisting and at least one fragment showing clear evidence of the joining of two different coloured rods, blue and probably originally clear but now appears slightly yellow	19th century
2209	Bottle	0.143	Base shards from a natural black glass bottle with traces of pontil mark	18th-19th-century
2212	Bottle	0.011	Fragment from a natural black glass or dark olive green bottle	Not closely datable
2216	Bottle	0.020	Shard of clear decorated press-moulded glass	19th-20th century
2216	Window glass	0.001	Shard of thin very slightly blue-green glass	Not closely datable
2290	Bottle	0.004	Shard from a dark olive green glass bottle	20th century
2294	Window glass	0.006	Single shard of clear very slightly blue-green glass	Not closely datable
2309	Bottle	0.010	Body shard from a blue-green bottle	19th-20th century
2324	Miscellaneous	0.011	Small shard, a rim fragment possibly from an oil lamp or something similar. The rim is well finished and fire polished	19th-20th century
2324	Bottle	0.228	Shards from several press moulded blue-green bottles including one cylindrical bottle with the end of the word Cambridge embossed on one side. One is six-sided, roughly rectangular with faceted ends.	19th-20th century
2324	Bottle		Small shard of natural black glass	Not closely datable
2375	Window glass	0.001	Shard of glass in poor condition	Not closely datable
2399	Drinking glass	0.096	Base from a clear colourless drinking glass, possibly a tumbler	? 19th century
2473	Bottle	0.752	Near complete cylindrical natural black glass bottle with a roughly cylindrical neck, V- shaped lip and down-tooled applied string rim. The base bulges slightly, suggesting the bottle is mould-blown, and the kick is relatively shallow, slightly conical with traces of a pontil mark.	Late 18th-early 19th century
2473	Bottle	0.182	Neck, with surviving rim, from what has been tentatively identified as an English wide-mouth preserving/storage bottle, in natural black glass. Most likely a squat cylinder form. The lip is roughly V-shaped with the applied string rim overlapping the lip in some parts and is most likely up-tooled to be shaped above a short tapered neck. Late 18th century	Late 18th century
2473	Bottle	0.454	Wide base possibly from the wide-mouth preserving/storage bottle previously detailed squat cylindrical bottle or onion-type bottle, in natural black glass. The heel of the bottle is relatively upright and not bulging and the kick is slightly comical and relatively shallow for the size of the bottle, with the remains of a pontil mark.	?Late 18th century
2473	Bottle		A collection of large fragments from a minimum of 15 natural black glass cylindrical bottles of similar form. 15 complete and semi-complete bases survive, the majority of which are slightly flaring, suggesting mould-blown bottles. Several have relatively high kicks which are domed or slightly conical and all retain some trace of the pontil mark. 11 necks with complete or semi-complete rims survive, several versions of the string rim are present are although all appear to be similar date, which is late 18th to early 19th century, with two rims possibly mid to late 18th century.	Late 18th to early 19th century
2473	Bottle	0.011	Body shard from mid dark olive-green glass bottle	18th-19th century
2473	Bottle	0.085	Base from a clear, near colourless, possibly ovoid glass vessel with very shallow, slightly domed kick that bears the traces of a pontil mark. It is possibly a pharmaceutical bottle.	Uncertain of date
2473	Bottle	0.149	Fragments of various clear near colourless glass bottles, some represented only by base shards with high kick and very coarse pontils. Also neck and rim shards. One small near complete phial	18th century

Ctxt	Form	Wt (kg)	Description	Overall Date
			survives, its size and shape suggesting 18th century	
2473	Bottle	0.094	Bottle fragment of a much later date than the other material recovered as this appears to be moulded having measurement indicators impressed on one of its octagonal sides indicating it was used for dispensing most likely medicines	19th-20th century
2473	Window glass	0.194	Large fragments of clear relatively colourless window glass	? 19th-century
2473	Drinking glass	0.769	Vessel glass in the form of a number of drinking glasses or stemware, several types represented. Although no complete examples are present, several vessels survived to indicate the type of glass. The majority have a plain foot rim and foot on the underneath of which is a relatively well finished pontil. A single rim form suggests one of the glasses may have been bell-shaped, while the majority are straight-stemmed. One glass may be a rummer, the others appear to be wineglasses, a small glass vessel may be a jelly cup. The plain nature of all but one of the drinking glasses, one shard has cut glass decoration, their lack of air twist stem or decorated stems and relatively unfinished pontil marks may be indicative of a later date.	? 18th and 19th century material
2484	Bottle	0.004	Shard of completely opaque glass	Not closely datable
2493	Window glass	0.001	Single shard of clear slightly blue green glass	Not closely datable
2495	Miscellaneous	0.005	Flat glass with embossed lines grooved lines.? Car headlight glass	20th century
2495	Bottle	0.195	Shards from a natural black glass and dark olive-green cylindrical bottle	19th-20th century
2495	Bottle	0.658	Fragments from a from one or more natural black glass bottles in poor condition	Possibly late 18th century
2495	Bottle		Moderate collection of shards from a pale green moulded bottle, probably some kind of medicinal bottle	19th-20th century
2495	Bottle		Base shards from natural black glass bottles, two different vessels are represented that both have pontil scars	Late 18th or 19th century,
2495	Bottle		Natural black glass bottle with an applied finished rim moulded onto it, possibly tooled after application	19th century
2495	Bottle		Flared neck from a natural black glass bottle with flat top and champagne type finish	19th century or later
2495	Bottle		Base shards from several natural black glass bottles. All are heavily encrusted with iridescence and appear much earlier than the other glass in this assemblage from this context	? 18th century
2495	Window glass	0.134	Large number of fragments of slightly blue-green glass, clear or somewhat iridescent all on the whole of similar thickness. The majority of the edges show no sign of grozing	Several periods possibly represented, likely to be 18th or 19th century
2551	Window glass	0.003	Three shards of highly iridescent thin glass clear slightly blue-green	Not closely datable
2576	Miscellaneous	0.006	Fragment from a moulded glass vessel made to look like a basket in opaque blue milk type glass	19th or 20th century although it could be Victorian
2581	Bottle	0.034	Body shard from a natural black glass bottle	Not closely datable
2608	Drinking glass	0.044	Stem and foot from a wine glass similar to those recovered from context 2473	18th century (circa 1740 -1775)
2608	Drinking glass		Base and part of the wall a clear near colourless glass flat-bottomed glass tumbler	The lack of pontil mark suggests it is most likely 19th century
2608	Bottle	0.268	Neck and part of upper body from a clear and colourless glass phial	18th century
2608	Bottle		Pale olive green rectangular eight sided bottle, appears to be press-moulded	19th or 20th century
2653	Bottle	0.049	Shard of a completely iridised pale olive-green bottle	Pre-19th-century
2653	Bottle		Shard from a basal kick of a natural black glass bottle with light iridescence. Traces of pontil mark	Not closely datable
2655	Bottle	0.182	Base shard from a natural black glass bottle with exceptionally high kick	18th century
2656	Bottle	0.040	Body shard from a dark olive green natural black glass bottle	Late 18th-early 19th

Ctxt	Form	Wt (kg)	Description	Overall Date
				century
2657	Bottle	0.010	Shard of olive green glass, heavily patinated	Not closely datable
2660	Bottle	0.470	Fragments from the bases of, and body shards from, several natural black glass bottles	Not closely datable
2724	Miscellaneous	0.002	Small fragment of blue-green aqua flat glass. Unsure if this is in fact window glass or from a vessel	Not closely datable
2736	Bottle	0.696	Base and wall of a brown glass bottle	19th century
2736	Bottle		Base and partial wall of a natural black glass bottle	19th century.
2736	Drinking glass	0.449	Two clear near colourless glass tumbler bases and some body shards from the same vessels. The glass is slightly iridescent, the clear and colourless nature suggest it could be lead crystal or a soda glass	? Late 18th and early 19th century
2736	Drinking glass		Clear almost colourless glass, knoped and faceted stem and part of faceted bowl, which appears to be from a hexagonal form. The dating is uncertain since this glass may have been curated and deposited some time after this form of glass went out of fashion	c.1760-1810
2752	Bottle	0.050	Shard of clear slightly blue tinted bottle glass	19th or 20th century
2752	Bottle		Clear slightly greenish tinge to rim shard from a bottle, could be a milk bottle	Possibly 20th century
2752	Bowl		Body shard	Uncertain of date
2752	Window glass	0.012	Three shards of clear, colourless glass in moderate condition	Not closely datable
2756	Bottle	0.061	Thick shard from a clear slightly blue green bottle, most likely some kind of soda bottle.	19th-20th century
2756	Bottle		Shard of dark olive-green/natural black glass from bottle	19th-20th century
2759	Bottle	0.024	Fragment from slightly blue-green clear glass vessel, thick glass, not embossed, but most likely comes from some kind of soda bottle	19th or 20th century
2766	Bottle	0.147	Base shard from a natural black glass bottle, cylindrical and straight-sided	19th century
2782	Window glass	0.008	Shard of what appears to be window glass. Most of the edges are broken, the glass itself is distorted by heat and does show a degree of devitrification	Not closely datable
2790	Bottle	0.056	Two shards, most likely from different bottles. Clear slightly green tinted glass, one of which is most definitely oval and probably comes from Hamilton-type bottle. The other is also very thick and probably also comes another soda-type bottle. Both have traces of writing on them	19th-20th century
2790	Bowl or drinking vessel		Shard from what might be press-moulded glass. Possibly a bowl or beaker. The glass is quite thick similar to optically-blown glass, but appears to be press-moulded. Very iridescent, clear almost colourless glass	Unsure of date
2799	Window glass	0.003	Fragment of iridised glass with a rolled edge, suggesting it has come from either crown or cylinder glass sheet	18th century
2808	Bottle	0.174	Fragments from one or more natural black glass bottles in relatively poor condition, the glass itself being rather opaque	Late 17th-18th century
2808	Bottle		Two body shards from a natural black glass bottle	Not closely datable
2832	Bottle	0.009	Shard of curved slightly blue-green glass with some degree of iridescence and pink in the mix. Appears to be from a vessel	19th-20th century
2834	Vessel/ Miscellaneous	0.005	Small diameter rim shard, possibly from a clear colourless glass vessel or oil lamp glass chimney	19th century
2834	Bottle	0.008	Rather opaque shard from a clear slightly blue-green tinted press-moulded glass bottle with traces of embossed letters	19th-20th century
2883	Bottle	0.002	Shard of slightly blue-green glass, slightly iridescent.	Not closely datable
2890	Bottle	0.014	Small body shards from natural black glass bottles, all fairly undiagnostic	Not closely datable
2906	Bottle	0.296	Fragments and base from a natural black glass bottle	Early 19th could be late 18th
2906	Bottle		Base from a natural black glass bottle, heavily patinated, slightly flaring, suggesting mould-blown	Late 18th or early 19th-century
2906	Bottle		Base from a press-moulded blue six-sided bottle. The base is embossed with a three-lobed simple design. Most likely held	19th or 20th century

Ctxt	Form	Wt (kg)	Description	Overall Date
			something poisonous	
2906	Bottle		Two shards of blue-green vessel glass, somewhat abraded	Not closely datable but likely 19th- 20th century
2906	Window glass	0.019	Mixed shards of somewhat iridescent slightly blue-green glass, similar in nature to that recovered from context 2495	Not closely datable
2930	Bottle	0.053	Base shards and a rim fragment from a natural black glass bottle with a string rim. Possibly also a pontil scar	Not closely datable
2932	Bottle	0.009	Single shard of natural black glass bottle	Not closely datable
2932	Window glass	0.001	Two small shards of clear slightly blue-green thin glass	Not closely datable
2933	Bottle	0.116	Base shard from a natural black glass bottle, heavily iridised and patinated. All the base glares very slightly suggesting it is mould-blown	18th century
2933	Bottle		Very small body shards from one or more natural black glass bottles, too small to be diagnostic	Not closely datable
2937	Bottle	0.004	Single shard that appears to be natural black glass	Not closely datable
2937	Window glass	0.073	Slightly pale greenish clear fragment of what appears to be window glass with a very definite pontil scar in the centre of it and a corresponding rounded bowl on the reverse. This is a piece of bullseye glass and the pontil mark is most likely from a bare iron pontil. Similar shards were found in context 3621	Uncertain date but likely 18th-19th century
2937	Window glass		A number of small clear blue-green flat glass shards. Flat, shiny and few if any inclusions or bubbles (a few fragments may be different and show some weathering)	19th-20th century
2937	Window glass		Three small shards of slightly iridescent clear near colourless very slightly blue-green glass	Not closely datable
2942	Bottle	0.272	Body shard from an olive green glass bottle showing some iridescence and discolouration	Not closely datable
2942	Bottle		Shards from place of the blue-green glass bottle with some residual embossed lettering are only a few of the letters a clear DO, most likely it said 'London'	19th-20th century
2942	Bottle		Base from a cylindrical boss bottle in relatively thick blue-green glass. The base of the bottle is embossed with what is most likely a six-pointed star, suggesting that this is from the Star Brewery based in Cambridge	19th-20th century
3008	Bottle	0.030	Part of the kick from a natural black glass bottle, reverse of the pontil mark below the glass is slightly whitish opaque	? 18th century
3018	Bottle	0.228	Body shards and neck, tapering, slightly constricted, from one or more natural black glass bottles. The form of the rim suggests it is not hand applied but moulded with a rounded side	19th century
3018	Bottle		Shard from a slightly blue-green press-moulded glass bottle	19th-20th century
3026	Bottle	0.009	Fragment of clear slightly blue-green tinted glass with moulded decoration, the raised letters that survive are S and U	19th- 20th century
3027	Bottle	0.028	Neck shard from a natural black glass bottle	Not closely datable
3029	Bottle	0.002	Small fragment of slightly cloudy slightly iridescent moulded glass, faceted and angled, from a small medicinal type bottle	19th century
3079	Bottle	0.012	Shard of natural black glass	Not closely datable
3270	Bottle	0.260	Fragment of natural black glass bottle	Not closely datable
3270	Bottle		Fragment of slightly greenish vessel glass	Not closely datable
3270	Bottle		A shard from natural black glass	Late 18th 19th-century
3270	Window glass	0.002	Shard of clear near colourless thin glass	Not closely datable
3319	Bottle	0.348	Base and neck from a natural black glass bottle	19th century
3319	Window glass	0.017	Two shards of slightly greenish clear glass, with few faults in the glass. They are slightly cloudy, one surface reveals distinct pitting, suggesting this is the outer surface of the glass that was exposed to weathering	Not closely datable
3390	Bottle	0.032	Shard of natural black glass bottle	Not closely datable
3390	Window glass	0.004	Small shards of clear green glass	Not closely datable
3455	Vessel	0.003	Shard of completely opaque glass, curve suggests it has come from a vessel	? Early post-medieval

Ctxt	Form	Wt (kg)	Description	Overall Date
3507	Bottle	0.003	Completely opaque and granular, possibly a basal kick from a small phial	? Late Medieval or 17th century
3596	Bottle	0.270	Fragments from one or more thin-walled dark olive green glass bottles	19th century
3607	Artefact	0.036	SF 551: Pendent from a chandelier	19th century
3607	Bottle	0.098	Various fragments from one or possibly more natural black glass bottles	Late 18th- early 19th century
3621	Bottle	0.122	Shards including a base shard and body shards from a pale green glass rectangular bottle	19th-20th century
3621	Window glass	0.037	Two shards of thin, very iridescent window glass	Not closely datable
3621	Window glass	0.235	Three large shards of bullseye glass, flat on one side with a distinct dome on the opposing side on which there is a very coarse central knob or bullion. The glass is clear, slightly blue-green, one shard slightly more green. The other has some clouding of the surfaces and it is possible that the domed surface was the external surface of the glass with the more crude broken bullion or pontil being internal. These fragments are very similar to one recovered from context 2937, which also has a bare iron pontil mark. The thickness of the glass and its clarity or lack of oxidation and other characteristics suggests it is probably 18th-19th century	18th-19th century
3621	Window glass		Two shards of slightly iridescent glass, both of which bear the curved edge of a finished glass sheet, apparently a sheet of crown glass	18th-19th century
3631	Bottle	0.127	Base shards from one or more natural black glass bottles	Not closely datable

Table 13: Glass catalogue

B.6 Post-Roman pottery

By Carole Fletcher

Introduction

B.6.1 Archaeological works produced a pottery assemblage of 395.440kg from both the evaluation and excavation, including material collected during cleaning of areas and not assigned to a particular feature. A number of sherds were recovered from samples, however these were mainly small abraded sherds, many being undiagnostic, and have not been included in this assessment except where no other dating material was available.

B.6.2 The bulk of the assemblage is broadly 18th and 19th century (180.506kg) alongside a substantial medieval assemblage (weighing 141.442kg) with material from the post-medieval period well represented (weighing 68.223), while the Late Saxon-early medieval period is poorly represented. The condition of the overall assemblage is unabraded to moderately abraded.

Methodology

B.6.3 The Medieval Pottery Research Group (MPRG) *A guide to the classification of medieval ceramic forms* (MPRG, 1998) and *Minimum Standards for the Processing, Recording, Analysis and Publication of Post-Roman Ceramics* (MPRG, 2001) act as a standard.

B.6.4 Rapid recording was carried out, the contexts have been spot dated and fabrics within them noted using using Cambridgeshire fabric types where possible (Spoerry, forthcoming). The summary catalogue at the end of this report lists the context and spot date. The pottery and archive are curated by Oxford Archaeology East until formal deposition.

Sampling Bias

- B.6.5 The open area excavation was carried out by hand and selection made through standard sampling strategies on a feature by feature basis. There are not expected to be any inherent biases.

The Assemblage

- B.6.6 The broad ceramic fabric abbreviations used are given in Table 14. It should be noted that for the purpose of this post-excavation analysis all the various types of decoration present for Creamware, Pearlware, Yellow ware and Refined White Earthenware have been grouped together under the fabric descriptions of CREA, PEARL, YELL and RFWE for simplification. The decoration type can help dating of an individual context and this will be recorded, although for the purpose of the broad ceramic abbreviations these differences are not included. The list indicates the range of fabrics present in the assemblage.

<i>Full Name</i>	<i>Fabric Code</i>
Agricultural ceramics-plant pot	AGRI
Bichrome	BICR
Black Basalt	BBAS
Bone China	BCHIN
Bourne 'D' ware	BOND
Brill/Boarstall ware	BRILL
Cambridge Sgraffito	CASG
Cistercian ware	CSTN
Colne Medieval ware	CONM
Creamware	CREA
Developed St Neots	DNEOT
Dutch Redware	DUTR
Early Medieval Essex Micaceous Sandy Ware	EMEMS
Early Medieval Essex Micaceous Sandy Ware/ Medieval Essex-type Micaceous Grey Sandy wares	EMEMS/MEMS
Early Medieval ware	EMW
East Anglian Redware	EAR
East Anglian Redware (Late)	LEAR
Ely Babylon ware/Post-medieval Black-Glazed	BABEL/PMBL
English Stoneware	ENGs
Frechen Stoneware	FREC
Heddingham Fineware	HEDI
Huntingdon Late Medieval Calcareous ware	HUNCAL
Huntingdonshire Early Medieval ware	HUNEMW
Huntingdonshire early Medieval ware/Huntingdonshire Fen Sandy ware	HUNEMW/HUNFSW
Huntingdonshire Fen Sandy ware	HUNFSW
Late Medieval Ely ware	LMEL
Late Medieval Hertfordshire glazed ware	HERTG
Late Medieval Reduced ware	LMR
London Stoneware	LONS
Lustre ware	LUST
Lyveden A-type Shelly ware	LYVA
Medieval Coarse ware	MCW
Medieval Ely ware	MEL

Full Name	Fabric Code
Medieval Ely Ware/Late Medieval Ely ware	MEL/LMEL
Medieval Essex-type Micaceous Grey Sandy wares	MEMS
Metropolitan Slipware	METS
Mill Green Fineware	MGF
Modern Redware	MODR
Modern Redware - Late slipped kitchen wares	MODR (S)
Nottinghamshire/Derbyshire-type Stoneware	NOTTS
Orange Sandy ware	OSW
Pearlware (includes all decoration variants at this time)	PEARL
Porcelain	PORC
Post-Medieval Black-Glazed ware	PMBL
Post-Medieval Redware	PMR
Potterspury	POTT
Raeren stoneware	RAER
Raeren/Frechen	RAER/FREC
Refined White Earthenware (includes all decoration variants at this time)	RFWE
South Cambridgeshire Grog-Tempered Sandy ware	SCAGS
South Cambridgeshire Smooth Sandy ware	SCASS
South-east Fenland Medieval Calcareous Buff ware	SEFEN
Staffordshire Brown Stoneware	STBRS
Staffordshire White-Dipped ware	STWD
Staffordshire-type Mottled Brown Glazed/Manganese Mottled ware	STMO
Staffordshire-type Slipware	STSL
Staffordshire White Salt-Glazed ware	SWSG
Tin-Glazed Earthenware	TGW
Transitional Redware	TRAN
Tudor Green	TUDG
Unprovenanced	UNPROV
Unprovenanced Glazed ware	UPG
Westerwald	WEST
Yellow ware (includes all decoration variants at this time)	YELL

Table 14: *Pottery fabrics present in the assemblage*

Pottery By Ceramic Period

- B.6.7 A small amount of Late Saxon-early medieval pottery, undiagnostic Thetford ware and St Neots ware sherds, was recovered during the excavation. It is unusual that no Stamford ware was recovered as this fabric is a normal part of the triumvirate of Thetford ware, St Neots and Stamford ware that are found across much of Cambridgeshire in the 10th-12th centuries. Similar low levels of Late Saxon-early medieval pottery were recovered from the Eastern Gate Hotel site (Cessford, Hall and Hall 2013) and at Intercell House (Fletcher 2012; 2015).
- B.6.8 Early medieval pottery (AD 1050-1200) including Developed St Neots ware, Early Medieval Essex Micaceous Sandy ware, some Cambridgeshire early medieval sandy wares are also present, including sherds of South Cambridgeshire Smooth Sandy Ware. This fabric is “characteristically smooth [...] surfaces of the fabric are usually red-brown where oxidised and dark brown to dark grey when reduced, and the core is almost always a reduced mid-grey [...] this pottery type clearly sits in the early medieval ware tradition” (Spoerry forthcoming).

- B.6.9 The presence of early medieval fabrics indicates some level of pre-12th century occupation although no early medieval features were identified. The low levels of pottery recovered suggests either middening scatters or rubbish deposition within features that were destroyed by 13th century activity, thus the majority of the sherds were recovered as a residual element within later features.
- B.6.10 Medieval fabrics (AD 1200-1500) form c.30% of the total assemblage (by weight), suggesting moderate levels of medieval activity, with much of this material related to the medieval kitchen and serving of liquids. Many of these vessels were recovered directly from medieval wells, pits and a clay-lined tank, with others coming from reworked medieval features in Period 3. Coarsewares present here are similar to those from Cambridge Regional College, Brunswick (Fletcher 2011), Intercell House (Fletcher, 2012, 2015), the Grand Arcade (Cessford 2007) and the Eastern Gate Hotel site assemblages (Hall, Cessford and Newman 2013). The Grand Arcade coarseware assemblage was initially subdivided by colour with Ely ware being easily recognised and therefore separated (Cessford and Hall 2007, 301-302). It would appear that The Eastern Gate Hotel site assemblage was similarly divided with Ely ware again easily recognised (Hall, Cessford and Newman 2013, 69). At the Brunswick assemblage (Fletcher 2011) and at Intercell House, some of these medieval coarsewares have been identified as Southeast Fenland Calcareous Buff ware, 'A mainly light-firing quartz-tempered fabric. The surfaces are usually buff, and even off-white, in colouration, but are sometimes light brown, and the core is usually light grey and reduced. The fabric is sandy to the touch ... its origins possibly in the parishes of Soham or Wicken' (Spoerry, forthcoming). Coarsewares that could not initially be assigned a group have for the purpose of this report been recorded as medieval coarsewares rather than grouped by colour, with the possibility of some of these being as yet unidentified local fabrics. Ely ware and South-east Fenland Calcareous Buff ware are present in significant numbers in this assemblage alongside Medieval Essex-type Micaceous Grey Sandy wares.
- B.6.11 Glazed wares are common in the medieval assemblage and are mainly redware sherds including Mill Green fineware and Hedingham fineware. The largest group of medieval sherds are the redwares many of which are glazed. These sherds, unless a specific fabric identification can be made, have been grouped together as East Anglian Redwares. These redwares form part of a medieval tradition across East Anglia that continues into the late medieval and post-medieval periods and includes the various redwares produced over much of Essex. Also present in the assemblage is Medieval Ely ware the majority of which are jug sherds (glazed and unglazed), Grimston Glazed ware and some Brill/Boarstall ware vessels.
- B.6.12 Some fabrics such as Lyveden-Stanion ware, commonly found on medieval Cambridgeshire sites were notable by their near absence at both Cambridge Regional College site (Fletcher 2011) and Intercell House, Coldhams Lane (Fletcher 2012; 2015). These assemblages each produced only two sherds of the fabric (Fletcher 2012; 2015) and the excavation of the Eastern Gate Hotel site produced only a single sherd of Lyveden-Stanion ware (Hall, Cessford and Newman 2013, 70, tbl 18). This suggests that Lyveden-Stanion ware was not in favour within the Brunswick lay settlement in the medieval period, the population of Barnwell appearing to have preferred Essex and Ely ware jugs to those of the Lyveden-Stanion potters (Fletcher 2015). Examination of the Harvest Way assemblage suggests Lyveden-Stanion, although recovered in greater numbers, is still relatively uncommon, with a significant find being several fragmentary jugs from the fill of well **2554** context (3269). This variance in the distribution of the fabric between the Barnwell lay settlement excavations may relate to the individuals occupying the medieval plots personal preference for the Lyveden-Stanion jugs.

- B.6.13 Definitively late medieval ceramics (AD 1350-1500) are present in only moderate numbers c.7% of the assemblage by weight (22.531kg). Many of the identified medieval fabrics remain in production for the whole of the medieval period and undiagnostic body sherds can only be broadly dated, full analysis may increase the number of later medieval sherds within the assemblage. Those present include Late East Anglian Redwares, Late Medieval Ely ware, Late Medieval Reduced ware including a neck sherd of an alembic from evaluation pit **91**, and sherds of Hertfordshire Glazed ware. In addition a number of transitional medieval-post-medieval sherds were recorded, including a number of Cistercian ware sherds. Observation of this assemblage in relation to the Intercell House assemblage suggests that the like Intercell House the late medieval period is not well represented, being only c.5% of the total assemblage by weight, which relates most likely to the fall in population density and the decline of the site in the 15th century.
- B.6.14 Post-medieval fabrics are well represented, forming c.17% (68.223kg) of the total assemblage by weight and comprising mainly mid 16th-18th century Post-medieval Redwares. It is probable that some of the redwares identified as Post-medieval redwares are the 15th-16th century products of the kilns in Ely, described by Cessford and Hall as Broad Street Glazed Red earthenware (Cessford, Alexander and Dickens 2006, 51-58). Also present in moderate numbers are Metropolitan-type Slipwares and the early material from the Staffordshire industries, Staffordshire-type Slipwares, Staffordshire White Salt-Glazed wares and Staffordshire-type Mottled Brown Glazed/Manganese Mottled ware
- B.6.15 Imported wares appear at this point and include Raeren stoneware, Frechen Stoneware and the later Westerwald Stoneware. The most significant import was recovered from pit **430**, which produced 30 sherds from a semi-complete 16th century Tin-Glazed Earthenware ring-handled vase, onto which is painted a Christogram, a combination of letters that form an abbreviation for the name of Jesus Christ, in this case the Greek letters IHS, denoting the first three letters of the Greek name of Jesus. This vessel may have come from the Netherlands, while others were produced in Italy. These are often referred to as altar vases, although it is most likely a flower vase, and they are often depicted in paintings of the period (Mellor 1997, 35).
- B.6.16 The late 18th-19th century or early modern material forms the bulk of the pottery recovered from the archaeological works, 180.506kg, approximately 46% of the total assemblage by weight, comprising most commonly sherds of Creamware, Pearlware, Yellow ware and Refined White Earthenware from the industrial Midlands and other pottery producing areas. Also present were a number of large heavy Modern Redware or Late Slipped Kitchen wares as described by Cotter (Cotter 2000, 254-6), and plant pots. Excavations at the Eastern Gate Hotel site produced a slightly larger assemblage of 18th-19th century material weighing 227.7kg, although both assemblages have a similar range of fabrics.

Provenance

- B.6.17 There is a moderate range of fabrics of local and non-local origin present in the assemblage from a relatively moderate range of sources, some represented by only low numbers of sherds. The majority of the assemblage originated in that area now commonly known as the Staffordshire potteries. A number of the Creamwares, Pearlwares and later fabrics may have been produced elsewhere, however a significant number of Creamware sherds were marked, either with an impressed stamp or a transfer-printed mark, which indicated the manufacturer, and those that have been identified are all from the Staffordshire potteries. Manufacturers currently identified are

Wedgwood and Turner. A large pierced, undecorated oval drainer (most likely used for fish) is impressed on the back WEDGWOOD and most closely resembles the standard impressed mark used from 1759 onwards (Godden 1991, 657, 4075). Several are marked Turner, either alone or in one case below the Prince of Wales feathers; this mark relates to John Turner who was appointed potter to the Prince of Wales in 1784 (Godden 1991, 626, 3898).

- B.6.18** Pearlware vessels present also bore marks, however the majority of these could not be identified due to their partial nature. A large number of pearlware plates were also decorated, again the identification of the patters is difficult, with few being found in either of Coysh and Henrywood's two volumes of *The Dictionary of Blue and White Printed Pottery 1780-1880* (Volume 1 1982, Volume 2 1989). Some transfer-printed designs are identifiable and include, for example, a sherd from a bowl base decorated with flowers, which is marked on the base Spode and the pattern has been identified as Geranium, dating to the 18th century.
- B.6.19** The medieval assemblage originates from the Cambridgeshire region, and East Anglia in general including the Essex fabrics, while from Lincolnshire sherds the pottery is almost entirely Bourne 'D' ware. Also present is material from Bedfordshire, Buckinghamshire, Hertfordshire, Norfolk and Northamptonshire, among others.
- B.6.20** Imported vessels within the assemblage form a small but significant group with material from Raeren, Frechen and Westerwald. There is also a small number of Dutch Red Earthenwares and the Tin-Glazed Earthenware ring-handled vase discussed earlier, which is most likely from the Netherlands.

Form

- B.6.21** The vessels present in the full assemblage are, across all periods, primarily domestic in nature. They comprise bowls (including plates), which form the bulk of the assemblage, followed by jugs and jars which, due to the predominant age of the assemblage (late 18th-19th century), are relatively poorly represented. A rim sherd from a late medieval alembic was recovered in the evaluation.
- B.6.22** The post-medieval assemblage includes drinking vessels, jugs and bowls and the first appearance of chamber pots, a Staffordshire Slipware posset pot, and a ring-handled vase in Tin-Glazed Earthenware and Tin-Glazed Earthenware candlesticks.
- B.6.23** Also present in the early modern assemblage are drinking vessels, both tea cups and possibly earlier teas bowls, alongside saucers, teapots, plates, bowls, serving dishes, lids, plant pots, bottles, sauce boats and ladles. Some Creamware, Pearlware (although mostly found on Pearlware) and some later sherds are from named plates, these wares having been marked, either by hand in a fine copper plate before the final firing of the vessel, or by transfer-printing, with the name of a college, or a college cook (names or initials are found on both the upper surfaces, often on the rim and/or on the base) or in one case with MESS 12 incorporated into the transfer-printed design.

Pottery By Period

- B.6.24** At the point of writing the assemblage has been broadly phased, the breakdown of the assemblage by stratigraphic phase has resulted in a relatively even distribution of the pottery between the phases, no single phase being particularly dominant in terms of pottery by weight as part of the total assemblage.
- B.6.25** Period 2 (Medieval c.1200-1550) forms c.35% of the assemblage, although some of the pottery recovered from the Period 2 features can be sub-divided into high medieval or late medieval. There is disturbance of these features and a number of intrusive

sherds, c.9% of the phase assemblage, indicating later reworking. The bulk of the Period 2 material was recovered from pits, wells and a clay-lined tank. In total 487 contexts have been assigned to Period 2.

B.6.26 Period 3 (Post-medieval c.1550-1800) comprises c.33% by weight of the total assemblage, recovered from 228 contexts, from a large number of features, with the bulk of the assemblage recovered from cellars, pits, ditches and wells; other feature types include buildings, cesspits and layers. Some of this material is residual within the later features, c.12% by weight for the phase assemblage, indicating reworking of earlier deposits, and c.32% by weight for the phase assemblage is intrusive. The largest intrusive group was recovered from cellar **2474**, which indicates that the cellar may date to the 18th century, with its final infilling dating to the 19th century.

B.6.27 Period 4 (c.1800 to present) comprises c.34% of the total assemblage. Residuality for this phase is c.14% by weight (for the phase assemblage). The bulk of the pottery was recovered from pits (73.915kg), cellars (20.820kg) and wells, with lesser amounts recovered from a structure described as a store, and layers. The 19th century material represents serving of food and dining alongside the drinking of tea and the occasional chamber pot.

Discussion

B.6.28 Domestic in nature, the assemblage indicates occupation within the area of excavation, involving both the preparation and serving of food and drink in the medieval period. The site lies within the former lay settlement of the medieval Barnwell Priory and the features excavated would appear to relate to this settlement, the wells and pits most likely located at the back of properties within the lay settlement. The area may represent back plots.

B.6.29 Food preparation, consumption and disposal, in the form of chamber pots, is represented in the pottery assemblage in the post-medieval period (Period 3). The amount of pottery recovered suggests relatively dense occupation of the area. Perhaps the most interesting find is the Tin-Glazed Earthenware ring-handled vase, decorated with the Christogram IHS. According to Mellor vases of this type have been excavated from early Collegiate layers from the suburbs as well as the University area, and were clearly cherished by a wide range of society. The presence of ring-handled vases may also have some religious overtones in the unsettled 16th century (Mellor 1997, 35). Mellor is of course referring to material excavated from 16th century Tudor Oxford, however the presence of later Collegiate pottery of the 18th and 19th century recovered from Period 4 suggests that this area may have strong connections to the colleges of Cambridge in the 16th century.

B.6.30 Late 18th-19th century material may indicate levels of social status within the area of excavation. There appears to be continuation of the connection between the colleges and the site with material recovered that is marked with the names of college cooks and colleges themselves, which include Pearlware transfer-printed bowl/plate sherds recovered from context 2736, a fill of pit **2753**. SF326 and SF327 appear to be similar vessels to one described by Cessford in the Eastern Gate Hotel report, F.160 [587], a blue transfer-printed floral pattern plate of Henry Hudson, cook at Trinity College *circa* 1813-38 (one sherd, 11g) (Cessford 2013, 73). SF326 and SF327 may be part of the same service from Trinity College. SF327 is a near complete example and within the transfer-printed design is a banner scroll enclosing H & P HUDSON TRINITY; although the lower part of Trinity is absent, that is clearly what is represented. On the base are the letters HUD and part of the mark for (C)OPLAND, although it is unclear which mark

this represents. Hudson's time at Trinity (1813-38) suggests that the mark on the back of the plate represents Copeland and Garrett at the Spode works, Stoke, a mark used between 1833-47 (Godden 1991, 173 1088-1090).

Potential

- B.6.31 The assemblage can contribute to understanding pottery consumption and usage within the town and has the potential to aid local, regional and national research priorities, specifically, where individual plots in any period can be identified, ceramics, usage and perhaps status can be compared and the longevity of the plot looked at through the pottery usage and comparisons made between plots.
- B.6.32 Closer examination of the pottery may indicate if the period of 'abandonment' noted in the Intercell House, Coldhams Lane excavation from c.1550/1600 to c.1650 before re-occupation (Atkins, 2012b; 2013b) is paralleled here. Also there may be evidence of the fire of 1731 that destroyed part of the village, as some Tin-Glazed Earthenwares and glass show evidence of burning at temperatures that have distorted and partially vitrified the material.
- B.6.33 The 18th-19th century material offers various areas of research, including into the links with the Collegiate system. Documentary research would be required on the names found on the various vessels to help date the vessel and to tie it to, if possible, the particular college. The relatively large size of the assemblage should allow for better classification of the vessel types, decoration and more fully identify functional categories. The study of 18th and 19th/20th century ceramics has become more significant in British pottery studies in recent years and this assemblage expands knowledge of supply and use.
- B.6.34 Comparison of this assemblage with that of both Intercell House and the Eastern Gate Hotel assemblages would provide a broader understanding of the usage of pottery across the Barnwell settlement in the medieval and later periods and especially the 18th and 19th century occupation. Documentary research can help establish the use of buildings and the occupations of residents and relate these to the material recovered from cellars and pits on the properties.

Further Work

- B.6.35 A basic reord of the full assemblage should be completed, level of residuality and contamination should be established and well preserved key groups, new forms and fabrics identified.
- B.6.36 Full recording of well preserved key groups any any new forms or fabrics identified. Identification to type of the Medieval Coarsewares sherds where possible.
- B.6.37 Fully record and identify the transfer-printed decoration and any makers' marks to determine where possible the manufacturer of the ceramics. Documentary research on the various names and initials recorded on the early modern pottery to establish connections with cooks or servants and colleges (to be undertaken by specialist)
- B.6.38 Analysis of the key assemblage groups on various field criteria, based on major stratigraphic units. Macroscopic inspection (based on x20 magnification) and description of all new fabric types. Identification, description and illustration of new forms and traits, especially relating to local fabric types that are otherwise unpublished to date. C. 50 vessels will need to be illustrated to record decoration, form or makers marks.

B.6.39 Pottery for illustration

Cxt	Fabric	Form	Decoration or details	Ph
92	LMR	Alembic		2
546	TRAN	Curfew		3
597	SEFEN	Jug		3
1457	EAR	Chicken feeder		3
1631	MEL	Jug		2
1710	LEAR	Mammiform costrel		3
1796	LMEL	Jug		2
2348	Ely Babylon ware/Post-medieval Black-Glazed	Drinking vessel	Tyg with applied white slip pads, three pads in a triangular pattern with small white dot in the centre	3
2348	Ely Babylon ware/Post-medieval Black-Glazed	Drinking vessel	Tyg with applied white slip pads	3
2348	Ely Babylon ware/Post-medieval Black-Glazed	Drinking vessel	Tyg with applied white slip pads with red clay spots	3
2348	Cistercian ware	Jug	Applied white slip pads 'in flower design'	3
2358	East Anglian Redware	Baluster jug		3
2358	East Anglian Redware	Baluster jug		3
2473	Staffordshire-type slipware	Posset pot		3
3269	Medieval Ely ware	Jug		2
3269	Medieval Ely ware	Jug		2
3269	Medieval Ely ware	Jug		2

Table 15: *Pottery illustration list*

B.6.40 Pottery for photography

Ctxt	Fabric	Form	Decoration or details	Period
546	Tin-Glazed Earthenware	Ring-handled vase	Painted with name of Jesus in Greek IHS	3
546	Raeren stoneware	Jug		3
818	Staffordshire White-Dipped ware	Mug	Incised	
818	Staffordshire White Salt-Glazed ware	Moulded plate	Moulded	3
818	Staffordshire-type slipware	Handled bowl (chamber pot)	Slipped	3
818	Staffordshire-type slipware	Handled bowl (chamber pot)	Slipped dots on rim and trailed on body	3
818	Staffordshire-type slipware	Handled bowl (chamber pot)	Slipped dots on rim and brown slip with cream trailed on body	3
818	White salt-glazed stoneware with scratch blue decoration	Drinking vessel ?chocolate cup	Incised	3
1907	Frechen Stoneware	Semi-complete Bartmann jug		3
1907	Tin-Glazed Earthenware	Candle stick		3
1994	Black Basalt	Teapot	Turned or moulded	4
1994	Pearlware	Bowl - saucer	Transfer-printed	4
2473	Creamware	Plate	Transfer-printed	3

Ctxt	Fabric	Form	Decoration or details	Period
2473	Creamware	Plate	Transfer-printed	3
2473	Creamware	Lid	Moulded	3
2473	Creamware	Plate	Moulded	3
2473	Creamware	Oval pierced strainer	Marked WEDGWOOD	3
2473	Pearlware	Handled bowl (chamber pot)	Incised and applied (GR)	3
2473	Pearlware	Saucer	Transfer-printed	3
2608	Pearlware	Plate	Transfer-printed, rim marked CHRIST COLL. SF 311	4
2736	Creamware	Bowl	Marked COPELAND	4
2736	English Stoneware	Jug	Moulded	4
2736	Pearlware	Plate	Transfer-printed, scalloped moulded edged plate marked H & P HUDSON TRINITY. SF327	4
2736	Pearlware	Plate	Transfer-printed with impressed and printed makers' mark	4
2736	Pearlware	Bow	Transfer-printed marked Spode	4
2736	Pearlware	Plate	Transfer-printed marked (H) & P HUDSON. SF326	4
2736	Pearlware	Jug	Transfer-printed	
2736	Pearlware	Plate	Transfer-printed marked MESS 12	4
2736	Refined white earthenware with slip decoration	Mug	Slipped/engine-turned	4
2736	Yellow ware with slip decoration-mocha	Carinated bowl/chamber pot	Slipped - mocha	4
3319	Pearlware	Jug	Transfer-printed	4

Table 16: *Pottery photographic list*

B.6.41 Spot Dating

Context	Cut	Weight (kg)	Date Range	Period
2	1	0.063	13th-end of 14th century	2
5	3	0.235	Late 12th-mid 14th century	2
7	6	0.099	Late 12th-end of 13th century	2
13	14	0.018	Mid 11th-early 13th century	2
15	16	0.012	Late 18th-20th century	3
17	18	0.008	13th century	2
19	20	0.007	Mid 17th-early 20th century	3
21	22	0.012	13th-end of 14th century	2
25	26	0.010	Late 12th-end of 13th century	2
27	28	0.016	17th century	3
31	32	0.003	Late 12th-end of 13th century	2
33	34	0.001	18th century	3
35	36	0.006	13th-end of 14th century	2
39	40	0.164	13th-mid 14th century	2
52		0.015	Mid 14th-end of 15th century	2
55		0.005	13th-end of 14th century	4

Context	Cut	Weight (kg)	Date Range	Period
58	59	0.102	1430-mid 16th century	2
68	69	0.341	13th-end of 14th century	2
73		0.023	Mid 12th-end of 15th century	2
75		0.161	14th-mid 15th century+	3
76	76	0.037	16th century	3
78		1.282	Mid 16th-end 17th century	3
79		0.452	Mid 15th-1630	3
82	80	0.004	Mid 11th-early 13th century	2
88	80	0.066	13th-end of 14th century	2
92	91	0.062	Mid 14th-end of 15th century	2
96	95	0.087	13th-mid 14th century	2
98	95	0.144	16th century	2
101	99	0.022	13th-end of 15th century	2
102	99	0.096	15th century-mid 16th century	2
103	99	0.181	16th century	2
107	108	0.022	Mid 12th-mid 14th century	2
113	114	0.161	Late 18th-mid 19th century	2
117	118	0.080	15th century+	2
121	122	0.036	18th century	2
123	124	0.095	16th century	2
127	128	0.073	Late 18th-20th century	4
140		0.001	Late 18th-20th century	4
148		0.071	17th century	4
155	156	0.005	Mid 12th-mid 15th	2
171	172	0.007	16th century	2
180		0.666	17th-19th century	4
182	183	0.004	Late 18th-20th century	4
211	260	0.002	Mid 12th-mid 14th century	3
213		0.009	16th century+	3
214		1.128	19th century	4
218		0.001	Late 18th-20th century	4
227	228	0.001	18th-20th century	4
229		0.045	13th-end of 14th century	
230		0.140	16th century+	3
237		0.008	16th century+	3
238		0.014	Late 18th-20th century	3
403		0.087	Mid 16th-end of 17th century	3
404		0.033	Late 15th-end of 17th century	3
410		0.164	19th century	4
413		0.045	Mid 13th-end of 18th century	3
414		0.090	<i>circa</i> 16th century	3
416		0.009	13th-end of 15th century	3
429	430	0.247	13th-end of 15th century	3
433		0.030	13th-end of 15th century	3
454		0.162	17th century	3
455	456	0.046	Late 18th-mid 19th century	4
466		0.023	13th-end of 15th century	2
493		0.025	Mid 12th-mid 14th century	3
494		0.010	Mid 11th-end 13th century	3
520	519	0.067	12th-end of 15th century	2
521		0.007	Early 15th-mid 17th century	3
522		0.122	Early 15th-mid 17th century	3
524		0.002	Late 14th-mid 16th century	3
532	533	0.129	17th-end of 18th century	4

Context	Cut	Weight (kg)	Date Range	Period
537	538	0.012	Late 18th-20th century	4
540	541	0.214	Late 18th century	4
541	541	0.527	13th-end of 15th century	4
546	430	1.326	Mid 16th century+	3
561	560	0.084	17th-end of 18th century	3
562	560	0.037	17th century	3
565		0.037	Mid 14th-end of 15th century	3
577	574	0.006	Mid 11th-mid 12th century	3
596		0.165	Mid 14th century+	3
597		0.431	13th-end of 15th century	3
616	619	0.007	13th-end of 15th century	3
620		0.867	13th-end of 14th century	3
629	628	0.138	19th century	4
630		0.459	Early 19th century+	3
632	631	0.022	15th century+	3
645	648	0.137	Late 18th-early-mid 19th century	3
678	682	0.026	13th-end of 14th century	2
691		0.081	13th-end of 14th century	3
694		0.004	17th-mid 18th century	4
696		0.017	18th century	4
697		0.298	19th century	4
698		0.135	18th-early 19th century	4
701		0.054	17th-mid 18th+	3
702		0.076	13th-end of 15th century	3
703		0.021	18th century	3
704		0.012	13th-end of 14th century	3
710	711	0.007	16th century+	3
715	716	0.049	17th-end of 18th century	3
726		0.125	Mid 12th-mid 15th	2
728	729	0.136	19th century	4
731	830	2.861	Late 18th-20th century	3
732	830	4.476	18th century	3
738	737	0.023	Late 12th-end of 14th century	2
740	739	0.021	Late 18th-20th century	4
741	739	0.147	19th century	4
743		0.012	Mid 12th-15th century	3
753		0.012	Mid 12th-mid 14th century	3
754	755	0.151	13th-end of 14th century	3
757		0.174	Mid 14th-end of 15th century	3
763	762	0.723	19th century	4
766		0.056	Late 18th-end 19th century	4
778	784	0.061	13th-end of 15th century	2
779	784	0.305	Late 15th-mid 16th century	2
787		0.030	Late 17th-late 18th century	3
789		0.355	13th-end of 15th century	2
809	808	0.205	17th-end of 18th century	3
810		0.420	Late 15th-end of 16th century	3
812		0.419	16th century	3
818	816	6.170	18th century	3
822	821	0.143	17th-mid 18th century	3
823		0.007	19th century	4
825	824	0.002	Not closely datable	4
828		0.079	Mid 12th-end of 15th century	2
829	830	0.370	16th century	3

Context	Cut	Weight (kg)	Date Range	Period
834	733	0.071	13th-end of 14th century or 16th century	3
836		0.018	18th century	3
840		0.018	17th-mid 18th century	3
842		0.045	Mid 14th century-mid 16th century	3
845		0.018	17th-end of 18th century	3
849		0.089	Mid 16th-end of 18th century	3
853		0.016	16th/17th century	3
858		0.084	Mid 12th-mid 14th century	2
861	859	0.003	Mid 14th century+	3
862	859	0.958	Late 13th-mid 14th century	3
870		0.054	Late 18th-mid 19th century	4
908		0.220	Mid 14th-end of 15th century	2
910	874	0.038	19th century	4
913	912	0.012	Mid 14th-end of 15th century	2
915	914	0.044	17th-end of 18th century	3
916		0.102	17th-end of 18th century	3
917		0.063	17th century	3
922		0.005	13th-end of 15th century	2
927	931	0.573	19th possibly early 20th century	4
948		0.057	Late 18th-mid 19th century	3
949		0.076	13th-end of 14th century	2
983	985	0.155	17th century+	3
984	985	0.254	17th century	3
986	987	0.111	Late 18th-19th century	3
988	989	0.088	17th century	3
990	991	0.023	Mid 14th-end of 15th century	2
992	993	0.011	13th-end of 14th century	2
994	995	0.010	13th-mid 14th century	2
997		0.135	17th-end of 18th century	3
1004		0.045	13th-end of 15th century	2
1005		0.048	Late 18th-mid 19th century+	4
1009	1010	0.142	Late 18th-mid 19th century+	4
1043	1051	0.088	Late 18th-late 19th century	4
1044	1051	0.040	Early 19th century	4
1045	1051	0.070	Early 19th century	4
1047	1051	0.039	Late 18th-mid 19th century	4
1049	1051	0.011	Late 18th-mid 19th century	4
1069	1068	0.344	16th-end of 18th century	3
1080	1080	0.003	16th century+	4
1084		0.302	Late 18th-mid 19th century	4
1092	1089	0.647	Late 18th-20th century	4
1113	1112	0.337	Late 18th-mid 19th century	4
1125	1124	0.007	Mid 12th-mid 14th century	2
1132	1130	0.069	13th-end of 14th century	2
1135	1133	0.023	15th-end of 16th century	3
1139		0.094	Mid 18th -mid 19th century	3
1140		0.057	18th-end of 19th century	3
1141		0.022	Late 18th-mid 19th century+	3
1147		0.024	17th century+	3
1192	1191	0.002	17th-end of 18th century	3
1196	1195	0.014	17th-end of 18th century	3
1198	1199	0.075	13th-mid 14th century	2
1206		0.026	17th century	3
1225	1221	2.058	Late 18th-20th century	4

Context	Cut	Weight (kg)	Date Range	Period
1226	1210	0.418	19/20th century	4
1228	1211	0.016	Late 18th-mid 19th+ century	4
1229	1213	0.003	Mid 14th-16th century	3
1231	1214	1.546	13th-end of 15th century	2
1241	1240	0.023	18th-end of 19th century	3
1245	784	0.189	13th-end of 15th century	2
1246	784	0.358	14th-end of 15th century	2
1247	784	0.038	13th-end of 15th century	2
1256	1255	0.100	13th-end of 15th century	2
1259		0.006	Not closely datable	4
1260		0.062	19th century	3
1261	1262	0.042	13th-end of 15th century	2
1263	1264	0.006	13th-end of 14th century	2
1276	1214	0.084	Mid 11th-mid 13th century	2
1278	1528	0.047	13th-end of 15th century	2
1283	1284	0.037	17th century	2
1286	1335	0.111	13th-end of 15th century	2
1287	1288	0.407	13th-end of 15th century	3
1291	1293	0.009	Late 18th-19th century	4
1292	1293	0.016	19th century	4
1294	1295	0.010	13th-end of 15th century	2
1296	1297	0.027	Late 18th-late 19th century	4
1302	1301	0.090	14th-end of 15th century	2
1308	1309	0.014	18th/19th century	4
1314	1303	0.080	13th-end of 15th century	2
1323	1322	0.004	13th-end of 15th century	2
1325	1322	0.007	13th-end of 15th century	2
1327	1326	0.002	Not closely datable	2
1337	1336	0.011	13th-end of 14th century	2
1360	1361	0.003	13th-end of 15th century	2
1363	1362	0.496	13th-end of 15th century	2
1365	1362	0.004	13th-end of 15th century	2
1378	1380	0.018	12th-end of 14th century	2
1379	1380	0.073	12th-mid 14th century	2
1384	1385	0.026	13th-end of 15th century	3
1388	1387	0.733	Late 18th-mid 19th century	4
1389	1386	0.249	Late 18th-mid 19th century	4
1390	1386	0.394	19th-early 20th century	4
1393	1288	0.051	17th century	3
1400	1399	0.008	13th-end of 14th century	2
1410	1413	0.059	13th-end of 15th century	2
1411	1413	0.108	Mid 14th century	2
1418		1.331	13th-end of 15th century	3
1425	1424	0.121	Late 18th-mid 19th century	3
1427	1424	0.194	16th century+	3
1428	1424	0.019	17th century	3
1429	1424	0.307	16th century+	3
1433	1424	0.329	14th century+	3
1435	1436	0.332	14th century+	2
1438	1420	0.159	14th-16th century	2
1441	1420	0.075	Mid 14th-end of 15th century	2
1448	1447	0.197	13th-end of 15th century	2
1449	1450	0.186	Mid 14th-16th century+	2
1452	1451	0.124	19th century	4

Context	Cut	Weight (kg)	Date Range	Period
1453	1451	0.013	Mid 12th-end of 14th century	4
1454	1451	0.669	Late 18th-mid 19th	4
1457	1456	1.507	Mid 16th-end 17th century	3
1459	1456	0.149	15th-end of 16th century	3
1460	1456	0.445	16th century+	3
1464	1463	0.454	16th century+	2
1476	1477	0.008	13th-end of 15th century	2
1485	1484	0.087	19th century	4
1486		0.006	13th-end of 15th century	3
1492	1491	0.042	13th-end of 14th century	2
1494	1503	0.219	13th-end of 14th century	2
1499	1503	0.146	13th-end of 14th century	2
1501	1503	0.067	14th century+	2
1504	1505	0.017	13th-end of 14th century	2
1509	1508	0.035	14th century	2
1512		0.008	13th-end of 14th century	3
1514	1515	0.020	13th-end of 14th century	2
1517	1516	0.011	13th-end of 14th century	2
1519	1518	0.072	12th century	2
1521	1520	0.077	13th-end of 15th century	2
1523	1528	0.303	13th-end of 14th century	2
1529	1535	0.496	16th century+	2
1531	1535	0.362	13th-mid 14th century	2
1536	542	1.087	19th century	4
1545	1546	0.032	12th-16th century	2
1549		0.031	13th-end of 14th century	3
1558	1552	0.058	13th-end of 14th century	2
1561		0.016	13th-end of 15th century	3
1564	1565	0.034	13th-end of 14th century	3
1566	1567	0.014	13th-end of 15th century	2
1569	1570	0.008	13th-end of 14th century	3
1572	1571	0.026	13th-end of 14th century	4
1574	1573	0.080	Mid 16th-end of 17th century	3
1575	1576	0.001	Mid 12th-mid 14th century	3
1578	1577	0.024	Mid 12th-15th century	3
1584	1577	1.609	Mid 16th-end of 17th century	3
1586	1621	3.895	Early 15th-mid 17th century	2
1590		0.058	12th-16th century	3
1596	1599	0.346	13th-end of 14th century	2
1610	1611	0.014	18th/19th century	3
1612		0.266	13th-end of 14th century	2
1613		0.119	13th-end of 14th century	2
1614		0.291	13th-end of 15th century	2
1616	1616	0.004	13th-end of 14th century	4
1619	1621	0.216	18th century	2
1620	1621	0.191	13th-end of 15th century	2
1625	1624	0.022	19th century	4
1628	1621	0.479	13th-end of 15th century	2
1629	1621	0.333	Mid 14th century	2
1631	1630	1.681	Mid 12th-mid 14th century	2
1633	1632	0.094	13th-end of 15th century	2
1634	1638	0.067	13th-end of 14th century	2
1636	1638	0.029	13th-end of 14th century	2
1639	1644	0.259	Mid 12th-mid 14th century	2

Context	Cut	Weight (kg)	Date Range	Period
1640	1644	0.451	13th-end of 14th century	2
1643	1644	0.172	13th-end of 14th century	2
1651	1650	0.512	13th-end of 15th century	2
1653	1654	0.005	Mid 12th-end of 14th century	2
1655	1656	0.005	12th-mid 14th century	2
1657	1658	0.009	Not closely datable	3
1665	1666	0.066	Late 18th-late 19th century	3
1667	1668	0.084	13th-end of 14th century	3
1669	1670	0.036	13th-end of 14th century	2
1671	1672	0.010	13th-end of 15th century	2
1682	1681	0.001	Not closely datable	2
1684	1683	0.002	Not closely datable	2
1691	1692	0.037	18th century	3
1696	1621	0.571	14th century+	2
1697	1621	0.145	14th century+	2
1698	1699	0.015	13th-mid 14th century	2
1703	1700	0.190	Mid 12th-end of 14th century	2
1709	1741	0.470	13th-end of 14th century	3
1710	1741	0.254	Mid 14th-end of 15th century	3
1712	1711	0.002	Not closely datable	2
1714	1713	0.004	Late 18th-19th century	3
1717	1868	0.648	Mid 14th-mid 16th century	2
1721	1721	0.009	17th-end of 18th century	3
1728	1706	0.091	13th-end of 15th century	2
1729	1706	0.010	13th-end of 15th century	2
1731	1707	0.025	13th-mid 14th century	2
1738	1737	0.012	13th-end of 14th century	2
1740	1739	0.014	13th-end of 15th century	2
1743	1747	0.436	13th-end of 15th century	2
1745	1747	0.353	Mid 14th-mid 16th century	2
1746	1747	0.179	13th-end of 15th century	2
1749	1748	0.679	13th-end of 14th century	2
1751	1750	0.176	13th-end of 15th century	2
1752	1750	0.340	13th-mid 14th century	2
1754	1753	0.003	13th-end of 15th century	2
1757	1756	0.038	Mid 15th-mid 17th century	2
1760	1756	0.022	Late 18th-20th century	2
1761	1756	0.075	Mid 14th-mid 16th century	2
1764		0.473	15th century+	2
1768	1767	0.022	18th century	3
1770	1767	0.012	Late 18th-mid 19th century	3
1772	1741	0.239	13th-end of 15th century	3
1773	1741	0.106	Late 14th-mid 16th century	3
1774	1741	0.053	Late 14th-mid 16th century	3
1778	1777	2.325	Late 18th-mid 19th century	4
1784	1783	0.491	13th-end of 15th century	2
1792	1747	0.005	Mid 12th-end 14th century	2
1793	1747	0.021	13th-end of 15th century	2
1795	1794	0.706	13th-end of 14th century	2
1796	1794	2.393	Mid 14th-end of 15th century	2
1798	1797	0.285	13th-end of 14th century	2
1801	1800	0.017	17th-end of 18th century	3
1804	1803	0.021	Mid 14th-end of 15th century	2
1808	1807	0.027	13th-end of 14th century	2

Context	Cut	Weight (kg)	Date Range	Period
1809	1783	0.090	Mid 12th-mid 14th century	2
1816	1820	0.550	19th century	4
1842		0.132	Late 15th-early 16th century	3
1843	1853	1.276	13th-end of 14th century	2
1849	1850	0.031	16th century+	3
1852	1853	0.153	14th century+	2
1860	1861	0.046	13th-end of 14th century	3
1862	1794	1.324	13th-end of 14th century	2
1869	1868	0.006	Mid 11th-end of 15th century	2
1888	1424	0.498	16th century+	3
1897	1896	0.061	13th-end of 14th century	2
1899	1898	0.004	Mid 16th-mid 18th century	3
1902	1901	0.061	Mid 12th-mid 14th century	3
1903	1901	0.067	13th-end of 14th century	3
1904	1901	0.215	13th-end of 14th century	3
1905	1901	0.395	13th-end of 14th century	3
1907	1906	17.710	17th-end of 18th century	3
1915	1914	1.997	19th possibly as late as 20th cent	4
1917	1927	0.195	13th-end of 14th century	2
1922	1927	0.005	13th-end of 14th century	2
1924	1927	0.024	13th-end of 14th century	2
1926	1927	0.089	14th century+	2
1933	1939	0.066	16th century+	2
1937	1939	0.038	13th-end of 14th century	2
1938	1939	0.108	Mid 12th-end of 14th century	2
1941	1940	1.199	13th-end of 15th century	2
1943	1942	0.105	Mid 12th-mid 14th century	2
1944	1942	0.097	Mid 12th-mid 14th century	2
1946	1942	0.156	13th-end of 14th century	2
1954	1951	0.497	17th century+	3
1963	1940	0.005	Mid 12th-end of 14th century	2
1967	1940	0.430	13th-end of 14th century	2
1968	1940	0.482	13th-end of 14th century	2
1970	1969	0.086	Mid 14th century+	2
1971	1969	0.038	13th-end of 14th century+	2
1973	1969	0.018	Mid 14th-end of 15th century	2
1976	1977	0.023	19th century	4
1978	1986	0.006	13th-end of 15th century	2
1979	1986	0.034	13th-end of 15th century	2
1981	1986	0.171	14th century+	2
1992	1993	0.050	Mid 12th-end of 14th century	2
1994	1995	12.063	18th century	4
1996	1997	0.007	Mid 12th-mid 14th century	2
2003	2002	0.018	Not closely datable	2
2005	2004	0.109	13th-end of 14th century	2
2016	2020	3.162	18th century	3
2018	2020	0.683	17th-end of 18th century	3
2019	2020	0.273	17th-end of 18th century	3
2021	1969	0.386	Mid 14th century-end of 15th century	2
2022	1969	0.068	13th-end of 15th century	2
2024	2061	0.185	Mid 16th-end of 17th century	3
2025	2061	2.054	17th century	3
2027	2061	0.227	16th century	3
2028	2061	2.082	17th-end of 18th century	3

Context	Cut	Weight (kg)	Date Range	Period
2030	2061	0.002	13th-end of 14th century	3
2031	2061	0.048	17th century	3
2032		0.191	Mid 16th-end of 17th century	3
2033	2096	2.729	Late 15th-end of 16th century	2
2037	2036	0.007	Mid 12th-end of 14th century	3
2039	2038	0.021	13th-end of 14th century	2
2041	2040	0.413	14th-16th century+	2
2043	2042	0.013	16th century+	4
2045	2044	0.010	Mid 18th-mid 19th century	4
2047	2046	0.059	Late 18th-early/mid 19th century	4
2049	2046	0.054	Late 18th century+	4
2054	2059	0.012	13th-end of 15th century	2
2056	2059	0.050	Mid 12th-end of 14th century	2
2058	2059	0.004	Mid 11th-13th or 13th-end of 15th century	2
2063	1940	0.780	13th-end of 14th century	2
2067	1969	0.111	13th-end of 14th century	2
2073	2075	0.002	Not closely datable	
2089	2090	0.089	17th-end of 18th century	3
2097	2096	0.411	Late 15th-mid 16th century	2
2098	2096	0.232	Late 14th-mid 16th century	2
2099	2096	0.595	Mid 14th-end of 15th century	2
2100	2096	0.519	Late 14th-mid 16th century	2
2101	2102	0.041	19th century	4
2103	2104	0.118	19th century	4
2110	2109	0.005	17th-end of 18th century	3
2117	1424	0.017	17th century	3
2119	1424	0.143	16th century+	3
2124	2125	0.281	13th-end of 14th century	2
2135	2136	3.303	16th-end of 19th century	3
2137	2139	0.053	Mid 16th-end of 17th century	3
2141	2141	1.059	Uncertain of date	3
2146	2147	0.021	10th-mid 14th century	2
2148	1424	0.352	17th-end of 18th century	3
2149	1424	0.168	Mid 14th-16th century	3
2152	2153	0.008	Mid 12th-mid 14th century	2
2155	2154	0.251	Mid 14th century+	2
2156	2154	0.077	16th-end of 18th century	2
2158	2157	0.090	16th century+	3
2162	2157	0.028	13th-end of 15th century	3
2163	2173	0.047	13th-end of 14th century	2
2176	2177	0.011	Mid 11th-end of 12th century	2
2181		0.053	Late 14th-mid 16th century	2
2185	2182	0.190	Late 18th-mid 19th century	4
2186	2182	0.009	19th-century	4
2187	2182	0.030	19th-century	4
2191	2188	10.919	Mid 18th-mid 19th century	4
2192	2188	9.901	Late 18th-mid 19th century	4
2197	2199	12.141	Early-mid 19th century	4
2201	2200	0.049	13th-end of 16th century	2
2209	2208	0.093	17th-end of 18th century	3
2212	2211	0.276	19th century	3
2216	2215	0.109	18th-end of 19th century	4
2217	1456	0.724	13th-end of 14th century	3
2218	2219	0.257	14th century+	2

Context	Cut	Weight (kg)	Date Range	Period
2221	2220	0.016	13th-end of 14th century	2
2223	2222	0.298	16th-end of 17th century	3
2231	2136	0.101	15th century+	3
2232	2136	0.186	15th century+	3
2238	2237	0.291	16th century+	2
2239	2237	0.413	13th-end of 14th century	2
2240	2237	0.363	13th-end of 15th century	2
2241	2237	0.222	13th-end of 14th century	2
2242	2237	0.191	13th-end of 14th century	2
2244	2237	0.011	16th century	2
2247		0.330	13th-16th century	3
2248	1456	0.169	13th-end of 14th century	3
2249	1456	0.454	14th-15th century+	3
2257	2258	0.442	13th-end of 15th century	2
2273	1940	0.066	13th-end of 14th century	2
2281	2272	0.017	13th-end of 14th century	2
2284	2275	0.191	13th-end of 14th century	2
2285	2275	0.258	13th-end of 14th century	2
2288	2286	0.073	13th-end of 14th century	2
2290	2289	0.476	13th-end of 15th century	2
2294	2295	0.112	13th-end of 14th century	3
2300	2302	0.045	13th-end of 14th century	2
2309	2318	0.514	13th-end of 14th century	2
2311	2318	1.696	Mid 14th-end of 15th century	2
2312	2318	0.078	13th-end of 15th century	2
2313	2318	0.103	14th century+	2
2316	2318	0.430	13th-end of 14th century	2
2317	2318	0.107	13th-end of 14th century	2
2322	1747	0.122	13th-end of 15th century	2
2324	2327	3.468	19th century	4
2328	1463	0.042	13th-end of 14th century	2
2329	1463	0.324	13th-end of 14th century	2
2330	2452	0.041	Mid 12th-mid 14th century	2
2331	1424	0.009	13th-end of 14th century	3
2335	1424	0.200	16th century or 17th century	3
2336	1424	0.132	16th century	3
2347	1424	0.156	16th century+	3
2348	1424	4.092	Late 16th-end of 17th century	3
2351	2353	0.256	Mid 12th-end of 14th century	2
2357	2355	0.548	Late 15th-end of 16th century	3
2358	2355	1.452	Late 16th century-end of 17th century	3
2365	2364	0.563	16th century	2
2369	1456	0.860	Mid 14th-end of 15th century	3
2371	1456	0.011	13th-end of 14th century	3
2372	2373	0.022	Mid 12th-end of 14th century	2
2375	2377	0.238	Mid 12th-end of 14th century	2
2379	2380	0.241	17th century+	3
2386	2387	0.101	13th-end of 15th century	3
2390	2388	0.177	16th century+	3
2392	2391	0.249	13th-end of 14th century	2
2398	2393	0.621	19th century	4
2399	2474	0.926	13th-end of 18th century	3
2410	2411	0.010	Mid 12th-mid 14th century	3
2414	1456	3.605	13th-end of 15th century	3

Context	Cut	Weight (kg)	Date Range	Period
2416	2417	0.011	Mid 11th-mid 14th century	2
2418	2381	0.049	1150-end of 15th century	2
2420	2381	0.055	13th-end of 14th century	2
2423	2412	0.048	Mid 12th-end of 14th century	2
2426	2412	0.119	13th-end of 15th century	2
2428	2412	0.066	13th-end of 15th century	2
2433	2413	0.000	13th-end of 15th century	2
2434	2413	0.023	13th-end of 15th century	2
2435	2452	0.006	13th-end of 15th century	2
2439	2447	0.013	13th-end of 15th century	2
2440	2447	0.004	13th-end of 15th century	2
2442	2447	0.012	Mid 12th-mid 14th century	2
2445	2447	0.025	Mid 11th-end of 15th century	2
2451	2450	0.130	13th-end of 14th century	2
2473	2474	37.051	19th century (filled in Period 4)	3
2481	2480	0.009	13th-end of 15th century	2
2484	2482	0.010	13th-end of 15th century	2
2492	2486	0.033	Mid 11th-end of 15th century	2
2493	2486	0.391	13th-end of 14th century	2
2495	2494	6.987	19th-early 20th century	4
2496	1940	1.137	13th-end of 15th century	2
2498	1940	0.011	13th-end of 14th century	2
2502	2272	0.020	13th-end of 14th century	2
2503	118	0.121	13th-end of 15th century	2
2509	1463	0.410	13th-end of 15th century	2
2513	1463	0.808	13th-end of 14th century	2
2520	2519	0.253	Late 18th century+	3
2523	2528	0.047	13th-end of 15th century	2
2526	2528	0.109	13th-end of 14th century possibly at the earlier end	2
2529	2530	0.077	15th-16th century	2
2534	2536	0.099	13th-end of 15th century	2
2551	2550	0.032	Late 18th-mid/late 19th century	4
2555	2554	0.172	13th-end of 15th century	2
2556	2554	0.029	13th-end of 14th century	2
2557	2554	0.048	Mid 12th-15th century	2
2558	2554	0.313	14th century+	2
2562	2560	0.031	13th-end of 14th century	2
2563	2560	0.023	Mid 12th-end of 14th century	2
2564	2560	0.063	Mid 12th-end of 14th century	2
2565	2559	0.033	Mid 12th-end of 14th century	2
2576	2577	0.061	17th-end of 18th century	3
2581	2584	0.367	Mid 18th-mid 19th century	3
2583	2584	0.002	Late 18th-mid 19th century+	3
2587	2588	0.389	16th-end 18th century	3
2589	2590	0.052	18th century	3
2594	2595	0.008	Not closely datable	
2607	2604	0.050	13th-end of 14th century	2
2608	2609	1.812	Early 19th century +	4
2611	2610	0.232	17th century	3
2613	2612	0.599	<i>circa</i> 16th century+	3
2614	2612	0.545	16th century+	3
2615	2612	0.016	Mid 12th-end of 14th century	3
2616	2612	0.184	17th century	3

Context	Cut	Weight (kg)	Date Range	Period
2617	2618	0.001	Not closely datable	2
2619	2620	0.134	16th century+	3
2621	2621	0.046	13th-end of 15th century	2
2626		0.017	17th century	3
2631	2636	0.554	17th-end of 18th century	3
2634	2636	0.186	16th century+	3
2640	2623	0.012	13th-end of 15th century	2
2642	2624	0.018	Mid 12th-15th century	2
2653	2651	0.110	18th century	4
2655	2651	0.011	18th-end of 19th century	4
2656	2651	0.175	Late 18th-mid 19th century	4
2657	2747	0.127	19th-early 20th century	4
2660	2659	0.081	17th-end of 18th century	3
2663	2662	0.009	Mid 12th-end of 14th century	2
2664	2665	0.118	13th-end of 15th century	2
2666		0.072	17th-mid 18th century	3
2667	2671	0.772	Late 14th-mid 16th century	2
2670	2671	0.056	16th century+	2
2674	2682	0.002	13th-end of 14th century	2
2676	2682	0.083	13th-end of 14th century	2
2677	2682	0.257	13th-end of 14th century	2
2679	2682	0.012	13th-end of 15th century	2
2683		0.070	13th-end of 14th century	
2689	2695	0.270	13th-end of 14th century+	2
2700	2699	0.029	Mid 12th-end of 14th century	2
2704	2703	0.135	13th-end of 14th century	2
2706	2705	0.041	12th-15th century	2
2707	2713	0.051	Mid 12th-end of 14th century	2
2712	2713	0.187	Mid 12th-end of 14th century	2
2716	2714	0.010	13th-end of 14th century	2
2717	2714	0.189	13th-end of 14th century	2
2724	2722	0.030	Late 18th-mid 19th century	4
2730	2725	0.027	Mid 12th-15th century	2
2732	2725	0.094	13th-end of 14th century	2
2736	2735	18.347	19th century	4
2738	2737	0.041	Mid 14th-end of 15th century	2
2740	2739	0.063	Mid 12th-end of 14th century	2
2744		0.040	Late 18th-mid 19th century	3
2746		0.065	17th century	3
2752	2751	1.835	18th or 19th century	4
2753	2754	0.013	Late 18th-mid 19th+ century	4
2756		0.084	Late 18th-19th century+	4
2759		0.229	Late 18th-19th century	4
2762	2761	0.009	13th-end of 15th	2
2766	2765	0.498	19th-early 20th century	4
2774	2775	0.104	19th century	4
2790		0.510	19th century	4
2796		0.122	16th-end of 18th century	4
2799		0.016	18th-early 19th century	3
2801		0.121	13th-mid 14th century+	2
2804		0.361	19th century	4
2808	2808	0.013	Late 18th-19th century	4
2810	2811	0.047	Post-1828 but could be late	4
2817		0.043	Late 18th-mid 19th century	4

Context	Cut	Weight (kg)	Date Range	Period
2832		0.009	Late 18th-mid 19th century	4
2834	2833	0.043	Late 18th-19th century	4
2835	2870	0.003	Late 18th-mid 19th century	4
2837		0.073	16th-end of 17th century	3
2839		0.006	13th-end of 14th century	2
2850	3002	0.435	16th century	3
2852	1939	0.112	13th-end of 15th century	2
2854	1939	0.628	13th-end of 14th century	2
2860	1927	0.110	13th-end of 14th century	2
2861	1927	0.019	Mid 14th-end of 15th century	2
2863	2996	0.117	Early 15th-mid 17th century	2
2865	2864	0.094	13th-end of 15th century	2
2866	2554	0.925	13th-end of 14th century/end of 15th century	2
2867	2554	2.063	13th-end of 14th century	2
2868	2851	1.384	13th-end of 15th century	2
2869	2412	0.932	13th-end of 15th century	2
2871	2871	0.007	13th-end of 16th century	2
2872	2871	0.032	13th-end of 15th century	2
2888		0.543	Late 18th-19th century	4
2906		1.899	19th century	4
2922	2923	0.011	16th century+	3
2930		0.002	Mid 18th-mid 19th century	3
2932		0.242	19th possibly early 20th century	4
2933		0.366	19th possibly early 20th century	4
2937		0.057	Late 18th-mid 19th century	4
2940		0.111	19th century	4
2942		0.189	Late 18th-19th century+	4
2949	2953	0.096	13th-end of 15th century	2
2950	2953	0.012	14th century+	2
2952	2953	0.121	Late 13th-15th century	2
2954	2956	0.069	13th-end of 15th century	2
2955	2956	0.119	13th-end of 15th century	2
2959	2960	0.035	13th-end of 15th century	2
2961	2962	0.021	16th century+	3
2970	2971	0.002	13th-end of 15th century	3
2980	2978	0.062	13th-16th century	2
2987	2986	0.048	13th-end of 15th century	2
2988	2986	0.112	13th-end of 15th century	2
2997	2996	0.045	13th-end of 15th century	2
2999	2996	0.033	13th-end of 15th century	2
3001	2996	0.098	14th-16th century	2
3004	3004	0.275	19th century	4
3008		0.231	Late 18th-mid 19th century	4
3010	99	0.154	13th-end of 15th century	2
3012	3013	0.234	Late 18th-mid 19th century+	4
3013	3013	0.008	Not closely datable	4
3018		0.771	Early-mid 19th century	4
3024		1.621	19th possibly early 20th century	3
3026	3027	0.196	Early-mid 19th century	4
3027	3027	0.252	Late 18th-mid 19th century+	4
3029	3030	0.012	17th century	3
3060	2923	0.323	Mid 14th-end of 15th century	3
3062	3061	0.031	13th-end of 15th century	2
3064	3063	0.015	13th-end of 15th century	3

Context	Cut	Weight (kg)	Date Range	Period
3066	3065	0.232	17th century	3
3067	3065	0.035	13th-end of 15th century	3
3078	3076	0.600	13th-end of 15th century	2
3079	3079	0.040	Late 18th-mid 19th century	4
3082	3081	0.108	Mid 14th-end of 15th century	2
3083	3081	0.065	Mid 14th-end of 15th century	2
3085	3081	0.115	13th-mid 14th century	2
3087	2412	0.033	13th-end of 15th century	2
3088	2412	0.531	13th-end of 15th century	2
3090	2412	0.316	14th century+	2
3094	3093	0.184	13th-end of 15th century	2
3096	3095	0.358	13th-end of 14th century	2
3098	3097	0.023	Mid 12th-end of 14th century	2
3100	3099	0.023	Mid 12th-end of 14th century	2
3101	3099	0.052	13th-end of 15th century	2
3102	3099	0.080	13th-end of 15th century	2
3104	3103	0.041	13th-end of 15th century	2
3105	3103	0.033	13th-end of 14th century	2
3106	3103	0.057	13th-end of 14th century	2
3107	3103	0.130	13th-end of 15th century	2
3108	3103	0.051	13th-end of 14th century	2
3115	3109	0.175	14th-end of 15th century	2
3120	3118	0.052	13th-end of 14th century	2
3122	3125	0.027	Mid 12th-end of 14th century	2
3124	3125	0.075	13th-end of 15th century	2
3128	2412	0.066	13th-end of 15th century	2
3129	2412	0.075	13th-end of 15th century	2
3131	2412	0.059	13th-end of 15th century	2
3134	3133	0.289	16th century+	2
3138	3137	1.483	14th century+	2
3141	3137	0.765	13th-end of 15th century	2
3146	2554	9.806	Mid 14th-end of 15th century	2
3151	3150	0.030	End of 15th-end of 17th century	3
3161	3160	0.079	13th-end of 15th century	2
3163	3160	0.124	13th-end of 14th century	2
3164		0.031	13th-end of 14th century	3
3165	3168	0.010	13th-end of 14th century	2
3166	3168	0.005	Mid 12th-end of 14th century	2
3186	3185	0.025	13th-end of 14th century	3
3190	3189	0.002	17th century	3
3192	3191	0.020	Mid 12th-15th century	2
3196	3195	0.015	Mid 12th-15th century	3
3202	3199	0.080	14th century	2
3203	3199	0.003	13th-end of 15th century	2
3205	3212	0.023	12th-mid 14th century	2
3206	3212	0.058	13th-end of 14th century	2
3213	2554	0.568	13th-end of 15th century	2
3214	3081	0.167	13th-end of 15th century	2
3217	3215	0.743	13th-end of 14th century	2
3220	3218	0.056	Mid 12th-end of 14th century	2
3222	3222	0.008	13th-end of 15th century	2
3224	3223	0.145	13th-end of 15th century	2
3225	3223	0.148	13th-mid 14th century	2
3227	3226	0.017	13th-end of 14th century	2

Context	Cut	Weight (kg)	Date Range	Period
3232	3364	0.049	1480-mid 16th century	3
3235	3238	0.282	13th-end of 15th century	2
3239	3240	0.011	13th-end of 15th century	2
3248	1939	1.678	13th-end of 15th century	2
3249	1939	1.085	13th-end of 15th century	2
3250	1939	5.755	13th-end of 14th century	2
3253	1939	0.187	13th-end of 15th century	2
3266	2554	6.658	13th-end of 15th century	2
3267	2554	2.568	13th-mid 14th century	2
3268	2554	1.430	13th-end of 15th century	2
3269	2554	0.000	14th century	2
3270	3271	0.090	18th-19th century	4
3272	3273	0.029	13th-end of 15th century	4
3274	3280	0.007	13th-end of 14th century	2
3276	3280	0.010	13th-end of 15th century	2
3277	3280	0.090	13th-end of 15th century	2
3282		0.575	16th century+	4
3291	1927	0.241	13th-end of 15th century	2
3292	1927	0.096	14th century+	2
3293	1927	0.008	13th-end of 15th century	2
3294	1927	0.042	<i>circa</i> 13th-end of 15th century if bone China intrusive, or 19th century	2
3295	1927	2.127	13th-end of 15th century	2
3296	1927	1.221	13th-end of 15th century	2
3297	1927	0.574	13th-end of 15th century	2
3300	3299	0.092	19th century	2
3315		0.853	19th century	4
3317		0.307	19th century	4
3318		0.408	19th century	4
3319	3325	12.218	Late 18th-mid 19th century	4
3321	3325	2.528	17th-18th century	4
3324	3325	0.661	19th possibly early 20th century	4
3327	3334	1.682	19th possibly early 20th century	4
3332	3334	0.093	18th-century	4
3339		0.056	Mid 12th-end of 14th century	2
3346	3351	0.048	16th-end of 17th century	2
3348	3351	0.329	13th-end of 14th century	2
3349	3351	0.349	13th-end of 15th century	2
3353	3354	0.226	17th century	2
3363	3362	0.007	13th-end of 14th century	2
3365	3351	0.070	13th-end of 15th century	2
3366	3354	0.052	13th-end of 15th century	2
3367	3354	0.176	13th-end of 15th century	2
3368	3354	0.053	13th-end of 15th century	2
3379	3381	0.074	13th-end of 14th century or later	2
3380	3381	0.173	14th century	2
3382	3384	0.034	Late 12th-end of 15th century	2
3386	3388	0.088	13th-end of 15th century	2
3387	3388	0.664	13th-end of 15th century	2
3390	3389	0.075	Late 18th-mid 19th century	4
3391	3389	0.092	Most likely 19th century	4
3395	3392	0.079	Mid 12th-15th century	2
3399	3397	0.538	19th century	2
3404	3405	0.106	16th century+	3

Context	Cut	Weight (kg)	Date Range	Period
3408	3409	0.059	19th century	4
3410	3411	0.079	Late 18th-mid 19th century	3
3416	3420	0.226	13th-end of 14th century	2
3417	3420	0.162	13th-end of 14th century	2
3418	3420	0.026	1300-mid 14th century+	2
3419	3420	0.136	13th-end of 14th century	2
3421	3422	0.018	Mid 12th-15th century	2
3423	3425	0.211	14th century+	2
3424	3425	0.158	14th-end of 15th century	2
3427	3428	0.026	Mid 12th-end of 15th century	2
3429	3430	0.072	Mid 12th-end of 14th century	2
3436	3439	0.331	Mid 12th-mid 15th	2
3440	3444	0.083	13th-end of 14th century	2
3444	3444	0.066	13th-end of 14th century	2
3450	3370	0.012	Mid 11th-mid 14th century	2
3452	3451	0.036	Late 14th-mid 16th century	2
3454	3451	0.275	Late 14th-mid 16th century	2
3455	3451	0.018	14th century+	2
3456	3451	0.016	13th-end of 14th century	2
3457	3451	0.204	13th-end of 15th century	2
3459	3451	0.282	Late 14th-mid 16th century	2
3460	3451	1.486	13th-end of 14th century	2
3461	3451	0.669	Late 14th-mid 16th century	2
3463	3451	0.461	14th century+	2
3464	3451	0.008	Not closely datable	2
3465	3451	0.276	Late 15th-early16th century	2
3467	3451	0.754	16th century+	2
3468	3470	0.216	13th-end of 15th century	2
3469	3470	0.237	13th-end of 14th century	2
3471	3478	0.025	13th-end of 15th century	2
3474	3478	0.189	13th-end of 15th century	2
3475	3478	0.186	1300-mid 14th century+	2
3476	3478	0.439	13th-end of 15th century	2
3477	3478	0.088	13th-end of 15th century	2
3480	3481	0.003	Mid 12th-end of 14th century	2
3483	3485	0.012	Mid 12th-end of 14th century	2
3487	3486	0.031	Mid 12th-end of 14th century	2
3490	3488	0.073	Mid 12th-mid 14th century	2
3492	3491	0.368	16th-end of 18th century	4
3495	3496	0.267	13th-end of 14th century	2
3500	3499	0.009	13th-end of 14th century	2
3501	3499	0.113	Mid 14th century+	2
3502	3499	0.149	13th-end of 15th century	2
3504	3503	0.600	1480-mid 16th century+	3
3507	3503	1.438	16th century	3
3509	3516	0.142	13th-mid 14th century	2
3511	3516	0.154	13th-end of 14th century	2
3514	3516	0.213	Mid 12th-mid 14th century	2
3515	3516	0.047	Mid 14th century+	2
3522	3527	0.017	Mid 12th-end of 15th century	2
3529	3528	0.071	Mid 16th-end of 17th century	3
3530	3533	0.100	13th-end of 15th century	2
3531	3533	0.082	13th-end of 15th century	2
3532	3533	0.006	13th-end of 14th century	2

Context	Cut	Weight (kg)	Date Range	Period
3534	3537	1.045	Mid 12th-end of 14th century	2
3538	3539	0.005	Mid 11th-end of 12th century	2
3544	3557	0.126	13th-end of 14th century	2
3545	3557	0.056	13th-mid 14th century	2
3546	3557	0.041	13th-end of 14th century	2
3551	3557	0.049	13th-end of 14th century	2
3553	3557	0.103	13th-end of 14th century	2
3555	3557	0.010	13th-end of 15th century	2
3556	3557	0.036	13th-end of 15th century	2
3570	3499	0.021	14th century+	2
3571	3574	0.008	Mid 12th-end of 15th century	2
3572	3574	0.201	13th-end of 15th century	2
3584	3388	0.277	Mid 14th century+	2
3585	3388	0.767	13th-end of 14th century	2
3587	3388	0.279	13th-end of 15th century	2
3588	3388	0.077	14th century+	2
3591	3589	0.778	Late 17th-end of 18th	4
3594	3589	0.038	Late 18th-mid 19th century	4
3595	3589	0.025	Early-mid 19th century	4
3596	3589	0.995	19th possibly early 20th century	4
3603	3600	0.109	Late 18th-mid 19th century+	4
3604	3600	0.033	Late 18th-mid 19th century	4
3607	3609	0.477	19th possibly early 20th century	4
3608	3609	0.455	19th possibly early 20th century	4
3611	3481	0.010	13th-end of 14th century	2
3613	3478	0.002	Mid 12th-mid 14th century	2
3621	3597	0.065	19th century	4
3626	3470	0.104	13th-mid 14th century	2
3628	3470	0.644	13th-end of 15th century	2
3629	3470	0.745	13th-end of 14th century	2
3630	3633	0.087	Early-mid 19th century	4
3631	3633	0.005	19th-20th century	4
3632	3633	0.013	Late 18th-mid 19th century	4
3634	3635	0.422	19th century	4
3636	3388	0.032	13th-end of 15th century	2
3637	3388	0.028	13th-end of 15th century	2
3638	3388	1.542	13th-end of 15th century	2
3639	3388	0.326	13th-end of 14th century	2
3640	3388	1.670	13th-end of 15th century	2
3641	3388	0.332	14th century+	2
3642	3388	0.747	13th-end of 15th century	2
3643	3388	9.875	13th-end of 15th century	2
99999		0.201	Unstratified	

Table 17: *Pottery spot dating*

B.7 Clay pipe

By Craig Cessford

Summary

- B.7.1 The archaeological evaluation and excavation at Harvest Way, Cambridge, produced 882 fragments of clay tobacco pipe weighing 3588g, representing a minimum of 126

tobacco pipes. The material spans the period c. mid-17th–mid/late 19th century and is a locally and regionally significant assemblage. Thirteen pipemakers can be identified from the presence of initials or names on 28 pipes; these are predominantly local Cambridge pipemakers, although material from further afield is also present. There are also fifteen decorated pipes with no pipemakers marks. Eight individual contexts produced assemblages of five or more pipes that warrant individual consideration. Significant discoveries not previously recognised from archaeological investigations in Cambridge include several pipes decorated with masonic symbols, produced by a local maker William Balls, and Maclure, a pipe manufactured in Glasgow.

Introduction

- B.7.2 The archaeological excavations produced a moderately sized assemblage of clay tobacco pipe; totalling 878 pieces weighing 3578g with a stem length of 42.57m (Table 18). In addition 4 stem fragments weighing 10g were recovered during the evaluation phase, the material from the evaluation phase was not examined by the author. The excavation material equates to a minimum of 126 clay tobacco pipes (MNI: Minimum Number of Items). This represents the second largest assemblage recovered from an archaeological investigation in Cambridge, exceeded only by that from Grand Arcade. The assemblage from Harvest Way is considerably larger than that recovered from the nearby Eastern Gate Hotel site, although in some respects the two sites can effectively be considered a single assemblage as the division between them is an arbitrary one (Table 18). All other clay tobacco pipe assemblages recovered from the general area appear to be relatively negligible, for example investigations at Intercell House produced only 20 stem fragments weighing 46g (Atkins in Atkins 2013, 87). The material from Harvest Way consists of bowls and bowl fragments (110, 1203g), heel/spurs (27, 147g) and stems/mouthpiece fragments (741, 2228g). For quantification purposes re-fitting fragments that appear to represent recent breakages have been counted as one.
- B.7.3 The bowls were classified according to Oswald's simplified general typology (1975, 37–41), modified slightly based upon the author's unpublished work on clay tobacco pipes from Cambridgeshire (Table 19). Stem bore dating has not been undertaken as the assemblage does not warrant this form of analysis. The pipes are overwhelmingly of local manufacture. The presence of clay tobacco pipe fragments in a context indicates a date of the late 16th to early 20th centuries (c. 1580–1910), although in Cambridge clay tobacco pipe fragments are generally rare in deposits prior to 1620 and after 1890. Based upon bowl typology it appears likely that the earliest material in the assemblage dates to c. 1640–60 (see below).
- B.7.4 The clay tobacco pipe industry in Cambridge has been subject to two major studies which provide lists of Cambridge pipemakers (Cessford 2001a; Flood 1976), although both are now somewhat out-of-date. The earliest clay tobacco pipes recovered archaeologically from Cambridge dating to c.1580–1630/40 (which are not to be present at Harvest Way) were probably produced in London. Following on from this almost all pipes recovered from Cambridge were produced locally within the town until the mid-19th century, when a few pipes from Broseley (Staffordshire) and London occur all of which probably post-date Cambridge being linked into the railway network in 1845. Initially the pipemaking industry in Cambridge was dispersed around several parishes in the historic core of Cambridge, following the Eastern or Barnwell Fields Inclosure Act of 1807 Cambridge expanded rapidly eastwards. Pipemaking came to be almost exclusively concentrated in this area – where the Harvest way site is located – by the

1820s, with the exception of one kiln. Clay tobacco pipe production finally ended in Cambridge in the 1890s.

Site	Location	Count	Wt (g)	MNI	Reference
Harvest Way	Barnwell suburb	878	3578	126	This report
Eastern Gate Hotel	Barnwell suburb	384	1072	39	Cessford in Newman 2013, 85–87
Barnwell suburb total	Barnwell suburb	1262	4650	165	
Grand Arcade plus Christ's Lane	Barnwell Gate suburb	1807 (1501+306)	9960 (6970+1495)	256 (220+36)	Cessford in Cessford 2007, 352–56 Cessford in Newman 2007, 84–85
Cornfield Court plus Old Divinity School	Town centre street block	422 (212+210)	2361 (1522+839)	105 (75+30)	Cessford in Newman 2008, 224–29 Cessford in Cessford 2012, 95, 106

Table 18: *Clay tobacco pipe from Harvest Way and selected other Cambridge assemblages*

Temporal Profile

- B.7.5 In total 100 bowls could be typologically dated (Table 19), this can also be expressed as a decadal frequency (Table 20). The earliest material recovered dates to c. 1640–60, paralleling the results from the Eastern Gate Hotel site (Cessford in Newman 2013, 85–87). Based upon bowl typology and makers' marks the latest pipes present date to the mid/late 19th century.

Type	Dates	MNI
5	c. 1640–60	2
6	c. 1660–80	10
7	c. 1660–80	1
9	c. 1680–1710	12
10	c. 1700–40	5
12	c. 1730–80	19
22	c. 1730–80	2
Early/mid-19th	c. 1820–50	2
Mid/late 19th	c. 1840–90	47
Total	c. 1640–1890	100

Table 19: *Clay tobacco pipes dated based upon bowl typology, examples dated based upon pipemakers marks not included as this would distort results*

Decade	Adjusted decadal bowl count
1640s	0.67
1650s	0.67
1660s	5.5

Decade	Adjusted decadal bowl count
1670s	5.5
1680s	4
1690s	4
1700s	5.25
1710s	1.25
1720s	1.25
1730s	5.45
1740s	4.2
1750s	4.2
1760s	4.2
1770s	4.2
1780s	0
1790s	0
1800s	0
1810s	0
1820s	0.67
1830s	0.67
1840s	10.07
1850s	9.4
1860s	9.4
1870s	9.4
1880s	9.4

Table 20: *Quantities of clay tobacco pipes deposited per decade based upon bowl typology*

Pipemakers Marks

- B.7.6 The names or initials of nine local Cambridge makers are represented on 24 pipes. In addition two pipes from two non-local makers (London and Glasgow) are represented in the assemblage and there are two pipes produced by two pipemakers whose origin cannot be identified. The relatively low proportion of pipemakers names/initials (28 out of 126 pipes, c. 22%) is typical of clay tobacco pipes from Cambridge and indeed Cambridgeshire more generally. The bulk of the names/initials present are amongst those that are relatively common in Cambridgeshire; two exceptions are some bowls associated with William Balls that are decorated with Masonic symbols and the first identification a pipe manufactured in Glasgow from Cambridge.

Cambridge Pipemakers

- B.7.7 **W Balls:** three stems marked W-BALLS/CAMBRIDGE with foliate decoration on early/mid-19th century bowls decorated with masonic symbols and sides and rear with oak leaves on the front were recovered from fill 1994 (pit **1995**). One of these also has the initials W/B on the spur. There is also a fourth pipe with a similar bowl and the initials W/B on the spur that has a plain stem, also from 1994 (pit **1995**). Another pipe with masonic decoration but lacking a makers name or initials was recovered from fill (2197) (pit **2199**) (see below). Given his date of birth William Balls is unlikely to have been an independent pipemaker prior to c. 1807. He is first attested as a pipemaker in

1813, when he was resident in Barnwell. By 1820 he was definitely a master pipemaker and he continued as a pipemaker until at least 1832, working on George Street (a section of Newmarket Road), and probably until his death in 1836 aged 50. William Balls had a son William Eve Balls who continued the family business at George Street and later King Street until 1851. Pipes marked with the name William Balls or the initials WB appear to be relatively rare, suggesting that William only marked his more ornate products.

- B.7.8 Pipes decorated with masonic pipes originated c. 1750, whilst their early use was probably restricted to masons by the 19th century it is unclear if their use was still restricted or if they circulated more widely. Their usage has received some scholarly attention (Dallal 2000; White and Beaudry 2009, 220). The two features to produce pipes with masonic decoration were located c. 20m apart in the backplots of different houses fronting Shamrock Passage, a terrace of houses built by 1840. Marked pipes that can be associated with the Balls family are relatively uncommon discoveries from excavations in Cambridge although a few examples are known including one example from the Grand Arcade site. Pipes with masonic decoration appear to be rare locally and none have previously been recovered at archaeological investigations in Cambridge.
- B.7.9 **H/C**: initials H/C on the spur of a plain mid/late 19th century bowl (99999). Probably Henry Casey, who was a journeyman pipemaker in 1851 and had become a master pipemaker working on Newmarket Road by 1859. By 1871 he was a pipemaker and publican at the Dog and Pheasant, 121 Newmarket Road. He was last described as a pipemaker in 1891.
- B.7.10 **A Cleever**: two stems marked A·CLEEVER/CAMBRIDGE were found in fill 537 (drain **538**) and fill 2834 (wall foundation **2833**). Thomas Cleever died c. 1858-61, his widow Anne apparently took over his business and is listed in 1864 as working at 97 Newmarket Road. Anne Cleever died in 1864 and pipes marked A Cleever can probably be dated quite closely to 1858-64, as Anne does not appear to have marked pipes with her name whilst her husband was still alive. Despite her short floruit pipes produced by Anne Cleever are relative common discoveries from archaeological excavations in Cambridge.
- B.7.11 **J/C**: initials J/C on two spurs from layer 2790. This could be any one of several members of the Cleever family with the Christian initial J; including James (two individuals), John (three individuals) and Joseph (one individual). All these pipemakers were active in the Newmarket Road area and span the period c. 1848-83. Pipes with these initial are relatively common discoveries from archaeological excavations in Cambridge.
- B.7.12 **T/C**: initials T/C on eleven spurs with three types of bowls. These include eight plain mid/late 19th century bowls from fill 2736 (pit **2735**), one mid/late 19th century bowl with oak leaves on the front and rear of the bowl from 2197 (pit **2199**) and two on mid/late 19th century two-stage fluted bowls with oak leaves on front and rear of bowl from fill 2736 (pit **2735**). Thomas Cleever is first attested as a pipemaker in Cambridge in 1839 and had probably previously been working in Coventry (1837). He worked on George Street (a section of Newmarket Road). By 1851 he was a publican and pipemaker, employing at least six other pipemakers. Thomas Cleever died at some point between 1852 and 1861. His son Thomas Cleever continued the business until at least c. 1865 but later moved to London. Pipes with these initial are relatively common discoveries from archaeological excavations in Cambridge.

- B.7.13 **I/K**: initials I/K on the spur of a type 12 bowl (c. 1730–80) from 1994 (pit **1995**). James Kuquit is first attested in 1713 and died 1750. He worked at 11 Sidney Street (Cessford 2001b) and was one of the few early/mid-18th century Cambridge pipemakers to mark his products. Pipes marked with these initials are a common discovery on excavations in Cambridge and have also been found further afield at locations including Denny Abbey and Dry Drayton.
- B.7.14 **T/M**: the initials T/M occur twice on spurs, including one associated with a plain mid/late 19th century bowl, from layer 214 and fill 3321 (?well **3325**). The most probable manufacture is Thomas Moule, working on Newmarket Road c. 1830–39. Pipes with these initials appear to be relatively uncommon on excavations in Cambridge, but a few examples are known including one from Grand Arcade.
- B.7.15 **Pawson**: PAWSON CAMB on a stem with Wyer style decoration from fill 2192 (cellar **2188**). James Pawson worked at 11 Sidney Street between 1786 and 1813 (Cessford 2001b) and produced pipes marked with this relatively ornate form of decoration, which he adopted from his predecessor at the premises Samuel Wilkinson. His pipes are relatively common discoveries at archaeological excavations in Cambridge and it appears that he ceased to use this style of stem decoration c. 1800.
- B.7.16 **P/R**: initials P/R on a spur from fill 2324 (pit **2327**). Probably Patrick Ryan, a master pipemaker born in Ireland who was active at Newmarket Road in Cambridge c. 1849–51, having previously worked in Birmingham (1842) and Warwick (1847) and later moved to Derby (1857–58).

Non-Cambridge Pipemakers

- B.7.17 **C Crop**: pipe marked C CROP / LONDON in cartouche on stem from fill 2324 (pit **2327**). Charles Crop of 36 Great James St, London was active between 1856 and the 1870's and under his sons the firm continued until 1924 (Oswald 1975, 133). Crop was one of the largest mid/late 19th century pipe producers in London and their products included high quality pipes with ornate bowls. Whilst the bowl does not survive in this instance, the form of the stem and the bowl junction indicates that this was most probably an ornate bowl. A pipe by this maker has previously been recovered in Cambridge at the Grand Arcade site in a deposit dated c. 1874–81.
- B.7.18 **Maclure**: Although the stamp is not entirely clear this appears to read MACLURE/QUEEN ST/GLASGOW on the rear of a plain mid/late 19th century bowl from fill 2736 (pit **2735**). Applied stamps on the rear of the bowl in a frame are a relatively common phenomenon of 19th century pipes from Glasgow (Gallagher 1987, 73), but no pipemaker of this name is listed in the standard publications and Green Street is also not listed as a location (Anon. 1987; Gallagher 1987, 101–07). No clay tobacco pipes produced in Glasgow, or indeed in Scotland, have previously been identified from archaeological excavations in Cambridge.

Unidentified Pipemakers

- B.7.19 **J/D**: initials J/D on spur from fill 2197 (pit **2199**) from a mid-19th century group.
- B.7.20 **P/W**: Initials P/W on the sides of a heel of a type 12 bowl (c. 1730–80) from fill 2016 (ditch **2020**).
- B.7.21 There are no known Cambridge pipemaker with these initials, suggesting either an unrecognised Cambridge maker or pipes that were produced elsewhere.

Decorated Pipes

B.7.22 Decorated pipes marked with pipemakers initials or names have already been discussed. (see above). Excluding milled rims and simple elements confined to spurs/heels there are fifteen pipes with various forms of decoration that lack any form of pipemakers marks.

1) Seven fluted mid/late 19th century bowls with oak leaves front and rear and stylised oak leaves on spurs from fill 2197 (pit **2199**). These are relatively common in archaeological assemblages from Cambridge of this period.

2) Five mid/late 19th century bowls with oak leaves on front and rear of bowl but otherwise plain; three from fill 2197 (pit **2199**) and one from fill 2736 (pit **2735**), plus one from fill 3319 (?well **3325**) also has six pointed stars on heels. These are relatively common in archaeological assemblages from Cambridge of this period.

3) Mid/late 19th century bowl with Masonic symbols on bowl and circular motifs on spurs fill 2197 (pit **2199**) (for discussion see above).

4) Cross keys pattern plus floral/foliate elements on sides of mid/late 19th century bowl and circles on spurs fill 1092 (well **1089**). The cross keys pattern appears to have been relatively common locally, but is infrequent from archaeological investigations.

5) Incomplete mid/late 19th century bowl spurless/heeless type with heavy decoration including horizontal bands on bowl, five pointed stars below and teardrops along stem (99999). This pipe may potentially be a 20th century novelty item.

Context Assemblages of Note

B.7.23 The overall assemblage contains eight groups from individual contexts that are large enough to be noteworthy; these were defined as those containing five or more pipes. Several of these groups appear to represent rapidly deposited 'clearance' type groups of material (Cessford 2009; Cessford in prep). One method for considering this is to consider the mean stem length in contexts, as longer fragments typically represent more rapid deposition (Table 21). This suggests that five of the seven assemblages represent rapid deposition, as they have significantly higher mean stem lengths than either the assemblage as a whole or the assemblage minus these assemblages. The three contexts whose values are comparable to the general site assemblage are the smallest groups. Based upon excavations elsewhere in Cambridge most assemblages with ten or more pipes (excluding residual items) have a non-domestic origin and are associated with inns or other establishments.

	MNI of pipes	No. of fragments	Total stem length (mm)	Mean stem length per fragment (mm)	Mean stem length per pipe (mm)
Overall assemblage	126	878	42571	48.5	337.9
Overall assemblage less selected contexts	49	469	18951	40.4	386.8
1907	11	37	2221	60.0	201.9
1915	5	62	2704	43.6	540.8
1994	12	69	4549	65.9	379.1
2028	6	26	1043	40.1	173.8
2197	15	51	4061	79.6	270.7

	MNI of pipes	No. of fragments	Total stem length (mm)	Mean stem length per fragment (mm)	Mean stem length per pipe (mm)
2473	9	41	2489	60.7	276.6
2495	7	62	2657	42.9	379.6
2736	12	61	3896	63.9	324.7

Table 21: *Clay tobacco pipe mean stem lengths*

- B.7.24 Cellar fill1907 (cut **1906**), 100% excavated): MNI 11 pipes, this is a coherent group of type 9 (c. 1680–1710) and type 10 (c. 1700–40) bowls. Although the bowls have been divided into the two forms some are in fact transitional between the forms and do not match the Oswald general typology precisely. Although conventionally this group would be dated to c. 1700–20 it may well be as late as c. 1740. The group came from a cellar that had burnt down and an association with the major fire in Barnwell of 1731 is plausible for the pipes. All the bowls are unmarked and undecorated. Eleven pipes is a relatively large group for an early 18th century assemblages from Cambridge and indicates a non-domestic origin for the material in the cellar.
- B.7.25 (1915) (quarry, cut **[1914]**, 50% excavated): MNI 5 pipes (but probably c. 10 in whole deposit), coherent group that are all probably type 12 (c. 1730–80).
- B.7.26 (1994) (pit **1995**) was 100% excavated): MNI 12, a coherent early/mid-19th century group with the exception of one residual pipe produced by James Kuquit (c. 1713–50). Two types of pipe are present; one with a starburst on the spur (MNI 8) and other produced by William Balls or his son William Eve Balls (c. 1807–51) and decorated with Masonic symbols (MNI 3). Eleven pipes is a moderately large group for an early/mid-19th century assemblages from Cambridge, the material is probably not of domestic origin. Both types of bowl have a similar capacity indicating that the difference does not relate to this, suggesting some form of socio-economic status differentiation within a household or establishment linked to smoking.
- B.7.27 (2028) (building fill, cut (**2061**), 100 % excavated): MNI 6 a coherent late 17th century group with 3 type 6 (c. 1660–80) and 3 type 9 (c. 1680–1710) pipes. Given the overlap in forms a date of c. 1670–90 is most probable if the deposit represents a short-term rather than long-term event. Six pipes is a relatively large group for a late 17th century assemblages from Cambridge and may indicate a non-domestic origin for the material. Other fills in this building also contained a few pipe bowls that are consistent with the main assemblage fill 2027 1 type 6 and 1 type 7 of c. 1660–80 and fill 2030 1 type 9).
- B.7.28 (2197) (cess-pit **2199**), 100% excavated): MNI 15 a coherent mid-19th century group of material. The groups consists predominantly of fluted bowls with oak leaves on the front and rear and stylised oak leaves on spurs (MNI 11), plus bowls with oak leaves on the front and rear of the bowl but otherwise plain (MNI 4) and completely plain bowls (MNI 2). There is also a bowl decorated with masonic symbols (MNI 1), this is different from those in the larger group of pipes with masonic decoration from 1994 (pit **1995**) as it has circular motifs on the spurs rather than initials. There is only one pipe with makers initials; this has oak leaves on front and rear of bowl but is otherwise plain and has the initials T/C indicating a member of the Cleever family of c. 1839–65. 15 pipes is a moderately large group for a mid-19th century assemblages from Cambridge, the material is likely not to be of domestic origin.
- B.7.29 (2473) (cellar fill, cut (**2474**), 80%+ excavated): MNI 9 (but probably c. 10–11 in whole deposit), this is coherent group of material consisting solely of type 12 bowls (c. 1730–80). Two forms are present; one bowl form is slightly larger and completely plain (MNI

4, but probably 6), whilst the other bowl form is slightly smaller with a sunburst or 10-pointed star pattern on the spurs (MNI 3). Nine pipes is a relatively large group for a mid-late 18th century assemblages from Cambridge and may indicate a non-domestic origin for the material in the cellar. The presence of two types of bowl is probably linked to consumption patterns, as the bowls are of difficult capacity.

- B.7.30 (2495) (pit fill, cut (2494), c. 25% excavated): MNI 7 (but probably c. 28 in whole deposit), this is a relatively mixed group, with both mid-late 19th century bowls (MNI 5, c.20 in whole deposit) but also some of c. 1660–80 (MNI 2, but probably c. 8 in whole deposit).
- B.7.31 (2736)(pit fill, cut (2735)) MNI 12, this is a coherent mid-19th century group. It consists mainly of plain pipes marked T/C (MNI 8 or 9), but also a more ornate two-stage fluted bowl with the same initials (MNI 2). The initials T/C indicate a member of the Cleever family of c. 1839–65. There was also one pipe manufactured by Maclurm of Glasgow, the presence of this item suggests a date after the establishment of railway links to Cambridge in 1845.

Discussion and Recommendations

- B.7.32 The clay tobacco pipe assemblage from Harvest Way represents one of the largest groups recovered from archaeological investigations in Cambridge to date and is of local and regional significance. The assemblage should be incorporated into the overall publication of the site, preferably in conjunction with the material from the Eastern Gate Hotel site. There are several aspects of the assemblage that are of particular significance. The pipes with masonic decoration produced by William Balls have not been recovered elsewhere in Cambridge. The reason that these motifs were favoured is currently uncertain and documentary study may reveal if there were any masonic connections. The presence of a clay tobacco pipe produced in Glasgow represents a first for Cambridge and is therefore noteworthy.
- B.7.33 There are several potential further avenues that might be explored considering this assemblage. The Barnwell suburb expanded markedly in the 19th century, at a greater rate than the rest of Cambridge. The temporal profile of the assemblage, plus that from the adjacent Eastern Gate Hotel site, could be compared to other assemblages in Cambridge to determine if this difference is identifiable. From the 1820s onwards clay tobacco pipe production was largely located in the Barnwell suburb where the Harvest Way site is located, with the exception of a single kiln located at 11 Sidney Street (Cessford 2001b). It is noteworthy that whilst products from the Barnwell suburb are regularly discovered at town centre sites, those from the town centre kiln are absent from Barnwell suburb assemblages.
- B.7.34 The various types of pipe with masonic decoration warrant illustration and it may be worth also illustrating the type of pipe with starbursts on the spur that is found associated with them to illustrate the contrast. The pipe produced by Mclurm of Glasgow also warrants illustration. If any of the noteworthy assemblages are deemed to be reliably associated with the Barnwell fire of 1731 then the common bowl forms from these should be illustrated.

B.8 Architectural stone

By Dr Mark Samuels

Introduction

- B.8.1 Post-excavation work is arguably more intellectually challenging than the process of excavation (Andrews 1991, 15). This 'assessment of potential for analyses (ibid) is intended to aid decisions about the allocation of resources. It does not purport to have the final say on this assemblage.
- B.8.2 The *architectural fragments* (from here abbreviated to AF) are highly relevant to the overall comprehension of the excavation. The assemblage shares characteristics with *in-situ* excavated evidence and loose finds: some idiosyncrasies in its treatment are therefore inevitable. A wholly statistical approach is inadequate; nor is an 'object-orientated' approach correct. At this stage, the assemblage is only used to answer 'site specific' questions (i.e. dating).

Circumstances of excavation

- B.8.3 Cambridge requires 'proper recognition as an archaeological resource' (Ayers 2000, 59). The reasons for this are many and complex. The situation has improved with the preparation of urban databases in East Anglia, but past scantiness of archaeological work reflects lack of development pressure and the freedom of colleges to judge the need for archaeological recording during interventions. The first large-scale and non-collegiate urban excavations in Cambridge (GAD05/6) were recently carried out by the Cambridge Archaeological Unit and the author's involvement in some of these sites has allowed the new evidence here to be presented in context.
- B.8.4 The recent excavation covers a series of strip properties running southwards from the street frontage (Newmarket Road). Only the rear parts of these properties survived 20th-century road widening. With few exceptions, (retained) AF derives from contexts pre-dating the properties. These property divisions are thought (at this stage) to be of 19th-century origin (Pers. comm., Rob Atkins). Barnwell Priory stood on the north side of the road. The parish church and lay cemetery provided by the priory survive (almost) opposite the excavation *footprint*.
- B.8.5 The large and varied assemblage of architectural fragments does not derive from the buildings excavated on the site. The probability is that the majority of AF from the assemblage (now selected) derived from the priory. We know this formed a convenient quarry for colleges much further afield after 1538 (RCHME, 299). The situation contrasts with the Grand Arcade excavation (GAD05/6) where excavated AF may have come from two or more dissolved religious foundations; as well as domestic architecture on or just outside the site footprint (Cessford & Dickens, in prep). Such re-used material presents particular problems of interpretation. An understanding of how stone was likely to be re-used is important if any useful results are to be arrived at (Stocker 1993, 21). Only very specific features allow the nature of the 'parent structure' to be guessed at and little of the recent assemblage meets such criteria.
- B.8.6 Old building stone was a highly prized commodity. In NW European urban excavations, the earlier a *re-use feature*; the greater the probability of it containing recognizable groups of architectural fragments from the parent structure. This is because the fragments represent *primary re-use*. Later features are more likely to contain mixed material representing *secondary* or even *tertiary* reuse. Certain superstitions also affected re-use. The AF presents a revised TPQ for some *in-situ* structures which are pointed out below (Figure 13).

Conditions of recovery

- B.8.7 The sheer amount of stone on this site came as a surprise; although some was to be expected given its proximity to a monastic site. Without on-site specialist guidance, the decision was taken by the supervisor to retain all stone material of uncertain significance including featureless fragments. It might be asked why so few of the AF from this site (a quarter) have proved worthy of retention, even allowing for this. The very high discard rate underlines the need for early specialist intervention. In that way, unnecessary movements, cataloguing and storage are avoided. The need for on-site training of excavators unfamiliar with this type of find was manifest and the opportunity was taken to provide this.
- B.8.8 The material was labeled, but was not cleaned except where rained on. Due to lack of space it had to be stacked which is not ideal. A basic site hardcopy list was maintained. An *Excel* database was created off site (using *pro forma* sheets used on site).
- B.8.9 It is possible to summarize certain statistics of the assemblage. The need for subjective selection at all stages means that the statistics have little bearing on the initial state of the assemblage. At least 546 AF were recovered of which 184 (33%) have been retained in the short term (see below). The remainder were discarded by the author; their sole record being the site (paper) list.
- B.8.10 This list (maintained by the excavating staff) reveals that one *context* contained 194 of all AF initially retained. This was a discrete, well sealed and coherent group, but even in this case only 58 AF (29%; lower than the site average) have been selected for further analysis. *Ashlar* has limited utility as a 'resource' and the author made the decision to only retain exceptional (complete and well-preserved) examples. Many large plain 'blocks' were found: some of these were obviously structural but otherwise beyond interpretation. Given that most were found during site clearance, it is likely that these derived from the factory that occupied the site until recently. Very few have been recommended for analysis. *Rubblestone* is not normally retained except where there seem grounds (i.e. petrology) to make a sample.
- B.8.11 A second visit to the Bourn store was carried out to appraise two additional fragments. The retained assemblage had meanwhile been moved there. Several downpours had subsequently removed most of the adhering dirt and re-use mortar, revealing new information. However remedial action is needed to prevent deterioration before the summer ends
- B.8.12 How well-preserved was this assemblage? It is possible to measure the degree of fragmentation (Figure 10) but the result is affected by the retention policy (see above). Even allowing for this, it is clear that demolition and preparation occurred 'off-site' as evidenced by a near-absence of small fragments (these usually occur in large numbers where stone was 'processed' for re-use). This supports the overwhelming probability that the AF derived from structures outside the *site footprint*.

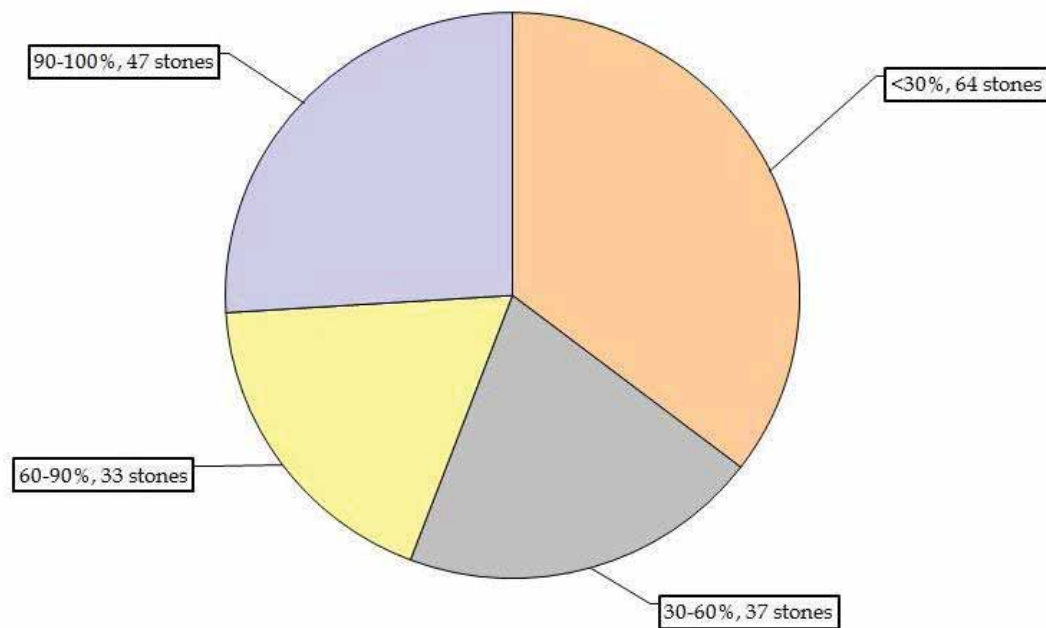


Figure 10: Fragmentation of the architectural stone assemblage expressed as an estimated percentage of the original element

B.8.13 Methodology

B.8.14 Each item was quickly inspected and basic parameters set down on the *pro-forma* sheets, as a series of keywords and code numbers, plus minimal 'free text'. This data was subsequently input into a spreadsheet (Excel 2007). The charts reproduced here are generated from this database .

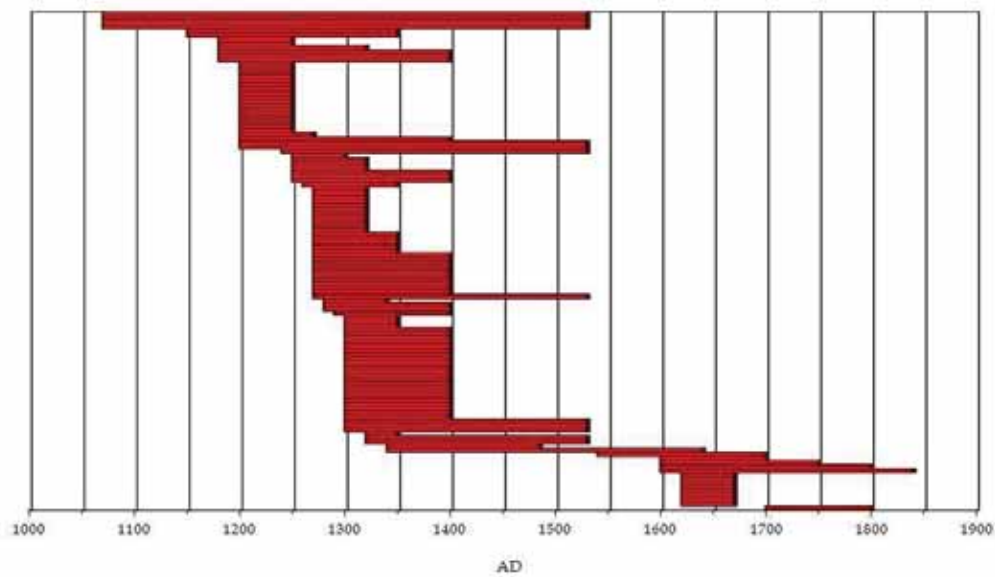


Figure 11: *Architectural stone date ranges for all dated architectural fragments*

B.8.15 Each item was given a date span based on the moulding and/or tooling marks. 'Importance' is rated **1-4**. **3 & 4** would normally qualify for publication (see below).

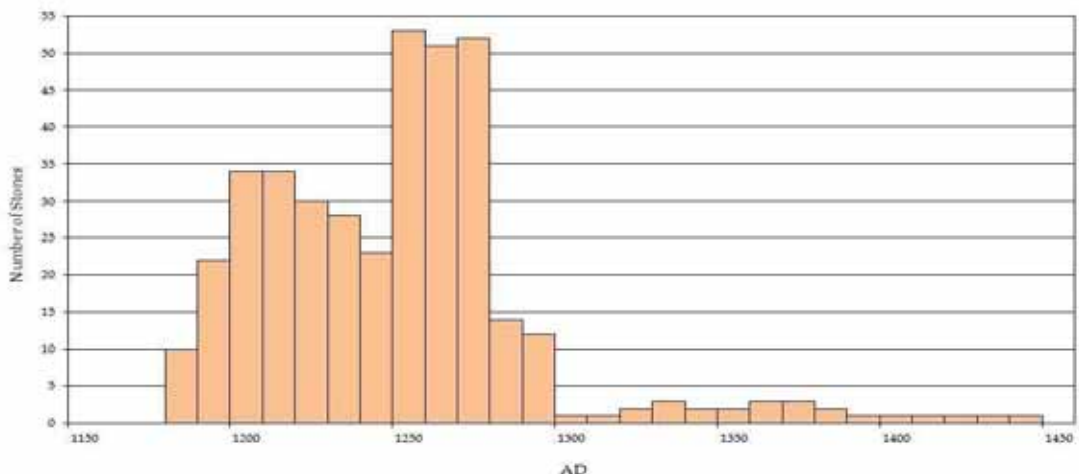


Figure 12: *Architectural stone cumulative date range for mouldings dated to within 100 years, plotted by decade*

An estimate of recording requirements

- B.8.16 The definitions given below are of a general nature for assemblages of medieval architectural fragments in SE England. Note that resource requirements are *calculated* from '3' and '4'. These recommendations are subject to amendment.
- B.8.17 **'1'**: 67 AF require further examination and, in some cases, minimal recording. They can then be returned to the developer for conservation-related work or otherwise disposed of.
- B.8.18 **'2'**: 36 AF will certainly require basic recording; on completion of which they can then be treated as above

- B.8.19 '3': 35 AF will require full archive illustration and recording. All will be mentioned or described as appropriate (but not illustrated) in the publication. They should be retained in long-term storage.
- B.8.20 '4': 43 AF constitute significant groups or outstanding items that throw light on art-historical context and/or allow reconstruction of architectural features. As such, publication illustration will be carried out in a CAD format and submitted as such. Final adaptation to 'house-style' will be carried in-house by OAE. They should be retained in long-term storage.
- B.8.21 Provision should therefore be made for the long-term storage of c. 78 AF in the *Cellarer's Chequer*
- The substitute archive**
- B.8.22 The *moulding* profile directly relates separate mouldings. Non-identical mouldings may derive from the same building campaign. Tool marks and building stone can also be used as means of categorizing the material.
- B.8.23 The best example of any given type of moulding is called the *typestone*. *Duplicates* may need very little recording once 'their' typestone has been established. Functionally distinct dressings (i.e. an arch or a jamb) may share a common moulding. A relationship can then be established. If such comparison is to be feasible, great care must be taken to accurately record the moulding, and there are various means of doing this (see below).
- B.8.24 Once a relationship or *type stone group* (TSG) has been established; discrete architectural features will, with any luck, begin to coalesce. Separate TSG may derive from a single building campaign which can be given its own *Build* number (see below). These 'Builds' are then ordered chronologically within the excavation phasing structure.
- B.8.25 Tool marks form an important tool for relating. The 13th Century was a time of flux as more sophisticated tool kits were introduced from France. There is therefore correlation between finishing techniques and date. However, particular finishing patterns and tools may mark out the preferences and habits of individual masons, rather than be indicative of a distinct building campaign (Pers. comm., Mark Evans; stonemason).
- B.8.26 Correct identification of building stone can be a sensitive research tool. Only gross distinctions can be made without specialist knowledge and laboratory preparation. Even with this *caveat*, useful sorting can be carried out on an empirical basis. The cultural/trade implications of building stone can be described once identification and description is completed. Those building stones atypical of the Cambridge area in medieval times require the most attention.
- B.8.27 The system of classifying typestones directly links them to the site phasing structure. This hierarchy can be expressed thus:
- <103>** = *ad hoc* WSN allocated on site by staff.
- TSG4<103>** = Type stone Group
- B3:TSG4<103>** = Build
- P2.B3:TSG4<103>** = Strat. 'Period 2 1190-1250'
- B.8.28 The putative type stone will therefore called 'P2.2:4<103>' during the analysis. A 'site-based' (rationalized) numbering system can eventually be created but only when all analysis is *completed*. This allows 'Builds' to be ordered chronologically within the appropriate 'strat' phase or period.

B.8.29 'Drawing' is here seen as an active process of interpretation rather than being a passive process of recording. Publication drawings minimize the need for description. Reconstruction drawings are only employed and for the same reason.

a) The Archive

B.8.30 Each Type stone is recorded on a hard copy 'worked stone sheet': long-hand notes, sketch drawings, prints of digital photographs as well as records of tooling (rubblings).

B.8.31 Where appropriate, mouldings are recorded at 1:1 on drafting film. Profile gauges, direct tracing or tracing through Perspex can all achieve this end). The completed ink drawings are subsequently scanned (see below). Tooling treatments and damage are indicated but the drawing is otherwise a diagram. *Arc segment* record positions are noted on the records (which include the back of the recording sheets). Rubbings of tooling marks are for 'project use' only, but exceptionally, tooling is digitally photographed for publication.

B.8.32 Orthogonal digital photography and 'silhouette tracings' of tracery elements allow a belt-and-braces record of these demanding items (only one has been recognised in this instance). After scanning, all drawings are manipulated in the same CAD environment.

B.8.33 Once a robust profile record is created on drawing film, it is then possible to directly compare other mouldings to it. Duplicates are then recognized and 'eliminated from the enquiry'. The common source of many of the CAM EAG 14 mouldings will significantly reduce the amount of recording required.

The role of photography.

B.8.34 Selected AF will be photographed by the specialist. Additional recording is carried out only if necessary. Photography records sculpture, relief ornament, masons' marks, graffiti, tooling marks and other technical features. The orthogonal images (see above) would be for project use only.

Petrology

B.8.35 'An objective description (of building stone) is surely of more use to one's successors than an unsupported guess' (Hudson 1990, 17).

B.8.36 The GAD05/6 assemblage amounted to a 'control group' of Cambridge historic building stones recovered in controlled conditions. Seven varieties were characterised; three being post-medieval (Cessford and Dickens, in prep).

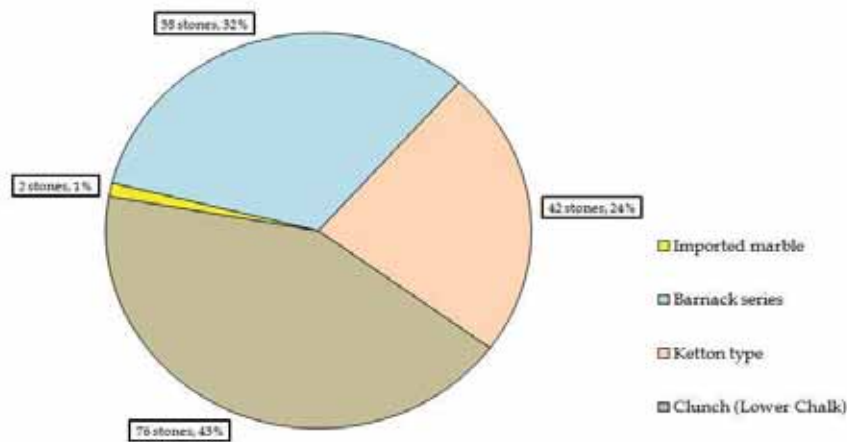


Figure 13: *Provisional identification of building stone*

- B.8.37 Dominance of two building stones is apparent in the CAMEAG14 site (Figure 13). This corresponds well to the results of the earlier excavation. However, oolites (other than the *Ketton* series) form 32% of the assemblage and *Burwell* stone forms another 43%. It is probably that the 'non-Ketton' oolites derive from the Barnack area of Lincolnshire; a question that needs to be addressed by a geologist familiar with the 'Limestone Belt'.
- B.8.38 The assemblage contrasts with a group deriving from the Norwich Whitefriars. That relatively small statistical group (Samuel 2006a, Chart 4) was dominated by the use of a 'Hard Chalk' (33%) and various Oolite varieties (36%). *Caen* stone was also used in some quantity. The CAM EAG 14 assemblage is devoid of this Normandy stone; an absence also seen at GAD05/6.
- B.8.39 The following research questions should be addressed:
- The number of/and provenance of Oolitic stone varieties present. Is a chronological component recognizable in their use?
 - Can the source(s) of Burwell stone be identified with greater geographical precision? Were other stones from the Lower Chalk used (i.e. Greensand).
 - Can changes in Lower Chalk supply be recognized over time?
- B.8.40 How do the proportions of different Building stone contrast with the use of stones in other towns in East Anglia? What factors may affect the different proportions of types present?
- B.8.41 Samples will be used for the preparation of thin sections which are examined and recorded with a petrological photomicroscope. General features will then be described and detailed observations made of the thin sections. The samples will be subject to comparative techniques in order to accurately determine provenance; these could entail mineralogical techniques (XRD) and geochemical (stable isotope and XRF) analysis.
- B.8.42 A hand-specimen assessment will be carried out first. Thin sections will then be made of selected (sacrificial) fragments. These can be compared with a reference collection

of freestone thin sections to assess their geological character and source. Microphotographs will be produced for publication.

Practical considerations

B.8.43 The following needs to be provided for prior to analysis:

Smaller AF should be transferred to cardboard boxes. Newspaper should be used as a packing/padding material because it allows 'breathing'. Larger AF should be stored on timber pallets and covered by thick black plastic (builder's damp course plastic) positively attached.

B.8.44 A *Collis* truck should be supplied for transporting the pallets.

B.8.45 A well-lit, heated office area with extensive strong surfaces and adequate power-points is required for recording.

Statistical overview of the assemblage

B.8.46 The assemblage is here examined without reference to documentary evidence. Any correspondence or lack of it is subsequently touched on in the concluding section.

B.8.47 Figure 11 employs methodology developed by for pottery research (Symonds 2003, 120). Every dated item in the assemblage is represented as an individual bar. The lines are placed in chronological order, positioned by 'early date'.

B.8.48 'Early-date' changes can be seen to be expressed in 'step changes'; this could represent the transition between building campaigns, but this has to be distrusted as a possible artifact of the analytical process. It can however be seen that narrow date spans are followed by widening date spans before the next 'step-change' in early date occurs. The majority of the fragments 'commence' in the century between 1200 and 1300. A handful is of late 12th-century date. Barely any date from after 1350. We can safely assume the results are 'skewed' by the chance nature of survival and the very uncertain date of most of the AF (see below).

B.8.49 A more sophisticated chart addresses the latter demerit (Figure 12). It is based on *Decade incidence* rather than individual architectural fragments; i.e. the chart 'selects' those mouldings with a sharply-defined date. Building is seen to commence in about 1180; peaking in the first two decades of the 13th Century. A gradual slowing off of construction ends with a peak of building in the period 1250-75. Construction tails off almost completely by 1300 with only minimal amounts of building occur during the remainder of the priory's existence. This presents an attractively plausible picture but is it reliable?

B.8.50 We have to remember that the surviving material may only derive from the older parts of the priory complex. The histogram however 'makes sense' as the kind of building activity one might expect for a Cluniac priory. Histograms for friaries in East Anglia are also consonant with what one might expect: i.e. the apparent building history is almost entirely restricted to the period around 1300 (Samuel 2006a, chart 3; Samuel 2006b, chart 3). At CAMEAG14, a sharp drop-off after 1280 *may* reflect the swing of fashion away from the Benedictine orders to the Mendicant orders. Lingering doubts as to the source of these AF may therefore be banished at this point.

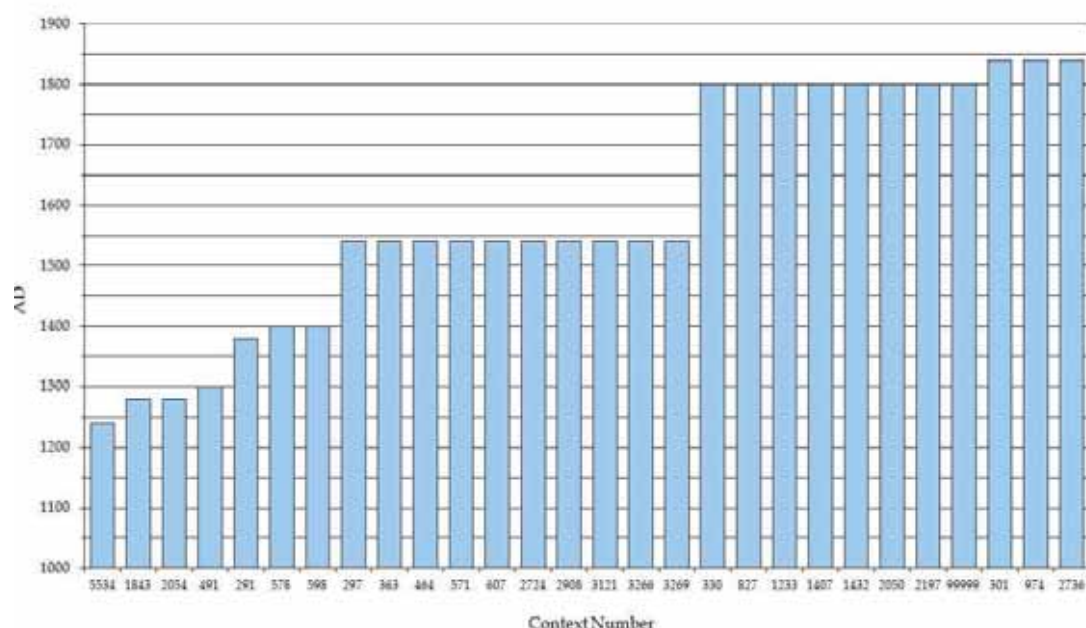


Figure 14: *Architectural stone latest dates for AF by context*

- B.8.51 AF can allow the TPQ of *re-use structures* to be dated. This has to be regarded as approximate, but is better than nothing. The chart orders *re-use contexts* in order of latest date. (All are apparently structures with one exception: one 'pitfall' [2724] contained significant quantities of 'un-reused' AF). There are no grounds for seeing any re-use contexts as pre-Dissolution in date. By far the most prolific structure was the 'cesspit' [1432] (the late date of '1800' can be discounted; see below). Even the seven contexts that apparently predate 1540 are probably of post-Dissolution date; given that most of the priory (the source structure) was built prior to 1280. [974] was the only context containing non-monastic (post-medieval) material in significant quantities (see below).

The main AF groups and their contexts

- B.8.52 In *ad-hoc* order, the following contexts produced significant groups. The bulk of interpretative work would focus on these:
- (99999) (unstratified)
- B.8.53 Two course segments of columnar piers probably derive from a re-use context destroyed during site 'reduction'. These have a distinctive 'reeded' tooling typical of around 1200 (Samuel 2001, 153-4). It is difficult to suggest an alternative location other than a great church of this period. They are therefore the most important AF from the site. Analysis would allow the diameter (1.5 -2 m?) to be determined. The proportions of Romanesque columns are a clue to the overall proportions and scale of the church elevation (Samuel 2011, 113-4) although hard-and-fast rules were not employed. These might have formed simple columns (i.e. Southwell Minster) or parts of compound piers (i.e. Peterborough Cathedral).
- (464) (fill of foundation trench **465**; Building 14)
- B.8.54 A dismantled octagonal chimney: The chimney was apparently of late medieval date but had weathered quite severely by the time of its destruction.
- (598) (Wall; George and Dragon pub/coffee house)

- B.8.55 The structure incorporated a fragment deriving from the foot of a medieval stone coffin (?Barnack rag). This type was very widely employed throughout England for wealthy burials including high-ranking ecclesiastics. It is stark evidence of the destruction of the cemeteries associated with the Priory and arguably derives from any of them (including the extant one). The church presbytery and chapter house would also have contained high-status burials with such coffins.

(974)(wall Shamrock Passage)

- B.8.56 At least 22 Ketton stone AF were found of a single elaborate structure that employed open and 'applied' balustrading. It can be identified as an important tomb of late-17th /early-18th century date by a fragment of a severely-weathered inscription.

Cess-pit (**1432**) (Building 8)

- B.8.57 This large stone cesspit served a privy at a much higher level. It is comparable to many medieval examples excavated in London, such as one excavated at Watling Court in 1978 (Schofield 1985, fig.76). The 'groove' around the base may have held a timber floor over an air-space. This would improve drainage and ease the process of emptying out (which occurred at intervals of several years).

- B.8.58 The walls contained 58 AF. 32 derived from at least two large and elaborate *lancet* windows; 16 dressings are substantially complete and all parts are represented apart from the sill. The window held an external timber window frame and various fastening arrangements can be identified. The complex moulding is characterized by the *Undercut Hollow Chamfer*. This pattern is not known before the third quarter of the 13th century (Morris 1978, 45). Several *label* mouldings may also derive from the same architectural location. The scale and elaboration of the window suggest a position either in the church or one of the main claustral buildings of the priory.

(2724) (fill of pit **2725**)

- B.8.59 This contained 10 'assorted' mouldings; 6 of these being of late-12th century date as well as much ashlar. This might be waste stone; removed from the priory but subsequently discarded?

Provisional conclusions

- B.8.60 At this point, it is appropriate to compare the results to documentary records, admirably analysed over a hundred years ago (Clark 1891, *passim*). The random sample provided by the assemblage provides no surprises about the building history of the priory:

- B.8.61 Clark usefully summarised the building history from documentary records (ibid, 231-2). His 'Period I' (1112-1175) surmises an initial spate of construction in the first ten years of the priory's existence but '...the building remained unfinished until work was resumed on a grand scale in 1175'. The lack of firmly dated AF from before about 1180 fits in with his thesis. His

- B.8.62 'Period 2' (1175-1208) works around the documented consecration date of 1191 which allegedly marked the completion of the fabric. It is therefore tempting to associate the columnar piers with the ?nave of this church. Documented mention of 'complete demolition of the church' commenced in 'Period I' is dismissed as incredible by Clark; the AF evidence is however in line with the documentation. The original work may have gone out of fashion to the extent that no attempt was made to complete it.

- B.8.63 'Period III' 1213-65 is identified as the period when the claustral buildings (which may have been of wood) were replaced in stone. This amounted to a complete re-planning of the priory around a new cloister circuit (including the extant 'Cellarer's Chequer').

'The Prior's chamber and chapel' were built between 1254 and 1265 (Clark 1891, 232) and the large lancet windows are an excellent 'dating fit'. Architecturally, the quasi-domestic natures of these openings (which opened and closed) support such identification.

- B.8.64 Clark provides no 'Period IV' from the documentation. The period between 1265 and the Dissolution is correspondingly lightly represented by AF. There are however hints of window reconstruction in this period (Figure 12; a phenomenon which seems to have pretty much universal in religious houses except the poorest. Documented renewal occurred at Bermondsey Abbey for example (Samuel 2011b, 198). Slight evidence for corresponding re-fenestration from this site is supported by the discovery of a complex tracery element on the adjacent CAU excavation (Newman, table 53), but further information is lacking. The scanty evidence hints at conventional *south-eastern* work in the early Perpendicular style.
- B.8.65 A high-status house fronting Newmarket road was built shortly after the Dissolution. It was provided with a correspondingly fine cesspit. No superstructure was apparently recognized during site reduction, nor has documentary evidence yet been recognized (Pers. comm., Rob Atkins).
- B.8.66 The presence of material from a demolished tomb is remarkable. It is hard to come up with an alternative explanation for its presence, except to suggest that a wealthy family replaced an earlier family tomb in the extant graveyard with a more fashionable structure. The weathered state of the material indicates that this may have occurred relatively recently (in archaeological terms). Documentary evidence for this intervention may therefore exist.

B.9 CBM and fired clay/daub

By Rob Atkins

Introduction

- B.9.1 A large assemblage of CBM and fired clay/daub dating from the Roman to modern periods comprised 5364 fragments weighing 409.464kg (Table 22). These were found in both the evaluation and at the subsequent excavation.
- B.9.2 Some of the CBM was recorded on site especially brick from *in situ* structures. Most of the Period 4 CBM (brick, floor brick, roof tile and drain) was discarded in the excavation without being counted and weighed and as a result these are marked with an asterisk in the table.

CBM	Nos.	Wt (g)	No. Contexts
Brick	270	93830	153*
Floor brick	17	8011	11*
Decorative brick	3	3657	3
Medieval floor tile	33	3795	14
Peg tile	4855	267801	322*
Ridge tile	22	3194	19

CBM	Nos.	Wt (g)	No. Contexts
?Stove tile	1	18	1
Pantile	31	3291	16*
Drain	8	2923	7*
Roman tile/brick	4	571	4
Fired clay/daub	121	22390	39
	5365	409482	

Table 22: CBM and fired clay/daub by numbers and weight

Methodology

- B.9.3 All complete lengths, widths and thickness of bricks and tiles were recorded. The exception was ceramic tiles where the thickness was not measured. Peg tiles were classified as either one or two peg hole types and recorded in the catalogue tables.
- B.9.4 The bricks, tile and fired clay/daub were recorded by colour. Difference in colour is affected by how much lime there is in the clay. In Ely, Kimmeridge Clay, Gault Clay and alluvium clay was used with the three different clays respectively producing reddish-brown, white (yellow), and a range of brindled and mottled hues (Lucas 1993, 158).

Results

- B.9.5 The artefacts are listed below by type, number and Period (Table 23). The very few artefacts from unphased contexts are not included.

Material	No. of contexts	No. fragments	Weight of artefacts (kg)	Period
Brick	50	124	14535	2
Medieval floor tile	7	25	2790	2
Roman tile	3	3	513	2
Peg tile	152	3964	212697	2
Ridge tile	8	9	978	2
Pantile	1	1	113	2
Drain	3	3	1934	2
Fired clay/daub	30	83	21395	2
Brick	62	112*	56282*	3
Floor brick	5	6	3384	3
Decorative brick	1	1	2535	3
Medieval floor tile	7	8	1005	3
Peg tile	127	688	41191	3
Ridge tile	9	11	1808	3
Stove tile	1	1	18	3
Pantile	2	4	1391	3
Drain	2	3	650*	3
Fired clay/daub	8	37	977	3
Brick	41	32*	18622*	4

Material	No. of contexts	No. fragments	Weight of artefacts (kg)	Period
Floor brick	8	11	4627*	4
Decorative brick	2	2	1122*	4
Roman tile	1	1	58*	4
Peg tile	41	197	13681*	4
Ridge tile	2	2	408*	4
Pantile	13	26	1647*	4
Drain	2	2	360*	4
Fired clay/daub	1	1	18*	4

Table 23: CBM and fired clay/daub by number and period

The Brick Assemblage

Introduction

- B.9.6 A moderate collection of bricks were recovered from the excavation (270 fragments weighing 93.83kg; Tables 22 and 24). Form was identified utilising the Norwich type series (Drury 1993, 163-5) as well as my own unpublished work on other brick found in the county. There has been a noticeable lack of brick recorded for Cambridgeshire with no published type series/form has not yet taken place. The Drury system is based on both measurements and fabric type. A catalogue of the brick from the evaluation and excavation is included (Table 24).
- B.9.7 It is important to note Drury's description of the variable fabric of early (medieval) brick, "is of low density, containing little detectable sand, some grog, marine shells, some vegetative matter, and many small voids. The colour varies from yellow through khaki and pink to red and purple-red, generally streaky on the surface and inconsistent in section; a purple tinge is frequent and distinctive, indicating production from salt-rich estuarine clays..." (*ibid*, 163). In the medieval period some bricks were made on a surface covered with vegetable matter. In Norwich Drury has commented that these vegetative type bricks were locally produced (as opposed to Flemish sanded types). They appear in Norwich contexts from the late 13th century but by the end of the 14th century they predominate and they continued being used throughout the 15th century (*ibid*, 163-5). The other brick was in a sanded form which is likely to be medieval in date. Some of the sanded bricks were imported Flemish types (especially those dating from the late 13th century and early 14th century). Local sanded types copied these Flemish bricks.
- B.9.8 'Later bricks' were made in a sanded form and followed on from 'early bricks' from at least the early 16th century and into the 19th century (*ibid*, 164-165). In the post-medieval period brick sizes were determined by various regulations which attempted to standardize their manufacture (Ryan and Andrews 1993, 93). The Tylers' and Brickmakers' Company charter of 1571, for example, stipulated a size of 9x4¼ x 2¼ inches.

Results

- B.9.9 There was a considerable quantity of medieval brick from the site, mainly in sanded form, but also some in vegetative types and these were found in mainly Period 2 and 3 features and layers.

Bricks in Period 2 features and layers and medieval brick in later features

- B.9.10 Nearly half the bricks (124 fragments) by numbers were found in medieval contexts, although by weight (14.535kg) it was less than one sixth of the assemblage. The average weight by fragment was 117.2g. Five of the fragments were definitely intrusive and dated either to the 17th or 18th centuries. None of the medieval bricks in Period 2 contexts were complete, although six had complete widths and a further 13 had measurable thicknesses. The widths of the bricks varied from two at 5", three at 4½", and one at 4¼". The thickness did not vary greatly – were all either 1¾" or 2" thick.
- B.9.11 The vast majority of the fragments varied in colour throughout from orange, red, pink to purple. This is very similar to Lucas's description of bricks from Ely (see above). This type brick was found in other excavations within this lay settlement (Atkins 2013; Atkins forthcoming). This fabric does not appear in comparative assemblages at Ramsey Abbey (Ryan 2009), Wisbech Castle (Atkins 2010) or Bury St Edmunds (Atkins 2014). A few of the bricks are made from an orange sandy fabric (e.g. in context 2402 and 2478). Bricks in this fabric have been found at Brunswick, 0.5km to the north-west (Atkins 2012a) and are noticeably similar to bricks found in Wisbech although the late medieval bricks here (and the medieval palace at Ely) had a far larger width (5") than those from Coldhams Lane (Atkins 2009).
- B.9.12 The majority of the bricks seem to have been sanded, including some which also had a few vegetative impressions. Bricks in a vegetative form were found in up to seven contexts (1978, 2285, 2863, 2997, 3349, 3459 and 3461).
- B.9.13 Small to moderate quantity of medieval brick fragments were found in three Period 2 features. Pit **1969** had 20 fragments (0.728kg) from five deposits, there were 25 fragments (3.836kg) from two deposits in pit **2275** and pit **3451** had 24 fragments (2.33kg) from seven deposits.
- B.9.14 Medieval brick was also found in many Period 3 and 4 features. Some of these bricks had been reused in later features – of note was the large quantity of bricks (as well as the stone) reused in the 16th century cess-pit **1424** with 31 bricks weighing 29.926kg. The bricks were largely used to form scaffolding holes for this feature. Most of the bricks were in a sanded form, but a few were of the vegetative type. One unusual brick had X1111 inscribed on top which may denote the tally mark 14. There were seven complete bricks (five 9" long and two at 8½"), 21 had measurable widths (which varied from one at 3¾", two at 4", four at 4¼", eight at 4½", four at 4¾" and two at 5". All thicknesses were either 1¾" or 2". Three other Period 3 features reused at least some medieval bricks (wall **492**, oven **463** and chimney **462**). Notable quantities of medieval brick was found within the backfill of pit **430**.

Bricks in Period 3 features and layers

- B.9.15 There were 112 bricks including fragments found in 62 contexts (56.282kg*). This does not include some brick from 10 Period 3 features which were measured but not weighed on site. Nearly half the bricks by weight were reused medieval ones found in cess-pit **1424** (see above).
- B.9.16 It is noticeable that there was no definite mid 16th to mid 17th century brick within the site. It was at this stage Barnwell was a small village devoid of its former patron Barnwell Priory. The possible exception is from the cellar of inn (**2062**), which was the earliest *in situ* post-reformation feature using contemporary bricks. The well made orange bricks (8" x 4" x 2") in this feature could only be broadly dated as 17th to 18th century. The archaeological evidence is that this feature burnt down probably in the fire of Barnwell 1731- so a 17th century date is likely for its construction. A well made brick cellar in the

17th century is an indicator of some wealth – presumably from trade along this main road including the business generated by the two important annual fairs (Midsummer and Stourbridge). It is noticeable that photographs taken in October 1959 of the destruction of the cellar building of the former Bird Bolt inn (which had been located directly to the west of the excavation area), possibly show it had also been made with similar bricks and the cellar was of similar size.

- B.9.17 'Locally' made bricks dating to the late 17th century to 18th century were found in relatively small quantity within the site. These bricks were both in a puddled yellow/red mixed with often with a grey core, as well as some yellow, orange and orange to red and red fabrics. This seems to suggest that in this period bricks were being brought in from several different (presumably) nearby kilns, but not in any large quantity. A few fragments of 18th century buildings and other structures were found on site included a possible stable structure (Building 12) behind cellar **2062**.
- B.9.18 From the c.mid 18th century there is far more evidence for brick within the site. North to south boundary plots walls (325/876, 792, 942, 1083), which post-date the 1731 fire, were all made with orange/red bricks which measured 8½" x 4" x 2½"(325/876).
- B.9.19 Eighteenth century buildings along the frontage of Newmarket Road seem to be largely made of clunch, but a few only had small quantities of bricks within them (including Building 14 which reused medieval examples in various aspects of this building (e.g. wall **492**; chimney **462**; oven **463**).
- B.9.20 It is noticeable that relatively/very few post-medieval brick fragments were found in the backfill of Period 3 features. This seems to add evidence that after the medieval period, brick seems to take some time to be used in any quantity within (or presumably near to) the site.

Bricks in Period 4 features and layers

- B.9.21 In Period 4 there were 32 bricks fragments found (18.622kg), but this doesn't include many bricks recorded from walls on site which were not weighed. It should be noted that within 19th and 20th century features brick were invariably not retained (but was noted in the context sheets).
- B.9.22 In the 19th century and up to the 1960s all new buildings within the site were made in bricks. There was virtually no reuse of medieval brick from the priory in this period. This is presumably due to relatively cheap brick kilns being established a few hundred metres to the east of the site. By the mid 19th century maps record more than one brick kiln, a few hundred metres apart.
- B.9.23 Most of the brick recorded within the site in Period 4 can be dated fairly accurately from a plethora of maps dating from Enclosure (c.1808). In the 1820s to 1840 the site reverts from a rural 'village' to being part of urban Cambridge. Indeed the RCHM (1988, 366) notes that in this period Barnwell becomes an area of small terraced closely built properties with some industry. Infilling and dominating the eastern third of the site was Shamrock Passage and Brown's yard. These are not shown on the 1820s parish map, but are shown on the 1840 Sewage map. Some of these buildings were made with different bricks, both yellow and red examples. Walls 372 and 376 for example comprised yellow machine made bricks with slight frogs (showing this type brick was being used by the 1840s).
- B.9.24 Yellow perforated brick is recorded in wall 1036 of the St George and Dragon

pub/coffee house which was extended to the south in the mid 19th century.

Discussion

- B.9.25 No early medieval brick (pre-13th century) types were found at Harvest Way. One-handed bricks were first used in the eastern counties in the late 13th century (Ryan 1996). Indeed no brick of this type have been yet recorded in Cambridgeshire.
- B.9.26 One-handed Flemish and also home-made bricks were used in towns on the east coast from an early date e.g. the first documented use for brick in Norwich was 1268-70 (Shepherd Popescu 2009, 463). Interestingly these early bricks were not meant to be on show, they were "generally used as an ingredient of rubble walling, or where they offered constructional convenience, in the construction of vaults, which often show signs of originally being plastered." (Drury 1993, 164).
- B.9.27 It is presently uncertain when brick was first being used within Harvest Way. This is in the main due that the medieval phase for this PXA is deliberately broad (c. AD 1200-1538). Brick was being found across the site in this broad period – but hopefully will be narrowed down for the full report/publication. It is probably significant that the earliest contexts in which bricks were found at Coldhams Lane dated to c.AD 1350-1400 (Atkins 2013). This is a similar date to brick from some other Cambridgeshire towns. At Huntingdon, Walden House, for example, the earliest bricks found in the excavations were from Period 2.4 contexts and probably date to around the mid 14th century (Atkins forthcoming). The presence of bricks within the lay settlement of Barnwell Priory from the mid 14th century is therefore very interesting and may help to establish a date at which bricks first began to be used in Cambridge.
- B.9.28 A mid 14th century date (1334/5) is recorded for brick-making in Ely, but this may have been a one-off job as there is no reference to any further firings in subsequent records and brick was being imported into Ely a few years later (Sherlock 1998, 65). Documentary evidence shows that by the middle of the 14th century (1333-4, 1347-8 and 1355-6), a brickworks in Wisbech was being run on land owned by the abbot of Ely (Sherlock 1998).
- B.9.29 Elsewhere in Cambridgeshire archaeological and documentary evidence suggests there may have been an increase in very late medieval bricks making; in the late 15th and early 16th century bricks were commercially produced at Ely, Ramsey and Wisbech (Lucas 1993; Sherlock 1998; DeWindt and DeWindt 2006, appendix 8). The Ely and Wisbech brickworks were both on Ely Cathedral land and these workings would have used the river network to transport the bricks. Ely had a wide distribution market for its bricks and tiles, including Cambridge (Lucas 1993, fig 1) with for example, Ely brick purchased by Trinity College in 1528/9 (*ibid*, 158). Ramsey Abbey may have offered an alternative supply since there are many records of bricks and brick moulds being produced by the abbey employees in the early sixteenth century and this abbey used its own boats for commercial transactions (DeWindt and DeWindt 2006, appendix 8).
- B.9.30 Queen's was the first Cambridge College to use exposed brickwork extensively in its front court of 1448-9 and this use of exposed brickwork was quickly followed by Jesus, Christ's and St. John's (Lee 2005, 189). There is only one known documented late medieval brick making area in Cambridge; St John's College organised the production of its own bricks by an indenture of 1511 and a brick-maker spent several days locating an area in Cambridge to produce bricks (*ibid*, 189). The location of this brickworks is unknown although only a few locations have gault clay including directly to the east of the Coldhams Lane site.
- B.9.31 In the very late post-medieval period a brickworks was located from at least c.1800, just to the south-east of the site (recorded on the 1807-12 Enclosure Map) and bricks would

have been taken up Brick Kiln road directly north of the site to be transported along the River Cam. Two and three separate brickworks are recorded on the 1830s and 1840s maps around this area. It was not a coincidence that there was a concentration of brick kilns located here – there was good clay beds for brick making, next to the river and a major road for transportation and significantly it was very close within a large area where there was (to be) a very large growth in population/housing. These economic factors probably was a major reason for expansion in this part of Cambridge. It has been long recognised by economic and social historians than an active building trade can boost the trade (and population) of a town. "the building trades were active in all areas of expansion, it is often possible to correlate regional bursts of industrial growth with new housing. Moreover the output of the builders represented a very high proportion of new capital" (Checkland 1979, 165).

B.9.32 This concentration of brickmaking is well-known from elsewhere e.g. at Northampton four adjacent brick kilns were recorded in the far northern segment of the town and these accounted over half of Northampton's brickmakers. This location was an area of good clay beds, next to the turnpike road in an area which saw the greatest housing expansion within the town in the 19th century (Atkins 2002, 97).

Ctxt	No	Wt (g)	Dimensions	Comments	Brick date	Feature	Pr
15	1	361	61mm (2½").	Yellow sandy? Post hole or pit	18th to early 19th century	?Post hole Building 8	3
19	2	113		In two fabrics: 1) Hard red to purple(97g). Burnt later. 2) Yellow/red mixed with grey core (16g).	?medieval Late 17th-18th	Post hole 20 Building 8	3
23	2	61	Orange sandy	Orange sandy		?Post hole 24 Building 8	3
27	2	93		In two fabrics: 1) Red sandy (42g) 2) Mixed yellow/red (51g)	Late 17th to 18th century	Post hole 28 Building 8	3
33	5	222		In three fabrics: 1) One hard orange sandy with dark grey reduced core (157g). Some large flint inclusions. 2) Three orange red (44g) 3) One yellow (21g)	3) Late 17th+	?Post hole 34 Building 8	3
37	1	8		Orange/red sandy		Post hole 38 Building 8	3
75	1	97	48mm (2")	Orange/red to purple		Floor Building 16	3
79	2	34		Orange		Floor Building 16	3
103	1	407	44mm (1¾")	Dark red to purple. A couple of vegetative impressions.	14th-early 16th	Pit 99	2
109	1	226	53mm (2") thick.	Yellow.	Late 17th -18th century	Post hole 114 Building 11	3
123	1	61	Hard red to purple.? med	Hard red to purple.? med		Pit 124	3
127	1	2311	220mm (8½") 102mm (4") wide and 60mm (2¼") thick.	Orange sandy.	Late 18th to mid 19th century	Pit 128	4
130			220mm (8½") 98mm (4") wide and 60mm (2¼") thick Some 70mm (3")	Hard red to purple. Arrises ok. Recorded on context sheet. Not weighed	18th-mid 19th	Wall 131	3
136				Fletton brick. Frogged and name stamped. Recorded on context sheet. Not weighed	Mid 20th+	Structure 138	4
159	2	340	2) 50mm (2")	In two fabrics:	1) Post-	Pit 160	3

Ctxt	No	Wt (g)	Dimensions	Comments	Brick date	Feature	Pr
				1) Red (14g). Post-medieval 2) Yellow. Cracked face. 50mm (2") thick	medieval 2) Late 17th -18th century		
161	2	446		In two fabrics: 1) Red sandy with some small flint inclusions 2) Orange red. Poorly made.	2) Late med+	Pit 162	3
182	1	10	Orangey red	Orangey red		Pit 183	4
193	1	39	Red	Red		Layer	3
199	2	136		Hard purple. Cracks. Not well made. Slight signs of burning on one side.	Medieval	Layer	3
209	2	406	1) 50mm (2")	In two fabrics: 1) One Yellow (261g). 50mm (2") 2) One orange sandy (145g)	1) Late 17th-18th century	Pit 260	3
220			102mm (4") x 72mm (3")	Red. Recorded on context sheet. Not weighed	Mid 18th- mid 19th	wall 220 ?Corral	3
291	2	4391	A) 230mm (9") x 104- 110mm (4-4 1/4") x 46mm (1 3/4") B) 228mm (9") x 117mm (4 3/4") x 47 (1 1/4")	A) Pink to purple (2148g).? partly sanded. Lot of vegetative impressions on base, some on top and a side. Frequent cracks and small holes. Mould impression. Uneven and slightly warped. B) Pink to purple (2243g). Vegetative – significant quantities. Frequent/some cracks and small holes. Mould impression. Uneven and slightly warped.	14th to early 16th		
312			228mm (9") x 102mm (4") x 76mm (3")	Recorded on context sheet. Not weighed	Late 18th- mid 19th	Wall 313 Building 24	4
314			215mm (8 1/2") x 102mm (4") x 76mm (3")	Recorded on context sheet. Not weighed	Late 18th- mid 19th	Wall 315 Building 24	4
316			203mm (8") x 102mm (4") x 76mm (3")	Recorded on context sheet. Not weighed	Late 18th- mid 19th	Wall 317 Building 18	4
318			203mm (8") x 102mm (4") x 76mm (3")	Recorded on context sheet. Not weighed	Late 18th- mid 19th	Wall 319 Building 18	3
320			228mm (9") x 115mm (4 1/2") x 76mm (3")	Recorded on context sheet. Not weighed	Late 18th- mid 19th	Wall 321 Building 18	3
323			178mm x 102mm (4") x 76mm (3")	Recorded on context sheet. Not weighed	Late 18th- mid 19th	Floor Shamrock Passage	4
326			228mm (9") x 102mm (4") x 76mm (3")	Recorded on context sheet. Not weighed	Late 18th- mid 19th	Wall 327 Browns Yard	3
328	1	3197	221mm (8 1/2") x 105mm (4") x 70mm (2 1/2")	Yellow. Recorded on context sheet. Not weighed	Late 18th- mid 19th	Soakaway 329	4
330	1	2630	200mm (8") x 100mm (4") x 52mm (2")	Varied from yellow to orange. Same size.	Late 18th- mid 19th	Drain 331	4
332			228mm (9") x 102mm (4") x 60mm (2 1/2")	Deep red. Recorded on context sheet. Not weighed	Late 17th- 18th	Wall 333	4
334			225mm (8 1/2") x 110mm (4 1/4") x 60mm (2 1/2")	Yellow. Recorded on context sheet. Not weighed	Mid 18th- mid 19th	Wall 335	4
371			230mm (9") x 110mm (4 1/2") x 70mm (2 3/4")	Yellow. Machine made with slight frogs (frog 150mm x 60mm x 20mm)	Mid 19th+	Wall 372 Browns Yard	4
376			220mm (8 1/2") x 110mm (4 1/2") x 70mm (2 3/4")	Yellow. Machine made with slight frogs (frog 150mm x 60mm x 20mm)	Mid 19th+	Wall 376 Browns yard	4
381			220mm (8 1/2") x 110mm (4 1/2") x 70mm (2 3/4")	Red	late 18th- 19th	Wall 381 Browns Yard	4
382			230mm (9") x 110mm (4 1/2") x 76mm (3")	Red and yellow	Late 18th- 19th	Wall 382 Browns yard	4
386			210mm (8 1/4") x 100mm (4") x 70mm (2 3/4")	Red	Late 18th- 19th	Wall 386 Shamrock Passage	4
392			230mm (9") x 110mm (4 1/2")	Yellow. Machine made	Mid 19th+	Floor Browns yard	4
423			230mm (9") x 110mm (4 1/2") x 60mm (2 1/2")	Yellow	Late 18th- 19th	Wall 423 Building 22	4
424			210mm (8 1/4") x 100mm	Red	Late 18th-	Wall 424	3

Ctxt	No	Wt (g)	Dimensions	Comments	Brick date	Feature	Pr
			(4") x 60mm (2½")		19th	?Corral	
425			230mm (9") x 110mm (4½") x 70mm (3")	Yellow	Late 18th-19th	Wall 425 ?Corral	3
428			220mm (8¾") x 110mm (4½") x 60mm (2½")		Late 18th-19th	Wall 428 Building 23	4
462	1	1860	228mm (9")x 114mm (4¾") x 47mm (1¾")	Orange (1860g). Sanded. Moderate quantities of vegetative impressions. Slight mould impression. Reasonably well made	14th-early 16th	Chimney 462 Building 14	3
463	1	3678	221mm (8½") x 104mm (4¼") x 48mm (2") 225 (8¾") x 110 (4½") x 51mm (2")	A) Pink to purple (1845g). Sanded. A few vegetative impressions. Cracks and some holes. B) Orange to red (1833g). Sanded. A few vegetative impressions. Not too well made. Arrises poor. Mould impression. Slight smoothness on top. Heavily sooted here.	14th to early 16th	Oven 463 Building 14	3
491	1	1882	A) 116mm (4¾") x 49mm (2") B) 106mm (4¼") x 43mm (1¾")	A) Orange to slightly purple (1094g). Sanded but a few vegetative impressions. Some cracks and holes. Mould impression B) Pink to purple (788g). Vegetative (mass). Some cracks. Mould impression.	14th to early 16th	Wall 492 Building 14	3
537	2	195		In two distinct types: 1) Yellow perforated (0.124g) 19th century 2) Yellow (71g)		Drain 538	4
540	1	869	116 (4½") 46mm (1¾")	Vegetative. Mass on base and a few on top. Frequent cracks and small holes external and internal. Uneven	14th to early 16th	Trench 541	4
542			105mm (4¼") x 70mm (2¾")	Red	Late 18th-19th	Toilet 543 Building 16	4
546	1	6234	A) 230mm (9")x 115mm (4½") x 46mm (1¾") B) 120mm (4¾") x 47mm (1¾") C) 221mm (8¾")x 110mm (4½") x 44mm (1½") D) 120mm (4¾") x 47mm (1¾")	A) Pink to purple (2168g). Sanded. Very few vegetative impressions on base and one side. Cracks. Mould impression. Slightly overfired – a little vitrification. Slightly warped. B) Pink to purple (1399g). Sanded, but has a few vegetative impressions. Moderate to large quantities cracks and holes. Mould impression. C) Orange to slightly red to purple (1742g). Frequent vegetative impressions on base but partly sanded? Mould impression. Near complete. D) Pink to purple (925g). Sanded. Large quantity of cracks. Mould impression.	14th to early 16th	Pit 430	3
559			230mm (9")x 130mm (5") x 50mm (2")	Red		Wall 559 Building 16	3
599	2	4702	228mm(9")x 100-108mm (4-4½") x 50mm (2") 230mm (9") x 106-108mm (4¼") x 60mm (2½")	A) Sanded (1968g). A few vegetative impressions. Not well made – Arrises poor. Slightly warped. Slightly overfired causing a little vitrification. Mould impression. From wall (mortar on top and base). Been reused? Deep red (2734g). Sanded. Well made. Near vertical arrises etc.	A) Late med-17th century B) 18th-early 19th century	Doorway 598 George and Dragon	4
625			230mm (9")x 110mm (4½") x 70mm (2¾")		Late 18th-19th	Wall 625 Building 28	4
645	1	8		Red		Pit 648	3
696	2	162		1) Yellow/red mixed (135g) 2) Orange (27g)		Floor Building 18	4
697	1	52		Yellow/red mixed. Scrape marks	17th+	Layer	4
720			230mm (9") x 110mm (4½") x 60mm (2½")	Yellow	Late 18th-19th	Wall 720 Building 18	3
754	1	118		Yellow brick (118g)	17th-19th	Pit 755	3
787	3	1473	A) 113mm (4½") x 46-50mm (1¾- 2") B) 110mm (4¼") x 41mm (1¾")	A) Purple (482g). Sanded. Many cracks. Mould mark. Uneven. Poorly made B) Purple (843g). Sanded. Mould impression C) Red-pink (148g). Sanded. 48mm (2")	?all medieval	Layer	3
810	1	83		Orange. Mould mark. Cracks	?medieval	Layer	3
829	1	63		Purple	?medieval	Ditch 830	3

Ctxt	No	Wt (g)	Dimensions	Comments	Brick date	Feature	Pr
876			220mm (8½") x 100mm (4") x 60mm (2½")	Red	Late 18th-19th	Wall 876 Boundary	3
879			230mm (9") x 120mm (5") x 60mm (2½")	Red		Wall 879 Boundary	3
927	3	1212	B) 51mm (2") C) 45mm (1¾")	A) One orange/red (632g) B) One orange (226g) C) one orange (354g)	B) 17th-18th	Well 931	4
986	1	308	47mm (1¾")	Yellow (308g). Frequent cracks and many small holes	17th-18th	Pit 987	3
1036			220mm (8½") x 110mm (4½")	Yellow perforated brick. (developed perforation of three holes per width x many)	Mid 19th+	Wall 1036 St George	4
1073			220mm (8½") x 120mm (5") x 65mm (2½")	Red		Wall 1073 Shamrock passage	4
1078			220mm (8½") x 100mm (4") x 70mm (2¾")	Red		Wall 1078 Boundary	4
1084	1	2		Res.? brick		Layer	4
1143	1	113		Red. Sanded	?late medieval	Floor Corral	3
1151	2	161		red to purple	?medieval	Post 1150 hole	4
1192	1	52		Yellow	17th+	Post 1191 Building 8 hole	3
1247	1	35		Purple. Overfired – vitrification on surface. Cracks	?medieval	Well 784	2
1263	2	21		Orange/red		Ditch 1264	2
1292	1	20		Red-purple		Pit 1293	4
1304	3	36		In two fabrics: 1) Two yellow (23g) Well made (corner survived in one) 2) One yellow/red mixed (13g)	1) Mid 18th+	?pit or PH 1305	4
1429	5	3073	A) 50mm (2") B) 116mm (4¾") x 45mm (1¾") C) 120mm (5") x 51mm (2") D) 49mm (2") E) 115mm (4¾") x 50mm (2")	A) Purple (91g). Cracked face. Overfired. B) and C) Two part bricks slightly pink to purple (1572g). Mostly sanded? One has some/frequent vegetative impressions. Mould impression. Arrises poor. C) is slightly burnt black. D) and E) are orange to pinky/purple in colour (1410g). Mostly sanded? Some vegetative impression on base. Poorly made.	14th-early 16th	Cess-pit 1424	3
1432	8	14906	A) 210 (8¼") x 112mm (4½") x 50mm (2") B) 215 (8½") x 106mm (4¼") x 44mm (1¾") C) 230 (9") x 113mm (4½") x 47mm (1¾") D) 114mm (4½") x 52mm (2") E) 228 (9") x 108mm (4¼") x 51mm (2") F) 226 (9") x 113mm (4½") x 52mm (2") G) 95mm (3¾") x 44mm (1¾") H) 126mm (5") x 50mm (2")	A) Pink to purple (2001g). Sanded. A few vegetative impressions on base. Very poorly made. Poor arrises, lot of cracks and holes. Mould marks. B) Mid orange sandy (1793g). Sanded. A few cracks. Slightly warped. Mould impressions C) Pink to purple (2039g). Sanded. Reasonably made. Only a few cracks and holes. OK arrises Mould marks. D) Sanded (1707g). Some vegetative impressions. Many cracks. Arrises ok. E) Mid orange sandy (2577g). Sanded. A few vegetative impressions. A lot of mortar attached. F) Pink to purple (2570g). Sanded. Large quantity of cracks and holes. Slightly warped. Some mortar attached. G) Red to purple (1164g).? Mostly sanded. Has frequent vegetative impressions on base and a few on side. Some cracks and holes. Poorly made. H) Pink to purple (1050g). Vegetative. Mass of impressions on base and a few on top and side. A few small internal holes and cracks. Poor arrises.	14th-early 16th	Cess-pit 1424	3
1433	3	2047	A) 110-112mm (4½") x 51mm (2") B) 108mm (4¼") x 43mm (1¾")	A) One orange to slightly purple (1202). Largely sanded, but some vegetative impressions. Mould mark. A few cracks and v. occasional small holes B) One orange to slightly purple (567g). Overfired causing vitrification. Some cracks. Mortared. Arrises ok C) One orange to slightly purple (278g)	14th-early 16th	Cess-pit 1424	3
1448	1	32		? fabric. Burnt black		Pit 1447	2
1457	2	330		Orange. One burnt along side and top of brick -used in		Well 1456	3

Ctxt	No	Wt (g)	Dimensions	Comments	Brick date	Feature	Pr
				oven/hearth?			
1564	1	21		Orange to pink	?late med	Pit 1565	3
1569	3	593	B) 50mm (2")	A) Two yellow/orange (46g) B) One orange sandy (547g)		Pit 1570	3
1584	3	444	48mm (2") 49mm (2")	Orange to pink. One is Vegetative (mass of impressions). The other two are probable – one has several impressions. Cracks etc.	14th-early 16th	Well or pit 1577	3
1586	6	401		Orange to pink to purple. One has had excess clay scraped off. One burnt	?medieval	Pit 1621	2
1714	1	85		Yellow and red clay mixed	17th+	Post hole 1713 Building 18	3
1718	1	1356	110 (4½") 67mm (2¾")	Orange. Well made in mould. Near vertical arrises.	mid 18th- mid 19th	Drain 1719	4
1888	2	1068	A) 101mm (4") and 42mm (1½") B) 46mm (1¾")	A) Orange/red/purple. Sanded. Has some vegetative impressions on base. Overfired – some vitrification in areas. Some cracks/holes. Arrises ok B) Orange to purple. Some vegetative impressions on base. A few small cracks	?late medieval -16th	Cess-pit 1424	3
1941	3	40		Red/pink/purple		Pit 1940	2
1968	1	13		orange to red		Pit 1940	2
1970	4	62		Pink to purple	?medieval	Pit 1969	2
1971	2	17		Orange to purple		Pit 1969	2
1978	1	572	43mm (1¾")	Dark red to light purple and one flint 21mm in length. Some vegetative impressions. Many cracks (external). Arrises very poor. Uneven brick.	14th-early 16th	Pit 1986	2
2018	1	219		Yellow with a few small red clay lump inclusions.	17th +	Ditch 2020	3
2021	3	178		orange to red to purple	?medieval	Pit 1969	2
2022	9	237		Eight were in a dark orange to red to slightly purple (186g). Vegetative impressions on two. One orange to red with some very small flint inclusions. (51g). Sanded	14th-early 16th	Pit 1969	2
2028	2	84		Orange to red. Some internal cracks.		Inn 2061	3
2030	1	16		Orange to red		Inn 2061	3
2033	5	104		A) Four orange to red to purple (77g). Cracks B) One yellow	A)? medieval B) Mid 18th +	Pit 2096	2
2062	1	1795	209 (8") x 101 (4") x 50mm (2")	Orange. Complete brick but has some lime mortar. Crease on face. Some cracking to faces. Arrises ok to good	17th-18th	Inn 2062	3
2067	2	34		Orange		Pit 1969	2
2100	1	8		Orange to purple. Small internal holes		Pit 2096	2
2155	2	21		Orange		Pit 2154	2
2158	2	110	40mm (1½") thick	Orange to slightly pink to purple. Mould mark. Cracks on exterior and interior		Pit 2157	3
2160	1	10		Red to purple		Pit 2157	3
2216	1	1292		Heavily burnt/overfired. Distorted etc....		Pit 2215	4
2217	2	1247	A) 108mm (4¼") x 49mm (2") B) 109mm (4¼") x 45mm (1¾")	A) Red/pink/purple. Sanded. A couple of vegetative impressions. A few cracks (relatively small). Some soot. B) Red/pink/purple. Uneven. Soot along the top (15mm deep) of one side of brick only. Used in? oven/hearth	Probably late med	Well 1456	3
2273	1	7		Red		Pit 1940	2
2284	8	801		Mostly purple – a couple orange to red. Frequent vegetative impressions on one. External cracks	14th-early 16th	Pit 2275	2
2285	17	3035	A) 116mm (4½") x 51mm (2") B) c.115mm (4½") C) 117mm (4½") x	A) Purple. Very uneven. Large cracks on face and some internal. Small holes. B) Purple C) Purple. I vegetative impression. Small holes	14th-early 16th	Pit 2275	2

Ctxt	No	Wt (g)	Dimensions	Comments	Brick date	Feature	Pr
			50mm (2") D) 51mm (2") E) 52mm (2")	Orange to red-largely purple. Most sanded? Some others have some to frequent vegetative impressions. Many cracks, uneven examples.			
2317	1	38		Orange/red		Pit 2318	2
2324	1	12		Yellow	17th+	Pit 2327	4
2331	3	87		Orange to slightly pink. Frequent vegetative impressions on one.	14th-early 16th	Cess-pit 1424	3
2333	3	3584	A) 48mm (2") B) 110mm (4¼") x 48mm (2") C) 104 (4") x 50mm (2")	A) Orange to slightly purple (1558g). Cracked. Large quantities of mortar B) Red to purple (1175g). Frequent vegetative impressions. Frequent cracks. Scrape marks – excessive clay removed from mould. Sanded. A few cracks. Scrape marks	B) 14th-early 16th C)? 16th-17th	Cess-pit 1424	3
2335	2	1518	115mm (4½") x 43mm-50mm (1¾"-2")	Orange to red slightly purple. Both have frequent vegetative impressions. One part brick is very uneven. Some cracks. Arrises ok.	14th-early 16th	Cess-pit 1424	3
2345	3	2678	A) 48mm (2") B) 120mm (4¾") C) 122mm (4¾"+)	A) Red to pink/purple(71g). Small cracks and holes B) Red to purple (1293g). Sanded. Some cracks. Scrape marks C) Red to purple (1314g). Cracks internal and external	A)? medieval B) 14th-early 16th C) 14th-early 16th	Cess-pit 1424	3
2347	2	2033	A) 45mm (1¾") B) 113mm (4½") x 50mm (2")	A) (955g) Vegetative?- large quantity of impressions. Scrape marks – removing excess clay. Cracks etc. B) Red to slight purple tinge. Vegetative – frequent impressions on base. Excess clay scraped off top. Internal cracks. Arrises poor to ok.	14th-early 16th	Cess-pit 1424	3
2348	2	3433	A) 228 (9") x 112mm (4½") x 40mm (1½") B) 215 (8½") x 102mm (4") x 44mm (1¾")	A) Soft to medium orange (1584g). Vegetative- frequent impressions on base? Mould marks. Has decoration on top of brick – is it denoting the number 14 for tallying? Whilst wet it has an X inscribed – from four corners of the brick by a finger? Then afterwards, there were four vertical lines drawn on eastern half of brick. First one is through the centre of the cross and the other three are progressively spaced c.1" apart to the east. Brick nearly complete. Unusual. DRAW B) Red (1849g). Sanded. A few vegetative impressions. Mould impression. Poorly made. Arrises poor. Slightly warped.	14th-early 16th	Cess-pit 1424	3
2402	1	452	110mm (4¼") x 44mm (1¾")	Orange. Sanded, but has a few vegetative impressions. Finger prints. Some/extensive cracks and a few holes (internal and external). Heavily overfired – a lot of vitrification.	Late medieval	Ditch 2405	2
2408	1	9		Red to purple		Pit 2409	4
2478	1	301	46mm (1¾")	Orange. Sanded. Poorly made. Cracks and holes. Some soot.	14th to early 16th	Pit 2479	2
2496	1	512	126mm (5")	Pink to purple. Sanded. Small cracks and holes	14th-early 16th	Pit 1940	2
2555	1	419	41mm (1½")	Orange. Sanded. Good arrises.	17th-18th	Well 2554	2
2581	1	298	42mm (1¾")	Red to slightly purple. Vegetative. Excess clay removed from mould. Frequent cracks	14th-early 16th	Pit 2584	3
2607	1	23		Orange		Oven/kiln 2604	2
2611	1	110	47mm (2")	orange. Mould mark. Some cracks and small holes		Pit 2610	3
2613	1	62		Purple. Mortar attached		Pit 2612	3
2667	1	93		Red to purple. Cracks and holes	?14th-early 16th	Pit 2671	2
2674	3	2568	A) 60mm (2½") B) 4¾"-5" 44mm (1¾") C) 98mm (4"), 44mm (1¾")	A) Orange (947g). Some pebble inclusions up to 28mm in length. Sanded. Arrises ok B) Pink to purple (628g). Cracks etc. C) Orange with grey core (993g). Ok made – reasonable arrises. Some cracks.	A) Late 17th century + B) 14th-early 16th C) 17th-18th	Pit 2682	2

Ctxt	No	Wt (g)	Dimensions	Comments	Brick date	Feature	Pr
2676	1	142		Orange	?	Pit 2682	2
2762	4	69		Orange. Three vitrified.		Post hole 2761	2
2764	3	45		Red. One burnt	?post-medieval	Post hole 2763 Building 11	3
2799	2	76		Yellow	Post-medieval	Layer	3
2820	2	647	A) 96mm (3¾") x 50mm (2") B) 38mm (1½")	A) Orange/pink/purple (472g). A lot/some small cracks. B) Yellow/red clay mixed brick with yellow clay lump inclusions (175g)	17th-18th 17th-18th	Post hole 2818 Building 11	3
2863	1	174	44mm (1¾")	Orange. Some vegetative impressions. Some cracks	14th-early 16th	Pit 2996	2
2869	1	33		Red to purple. Cracks. A little burning on corner	?late med	Well 2412	2
2883	2	50		Orange		Layer	4
2949	2	184		Red to purple. Poorly made. Cracks. Mould mark.	?medieval	Pit 2953	2
2952	1	109	52mm (2")	Red. Sanded. Some small pebble inclusions. A few small cracks.	late 17th-18th	Pit 2953	2
2955	1	38		Red		Pit 2956	2
2988	1	64		Orange. Fletton type. Frog. Start of letters on frog	Mid 20th+	layer	4
2997	1	296	51mm (2")	Pink to purple. A few vegetative impressions. Some cracks and holes.	14th-early 16th	Pit 2996	2
3029	2	241		Yellow red clay mixed. Scrape marks removing excess clay from mould. Some cracks and holes	17th-18th	Post hole 3030 Building 11	3
3066	1	171		Red to purple. Slightly pitted appearance. A few holes	?medieval	Pit 3065	3
3069	1	30		Red to purple. Some cracks.	?medieval	Post hole 3068 Building 11	3
3078	1	10		Orange.? brick		Pit 3076	2
3090	1	16		Orange.? brick		Well 2412	2
3151	1	55		Orange. Slightly burnt		Post hole 3150	3
3188	1	14		Scrap		Post hole 3187 Building 11	3
3272	3	280	41 (1¾")	Hard red to slightly purple. Poorly made. Several cracks and holes	14th-early 16th	Pit 3273	4
3291	1	34		Orange to red		Well 1927	2
3349	1	262		Dark orange to red/to slightly purple. A few vegetative impressions. Some internal cracks	14th-early 16th	Pit 3351	2
3365	1	27		Orange to red. Cracks		Pit 3351	2
3380	1	30		Pink to purple. Crack and small holes	?medieval	Pit 3381	2
3457	6	524	45mm (1¾")	Orange to red to purple. Three may have been part of an oven as soot/burning on top. Cracks on external and internal.	Medieval	Pit 3451	2
3459	10	624	A) 50mm (2")	A) Part brick (409g). Red to purple. Vegetative. Scrape marks showing removal of excess clay. Cracked face. Arrises ok B) Nine orange small fragments (215g)	A) 14th to early 16th	Pit 3451	2
3460	3	186	46mm (1¾")	Orange to red. Sanded. A couple of vegetative impressions. Cracks. Mould impression	?14th-early 16th	Pit 3451	2
3461	1	448	50mm (2")	Red to purple. Some vegetative impressions on base. Some small voids. Mould mark	14th-early 16th	Pit 3451	2
3463	1	74	45mm (1¾")	Orange to pink.	Late med/ v.early post-med	Pit 3451	2
3465	1	31		Pink to purple		Pit 3451	2
3467	2	443	c.50mm (2")	Two yellow. Poorly made. Very poorly made. Uneven.	17th?	Pit 3451	2

Ctxt	No	Wt (g)	Dimensions	Comments	Brick date	Feature	Pr
				Significant cracks. A little sooting on one			
3507	1	53		Some holes/cracks	?medieval	Pit 3503	3
3529	1	17		Orange with flint inclusions up to 14mm		Post hole 3528	3
3572	1	337		Orange with a few small stone (flint) inclusions up to 15mm. Sanded. Arrises good	?med? post-med. More likely the latter	Pit 3574	2
3643	1	13		?brick		Well 3388	2
	270	93830					

Table 24: *Catalogue of brick*

The Floor bricks

Introduction

- B.9.33 There was a small collection of 17 floor bricks (8.01kg) from 11 contexts (two Period 4 contexts were measured on site, but not weighed). All 17 floor bricks were found in Period 3 and 4 contexts (Tables 22 and 25).
- B.9.34 All 17 floor bricks have a smoothed top presumably from being walked on by countless people. All the bricks date from the 17th or 18th century. Several of the floor bricks had been produced as normal hand made bricks from moulds, and then placed within a floor, whilst others were produced for the floor (being substantially thinner than a normal brick). A few machine made 20th century examples were also recovered.

Floor Bricks in Period 3 features and layers

- B.9.35 Only six floor bricks were found in post-medieval contexts. A complete late 17th-early 18th century floor brick was later reused in the 18th century within wall 481 and had a burnt top. The other post-medieval floor bricks were only found as fragments, presumably after the building they had been used in was demolished (or even burnt down such as in the 1731 fire of Barnwell). 17th century Inn cellar **2062** had been floored in brick, but impressions of these bricks from within the top of mortar only survived. These bricks were presumably taken up after the 1731 fire to be reused elsewhere. In this period brick was being used in floors as there were benefits. Morton in 1712 (page 70) stated that a floor of brick is drier, imbibes any wet that falls upon it, more speedily than a floor of stone of the same sort, and is not subject to sweating in damp weather.

Floor Bricks in Period 4 features and layers

- B.9.36 There was an increase in just 11 floor bricks recorded in Period 4 contexts. It should be noted that yellow brick recorded within c.1830s cellar floor 392 was not included in the statistics. Presumably re-used post-medieval bricks were reused in floor 600. A few fragments of floor brick were found in the backfill of features. 19th century square and sub-square machine made tiles were found in floors 322 and 360.

Ctxt	No	Wt (g)	Dimensions	Comments	Brick date	Feature	Ph
193	1	660	101mm (4") wide (1½") 40mm	Yellow sandy. Worn smooth on top.	Late 18th to 19th century	Layer	3
322			Tiles 160mm x 150mm	From tiled floor. Machine made. Machined off. Not weighed	Late 19th/early 20th century.	Floor	4
360			150mm² (5")	Red machine made tiles. Not weighed	19th century	Floor	4

481	1	2021	220mm (8½") x 105mm (4") x 47mm (1¾")	Yellow/red mixed. Sanded. Only a couple of vegetative impressions Reasonably well made. Arrises ok. Smoothed top. Subsequently burnt (sooted) – no burning elsewhere. Reused from an earlier floor of building which had been near a fire?	Late 17 th -18 th	Wall	3
600	2	2099	A) 210mm (8¼") x 101mm (4") x 41-44mm (1¾") B) 100mm (4") x 40mm (1½")	A) Orange sandy (1523g). Slight crease on face. Some small cracks. Reasonably well made. Smoothed top. B) Yellow to red mixed (576g). Creased face. Smoothed surface	17 th -18 th	Floor	4
927	2	256	34mm (1¼") x2	Two orange. Smoothed top.	mid 18 th -19 th	Well 931	4
988	1	216	35mm (1¼")	One red with yellow clay lump inclusions. Sanded base. Near vertical arrises. Smoothed top	18 th -early 19 th	Pit 989	3
1049	1	82		Yellow/orange. Smoothed top	18 th -19 th	Well 1051	4
1225	1	398	33mm (1¼")	Yellow/red clay mixed. Well made. Near vertical arrises. Top very smooth.	Mid 18 th -19 th	Structure 1221	4
1569	2	431	A) 45mm (1¾") B) 32mm (1¼")	Two yellow orange. Both have smoothed top. Cracks etc.	18 th -19 th	Pit 1570	3
1774	1	56	20mm (¾")	Orange with a large grey core.? floor brick – could be medieval floor tile. Has a smoothed top		Pit 1741	3
2197	4	1534	All 110mm (4¼"). Between 28-31mm (1¼")	Yellow. Four part bricks. Well made. Very good arrises -vertical sides. All have smoothed tops	Late 18-19 th	Pit 2199	4
2766	1	258	108mm (4") 43mm (1¾")	Yellow/orange to red poorly mixed. Many cracks. Top is worn smooth	mid 18 th -19 th	Pit 2765	4
	17	8011					

Table 25: *Floor brick*

Decorative bricks

Introduction

B.9.37 There were just three decorative bricks (Table 26), one in a Period 3 well and two in Period 4 features. Part of a possible chimney brick fragment is unusual and should be drawn/photographed. The other two decorative bricks were coping brick, probably from the top of walls.

Ctxt	No	Wt (g)	Dimensions	Comments	Brick date	Feature and Period
127	1	601		Decorative brick fragment. Yellow sandy. Semi-circular capping brick uses include for top of walls.	19 th century	Pit 128 4
658	1	2535	120mm (4¾") width Up to 93mm (3¾") high	Deep red. Coping brick from top of wall?. Rises to a pediment.	Late 18 th -19 th	Well 660 3
2192	1	521	108mm (4¼") width x 35mm (1¼") thick	Light orange sandy. One one side there are two equal rectangular panels with clay removed before firing to show a cross cut design. Arrises near vertical. Unusual? from chimney. ** DRAW or photograph.	?18 th century	Toilet 2188 4
	3	3657				

Table 26: *Decorative brick*

Medieval floor tile

- B.9.38 A small collection of medieval floor tile (33 fragments weighing 3795g) was recovered from 14 contexts (Table 27). The majority of the floor tile was found in medieval seven contexts (25 fragments (2.790kg). Most of these (20 fragments weighing 2.323kg) were from three deposits from within pit **1794**. The vast majority of these tile fragments had been burnt and had therefore been removed presumably from the priory. They may have initially been placed in middens as there were fragments from many different tiles.
- B.9.39 Two of the tiles had impressed decorations which had been glazed: a tile with a Fleur-de-lis design was used as packing for post-medieval wall 492 and a tile with geometric design was found in pit **1794**. The majority of the tile had been unglazed. One of the tiles was of triangular shape (Period 2 pit **2713**), whilst the others, where discerned, were from square tiles.
- B.9.40 Harvest Way had far more tile fragments from other other excavations within the lay settlement. Two medieval floor tiles were found in the Coldhams Lane excavation comprising a fragment with green glaze on top which may have been in a contemporary pit and an unglazed fragment (Atkins 2013). 'Rare' medieval floor tile was found in the CAU excavation directly to the east of the site (Newman 2013, 93), although only an impressed tile probably 140mm² was recorded. The design of this tile appears to have been sub-divided into four quadrants with the lower right containing a stylised armorial shield, above which the feet of a probable heraldic beast was discernible. No medieval tile was found in the Newmarket Road excavations (Atkins forthcoming).

Ctxt	No	Wt (g)	Comments	Feature	Ph
23	1	36	Orange sandy. Green brown glaze	Pit 24	3
167	1	243	Hard orange sandy with reduced grey core. Slightly chamfered sides. 25mm (1") thick	Pit 168	2
491	1	346	Orange sandy with grey core. 122mm (5") x 24mm (1") thick. Impressed decoration in top. Fleur-de-lis design in yellow/green glaze. 13th/14th century. Reused as mortar has been plastered on decoration. SF 54.	Wall 492	3
1710	2	102	Orange on surface with grey reduced elsewhere. 23mm (¾") thick. Smoothed top on both.	Pit 1741	3
1795	4	896	A) One hard orange sandy (181g). 22mm <1" thick. Chamfered sides. Burnt black – soot on top of exterior (orange to brown remainder of tile). 13th/14th century B) Two (from one tile) in a hard orange sandy fabric with large grey core with frequent flint and very occasional small yellow clay lump inclusions (617g). 24-25mm (1"). Slight to moderately burnt dark brown on top of tile. C) One hard orange sandy grey core (98g). 23mm (1") Some splash glaze on side. Burnt on top.	Pit 1794	2
1796	1	95	25mm (1"). Orange to red sandy. Burnt	Pit 1794	2
1862	15	1332	A) One grey (131g). 24mm (1") thick. Impressed decoration in top. Geometric design with remains of three circles (32mm in diameter) and a linear line. Green/brown glaze infilling. Burnt afterwards on base and sides (soot) after disuse? SF 151. 13th/14th century. B) One hard orange with large grey to black core (40g). 20mm (<1" thick). Burnt black – soot on top of exterior. C) One hard orange sandy (378g). 5" wide (?square) and 23mm (1") thick. Slight chamfer. Unglazed on top, but splash green/brown glaze on side. D) Twelve orange sandy with frequent small flint <2mm occasional flint up to 80mm (783g) 25mm (1"). Near vertical sides. Unglazed. All heavily burnt? from more than one tile?	Pit 1794	2
2032	1	318	Orange with grey core with occasional white quartz up to 6mm and small pebbles up to 10mm. 120mm (5") x 18-20mm (¾") thick. Splash green/brown glaze on part of one side and base. Top worn smooth.	Layer	3
2033	2	80	Orange with grey core. 18mm (¾"). Smoothed top	Pit 2096	2

Ctxt	No	Wt (g)	Comments	Feature	Ph
2247	1	34	?med floor tile. Surface orange, the remainder grey. 23mm (1") thick.	Layer	3
2249	1	74	? Medieval floor tile. Orange surface predominantly grey reduced. Burnt top.	Well 1456	3
2707	1	79	?Late medieval tile. Orange sandy. Had been triangular shape. Part survives. Three linear grooves along one side of tile. 15mm (½") thick.	Pit 2713	2
2869	1	65	?med floor tile. Surface orange, the remainder grey. 23mm (1") thick. Top smooth.	Well 2412	2
3504	1	95	Orange sandy. 26mm (1") thick. Green/brown glaze on exterior	Pit 3503	3
	33	3795			

Table 27: *Catalogue of medieval floor tile*

Roman tile

- B.9.41 There was a very small assemblage of Roman tile comprising 4 fragments (0.571kg) from 4 contexts (Table 28). Three were from medieval contexts including two fragments from two different Well **2554** deposits.

Ctxt	Tr	No	Wt (g)	Comments	Feature	Ph
39	1	1	83	Hard orange sandy with reduced grey core. ?Tegula	Pit 40	2
3146		1	104	?Roman. Hard orange sandy. 22mm (<1"). Burnt-soot on reverse. Flat	Well 2554	2
3269		1	326	Very hard fully oxidised orange. 35mm (1½"). Flat	Well 2554	2
3282		1	58	?Roman. Hard orange sandy with a slight grey core. 29mm (1")	layer	4
		4	571			

Table 28: *Roman tile*

Ceramic peg roof tile

- B.9.42 A large assemblage of peg tile comprising 4855 fragments (267.801kg) from 322 contexts was recovered (Table 29). Tile from medieval and post-medieval features were kept, but from Period 4 features they were largely discarded, although their presence was noted on context sheets. This discard policy explains the relatively small quantities of Period 4 tile recorded in this report. A representative sample (c.10%) of the enormous assemblage from pit **3478** was weighed on site (not washed), the rest counted and a weight estimated from the recorded sample.

Peg tile in Period 2 features and layers

- B.9.43 In the medieval period there was 3964 tile fragments (212.697kg) from 152 contexts. The vast majority are presumed to be peg tiles, though two nibs were found (one in an orange oxidised fabric in pit **2486** and a nib in an orange tile with grey core from pit **3478**). A mixture of 1 and 2 peg hole type tiles were found in all fabric types, although there was biases. Nearly all the yellow tile were of 1 peg type (although two 2 peg types were also recovered). In fully oxidised orange, the tile were mostly 2 peg hole types whereas for Orange with a reduced grey core the numbers were equal for both type tiles.
- B.9.44 Well over half the assemblage was recovered from pit **3478** which contained 2846 fragments (estimated 164.56kg). Almost all of the collection were relatively unabraded

yellow tiles of 1 peg hole type. One nearly complete yellow tile was found and was 256mm (10") long, 161mm (6½") wide and was of 1 peg hole type. This suggests it is extremely likely these tiles were demolition rubble from a single building.

- B.9.45 Two other pits produced notable quantity of tiles. Pit **3451** had 459 fragments (15.013kg) from 10 different deposits. This tile seems to have derived from different sources as there was a mixture of six fabrics present. The condition was largely very abraded (32.7g per fragment), suggesting they had been discarded as they were not reusable. An exception was a tile with a complete width 158mm (6") of 1 peg hole type in an orange sandy fabric with reduced grey core. In contrast pit **1621** had 102 fragments (8.91kg) from six pit contexts, but these were of reasonable size at 87.4g per fragment. Two widths of tiles were measurable, one 168mm (6½") width in an orange fully oxidised ware and the other 144mm (5¾") was in a yellow fabric of 1 peg hole type.
- B.9.46 A further seven pits had more than 1kg of tile. These comprised pit **1940** with 42 tile fragments (1.178kg) from five deposits, pit **1969** with 47 fragments (2.233kg) from seven deposits, pit **2671** 23 fragments (1.19kg) from two contexts, pit **2682** had 29 tile fragments (1.99kg) from five contexts, pit **3351** with 32 fragments (1.92kg) from four contexts, pit **3354** had 36 fragments (1.25kg) from three contexts and pit **3499** had 46 tile fragments (1.93kg) from two contexts.

Peg tile in Period 3 features and layers

- B.9.47 In the post-medieval period there were 688 fragments (41.191kg) within 127 contexts. A significant minority of the tile came from cess-pit **1424** where there was 125 fragments (15.183kg) from 17 deposits. Tile was mostly found in the backfill, but a small minority was used in the construction of the cess-pit. The relatively large size of the tiles can be seen in eight tiles had widths surviving. Four were in a fully oxidised orange and had widths between 162mm and 172mm wide (6½" and 6¾"). Three of these tiles are of 2 peg hole type and one is of uncertain type. Four were in an orange with grey core and these were between 158mm (6¼") and 168mm (6½") wide. One is a 1 peg hole type tile, two of 2 peg hole types with one uncertain.
- B.9.48 One further feature, pit **3503**, had a moderate to large quantity of tile with 78 fragments (3.809kg) from three deposits. The tile were made in seven fabrics and were of small abraded size (48.8g per fragment), suggesting that this may have come from middens before being disposed of within the pit.
- B.9.49 A further four features contained more than 1kg of tile. Pit **1741** had 29 tile fragments (1.166kg) from five deposits, mostly of small size but included an orange oxidised tile which was 158mm (6¼") wide and was of 2 peg hole type. In well **1456** there were 31 fragments (1.385kg). Within ditch **2020** there were 14 fragments (1.267kg) from 2 deposits. The cellar of inn **2061** was totally excavated by hand and only produced 60 tile fragments (2.486kg). This was low quantity in terms of numbers, they were in different fabric types and were very small in size at 41.4g per fragment. overall this suggests they may not have originated from the actual building (despite the structure was seemingly burnt down in the fire of 1731).

Peg tile in Period 4 features and layers

- B.9.50 In post AD c.1800 contexts there were 197 fragments (13.681kg) from 41 contexts. A near complete orange oxidised tile was used in the construction of wall 339. it was in an orange oxidised fabric, was 263mm (10½") long, 156mm (6") wide and of 2 peg type tile.

B.9.51 Only one feature produced a large quantity of tiles (ditch **2403**) with 28 fragments (6.052kg). Two tiles had tiles cut lengthways (321mm and 325mm (12½"). A further three tiles had widths surviving (165mm (6½"), 170mm (6¾") and one at 201mm (8")). The only other feature with over 1kg of tile was well **1051** which produced 50 fragments (1.997kg) from five deposits.

Ctxt	No	Wt (g)	Comments	Feature	Ph
23	1	12	Hard orange sandy with large reduced grey core	Pit 24	3
33	2	17	Yellow sandy	?Post hole 34	3
37	6	126	In two fabrics: 1) Three yellow/red clay mixed (60g) 2) Three orange sandy (66g)	Post hole 38	3
39	5	183	Mixed yellow/red clay	Pit 40	2
75	1	30	Orange	Floor	3
78	5	101	Orange with grey core? type peg tile	Layer	3
79	3	140	In three fabrics: 1) One orange sandy (34g) 2) One orange with grey core (51g) 3) One hard red (55g)	Layer	3
88	1	13	Hard orange sandy with reduced grey core	Pit 80	2
90	1	39	Orange sandy	Pit 80	2
102	1	48	Orange sandy with reduced grey core	Pit 99	2
103	4	147	In three fabrics: 1) Two orange sandy with reduced grey core (113g). Very small white clay lump inclusions. 2) One hard orange sandy with reduced grey core (13g) 3) One yellow (21g)	Pit 99	2
123	1	2	orange sandy	Pit 124	3
155	1	55	Yellow sandy	?Ditch 156	2
159	1	138	Yellow	Pit 160	3
167	8	213	In three fabrics: 1) Six in a yellow/red mixed fabric (163g) 2) One hard orange sandy with reduced grey core (62g) 3) One Hard orange sandy fully oxidised (53g)	Pit 168	2
173	3	209	Yellow/red mixed	Ditch 176	3
193	8	180	Yellow/red mixed. One sub-rounded peg hole 45mm from side. 2 peg hole type	Layer	3
199	2	49	In two fabrics: 1) Yellow/red clay mixed (26g) 2) Yellow (30g). Sub-rounded peg hole 30mm from side. 2 peg hole type.	Layer	3
209	1	44	Yellow/orange clay mixed	Pit 260	3
339	1	986	Hard orange sandy. Most of one roof tile. (c.85% complete). 263mm (10½") long and 156mm (6") wide. 2 peg type tile.	Wall 339	4
404	1	20	Yellow	Layer	3
410	1	9	Yellow/orange clay mixed	Layer	4
414	1	88	Orange. 2 peg hole type	layer	3
460	2	298	Orange sandy. Both 2 peg hole type	Layer	3
491	1	122	Orange sandy with grey core	Wall 492	3
500	5	234	In two fabrics: 1) One orange sandy (56g) 2) Four grey with frequent small chalk lumps (178g)	Floor	3
521	3	44	In two fabrics:	Layer	3

Ctxt	No	Wt (g)	Comments	Feature	Ph
			1) Two orange sandy with grey core (35g) 2) One yellow (9g)		
522	2	26	In two fabrics: 1) One orange (7g) 2) One orange with grey core (19g)	Layer	3
546	9	505	In two fabrics: 1) Four orange (319g) 2) Five orange with grey core (186g)	Pit 430	3
562	1	20	Orange with grey core	Pit 560	3
565	1	14	Orange sandy with yellow clay lump inclusions (14g)	Layer	3
576	2	34	White	Pit 574	3
581	1	20	Orange with grey core	Drain 582	4
696	5	157	In three fabrics: 1) 1 yellow (61g) 2) 1 yellow/red mixed (36g) 3) Three orange grey core (60g)	Layer	4
697	23	863	In five fabrics: 1) Nine yellow (454g) 2) Six orange with grey core (86g) 3) One yellow/red clay mixed (93g) 4) Three hard orange (74g) 5) Four yellow with red clay lumps (72g)	Layer	4
698	3	110	Three yellow/orange mixed. One burnt exterior	Layer	4
701	1	21	Yellow/red mixed	Surface	3
703	2	37	Orange sandy with grey core	Layer	3
731	1	590	Yellow. Width 170mm (6½")	Ditch 830	3
740	1	50	Orange	Well 739	4
754	2	162	In orange oxidised	Pit 755	3
778	8	457	In three fabrics: 1) One yellow (72g) 2) Two orange (62g) 3) Five Orange with grey core (323g)	Well 784	2
787	7	1124	In three fabrics: 1) Yellow (328g) 151mm (6") wide 2) Orange (313g) 3) Five orange with grey core (483g). 2 peg hole type tile	Layer	3
812	4	220	In two fabrics: 1) Two orange (161g) 2) Two orange with grey core (59g). 2 peg hole type.	Floor	3
818	12	669	Yellow/red mixed. 2 peg hole type tile	Ditch 816	3
822	5	379	In three fabrics: 1) 1 yellow (38g) 2) 1 Orange (40g) 3) 3 yellow/orange mixed (301g)	Pit 821	3
829	1	78	Orange	Ditch 830	3
836	1	120	Yellow/orange clay mix	Layer	3
840	1	58	Yellow/orange mixed	Layer	3
842	6	265	in three fabrics: 1) One yellow (63g) 2) Two orange (138g). 2 peg hole type. Post-med? 18th century. 3) Three orange with grey core (64g)	Layer	3
845	1	8	Yellow/red mixed	Layer	3
853	3	94	In two fabrics: 1) One orange (37g) 2) Two orange with grey core (57g)	Layer	3

Ctxt	No	Wt (g)	Comments	Feature	Ph
862	3	23	Yellow and orange clay mixed	Floor	3
910	1	12	Hard red.? post-medieval	Pit 874	4
913	1	16	Orange with grey core	?Pit 912	2
915	2	45	In two fabrics: 1) One yellow/orange (24g) 2) Yellow/orange poorly mixed tile with grey core (21g)	Pit 914	3
916	4	172	Four orange. 2 peg hole type.	layer	3
917	2	31	In two fabrics: 1) One orange with grey core (15g) 2) One yellow (16g)	Layer	3
927	6	234	In three fabrics: 1) Three Yellow (91g) 2) Hard orange with grey core (21g) 3) 2 Orange (122g)	Well 931	4
986	3	102`	In two fabrics: 1) Two orange with grey core (79g) 2) One orange (23g)	Pit 987	3
988	6	95	In three fabrics: 1) Four orange (63g) 2) One orange with grey core (23g) 3) Yellow/orange mixed (9g)	Pit 989	3
1043	4	97	In two fabrics: 1) One yellow (47g) 2) Three yellow/red mixed (50g)	Well 1051	4
1044	8	501	In two fabrics: 1) Seven yellow/red mixed (450g) 2) One yellow/orange clay mixed with grey core (51g)	Well 1051	4
1045	15	548	In five fabrics: 1) Eight yellow-red mixed (310g) 2) Three yellow (117g) 3) One orange oxidised (35g) 4) One yellow-red mixed with grey core (21g) 5) Two orange with grey core (65g)	Well 1051	4
1047	13	431	In four fabrics: 1) Six yellow (201g) 2) Five yellow/orange clay mixed (170g) 3) One yellow red mixed with grey core (11g) 4) One grey (49g)	Well 1051	4
1049	10	420	In three fabrics: 1) One yellow (43g) 2) Eight yellow/red mixed (319g) 3) One Orange with grey core (58g)	Well 1051	4
1113	3	226	in two fabrics: 1) One yellow (46g) 2) Two Orange to red (180g). 2 peg type tile	Pit 1112	4
1135	1	63	Orange with grey core	Pit 1133	3
1143	35	1177	In three fabrics: 1) 24 in a yellow/orange clay mix (759g). One 2 peg type; 1?? peg type 2) 10 in orange sandy fabric (384g). One 2 peg hole type 3) One yellow/orange clay mix with grey core (34g)	Floor	3
1147	1	109	Yellow/orange clay mixed. 2 peg hole type	Floor	3
1206	4	89	In two fabrics: 1) One yellow (24g) 2) Three yellow/orange mixed (65g)	Floor	3
1225	4	752	In three fabrics: 1) Two mixed yellow/red (510g). Width 171mm (6½"). 2x2 peg hole type 2) One yellow (156g) Lime mortar attached. Well made tile. 3) One yellow with grey core with white clay inclusions (86g). Uneven and poorly made	Structure 1221	4

Ctxt	No	Wt (g)	Comments	Feature	Ph
1226	1	56	Orange. ? tile	Pit 1210	4
1259	3	27	In two fabrics: 1) One orange (7g) 2) Two orange with grey core (20g)	Surface	4
1263	3	69	In two fabrics: 1) Two orange (16g) 2) One yellow (53g)	Ditch 1264	2
1278	1	13	Orange with grey core	Layer	2
1283	1	93	Orange with grey core	Post hole 1284	2
1286	1	4	Orange	Pit 1335	2
1287	1	13	Orange	Pit 1288	3
1291	4	67	in two fabrics: 1) One yellow (4g) 2) Three yellow/red mixed (63g)	Pit 1293	4
1292	8	179	In four fabrics: 1) One orange (18g) 2) One yellow (11g) 3) Five yellow/orange mixed (113g) 4) One yellow/orange mixed with grey core (37g)	Pit 1293	4
1296	1	28	Yellow/orange mixed	Pit 1297	4
1298	1	47	One yellow/orange mixed	Pit 1299	3
1306	1	25	Yellow/orange mix. Two finger impressions	Post hole 1307	3
1310	5	112	in three fabrics: 1) One yellow (42g) 2) One hard orange (16g) 3) Three yellow/red mixed (54g)	Ditch 1311	2
1363	2	138	Two hard red with grey core	Pit 1362	2
1365	5	492	Yellow	Pit 1362	2
1378	1	10	Orange	Pit 1380	2
1388	1	6	Orange	Pit 1387	4
1410	1	6	Yellow/orange mixed	Pit 1413	2
1425	1	43	orange	Cess-pit 1424	3
1427	1	46	Orange with grey core	Cess-pit 1424	3
1428	6	515	In two fabrics: 1) Four yellow (405g) 2) Two orange with grey core (110g)	Cess-pit 1424	3
1429	18	2278	In three fabrics: 1) 14 Orange (1623g). Some soft to medium orange, some hard orange. Width 164mm (6½"). 2 x2 peg hole type. 2x? peg type. 2) One purple exterior with grey core with small white clay lump inclusions(251g). 2 peg hole type. 3) Three hard orange with large grey core (404g). One has a "dummy hole" -not completely through – presumably by mistake. 1 peg hole type.	Cess-pit 1424	3
1432	13	4954	In two fabrics: 1) Three orange oxidised (1.595kg). 1) 172mm (6¾") wide. 2) 162mm (6½") wide -this is a 2 peg hole type tile. 3) 165mm (6½") wide. 2 peg hole type tile. 2) Ten in an orange sandy with grey core (3.359kg). Includes parts of two tiles mortared together on top of each other. The lower one is 1) 165mm (6½") wide and is a 1 peg hole tile. The upper is a 2 peg hole type tile. 2) 165mm (6½") wide and is a 2 peg hole type. 3) 158mm (6¼") wide. 4) 165-168mm (6½") and is 1 peg hole type. A further tile is a 2 peg hole type	Cess-pit 1424	3
1433	22	1886	In six fabrics:	Cess-pit	3

Ctxt	No	Wt (g)	Comments	Feature	Ph
			1) Nine yellow (564g) 2) Two orange (323g) 3) Four orange with grey core (439g). 1 peg tile type 4) Three yellow/red clay mixed with grey core. Poorly made tiles (108g) 5) Three hard red with frequent small white clay lump inclusions and slight grey core (269g) 6) One hard red (183g)	1424	
1448	3	66	In two fabrics: 1) Two orange with grey core (44g) 2) One yellow/orange mixed (22g)	Pit 1447	2
1454	2	91	Orange	Pit 1451	4
1457	15	744	In three fabrics: 1) Two yellow (133g) 2) Five hard orange with grey core (295g).? peg type. 3) Eight orange (316g)	Well 1456	3
1459	2	24	Orange	Well 1456	3
1460	3	214	In two fabrics: 1) One orange with grey core (121g)? peg tile type 2) Two orange (93g)	Well 1456	3
1529	1	58	Orange with yellow clay lump inclusions and grey core (58g)	Pit 1535	2
1531	1	32	Orange with grey core	Pit 1535	2
1569	5	491	In two fabrics: 1) Four orange sandy (376g) 1 peg hole type 2) One yellow (115g)	Pit 1570	3
1572	5	388	In two fabrics: 1) Four orange (311g). Very well made (machine) 19th-20th..more likely late 19th. 2) One orange sandy (77g)	Pit 1571	4
1584	21	1040	In two fabrics: 1) Ten orange (387g). Two burnt 2) Seven orange with grey core (374g) 3) Three yellow (206g) 4) One orange to purple (73g). Used estuarine clay	Well or pit 1577	3
1586	93	8416	1) Twenty-two orange to red with grey core (1112g). Three burnt. 1 peg hole tile (75mm from side). 2) Fifty-nine orange (6123g). width 168mm (6½") 2x 1 peg hole type (61mm and 78mm from their respective sides). 5x2 peg hole type. 4? peg hole type 3) Twelve yellow (1181g). One burnt black (soot) in parts. One width 144mm (5¾"). 1 peg hole tile (80mm from side);? peg hole type	Pit 1621	2
1590	3	413	Orange with grey core	Layer	3
1608	2	13	Two orange. 2 peg hole type	Post hole 1609	4
1610	6	283	In three fabrics: 1) Two orange (41g). Very well made (machine) 19th-20th..more likely late 19th. 2) Three orange (198g) 3) One yellow/orange mixed (44g)	Pit 1611	3
1613	1	81	One yellow/orange	Surface	2
1619	2	52	In two fabrics: 1) One grey (23g) 2) One orange with grey core (29g)	Pit 1621	2
1620	2	125	In two fabrics: 1) One hard orange with grey core (55g) 2) One hard orange (70g)	Pit 1621	2
1628	2	128	Yellow	Pit 1621	2
1629	1	139	Yellow	Pit 1621	2
1640	1	22	Orange with grey core	Pit 1644	2

Ctxt	No	Wt (g)	Comments	Feature	Ph
1663	1	2	Orange	Post hole 1664	3
1696	2	50	In two fabrics: 1) one orange with grey core (36g) 2) One yellow (14g)	Pit 1621	2
1709	6	96	In three fabrics: 1) Four orange sandy (33g) 2) One hard orange sandy (39g) 3) One orange with grey core (24g)	Pit 1741	3
1710	17	946	In two fabrics: 1) Seven orange (520g). One width 158mm (6") 2 peg hole type. 2) Ten orange with grey core (426g)	Pit 1741	3
1717	11	143	In two fabrics: 1) One orange with grey core (18g) 2) Ten orange (125g)	Pit 1868	2
1718	2	70	Orange with grey core. Has very small white clay lump inclusions	Drain 1719	4
1745	1	13	Orange	Well 1747	2
1749	2	49	Two orange with grey core (49g). Both heavily burnt	Pit 1748	2
1760	1	39	Orange with grey core	Pit 1756	2
1772	2	38	In two fabrics: 1) One mixed yellow/orange with yellow clay lump inclusions (12g). Has slightly purple core. 2) One orange with grey core (26g)	Pit 1741	3
1773	3	76	In two fabrics: 1) Two orange (60g) 2 peg hole type 2) One orange with yellow clay lump inclusions with grey core (16g)	Pit 1741	3
1774	1	10	Orange with grey core	Pit 1741	3
1798	1	9	Orange	Pit 1797	2
1802	3	76	In two fabrics: 1) One yellow (23g) 2) Two orange with grey core (53g)	Post hole 1800	3
1842	1	35	Yellow	Layer	3
1843	9	285	In two fabrics: 1) Two yellow (163g) 2) Seven orange with grey core (122g)	Pit 1853	2
1859	2	41	In two fabrics: 1) One orange with grey core (29g) 2) Yellow/orange mixed (12g)	Pit 1858	3
1888	11	729	In four fabrics: 1) Two orange (90g) 2) Four yellow (212g) 3) Four orange with grey core (272g).? type tile 4) One orange with grey core with small white clay lumps (155g)	Cess-pit 1424	3
1903	1	22	Orange with grey core	Pit 1901	3
1932	7	204	In two fabrics: 1) Five orange sandy (174g) 2) Two orange with grey core (30g)	Well 1939	2
1933	1	107	Orange	Well 1939	2
1937	1	25	Orange with grey core	Well 1939	2
1941	26	660	In five fabrics: 1) Six yellow (180g) 2) One yellow red mixed (poorly) with grey core (8g) 3) Two yellow/orange mixed (28g) 4) Five orange (158g) 5) Twelve orange with grey core (286g). One burnt	Pit 1940	2
1963	1	93	Orange	Pit 1940	2

Ctxt	No	Wt (g)	Comments	Feature	Ph
1968	8	180	In three fabrics: 1) Five yellow (123g) 2) One orange (33g) 3) Two orange with grey core (24g)	Pit 1940	2
1970	5	87	In two fabrics: 1) Four orange (64g) 2) One orange with grey core (23g)	Pit 1969	2
1971	4	211	In two fabrics: 1) Two orange (152g). Well made.? post-medieval 2) Two poorly made yellow/orange mixed with grey core (59g)	Pit 1969	2
1973	3	43	Orange	Pit 1969	2
1978	3	76	The yellow/red tile with grey core. Poorly puddled	Pit 1986	2
1979	4	120	In three fabrics: 1) Two hard orange with grey core (92g) 2) One yellow/orange mixed (10g) 3) One hard red (18g)	Pit 1986	2
2016	3	378	In three fabrics: 1) One yellow (251g) 2) Three orange (68g) 3) One orange with grey core (59g)? type tile	Ditch 2020	3
2018	11	889	In four fabrics: 1) Two yellow (462g) 2) One soft orange (77g) 3) Two hard red (60g) 4) Six yellow/orange (290g)	Ditch 2020	3
2021	25	1559	In four fabrics: 1) Three yellow (261g) 2) Five orange with grey core (212g) 3) Four red with yellow clay lumps (209g) 4) Thirteen orange (877g)	Pit 1969	2
2022	7	271	In four fabrics: 1) Three orange (121g) 2) Two orange with grey core (24g) 3) One orange with small yellow lump inclusions (6g) 4) One orange with yellow lump inclusions up to 7mm in size and grey core (120g)	Pit 1969	2
2023	1	23	Orange	Pit 1969	2
2024	1	10	Orange	Inn 2061	3
2025	21	1184	In four fabrics: 1) Two yellow/orange mixed (161g). Sub-square peg hole. 2 peg hole type. 2) Eleven orange (297g) 3) Seven orange with grey core (545g) 4) One yellow (181g)	Inn 2061	3
2027	8	281	In two fabrics: 1) Two yellow/orange mixed (87g) 2) Six orange with grey core (138g)	Inn 2061	3
2028	20	641	In four fabrics: 1) Seven orange with grey core (197g)? peg hole type 2) Eleven orange (329g) 3) One yellow (8g) 4) One orange with yellow clay lumps and grey core (107g). Poorly mixed	Inn 2061	3
2030	6	217	Orange with grey core	Inn 2061	3
2031	4	153	In two fabrics: 1) Two yellow (30g) 2) Two yellow with grey core (123g)	Inn 2061	3
2032	7	462	In three fabrics: 1) One yellow (132g) 2) Four hard orange grey core (229g) 3) Two hard orange (101g) 2 peg tile type	Layer	3

Ctxt	No	Wt (g)	Comments	Feature	Ph
2033	24	696	In five fabrics: 1) One yellow and orange mixed (87g) 2) two grey (49g) 3) Eight orange (258g)? type tile 4) Twelve orange with grey core (283g) 5) One hard orange with grey core (19g)	Pit 2096	2
2039	2	120	Orange. 1? peg hole type	Pit 2038	2
2041	5	323	In three fabrics: 1) Two orange (132g) 2) One hard orange (18g) 3) Two orange with grey core (173g)	Pit 2040	2
2067	2	39	In two fabrics: 1) One yellow (24g) 2) One yellow/orange mixed (15g)	Pit 1969	2
2098	1	38	Orange with grey core	Pit 2096	2
2100	7	129	In two fabrics: 1) Four orange (73g) 2) Three orange with grey core (56g)	Pit 2096	2
2110	1	24	Yellow	Post hole 2109	3
2117	8	947	In four fabrics: 1) Five yellow (340g) 2) One orange with grey core (475g). Hard mortar attached. 3) One soft to mid orange (72g) 4) One hard orange (60g)	Cess-pit 1424	3
2119	3	159	In two fabrics: 1) One hard orange with grey core (114g). 1 peg hole type (85mm from side) 2) Two yellow (45g)	Cess-pit 1424	3
2135	3	88	In two fabrics: 1) Two orange (70g) 2) One orange with grey core (18g)	Pit 2136	3
2148	7	645	In two fabrics: 1) Five orange with grey core (585g) 2) Two yellow and red mixed with grey core (60g). Poorly made.	Cess-pit 1424	3
2155	10	343	In four fabrics: 1) One yellow (32g) 2) Five orange with grey core (139g) 2 peg tile type 3) Three orange (98g) 4) One orange with yellow clay lumps and grey core (74g)	Pit 2154	2
2158	28	784	In three fabrics: 1) Four orange/red mixed (140g) 2) Ten orange with grey core (147g) 3) Fourteen Orange (497g) 2 peg tile type	Pit 2157	3
2159	1	108	Yellow/red mixed	Pit 2157	3
2162	2	22	In two fabrics: 1) One yellow (18g) 2) One orange with grey core (4g)	Pit 2157	3
2163	1	11	Orange with grey core	Pit 2173	2
2181	3	118	In two fabrics: 1) Two hard orange (70g) 2) One yellow (48g)	Layer	2
2191	1	205	One orange sandy. 161mm (6½") width. 2 sub-square peg holes	Toilet 2188	4
2217	11	403	In two fabrics: 1) Four orange with grey core (103g) 2) Seven orange (300g)	Well 1456	3
2218	2	119	Two hard orange with grey core (119g). 1 peg hole type	Pit 2219	2
2231	1	15	Orange with grey core	Pit 2136	3

Ctxt	No	Wt (g)	Comments	Feature	Ph
2238	2	42	In two fabrics: 1) One orange with grey core (20g) 2) One orange (22g)	Pit 2237	2
2239	2	75	Orange	Pit 2237	2
2241	1	11	One orange/purple	Pit 2237	2
2247	5	105	In three fabrics: 1) One yellow (28g) 2) Two orange with grey core (25g) 3) Two orange (52g)	Layer	3
2249	2	110	in two fabrics: 1) One orange (67g) 2) One yellow (43g)	Cess-pit 1424	3
2273	1	11	Yellow	Pit 1940	2
2284	9	440	In four fabrics: 1) One yellow (46g) 2) Four orange (151g) 3) Three orange with grey core (122g) 4) One yellow/red with grey core (121g). Poorly made/puddled.	Pit 2275	2
2285	7	341	In two fabrics: 1) One orange (58g) 2) Five orange with grey core (274g) 3) One yellow (9g)	Pit 2275	2
2290	1	17	Orange with grey core	Ditch 2289	2
2309	5	384	In three fabrics: 1) Two yellow (164g) 2) One yellow/red mixed (156g).? 2 peg hole type (45mm from side) 3) Two hard orange (64g). Post-medieval 18th-19th century	Pit 2318	2
2311	2	251	In two fabrics: 1) One orange with grey core (113g). 1 peg hole type 2) One yellow/orange mixed with grey core (138g). Poorly made tile. 1 peg type tile (63mm from side)	Pit 2318	2
2313	1	68	Orange	Pit 2318	2
2317	2	210	In two fabrics: 1) One yellow (137g) 2) One orange (73g)	Pit 2318	2
2324	3	48	In two fabrics: 1) One yellow (23g) 2) Two orange (25g)	Pit 2327	2
2333	6	639	In two fabrics: 1) Five orange with grey core (442g) 2) One orange (197g)	Cess-pit 1424	3
2335	4	631	Orange with grey core (631g). 1 peg hole type	Cess-pit 1424	3
2336	3	513	In two fabrics: 1) One orange sandy (149g) 1 peg hole type (71mm from side) 2) Two orange sandy with grey core (364g). 170mm (7") width	Cess-pit 1424	3
2341	1	143	Orange	Cess-pit 1424	3
2345	5	349	In two fabrics: 1) Four orange with grey core (306g) 2 peg hole type 2) One orange with small white clay lump inclusions with grey core (43g)	Cess-pit 1424	3
2348	14	596	In three fabrics: 1) Seven orange with grey core (270g) 2) Six orange (267g). Some soot on one. 2 peg hole type 3) One red with yellow clay lump inclusions and a grey core (61g)	Cess-pit 1424	3
2369	1	24	Orange	Well 1456	3
2400	11	3550	In three fabrics:	Ditch 2403	4

Ctxt	No	Wt (g)	Comments	Feature	Ph
			1) Two yellow (324g). One has width surviving (170mm (6¾")) 2) Two yellow/orange mixed (176g). 1 peg hole type (70mm from side) 3) Seven orange with grey core (3050g). Two of these were reused roof tiles, cut lengthways (in half) and then mortared and used in feature. A) 321mm (12½") long (1.176kg). B) 325mm (12¾") long (1.059kg)		
2401	1	190	Yellow	Ditch 2403	4
2402	16	2312	Orange with grey core. Consists of large pieces including at least two part (most of) tiles. One consisted of four fragments (969g), it survives 194mm(+) (7¾"+) long, 201mm (8") wide. Mortar attached. Another (three fragments weighing 797g). 230mm+ (9"+) long, 165mm (6½") wide. The remainder included a peg hole – 1 peg hole type tile(66mm) from side	Ditch 2403	4
2438	2	206	In two fabrics: 1)1 Yellow (118g) 2)1 Orange. 1 peg hole type (60mm from side)	Post hole 2438	2
2492	1	59	Orange	Pit 2486	2
2493	1	102	Orange with grey core. Has large nib 40mm x 30mm and 18mm high	Pit 2486	2
2495	1	39	Orange with grey core	Pit 2494	4
2496	6	234	In three fabrics: 1) Three yellow (158g) 2) One orange (4g) 3) Two orange with grey core (72g)	Pit 1940	2
2502	2	39	Orange with grey core	Pit 2272	2
2518	1	35	Orange with grey core	Pit 2515	2
2529	2	41	In two fabrics: 1) One orange (26g) 2) One orange with grey core (15g)	Pit 2530	2
2603	2	214	Two yellow	Pit 2603	3
2607	3	137	In two fabrics: 1) Two yellow (129g) 2) One orange with grey core (8g)	Oven/kiln 2604	2
2611	4	230	In two fabrics: 1) Two orange with grey core (81g). ?peg hole type 2) Two orange (149g) 2 peg hole type;? peg hole type	Pit 2610	3
2613	2	155	Orange	Pit 2612	3
2614	2	90	Orange	Pit 2612	3
2616	5	208	In two fabrics: 1) Four orange with grey core (159g) 2) One hard red (47g)	Pit 2612	3
2634	1	66	Orange	Pit 2636	3
2660	3	422	Three yellow and orange clay mixed. One is a 2 peg hole type. Two were? type tiles	Pit 2659	3
2664	1	77	Yellow	Pit 2665	2
2666	6	140	In three fabrics: 1) Four orange with very small yellow clay lump inclusions and grey core (62g) 2) One yellow (41g) 3) One yellow and orange mixed (37g)	Layer	3
2667	19	1066	In four fabrics: 1) One yellow (44g) 2) Two yellow and orange mixed (135g) 3) Five orange (299g) 4) Eleven orange with grey core (588g) 1?type peg tile	Pit 2671	2
2670	4	126	In four fabrics: 1) One orange (70g) 2) One yellow (12g) 3) One yellow/orange mixed (36g) 4) One orange with grey core (8g)	Pit 2671	2

Ctxt	No	Wt (g)	Comments	Feature	Ph
2674	5	497	In two fabrics: 1) One orange (153g) 2) Four orange with grey core (344g)	Pit 2682	2
2676	11	562	In four fabrics: 1) One yellow/red (67g) 2) Three orange (122g) 3) Six yellow (277g) 4) One orange with grey core (96g)	Pit 2682	2
2677	6	301	In two fabrics: 1) One orange sandy (110g) 2) Five yellow sandy (191g)	Pit 2682	2
2678	3	367	In three fabrics: 1) Yellow (128g) 2) Orange (101g) 3) Orange with grey core (138g)	Pit 2682	2
2679	3	194	In two fabrics: 1) Two yellow (161g) 2) One yellow/orange mixed (33g)	Pit 2682	2
2680	1	73	Yellow	Pit 2682	2
2683	4	200	In two fabrics: 1) Three orange with grey core (136g) 2) One yellow and red mixed clay, poorly made with grey core (164g). Uneven.		0
2694	2	130	In two fabrics: 1) One orange with grey core (78g) 2) One yellow (52g)	Pit 2695	2
2704	1	286	One yellow. 1 peg hole type (56mm from side)	Pit 2703	2
2732	1	26	Orange	Pit 2725	2
2738	1	34	Orange with grey core	Pit 2737	2
2762	3	17	In two fabrics: 1) Two yellow (14g) 2) One orange with grey core (3g)	Post hole 2761	2
2764	1	18	Orange	Post hole 2763	3
2766	3	88	Orange to light brown	Pit 2765	4
2773	2	50	Two Yellow and red mixed	Post hole 2772	0
2796	2	80	In two fabrics: 1) Orange sandy (16g) 2) Yellow/orange clay mixed (64g)	Floor	4
2801	1	82	Orange sandy	Layer	2
2817	14	219	In three fabrics: 1) Four orange (79g) 2) One yellow to orange (24g) 3) Nine orange with grey core (116g)	Layer	4
2837	1	26	Orange with grey core	Floor	3
2850	2	65	In two fabrics: 1) One orange (32g) 2 peg hole type 2) One orange with grey core (33g)	Pit 3002	3
2851	2	89	In two fabrics: 1) One orange with grey core (20g) 2) One yellow/red mixed (69g). 2 peg hole type	Pit 2851	2
2863	3	63	In two fabrics: 1) One yellow (21g). 2 peg type 2) Two orange (42g)	Pit 2996	2
2866	3	191	In two fabrics: 1) Two yellow (152g) 2) One orange (39g)	Well 2554	2

Ctxt	No	Wt (g)	Comments	Feature	Ph
2867	2	75	Yellow	Well 2554	2
2868	5	157	In four fabrics: 1) One orange with grey core (43g) 2) One yellow (47g) 3) One orange (16g) 4) Two poorly mixed orange and yellow clay with reduced grey core (51g)	Pit 2851	2
2883	5	80	In three fabrics: 1) Three grey (61g) 2) one orange (6g) 3) One orange with grey core (13g)	Layer	4
2890	2	91	Yellow with red clay mix	Layer	3
2906	1	48	Yellow	Layer	4
2922	1	19	Orange	Pit 2923	3
2949	1	37	Orange with grey core	Pit 2953	2
2952	3	114	In two fabrics: 1) Two orange with grey core (88g) 2) One orange (26g)	Pit 2953	2
2955	2	43	In two fabrics: 1) One orange with grey core (30g) 2) One yellow/red mixed (13g)	Pit 2956	2
2997	2	53	In two fabrics: 1) One orange with grey core (40g) 2) One orange/yellow clay mix (13g)	Pit 2996	2
3033	3	54	In two fabrics: 1) Two orange with grey core (51g). 1? peg hole type 2) One poorly mixed yellow and red clay with grey core (3g)	Post hole 3034	3
3064	1	63	Orange	Post hole 3063	3
3066	5	225	In two fabrics: 1) Three orange (127g) 2) Two orange with grey core (98g)	Pit 3065	3
3083	1	40	Yellow	Pit 3081	2
3085	1	38	Orange with grey core	Pit 3081	2
3088	1	129	Yellow. 1 peg hole type (75mm from side)	Well 2412	2
3090	1	20	Orange sandy.? tile	Well 2412	2
3098	4	29	In two fabrics: 1) Three orange with grey core (25g) 2) One orange (4g)	pit 3097	2
3106	1	16	Orange	Pit 3103	2
3120	1	53	Orange with grey core	Pit 3118	2
3122	1	15	Orange.? Could be a pantile	Pit 3125	2
3128	2	19	Yellow	Well 2412	2
3134	8	186	In five fabrics: 1) One yellow (27g) 2) One orange (34g) 3) One yellow/orange mixed (23g) 4) Three orange with grey core (50g) 5) Two orange with grey core with frequent small white clay lumps (52g)	Pit 3133	2
3146	2	137	Two yellow	Well 2554	2
3172	1	85	Orange	Post hole 3171	3
3179	1	7	Yellow/red mixed	Post hole 3178	3
3188	2	24	In two fabrics:	Post hole	3

Ctxt	No	Wt (g)	Comments	Feature	Ph
			1) One yellow/orange mixed (8g) 2) One orange with yellow clay lumps and grey core (16g)	3187	
3196	2	73	Orange	Pit 3195	3
3202	1	22	Orange with grey core	Pit 3199	2
3214	5	239	In three fabrics: 1) One yellow (62g)? peg type 2) Two orange with grey core (109g) 3) Two orange with yellow clay lumps and grey core (68g)	Pit 3081	2
3217	1	292	Orange. Has a large nib 45mmx28mmx20mm	Pit 3215	2
3227	1	23	Orange with grey core	Pit 3226	2
3232	7	441	In three fabrics: 1) One yellow (52g) 2) Three orange with grey core (247g) 3) Three orange (142g). One burnt.	Pit 3364	3
3267	1	112	Yellow	Well 2554	2
3269	2	127	Orange	Well 2554	2
3272	9	365	In five fabrics: 1) One orange (85g) 2) Two yellow (107g) 3) Three orange sandy (135g) 4) Three hard orange with grey core (17g) 5) One red with yellow clay lumps and reduced grey core (21g)	Pit 3273	4
3277	12	404	In four fabrics: 1) One yellow (67g) 2) Five orange (138g) 2 peg hole type. 3) One yellow/orange mixed (50g) 4) Five hard orange with grey core (149g)	Pit 3280	2
3282	2	34	In two fabrics: 1) One orange (24g) 2) One orange with grey core (10g)	Layer	4
3346	20	1387	In four fabrics: 1) Sixteen yellow (1099g).? peg hole type 2) Two hard orange with grey core (28g) 3) One orange with yellow clay lump inclusions and a grey core (106g) 4) One soft orange with grey core (154g)	Pit 3351	2
3348	7	330	In four fabrics: 1) One orange with grey core (122g) 2) Four yellow (127g) 3) One orange (35g) 4) One orange sandy with yellow clay lump inclusions (46g)	Pit 3351	2
3349	3	116	In two fabrics: 1) One orange (47g) 2) Two orange with grey core (69g)	Pit 3351	2
3353	34	1068	in four fabrics: 1) 26 yellow (902g).? peg type 2) Five orange (51g) 3) Two orange with grey core (76g) 4) One yellow with red clay lump inclusions (39g)	Pit 3354	2
3365	2	87	Two yellow (87g)	Pit 3351	2
3366	1	153	Yellow	Pit 3354	2
3367	1	30	Yellow	Pit 3354	2
3386	3	115	In two fabrics: 1) One orange with grey core (68g) 2) Two yellow (47g)	Well 3388	2
3387	1	8	Hard red	Well 3388	2
3454	57	1487	in four fabrics: 1) Forty-three orange (897g). 2? peg tile types	Pit 3451	2

Ctxt	No	Wt (g)	Comments	Feature	Ph
			2) Nine orange with grey core (402g). 1 peg hole type 3) Three yellow (149g) 4) Two red with yellow clay lump inclusions (39g)		
3456	1	120	Orange	Pit 3451	2
3457	63	1633	In three fabrics: 1) Fifty orange (1416g). 3 x? type tiles 2) Eleven orange with grey core (155g).? peg tile type 3) One yellow and orange mixed (40g) 4) One yellow/red with grey core (22g). Poorly made.	Pit 3451	2
3459	62	3423	In three fabrics: 1) Nine yellow (735g) 1 peg hole type (85mm from side) 2) Thirty-two orange (1124g) 3) Twenty-one orange with grey core (1564g). Width 158mm (6"). 1 peg hole type	Pit 3451	2
3460	125	3797	In six fragments: 1) Five yellow (321g) 2) One yellow/orange clay mix (9g) 3) Sixty-four orange (1107g). Vast majority very small. 1 peg hole? type. 4) Forty-two orange with grey core (1832g) 5) Nine orange with yellow clay lump inclusions (260g) 6) Four orange with yellow clay lump inclusions and grey core (268g)	Pit 3451	2
3461	54	1871	In five fabrics: 1) Three yellow (65g) 2) Twenty-six orange (866g) 3) Two red and yellow mixed with yellow clay lump inclusions (47g) 4) Twenty orange with reduced grey core (732g) 5) Three hard red with frequent small white clay inclusions (161g)	Pit 3451	2
3463	45	1278	In six fabrics: 1) Three yellow (83g) 2) Twenty-five orange (724g). 1? type tile 3) Two poorly mixed yellow and red tile with grey core (97g) 4) Twelve orange with grey core (288g) 5) Two orange with yellow clay lump inclusions and a grey core (22g) 6) One yellow/orange clay mix (64g)	Pit 3451	2
3464	4	148	In two fabrics: 1) Three hard orange (131g) 2) One orange with grey core (17g)	Pit 3451	2
3465	34	940	In two fabrics: 1) Twenty-three orange (708g). One burnt. 2) Eleven orange with grey core (232g).	Pit 3451	2
3467	14	316	In two fabrics: 1) Six orange (101g) 2) Eight orange with grey core (215g).? peg hole type.	Pit 3451	2
3471	2810	161077	In four fabrics: 1) 2768 yellow (estimated 159064g). 260 were weighed =14941g average = 57.465 per fragment. 4x1 peg hole type 2) 35 light orange sandy (1831g) 3) Four hard orange sandy (113g) 4) Three hard orange red (69g)	Pit 3478	2
3474	11	917	Yellow	Pit 3478	2
3475	12	912	in three fabrics: 1) Ten yellow (634g). 1 peg hole type (76mm from side). 2) One hard orange with grey core (216g). Has nib 55mm + long x 32mm x 17mm high. 3) One hard orange with grey core (62g)	Pit 3478	2
3476	10	1507	Yellow. Length 256mm (10") x width 161mm (6½"). 1 peg hole type (65mm from side)	Pit 3478	2
3477	3	147	Yellow	Pit 3478	2
3501	26	1005	Yellow. 1 peg hole type (64mm from side).	Pit 3499	2
3502	20	925	In four fabrics: 1) One orange (79g)	Pit 3499	2

Ctxt	No	Wt (g)	Comments	Feature	Ph
			2) One orange with grey core (73g) 3) Sixteen yellow (556g) 4) Two red with yellow clay lump inclusions and a grey core (217g)		
3504	11	510	In two fabrics: 1) Eight yellow (366g) 2) Two orange (95g)? type tile 3) Yellow/red with grey core (47g). Poorly made	Pit 3503	3
3506	1	8	Yellow	Pit 3503	3
3507	66	3291	In six fabrics: 1) Twenty yellow (1161g). 1 peg hole type (58mm from side). Soot on two 2) Seven orange (149g) 3) Fourteen orange to red (745g). 2 peg hole type 4) Twenty-two orange with grey core (980g) 5) One orange with yellow clay lumps (23g) 6) Two orange with yellow clay lumps and grey core (233g)	Pit 3503	3
3529	32	977	In four fabrics: 1) Twelve yellow (425g) 2 peg hole type 2) Three orange (43g) 3) Four yellow and orange mixed (122g) 4) Thirteen orange with grey core (387g)	Post hole 3528	3
3530	1	12	Orange with grey core	Pit 3533	2
3553	4	109	Four grey	Pit 3557	2
3571	11	847	In three fabrics: 1) Four yellow (332g). 2 peg hole type 2) Five orange (247g) 3) Two orange with grey core	Pit 3574	2
3572	2	64	Two yellow	Pit 3574	2
3598	1	34	Orange with grey core	Pit 3597	4
3607	1	35	Orange	Pit 3609	4
3608	1	61	Yellow/orange mixed	Pit 3609	4
3638	1	128	Orange with grey core	Well 3388	2
	4855	267801			

Table 29: Catalogue of peg tile

Ceramic ridge roof tile

- B.9.52 Twenty-two ridge tile fragments (3.94kg) were found in 19 contexts (Tables 22 and 30). Nine ridge tile fragments were found in medieval features. They were in four different fabrics (orange sandy, orange sandy with grey core, yellow and pink to purple). Two of the tiles had been glazed. Most of the tiles were recovered as single examples in features with the exception being three recovered in a yellow fabric from pit **3478**. It is probably significant that from this same feature there was a notable quantity of yellow peg tile. Eleven ridge tiles were found in Period 3 features and a layer. Four fragments came from cess-pit **1424**, three are in a yellow and one orange oxidised fabric. One of the yellow tiles had been made as a peg tile then deliberately warped before firing to create a curve. Two tiles had been glazed including a fragment from a base of a finial which was found in the cellar of Inn **2061**. Two tiles were found in Period 4 features, both in an unglazed yellow fabric.
- B.9.53 The 22 ridge tiles comprise less than 0.5% of the ceramic roof tile from the site. This percentage is similar to other excavations in Barnwell with Coldhams Lane having three ridge tiles out of 571 tile (Atkins 2013) and Brunswick a single fragment out of 735 (Atkins 2012a). Elsewhere in Cambridgeshire the percentages were similar with

Wisbech having four out of 836 tiles (Atkins 2010) and Huntingdon Town Centre where there were two ridge tiles out of 485 sherds (Atkins and Fletcher 2009).

Ctxt	No	Wt (g)	Comments	Feature	Ph
787	1	194	Ridge tile in orange sandy fabric	Layer	3
910	1	302	Yellow. Well made.? post-medieval.	Pit 874	4
1044	1	106	Yellow	Well 1051	4
1429	1	264	Hard orange	Cess-pit 1424	3
1435	1	139	Orange sandy with grey core. Dark green brown glaze on exterior	Pit 1436	2
1584	1	195	Orange with grey core	Pit or well 1577	3
2024	1	275	Orange sandy. Base of finials survives on top of tile – uncertain what the decoration would be. Light green glaze.	Inn 2061	3
2158	1	76	Orange. Yellow/green glaze on exterior	Pit 2157	3
2345	3	205	In two fabrics: 1) One orange sandy (121g) 2) Two yellow (84g)	Cess-pit 1424	3
2348	1	470	Yellow. It was originally made as a peg tile (1 hole type). More than 235mm (9¼"+) long, c.140mm (5½") wide. It has been warped deliberately before firing to create a curve for a specific part of a roof (i.e. used as a ridge tile). Has been mortared both sides.	Cess-pit 1424	3
2677	1	55	Orange sandy	Pit 2682	2
2988	1	117	Pink to purple fabric with occasional very small flint inclusions. Exterior it has a green slightly brown glaze	Pit 2986	2
3274	1	66	Orange sandy. Distinct curve, but small size means identification as ridge tile not certain.	Pit 3280	2
3353	1	31	Yellow/red	Pit 3354	2
3471	1	162	Yellow	Pit 3478	2
3474	2	335	Yellow	Pit 3478	2
3477	1	73	Yellow ridge tile.	Pit 3478	2
3507	1	84	Orange with grey core (84g). Curve suggests ridge tile.	Pit 3503	3
3529	1	45	Orange with grey core	Post hole 3528	3
	22	3194			

Table 30: Ridge tile

Ceramic stove tile

- B.9.54 Part of a possible stove tile (18g) was found in Period 3 layer 3024 (should be drawn). It was part of a decorative moulding in a late med fabric comprising a pinky red sandy and a bright green glaze on top. Stove tiles are uncommon, with few examples found in Cambridgeshire. A possible stove tile was found at Coldhams Lane in a Period 4.1 pit (645; Atkins 2013) and an example from Wisbech Castle (Atkins 2010).

Pantile

- B.9.55 Thirty one pantile fragments (3.291kg) were found in 16 contexts (Table 31). Pantiles from the site were all well made and are likely to date to the late 18th to 19th centuries. The vast majority were recorded from Period 4 features and a floor. One definite residual example was found in a Period 2 feature.

Ctxt	No	Wt (g)	Comments	Feature	Period
113	1	253	Pantile. Yellow/red clay mixed. Mid 18th to 19th century	Pit or well 114	2
537	2	58	Orange. Late 18th-19th century	Drain 538	4
1994	1	124	Orange	Pit 1995	4
2216	1	137	Yellow with nib	Pit 2215	4
2398	2	241	In two fabrics: 1) One hard orange (64g). Has nib. 2) Yellow (177g)	Pit 2393	4
2473	2	548	Orange. One with large nib	Cellar 2474	3
2657	1	23	Orange	Pit 2747	4
2752	1	110	Orange	Pit 2751	4
2766	1	84	Orange	Pit 2765	4
2790	1	67	Orange. Has nib.	Layer	4
2808	1	74	Orange	Post pad 2808	4
2814	2	194	Orange	Floor	4
2835	11	365	Orange	Wall 2870	4
3029	2	843	Orange. 240mm (9½") wide	Post hole 3030	3
3596	1	116	Orange	Pit 3589	4
3621	1	54	Orange	Pit 3597	4

Table 31: *Pantile*

Drain

- B.9.56 Eight drain fragments (2.923kg) was found in Seven contexts. Most of the drain fragments had been discarded in the excavation, although a tiny fragment of water and sewage pipes were kept. Half of the fragments (three in Period 2 and one of the Period 3 was definitely residual).

Ctxt	No	Wt	Comments	Feature	Period
113	1	1752	Yellow. 20mm (1") thick. Large. Horseshoe shape. Well made. 19th century	Pit or well 114	2
997	2	520	Salt glaze. Late 19th-20th century	Layer	3
2019	1	110	Yellow. Late 18th-19th century	Ditch 2020	3
2101	1	309	Salt glaze. Late 19th-20th century	Drain 2102	4
2888	1	51	Salt glaze. Late 19th-20th century	Layer	4
3399	1	108	Salt glaze. Late 19th-20th century	Pit 3397	2
3502	1	74	Salt glaze. Late 19th-20th century	Pit 3499	2
	8	2923			

Table 32: *Drain*

Fired Clay

- B.9.57 The excavations produced 121 fragments (22.39kg) of fired clay and daub (Table 33). The vast majority of the fired clay/daub came from medieval features with 83 fragments (21.395kg) found in 30 contexts. One of two features seem to have remains of former superstructures. Oven/kiln **2604** had 13 large fired clay fragments (10.978kg) Many of the fragments had withie impressions, smoothed sides and vegetative impressions. From oven/hearth **2452** there was similar material but in a far smaller scale (16 fragments 0.447kg).

B.9.58 Pit **3081** had large fragments from former hearth/oven(s) with eight fragments (6.546kg). Two other features (pit **3478** and well **784**) had far fewer fragments, but were small parts of hearth/oven which may have been formerly located close to them. Both features each had seven moderately large fragments respectively (1.086kg and 1.235kg). Several very small fragments of hearths/ovens and possibly daub were found in many other Period 2 features but in very low quantities.

B.9.59 In the post-medieval period there were far fewer fired clay/daub fragments with just 37 small fragments weighing 0.977kg from eight features and layers. It is likely that most or even all of these were residual medieval deposits. A single very small (18g) fired clay deposit was recovered from a Period 4 layer.

Ctxt	Tr	No.	Wt (g)	Comments	Feature	Ph
39	1	1	184	Light Brown. Brick or fired clay/daub	Post hole 38	3
79		1	30	Cream to white clay sand with frequent vegetative impressions	Floor	3
88	5	1	6		Pit 80	2
102	5	1	100	Light brown daub	Pit 99	2
117	4	2	25	undiagnostic	Pit 118	2
123	4	3	14	Orange sandy	Pit 124	3
620		2	25	cream to white clay sand. one smoothed side. Heavily burnt dark grey to black.	Floor	3
704		1	18	cream to white clay sand	Layer	4
778		2	651	cream to white clay sand with abundant vegetative impressions. Both have a smoothed side. One burnt slightly pink on interior side.	Well 784	2
779		2	354	cream to white clay sand with vegetative impressions	Well 784	2
916		1	39	cream to white clay sand	Layer	3
1245		2	147	cream to white clay sand with vegetative impressions. One has a smoothed side. Has a withie. one fragment slightly burnt	Well 784	2
1246		1	83	cream clay sand with small white chalky clay inclusions. Burnt dark grey to pink on interior.	Well 784	2
1418		8	623	cream clay sand with small white chalky clay inclusions. Seven have a single smoothed side. Five have signs of burning – dark grey to pink on interior.	Floor	3
1512		20	52	cream on edge....mostly dark grey to black	Floor	3
1628		1	69	cream to white clay sand with frequent vegetative impressions. One smoothed side	pit 1621	2
1629		2	18	cream to white clay sand with some vegetative impressions and very occasional flint	Pit 1621	2
1631		2	10	cream to white clay sand	Pit 1630	2
1796		1	11	cream to white clay sand	Pit 1794	2
1899		1	10	cream to white clay sand. One smoothed side. Slightly burnt dark grey on one side.	Post hole 1898	3
1937		1	29	cream to white clay sand with frequent vegetative impressions	Well 1939	2
1970		1	14	Pink to purple.? burnt fired clay.	Pit 1969	2
1971		1	89	cream to white clay sand with frequent vegetative impressions. Partly burnt grey/black on interior side	Pit 1969	2
2067		1	20	cream to white clay sand. Has a smoothed side	Pit 1969	2
2098		1	2	cream to white clay sand	Pit 2096	2
2323		14	364	cream to slightly pink clay sand with some vegetative impressions and very occasional flint. Three have one smoothed side surviving.	Oven/hearth 2452	2
2330		2	83	cream to slightly pink clay sand with some vegetative impressions. Smoothed side	Oven/hearth 2452	2

Ctxt	Tr	No.	Wt (g)	Comments	Feature	Ph
2518		3	224	cream to white clay sand with frequent vegetative impressions and very occasional flint. All with one smoothed sides. One withie on one.	Pit 2515	2
2605		13	10978	A) cream to white clay sand with frequent vegetative impressions. One large fragment (1556g). 50mm thick. One smoothed side. All three withies were parallel and between 40mm to 45mm in diameter. Large superstructure. B) Same fabric. Ten fragments (8394g). All have one smoothed side- one slight curve. Thickness varies from 15mm to 40mm. One has two withies (30mm in diameter), four others have single withies at 28mm, 30mm, c.35mm and c.50mm diameter. One slightly burnt. C) Two fragments in cream to white clay sand with frequent vegetative impressions and very occasional flint up to 28mm (1028g). Both have one smoothed side. One withie 43mm diameter. One burnt dark grey.	Oven/kiln 2604	2
2867		1	10	cream to white clay sand. Partly burnt grey/black on interior side.	Well 2554	2
3010		1	340	cream to white clay sand with frequent vegetative impressions and very occasional flint. Has smoothed side and two withies (20mm and 40mm).	Pit 99	2
3083		5	6508	Five fragments varying from 560g to 2072g. cream to white clay sand with frequent vegetative impressions and very occasional flint inclusions. Single smoothed sides. Thickness c.26mm. Sometimes single or up to two withies on a fragment.. Withies measurements were: one ??, c.30mm x 3, 38mm, 40mm, 46mm and c.70mm.	Pit 3081	2
3128		4	20	cream to white clay sand but burnt orange to dark grey	Well 2412	2
3138		5	83	cream to white clay sand with frequent vegetative impressions. Two with single smoothed sides. Some burning on four causing them to go dark grey to black.	Pit 3137	2
3217		1	2	cream on one side. Burnt mostly dark grey to black	Pit 3215	2
3227		1	10	cream to orange clay sand	Pit 3226	2
3472		7	1086	Seven fragments in a cream to white clay sand with frequent vegetative impressions and very occasional flint inclusions (1086g). Frequent very small holes. Four have a single smoothed side. All are 40mm to 50mm thick.	Pit 3478	2
3501		1	21	cream to white clay sand. With a smoothed side.	Pit 3499	2
3611		3	38	cream to white clay sand with frequent vegetative impressions. Two with a smoothed side. One partly burnt to dark grey	Pit 3481	2
Total		121	22390			

Table 33: Fired clay/daub

B.10 Worked bone and miscellaneous small finds in other materials

By Chris Howard-Davis

Quantification

- B.10.1 32 fragments of worked bone or ivory, representing 27 objects, were submitted for assessment. All but two of the items were from stratified contexts, mainly pit and quarry fills. The fill (1994) of Period 4 pit 1995, stood out in producing six objects (20% of the assemblage). Most were in good condition, although the condition of several of the knife handles was clearly affected by the proximity of highly corroded ferrous material. There were no worked bone finds from Period 1, six from Period 2, six from Period 3, and 13 from Period 4.

Methodology:

- B.10.2 Every fragment was examined, assigned a preliminary identification and, where possible, date range. An outline database was created, using Microsoft Access 2000 format, and the data recorded (context, small finds number, material, category, type,

quantity, condition, completeness, maximum dimensions, outline identification, brief description, and broad date) serve as the basis for the comments below. The state of preservation (condition) was assessed on a broad four point system (namely poor, fair, good, excellent).

Date range and distribution:

- B.10.3 The assemblage comprised a narrow range of objects, mainly knife handles, and objects concerned with personal appearance and or hygiene. Only one object could be regarded as unequivocally medieval in date, the remainder probably spanning the post-medieval and early modern periods.

Evaluation:

- B.10.4 The assemblage is too small to draw any inference from consideration of functional groups, so the worked bone is discussed by phase.

Period 2

- B.10.5 The character of the worked bone objects from Period 2 contexts is markedly different to those from the later phases, for the most part lacking the emphasis on knife handles seen in later phases. There are two plain bone pins (Sf 343, Sf 368) from the fill (2067) of quarry **1969**, and the fill (2311) of quarry **2318** respectively; a third example (Sf 112) was recovered unstratified. All three are carefully trimmed, and show some polish from use. They are effectively undateable, as is needle Sf 336, from the fill (2440) of pit **2447**.
- B.10.6 Two items from this phase could be seen as having broadly ecclesiastical connections. A finely-turned spherical-headed pin (Sf 338) from a fill (2487) of quarry **2486**, has been identified as a so-called 'parchment pricker' or stylus, of medieval type. Although not exclusively ecclesiastical in origin, these are significantly more common on religious sites, and, given the site's close connection with the Augustinian Canons of Barnwell, it seems reasonable to suggest its ultimate origin in the Priory. It must be noted, however, that these items seem to have remained in use well into the post-medieval period (Howard-Davis 2008, 414). A small, and markedly asymmetrical biconical bead (Sf 583) from well **2412** (fill 3129) has a noticeably high gloss. Bone beads were often used in rosaries (Gottshall 2008), and though not conclusive, it would seem reasonable to suggest that the wear-polish is a result of the repeated handling required of a rosary.
- B.10.7 Finally there is bone or ivory knife handle (Sf 236). Square-sectioned, and intended to seat a whittle-tanged blade (now absent); it came from pit **2059** (fill 2054). The form of the handle suggests a nineteenth-century date (Moore 1995, 28), raising the likelihood that this item is, in fact, intrusive. In addition, it bears a strong resemblance to an example from Period 4, and a third, very similar handle, was found unstratified (Sf 598).

Period 3

- B.10.8 Items associated with personal appearance at this time were represented only by a small fragment from a one-piece double-sided comb (Sf 235). Probably made from ivory, it has been trimmed to serve as a single-sided comb, presumably after breakage of the finer teeth. A similarly modified example can be seen amongst late material from Colchester (Crummy 1988, no 1851). This is the dominant comb form from the late medieval period onwards (McGregor 1985), and this example, from Period 3 wall 2061 (fill 2028), would seem to contribute towards dating the construction of the 'inn'.
- B.10.9 Apart from a somewhat damaged 'toggle' (Sf 107) from Period 3 pit **1288**, the remainder of the worked bone seen in Period 3 is confined to handles. Sf 58, from floor 433, is

roughly made from a sawn longbone, and could be unfinished, but the remainder are from finished objects. Sf 599, from cellar deposit 2473, is probably the remains of a relatively insubstantial folding knife, with only the very thin scales now recognisable, the blades being only a corroded mass. Sf 502, from pit **3354** (fill 3353) is a single scale from a roughly made scale-tanged blade or similar, with a single perforation at the rounded end of the handle and Sf 600, somewhat poorly preserved, is also from a scale-tanged blade, the scales fixed by two rivets. Like folding knife Sf 599, it was found in cellar deposit 2473. In general terms, scale-tanged knives became popular in the fourteenth century, continuing well into the post-medieval period (see for instance Egan 2005). Without an indication of the form of the blade, these simple handles are effectively impossible to date, but would seem to precede the eighteenth century.

Period 4

- B.10.10 Most of the worked bone finds can be assigned to Period 4, which produced a slightly wider range of object types than earlier phases, although again, many of the worked bone finds from this phase are handles. Two came from pit **1995** (Sf 322, Sf 360). The former is a fragmentary whittle-tanged example of pistol-grip type, popular from the later seventeenth century to the 1770s (Moore 1995). The latter, whilst utilitarian, is a scale-tang blade, again probably of early post-medieval type. A third plain, rectangular-sectioned example, the seating for a whittle tang part-filled with lead (Sf 300) was from pit **2327** (fill 2324) and is likely to be of later date, being similar to Sf 236 and Sf 598. A fragment of cut and polished bone (Sf 385) from pit **2494** (fill 2495) is probably part of another plain knife handle.
- B.10.11 There was a single pin or needle (Sf 391), roughly trimmed from a? pig fibula (the head is missing) which came from 2496, associated with the disuse of quarry **1940**. Sf 384, from pit **2735** (fill 2736) is a rather more delicate object, essentially a narrow-diameter tube with a screw thread at one end, which has been provisionally identified as a needle case, and seems likely to be of eighteenth or nineteenth-century date.
- B.10.12 There are surprisingly few bone buttons (although there are a few Mother of Pearl examples and a number of copper alloy buttons). Two (Sf 348, Sf 362), both from pit **1995** (fill 1994) are of the 'one-hole button mould' type, used as a former for stamped metal or fabric buttons (White, 2005, 69) and in use by the eighteenth century. A third button (Sf 601) is a four-hole sew-through type with a raised bead at the edge, and probably of similar date. There was also a small and highly decorative pin (Sf 414) from pit **2494** (fill 2495). Its purpose is not clear, though use as a tuning peg can be ruled out. It seems too short to be a hairpin, or associated with dress, but it is clearly intended for display. A seventeenth-century date might seem appropriate, although this would require confirmation after research.
- B.10.13 Pit **1995** also produced part of the back of a small bone brush (Sf 262), with some of the organic bristles, now carbonised, surviving. Bone brushes appear in the early post-medieval period and continue in production into the early twentieth (McGregor 1985). There is no detailed chronology yet available for bone brushes, but a similar example was amongst those seen in eighteenth-century deposits at Norton Priory in Cheshire (Howard-Davis 2008, fig 288.11).
- B.10.14 Finally, pits **1995** (fill 1994) and **2494** (fill 2495) both produced small bone domino pieces (Sf 346, Sf 413). The game of dominos seems to have appeared in Britain towards the end of the eighteenth century (Kelley 1999, 13), and has been popular ever since.

Conservation

B.10.15 The finds are well packed and in general require no further conservation.

Potential:

B.10.16 The worked bone finds have limited potential, when considered in conjunction with other material classes, to contribute to the interpretation and understanding of daily life on the site. They are not particularly diagnostic in terms of dating, but if considered in conjunction with other broadly contemporary finds from the site, could contribute to a refinement of the dating framework.

Proposed further work

B.10.17 Archival catalogue entries should be completed, and a brief illustrated report prepared for inclusion into any proposed publication. Approximately 15 illustrations will be required.

Miscellaneous small finds in other materials

Quantification

B.10.18 There were two ceramic objects, two glass objects, two Mother of Pearl objects, one or stone, one of? wax, and one of plastic. Their distribution is disparate, in both stratigraphic and chronological terms.

Methodology

B.10.19 Every fragment was examined, assigned a preliminary identification and, where possible, date range. An outline database was created, using Microsoft Access 2000 format, and the data recorded (context, small finds number, material, category, type, quantity, condition, completeness, maximum dimensions, outline identification, brief description, and broad date) serve as the basis for the comments below. The state of preservation (condition) was assessed on a broad four point system (namely poor, fair, good, excellent).

Date range and distribution

B.10.20 The assemblage probably spans a period from the eighteenth to the twentieth centuries.

Evaluation

B.10.21 The assemblage is too small to draw any inference from consideration of functional groups, beyond noting that most are personal items. All are from Period 4 contexts, and they are discussed briefly by material group.

Ceramic

B.10.22 A single ceramic wig-curler, of eighteenth-century type (Sf 347), came from pit **1995** (fill 1994). A small ceramic sphere, resembling a late nineteenth-century bottle stopper, came from cess-pit **2199** (fill 2197). It appears to have been painted yellow with brown spots, possibly to imitate a toy marble.

Glass

B.10.23 A single black glass button (Sf 409) came from the fill (2657) of quarry **2747**. Having an inset copper alloy loop, it is most likely to be of nineteenth-century date, reflecting the Victorian popularity of decorative buttons, with black glass used to imitate jet (Meredith and Meredith 2012). A teardrop-shaped glass pendant with bevelled edges

(Sf 551), cut to reflect and refract light and presumably from a glass light-shade of some kind, came from pit **3609** (fill 3607). Although faceted glass chandeliers were introduced in the eighteenth century, this fragment is likely to be considerably more recent.

Shell

- B.10.24 Two Mother of Pearl buttons (no Sf) came from cess-pit **2199** (fill 2197) and layer 2790. Both are sew-through buttons, one with two holes, one with four. Made, generally in the Birmingham area, from imported shell, these buttons appeared in Britain in the eighteenth century, and have continued in production and use more or less to the present day.

Wax

- B.10.25 A cracked and twisted fragment of a hard but brittle red material has been tentatively identified as sealing wax (no Sf). It was from the fill (2724) or pit 2722.

Stone

- B.10.26 A single small fragment from a slate pencil (Sf 420) was found unstratified.

Plastic

- B.10.27 Part of a single-sided plastic hair comb (Sf 408) came from fill 2657 of quarry **2747**. Undoubtedly of twentieth-century date, it could suggest that deposition continued until relatively recently.

Conservation

- B.10.28 The finds are well packed and in general require no further conservation.

Potential

- B.10.29 These finds have almost no potential to contribute to the interpretation and understanding of daily life on the site.

Proposed further work:

- B.10.30 Archival catalogue entries should be completed, and a brief comment be made on the wig curler with regard to any analysis of the group of finds from pit 1995. One illustration will be required.

B.11 Wood

By Chris Howard-Davis

Quantification

- B.11.1 20 fragments of worked or potentially worked wood were examined. All of the items were from stratified contexts. Most were in fair to good condition, but with the exception of object 35, were incomplete.

Methodology

- B.11.2 The items were extremely fragile and in need of conservation, in order to facilitate rapid conservation as recommended by English Heritage Guidelines (2012, 7) this assessment was undertaken from photographs and measured drawings of the items. These were used to assign a preliminary identification and, where possible, date range. An outline database was created, using Microsoft Access 2000 format, and the data recorded (context, small finds number, material, category, type, quantity, condition,

completeness, maximum dimensions, outline identification, brief description, and broad date) serve as the basis for the comments below. The state of preservation (condition) was assessed on a broad four point system (namely poor, fair, good, excellent).

Date range and distribution

- B.11.3 The assemblage comprised a narrow range of objects, predominantly fragments of structural wood, but including two turned dishes or bowls and a large paddle-like object. None of the objects could be dated, except from their stratigraphic context and other classes of finds found in association.

Evaluation

- B.11.4 The assemblage is discussed, for convenience, in functionally associated groups. Where individual items are discussed, they are identified by their 'wood ID' number. Not all items were available, and wood numbers 3, 5, 6, 7, 11, 12, 15, 16, 17, 21, 22, 25, 27, 31, 33, 35, 36, 37, 38, were assessed.
- B.11.5 Domestic life, in the form of evidence for eating and drinking, was represented by fragments of two turned wooden bowls (nos 3 and 21). Although well-known, and without doubt in use over a very long period, wooden bowls are not frequently found. There seem to be no particularly sensitive typological features, and these two, one with a simple upright rim, the other with an out-turned brim, could be of any date, but are perhaps more likely to be later medieval or early post-medieval. A single knife handle, with the remnant of its iron blade (no 22) was also noted. The style, probably with a whittle tang blade, though not particularly chronologically sensitive, would seem to reflect that of bone handles from the site, pointing to a possible seventeenth-century date.
- B.11.6 The identification of no 35 is not certain, whilst clearly a paddle, beater or bat, between 0.5 – 0.6m in length, its purpose or use is not clear. One obvious use is as a stirrer in large cooking vessel, or perhaps in cheese-making. Butter paddles are usually considerably smaller. Similar objects could have been used in the processing of flax (Earwood 1993), or its size, and strong resemblance to early examples, raises the possibility that it is in fact, a cricket bat. The game was in existence from the 1620s, and the spliced handle typical of modern examples was not introduced until the 1830s. A small split fragment (no 7b) seems likely to be a barrel or tub stave, but diagnostic features are now missing.
- B.11.7 Two large fragments from Period 2 well 1927 (fill 3295; nos 36 and 37; Sfs 564, Sf 367), both tangentially-cut or split planks, are clearly from a structure of some kind. No 31 has a series of peg holes, whilst no 36 is otherwise unmodified. No 12, although small, is one element of a pegged lap joint and no 11, although now largely featureless, also retains evidence for the use of pegs. Object 25 is also pegged, with the peg joining two thin laths. Object 16 is also pegged, but little remains of the original object. Other fragments include pegs or roughly cut stakes (eg no 15, no 27), the former cut from small-diameter roundwood.

Conservation

- B.11.8 The finds require conservation in order to ensure their continued well-being. Natural drying would be inappropriate, causing cracking, distortion, and ultimately disintegration.

Potential

- B.11.9 **Worked wood artefacts** have some limited potential, when considered in conjunction with other material classes, to contribute to the interpretation and understanding of daily life on the site. They are not diagnostic in terms of dating.

Proposed further work

- B.11.10 Archival catalogue entries should be completed after conservation, and a brief illustrated report prepared for inclusion into any proposed publication. Species identification should be undertaken.

APPENDIX C. ENVIRONMENTAL REPORTS

C.1 Assessment of human skeletal remains

By Zoë Uí Choileáin

Introduction

- C.1.1 This report presents the results of an assessment of a single skeleton (1272) recovered from grave cut **1273** and a small collection of disarticulated bone retrieved during excavations at the site of Harvest Way in Cambridge. The skeleton had been placed in the grave in a roughly North-South alignment with the head being positioned at the north end. The remains were in a crouched position and were over 75% complete. No grave goods were recovered with which to date the skeleton however the crouched burial position is most commonly in use in the Bronze Age and Iron Age and the remains were carbon dated to the late Bronze Age/ Early Iron Age. The aims of the assessment were as follows:

To evaluate the potential of the material for recording anthropological information such as age, sex and stature.

To explore the potential of the remains to provide palaeopathological information.

To give recommendations for further analysis.

Methodology

- C.1.2 The remains were assessed in accordance with national guidelines set out by Mays et al. (2005) and with reference to standard protocols for examining human skeletal remains from archaeological sites (Brickley and McKinley, 2004; Buikstra and Ubelaker, 1994; Cox and Mays, 2000). Completeness and condition were explored and provisional observations relating to sex and age estimation were made
- C.1.3 The potential to make more precise estimates of age and sex during future, detailed examination, was explored by assessing the availability of diagnostic features, primarily in the pelvis, skull and mandible for sex estimation, and pelvis and dentition for adult age estimation.
- C.1.4 The skeleton was also assessed for its potential to yield information on the physical attributes of the individual, in particular, their stature, build, but also information on non-metric traits.
- C.1.5 Any dental conditions, pathology or bony abnormalities were noted in passing. Particular attention was given to the presence of any unusual conditions that might require detailed specialist examination and/or the application of analytical techniques, such as radiography and histology.

Results

- C.1.1 The results are summarised in the table below

Skeleton number	burial type/position	Orientation*	Age	Sex	Pathologies
1631	crouched	N-S	Mature Adult	Male	Fractured Radius, Non Specific Infection in legs

Table 34: Inhumation results

**Position of the skull referred to first*

- C.1.2 The skeleton was >75% complete with only some ribs and hand and foot bones being missing. The condition of the skeleton was assessed as grade 4 after McKinley (2004, 16) This means that all of the bone surface is affected by erosive action but the general profile of the bone has been maintained. In addition, while the majority of the bones are present many of the more fragile remains such as ribs and pelvis fragmented during processing and could not be fully analysed.
- C.1.3 Due to the rather fragmentary nature of the remains there is limited potential for recording the cranial or post-cranial measurements that are recorded in standard full analyses of archaeological human remains (Brickley and McKinley, 2004). Some craniometric measurements are possible as were some length and width measurements of the long bones (Buikstra and Uberlaker 1994). A stature estimate was taken from the left femur (Trotter 1970) which gave a height of 165.7cm.
- C.1.4 The individual was estimated to be probably male based primarily upon observations of cranial traits and a measurement of the width of the femoral head and radial head. Only the sciatic notch remained of the pelvis to observe and this alone represented the pattern more commonly seen in females.
- C.1.5 The epiphyses on all bones had fused indicating that skeleton 1294 was an adult. The poor preservation of the skeleton meant little was available to define an age however the auricular surface suggests an age range of 40-44yrs (Buckberry and Chamberlain 2002, Lovejoy et al 1985). Cranial suture closure suggested an age range of between 30-71 years with a mean age of 48.8yrs. As such the skeleton was estimated to be between 40-48yrs at time of death. There is potential to look at wear patterns on the teeth in order to determine a more accurate age however it is possible that the heavy wear on the individuals teeth may be due to other factors and this should be kept in mind during detailed analysis.
- C.1.6 Little pathology was observed during the assessment however a healed greenstick fracture was observed on the distal joint end of the left radius along with some mild osteoarthritis in the left scaphoid bone which is most likely related to the fractured radius. The fracture is very well healed and was most likely the result of a fall. The distal ends of both tibiae and fibulae revealed small patches of bony growth on the medial sides along with striated bone which is often a sign of non-specific infection. The distal end of the L. femur showed similar striations.

Disarticulated Remains

- C.1.7 A small collection of Disarticulated remains was recovered from several features on site and these are catalogued in Table 35.

Context Number	Preservation	Completeness	MNI	Age
1009	Grade 1	<25%	1	Adult
1994	Grade 2	<25%	1	Adult
2495	Grade 1	<25%	2	Adult
2736	Grade 1	<25%	2	Adult/Neonate

Table 35: Disarticulated Remains

- C.1.8 None of the disarticulated remains recovered represent a primary burial and it is most probable that they are associated with the nearby priory cemetery and do not represent any form of purposeful deposition.

- C.1.9 In addition, after this report was written, 12 fragments of disarticulated human skeletal material from minimum of 3 individuals were recovered from the faunal sample, all from Period 4 (1800 + contexts). These are catalogued by Chris Faine below:

Context 2185: A single right adult femur fragment (midshaft)

Context 2186: A single left adult humerus fragment (upper midshaft); A portion of cranium (occipital); A portion of sternal rib end; A right neonatal scapula; A right neonatal ilium; An adult right 3rd metacarpal; A neonatal right tibia

Context 2495: A portion of sternal rib end; 3 midshaft radius fragments (2 left, 1 right)

Statement of potential and recommendation for further work

- C.1.1 Overall skeleton 1294 was in fair condition and was relatively complete. The bones were fairly robust with prominent muscle attachments on both humeri. There is moderate potential to obtain further information regarding their sex, age at death, and physical attributes (stature and build). A more detailed examination will take into consideration a full dental analysis, metric analyses of the post cranial bones and an estimate of stature. It will look at the burial practice followed and observe any differences from standard Bronze age and Iron age burial practice in Cambridgeshire.
- C.1.2 As the remains represent a possible Bronze Age or Iron Age presence in an area which seems to primarily show evidence of medieval activity the remains were sent for C14 dating in order to gain a more detailed estimate of date for the burial. A Late Bronze Age/Early Iron Age date was estimated.

Calibration Plot

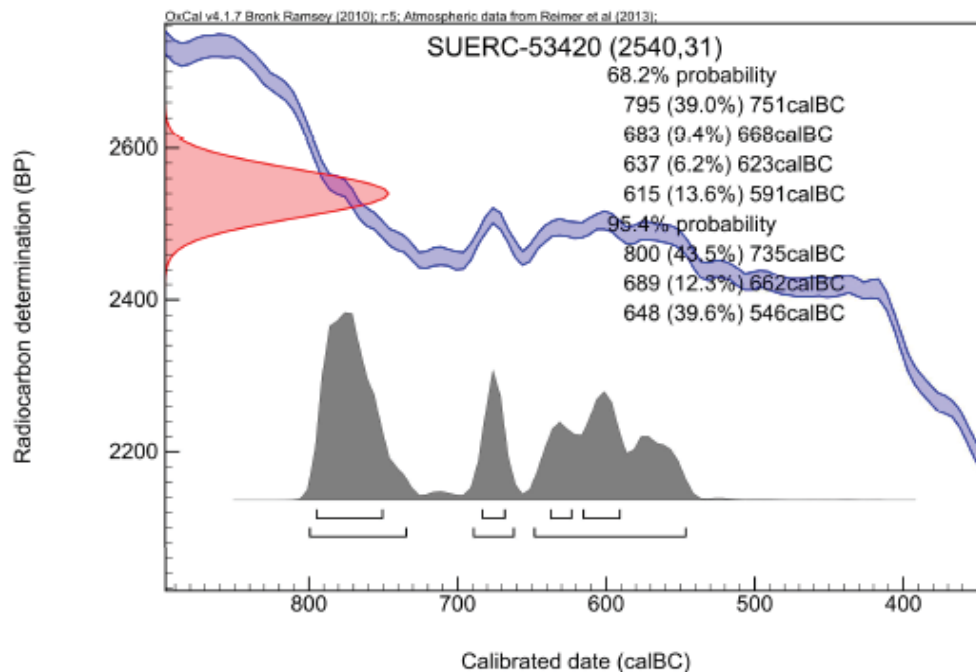


Fig. 15: Radiocarbon date of skeleton 1272

C.2 Faunal Remains

By Chris Faine

Introduction

- C.2.1 One hundred and forty one kilograms of faunal material was recovered from the excavation at Harvest Way yielding 2381 “countable” bones (see below). A further 814 & 528 bones were classed as “Large or Medium sized mammal” respectively, with 1074 fragments being unidentifiable. All bones were collected by hand and from environmental samples. Faunal remains were recovered from a variety of features including pits, layers and structural features (walls, foundations, cellars etc.).
- C.2.2 The material is stored in 19 crates measuring 45×30×23cm. The bones are washed and bagged by context. With no knowledge as to how long bone fragments have suffered pre-depositional taphonomic processes it is difficult to assess where bone derived from an earlier period or sub-period. Where variable preservation of bone has been noted within a deposit, it could be suggested to contain potentially reworked material. However, this is rare in the assemblage with differential presentation being recorded in only 20% of contexts. However, given the inter-cutting nature of much of the archaeology further information is needed when considering the issue of residual fragments.

Methodology

- C.2.3 All data was initially recorded using a specially written MS Access database. Bones were recorded using a version of the criteria described in Davis (1992) and Albarella & Davis (1994). Each context was assessed for numbers of recordable fragments, along with numbers of ageable, sexable, and measurable bones. Criteria for ageing mandibles were taken from Payne (1973) and (1987) for sheep, Grant (1982) and Halstead (1992) for pigs, Grant (1982) and Halstead (1985) for cattle and Levine, (1982) for horses. Completeness was expressed in terms of percentage and zones present (after Dobney & Reilly, 1988 & Cohen & Serjeantson 1996). The entire identifiable assemblage was quantified in terms of number of individual fragments (NISP). Rates of epiphyseal fusion were not quantified at this stage but unfused epiphyses were noted wherever possible. Bird and fish remains were noted but not identified to species at this stage unless unusual elements relevant to the assessment were recovered. Surface preservation levels were noted for each context, with these being rated from 0-5, with 0= Excellent to 5=eroded to the extent the element is unidentifiable (see Table 36).

The Assemblage

- C.2.4 As mentioned above Table 37 shows the number of identifiable fragments per phase, with the numbers of ageable, measurable and sexable bones being shown in Tables 38-41. Preservation of the assemblage is extremely good, with the majority of remains from all phases being classed as “excellent/very good”.
- C.2.5 Few elements were recovered from Prehistoric contexts, consisting almost entirely of horse remains with a single cattle fragment. No sexable or measurable bones were recovered.
- C.2.6 The vast majority of identifiable fragments were recovered from Medieval contexts (NISP: 1434). These consisted largely of domestic mammals, with sheep/goat being the prevalent taxon (35.9% of the total), along with smaller numbers of cattle. A relatively

large number of pig remains were also recovered. However it must be noted that the assemblage does include an articulated skeleton (see below). Horses are relatively scarce as are dog remains. Cat remains cat remains were recovered from 10 contexts, including 2 skeletons and juvenile elements. Some rabbit elements were also recovered. Unusually bird remains make up a large part of the identifiable assemblage (21% of the total). Although it is not standard practice to identify birds to species at assessment level, it is worth noting that it appears a wide variety of species are present; including but not limited to galliformes (fowl, pheasant etc.), anseriformes (ducks & geese) and passerines (songbirds). Fish remains were recovered from 10 contexts, including large gadid remains and a pike dentary from well fill **3468**. The only anuran amphibian remains (frog/toad) were recovered from Period 2 contexts.

- C.2.7 A one would expect the number of ageable epiphyses closely mirrors the species distribution (the large number of epiphyses is also the result of the generally excellent preservation of the assemblage). The largest number of epiphyses was recovered from the sheep assemblage with smaller numbers of bird and cattle. Pig epiphyses are slightly under-represented compared to the number of elements due to the presence of a neonatal and hence more fragile intact skeleton. The relatively large number of cat epiphyses can be attributed to the presence of intact skeletons. There is good potential for using epiphyses to age the cattle, sheep, and pig populations. Although ageable mandibles were recovered from cattle, sheep and pigs, only the sheep sample is large enough (NISP: 63) to provide a statistically meaningful comparison with other assemblages. Numbers of measurable bones again mirrors the general species distribution, with larger numbers of sheep elements along with smaller numbers of cattle and bird. The higher number of sheep mandibles has increased the number of measurable bones, but even without these there is good potential for comparison of this and bird assemblage with other sites. Few sexable elements were recovered, consisting largely of sheep inominates and cattle metapodia.
- C.2.8 The vast majority of the Post-Medieval (Period 3) assemblage again consists largely of domestic mammals in similar proportions to the post-medieval sample, with sheep being the most prevalent along with smaller numbers of cattle. Proportionally slightly fewer pig, horse and cat fragments were recovered compared to the Post-Medieval phase. Dog numbers increase due to the presence of an articulated skeleton. Bird remains are also present in smaller numbers, again with a number of different species types represented. Interestingly cellar context **2473** contained an intact guinea fowl skull. Guinea fowl are rare on archaeological sites largely due to the difficulty in distinguishing post cranial elements from other galliformes. Few fish remains were recovered (NISP: 6).
- C.2.9 As with the medieval phase the number of ageable epiphyses closely mirrors the species distribution, with sheep epiphyses being the most numerous along with smaller numbers of cattle, bird and pigs. Again pig epiphyses are slightly under-represented compared to the number of elements. Unlike other domesticates pigs achieve optimum meat weight whilst some elements are still to fuse, meaning that unfused and hence more fragile pig epiphyses often enter the archaeological record. Numbers of dog epiphyses increased due to the presence of an intact skeleton. There is good potential for using epiphyses to age the cattle, sheep, and pig populations. Relatively few ageable mandibles were recovered, mostly from sheep with smaller numbers of cattle and pig with a single horse mandible. As with the medieval sample only the sheep assemblage can provide a statistically meaningful comparison with other sites. The sample of measurable bones is dominated by sheep and bird remains with roughly similar numbers of cattle, pig and other animal to the medieval sample. The lower

proportion of measurable sheep bones compared to the medieval phase can attributed to the lower number of mandibles. Sexable bones are rare, consisting of pig inominates and cattle metapodia.

- C.2.10 The Modern (1800+), assemblage again consists largely of sheep remains along with smaller numbers of cattle. Other mammals are scarce aside from a relatively large number of cat remains (no articulated elements were recovered). Despite this, due to the good preservation of the assemblage a statistically significant sample of both sheep and cattle epiphyses were recovered. The sample only contained 4 ageable mandibles (2 sheep, 1 cattle & 1 pig). Measurable sheep and cat bones were present in equal numbers, with smaller amounts of horse and pig. A single sexable sheep inominate was recovered.
- C.2.11 A number of full or partial skeletons (associated bone groups/ABG's) were also recovered. These were:

Period 2

- x2 Cat skeletons from well fill **3629**
- A bird skeleton from pit fill **3461**
- A partial juvenile cattle skeleton from well fill **3129**
- A bird skeleton from well fill **3088**
- A neonatal pig skeleton from pit fill **1847**

Period 3

- x2 pig skeletons from grave? fill **2776**
- A dog skeleton from grave? Fill **1721**

Period 4

- A cat skeleton from grave? fill **825**

Comparisons/Conclusion

- C.2.12 Given the relatively large sample size there is good potential for comparisons with other contemporary Late Medieval & post-medieval sites both nearby and further afield. This can be assessed alongside the similar sized assemblage from the adjacent Eastern Gate Hotel site (Newman, 2014). The largest comparable assemblage in Cambridge itself is the Grand Arcade & Bradwell Court Site (Higbee, in Cessford, 2007) which would be useful in comparing the Harvest Way assemblage with one recovered from inside the city itself and hence the relationship between Barnwell and the city. Smaller sites nearby include Coldhams Lane (Atkins 2013a), the Brunswick site (Atkins 2012a) and Bradwells Court (Newman, 2007). Other comparable sites elsewhere in East Anglia include Cattle Mall, Norwich, (Albarella *et al* 2009) and Lincoln, (Dobney *et al* 1996).
- C.2.13 In terms of the entire site this is a large and extremely well preserved assemblage containing a variety of species common seen on Medieval/post-medieval sites. Whilst not as large other urban assemblages further afield in east Anglia, aside from the Grand Arcade it is the largest faunal assemblage recovered from immediate Cambridge area and in thus of regional importance (especially considered in conjunction with the Eastern Gate Hotel site). Interestingly the number of bird remains is unusually high in an assemblage of this size (the total NISP of birds is roughly the same in both Medieval phases of Harvest Way and the Grand Arcade, despite the total sample size of the latter

being significantly larger). With respect to the medieval and post-medieval samples there is good potential for comparing animal husbandry practices at both an inter and intra site level, with particular potential for analysis of body part distribution and production of secondary products through age profiles. It is recommended that the remainder of the hand-collected bone be fully recorded, and incorporated into the site archive. This would include full identification of all bird and fish remains.

	Period		
Level	1	2	3
0	0	66	56
1	80	23	11
2	20	7	20
3	0	0	13
4	0	4	0
5	0	0	0

Table 36: Preservation levels for each period (%)

	Period 1 (Prehistoric)	Period 2 (1200-1538 AD)	Period 3 (1538-1800 AD)	Period 4 (1800+)
Cattle (<i>Bos</i>)	1	341	231	22
Sheep/Goat (<i>Ovis/Capra</i>)	0	515	327	42
Pig (<i>Sus scrofa</i>)	0	140 (1)	66	8
Horse (<i>Equus</i>)	11	27	16	1
Dog (<i>Canis familiaris</i>)	0	5	43 (1)	0
Cat (<i>Felis sylvestris</i>)	0	50 (2)	19	24
Rabbit (<i>Oryctolagus cuniculus</i>)	0	6	4	2
Bird	0	306 (2)	110	12
Fish	0	18	6	2
Anuran amphibian (<i>Rana/Bufo</i>)	0	26	0	0
Total:	12	1434	822	113

Table 37: Number of identifiable animal bones by period

	Period 1 (Prehistoric)	Period 2 (1200-1538 AD)	Period 3 (1538-1800 AD)	Period 4 (1800+)
Cattle (<i>Bos</i>)	0	221	104	44
Sheep/Goat (<i>Ovis/Capra</i>)	0	504	266	60
Pig (<i>Sus scrofa</i>)	0	94	60	4
Horse (<i>Equus</i>)	6	28	12	0
Dog (<i>Canis familiaris</i>)	0	13	30	0
Cat (<i>Felis sylvestris</i>)	0	30	28	22
Rabbit (<i>Oryctolagus cuniculus</i>)	0	8	2	0
Bird	0	349	108	0
Total:	6	1247	610	130

Table 38: Number of ageable epiphyses by period

	Period 2 (1200-1538 AD)	Period 3 (1538-1800 AD)	Period 4 (1800+)
Cattle (<i>Bos</i>)	15	8	1
Sheep/Goat (<i>Ovis/Capra</i>)	63	37	2
Pig (<i>Sus scrofa</i>)	15	11	1
Horse (<i>Equus</i>)	0	1	0
Total:	93	57	4

Table 39: Number of ageable mandibles by period

	Period 2 (1200-1538 AD)	Period 3 (1538-1800 AD)	Period 4 (1800+)
Cattle (<i>Bos</i>)	25	20	0
Sheep/Goat (<i>Ovis/Capra</i>)	128	96	6
Pig (<i>Sus scrofa</i>)	16	14	2
Horse (<i>Equus</i>)	7	1	1
Dog (<i>Canis familiaris</i>)	3	9	0
Cat (<i>Felis sylvestris</i>)	22	9	3
Bird	91	68	7
Total:	292	217	19

Table 40: Number of measurable animal bones by period

	Period 2 (1538-1800 AD)	Period 3 (1538-1800 AD)	Period 4 (1800+)
Cattle (<i>Bos</i>)	8	50	0
Sheep/Goat (<i>Ovis/Capra</i>)	12	0	1
Pig (<i>Sus scrofa</i>)	0	3	0
Bird	1	0	0
Total:	21	53	1

Table 41: Number of sexable animal bones by period

C.3 Environmental samples

By Rachel Fosberry

Introduction

- C.3.1 A total of 194 bulk samples were taken from features within the excavated areas at Harvest Way, Cambridge in order to assess the quality of preservation of plant remains and their potential to provide useful data as part of further archaeological investigations.
- C.3.2 Most of the samples were taken from two main phases of occupation; in the medieval period c.AD1200-c.AD1550 the site was a lay settlement of Barnwell Priory (Period 2) and settlement continued into the post-medieval period c.AD1550-AD1800 (Period 3). Samples were also taken from an Iron Age inhumation (Period 1) and from a post-medieval building (Period 4). The initial assessment results show that preservation of plant remains is good with carbonised, mineralised and waterlogged plant remains present. Waterlogged plant remains are of particular value for providing information on the surrounding environment of a site whereas carbonised plant remains relate to agriculture and domestic, culinary activities and mineralised remains usually indicate cess. Charred cereals predominate along with occasional legumes and mineralised fruit seeds provide evidence of other foods consumed. In addition, the presence of mineralised insect remains are also an indication of cess and may provide further information on the occupants of the site and their activities.
- C.3.3 Monolith samples were taken from wells **1927**, **1424**, **2414** (NB no bulk samples) and **2554**. Samples specifically taken for insect analysis were taken from well **1927**.

Methodology

- C.3.4 For this initial assessment one bucket (approximately 10L) of each bulk sample was processed by water flotation (using a modified Siraff three-tank system) for the recovery

of charred plant remains, dating evidence and any other artefactual evidence that might be present. The floating component (flot) of the samples was collected in a 0.3mm nylon mesh and the residue was washed through 10mm, 5mm, 2mm and a 0.5mm sieve. Both flot and residues were allowed to air dry. A magnet was dragged through each residue fraction prior to sorting for artefacts. Any artefacts present were noted and reintegrated with the hand-excavated finds. The dried flots were subsequently sorted using a binocular microscope at magnifications up to x 60 and an abbreviated list of the recorded remains are presented in Tables 42 - 53. Identification of plant remains is with reference to the *Digital Seed Atlas of the Netherlands* and the authors' own reference collection. Nomenclature is according to Zohary and Hopf (2000) for cereals and Stace (1997) for other plants. Carbonized seeds and grains, by the process of burning and burial, become blackened and often distort and fragment leading to difficulty in identification. Plant remains have been identified to species where possible. The identification of cereals has been based on the characteristic morphology of the grains and chaff as described by Jacomet (2006).

Quantification

- C.3.5 For the purpose of this initial assessment, items such as seeds, cereal grains and legumes have been scanned and recorded qualitatively according to the following categories

= 1-10, ## = 11-50, ### = 51+ specimens ##### = 100+ specimens

Items that cannot be easily quantified such as charcoal, magnetic residues and fragmented bone have been scored for abundance

+ = rare, ++ = moderate, +++ = abundant

Key to tables: C = charred M=mineralised, W=waterlogged, N=no preservation

Results

- C.3.6 Preservation of plant remains is predominantly through carbonisation. Preservation by waterlogging has occurred in some of the deposits that have been continuously beneath the water table. A third method of preservation, mineralisation, has occurred in several of the former wells and in some pits indicating cess inclusion. Seeds that have been (untransformed in that they appear to be modern) were quite frequent and include plants such as dead-nettles (*Lamium* sp.) and goosefoot (*Chenopodium* sp.).
- C.3.7 The charred plant remains are dominated by cereal grains along with seeds of weeds commonly encountered growing alongside cereal crops on cultivated soils and were most likely harvested with the cereal crop. All four cereal types are represented with wheat (*Triticum* sp.), in particular free-threshing bread wheat (*T. aestivum/compactum*), predominating over barley (*Hordeum* sp.) and oats (*Avena* sp.). Rye (*Secale cereale*) occurs less frequently.
- C.3.8 The results are discussed by Period:

Period 1

- C.3.9 Five samples were taken from grave **1273** to ensure maximum retrieval of human bones. A single indeterminate charred grain recovered from fill 1271 can be considered to be either intrusive or accidentally included in the grave backfill.

Sample No.	Context No.	Cut No.	Feature Type	Volume processed (L)	Flot Volume (ml)	Cereals	Small Bones	Charcoal
18	1271	1273	Grave	5	10	0	0	+

Sample No.	Context No.	Cut No.	Feature Type	Volume processed (L)	Flot Volume (ml)	Cereals	Small Bones	Charcoal
22	1271	1273	Grave	1	0	0	0	0
25	1271	1273	Grave	7	5	#	0	+
27	1271	1273	Grave	10	10	0	#	+
29	1271	1273	Grave	8	10	0	0	+

Table 42 : Bulk environmental samples taken from Grave **1273**

Period 2

Ovens 2604, 2452, 2855, 3168, 3370, 3381. Hearth 1415 (Table 43)

- C.3.10 Thirteen samples taken from oven and hearth fills all contain charred cereal grains that are predominantly free-threshing wheat (*Triticum aestivum sensu-lato*), the exception being oven **3370** (Samples 182 and 185, fill 3372) which contains abundant barley grains (*Hordeum vulgare*), a large proportion of which have sprouted (Table 43). These samples also contain abundant charred seeds of clover (*Trifolium* sp.) along with lesser quantities of cleavers (*Galium aparine*), henbane (*Hyoscyamus niger*), brassicas (*Brassica* sp.) and several species of the dock family (Polygonaceae).

Silicates are common in lower fills of ovens **2604** (2606), **2452** (2415) and **2855** (2856) as the remains of fuel that has burnt to ash. The fuel is predominantly charcoal, but there is also evidence of the burning of great fen sedge (*Cladium mariscus*) particularly in hearth **1415** (Sample 39, fill 1419) and from the flue of oven **1415** (Sample 118, fill 2435).

Sample No.	Cxt No.	Cut No.	Feature Type	Volume processed (L)	Flot Volume (ml)	Preservation	Cereals	Chaff	Legumes	Weed Seeds	Burnt Snails	Small Bones	Charcoal <2mm	Mineralised insects	Fish bone/fish scale
39	1419	1415	hearth	6	100	C,M	###	0	#	#	0	0	+++	#	#
118	2435	2452	oven	8	80	C	##	#	#	#	0	0	++	0	0
112	2323	2452	oven	1	10	C	##	0	0	0	0	0	++	#	#
113	2330	2452	oven	9	30	C	##	#	#	0	0	0	++	0	0
114	2354	2452	oven	8	2	C	#	0	0	0	0	0	++	0	0
115	2395	2452	oven	9	30	C	##	#	#	0	#	0	++	0	#
117	2415	2452	oven	6	60	C	##	0	0	0	#	0	++	0	#
127	2606	2604	kiln/oven	8	150	C,M	#	0	0	0	0	#	+++	##	##
139	2856	2855	oven	9	2	C	#	0	0	#	0	0	+	0	0
138	2857	2855	oven	9	1	C	0	0	0	#	0	0	++	0	#
158	3166	3168	oven	5	15	C	#	0	0	#	#	0	++	0	0
182	3372	3370	oven	10	50	C	###	###	0	###	0	0	+++	0	0
185	3372	3370	oven	8	20	C	##	####	#	##	0	0	++	0	#
183	3382	3381	oven	8	40	C,M	##	0	0	#	0	#	++	0	##

Table 43: Environmental samples taken from Period 2 hearths/ovens

Clay-lined features 2682, 2851, 3137, 3199, 3280

- C.3.11 Samples taken from secondary deposits within clay-lined features vary in content (Table 44). Charred cereal grains are present but only in significant quantity in tank **2682** (Sample 130, fill 2677) which contains a large volume of wheat grains. Charred seeds of wetland plants such as sedges (*Carex* sp.) and leaf fragments of great fen sedge occur in most of the samples from the clay-lined features along with burnt wetland snail shells which were most likely harvested with the sedges which have been burnt as fuel.
- C.3.12 Sample 178, fill 3277 of tank **3280** contains numerous seeds preserved by mineralisation including docks, campions, goosefoot, orache (*Atriplex* sp.), poppy and wild/sweet pea (*Lathyrus* sp.).

Sample No.	Context No.	Cut No.	Volume processed (L)	Flot Volume (ml)	Preservation	Cereals	Chaff	Charred Weed Seeds	Mineralised seeds	Burnt Snails from flot	Charcoal	Fish bone
130	2677	2682	8	70	C	####	#	0	0	0	++	#
141	2868	2851	9	20	C	#	0	0	0	#	++	#
154	3138	3137	8	100	C	##	0	#	0	##	++	#
157	3201	3199	6	10	C	##	#	#	0	#	++	#
178	3277	3280	9	25	M,C	#	0	#	##	0	+	#

Table 44: Environmental samples taken from Period 2 clay-lined features

Ditches 1753, 1218, 1220

- C.3.13 Of the three ditches sampled only **1753** (Sample 55, fill 1754) contains preserved remains which are in the form of what appears to be a deliberate dump of charred grain (wheat and barley; Table 45).

Sample No.	Context No.	Cut No.	Volume processed (L)	Flot Volume (ml)	Preservation	Cereals	Charcoal	Fishbone
15	1217	1218	10	2	C	#	0	0
16	1219	1220	10	2	N	0	0	0
55	1754	1753	10	30	C	####	++	#

Table 45: Environmental samples taken from Period 2 ditch fills

Pits

- C.3.14 Seventy-four pit fills were sampled, thirteen of which were former quarry pits (Tables 46 and 47). Nearly all of the pits contain charred plant remains as evidence that they have been used for the disposal of burnt waste and twenty-seven of the pit fills also contain plant and/or insect remains that have been preserved by mineralisation. Three fills contain waterlogged plant remains of plants of disturbed ground. Most of the less-productive pit fills were described on excavation as having a 'cessy' appearance and it would appear that the original material has fully decomposed.
- C.3.15 Charred cereals often occur in significant quantities and all four cereal groups are represented. Wheat is most common and there are chaff elements that are identifiable

as bread wheat (*T. aestivum*/ *T. compactum*). Most of the larger assemblages are from samples that were taken from obvious layers in the pits which suggests that they are possibly single deposits. Five samples from pit fills (Table 46) that contain abundant grain assemblages also have evidence of infestation of wheat by a ear-cockle nematode (*Anguina tritici*). The 'ear-cockles' are evidently wheat grains that appear swollen to the point at which the ventral groove appears as a thin line. Several of the ear-cockles have a hole through which the nematodes would have hatched.

Sample No.	Context No.	Cut No.	Feature Type
37	1494	1503	pit
67	1965	1940	pit
81	2098	2096	quarry pit
92	2288	2286	pit
144	2949	2953	pit

Table 46: Period 2 pit fills containing charred ear-cockles

- C.3.16 Barley is also frequent and occasionally the grains show evidence of germination. Oats occur in many of the samples in low numbers and may represent the wild variety that grows as a crop weed rather than cultivated oats. The exception is Sample 155, fill 3083 of pit **3081** which contains a significant quantity of oat grains and also occasional chaff elements that are identifiable as florets of the cultivated form (*A. sativa*). Rye is also infrequent in Period 2 pits mainly occurring in low numbers (<10) with the exception of Sample 197 fill 3463 of pit **3451** in which it appears to have been deposited in a burnt layer with bone and pottery. A 2L sample produced a 100ml flot that is predominantly charred plant remains. Chaff elements are included along with an unusually large amount of burnt culm nodes which represent straw. It is possible that this sample includes whole ears and stems of rye.
- C.3.17 Cultivated pulses were also present although they occur in low numbers, usually less than ten specimens in a sample. Both peas (*Pisum cf. sativum*) and, less commonly, beans (Fabaceae) are present but they are not easily distinguishable as medieval beans were often very small. Sample 92, fill 2288 of pit **2286** contains the largest assemblage of legumes from this phase and Sample 69, fill 1941 of pit **1940** also contains fragments of burnt legume pods, either pea or vetch (*Vicia* sp.).
- C.3.18 Charred weed seeds are common in many of the assemblages especially in the pit samples that contain large grain assemblages such as Sample 155, fill 3083 of pit **3081**. Both segetal and ruderal weeds are represented; seeds of plants found growing amongst crops (segetal) include cornflower (*Centaurea* sp.), corn-cockle (*Agrostemma githago*), corn gromwell (*Lithospermum arvense*), cleavers (*Gallium aparine*) and vetch/tare (*Vicia/Lathyrus* sp.), brassicas (brassica sp.), brome/rye grass (*Bromus/Lolium* sp.), knotgrass (*Polygonum aviculare*), wild radish (*Raphanus raphanistrum*) grass seeds (Poaceae), and thistles (*Carduus/Cirsium* sp.). Stinking mayweed (*Anthemis cotula*) is a common crop weed but it has a specific habitat, preferring heavy clay soils. Hemlock (*Conium maculatum*) and spike rush (*Eleocharis* sp.) are plant species that prefer damp soils near streams and ditches but may also be found on the edges of cultivated fields. Great fen sedge leaf fragments occur in many of the pit samples along with sedge seeds and burnt wetland snails, as further evidence of the use of these wetland resources.

- C.3.19 Weeds such as dock (*Rumex* sp.) and clover/medick (*Trifolium/Medicago* sp.), ribwort plantain (*Plantago lanceolata*) and stinging nettles (*Urtica dioica*) have a broader habitat including disturbed and waste ground and are described as ruderals.
- C.3.20 Twenty-seven of the pits contain plant remains preserved by mineralisation suggesting that cess deposits have been included. Sample 75, was a small sample (approx 800ml) taken from the base of a ceramic vessel fill (2124) retrieved from pit **2125**. It contains abundant mineralised fly pupae, mineralised straw and a sloe/cherry (*Prunus* sp.) inner seed along with charred wheat and rye grains including chaff elements of both. Mineralised seeds occur in seventeen of the samples but are mainly seeds of weed plants such as goosefoot, corn gromwell, mallows (*Malva* sp.) and dead nettles. An apple/pear (*Malus/Pyrus* sp.) seed is present in Sample 200, fill 3454 of pit **3451**, a mineralised grape/raisin (*Vitis vinifera*) seed was found in Sample 190, fill 3474 of pit **3478** and Sample 92, fill 2288 of pit **2286** contains mineralised fig (*Ficus carica*) seeds.
- C.3.21 Fish bones are present in most of the pit fills along with small mammal bones, animal bones and marine shell indicating that most of the deposits are of mixed refuse.

Sample No.	Cxt No.	Cut No.	Feature Type	Volume processed (L)	Flot Volume (ml)	preservation	Cereals	Chaff	Legumes	Charred Weed Seeds	Mineralised seeds	Charcoal	Mineralised insects	Fish bone
17	1231	1214	pit	8	20	C	##	0	0	0	0	++	0	#
28	1312	1303	pit	8	10	C,M	#	#	#	#	0	++	##	#
30	1286	1335	pit	10	15	C,M	#	#	0	#	0	++	##	#
31	1363	1362	quarry pit	10	50	C	##	0	0	#	0	++	0	#
32	1411	1413	quarry pit	9	20	C,M	#	0	0	0	0	+	0	#
33	1448	1447	pit	8	15	C,M	##	#	#	0	0	+++	#	#
37	1494	1503	pit	10	15	C,M	##	0	0	#	0	++	##	#
38	1531	1535	quarry pit	6	15	C,M	##	0	0	0	0	++	#	0
47	1596	1599	pit	10	50	C	###	#	#	#	0	+++	0	#
52	1586	1621	pit	6	60	C	##	0	0	#	0	++	0	#
48	1631	1630	pit	10	10	C,M	##	0	0	#	##	++	##	#
49	1636	1638	quarry pit	9	15	C,M	##	#	#	#	#	++	#	#
50	1640	1644	quarry pit	8	15	C,M	##	0	#	#	0	++	#	#
51	1643	1644	quarry pit	9	30	C	##	0	#	#	0	++	0	#
56	1746	1747	pit	10	10	C	##	0	#	0	0	++	0	#
59	1793	1747	pit	10	15	C	##	0	#	0	0	0	0	0
57	1758	1756	quarry pit	7	30	C	##	0	0	0	#	++	0	#
58	1784	1783	pit	10	60	C	##	#	#	##	0	++	0	#
60	1795	1794	pit	10	60	C,M	###	#	##	#	#	0	#	#
61	1847	1848	quarry pit	9	15	C,M	##	0	0	0	#	+	0	#

Sample No.	Cxt No.	Cut No.	Feature Type	Volume processed (L)	Flot Volume (ml)	preservation	Cereals	Chaff	Legumes	Charred Weed Seeds	Mineralised seeds	Charcoal	Mineralised insects	Fish bone
62	1844	1853	quarry pit	9	120	C	###	#	#	##	0	+++	0	#
67	1965	1940	pit	10	80	C	###	#	#	#	0	#	++	#
68	1967	1940	pit	10	100	C,M	###	##	##	##	##	++	0	#
69	1941	1940	pit	5	45	C,M	##	0	##	#	0	+	#	#
120	2063	1940	pit	10	100	C	####	##	##	#	0	+++	0	0
121	2496	1940	pit	10	60	C	###	#	##	#	0	+++	0	#
123	2996	1940	pit	0.5	1	C	#	0	#	0	0	++	0	#
125	1968	1940	pit	10	10	C,M	##	0	#	0	0	++	##	#
70	1971	1969	pit	10	70	C,M	###	0	0	#	0	+	#	0
71	1973	1969	pit	10	25	C,M	##	0	0	#	0	0	##	#
81	2098	2096	quarry pit	5	30	C	####	#	0	#	0	+++	0	0
82	2100	2096	quarry pit	8	30	C	###	0	#	#	0	++	0	#
75	2124	2125	pit	1	25	C,M	##	#	0	0	#	++	###	#
88	2218	2219	pit	10	10	C,M	##	0	0	0	0	++	#	#
89	2238	2237	pit	8	10	C	##	0	#	#	0	+++	0	#
122	2502	2272	pit	10	15	C,M,W	##	0	#	#	#	++	#	#
92	2288	2286	pit	9	80	C,M	####	###	##	#	#	0	#	#
93	2311	2318	pit	8	100	C	###	#	#	#	0	++	0	#
95	2349	2353	Quarry pit	9	15	C	##	#	0	#	0	+++	0	#
96	2351	2353	Quarry pit	8	25	C	###	0	0	#	0	++	#	#
116	2394	2479	pit	9	25	C	##	0	#	#	0	++	0	#
119	2491	2486	pit	10	10	C	##	0	0	0	0	++	0	#
129	2664	2665	pit	10	10	C,M	##	0	#	0	#	++	#	#
131	2702	2701	pit	9	10	C	##	0	#	#	0	++	0	#
132	2704	2703	pit	10	30	C	#	0	0	#	#	+	0	#
133	2706	2705	pit	9	2	C	#	0	0	0	0	+	0	0
134	2716	2714	pit	10	1	C	#	0	0	0	0	+	0	0
140	2865	2864	pit	9	5	C	#	0	0	#	0	+	0	0
144	2949	2953	pit	8	75	C,M	###	##	#	#	#	+++	0	#
146	3001	2996	pit	9	10	C,W	0	0	0	#	0	+	0	0
147	3078	3076	pit	9	15	C	#	0	0	0	0	++	#	#
148	3078	3076	pit	10	15	C	##	#	#	#	0	++	#	0
155	3083	3081	pit	10	60	C	###	#	#	###	0	+++	0	0
156	3085	3081	pit	10	10	C	##	0	#	#	0	+	0	#
159	3214	3081	pit	10	10	C,W	##	0	0	#	0	+++	0	0
160	3216	3215	pit	10	10	C,M	#	0	#	#	#	+	###	#

Sample No.	Cxt No.	Cut No.	Feature Type	Volume processed (L)	Flot Volume (ml)	preservation	Cereals	Chaff	Legumes	Charred Weed Seeds	Mineralised seeds	Charcoal	Mineralised insects	Fish bone
161	3217	3215	pit	10	15	C	##	#	0	#	0	++	##	#
162	3219	3218	pit	10	30	C	##	#	0	0	0	++	#	#
163	3224	3223	pit	10	40	C	##	0	#	#	0	++	#	##
181	3365	3351	pit	10	60	C	###	##	0	#	0	+++	0	#
184	3394	3392	pit	2	1	C	#	0	0	0	0	+	0	0
193	3460	3451	Pit	9	20	C,M	###	0	0	#	#	++++	#	#
194	3467	3451	Pit	8	20	C	##	0	0	#	0	+++	0	#
195	3454	3451	Pit	8	5	C	0	0	0	#	0	+++	0	#
197	3463	3451	Pit	2	100	C	###	##	#	#	0	++	0	0
199	3457	3451	Pit	10	30	C	##	0	0	#	0	++	0	0
200	3454	3451	pit	8	10	C,M	##	0	0	#	#	++	0	0
189	3473	3478	pit	5	10	C,M	0	0	0	0	0	0	0	#
190	3474	3478	Pit	10	10	C	##	#		#	#	+	0	#
191	3476	3478	Pit	10	2	C	##	#	0	0	0	+	0	0
188	3480	3481	pit	8	2	C	##	0	0	#	0	+	0	#
198	3571	3574	Pit	8	50	C	###	#	0	##	0	+++	0	#
44	1558		pit	9	30	C,M	##	#	0	#	#	++	#	0
100	2375		pit	10	35	C	###	#	#	#	0	+++	#	#

Table 47: Environmental samples taken from Period 2 pit fills

Features containing waterlogged deposits

- C.3.22 A total of twenty-two samples were taken from six wells and two quarry pits (Table 48). Six of the samples contain plant remains preserved by carbonisation only and represent deposits that have not remained wet. Wells **1463** (fills 1464, 2328 and 2513) and **2412** (fill 3028) contains poorly preserved charred cereals and occasional waterlogged dead-nettle seeds.
- C.3.23 Two samples were taken from well **2554**. Upper fill 2867 (Sample 142) contains predominantly charred remains with occasional untransformed seeds of henbane (*Hyoscyamus niger*) that may or may not be waterlogged. It also contains a large assemblage of burnt molluscs. Lower fill 3269 (Sample 169) contains only waterlogged plant material including seeds of knotgrass (*Polygonum aviculare*), mallow (*Malva* sp.) and stinging nettles (*Urtica dioica*) and occasional insect fragments.
- C.3.24 Ten samples were taken from well **1927** from seven of its twenty-four fills. Samples taken from the lowest fill 3297 contain only sparse waterlogged remains of buttercups (*Ranunculus* sp.) and nettles (*Urtica* sp.). The fill above, 3296 (Sample 177), contains only moss (Bryophyte) fragments. The next fill, 3295 (Sample 175) is more productive and contains seeds of plants that were possibly crop weeds such as knapweeds (*Centaurea* sp.), brassicas (*Brassica* sp.), fumitory (*Fumaria officinalis*), henbane and sedges (*Carex* sp.) although no cereals were noted. Insect fragments are also present. Sequential fill 3294 (Sample 167) is very different to the other fills of this well in that it contains waterlogged leaf fragments of great fen sedge and stems of reeds that are coated with a white deposit, possibly lime. Waterlogged seeds of plants include cornflower (*C. cyanus*), thistles (*Carduus/Cirsium* sp.), corncockle testa fragments,

pinks (Caryophyllaceae) and Great fen sedge nutlets. Insect fragments and ostracods were also noted.

C.3.25 Fill 3293 contains only sparse remains while the fill above, fill 3292 (Sample 166), contains charred and waterlogged remains and was taken from an area where there was waterlogged wood surviving. The charred cereals form a minor component of the plant assemblage which is predominantly waterlogged seeds of ruderal weeds including several species of plant families such as goosefoot (Chenopodiaceae), pinks (Caryophyllaceae) and poppies (Papaveraceae) along with fumitory, small nettle (*Urtica urens*) and buttercups. Waterlogged insect fragments are also common. Fill 3291 (Sample 170) contains a similar assemblage and includes algae (charophyte oogonia). None of the subsequent 17 fills were sampled.

C.3.26 The two samples taken from the lower fills of wells 3388 (fill 3643, Sample 205) and 3470 (fill 3629, Sample 202) produced similar assemblages of just waterlogged dead-nettle seeds (*Lamium* sp.). The upper fills 3641 (Sample 203) of 3470 also contains dead-nettle seeds whereas fill 3628 (Sample 201) contains charred cereals in addition to untransformed (possibly waterlogged) elderberry (*Sambucus nigra*) seeds as well as mineralised nettle seeds and common club-rush (*Shoenoplectus* cf. *lacustris*).

Sample No.	Cxt No.	Cut No.	Feature Type	Volume processed (L)	Flot Volume (ml)	Preservation	Cereals	Chaff	Charred Weed Seeds	Mineralised seeds	waterlogged seeds	Burnt Snails from flot	Small Bones	Charcoal	Waterlogged insects	Fish bone/ fish scale
36	1464	1463	well	10	50	C	##	0	#	0	0	#	#	+++	0	#
94	2328	1463	well	9	5	C	##	0	0	0	##	#	##	++	0	0
124	2513	1463	well	10	10	C,W	#	0	0	0	##	#	#	++	0	#
166	3292	1927	well	10	70	C,W	##	0	0	0	###	0	0	0	##	0
170	3291	1927	well	8	60	C,W	#	#	0	0	###	0	0	0	#	0
167	3294	1927	well	8	80	W	0	0	0	0	##	0	0	0	#	0
171	3292	1927	well	1	2	W	0	0	0	0	##	0	0	0	0	0
172	3294	1927	well	1	1	W	0	0	0	0	#	0	0	0	0	0
173	3293	1927	well	1	1	W	0	0	0	0	#	0	0	0	0	0
175	3295	1927	well	8	1	W	0	0	0	0	##	0	#	0	0	##
177	3296	1927	well	8	2	W	0	0	0	0	0	0	0	0	0	#
179	3297	1927	well	1	1	W	0	0	0	0	#	0	0	0	0	0
180	3297	1927	well	9	15	W	0	0	0	0	#	0	0	0	0	#
151	3028	2412	well	8	15	C	#	0	0	0	0	0	0	+	0	#
142	2867	2554	well	10	15	C,W	##	0	#	0	#	###	#	++	0	#
169	3269	2554	well	9	60	W	0	0	0	0	##	0	0	0	#	0
164	3213	2559	quarry pit	10	20	C,W	##	#	0	0	##	0	0	0	0	#
143	2872	2871	quarry pit	9	50	C,W	##	#	#	0	#	0	0	++	0	0
205	3643	3388	well	8	2	W	0	0	0	0	##	0	0	0	0	0
203	3641	3388	well	8	2	W, C	0	0	0	0	##	0	0	+	0	#

Sample No.	Cxt No.	Cut No.	Feature Type	Volume processed (L)	Flot Volume (ml)	Preservation	Cereals	Chaff	Charred Weed Seeds	Mineralised seeds	waterlogged seeds	Burnt Snails from flot	Small Bones	Charcoal	Waterlogged insects	Fish bone/ fish scale
201	3628	3470	well	8	20	C	##	0	0	#	0	0	##	++	0	#
202	3629	3470	well	8	2	W,C	0	0	0	0	##	0	#	+	0	#

Table 48: Environmental samples from Period 2 features containing waterlogged deposits

Period 3

Pits

- C.3.27 Thirteen pits were sampled, mainly from defined deposits that were seen during excavation as layers within pit fills (Table 49). Charred cereal grains are common in almost all of the samples and were abundant in many whereas mineralisation was rarely encountered. Sample 14, fill 471 of pit **473** produced a flot volume of 850ml comprised almost entirely of wheat grains. Occasional barley and oats grains, peas and beans were noted in the fraction scanned (20%). Weed seeds such as corncockle, cornflower, brassica and dandelion (*Lolium* sp.) occur rarely and are likely to be in the assemblage as they are of a similar size to the grains and could not be removed by sieving. A charred insect was also recovered. This sample could possibly represent the accidental burning of grain in an oven (possibly whilst drying) as there are numerous fragments of fired clay present, some of which have impressions of great fen sedge leaves. Sample 14, fill 577 of pit **574** produced a similar assemblage that also had evidence of nematode infection. Both samples contain charred great fen sedge leaves.
- C.3.28 Samples 63 (fill 1873) and sample 64 (fill 1875) were taken from pit **1881**. Both samples produced a rich mixed assemblage of burnt grain (predominantly bread wheat and rye) and peas with pod fragments included. Chaff of both rye and wheat are present and may represent a maslin crop in which both cereals are grown together. Weed seeds are mainly of cornflower.
- C.3.29 Sample 145, fill 2850 of pit **3002** contains a large assemblage of barley grains mixed with great fen sedge. There is no evidence of germination. Sample 196, fill 3506 of pit 3503 contains a mixed assemblage of oats, barley and wheat and has florets of both cultivated oats and common wild oat (*A. fatua*).

Sample No.	Cxt No.	Cut No.	Volume processed (L)	Flot Volume (ml)	Preservation	Cereals	Chaff	Legumes	Charred Weed Seeds	Burnt Snails from flot	Charcoal	Fish bone	Anguina	Cladium leaf
10	471	473	8	850	C	#####	0	#	#	0	+	0	0	#
14	577	574	10	320	C	#####	#	#	##	#	++	0	#	##
65	1771	1741	8	55	C,M	###	0	#	##	0	+	#	0	0
63	1873	1881	10	70	C,M	###	##	#	0	0	+++	#	0	#
64	1875	1881	10	200	C	###	##	###	##	0	+++	0	0	0

Sample No.	Cxt No.	Cut No.	Volume processed (L)	Flot Volume (ml)	Preservation	Cereals	Chaff	Legumes	Charred Weed Seeds	Burnt Snails from flot	Charcoal	Fish bone	Anguina	Cladium leaf
79	2162	2173	10	160	C	####	#	#	#	0	+++	#	0	0
85	2209	2208	10	30	C	##	0	#	0	0	++	0	0	0
86	2212	2211	10	45	C	##	0	0	#	0	++	#	0	0
99	2358	2355	8	70	C, M	####	#	#	#	0	0	#	0	0
128	2616	2612	9	35	C	##	#	0	0	0	+++	0	0	#
149	3080	2923	10	20	C	#	0	0	0	0	+	0	0	0
145	2850	3002	10	160	C	####	0	0	#	0	+++	#	0	##
192	3507	3499	10	30	C	###	0	0	#	0	+++	#	0	#
196	3506	3503	8	100	C	####	##	0	#	##	++	#	0	###

Table 49: Environmental samples from *Period 3 pits*

Layers

C.3.30 Samples taken from layers mainly contained just charcoal (Table 50). Both buried soil 859 (Sample 12, layer 860) and floor layer 1486 (Sample 42) are comprised of poorly preserved charred grain mixed with legumes and great fen sedge. Layer 2030 (Sample 73 within building 2061) is of note as it contains mineralised cysts. These unidentified objects often occur in samples associated with cess deposits, although not exclusively so. Attempts to identify them have failed although suggestions of tapeworm cysts and fungi have been proposed (Carruthers 1996).

Sample No.	Context No.	Cut No.	Volume processed (L)	Flot Volume (ml)	Preservation	Cereals	Chaff	Legumes	Charred Weed Seeds	Charcoal
11	415		8	50	C	##	0	0	#	+++
40	620		9	120	C	0	0	0	0	+++
66	620		0.2	10	C	0	0	0	0	+++
41	691		9	800	C	0	0	0	0	+++
12	860	859	8	50	C	###	#	#	#	++
26	1257		3	10	C	0	0	0	0	+
42	1486		2	25	C	##	0	##	#	+++
43	1512		1	1	C	0	0	0	0	+
74	1907	1906	8	110	C,M	#	#	0	0	+++
73	2030	2061	10	10	C	#	0	0	0	+

Table 50: Environmental samples taken from *Period 3 layers*

Wells 1456, 1577 and 2412

C.3.31 Well **1456** contained eleven deposits. The lowest two deposits were not sampled but the subsequent six were (Table 51). All of the samples contain charred plant remains and the lowest two were waterlogged. The lowest fill sample 2370 (Sample 98) contains

only sparse remains of charred cereal grains and occasional charred weed seeds along with waterlogged seeds of sedges. The fill above, 2369 (Sample 97) is most unusual in that it contains numerous matted hairs that resemble a felt-like fabric. Preservation is predominantly by waterlogging and there are numerous small trigonous sedge seeds present. There are mineralised remains of insects and a seed of goosefoot along with fish bones and scales. Additionally, charred wheat grains and sparse charcoal are also present. Fill 2249 (Sample 91) contains a moderate assemblage of charred barley and wheat grains with mixed mineralised remains of fly puparia, cysts and possible seeds. Fill 2248 (Sample 90) is charcoal-rich and contains barley, wheat and several legumes and dock seeds. Fill 2217 (Sample 87) is also charcoal-rich and contains mixed charred grains of wheat, barley and oats, great fen sedge and a charred seed-head of corncockle. The latest fill sampled is 2414 (Sample 84) and has the greatest archaeobotanical potential. It contains predominantly barley grains, occasional legumes, mineralised fig and grape/raisin seeds and a charred object that resembles a raisin.

- C.3.32 Neither of the two samples taken from well **1577** were waterlogged. Lower fill 1578 (Sample 45) contains only sparse charred remains but fill 1584 (Sample 46) contains abundant oat grains mixed with occasional wheat grains.
- C.3.33 Both samples from well **2412** contains charred and possibly waterlogged remains. Untransformed elderberry seeds are frequent in both samples along with poppy and dead-nettle seeds that are probably preserved by waterlogging unless the deposit has only recently dried out. Charred cereals and sedge seeds occur in small amounts.

Sample No.	Cxt No.	Cut No.	Volume processed (L)	Flot Volume (ml)	Preservation	Cereals	Chaff	Legumes	Charred Weed Seeds	Mineralised seeds	untransformed Seeds	waterlogged seeds	Burnt Snails from flot	Charcoal	Insects/Mineralised	Fish bone/fish scale
84	1457	1456	10	95	C	###	0	#	#	#	0	0	#	++	0	#
87	2217	1456	10	45	C	###	##	#	#	0	0	0	0	++	0	#
90	2248	1456	10	100	C	###	#	##	##	0	0	0	0	+++	0	#
91	2249	1456	10	35	C,M	###	#	#	#	#	#	#	0	+++	#	#
97	2369	1456	8	80	C,M,W	#	0	0	0	#	0	##	0	0	0	#
98	2370	1456	8	80	C,W	##	0	#	#	0	0	#	0	0	0	0
45	1578	1577	9	5	C	#	0	0	0	0	#	0	#	++	0	0
46	1584	1577	8	30	C	###	0	0	#	0	0	0	#	++	0	0
152	3029	2412	9	15	C	##	0	0	#	0	###	##	0	++	0	#
153	3031	2412	8	5	C,W	#	0	0	0	0	#	##	0	0	0	#

Table 51: *Samples taken from Period 2 and 3 wells*

Cess-pit 1424

- C.3.34 Thirteen of the thirty-one deposits in cess-pit **1424** were sampled (Table 52). The earliest deposit sampled was the sixth in the sequence 2345 (Sample 110) and contains

sparse charred remains but hairs are preserved. Fill 2343 (Sample 109) contains plant remains preserved by waterlogging, mineralisation and charring and includes wetland plants such as sedges and hemlock (*Conium maculatum*) along with charred cereals, waterlogged poppy and henbane seeds and mineralised black bindweed (*Fallopia convolvulus*) and also contains a fragment of twisted fibres, probably string. Fill 2341 (Sample 108) has a higher density of waterlogged seeds, mainly sedges and henbane, and occasional charred cereals and also contains hairs and waterlogged fly pupae.

C.3.35 Fill 2339 (Sample 107) contains sparse remains preserved by waterlogging (sedges and henbane seeds), mineralisation (nettle seed) and carbonisation (a charred oat pedicel and charred grains). Fill 2336 (Sample 106) contains charred material only and is comprised of numerous leaf fragments of great fen sedge that includes a few nutlets in addition to a moderate assemblage of charred grains of wheat and barley and charred peas. Fill 2333 (Sample 105) contains numerous barley grains (many of which have sprouted) that are charred but also have some waterlogged preservation. Both charred and waterlogged seeds of sedge are also present and there are reed stems that appear to be partially carbonised. Fill 2331 (Sample 104) is a large assemblage of charred stems (either cereal or reeds) and charred cereals. Barley predominates and some well preserved chaff elements suggest a 6-row variety. Great fen sedge leaf fragments are abundant and charred seeds are predominantly of cornflower. Fill 2149 (Sample 78) contains a diverse assemblage of charred plant remains. Oat, barley, wheat and rye are present with chaff elements and a ear-cockle. There are several charred weed seed varieties including black medick (*Medicago lupulina*), corncockle, cornflower. Charred seeds of wetland plants include sedges, black bog-rush (*Schoenus nigricans*) and there are also tiny charred flowers preserved. Straw fragments are common as is great fen sedge leaflets. Fill 2148 (Sample 77) contains an unusual assemblage of charred and waterlogged material. There are a few charred cereal grains and great fen sedge leaf fragments, waterlogged seeds of stinging nettle, sedges, spike rush (*Eleocharis palustris*) docks (*Rumex* sp.) and henbane. There are also fragments of what has been tentatively identified as flax (*Linum usitatissimum*) seed cases. Mineralised seeds of fig, nettle and knawel (*Scleranthus annuus*) are also present. Fill 2117 (Sample 80) is predominantly waterlogged and contains sedges, henbane and dead-nettle seeds but is also rich in silicates. Fill 1888 (Sample 72) produced a small 5ml flot containing waterlogged moss, henbane, water-crowfoot (*Ranunculus* subgenus *batrachium*) and sedge seeds. Seeds of elderberry and bramble (*Rubus* sp.) are untransformed and may also be waterlogged. Charcoal is present but there are no charred cereal grains. Fill 1429 (Sample 35) contains a few untransformed seeds of henbane and dead-nettle and the last fill sampled, 1426 (Sample 34) contains vitrified charcoal.

Sample No.	Cxt No.	Fill sequence	Volume processed (L)	Flot Volume (ml)	Preservation	Cereals	Chaff	Charred Weed Seeds	Mineralised seeds	Seeds untransformed	waterlogged seeds	Burnt Snails from flot	Small Bones	Charcoal <2mm	Mineralised insects	Waterlogged insects	Fish bone/fish scale	wetland seeds	Cladium leaf
34	1426	30	6	200	C,M	#	0	0	0	o	0	0	0	++++	##	0	0	0	0
35	1429	27	9	8	C	0	0	#	0	##	0	0	#	++	0	0	#	0	0
72	1888	26	10	5	W	0	0	0	0	0	#	0	##	+++	#	0	0	#	0
80	2117	25	10	50	C,M, W	##	#	#	#	0	##	0	0	+++	0	0	#	##w #	0

Sample No.	Cxt No.	Fill sequence	Volume processed (L)	Flot Volume (ml)	Preservation	Cereals	Chaff	Charred Weed Seeds	Mineralised seeds	Seedsuntransformed	waterlogged seeds	Burnt Snails from flot	Small Bones	Charcoal <2mm	Mineralised insects	Waterlogged insects	Fish bone/fish scale	wetland seeds	Cladium leaf
77	2148	22	8	110	C	##	##	##	0	0	0	##	0	++	0	0	#	#	##
78	2149	21	8	30	C,W	#	0	0	0	0	##	0	#	0	0	0	#	0	0
104	2331	20	8	100	C	###	###	##	0	0	0	##	0	+++	0	0	#	0	###
105	2333	18	5	30	C&W	###	#	#	0	#	#	0	0	++	0	#	#	#	0
106	2336	15	10	250	C	###	0	0	0	0	0	0	0	+++	0	0	#	#	###
107	2339	12	10	30	C,W	##	0	0	0	0	#	0	0	+	0	##	#	##	0
108	2341	10	5	30	C,W, M	##	#	#	#	#	#	0	#	++	0	0	#	##	0
109	2343	8	2	10	C,W, M	##	#	#	#	#	#	#	0	+++	0	0	#	0	0
110	2345	6	8	1	C	#	0	#	0	0	0	0	0	+	0	0	0	#	0

Table 52: Environmental samples from cess-pit **1424**

Discussion

- C.3.36 The environmental samples from from Harvest Way have produced a rich plant assemblages that are able to assist with interpretation of the features sampled. Plant remains are predominantly preserved by carbonisation and there are also some deposits that have remained wet and have retained waterlogged plant and insect remains. Mineralisation occurs in several samples, mainly in the form of mineralised arthropods but also of seeds, including some food types that are less likely to be preserved by other means.
- C.3.37 All three methods of preservation are differential; carbonization only occurs under certain conditions when plant material is incompletely burnt and reduced to pure carbon. Any surviving charred remains will only represent a small proportion of the original material being burnt. Mineralisation occurs when the organic component of a seed or fruit is replaced by minerals such as calcium phosphate. This process will also only occur under certain conditions, most commonly when mixed with cess. (Hall, 2000) and only certain types of plant remains commonly become mineralised which is why it is relatively common to recover seeds of grape, fig and members of the cherry/sloe family which are relatively tough as opposed to vegetable seeds which rarely preserve by this method. Preservation of waterlogged remains may be differential; a fluctuating water table will result in the more robust, woody plants preserving whereas more fragile material such as stems and leaves will decay (Green 1982).
- C.3.38 All four of the main cereal types are represented but cereal assemblages within individual deposits generally include more than one cereal type which could suggest either a mixing of material prior to deposition, several depositional events within the same deposit or mixed crops. During the medieval period some crops were occasionally grown together; wheat and rye were cultivated as a mixed crop known as 'maslin' and would have been sown in the autumn.
- C.3.39 Bread wheat is the most common cereal grain recovered and is most likely to have been used for milling to produce flour to make bread. Bread would have been baked in ovens with semi-clean grain being spread over the oven shelves to prevent the bread sticking. This would indeed produce substantial quantities of burnt grain that would have been raked out and discarded in contemporary rubbish pits. Wheat would have been the preferred grain for making bread although the cheaper rye bread may have

been more common among the peasant class. Barley was the preferred malting grain of this period and there is evidence in several samples that the barley has germinated which is likely to be evidence of brewing activities, fitting in well with the probability that some of the buildings were inns. Oats were most probably a fodder crop and many of the charred assemblages are likely to have derived from the burning of stable waste.

- C.3.40 The charred seed assemblage is consistent with what one would generally expect to find growing amongst cereal crops. They are most likely derived from weed plants that have been harvested along with the crop, as reaping in the medieval period usually involved cereals being cut at ground level with sickles (Jones 1988).
- C.3.41 The samples from each of the hearths have produced substantial quantities of burnt grains and weed seeds along with large quantities of Great Fen sedge which was one of the major vegetation types of the Fen and was commonly used for thatching and as fuel (Rowell 1986). Evidence of charred remains of this wetland plant species was found at both Newmarket Road (CAMNMR14) and Coldham's Lane (CAMCOL12) but was notably absent from the Eastern Gate Hotel site (de Vareilles 2013).
- C.3.42 Water was obtained from wells and would also presumably have been collected as rainwater. The wells would have had to be kept clean and are likely to have been covered. Primary fills containing waterlogged plants most likely reflect plants that were growing in the vicinity of the well whose seeds have blown in such as nettles and thistles. The pollen spectrum (Smith, this report) adds to the list of taxa associated with the site. Once the original function of the wells was discontinued (either because they became contaminated or dried out), they became a convenient depository for refuse. The numerous deposits in all of the Harvest Way wells, particularly when seen as lenses of different materials, indicates that this secondary use took place over a period of time and that they were used for the disposal of all manner of domestic, industrial and latrine waste. Organic waste would have contracted in volume as it decayed, over time forming lenses of matted material. The nature of the waste deposited would have attracted flies and vermin and would most definitely have been very noisome. The smell could be alleviated somewhat by adding sealing layer of charcoal and/or lime. By the post-medieval period the lack of mineralisation in pits suggests that cess was disposed of in specific features by this phase and there is at least one feature that appears to have been purposely dug as a cess-pit (**1424**). cess-pits were often placed under cellar floors or in the yards of properties, often along the neighbouring boundary. Pit **1424** is unusual in the there is a void at the base which would suggest the upper deposits would be free-draining and yet there are several waterlogged deposits interspersed with charred deposits.

Conclusion

- C.3.43 The medieval household economy would have included brewing, baking, dairying and the keeping of small-animal livestock with products being sold at local markets or to passing trade. The extensive sampling undertaken at this site has provided tantalising evidence of many of these activities. Later, in the post-medieval period, there is evidence at Harvest Way of inns which would have operated a similar economy but on a larger scale. Most of the evidence is in the form of domestic, culinary, industrial and animal waste would have been a constant problem with regards to disposal. Whilst much of the waste would have been removed from the site, particularly in the post-medieval period through the employ of 'gong farmers', there is substantial evidence that at least some of this waste was disposed of by burial on site. Backyard digging for pits, including purpose-dug cess-pits, would have resulted in upcast that may have been dumped in other open features.

- C.3.44 Environmental samples have shown significant archaeobotanical potential for further study.
- C.3.45 Large quantities of cereals raise the question of how much was actually discarded, bearing in mind only a small proportion of what was burnt would actually survive as most of the material would have been reduced to ash and only those grains that burn in a certain area of a fire would fully carbonise. Straw is likely to be under-represented as it is less likely to carbonise (Boardman and Jones 1991) but it is likely to have been a major component of the original material.
- C.3.46 The results of environmental sampling at this site are similar to samples from Cambridge Regional College site, Brunswick Road (Atkins 2011), Harvest Way, Newmarket Road and Eastern Gate Hotel although on a larger scale and with greater potential for further analysis.

Recommendations for further work

- C.3.47 Further study of selected assemblages is recommended with the aims of studying the relationship of the site with the local town and markets and its position on a major trade route into Cambridge in accordance with the the revised frameworks for the East of England (Medlycott 2011, 70-78). This involves the production and processing of food and the nature of the disposal of human, animal and industrial waste. Further work is recommended to investigate the relative importance of each cereal type with regard to it's primary use. Oats are considered to be a fodder crop whereas wheat and rye were used to make bread and barley was usually used for brewing. There are several samples that contain significant amounts of cereal chaff that contrast to the findings of the excavations from the adjacent sites. Further study of these assemblages may determine whether this implies that a higher level of cereal processing is taking place on this site or whether is relates to the stabling of animals. The cess-pit and well deposits in particular have excellent archaeobotanical potential as they are well-sealed and relate to specific occupation phases. Economic plants other than cereals and legumes occur rarely and only in a mineralised state. This suggests that most of the cess deposits have arisen through the burial of animal dung rather than human latrine waste although further study may refute this interpretation. The recovery of small amounts of imported fruits such as fig and grape are consistent with the mineralised remains found from contemporary deposits at the adjacent sites and are usually found on urban and sub-urban sites in this region rather than rural sites (de Vareilles, *ibid*). Further processing of samples containing mineralised fruit seeds is recommended in order to maximise recovery.
- C.3.48 The presence of charred ear-cockles offers a rare opportunity to study what would have been a prevalent crop disease that is rarely encountered (or recognised) in the archaeobotanical record.

Sample No.	Ctxt No.	Cut No.	Period	Feature Type	Additional processing?	reason for analysis
182	3372	3370	2	oven		Cereal analysis – combine with 185
185	3372	3370	2	oven		Cereal analysis – combine with 182
92	2288	2286	2	pit	yes	cereal and legumes analysis, Anguina infection, grape
144	2949	2953	2	pit	yes	cereal analysis, Anguina infection
155	3083	3081	2	pit	yes	crop grains and seeds analysis

Sample No.	Ctxt No.	Cut No.	Period	Feature Type	Additional processing?	reason for analysis
178	3277	3280	2	pit	yes	Largest assemblage of mineralised seeds
197	3463	3451	2	Pit		Dominance of rye
167	3294	1927	2	well	1L wet-sieve	waterlogged seeds, lime deposits
166	3292	1927	2	well	2L wet-sieve	waterlogged seeds
10	471	473	3	pit		cereal analysis, Anguina infection
14	577	574	3	pit		Specific deposit of wheat – weed seed assemblage
64	1875	1881	3	pit		Possible maslin crop with pea pods
196	3506	3503	3	Pit		Predominance of oats – fodder crop?
84	1457	1456	3	well	yes	Mineralised grape and fig, predominance of barley
104	2331	1424	3	well	yes	evidence of germination of barley. Possible peat
105	2333	1424	3	well	Yes + 1L wet-sieve	Differential preservation – charred and waterlogged
77	2148	1424	3	well	1L wet-sieve	Flax
78	2149	1424	3	well	yes	Anguina infestation, charred flowers

Table 53: *Environmental samples recommended for further study*

C.4 Pollen remains

By Mairead Rutherford

Introduction

- C.4.1 Six sub- samples taken through the fills of two silted up wells and one cess-pit of medieval – post-medieval age.

Quantification

- C.4.2 Volumetric samples were taken from six sub-samples and one tablet containing a known number of *Lycopodium* spores was added so that pollen concentrations could be calculated (Stockmarr 1971). The samples were prepared using a standard chemical procedure (method B of Berglund and Ralska-Jasiewiczowa 1986), using HCl, NaOH, sieving, HF, and Erdtman's acetolysis, to remove carbonates, humic acids, particles > 170 microns, silicates, and cellulose, respectively. The samples were then stained with safranin, dehydrated in tertiary butyl alcohol, and the residues mounted in 2000cs silicone oil. Slides were examined at a magnification of 400x by ten equally-spaced traverses across at least two slides to reduce the possible effects of differential dispersal on the slides (Brooks and Thomas 1967) or at least until 100 total land pollen grains were counted. Pollen identification was made following the keys of Moore *et al* (1991), Faegri and Iversen (1989), and a small modern reference collection. Plant nomenclature follows Stace (2010). The preservation of the pollen was noted and an assessment was made of the potential for further analysis. Fungal spore identification and interpretation followed van Geel (1978) and van Geel and Aptroot (2006).

Assessment

- C.4.3 Six pollen sub-samples from two wells and one cess-pit were assessed, as detailed in Table 54 below. The monolith sub-samples from the cess-pit were from dark brown organic silt clay (**2118**) and dark grey clay and sand (**2119**) lithologies.

Feature	Sample and context numbers	Sub-sampled for palynology (depth m, where relevant)
Well 2554	169 (3269)	bulk
Well 1927	172 (3294)	bulk
Well 1927	174 (3295)	bulk
Well 1927	176 (3296)	bulk
Pit 1424	76 (2118)	0.09-0.10
Pit 1424	76 (2119)	0.15-0.16

Table 54: *Pollen Sub-sampling*

Results

- C.4.4 Five of the assessed sub-samples contained pollen, but only one sample (76, **2118**) at 0.09-0.10m yielded a rich assemblage (Table 55).

Well 2554, 169 (3269)

- C.4.5 Only five pollen grains were recorded from this sample, comprising a single cereal-type grain, a single grass (Poaceae) pollen and three grains of dandelion-type (*Taraxacum*-type). The dimensions of cereal-type pollen overlap with those of wild grasses such as sweet-grasses (*Glyceria*), (Andersen 1979), several species of which live in damp or wet areas (Stace 2010). If the grain represents a cultivated cereal-type rather than wild grass, then it may have derived from possible nearby arable cultivation or from materials such as straw, human faeces or animal dung incorporated into the well sediments. Microcharcoal particles are present, perhaps suggesting that the products of burning (for example, hearth debris) may have been cast in the well.

Well 1927, 172 (3294)

- C.4.6 Recovery of pollen is poor in this sub-sample, with a total count of only 26 grains. Of these, pollen of grasses is most common, followed by pollen of cereal-type, possibly suggesting derivation from an arable source or from materials incorporated into the well sediments (e.g. straw, animal dung, human faeces). In addition, some pollen of the goosefoot family (Chenopodiaceae, now Amaranthaceae (Stace 2010), a large group including plants such as fat-hen, good-king-henry and many-seeded goosefoot) and commonly associated with disturbed and waste ground (Stace 2010), and a few pollen grains of Asteraceae (including plants such as daisies and thistles), are recorded. A single pollen grain of willow (*Salix*), a shrub that prefers damp areas, is present. Of interest also is the occurrence of specimens of the fresh-water alga *Pediastrum* (HdV-760), suggesting local wetness and not unexpected within a former well. The fungal spores assemblage comprises commonly occurring *Chaetomium* (HdV-7A) and a single example of *Cercophora* (HdV-112), both of which are known to be coprophilic but *Chaetomium* (HdV-7A) also hosts on a variety of substrates associated with settlement, for example, damp straw, cloths, leather, fibres (van Geel and Aptroot, 2006). There is a single occurrence of *Trichuris* (HdV-531), eggs of the intestinal parasite whipworm, associated with human faeces but which can also infect other animals such as pigs or

mice. Microcharcoal is present, which may be indicative of burning activity, the products of which were dumped in the well.

Well 1927, 174 (3295)

- C.4.7 Recovery of pollen is also poor in this sub-sample, with records for pollen of grasses and rare occurrences of sedges (Cyperaceae), willow, pink family (Caryophyllaceae, a large group including stitchworts, mouse-ears and chickweed) and cereal-type pollen. Pollen of the aquatic plant bulrush (*Typha latifolia*) supports the interpretation of the feature as a well. Fungal spores are limited to isolated occurrences of *Chaetomium* (HdV-7A) and *Sordaria* (HdV-55A/B). *Chaetomium* (HdV-7A) is known to be cellulose decomposing and may occur on plant remains, fibre and dung. In archaeological contexts, it may occur in settlements where dung, damp straw, cloths or other suitable substrates may have been present (van Geel and Aptroot 2006). Of interest is the occurrence of several species of *Trichuris* (HdV-531), eggs of the intestinal parasite whipworm, associated with human faeces but which can also infect other animals such as pigs or mice. Microcharcoal is commonly present, suggesting that it may have been deposited as waste material in the well.

Well 1927, 176 (3296)

- C.4.8 This sub-sample was barren of palynomorphs.

Pit 1424, 76 (2118)

- C.4.9 0.09-0.10m A rich pollen assemblage is dominated by herb pollen, including cereal-type, and pollen of grasses, cornflower (*Centaurea cyanus*), common knapweed (*C.nigra*), pollen of the cabbage family (Brassicaceae, a large group including plants such as mustards, rockets and cabbages), dandelion-type, thistles (*Cirsium*), docks/sorrels (*Rumex*), ribwort plantain (*Plantago lanceolata*), mugworts (*Artemisia*) and pollen of mints (*Mentha*-type). The fungal spore assemblage comprises rare occurrences of *Chaetomium* (HdV-7A), *Sporomiella* (HdV-113) and *Glomus* (HdV-207). The pollen assemblage may infer an open landscape, potentially with fields of grasses and/or crops as well as weeds of waste and rough ground (for example, thistles, knapweeds and dandelions). However, cereal-type pollen and other potential food stuffs (suggested, for example, from pollen of plants of the cabbage and mints families), in the sediments of this cess-pit, are likely to have derived from materials such as straw, human faces or animal dung incorporated into the pit sediments. Microcharcoal is present, suggesting that it may have been deposited as waste material in the well.

Pit 1424, 76 (2119)

- C.4.10 0.15-0.16m A sparse assemblage contains pollen of sedges, grasses, cabbage-types, cornflower, ribwort plantain, mugworts, daisy-type and dandelion-type. Pollen of sedges and grasses and herbs such as daisy-type and dandelion-type may represent a variety of habitats, for example, damp grassy areas and rough or waste ground and could have accumulated in the cess-pit as products, for example, of animal fodder. *Chaetomium* (HdV-7A) fungal spores are commonly present as well as fewer *Sordaria* (HdV-55A/B) spores. *Chaetomium* (HdV-7A) is known to be cellulose decomposing and may occur on plant remains, fibre and dung. In archaeological contexts, it may occur in settlements where dung, damp straw, cloths or other suitable substrates may have been present (van Geel and Aptroot 2006). *Sordaria* (HdV-55A/B) taxa represent coprophilous fungal spores and will have been derived from animal dung. Small amounts of microcharcoal were found in this context.

Potential

- C.4.11 Although pollen was present in all but one of the sub-samples, only one of the sub-samples contained sufficient pollen to warrant analysis. More than half of the pollen counted from that sub-sample (cess-pit **1424, 76 (2118)**) contained grass pollen with roughly a fifth comprising cereal-type pollen. The assemblage does fit with the interpretation of the feature as a cess-pit, assuming that the pollen derived from materials such as straw, human faces or animal dung, which became incorporated into the pit sediments. It is therefore suggested that analysis of this sub-sample is unlikely to provide any additional information, other than perhaps a greater abundance, and possible greater diversity of herbs. Consequently, no further pollen work is suggested.

Sample		169	172	174	176	76	76
Context		3269	3294	3295	3296	2118	2119
Preservation		Poor	Mixed	Mixed	Barren	Mixed	Mixed
Potential		No	No	No	No	Yes	No
Depth (m)		bulk	bulk	bulk	bulk	0.09-0.10	0.15-0.16
Trees/Shrubs							
Salix	Willow		1	1			
Crops							
Cereal	Cereal-type	1	6	1		17	
Herbs							
Amaranthaceae	Goosefoot family		3				
Apiaceae	Carrot family					2	1
Artemisia	Mugwort					1	1
Asteraceae	Daisy family		2			2	2
Brassicaceae	Cabbage family		1			4	3
Caryophyllaceae	Pink family			1		1	
Centaurea cyanus	Cornflower					7	2
Centaurea nigra	Common Knapweed					1	
Cirsium-type	Thistles					1	
Cyperaceae	Sedges		1	2		3	5
Fabaceae	Pea family			1		1	1
Mentha-type	Mints					1	
Plantago lanceolata	Ribwort plantain					2	1
Poaceae	Grass family	1	9	11		54	5
Rumex	Docks/Sorrels					1	
Ranunculaceae	Buttercup family					1	
Succisa pratensis	Devil's Bit Scabious					1	
Taraxacum-type	Dandelion-type	3				3	1
Vicia-type	Vetches			1			
Unknown herbs			3			2	
	Total land pollen	5	25	18	0	105	22
	Number of traverses	10	10	10	10	5	10
<i>Lycopodium</i> spores	Exotic	33	29	19	14	13	13
Ferns							
Polypodium	Polypodies			1			
Pteropsida (monoete)	Fern spores (monoete)		1	1		1	
Equisetum	Horsetails						1
Aquatics							
Typha latifolia	Bulrushes			1			
Algae							
Pediastrum spp.	Freshwater alga		3				

Sample	169	172	174	176	76	76
Other						
Broken grains			1			1
Concealed grains	1		2		11	3
Crumpled grains			2		5	
Microscopic charcoal	60	70	270		140	36
Fungal spores/NPP						
<i>Chaetomium</i> HdV-7A		15	4		3	15
<i>Cercophora</i> HdV-112		1				
Copepoda HdV-28					1	
Glomus HdV-207					1	
<i>Sordaria</i> HdV-55A/B			1			2
HdV-121			2			
Sporomiella HdV-113					2	
Fungal spores (undiff.)		4	2			3
<i>Trichuris</i> HdV-531		1	4			

Table 55: *Pollen Assessment*

Note: NPP = non-pollen palynomorphs

C.5 Insect Remains

By Geoff Hill

Background

- C.5.1 Two samples of pre-processed mineralised fly puparia and one bulk, waterlogged sample were submitted for insect analysis.
- C.5.2 The mineralised fly puparia in sample 75, were retrieved from the base of a ceramic vessel (2124) placed in pit 2125. Mineralised material was also recovered from Sample 44 from pit 1558. The waterlogged sample 166 came from one of the upper fills of well 1927, which contained abundant waterlogged seeds of a primarily ruderal nature (i.e. *Chenopodiaceae*, *Caryophyllaceae*, *Papaveraceae*, and *Urtica urens* (L.)), as well as some charred cereals (Fosberry see Appendix C.3 above).
- C.5.3 The environmental report highlighted the presence of significant amounts of cereal chaff, across the excavated fills, in contrast to the results from adjacent sites - which posed the question as to whether cereal processing, or, the stabling of animals, occurred within this settlement (Fosberry see Appendix C.3 above).

Laboratory methods

- C.5.4 The water logged single bulk sample (166) was processed following the standard paraffin flotation methods outlined in Kenward *et al.* (1980). Both the mineralised and waterlogged insect remains were sorted and identified under a low-power binocular microscope at magnifications between x15 – x45. Where achievable the insect remains were identified to species level by direct comparison to specimens in the Gorham and Girling insect collections, housed in the Department of Classics, Ancient History and

Archaeology, University of Birmingham. The nomenclature and taxonomic order presented follows the BugsCEP database (Buckland 2006) which uses Lucht (1987), revised Böhme (2005), and Gustafsson (2005).

Results

- C.5.5 Details of analysed samples and associated features and dates are presented in Table 56. The majority of the insect remains identified from sample 166 are beetles (Coleoptera). The two mineralised samples contained only fly puparia (Diptera) only. A list of both the Coleoptera and Diptera recovered is presented in Table 57. The nomenclature for Coleoptera (beetles) follows that of Lucht (1987) and that for the Diptera follows that of Smith (1989). The list of host and associated plants (Table 57) for the phytophagous species of beetle that were recovered are predominantly derived from Koch (1989; 1992), but include other sources found in BugsCEP database (Buckland, 2006) where referenced. The plant taxonomy follows that of Stace (2010).
- C.5.6 In order to aid interpretation, where possible, Coleopteran taxa have been assigned to ecological groupings via the ecological data available in BugsCEP (Buckland, 2006). This grouping of Coleoptera follows a simplified version of the scheme suggested by Robinson (1981; 1983) with the addition of Kenward's (Hall and Kenward 1990) 'house fauna'. This 'house fauna' comprises of a suite of beetles with a particular affinity to human habitation and settlement, making home in the dry timbers or roofing and bedding materials of buildings. The affiliation of each beetle species to a particular ecological grouping is indicated in the second column of Table 57. The meaning of each ecological code is explained in the key at the base of Table 57. The occurrence of each of the ecological grouping is expressed as a percentage in Table 58 and in Figure 16 and 2 for the samples. The pasture/grassland, dung, tree and 'house fauna' taxa are calculated as percentages of the number of terrestrial species, as opposed to the whole fauna, where uncoded, true aquatic and waterside taxa are included.
- C.5.7 276 individuals were recovered in total, from 64 taxa, and, despite the bulk sample having dried out, the recovery and preservation of insects remained excellent.

Discussion

Mineralised Remains – Samples 44 & 75

- C.5.8 As suggested in the initial archaeobotanical results (see Fosberry Appendix C.4), the fly puparia recovered clearly suggest that these pits contained cess. Present in both these samples were large numbers of the 'seaweed' fly, *Thoracochaeta zosterae*. Although, today, this species is primarily found on the seashore among washed up seaweed, it is commonly found in archaeological cesspits (Belshaw 1989; Skidmore 1999; Smith 2013). Within its lifecycle, unlike its moist, salt-loving larvae, the puparia of *T. zosterae* require a dry medium to allow development into the adult fly (Belshaw 1989; Smith 2013). It has been suggested that as the cess dries out, perhaps due to seasonal change, *T. zosterae* would then pupate. The puparia recovered here, however, were all of the 1st or 2nd instar stage, that is the earliest stages of development, only a few days old, suggesting that these, dry, cess deposits had not been exposed for a long period of time, before being 'limed'. 'Liming' has been found to be a common occurrence in archaeological cess-pits and it is presumed that this activity can lead to mineralisation of materials in the archaeological record (Skidmore 1999; McCobb et al. 2004; Smith 2013). Alongside *T. zosterae*, a number of specimens each of *Fannia* spp. and *Calliphora* spp. flies were also recovered. These taxa are also common in archaeological cess-pits (Smith 2013).

Well deposit, Sample 166

Waterside and Aquatic Fauna

- C.5.9 Although this feature, and deposit, was waterlogged, the beetle assemblage contained no aquatic fauna, and very few (6%) waterside taxa. These few species of a waterside origin (*Bembidion aeneum* and *Platystethus nitens*) while possibly accidental inclusions, are likely to come from the damp ground around the well, since both are associated with wet mud near water sides (Duff 2012; Lott 2009).

Terrestrial Fauna

- C.5.10 The majority of the terrestrial Coleoptera belong to the 'house fauna' group (50%, Table 58; Fig. 16), and include *Cryptophagus* spp., *Atomaria* spp., *Latridius* spp., *Dienerella ruficollis*, *Aglenus brunneus*, *Mycetaea subterranea*, *Anobium punctatum* and *Ptinus fur*. These are typical species of moulding domestic, stable or barn environments in settlement where there is a build-up of loose organic matter and waste or exposed structural timbers. One species of the 'house fauna' the 'spider beetle', *Tipnus unicolor*, was present in 'superabundant' proportions (i.e. > 10% of the total assemblage, Kenward, 1988), and is associated with farm buildings, such as barns, stables and coops, where it breeds within hay and straw waste on damp floors (Palm, 1959; Koch 1971, 1989; Harde 1984), it has also been consistently recovered from thatch roofs (Smith 1996; Smith et al. 1999, 2005). These beetles also form part of a wider set of insects that have been associated with stabling material in the archaeological record (Kenward et al. 1997).
- C.5.11 Also recovered were a significant proportion of dung beetles principally the Scarabids, (Ecological grouping 'df' - 11%, Table 58; Fig. 16) - *Oxyomus sylvestris*, *Aphodius subterraneus*, *A. sticticus*, *A. sphacelatus* and *A. granarius*. Most of these species are typically associated with cattle and horse dung (Jessop, 1986) however, recent work by Carrot and Kenward (2001) has indicated that several of these species may well have bread in settlement material in the past.
- C.5.12 The second largest group of fauna, the 'decomposers' (rt. 18%), principally the Staphylinids, are typical of the dung and/or domestic/stabling waste. Of particular note are a number of synanthropes which belong to the 'rt' ecological grouping, such as *Gyrohypnus fracticornis*, *Ptomaphagous medius*, and the *Anotylus* spp., typically found in anthropogenic assemblages from farm buildings/domestic waste.
- C.5.13 The open ground/pasture (p. 16%) fauna are also numerous, and species such as *Ophonus ruficollis*, *Harpalus affinis* and *Helophorus nubilus* are typical of arable land, with *H. nubilus* a known pest of *Triticum* (wheat) (Duff 2012). The other beetles from this group, notably the Curculionidae, *Brachypterus urticae* and *Gastrophysa viridula*, are suggestive of a number of ruderal weeds such as *Rumex* spp. (dock), *Malva* spp. (mallow), *Urtica* spp. (nettle) and *Lotus corniculatus* (L.) (common birds foot trefoil). These insects may have been amongst the various materials brought onto site, but, more probably grew within the disturbed grounds of the settlement itself.
- C.5.14 A single individual of *Sitophilus granarius*, the granary weevil was recovered. This species is considered one of the more destructive beetle pests found in granaries particularly in the early stages of grain spoilage, and have been present on the British Isles since the Roman occupation (Smith & Kenward 2011).

Conclusion

- C.5.15 The Coleopteran assemblage from an upper fill of well 1927 suggests that a range of settlement materials and waste was deposited into this feature, presumably as it was in

filled at the end of its productive life. Although several aspects of the insect fauna associated with stabling waste are absent (i.e. Kenward and Hall 1997) it is entirely possible that some of this may have been stabling material. The cereal chaff found amongst the plant remains may also have a similar origin since it can be a common component of stabling waste.

- C.5.16 The mineralised remains of fly puparia found in pits **2125** and **1558** clearly indicate that these features were cess-pits.
- C.5.17 Any publication should include a summary of these results, no further work is recommended.

Sample	Context	Weight (Kg)	Volume (L.)	Associated Feature	Period
166	3292	9	8	Well (1927)	2
44	1558	n/a	n/a	Pit (1558)	2
75	2124	n/a	0.8	Ceramic Vessel (2124) Pit (2125)	2

Table 56: Details of samples for archaeoentomological analysis

Context		3292	1558	1558	
Sample		166	44	75	
DIPTERA					
<i>Fannia</i> spp.			2		
<i>Thoracochaeta zosteræ</i> (Haliday)			32	78	1 st & 2 nd instars
<i>Calliphora</i> spp.				2	
COLEOPTERA	Eco Code				Associated plants / pests
CARABIDAE					
<i>Notiophilus palustris</i> (Duft.)		1			
<i>Bembidion</i> (Ocys) <i>quinquestriatum</i> (Gyll.)		3			
<i>Bembidion aeneum</i> (Germ.)	ws	1			
<i>Bembidion</i> sp.		1			
<i>Ophonus rufibarbis</i> (F.)	p	1			
<i>Harpalus affinis</i> (Schrank)	p	1			
<i>Harpalus</i> sp.		1			
<i>Pterostichus</i> sp.		1			
<i>Anchomenus dorsalis</i> (Pont.)		1			
HYDRAENIDAE					
<i>Helophorus nubilus</i> (F.)	p	2			<i>Triticum</i> (wheat)
HYDROPHILIDAE					
<i>Megasternum obscurum</i> (Marsham)	rt	1			
CATOPIDAE					
<i>Ptomaphagus medius</i> (Rey)	rt	1			

	Context	3292	1558	1558	
STAPHYLINIDAE					
<i>Omalius</i> spp.	rt	2			
<i>Lesteva</i> spp.	ws	5			
<i>Aploderus ?caelatus</i> (Grav.)	df	1			
<i>Anotylus insecatus</i> (Grav.)	rt	4			
<i>Anotylus rugosus</i> (F.)	rt	1			
<i>Anotylus sculpturatus</i> (Grav.)	rt	4			
<i>Platystethus arenarius</i> (Geoff.)	df	2			
<i>Platystethus nitens</i> (Sahl.)	ws	1			
<i>Stenus</i> spp.		3			
<i>Gyrophypnus fracticornis</i> (Müll.)	rt	3			
<i>Megalinus glabratus</i> (Grav.)	rt	2			
<i>Xantholinus linearis</i> (Ol.)	rt	3			
<i>Philonthus</i> sp.		1			
<i>Tachinus</i> spp.		5			
<i>Tachinus rufipes</i> (L.)		2			
Aleocharinae indet.		2			
ELATERIDAE					
Elateridae indet.		1			
<i>Adrastus pallens</i> (F.)		1			
NITIDULIDAE					
<i>Brachypterus urticae</i> (F.)	p	1			<i>Urtica dioica</i> (L.) Nettle
CRYPTOPHAGIDAE					
<i>Cryptophagus</i> spp.	h	11			
<i>Atomaria</i> spp.	h	2			
LATRIDIIDAE					
<i>Stilbus testaceus</i> (Panz.)	p	3			
<i>Latridius</i> spp.	h	8			
<i>Dienerella ruficollis</i> (Marsham)	h	2			
<i>Corticaria</i> spp.	rt	2			
COLYDIIDAE					
<i>Aglenus brunneus</i> (Gyll.)	h	2			
ENDOMYCHIDAE					
<i>Mycetaea subterranea</i> (Marsham)	h	1			
COCCINELIDAE					
Coccinellidae indet.		1			
ANOBIIDAE					
<i>Anobium punctatum</i> (Deg.)	l	4			
PTINIDAE					
<i>Tipnus unicolor</i> (Pill. & Mitt.)	h	28			
<i>Ptinus fur</i> (L.)	h	8			
ANTHICIDAE					
<i>Anthicus antherinus</i> (L.)		1			
SCARABAEIDAE					
<i>Oxyomus sylvestris</i> (Scop.)	df	4			
<i>Aphodius subterraneus</i> (L.)	df	1			
<i>Aphodius sticticus</i> (Panz.)	df	2			
<i>Aphodius sphacelatus</i> (Panz.)	df	3			
<i>Aphodius granarius</i> (L.)	df	1			

	Context	3292	1558	1558	
CHRYSOMELIDAE					
<i>Gastrophysa viridula</i> (Deg.)	p	1			<i>Rumex</i> (Dock)
<i>Phyllotreta</i> sp.	p	1			
CURCULIONIDAE					
<i>Apion frumentarium</i> (L.)	p	1			<i>Rumex</i> (Dock)
<i>Apion</i> sp.	p	1			
<i>Aspidapion aeneum</i> (F.)	p	3			<i>Malva</i> (mallow)
<i>Sitona macularius</i> (Marsham)	p	5			Papilionaceae
<i>Sitona waterhousei</i> (Walton)	p	1			<i>Lotus corniculatus</i> (L.) (birds foot trefoil)
<i>Curculio</i> sp.	l	1			
<i>Sitophilus granarius</i> (L.)	g	1			Stored grain pest
<i>Limnobaris t-album</i> (L.)	ws	1			Cyperaceae
<i>Ceutorhynchus contractus</i> (Marsham)	p	2			
<i>Ceutorhynchus</i> sp.	p	1			
MNI		162	34	80	Σ276

Table 57: *Insect species list*

C.5.18 Ecological Coding

a = aquatic water beetles (running = rivers/streams); ws = waterside taxa often associated with emergent vegetation; df = taxa often associated with dung; p= taxa associated with grassland and open areas; g = species associated with grain; l = taxa associated with trees / woodland, dw = taxa associated with deadwood; h = 'house fauna' synanthropic beetles, *sensu* Hall & Kenward (1990); rt = decomposer beetles

Sample	166
Total number of individuals	162
Total number of species	61
% aquatic	0%
% waterside	6.1%
% dung foul / terrestrial	11.2%
% stored grain / terrestrial	0.8%
% tree / terrestrial	4%
% grassland and pasture / terrestrial	16%
% 'house fauna' / terrestrial	49.6%
% decomposer / terrestrial	18.4%

Table 58: *The proportions of the ecological grouping of Coleoptera*

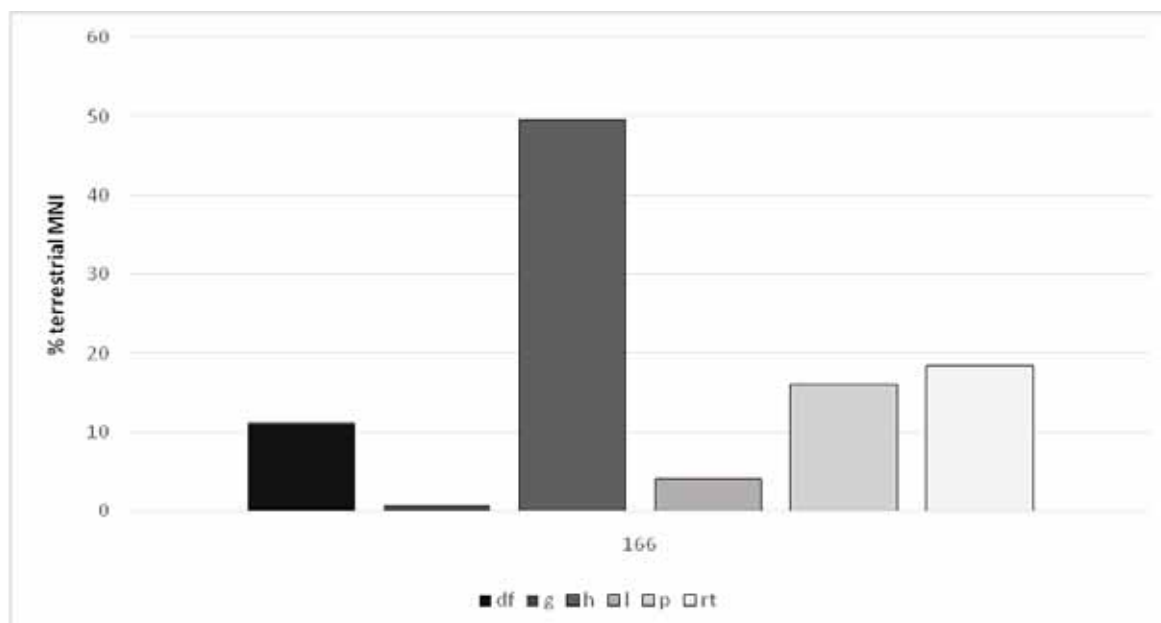


Figure 16: Proportions of the terrestrial ecological groups of Coleoptera from Harvest Way, Cambridge

C.6 Shell

By Rhiannon Philp and Lexi Scard

Introduction and Methods

- C.6.1 A total of 24.90kg of marine shell was recovered from 199 contexts during excavations at Harvest Way, Cambridge in 2013. The shells were quantified and examined in order to assess the diversity and quantity of these ecofacts and their potential to provide useful data as part of the archaeological investigations (Table 59).

Species	Common name	Habitat	Wt (kg)	No Cxts
Ostrea edulis	Oyster	Estuarine and shallow coastal water	23.76	175
Mytilus edulis	Mussel	Intertidal, salt water	0.61	45
Cerastoderma edule	Cockle	Intertidal, salt water,	0.04	14
Buccinum undatum	Whelk	Coastal water	0.48	4
Cypraeidae	Cowrie	Tropical and subtropical, shallow to relatively deep water	0.01	1

Table 59: Overview of identified, quantified shell

- C.6.2 Shells were recovered both in the field and from environmental samples. Only shell apices were quantified in order to obtain the Minimum Number of Individuals (MNI) for each species, bearing in mind that each individual would originally have had two apices. The MNI was arrived at by different means, depending on the species.
- C.6.3 *Oyster/ostrea edulis* has a defined left and right valve. The left is, generally, more concave in shape and displays radiating ribs on the outer surface. The right is flatter and lacks the ribs, though concentric growth rings are often visible (Winder 2011, 11). Therefore to obtain the MNI, the number of left and right valves were counted. The largest number was then taken as the MNI. In the case of cockle/*cerastoderma edule* and mussel/*mytilus edulis*, it is much more difficult to identify the left and right valves and so the MNI was calculated by taking the full amount of valves and then halving it.
- C.6.4 Oyster shell size has been recorded as an average for each assemblage. The measurement describes the length from the apex to the outer edge of the shell.

Results

- C.6.5 Oyster shell predominates the assemblage of this site. The size of the oyster shell ranges from 3cm to 60cm, with the average size being 5cm. Several of the shells showed evidence of shucking, the term given to the process in which the shells are prised apart for consumption, including one valve from a clay-lined pit [3076] having visible knife damage. A large proportion of the assemblage were spats: oyster larvae attached to adult oyster shell. A select few of the valves showed signs of having been burnt, though this was not a consistent pattern noticed through out the assemblage.
- C.6.6 As well as oyster, mussel, cockle, whelk/*buccinum undatum* and cowrie/*cypraeidae* was also recovered from the site. Below, Tables (60-64) showing the quantification and observations of all shell species recovered from site can be seen.

Ctxt	Feature type	Cut	Pr	Wt (Kg)	L	R	MNI	Size (cm)	Comments
2683				0.01	1	1	1	4	
2455					8	5	8	4-7	
1613	Surface		2	0.02	0	3	3	5	Shucking, some fragments.
921	Floor		2	0.01	1	0	1	5	
1265	Ditch	1267	2	0.01	0	1	1	5	Fragment
1286	Pit	1335	2	0.01	0	2	2	5	Shucking.
1339	Post hole	1338	2	0	1	0	1		Fragment
1441	Pit	1420	2	0.05	5	1	5	5	R valve burnt
1448	Pit	1447	2	0.03	2	1	2	5-6	
1499	Pit	1503	2	0.03	2	0	2	7	Shucking
1531	Pit	1535	2	0.01	0	2	2	5	Shucking
1529	Pit	1535	2	0.05	3	2	3	5-6	
1634	Pit	1638	2	0	0	1	1	4	
1640	Pit	1644	2	0	0	1	1	4	Fragment
1746	Well	1747	2	0.01	2	0	2	5	
1745	Well	1747	2	0.01	1	0	1	5	
1743	Well	1747	2	0.03	2	0	2	5 + 8	

Ctxt	Feature type	Cut	Pr	Wt (Kg)	L	R	MNI	Size (cm)	Comments
1749	Pit	1748	2	0.01	0	1	1	>3	Fragment
1752	Well	1750	2	0.05	1	4	4	3-7	Spats on larger shell. All R valves smaller than main R, which matches spat L valve.
1809	Pit	1783	2	0.01	0	1	1	5	Fragment
1784	Pit	1783	2	0.04	1	2	2	6	Spats and shucking.
1862	Pit	1794	2	0.02	1	1	1	6	
1796	Pit	1794	2	0.11	6	5	6	5-6	Shucking
1795	Pit	1794	2	0.1	4	7	7	4-7	Shucking
1798	Pit	1797	2	0.04	2	0	2	6	
1843	Pit	1853	2	0.01	1	0	1	5	
1897	Ditch	1896	2	0.01	0	1	1	5	
2860	Well	1927	2	0.01	1	0	1	5	
2498	Pit	1940	2	0.07	7	1	7	4-7	
2496	Pit	1940	2	0.44	39	32	39	4-6	Spats, shucking.
2273	Pit	1940	2	0.08	5	5	5	5-6	Lots of spats. Uniform size.
2064	Pit	1940	2	0.1	6	9	9	5	Shucking
2063	Pit	1940	2	0.18	17	17	17	4-6	Shucking. 1 possible burnt.
1968	Pit	1940	2	0.53	41	54	54	4-5	1 L valve has evidence of burning.
1963	Pit	1940	2	0.09	8	6	8	5	
1941	Pit	1940	2	0.54	44	44	44	3-7	Knife damage to 2 L valves (probably from shucking).
2067	Pit	1969	2	0.07	10	3	10	4-6	Evidence of burning on 1 R valve. + Fragments.
2022	Pit	1969	2	0.03	2	2	2	4-5	
2021	Pit	1969	2	0.02	0	2	2	5	Shucking
1973	Pit	1969	2	0.01	1	0	1		+ fragments
1971	Pit	1969	2	0.01	0	2	2	5	
1970	Pit	1969	2	0.03	4	0	4	5	
2039	Pit	2038	2	0.02	0	3	3	5	Shucking
2163	Pit	2173	2	0.14	7	12	12	4-6	Shucking
2201	Pit	2200	2	0.03	3	3	3	4.5	
2221	Pit	2220	2	0	1	0	1	4	Fragmented
2239	Pit	2237	2	0.01	0	1	1	5	Spats
2502	Pit	2272	2	0.08	6	3	6	5-7	One R valve has evidence for burning on edge.
2285	Pit	2275	2	0.02	2	0	2	5	
2284	Pit	2275	2	0.13	8	13	13	5	
2290	Ditch	2289	2	0.03	0	1	1	6	
2317	Pit	2318	2	0.01	0	1	1	5	
2311	Pit	2318	2	0.01	1	0	1	5	
2309	Pit	2318	2	0	0	1	1	5	Fragment

Ctxt	Feature type	Cut	Pr	Wt (Kg)	L	R	MNI	Size (cm)	Comments
3088	Well	2412	2	0.07	2	5	5	5-6	
3087	Well	2412	2	0.02	2	2	2	4-5	
2869	Well	2412	2	0.03	1	3	3	4-6	
2493	Pit	2486	2	0.02	1	2	2	6	
3269	Well	2554	2	0.02	0	1	1	7	
3267	Well	2554	2	0.01	1	0	1		Fragments – no apices.
3213	Well	2554	2	0.02	1	1	1	5	
3146	Well	2554	2	0.02	1	0	1	8	Possible shucking
2867	Well	2554	2	0.01	0	1	1	5	
2866	Well	2554	2	0.06	2	4	4	4-7	Shucking
2628	Pit	2630	2	0.01	1	0	1	6	Possible shucking.
2664	Pit	2665	2	0.01	1	0	1	4	
2667	Pit	2671	2	0.03	0	2	2	5	
2667	Pit	2671	2	0.03	1	0	1	6	
2676	Pit	2682	2	0.01	0	1	1	5	
2707	Pit	2713	2	0.01	0	1	1	5	
2717	Pit	2714	2	0.03	1	2	2	5	Shucking
2716	Pit	2714	2	0.01	1	0	1	6	
2732	Pit	2725	2	0.01	1	1	1	4	
2738	Pit	2737	2	0.01	1	0	1	5	
2868	Clay-lined tank	2851	2	0.05	3	4	4	4-6	
2952	Pit	2953	2	0.02	1	0	1	5	Shucking
3001	Pit	2996	2	0.01	1	0	1	6	
3078	Clay-lined pit	3076	2	0.08	6	6	6	4-5	Knife damage on 1 L valve.
3098	Pit	3097	2	0.01	0	2	2	5	
3108	Pit	3103	2	0.01	0	1	1	5	Shucking
3134	Pit	3133	2	0	0	1	1	5	Shucking
3138	Clay-lined tank	3137	2	0.48	27	21	27	5-7	Shucking. 1 burnt R valve.
3202	Pit	3199	2	0	0	1	1	4	
3233	Pit	3238	2	0.03	1	0	1	4	
3277	Clay-lined tank	3280	2	0.03	1	2	2	3-5	
3349	Pit	3351	2	0.01	1	0	1	5	
3348	Pit	3351	2	0.02	0	4	4	4	Shucking
3368	Pit	3354	2	0.01	0	1	1	4	
3367	Pit	3354	2	0.02	1	2	2	4-5	Spats.
3353	Pit	3354	2	0.02	0	4	4	4	
3380	Pit	3381	2	0.01	1	0	1	5	

Ctxt	Feature type	Cut	Pr	Wt (Kg)	L	R	MNI	Size (cm)	Comments
3639	Well	3388	2	0.02	1	0	1	6	
3638	Well	3388	2	0.03	2	0	2	4+7	
3587	Well	3388	2	0.02	0	2	2	5	
3387	Well	3388	2	0.02	0	1	1	7	Shucking?
3399	Pit	3397	2	0	0	1	1	4	
3467	Pit	3451	2	0.09	4	4	4	5-7	
3465	Pit	3451	2	0.12	7	12	12	3-7	1 of L valves larger than all others (including R valves).
3463	Pit	3451	2	0.18	12	13	13	4-6	Spats, shucking.
3461	Pit	3451	2	0.12	11	8	11	3-7	Shucking. Spats. + fragments. L valves larger.
3460	Pit	3451	2	0.1	26	19	26	4-7	Knife hole through centre. L valves bigger than R valves. Spats.
3459	Pit	3451	2	0.15	7	15	15	3-7	Most small, 1 large L valve. Possible shucking. Some spats.
3457	Pit	3451	2	0.1	7	8	8	4-6	Shucking
3454	Pit	3451	2	0.04	6	0	6	4-5	
3477	Pit	3478	2	0.01	1	0	1	5	Possible Shucking
3502	Pit	3499	2	0.01	0	2	2		Fragments
3502	Pit	3499	2	0.01	2	2	2	4-60	Not matching pairs.
3501	Pit	3499	2	0.02	1	0	1	6	
3531	Pit	3533	2	0.01	1	1	1	3	Fragments
3530	Pit	3533	2	0.01	2	0	2	4	broken
3534	Pit	3537	2	0.01	1	0	1	9	Long and thin
3538	Pit/Post hole	3539	2	0.01	0	1	1	5	
3553	Pit	3557	2	0.02	1	0	1	6	
3010	Pit	99	2	0	0	1	1		
103	Pit	99	2	0.04	3	1	3	5-7	
101	Pit	99	2	0.03	2	1	2	6-7	
990	Pit	991	2	0.01	0	2	2	4	Shucking
992	Pit	993	2	0.01	0	1	1	6	Shucking
3164			3	0	1	0	1	4	
2666	Build up		3	0.01	1	0	1	5	
1141			3	0.01	0	1	1		
845			3	0.04	1	1	1	7	R= fragment
630	Garden soil		3	0.03	1	0	1	7	
414			3	0.01	1	1	1	5	R valve burnt
78	Levelling layer		3	0.02	1	1	1	6	Shucking.
75	Floor		3	0.02	1	0	1	7	

Ctxt	Feature type	Cut	Pr	Wt (Kg)	L	R	MNI	Size (cm)	Comments
2348	Pit	1424	3	0.01	1	0	1	5	
2117	Pit	1424	3		0	1	1	9	Shucking
1888	Pit	1424	3	0.02	1	1	1	6	
2249	Well	1456	3	0.03	2	1	2	5-6	Shucking
2248	Well	1456	3	0.01	1	0	1	6	
2217	Well	1456	3		0	1	1	5	Shucking
1460	Well	1456	3	0.06	9	6	9	4-5	
1459	Well	1456	3	0	0	1	1	4	
1457	Well	1456	3	0.07	7	2	7	4-6	
1564	Pit	1565	3		1	0	1	6	
1574	Pit	1573	3	0.01	1	1	1	5	Shucking
1667	Ditch	1668	3		0	1	1	5	Shucking
1859	Pit	1858	3	0.02	0	4	4	4	
2031	Building	2061	3	0.01	0	1	1	5	
2028	Building	2061	3	0.09	6	4	6	3-7	
2025	Building	2061	3	0.06	2	1	2	5-7	
2024	Building	2061	3	0.01	1	0	1	5	
2162	Pit	2157	3	0.17	11	18	18	2-5	Shucking. Couple of very small individuals – possible contaminants (have their matching opposite valves). 1 larger valve with spats.
2158	Pit	2157	3	0.09	4	5	5	4-7	1 larger R valve.
2386	Pit	2387	3	0.03	1	3	3	5-6	
2473	Cellar	2474	3	0.04	1	0	1	8	Very thick.
2616	Pit	2612	3	0.13	2	4	4	6-11	1 very big L valve (11cm). Does not match any other valves. Average size = 6cm. Shucking.
2614	Pit	2612	3	0.05	1	3	3	6	Shucking
2631	Pit	2636	3	0.01	0	1	1	6	
2922	Pit	2923	3	3.46	105	120	120	5-9	Shucking. Lots of fragments.
2850	Pit	3002	3	0	0	1	1	>3	Fragment
3029	Post hole	3030	3		1	0	1	5	Fragment
3066	Pit	3065	3	0.04	5	5	5	3-5	+ fragments.
3232	Pit	3364	3	0.03	1	6	6	4-5	
3507	Pit	3503	3	0.57	41	71	71	3-5	Shucking, Spats.
3506	Pit	3503	3		6	2	6	6-7	
3504	Pit	3503	3	0.09	7	11	11	4-6	
3529	Post hole	3528	3	0.03	3	4	4	4-5	All quite small and flat.
818	Ditch	816	3	0.09	2	2	2	7	Spats
829	Ditch	830	3	0.1	9	5	9	4-5	
984	Pit	985	3	0.01	1	0	1		Fragments
2832	Floor		4	0.01	1	0	1	4	

Ctxt	Feature type	Cut	Pr	Wt (Kg)	L	R	MNI	Size (cm)	Comments
2817	Levelling		4	0.01	0	1	1	5	
1778	Pit	1777	4	0.03	1	0	1	8	
2187	Building	2182	4	0.04	0	3	3	5-6	
2186	Building	2182	4	0.01	0	1	1	5	
2216	Pit	2215	4	0.04	1	0	1	8	
2495	Pit	2494	4	0.04	0	4	4	5-6	
2766	Pit	2765	4	11.7	307	342	342	5-11	Great variation in size. Small number of 10-11cm. Average size = 6-7cm. Lots of 5 cm examples and lots of fragments. All clear apices were counted.
2834	Wall foundation trench	2833	4	0.01	1	0	1		Fragments
3391	Pit	3389	4	0.01	1	1	1	5	
3390	Pit	3389	4	0.03	1	1	1	7	
3596	Pit	3589	4	0.05	0	2	2	8	Shucking.
3607	Pit	3609	4	0.49	10	8	10	8-10	Much larger, barnacles
TOT				23.76	978	1080			

Table 60: Oyster Shell

Ctxt	Feature type	Cut	Ph	Wt (Kg)	Total	MNI	Comments
1441	Pit	1420	2	0	1	1	Fragments
1529	Pit	1535	2	0	3	2	
1784	Pit	1783	2	0	1	1	Fragments
1843	Pit	1853	2	0	2	1	Fragments
1941	Pit	1940	2	0.01	3	2	Fragments
2063	Pit	1940	2	0.11	2	1	Fragments
2496	Pit	1940	2	0	2	1	
1971	Pit	1969	2	0.01	1	1	Lots of fragments, only 1 apices.
1973	Pit	1969	2	0.02	3	2	Fragments
2067	Pit	1969	2	0	1	1	
2201	Pit	2200	2	0.01	2	1	
2281	Pit	2272	2	0	1	1	Fragments – no apices.
2311	Pit	2318	2	0.01	1	1	
2867	Well	2554	2	0.01	1	1	Fragments
2667	Pit	2671	2	0	1	1	Fragments – 1 apices.
2716	Pit	2714	2	0.01	3	2	Fragments
3078	Clay-lined pit	3076	2	0	1	1	Fragments
3138	Clay-lined tank	3137	2	0	1	1	Fragments
3371	Oven	3370	2		1	1	Fragment
3450	Oven	3370	2	0.1	50	25	Lots of fragments – only apices counted.
3456	Pit	3451	2	0.1	33	17	Lots of fragments – only apices

Ctxt	Feature type	Cut	Ph	Wt (Kg)	Total	MNI	Comments
							counted.
3460	Pit	3451	2	0.01	2	1	
3461	Pit	3451	2	0	1	1	Only 1 apices
3463	Pit	3451	2	0.01	6	3	
3465	Pit	3451	2	0	1	1	
3530	Pit	3533	2	0.01	1	1	
3532	Pit	3533	2	0	2	1	Fragment
3534	Pit	3537	2	0	1	1	
3010	Pit	99	2	0	1	1	Fragments
75	Floor		3	0	1	1	Fragments
1457	Well	1456	3	0	2	1	
1460	Well	1456	3	0	1	1	
2028	Building	2061	3	0.03	1	1	
2158	Pit	2157	3	0.01	2	1	
2162	Pit	2157	3	0.01	1	1	Fragments
2386	Pit	2387	3	0	2	1	
3232	Pit	3364	3	0	2	1	
3504	Pit	3503	3	0	1	1	Fragments
3507	Pit	3503	3	0.01	5	3	+ Fragments
829	Ditch	830	3	0.01	2	1	
214			4	0	1	1	Fragments – no apices
694	Levelling		4	0	1	1	
2906	Levelling		4	0.01	1	1	
1009	Pit	1010	4	0.01	3	2	Fragments
2766	Pit	2765	4	0.1	27	14	Quite large examples. Mostly whole. One with square hole – possible knife damage?
TOTAL:				0.61	182		

Table 61: Mussel Shell

Context	Feature type	Cut	Ph	Weight	Total	MNI	Comments
1448	Pit	1447	2	0	1	1	
1796	Pit	1794	2	0	1	1	
2201	Pit	2200	2	0	1	1	Fragment
3464	Pit	3451	2	0	1	1	
3454	Pit	3451	2	0	1	1	
2335	Pit	1424	3	0.01	6	3	Uniform size
2333	Pit	1424	3	0.01	2	1	
2119	Pit	1424	3	0	1	1	
1888	Pit	1424	3	0.01	3	2	Uniform size

2249	Well	1456	3	0.01	2	1	Only 1 apices, but other fragments does not match.
2158	Pit	2157	3	0	1	1	Fragment
3232	Pit	3364	3	0	1	1	
3504	Pit	3503	3	0	1	1	
1915	Pit	1914	4	0	1	1	Fragment – would have been quite large if complete.
TOTAL:				0.04	23		

Table 62: *Cockle Shell*

Ctxt	Feature type	Cut	Ph	Wt (Kg)	Total	MNI	Comments
2867	Well	2554	2		1	1	6cm long
2922	Pit	2923	3	0.01	1	1	3cm long
2197	Pit	2199	4	0.02	1	1	Polished? Very thick. Possibly ornament rather than food.
2766	Pit	2765	4	0.45	86	86	Mixture of sizes from 3-8cm long. Average = 4cm.
TOTAL:				0.48	89		

Table 63: *Whelk Shell*

Ctxt	Feature type	Cut	Ph	Weight	Total	MNI	Comments
812	Floor		3	0.01	1	1	Unlikely to be food. Quite small – 4cm long by 1.5cm wide. SF# 286. Special significance?

Table 64: *Cowrie Shell*

Discussion

- C.6.7 Oyster shell predominates this assemblage at 95.4%. The oyster shell appears to be spread across the site within 174 contexts. More specifically, the vast majority of oyster was recovered during Period 2 of the site, closely followed by Period 3 and came from the fills of pits. No shell was found within features of the first phase of the site, and only a few shells were recovered from Period 4. To put this into context, Period 1 refers to the Prehistoric period; Period 2 is Medieval; Period 3 is post-medieval and Period 4 is post 1800. This means that the majority of oyster shell was deposited during the Medieval and post-Medieval period, which is to be expected as shellfish, along with fish, was a key part of the diet throughout this time. More particularly, it would have been consumed religiously on Fridays and during Lent in the medieval period. The shells would have been discarded in middens which were often used for manuring cultivated fields (Fosberry 2010). To further support the argument that the presence of oyster shell represents consumption and disposal of oyster, one can look at the distribution of the features which shell was recovered from. The largest quantities of shell came from pits (**3451**), (**2923**) and (**3503**). All three of these features were found to be in close proximity to contemporaneous post-holes: post-hole structures. It would seem sensible to have a midden in said location, to allow for easy disposal, whilst not having the rubbish pits within the structures themselves, to avoid smells etc.
- C.6.8 Pit (**2765**) contained the largest quantity of oyster shell on site. This is interesting because the pit is from Period 4 of the site, thus dates to post 1800. At this time, the

general consumption and trade of oyster changed rather considerably and it was lesser known for the shells to be discarded of in pits. Pit (**2765**) is also the feature that produced the greatest quantity of whelk during excavation. This, fairly small, pit was uncovered next to domestic buildings dating from c.1830. Given the familiar layout of pit outside structures, it can be confidently argued that this, again, is a midden (oyster was still consumed post-1800, just overall in a different manner). The most probable argument for such an abundance of shell here is that it is remnant of a large feast(s). It is not unlikely that there was a celebration at this location, and that the shell-filled pit was a product of this.

- C.6.9 A considerable amount of oyster shell was recovered from Feature **3137**, a clay-lined tank. Though different in form to the 'standard' middens, it is notable that **3137** was contained in a plot, consisting of at least three ovens/hearths and five clay-lined pits. It is, at this stage, believed that the clay-lined features are reflective of crop-soaking, though the specifics are not yet certain. Being in such close proximity to ovens/hearths as well as crop processing, it can strongly be suggested that **137** is another good example of disposal following consumption of oyster during the Medieval period. The ovens/hearths would also explain the presence of seemingly burnt shell.
- C.6.10 Shell fragments from within redeposited layers at Harvest Way could possibly have derived from Barnwell Priory or from the popular Midsummer Fair granted to the Canons of Barnwell in 1211 and situated to the north of the site (Lee 2005, 118). Stalls selling shellfish along with other goods were common at the Fair, the legacy of which can be seen about half a mile to the east of Harvest Way, with road names such as Oyster Row and Garlic Row.
- C.6.11 Prior to eating, the preparation of oysters consists of the right valve being prised off and sometimes discarded separately, with the meat being left in the left valve. Equal numbers of left and right valves being found together in features signifies that the oysters were being prepared and eaten together. The shell on this site occurs in assemblages with relatively even numbers of both left and right valves, suggesting the oysters were being prepared and consumed at the same location. This could strengthen the idea that they were related to the Fair; perhaps being consumed close to the stall they were bought. Any waste collected up after would then represent both sides of the process and could have been deposited in rubbish pits at the nearby location of Harvest Way.
- C.6.12 Across the site, oyster shell was reasonably uniform in size, with some examples recorded as very large (>10cm). Oysters of a uniform size usually represents a particular time of harvesting. The larger the oyster, the longer they will have been left before harvesting. Smaller oysters would imply an immediate need for food, or perhaps a period of bad harvest. Medieval oyster shell tends to be smaller than in earlier periods due to intensification of harvesting (Winder 1993). In this assemblage, the valves average approximately 4-6cm. Some of the smaller shells were possibly juvenile spats that had been harvested too early. Many of the adult shells showed signs of young spats seeding from their own shells, which is common in overcrowded oyster beds.
- C.6.13 The percentage of mussels (0.2%), cockles (0.2%) and whelk (2%) on this site are very low. Whilst such shellfish was consumed during the Medieval period, the excavation did not produce large enough quantities of these shells to suggest intentional harvest or consumption on this site. A possible explanation is that these three species were contaminants of the oyster harvests.

- C.6.14 On the whole, the shells were moderately preserved and did not appear to have been deliberately broken or crushed. There was evidence on many of the oysters of damage likely to have been caused during the opening (shucking) process, in the form of small 'v' or 'u' shaped holes at the centre of the outer edge, usually on the left hand valve. This supports the argument that the shells are remnants of food waste.
- C.6.15 Cowrie shell is an anomaly on the site. It is unlikely that these ecofacts are connected to diet in this instance. Perhaps more probable is the theory that it was a personal curiosity owned by one of the inhabitants of the site. A polished whelk was also recovered, which might be interpreted in the same way. Again, one could also argue that said species were contaminants of other harvests, and that they were not intentionally collected

Further Work and Methods Statement

- C.6.16 The assemblage of the site on Harvest Way, Cambridge is widespread, but for the most part can only be viewed as a background scatter. The assemblage has been fully quantified and no further work is required.

APPENDIX D. RISK LOG

Risk Number: 1

Description: Specialists unable to deliver analysis report due to over running work programmes/ ill health/other problems

Probability: Medium

Impact: Variable

Countermeasures: OA has access to a large pool of specialist knowledge (internal and external) which can be used if necessary.

Estimated time/cost: Variable

Owner: Project Manager

Date entry last updated:

Risk Number: 2

Description: non-delivery of full report due to field work pressures/ management pressure on Co-authors

Probability: Medium

Impact: Medium - High

Countermeasures: Liaise with OA Management team

Estimated time/cost: Variable

Owner: Project Manager

Date entry last updated:

APPENDIX E. BIBLIOGRAPHY

- Andrews, G., 1991 *Management of Archaeological Projects*, English Heritage (repr.1996)
- Albarella, U. M., Beech, A., Locker, M., Moreno-Garcia and Curl, J., 2009 *Norwich Castle Excavations and Historical Surveys 1987-98. Part III: a Zooarchaeological Study*. Norwich: East Anglian Archaeology Occasional Paper 22
- Albarella, U. and Davis, S. J. M., 1994 *The Saxon & Medieval animal bones excavated 1985-1989 from West Cotton, Northamptonshire*. AML Rep. Ser. 17/1994
- Andersen, S. T., 1979 Identification of wild grass and cereal pollen, *Danmarks Geologiske Undersøgelse*, 69-92
- Anon. 1987 Alphabetical List of Pipemakers in Scotland, in Davey, P. (ed). *The Archaeology of the Clay Tobacco Pipe 10: Scotland*. British Archaeological Reports British Series 178, 337-50.
- Atkins, R., 2002 'Brickmaking in the Holy Sepulchre parish, Northampton', *Northamptonshire Archaeol.* 30, 83-100
- Atkins, R., 2010 'Bricks, floor and roof tile', in Fletcher, T., Archaeological investigations at Wisbech Castle – a community archaeological project. Oxford Archaeology East Report 1137, 64-78 (unpublished)
- Atkins, R., 2011 *Early Neolithic pits, Late Iron Age, Roman and medieval layers and late 17th century quarrying at the former Cambridge Regional College site, Brunswick, Cambridge* Post-excavation Assessment and Updated Project Design OA East report 1221 (unpublished)
- Atkins, R., 2012a Between river, priory and town: excavations at the former Cambridge Regional College Site, Brunswick, Cambridge *Proc. Cambridge Antiq. Soc.* Cl, 7-22
- Atkins, R., 2012b *Medieval and post-medieval remains at Intercell House, Coldhams Lane, Cambridge* OA East report 1424 (unpublished)
- Atkins, R., 2013a *A Mid/Late Iron Age ditch and medieval to modern settlement at Coldhams Lane, Cambridge. Post-excavation assessment report*. OA East report 1440 (unpublished)
- Atkins, R., 2013b *Medieval to modern remains at 9-15 Harvest Way, Barnwell, Cambridge* OA East report 1551 (unpublished)
- Atkins, R., 2014 'Brick, Floor, Roof Tile and Fired Clay/Daub', in Clarke, R., *Medieval and post-medieval occupation and garden features, Thingoe House, Bury St Edmunds, Suffolk: Post-excavation Assessment and updated Project Design* OA East report 1436 (unpublished)
- Atkins, R., 2015 *A Mid/Late Iron Age ditch and medieval to modern settlement at Coldhams Lane, Cambridge. Full archive report*. OA East report 1711 (unpublished)
- Atkins, R., forthcoming A "Brick, floor and roof tile and fired clay from Walden House, Huntingdon", in Clarke, R., excavations at Walden House, Huntingdon (OA East report)
- Atkins, R., forthcoming B Medieval to modern remains at Newmarket Road, Barnwell, Cambridge Post-excavation Assessment and Updated Project Design OA East report 1699 (unpublished)
- Atkins, R. and Fletcher, C., 2009 'Brick and tile', in Clarke, R., Late Saxon to post-medieval occupation to the rear of Gazeley House and Laurence Court (Huntingdon Town Centre), Huntingdon, Cambridgeshire. Oxford Archaeology East report 1056 (unpublished)
- Ayers, B., 2000 'Anglo-Saxon, Medieval and Post-Medieval (Urban)', in Brown, N. and Glazebrook, J. (eds.), *Research and Archaeology: A Framework for the Eastern Counties*, East Anglian Archaeology Occ. Papers 8, SCOPE Archaeological Committee, 27-32

- Beaudry, M.C., 2006 *Findings. The material culture of needlework and sewing*, New Haven
- Belshaw, R., 1989 A note on the recovery of *Thoracochaeta zosterae* (Haliday) (Diptera: Sphaeroceridae) from archaeological deposits. *Circaea* 6, 39–41
- Berglund, B. E. and Ralska-Jasiewiczowa, M., 1986 Pollen analysis and pollen diagrams, in (ed) B E Berglund, *Handbook of Holocene Palaeoecology and Palaeohydrology*, Wiley, Chichester, 455–484
- Boardman, S. and Jones, G., 1990 Experiments on the effects of charring on cereal plant components. *Journal of Archaeological Science* 17, 1–11
- Bohme, J., 2005 *Die Kafer Mitteleuropas. K. Katalog (Faunistische Übersicht)*. Munich: Spektrum Academic
- Bowsher, D., Dyson, T., Holder, N. and Howell, I., 2007 *The London Guildhall. An archaeological history of a neighbourhood from early medieval to modern times* Museum of London Archaeological Services monograph 36. London: Museum of London Archaeological Services
- Brickley, M. and McKinley, J., 2004 *Guidelines to the standards for recording human remains* IFA Paper No. 7 British Association for Biological Anthropology and Osteoarchaeology and the Institute of Field Archaeologists
- British Geological Survey (BGS) 1981 *Cambridge Solid and Drift Edition* 1:50, 000 English and Wales Sheet 188
- Brooks, D. and Thomas, K. W., 1967 The distribution of pollen grains on microscope slides: The non randomness of the distribution, *Pollen et Spores* 9, 621–629
- Buckberry, J.L. and Chamberlain, A.T., 2002 Age Estimation From the Auricular Surface of the Ilium: A Revised Method in *American Journal of Physical Anthropology* 119, 231–239
- Buckland, P. I., 2006 Bugs Coleopteran Ecology Package. (Versions: BugsCEP v7.63; Bugsdata v8.0; BugsMCR v2.02; BugStats v1.22), [Downloaded: August 2014], www.bugscep.com.
- Buikstra, J. E. and Ubelaker, D. H. (eds.), 1994 *Standards for data collection from human skeletal remains* Arkansas Archaeological Survey Research Series 44 Arkansas
- Cappers, R.T.J., Bekker R.M. and Jans, J.E.A., 2006 Digital Seed Atlas of the Netherlands Groningen Archaeological Studies 4, Barkhuis Publishing, Eelde, The Netherlands. www.seedatlas.nl
- Carrott, J. and Kenward H.K., 2001 Species associations amongst insect remains from urban Archaeological Deposits and their significance in reconstructing the past human environment. *Journal of Archaeological Science* 28, 887–905.
- Carruthers, W., 1996 Mystery object number 2- animal, mineral or vegetable? Available at <http://www.envarch.net/publications/circaea/6.1/mystery-object.pdf>
- Cessford, C., 2001a The Clay Tobacco Pipe Industry in Cambridgeshire and Huntingdonshire, *Cambridgeshire Local History Society Review* 10, 3–19
- Cessford, C., 2001b Pipemaking at No.11 Sidney Street, Cambridge, *Society for Clay Pipe Research Newsletter* 57, 13–22
- Cessford, C., 2007 *Grand Arcade Cambridge: an archaeological excavation*. Cambridge Archaeological Unit Report 800 (unpublished)

- Cessford, C., 2009 'Post-1550 Urban Archaeology in a Developer-funded Context: An Example from Grand Arcade, Cambridge', in Horning, A. and Palmer, M. (eds.). *Crossing Paths or Sharing Tracks? Future directions in the archaeological study of post-1550 Britain and Ireland*. Woodbridge: Boydell and Brewer, 301–21
- Cessford, C., 2012 *The Old Divinity School, Cambridge: an archaeological excavation*. Cambridge Archaeological Unit Report 1094 (unpublished)
- Cessford, C., 2014 *North west Cambridge archaeology University of Cambridge 2013-14 Excavations - site IX- CAU report 1248* (unpublished)
- Cessford, C., in prep. Routine or ritual assemblages? Depositional practices and the Post-Medieval household, invited paper for *Post-Medieval Archaeology*
- Cessford, C. with Dickens, A., 2004 The origins and early development of Chesterton *Proc. Cambridge Antiq. Soc.* XCIII, 125-42
- Cessford, C. and Dickens, A., In preparation *From King's Ditch to Department Store: investigations of an 11-20th-century Suburb and the Town Ditch of Cambridge* Cambridge Archaeological Unit report
- Cessford, C. and Slater, A., forthcoming Beyond the manor of Hintona. Further thoughts on the development of Cherry End, Cherry Hinton: The Neath Farm site *Proc. Cambridge Antiq. Soc.*
- Cessford, C., Alexander, M. and Dickens, A., 2006 *Between Broad Street and the Great Ouse: waterfront archaeology in Ely*: East Anglian Archaeology Report 114
- Cessford, C, Hall, D. and Hall, A., 2007 'Pottery assessment', in Cessford, C., *Grand Arcade* CAU Report 800 (unpublished)
- Cessford, C, Hall, D. and Newman, R., 2013 'Pottery', in Newman, R., *The Eastern Gate Hotel Site, Cambridge: An Archaeological Excavation*, CAU Report 1176 (unpublished)
- Checkland, S., 1979 *The rise of industrial society in England 1815-85* (Longman). Seventh edition
- Clark, J. W., 1891 *An attempt to trace the architectural History and Plan of the Church and Conventual buildings of Barnwell Priory, Cambridge*, *Proc. Cambridge Antiq. Soc.* Vol. 7, 222-251
- Cohen, A. and Serjeantson, D., 1996 *A manual for the identification of bird bones from archaeological sites*, London
- Connor, A., 2013a Health and safety method statement Eastern Gate 9-15 Harvest Way, Cambridge OA East report (unpublished)
- Connor, A., 2013b *Written scheme of investigation, archaeological evaluation at Eastern Gate. 9-15 Harvest Way, Cambridge* OA East report (unpublished)
- Conzen, M.R.G., 1960 Alnwick, Northumberland: a study in town plan analysis (London: Institute of British Geographers Publication 27)
- Cotter, J., 2000, *Post-Roman pottery from excavations in Colchester, 1971-85*. Colchester Archaeological Trust
- Cox, M. and Mays, S.(eds.), 2000 *Human Osteology in Archaeology and Forensic Science* London: Greenwich Medical Media Ltd
- Coysh, A.W. and Henrywood, R.K., 1982, 1989 *The Dictionary of Blue and White Printed Pottery 1780-1880* Volumes 1 and 2, Antiques Collectors Club

- Crummy, N., 1988 *The post-Roman small finds from excavations in Colchester 1971-85*, Colchester Archaeol Rep, 5, Colchester
- Dallal, D., 2000 'Five Points of Fellowship: Masonic Pipes from Block 160, An Interpretive Approach to Understanding Working-Class Life', in Yamin, R. (ed.), *Tales of Five Points: Working-Class Life in Nineteenth-Century New York*, vol. II. New York, General Services Administration, Region 2, 111–29
- Danckwerts, P. V., 1980 The inheritors of Barnwell Priory *Proc. of the Cambridge Antiq. Soc.* LXX, 211-228
- Davis, S., 1992 *A rapid method for recording information about mammal bones from archaeological sites*. AML rep. 81/91 London.
- DeWindt, A. R. and DeWindt, E. B., 2006 *Ramsey: The Lives of an English Fenland Town, 1200-1600* (Washington D.C.: Catholic University of America Press)
- Dobney, K.M., Jaques, S.D. and Irving, B.G., 1996 *Of Butchers and Breeders: Report on the vertebrate remains from various sites in the City of Lincoln*, Lincoln Archaeological Studies: 5, Lincoln
- Dobney, K. and Reilly, K., 1988 A method for recording archaeological animal bones: the use of diagnostic zones. *Circaea* 5(2), 79-96
- Dobney, K.M., Jaques, S.D. and Irving, B.G., 1996 *Of Butchers and Breeders: Report on the vertebrate remains from various sites in the City of Lincoln*, Lincoln Archaeological Studies: 5, Lincoln
- Drury, P., 1993 'Ceramic building materials', in Margeson, S., *Norwich Households, E. Anglian Archaeol.* 58 (Norwich Survey), 163-8
- Duff, A.G., 2012 *Beetles of Britain and Ireland, Volume 1: Sphaeriusidae to Silphidae*. Norfolk: A.G. Duff Publishing
- Dyson, T., Samuel, M.W., Steele, A. and Wright, S.M., 2011a *The Cluniac Priory and Abbey of St Saviour Bermondsey, Surrey*; Monograph 50 Museum of London Archaeology
- Earwood, C., 1993 *Domestic Wooden Artefacts in Britain and Ireland from Neolithic to Viking Times*, Exeter
- Egan, G., 2005 *Material Culture in London in an age of transition. Tudor and Stuart period finds c1450-c 1700 from excavations at riverside sites in Southwark*, MoLAS Monog, 19, London
- Egan, G. and Pritchard, F., 1991 *Dress Accessories c 1150 – c 1450*, Medieval Finds from Excavations in London,, 3, London
- English Heritage., 2006 *Management of Research Projects, The MoRPHE Managers' Guide*
- English Heritage., 2008 *Management of Research Projects, PPN3: Archaeological Excavation*
- English Heritage., 2012 *Waterlogged Organic Artefacts. Guidelines on their Recovery, Analysis and Conservation*, Swindon
- Faegri, K. and Iversen, J., 1989 *Textbook of Pollen Analysis*, 4th ed, Wiley, Chichester, 328
- Fletcher, C., 2011 'Pottery', in Atkins, R., *Early Neolithic pits, Late Iron Age, Roman and medieval layers and late 17th century quarrying at the former Cambridge Regional College site, Brunswick, Cambridge: Post-excavation Assessment and Updated Project Design* Oxford Archaeology East report 1221 (unpublished)
- Fletcher, C., 2012 'Pottery' in Atkins, R., *Medieval and post-medieval remains at Intercell House, Coldhams Lane, Cambridge*, OA East report 1424 (unpublished)

- Fletcher, C., 2015 'Pottery' in Atkins, R., *Medieval and post-medieval remains at Intercell House, Coldhams Lane, Cambridge*, OA East report 1711 (unpublished)
- Flood, R.J., 1976 *Clay tobacco pipes in Cambridgeshire*. Cambridge, Oleander Press
- Fosberry, R., 2011 'Appendix A: Shell' in Atkins, R., Early Neolithic pits, Late Iron Age, Roman and medieval layers and late 17th century quarrying at the former Cambridge Regional College site, Brunswick, Cambridge Post-excavation Assessment and Updated Project Design Oxford Archaeology East report 1221 (unpublished)
- Fox, C., 1923 *The archaeology of the Cambridge region* (Cambridge: Cambridge University Press)
- Frere, S. S. and Stow, S., 1983 Excavations in the St. George's Street and Burgate Street Area Volume V11 (Kent Archaeol. Soc)
- Gallagher, D.B., 1987 'Tobacco Pipemaking in Glasgow 1667–1967', in Davey, P. (ed.), *The Archaeology of the Clay Tobacco Pipe 10: Scotland*. British Archaeological Reports British Series 178, 35–109
- Godden, G.A., 1991 *Encyclopaedia of British Pottery and Porcelain Marks*, Barrie & Jenkins, London
- Gransden, A., 2007 *A history of the Abbey of Bury St Edmunds 1182-1256* (Woodbridge)
- Grant, A., 1982 'The use of toothwear as a guide to the age of domestic ungulates', in Wilson, B., Grigson, C. and Payne, S. (eds.), *Ageing and sexing animal bones from archaeological sites*, BAR Brit Ser, 109, Oxford, 91-108
- Gustafsson, B., 2005 *Catalogus Coleopterorum Sueciae*. (CATCOL2004.XLS) . NRM
- Hall, A. R. & Kenward, H. K., 1990 Environmental Evidence from the Colonia. *The Archaeology of York 14/6*, London: Council for British Archaeology
- Hall, D., Cessford, C. and Newman, R., 2013 'Medieval [pottery]' in Newman, R., *The Eastern Gate Hotel Site, Cambridge: An Archaeological Excavation*, CAU Report 1176 (unpublished)
- Hall, R. A. and Hunter-Mann, K., 2002 *Medieval urbanisation in Coppergate: refining a townscape Archaeology of York 10/6* York: Council for British Archaeology
- Halstead, P., 1985 'A study of Mandibular Teeth from Romano-British Contexts at Maxey', in Pryor, F., French, C., Cowther, D., Gurney, D., Simpson, G and Taylor, M *Fenland Project, No 1: Archaeology and Environment in the Lower Welland Valley, V1*, Cambridge, 219-24
- Halstead, P., 1992 Demi & DMP: faunal remains plus animal exploitation in late Neolithic Thessaly *Annual of the British School of Athens*, 87, 29–59
- Hampson, E.M., 1934 *The Treatment of Poverty in Cambridgeshire 1597-1834* Cambridge University Press
- Harde, K. W., 1984 *A Field Guide in Colour to Beetles*. London: Octopus
- Hopkins, E., 1989 *Birmingham the first manufacturing town in the world 1760-1840* Weidenfield and Nicolson (London)
- House, J., 2013 *Medieval remains at 30-31 Occupation Road, Cambridge* OA East report 1496 (unpublished)
- Howard-Davis, C.L.E., 2005 Bone and Ivory Objects, in Brown, F. and Howard-Davis, C., *Norton Priory: Monastery to Museum. Excavations 1970-87*, Lancaster Imprints, 16, Lancaster, 414-18

- Hudson, J.D. & Sutherland, D.S., 1990 'The Geological Description and Identification of Building Stones: Examples from Northamptonshire' in *Stone Quarrying and Building in England, AD 43-1525*, (David Parsons ed), Rochester, 16-32
- Jacomet, S., 2006 Identification of cereal remains from archaeological sites. (2nd edition, 2006) IPNA, Universität Basel / Published by the IPAS, Basel University
- Jessop, L., 1986 *Coleoptera: Scarabaeidae. Handbooks for the Identification of British Insects*. London: Royal Entomological Society of London
- Jones, M.K., 1988 'The arable field: A botanical battleground', in Jones, M. K. (ed.), *Archaeology and the Flora of the British Isles*. Oxford: Oxford University Committee for Archaeology, 86-92
- Kelley, J.A., 1999 *Great Book of Domino Games*
- Kenward, H. K., 1988 *The value of insect remains as evidence of ecological conditions on archaeological sites*. London: Institute of Archaeology Occasional Publication (No.3) 25-37
- Kenward, H. K., Hall, A. R. and Jones, A. G., 1980 A tested set of techniques for the extraction of plant and animal macrofossils from waterlogged archaeological deposits. *Science and Archaeology* 22, 3-15.
- Kenward, H.K. and Hall, A.R., 1997 Enhancing bio-archaeological interpretation using indicator groups: Stable manure as a paradigm. *Journal of Archaeological Science* 24. 663-673
- Keynes, F., 1947 *By-Ways of Cambridge History* Cambridge: Cambridge University Press
- Koch, K., 1971 Zur Untersuchung subfossiler Käferreste aus römischen und mittelalterlichen Ausgrabungen im Rheinland. *Rheinische Ausgrabungen*. 10, 378-448
- Koch, K., 1989 *Die Käfer Mitteleuropas. Ökologie, 1*. Krefeld: Goecke & Evers
- Koch, K., 1992 *Die Käfer Mitteleuropas. Ökologie 3*. Krefeld: Goecke & Evers
- Knight, B., 1985 'Cames', in Hare, J. N., *Battle Abbey, the eastern range and the excavations of 1978-80*, HBMCE Archaeol Rep, 2, London, 154-6
- Lee, J. S., 2005 *Cambridge and its economic region, 1450-1560* studies in regional and local history volume 3 (University of Hertfordshire Press)
- Levine, M., 1982 'The use of crown height measurements and eruption-wear sequences to age horse teeth' in Wilson, B., Grigson, C. and Payne, S. (eds.), *Ageing and sexing animal bones from archaeological sites*, BAR Brit Ser, 109, Oxford, 223-250
- Lott, D., 2009 The Staphylinidae (Handbooks for the Identification of British Insects volume 12 part 5). London: Royal Entomological Society
- Lovejoy, C.O., Meindl, R.S., Pryzbeck, T.R. and Mensforth, R.P., 1985 Chronological Metamorphosis of the Auricular Surface of the Ilium: A New Method for the Determination of Adult Skeletal Age At Death *American Journal of Physical Anthropology* 68, 15-28
- Lucas, R., 1993 Ely bricks and roof-tiles and their distribution in Norfolk and elsewhere in the 16th to 18th centuries *Proc. Cambridge Antiq. Soc.* LXXXII, 157-62
- Lucht, W. H. 1987 *Die Käfer Mitteleuropas. Krefeld: Goecke & Evers*
- Keynes, F., 1947 *By-Ways of Cambridge History*. Cambridge: Cambridge
- Maitland, F.W., 1964 *Township and Borough* (Cambridge University Press) reprinted from 1898 volume

- Mays, S., 2005 *Guidance for Best practice for the Treatment of Human Remains Excavated from Christian Burial Grounds in England*. Swindon. English Heritage and The Church of England
- McCobb, L.M.E., Briggs, D.E.G., Hall, A.R. and Kenward, H.K., 2004 The preservation of invertebrates in 16th century cesspits at St Saviourgate, York. *Archaeometry* 46, 157–169
- McGregor, A., 1985 *Bone, Antler, Ivory, and Horn. The technology of Skeletal Materials Since the Roman Period*, London
- Medlycott, M. (ed.), 2011 *Research and archaeology revisited: a revised framework for the East of England* E. Anglian Archaeol. Occ pap no. 24 (ALGAO)
- Mellor, M., 1997 *Pots and People that have shaped the heritage of medieval and later England*, Ashmolean Museum, Oxford
- Meredith, A. and Meredith, G., 2012 *Buttons*, Oxford
- Moore, S., 1995 *Table Knives and Forks*, Princes Risborough
- MPRG, 1998 *A Guide to the Classification of Medieval Ceramic Forms*. Medieval Pottery Research Group Occasional Paper I
- MPRG, 2001 *Minimum Standards for the Processing, Recording, Analysis and Publication of Post-Roman Ceramics*. Medieval Pottery Research Group Occasional Paper 2
- Moore, P. D., Webb, J. A. and Collinson, M. E., 1991 *Pollen analysis*, 2nd ed Oxford
- Morris, R.K., 1978-9 The development of later Gothic mouldings in England *Architectural History* 21 & 22, 21-57, 1-48
- Morton, J., 1712 *The natural history of Northamptonshire*
- Munby, L.M., 1977 *The Hertfordshire Landscape* (London: Hodder and Stoughton)
- Newman, R., 2007 *The Christ's Lane development at Bradwell's Court, Cambridge: an archaeological excavation*. Cambridge Archaeological Unit Report 775 (unpublished)
- Newman, R., 2008 *St. John's Triangle, Cambridge: an archaeological excavation and watching brief*. Cambridge Archaeological Unit Report 851 (unpublished)
- Newman, R., 2013 *The Eastern Gate hotel site, Cambridge: an archaeological excavation* CAU report 1176 (unpublished)
- Newman 2014 169-173 *High Street, Chesterton, Cambridge: an archaeological excavation* CAU report 1226 (unpublished)
- Oakley, G.E., 1979 'The Copper Alloy Objects', in Williams, J. H (ed.), *St Peter's Street, Northampton, Excavation 1973-1976*, Northampton, 248-64
- Oswald, A., 1975 *Clay Pipes for the Archaeologist*. British Archaeological Reports British Series 14
- Palm, T., 1959 *Die Holz und Rindenkäfer der sud- und mittelschwedischen Laubbaume*. Opuscula Entomologica Suppl. 16
- Palmer, W. M., 1931 *Cambridge Borough Documents* Vol. I. Cambridge: Bowes and Bowes
- Payne, S., 1973 Kill-off patterns in sheep and goat mandibles: the mandibles of Asvan Kale, *Anatolia Studies* 23, 281-303
- Payne, S., 1987 Reference codes for wear states in the mandibular cheek teeth of sheep and goats *Capra Journal of Archaeological Science* 12, 139-47

- Reaney, P.H., 1973 *The place-names of Cambridgeshire and the Isle of Ely* (Cambridge: Cambridge University Press) reprint of its 1943 edition
- Ridout, H., 2011 *Cambridge and Stourbridge Fair* (Cambridge: Blue Ocean)
- Robinson, M., 1981 'The Iron Age to early Saxon environment of the upper Thames terraces', in Jones, M. and Dimbleby, G., *The Environment of Man: the Iron Age to the Anglo-Saxon Period* Oxford: B.A.R. British Series 87, 251-286
- Robinson, M., 1983 Arable/Pastoral Ratios from Insects? In Jones, M., *Integrating the Subsistence Economy: Synopsis of the of the Association for Environmental Archaeology No. 4* London: B. A. R. International Series 181, 19-47
- Rowell, T.A., 1986 Sedge (*Cladium mariscus*) in Cambridgeshire: its use and production since the seventeenth century. *Agricultural History Review* 34 (2), 140-8
- Royal Commission on the Historical Monuments of England (RCHME), 1988 *City of Cambridge part I and II* (Her Majesty's Stationary Office) Reprint of 1959 edition
- Ryan, P., 1996 *Bricks in Essex. From the Roman Conquest to the Reformation* (Colourfast: Colchester)
- Ryan, R., 2009 'Bricks', in Macaulay, S., Atkins, R. and Shepherd Popescu, E. 2009 Medieval Archaeology within the Outer Precinct of Ramsey Abbey: Excavations at Ramsey Abbey School, Cambridgeshire 1998-2005, OA East report 1229 (unpublished)
- Ryan, P. and Andrews, D.D., 1993 'A brick and tile typology for Cressing Temple', in Andrews, D.D. (ed.), *Cressing Templer. A templar and hospitaller Manor in Essex* (Essex County Council: Chelmsford), 93-103
- Salzman, L.F. (ed.), 1967 *The Victoria History of the Counties of England Cambridge and Ely* vol II (London) , reprinted from 1948 edition
- Samuel, M.W., 2001 'The Architectural Fragments', in Hicks, M. Hicks. A., *St Gregory's Priory: Northgate, Canterbury Excavations 1988-1991* The Archaeology of Canterbury 2 (new series), 151-182
- Samuel, M.W., 2006a Whitefriars, Norwich. *Assessment of the Architectural fragments from the excavations 2002-3 – The architectural fragments Howland associates site assessment of 2002: an initial statement on the assemblage*. Cambridgeshire Archaeological Field Unit (now OAE)
- Samuel, M.W., 2006b *Whitefriars, Canterbury. The Architectural fragments from the 2000-3 Excavations CW13, 21, 29,46,50,64. Answering Site Research Questions: the Analytical Requirements to do this, measured from Existing Records*. Canterbury Archaeological Trust
- Samuel, M.W., 2011b 'Architectural fragments and reconstructions', in Bull, R., Davis, S., Lewis, H., Phillpotts, C. and Birchenough, A., *Holywell Priory and the development of Shoreditch to c.1600*, Monograph 53 Museum of London Archaeology, 113-117; 141-149
- Schofield, J., 1984 *The Building of London from the Conquest to the Great Fire*, London
- Semmelmann, K., 1998 *The Anglo-Saxon archaeology of the Royston area* (Royston: Royston and District Museum)
- Shepherd Popescu, E., 2009 *Norwich Castle: Excavations and Historical Survey 1987-98*, 2 vols, E. Anglian Archaeol. 132
- Sherlock, D., 1998 'Brickmaking Accounts for Wisbech', 1333-1356', *Proc. Cambridge Antiq. Soc* 87, 59-69

- Skidmore, P., 1999 'The Diptera', in Connor, A and Buckley, R. (eds.), *Roman and Medieval Occupation in Causeway Lane, Leicester* (Leicester Archaeological Monographs 5). Leicester: Leicester University Press, 341–343
- Slater, T.R., 1981 The analysis of burgage patterns in medieval towns *Area* 13, 211-16
- Smith, D. 1996 Thatch, turves and floor deposits: A survey of Coleoptera in materials from abandoned Hebridean blackhouses and the implications for their visibility in the archaeological record *Journal of Archaeological Science* 23, 161–74
- Smith, D. N., 2013 Defining an indicator package to allow identification of 'cesspits' in the archaeological record. *Journal of Archaeological Science*, 526-543
- Smith, D., Letts, J. P. and Cox, A., 1999 Coleoptera from Late Medieval smoke blackened thatch (SBT): Its archaeological implications. *Environmental Archaeology* 4, 9–18
- Smith, D.N. Letts, J. and Jones, M., 2005 The insects from non-cereal stalk smoked blackened thatch. *Environmental Archaeology*, 10, 171–8
- Smith, D. and Kenward, H., 2011 Roman Grain Pests in Britain: Implications for Grain Supply and Agricultural Production. *Britannia*, 243-262
- Smith K.G.V., 1989 An introduction to the Immature Stages of British Flies. *Handbooks for the identification of British Insects*. Vol. 10 part 14. London: Royal Entomological Society of London
- Spoerry, P.S., Forthcoming *The Production and Distribution of Medieval Pottery in Cambridgeshire*
- Stace, C., 1997 *New Flora of the British Isles*. Second edition. Cambridge University Press
- Zohary, D., Hopf, M. 2000 Domestication of Plants in the Old World – The origin and spread of cultivated plants in West Asia, Europe, and the Nile Valley. 3rd edition. Oxford University Press
- Stace, C., 2010 *New Flora of the British Isles (3rd Ed.)*. (Cambridge: Cambridge University Press)
- Stocker, D., 1993 'Recording worked stone', in Gilchrist, R. and Mytum, H. (eds.), *Advances in Monastic Archaeology* BAR British Series 227, 19-27
- Stockmarr, J., 1972 Tablets with spores used in absolute pollen analysis, *Pollen et Spores* 13, 615-621
- Stokes, H.P., 1911 Cambridge parish workhouses *Proc. Cambridge Antiq. Soc.* XV, 71-142
- Symonds, R. P., 2003 'Roman Pottery: methodology, dating and discussion', in Cowan, C., *Urban development in north-west Roman Southwark: excavations 1974-90*, Monograph 16, Museum of London Archaeology, 119ff
- Taylor, A., 1999 *Cambridge: the hidden history* (Stroud: Tempus)
- Trotter, M., 1970 'Estimation of Stature from Intact Long Limb Bones', in Stewart, T.D. (ed.), *Personal Identification in Mass Disasters* The Smithsonian Institution, National Museum of Natural History, Washington DC, 71-84
- Unwin F.T., 1991 *A Cambridge Childhood*
- van Geel, B., 1978 A palaeoecological study of Holocene peat bog sections in Germany and the Netherlands based on the analysis of pollen spores and macro-and microscopic remains of fungi algae cormophytes and animals, *Review of Palaeobotany and Palynology*, 25, 1-120
- van Geel, B. and Aptroot, A., 2006 Fossil ascomycetes in Quaternary deposits, *Nova Hedwigia*, 82(3-4), 313-329

- Wade, K., 2000 'Anglo-Saxon and medieval (rural)', in Brown, N. and Glazebrook, J. (eds.), *Research and : a Framework for the Eastern Counties, 2. Research Agenda and Strategy*. E. Anglian Archaeol. Occ Pap no. 8 (Scole archaeological committee), 23-26
- White, C.L., 2005 *American Artefacts of Personal Adornment, 1680-1820. A guide to Identification and Interpretation*, Maryland
- White, C.L. and Beaudry, M.C., 2009 'Artifacts and personal identity', in Gaimster, D. and Majewski, T. (eds.), *International Handbook of Historical Archaeology*. London, Springer, 209–25
- Whitehead, R., 2003 *Buckles 1250-1800*, Witham
- Winder, J.M., 1993 *A study of the variation in oyster shells from archaeological sites and a discussion of oyster exploitation*. PhD Thesis, University of Southampton, Department of Archaeology, Faculty of Arts
- Winder, J.M., 2011 *Oyster Shells from Archaeological Sites, A brief illustrated guide to basic processing*. Available at <http://oystersetcetera.wordpress.com/category/archaeological-shells/> Accessed 19.03.15

APPENDIX F. OASIS REPORT FORM

All fields are required unless they are not applicable.

Project Details

OASIS Number	oxfordar3-207609			
Project Name	Early Iron Age and medieval to modern settlement remains at Harvest Way, Barnwell, Cambridge			
Project Dates (fieldwork)	Start	03-02-2014	Finish	27-06-2014
Previous Work (by OA East)	Yes		Future Work	No

Project Reference Codes

Site Code	CAMEAG14	Planning App. No.	11/0219/FUL
HER No.	CHER ECB 3941	Related HER/OASIS No.	Oxfordar3 164902

Type of Project/Techniques Used

Prompt	Direction from Local Planning Authority - PPS 5
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Please select all techniques used:

<input type="checkbox"/> Field Observation (periodic visits)	<input type="checkbox"/> Part Excavation	<input type="checkbox"/> Salvage Record
<input type="checkbox"/> Full Excavation (100%)	<input type="checkbox"/> Part Survey	<input type="checkbox"/> Systematic Field Walking
<input type="checkbox"/> Full Survey	<input type="checkbox"/> Recorded Observation	<input type="checkbox"/> Systematic Metal Detector Survey
<input type="checkbox"/> Geophysical Survey	<input type="checkbox"/> Remote Operated Vehicle Survey	<input type="checkbox"/> Test Pit Survey
<input checked="" type="checkbox"/> Open-Area Excavation	<input type="checkbox"/> Salvage Excavation	<input type="checkbox"/> Watching Brief

Monument Types/Significant Finds & Their Periods

List feature types using the [NMR Monument Type Thesaurus](#) and significant finds using the [MDA Object type Thesaurus](#) together with their respective periods. If no features/finds were found, please state "none".

Monument	Period	Object	Period
Burial, field system	Bronze Age -2.5k to -700	Domestic and industr	Medieval 1066 to 1540
Settlement	Medieval 1066 to 1540	Domestic and industr	Post Medieval 1540 to 1901
Settlement	Post Medieval 1540 to 1901	Domestic and industr	Modern 1901 to Present

Project Location

County	Cambridgeshire	Site Address (including postcode if possible)	
District	Cambridge City	9-15 Harvest Way, Barnwell, Cambridge CB1 2FE	
Parish	Cambridge		
HER	Cambridgeshire		
Study Area	0.3252ha	National Grid Reference	TL 4635 5887

Project Originators

Organisation	OA EAST
Project Brief Originator	Andy Thomas, Cambridgeshire County Council
Project Design Originator	Aileen Connor. OA East
Project Manager	Aileen Connor
Supervisor	Rob Atkins

Project Archives

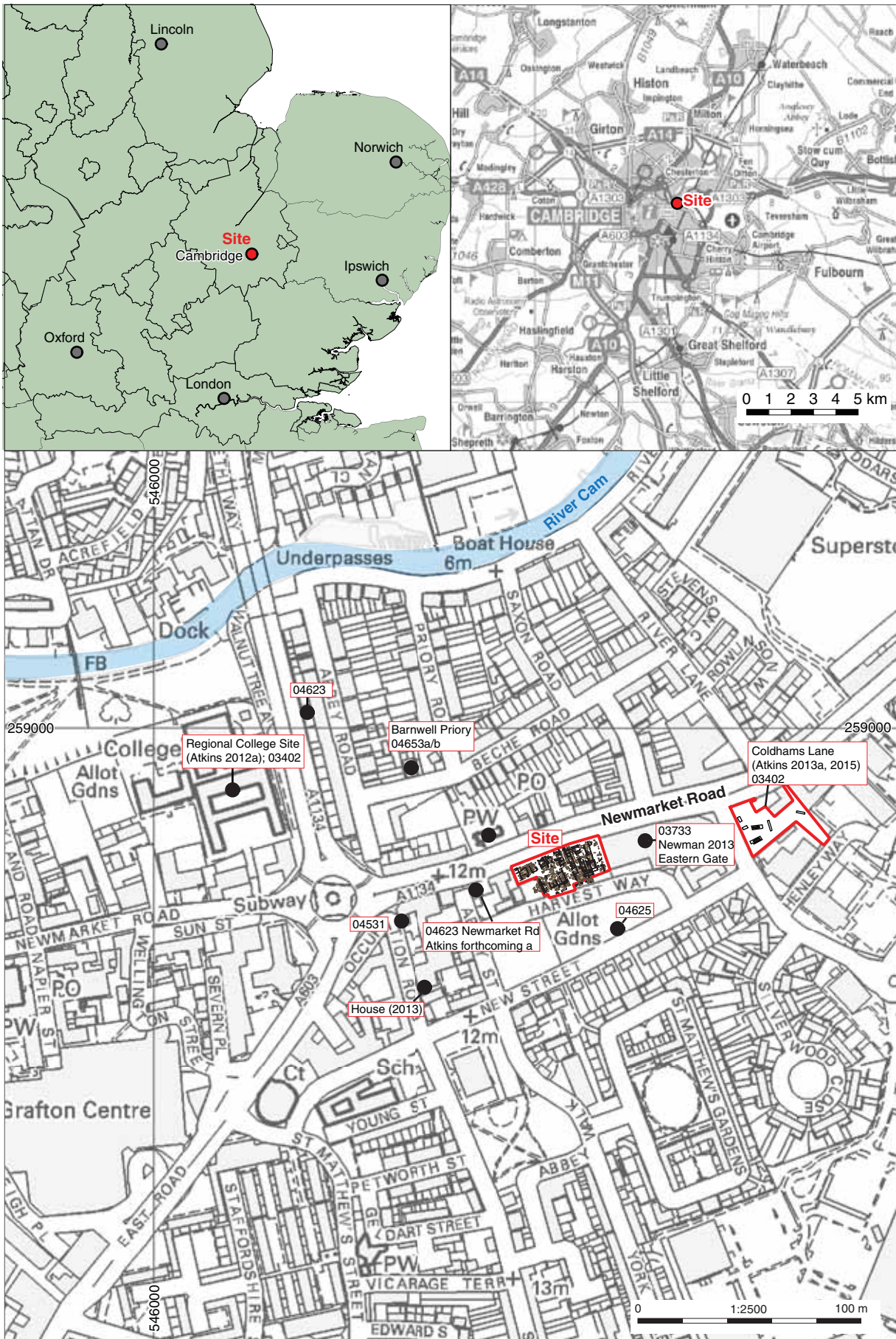
Physical Archive	Digital Archive	Paper Archive
CCC Stores	OA East	CCC Stores
CAMEAG14	CAMEAG14	CAMEAG14

Archive Contents/Media

	Physical Contents	Digital Contents	Paper Contents
Animal Bones	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Ceramics	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Environmental	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Glass	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Human Bones	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Industrial	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Leather	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Metal	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Stratigraphic		<input type="checkbox"/>	<input type="checkbox"/>
Survey		<input type="checkbox"/>	<input type="checkbox"/>
Textiles	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Wood	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Worked Bone	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Worked Stone/Lithic	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
None	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Digital Media	Paper Media
<input checked="" type="checkbox"/> Database	<input type="checkbox"/> Aerial Photos
<input checked="" type="checkbox"/> GIS	<input checked="" type="checkbox"/> Context Sheet
<input type="checkbox"/> Geophysics	<input checked="" type="checkbox"/> Correspondence
<input checked="" type="checkbox"/> Images	<input checked="" type="checkbox"/> Diary
<input checked="" type="checkbox"/> Illustrations	<input checked="" type="checkbox"/> Drawing
<input type="checkbox"/> Moving Image	<input type="checkbox"/> Manuscript
<input type="checkbox"/> Spreadsheets	<input checked="" type="checkbox"/> Map
<input checked="" type="checkbox"/> Survey	<input checked="" type="checkbox"/> Matrices
<input checked="" type="checkbox"/> Text	<input checked="" type="checkbox"/> Microfilm
<input type="checkbox"/> Virtual Reality	<input checked="" type="checkbox"/> Misc.
	<input checked="" type="checkbox"/> Research/Notes
	<input checked="" type="checkbox"/> Photos
	<input checked="" type="checkbox"/> Plans
	<input checked="" type="checkbox"/> Report
	<input checked="" type="checkbox"/> Sections
	<input checked="" type="checkbox"/> Survey

Notes:



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Figure 1: Site location, surrounding CHER sites and recent excavations mentioned in text. Scale 1:2500

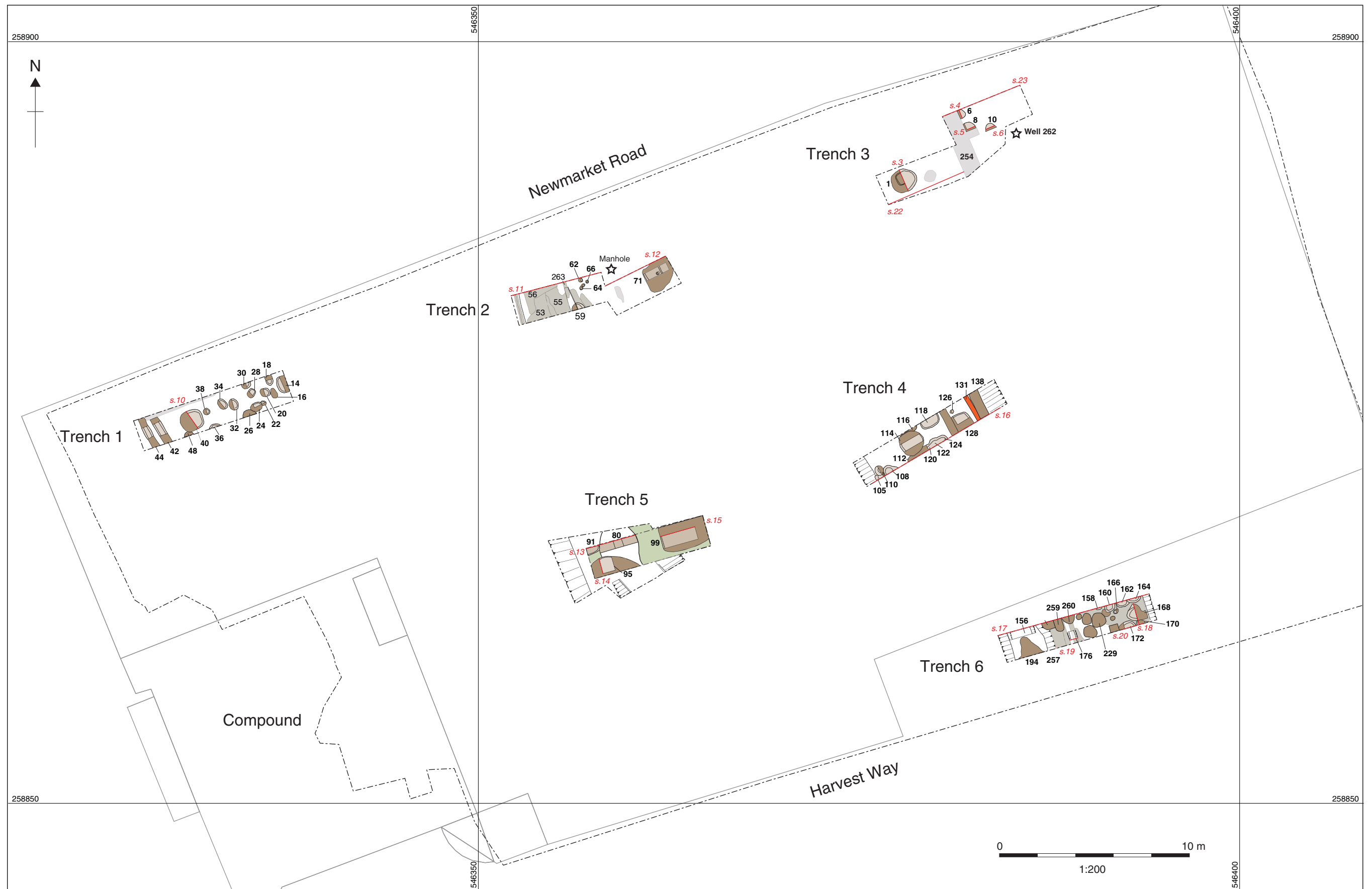




Figure 3: Period 1: Plan of features

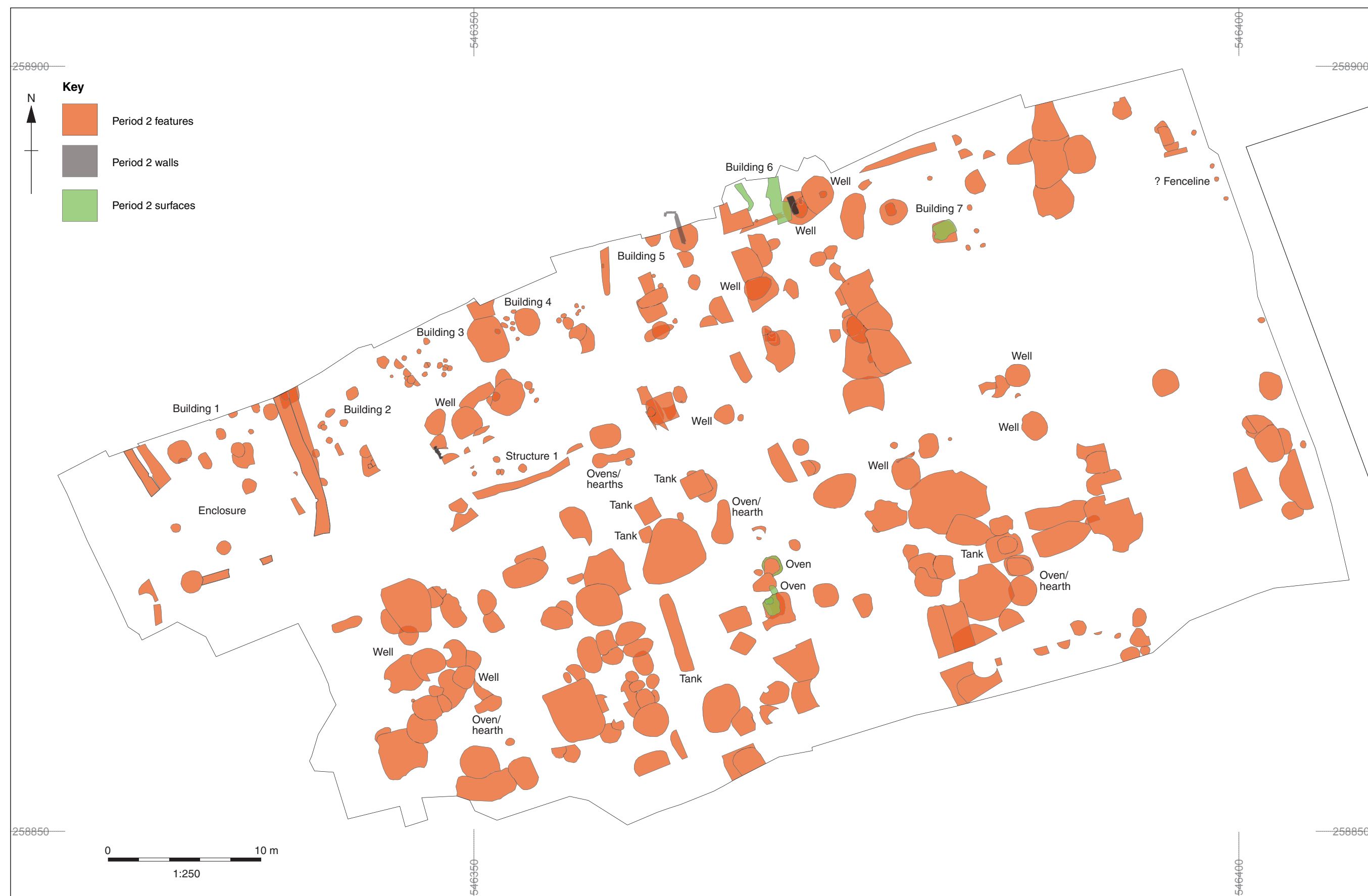


Figure 4: Period 2: Plan of features including walls and surfaces



Figure 5: Period 3: Plan of features including walls and surfaces

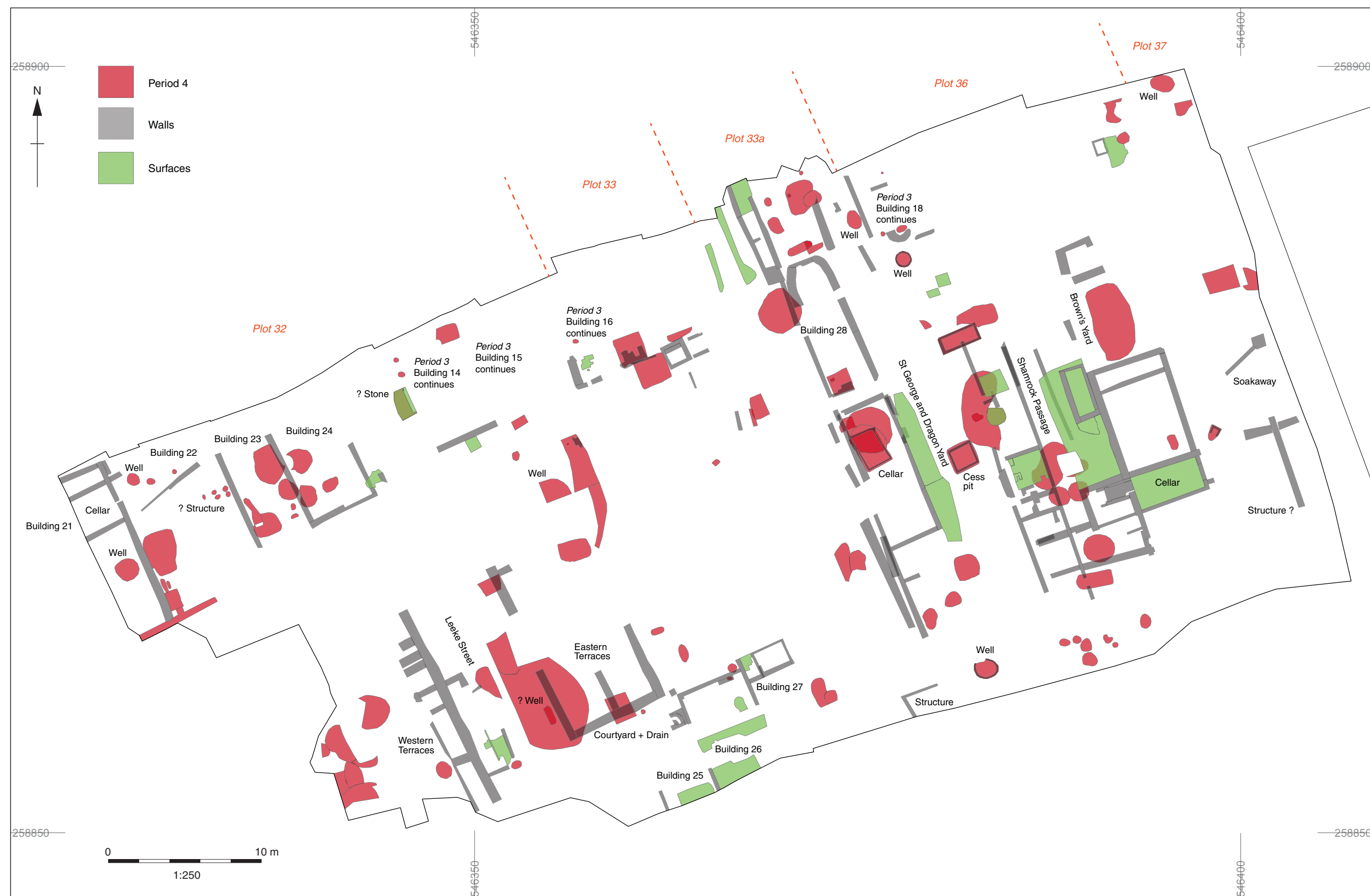


Figure 6: Period 4: Plan of features including walls and surfaces

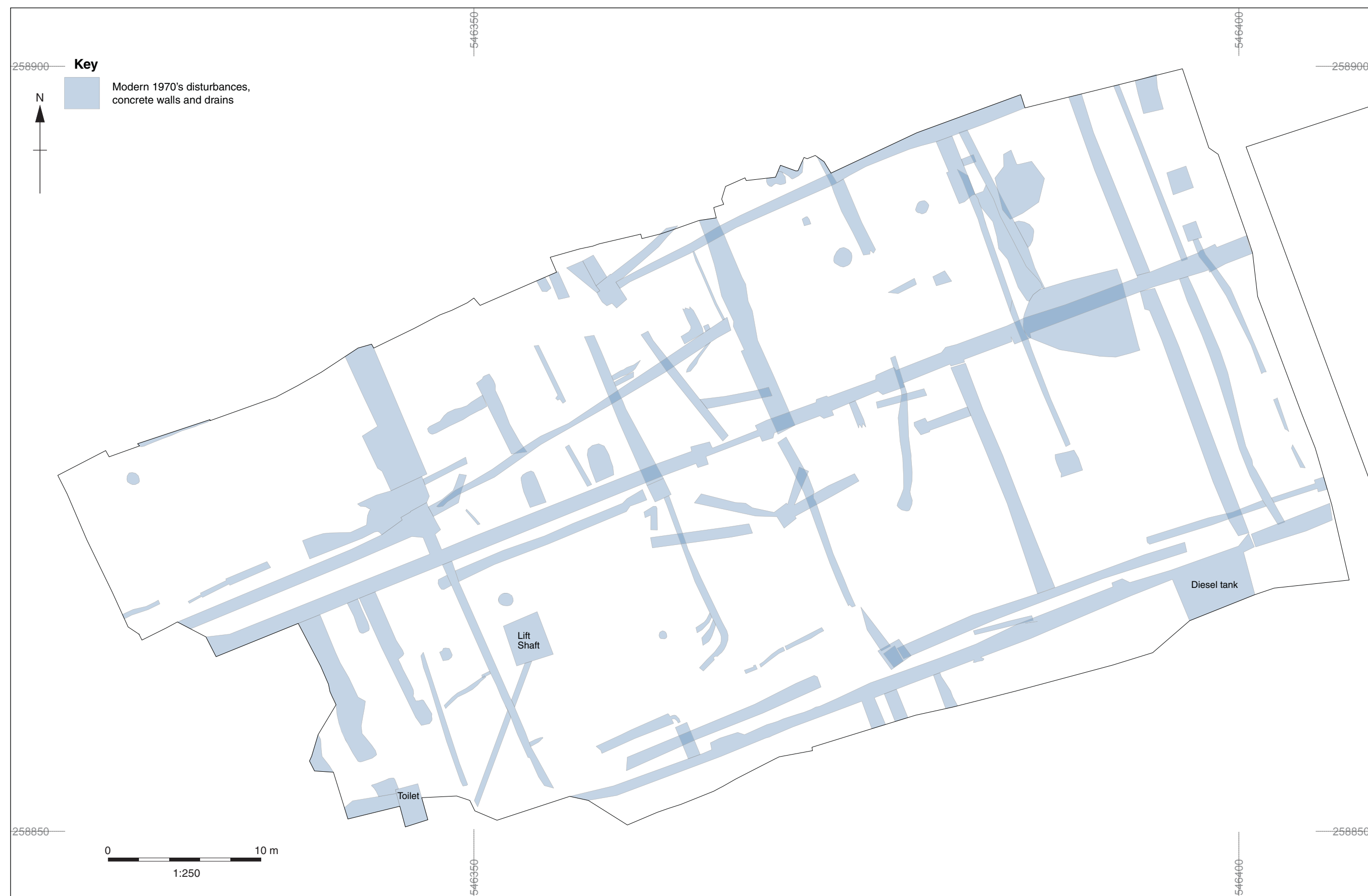


Figure 7: 1970's disturbances, concrete walls and services

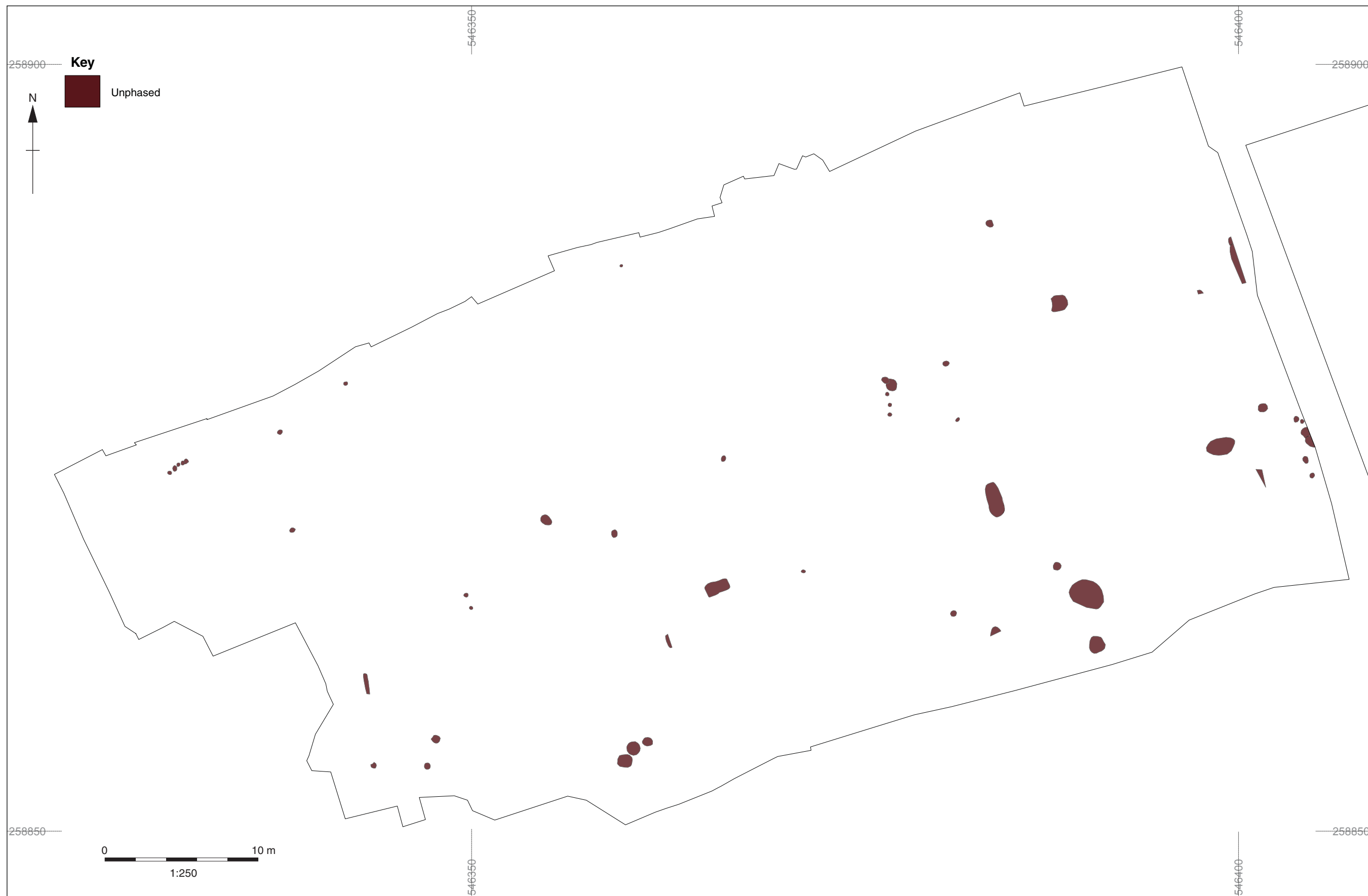


Figure 8: Unphased features

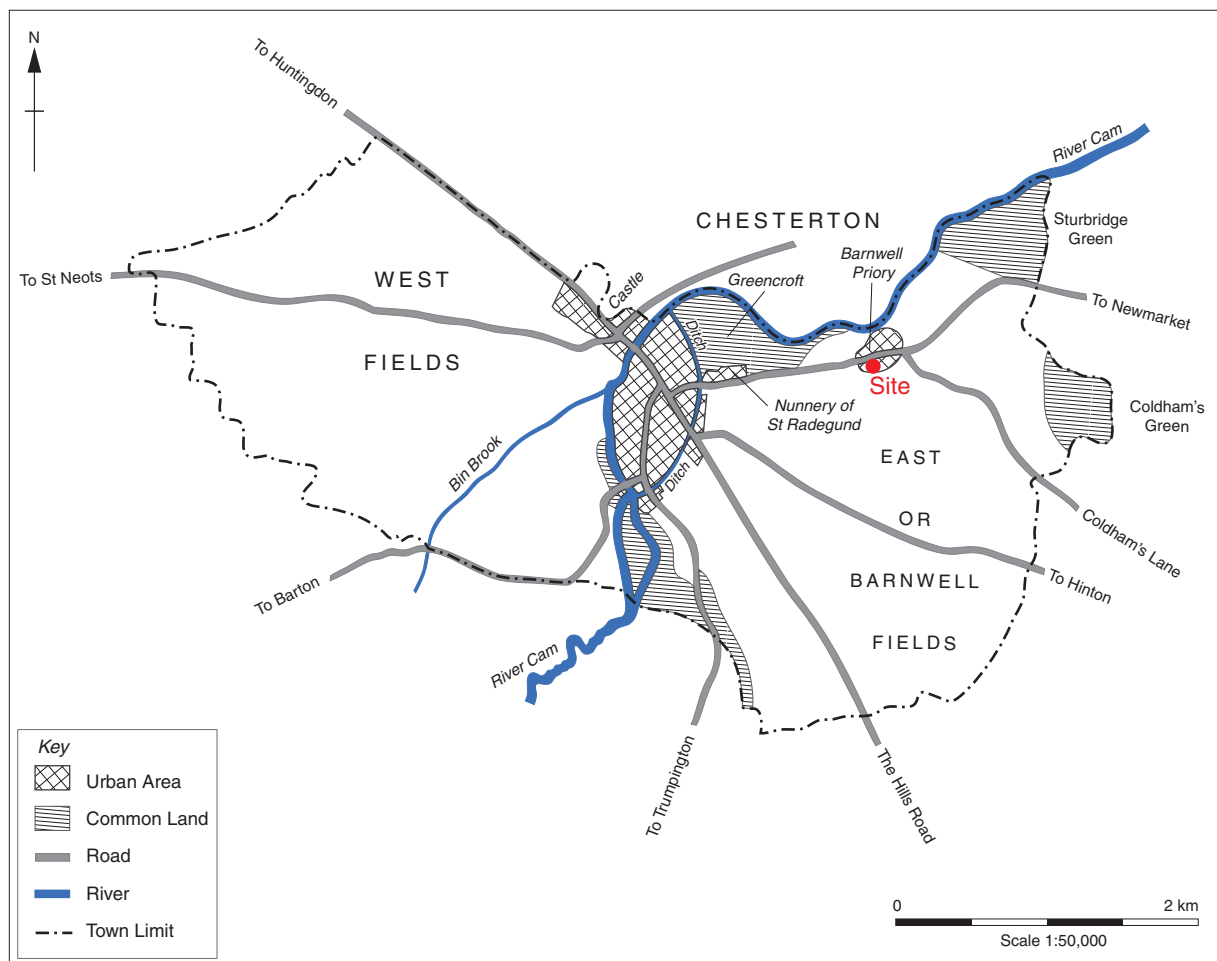


Figure 9: Site in relation to medieval Cambridge (after Maitland 1964 facing p.54)



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