NORTH WEST CAMBRIDGE

ARCHAEOLOGY

No. 6

SITE IX EXCAVATIONS

Assessment Report

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NORTH WEST CAMBRIDGE ARCHAEOLOGY

University of Cambridge
2013–14 Excavations

- Site IX -

(NWC Report No. 6)

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University of Cambridge
July 2014/Report No. 1248
HER Event Number: **ECB 4180**

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Summary

Excavations undertaken between April and June 2014 covering 0.47 ha. as part of the archaeological investigations in advance of the North West Cambridge development revealed remains of a medieval rural settlement, which can be identified as the documented settlement of Howes. Occupation began c. 1150–1210 and consisted of a series of square or sub-square ditched enclosures fronting onto Huntingdon Road. The settlement appears to have increased in size gradually until around the mid/late 14th century, before declining from the early/mid-15th century onwards. Occupation ceased in the early/mid-16th century, although agricultural activity continued and the site was later occupied by the University Farm in the early 20th century. The archaeological evidence is atypical of medieval rural settlements in South Cambridgeshire in a number of respects. The settlement occupies an unusual location, at a point in the landscape where four parishes meet, and is a late addition to the medieval settlement pattern. The ceramics are dominated by Huntingdonshire Fen Sandy ware, which is not usually found in significant quantities in and around Cambridge, and there is an atypical preponderance of mussel shells compared to oyster shells. The animal bone assemblage is dominated by horse, with signs of butchery and carnivore gnawing suggesting that it may have been fed to dogs. It is possible that some of the atypical elements of the site relate to Howes as a roadside settlement potentially playing a specialised role with regard to travellers. Alternatively, the horse bone may relate to a kennel or similar establishment, as documentary sources attest to hunting in the immediate vicinity.

SECTION 1: INTRODUCTION

Commissioned by the University of Cambridge Estates Management and Buildings Service, the Cambridge Archaeological Unit (CAU) undertook archaeological excavations as part of the 2013–14 investigations at Site IX between January and June 2014. Site IX was located on the northeast edge of the North West Cambridge development area in Fields 116 and 117, adjacent to Huntingdon Road centred on TL 4300 6035 (Figs 1–4). Site IX was originally revealed during the evaluation phase, when ditches and pits containing 12th–15th century pottery indicating domestic occupation were identified in Tr. 207–08 and it was suggested that these related to the documented Medieval settlement of Howes (Evans & Newman 2010, 82–86). Although initial machine stripping for the excavation phase began on the 20th of January 2014, prevailing weather and groundwater conditions meant that a delay ensued and the main phase of excavation took place between the 10th of March and the 11th of April 2014. A second phase of work took place between the 20th of May and the 4th of June 2014.

The area of investigation was expanded several times during the course of the fieldwork. It ultimately consisted of two broadly rectangular areas — separated by the pre-existing concrete farm track — that were *c*. 85m by 48m and *c*. 47m by 27m in extent, covering 3448.27 and 1248.1 square metres. There was also a 38m long trench running to the southeast covering 131.25 square metres. In addition, a watching brief was maintained on nearby service trenches; this covered 129.76 square metres. The excavated area — excluding the trench and watching brief — covered 4696.37 square metres (*c*. 0.47 ha.) whilst the total including all areas covered 4957.38 square metres (*c*. 0.50 ha.). The surface height post-machining ranged between 22.6–23.4m OD. The CAU site code is NWC13 and the Event Number is ECB4180.

Methodology

All excavation and recording methodologies employed are the same as those of the 2012–13 excavations at North West Cambridge (Cessford & Evans 2014). The topsoil and other overlying deposits were removed using a tracked 360° mechanical excavator with a 2.1m-wide toothless bucket under constant archaeological supervision. All archaeological features were digitally planned using a Leica TPS system and the exposed surfaces of all features were metal detected (with spot finds designated SF). All features were then hand excavated; discrete features were 50% excavated, although in a number of instances where features produced significant assemblages of material culture they were 100% excavated. Linear features were excavated in 1.0m wide slots, the percentage investigated varied between 1 in 4 to 1 in 10; dependent on the nature of the feature. The exception to this were a small minority of features that were so severely affected by flooding and/or contamination that they were not investigated, although they were base-planned and recorded as far as feasible. After excavation all slots were digitally recorded using the same Leica TPS system as the initial base planning. The sections of selected features were drawn at 1:20 or 1:10 as appropriate. Features were recorded using the CAU modified Museum of London Archaeology Service system (Spence 1994). Context numbers are indicated within the text in square brackets (e.g. [12500]); all identifiable features have been assigned feature numbers denoted by the prefix F (e.g. F.4000). Feature

numbers are generally used in discussion in preference to context numbers and all contexts have been assigned to features. The numbering systems employed for contexts and features continue on from the numbers assigned during earlier phases of fieldwork at North West Cambridge. Each excavated slot was assigned a slot number (e.g. sl.3000), these have been utilised as the primary mechanism for plotting the distribution of materials. Photographic recording was primarily digital; including both general record shots by members of the excavation team and selective higher standard photography by the CAU photographer Dave Webb. A range of features were sampled for environmental remains.

All work was carried out in strict accordance with statutory health and safety legislation and the recommendations of the Federation of Archaeological Managers & Employers (Allen & Holt 2010).

Geology and Topography

Geologically Site IX is principally located upon 3rd–4th terrace/head gravels; however the underlying geology proved to be highly variable across the investigated area. Although much of the site lay on these gravels in places the underlying Gault clay was present and there were also substantial areas where a mixed marl-like interface deposit between the gravel and the clay was present. Topographically the site was relatively flat with no discernible slope; this appears to genuinely reflect the topography of the area when Site IX was occupied.

Archaeological and Historical Background

In addition to the ditches and pits containing 12th–15th century pottery indicating domestic occupation identified in Tr. 207–08 during the evaluation (Evans & Newman 2010, 82–86) several other pieces of fieldwork have been undertaken within the probable Medieval boundaries of Howes (Fig. 2). Negative results, although in some cases affected by later disturbance, with no Medieval features or material were produced by trench based evaluations at Howes Close (Casa Hatton 2001), 2 Girton Road (Cooper 2005), the NIAB HQ site (Collins 2010) and 193 Huntingdon Road (Fletcher 2004). Recent work at the Anglia Ruskin Sports Facility revealed the bases of linear features that appear to be the remnants of Medieval furrows, which may well have been farmed from the settlement (Tabor 2014). Remains that may relate to Howes were found at the NIAB South site, where Tr. 13 and 15 identified a 'light scatter' of features; with two undated pits or postholes and one pit/ditch containing two sherds of Medieval pottery (Mason 2008, 4–5, 29). Given the low density of features and material revealed by the current investigations (see below) these relatively unimpressive results may well be part of the same settlement. Additionally a small test pit at The Brambles on Huntingdon Road produced sherds of Medieval pottery (Blinkhorn 2010).

Some of the documentary evidence associated with Howes has been discussed in the evaluation report (Evans & Newman 2010, 86). These sources indicate that the settlement was in existence by 1219, was still inhabited in the late 14th century and appears to have been abandoned prior the 17th century. Further on-going documentary research has indicated that although a considerable quantity of Medieval documentary evidence exists, the fact that the settlement spread over four

parishes — and the fact that documentary survival varies markedly from parish to parish — makes it effectively impossible to reconstruct the settlement from documentary evidence alone. Additionally it appears that the excavated area fell principally within Impington parish (Fig. 9), which has relatively little surviving Medieval documentary evidence compared to neighbouring Cambridge St. Giles and Girton. This research also suggests that the earliest element of the hamlet may have comprised a roadside chapel, and that the hamlet probably shrank over time rather than being totally abandoned; it may in fact never have been entirely deserted.

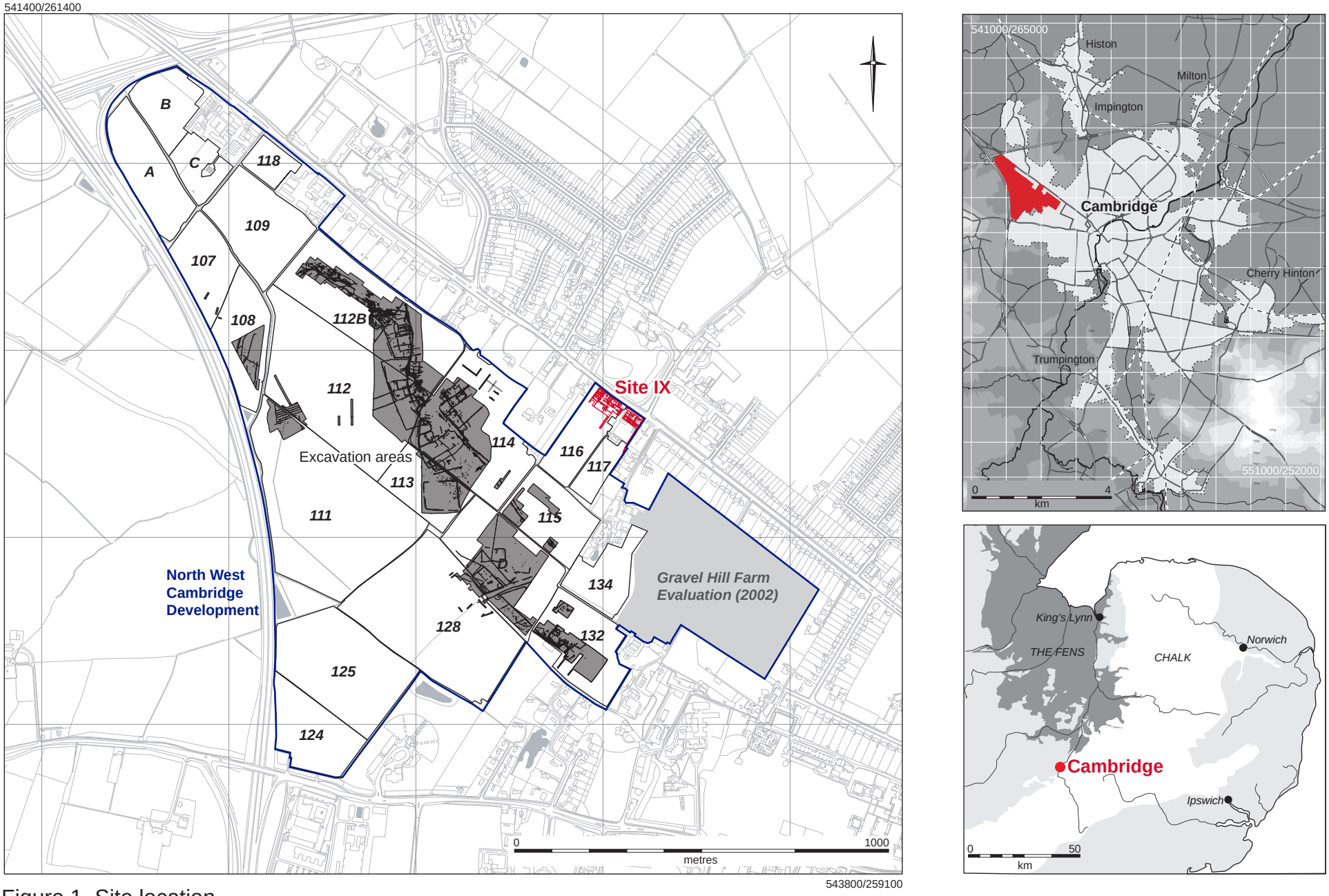


Figure 1. Site location

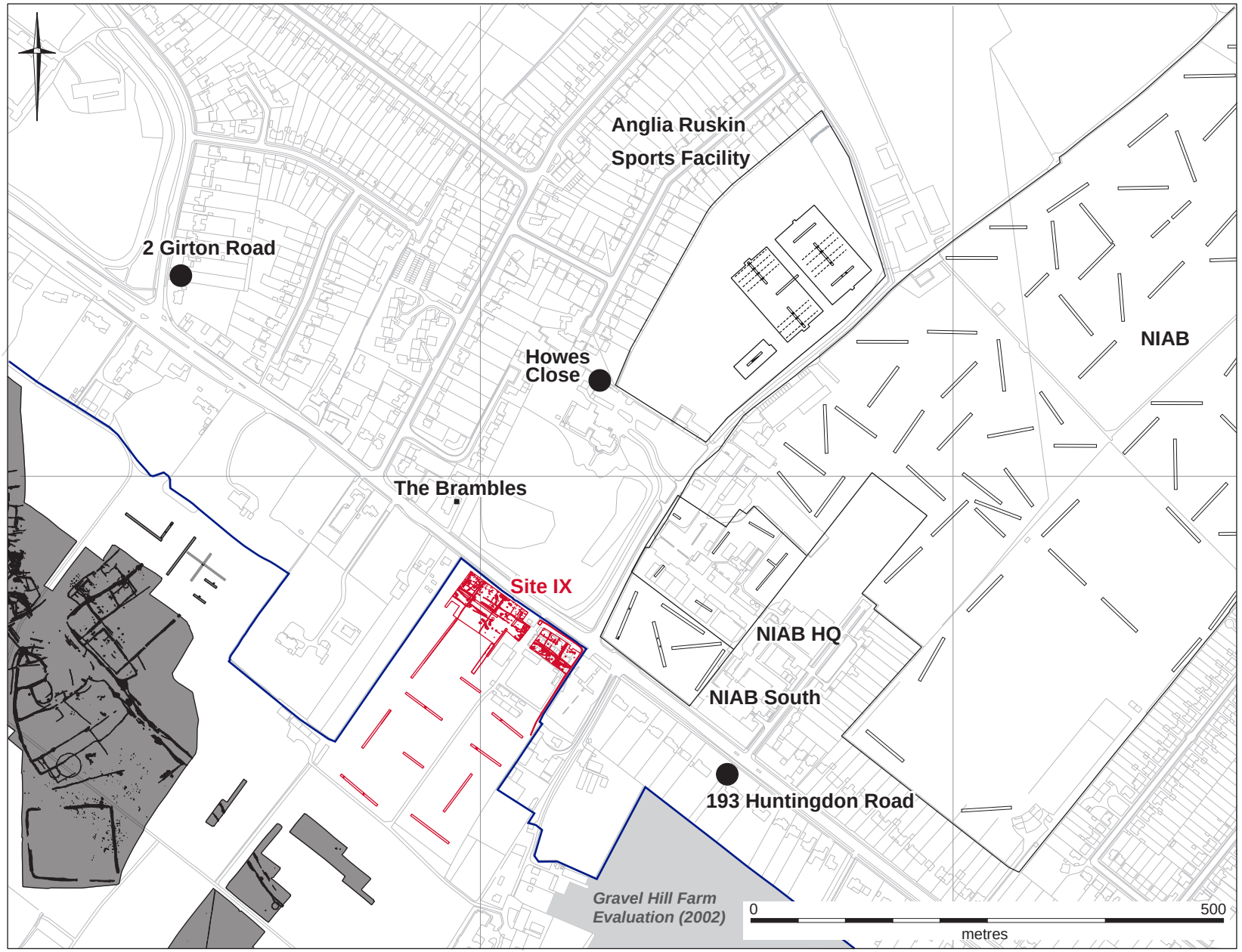


Figure 2. Plan of Site IX, plus other archaeological investigations associated with Howes

Figure 3a. Plan of all archaeological features

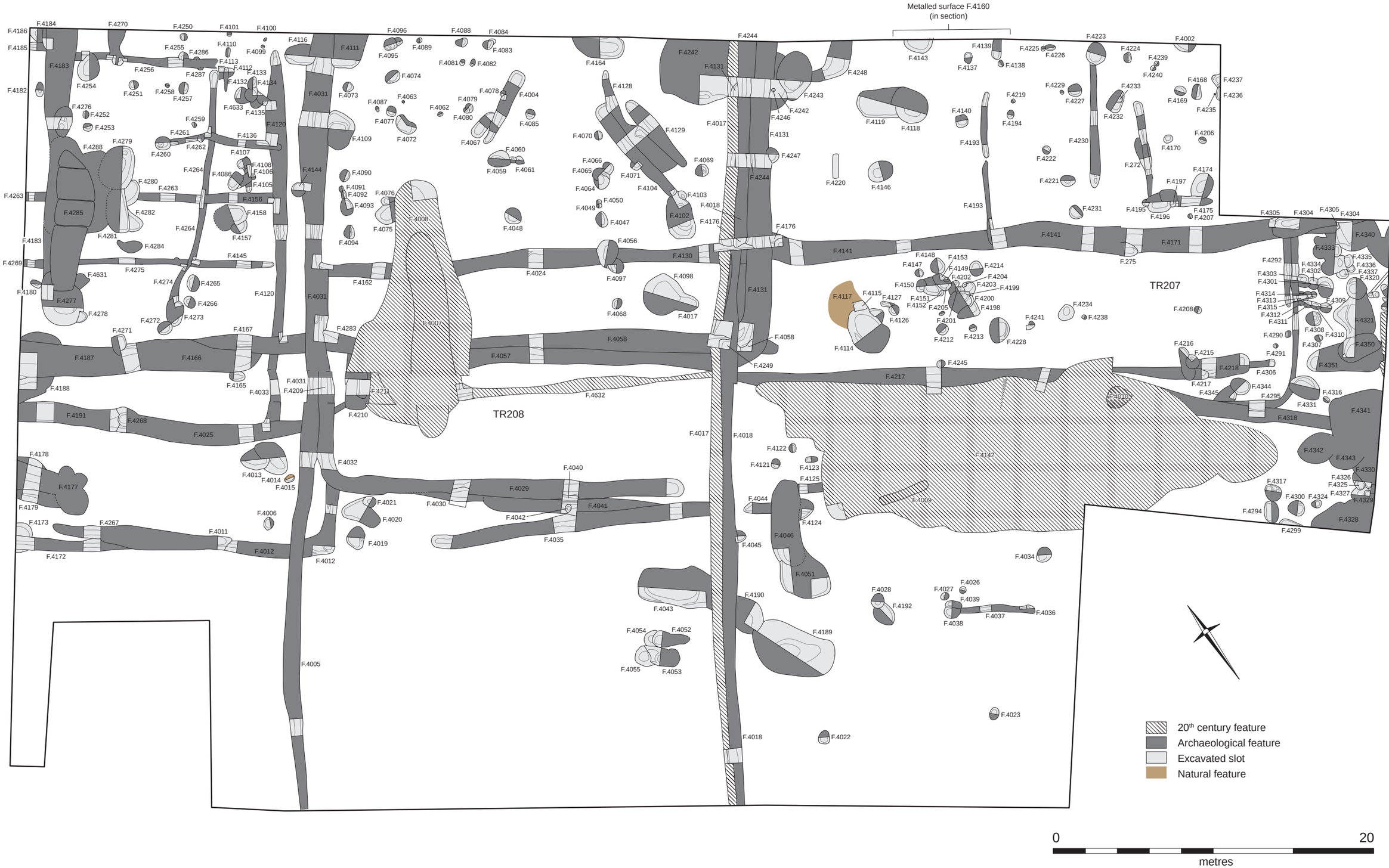


Figure 3b. Plan of all archaeological features in northwestern area

Figure 3c. Plan of all archaeological features in southeastern area

Figure 4. General view of area during excavation, facing northwest

SECTION 2: RESULTS

Four broad archaeological phases can be identified: pre-settlement activity, Medieval settlement, Post-Medieval agriculture and 20th century activity associated with the University Farm (Table 1). Evidence for pre-settlement activity is minimal, whilst both the Post-Medieval and Modern remains are of extremely limited significance. The vast bulk of the features and artefactual evidence relate to the Medieval settlement.

Period	No.	%
Natural	2	0.4
Medieval	411	88.6
Post-Medieval/Early Modern	9	1.9
20th century	42*	9.1
Total	***464***	

Table 1: Features from Site IX by broad period (* - includes features that were not recorded or assigned feature numbers during fieldwork).

Pre-Settlement Activity

There is no significant evidence for activity in the area prior to the establishment of the Medieval settlement. It is possible that some of the discrete features that contained no dateable material may pre-date the Medieval settlement, however in most instances there is no evidence to support such an attribution and in terms of their form and fills most such features fall within the spectrum definitely dated to the Medieval period. There were two treethrows that were rather different in terms of their fills and probably pre-dated the Medieval settlement (F.4015, 4117).

A small quantity of residual Prehistoric and Romano-British material was recovered from Medieval and later features. The evaluation produced a single undiagnostic flint chip and during the excavation phase several more pieces of struck (9 pieces, 352g) and burnt (4 pieces, 2g) flint were recovered. The struck flint consists of chronologically undiagnostic flakes, chunks and chips and some of the pieces have suffered later damage (pers. comm. Emma Beadsmoore). During the evaluation an unstratified fragment of an Early Romano-British cast polychrome glass vessel (most probably a bowl) was recovered. The only piece of vessel glass recovered during the excavation phase was a single small thin colourless glass fragment (sample <824> F.4357). The piece is too small to be diagnostic, although on balance it is perhaps more likely to be Romano-British than Medieval (pers. comm. Vicki Herring). The only Romano-British pottery identified from either phase of investigations was a single sherd of Samian ware weighing 7g from F.4216 (pers. comm. David Hall). It is possible that some Romano-British coarsewares were also present, but these could not be reliably distinguished from the Medieval pottery.

More intriguingly a group of at least 22 domed hobnails (23g) from 15th century pit F.4276 appear to be Romano-British in date (see Appleby below). If this is correct the number of hobnails is comparable to those recovered from Romano-British burials at the site (Cessford & Evans 2013) and may provide proxy evidence for the disturbance of a nearby burial of this period in the 15th century. These hobnails plus the evidence for a high quality glass bowl (see above) provide some support, albeit ambiguous, for the suggestion that an undated barrow discovered in the vicinity

during the construction of the Huntingdon Road turnpike in *c*. 1745 (Lysons & Lysons 1808, 44–45) and the fact that name 'Howes' was consistently recorded in the plural during the Medieval period (Reaney 1943, 177), indicate the presence of a number of Roman-British barrows in the area.

No Early or Middle Saxon material was recovered during either phase of fieldwork. If the settlement of Howes was established *c*. 1150–1210 (see below) then it is likely that prior to this the area was probably laid out as open-field systems under arable cultivation as a series large, hedge-less 'open fields' farmed in strips *c*. 850–1150 (Oosthuizen 2006), although locally there is evidence for 8th–9th-century intensively cultivated proto-open field systems (Oosthuizen 2005; Oosthuizen 2006). No traces of this putative activity survived and it is conceivable that the relatively poor drainage of this specific locale meant that it was not ploughed.

Medieval Settlement

The majority of the archaeological features identified (88.6%) relate to the Medieval settlement identified as Howes (Figs 5–7; Table 2). The date at which Howes was established is uncertain; a combination of ceramic and stratigraphic evidence suggests that the site began either very late in the period when 10th–12th century ceramics were in use, or during the transitional period when these were in use alongside some 13th–15th century wares. This transition is typically dated to *c*. 1200, but more probably took place within the period spanning *c*. 1175–1225, suggesting that the settlement originated *c*. 1150–1225. As Howes is first mentioned in 1219 — and is likely to have been established for a number of years by then — a date of *c*. 1150–1210 appears probable.

The form of the settlement at Howes places it within the general phenomenon of the shift from a largely dispersed settlement pattern towards nucleation and the concomitant adoption of large unenclosed fields farmed in common, which has been termed the 'village moment' or 'great re-planning' (Lewis *et al* 1997). This 'village moment' is generally seen as an evolutionary process, rather than a revolutionary development, which was the product of a particular period and took 400 years to reach maturity and that passed after the 12th century (Lewis *et al* 1997). Nuclear settlements appear to develop from a variety of 'pre-village nuclei', rather than from the abandonment of an earlier pattern of dispersed settlement (Jones & Page 2006). The evidence from Howes fits with broader patterns in South Cambridgeshire and further afield, where rural settlements of broadly this form are typically no earlier than the 11th century and predominantly post-date the Norman Conquest. Archaeological dating of the origins of such sites usually falls within the period *c*. 1050–1200, suggesting that Howes is a relatively late example.

The excavation evidence points to the creation of a series of square or sub-square plots enclosed by ditches, whose frontages lay to the northeast of the investigated area, probably under the current Huntingdon Road. Parts of five plots can be identified within the excavated area (Plots A–E), plus a zone behind these plots (Rear Area). As the entire extent of no single plot fell within the area of excavation it is impossible to reconstruct them precisely. At a general level they had ditched boundaries of moderate size, possibly with associated internal banks although this is speculative, and there are less substantial internal linear sub-divisions. There were numerous pits of various, usually unknown functions, postholes which in most

instances form no coherent pattern, plus wells (Fig. 6), cesspits and some pits that appear to have been timber lined, would have naturally retained water and probably fulfilled light industrial functions (Fig. 17). There are clear indications that the frontages of the plots lay a short distance to the northeast of the excavated area, with indications of metalled surfaces and timber structures in this area.

The principal Medieval occupation at Howes spanned *c.* 300–400 years. It is clear that the layout of plots changed and developed over time, albeit in an evolutionary rather than a revolutionary manner, and a broad sequence can be identified, based principally upon the network of boundary ditches. A combination of stratigraphic relationships, spatial logic and dateable material allow a sequence of five phases to be identified (Fig. 8). Unfortunately, it is impossible to relate the majority of the discrete features to this sequence due to the paucity of dateable material. These phases can be broadly dated on the basis of the pottery recovered, although the dates are only approximate:

Phase 1 - Plots B and C established (mid 12th/early 13th–early/mid-13th century)

Phase 2 - The existing Plots B and C expanded and Plots A, D and E established (early/mid-13th century–late 13th/early 14th century)

Phase 3 - Plots A, B and C expanded, Plots D and E probably expanded although evidence is ambiguous (late 13th/early 14th century– early/mid-15th century)

Phase 5 - Plot A and B expanded, Plots C, D and E abandoned (early/mid-15th–early/mid-16th century.

Type	Plot A	Plot B	Plot C	Plot D	Plot E	Plot boundaries	Rear area	Total
Boundary ditches	6	9	10	4	3	11	0	43
Ditches other	16	2	6	7	0	0	2	33
Pits	51	36	50	79	17	3	12	248
Specialised pits	3	1	0	0	0	0	0	4
Cesspits	2	0	0	0	0	0	0	2
Postholes/post-pads	7	20	25	11	1	7	0	71
Wells	0	0	3	1	2	0	0	6
Other	0	1	1	0	1	0	2	5
Total	***85***	***69***	***95***	***102***	***24***	***21***	***16***	***412***

Table 2: Types of Medieval feature by plot and other spatial units.

Plot A: As with the other plots the northeastern frontage of Plot A fell outside the area of investigation. As a *c.* 18m width of the plot was investigated it is likely that that *c.* 50%+ of the width of the plot was investigated. The southeastern boundary of Plot A running perpendicular to Huntingdon Road, which it shared with Plot B, was defined by several phases of ditch (F.4031–32, F.261–62 in evaluation). There were three significant ditches running parallel to Huntingdon Road, these were located *c.* 19m (F.4167/4187), *c.* 24m (F.4025/4191), and *c.* 32m (F.4011/4072) from the northeastern limit of excavation respectively. Although absolute stratigraphic certainty is lacking, it appears that these three ditches all represent the rear boundary of Plot A and demonstrate the expansion and lengthening of the plot to the southwest over time; increasing it by *c.* 5m and *c.* 8m respectively.

Figure 5. Plan of medieval features

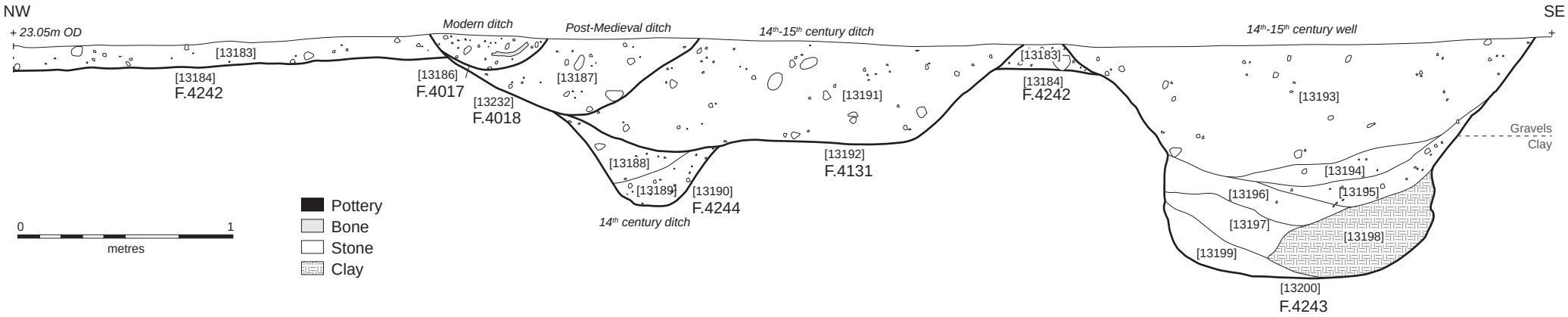


Figure 6. View and section of boundary ditches between Plots B-C and well F.4243, facing northwest

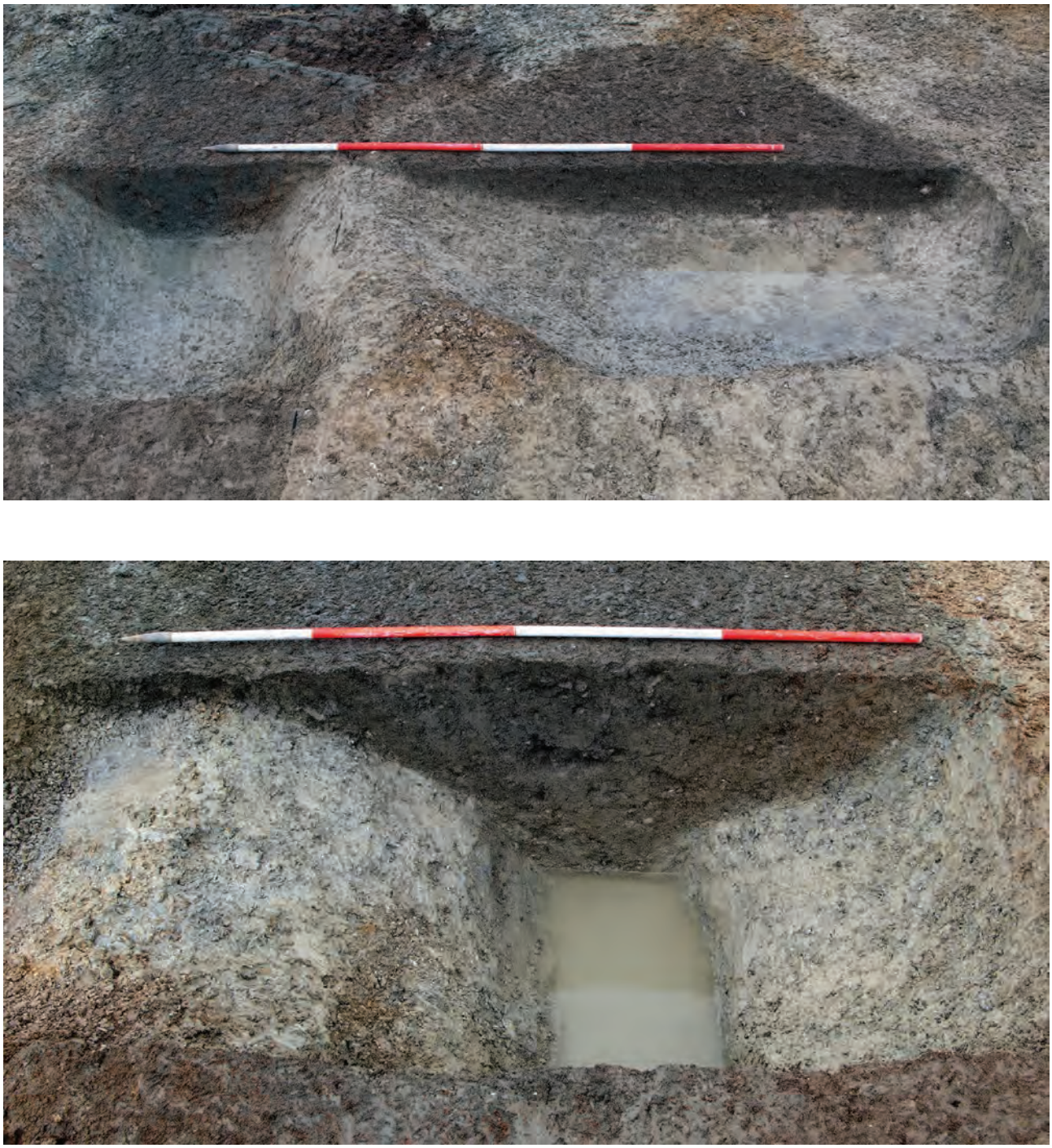


Figure 7. Views of ditch F.4356 and pit F.4363 facing northwest (upper) and ditch F.4357 facing northwest (lower)

Internally within Plot A there were a range of discrete features plus evidence for relatively intensive sub-division of the plot. The evidence for sub-division consists of a number of extremely shallow gullies (F.4033/4120/eval.258, 4136/4261, 4145/4269, 4156/4263, 4185/4256, 4264/4274). The functions of the rest of the network of subdivisions are less clear, although they may well be related to livestock. They do, however, appear to form a single consistent system and appear to be contemporary with the first expansion of Plot A (as defined by the rear boundary ditch F.4025/4191).
Discrete features include a range of 48 relatively nondescript pits (F.4006, 4013–14, 4086, 4105–07, 4110, 4112, 4116, 4132–35, 4144, 4157–58, 4165–66, 4173, 4177–82, 4186, 4188, 4250–55, 4257–60, 4265, 4268, 4271, 4273, 4277–78, 4280, 4282, 4284, 4288) and 7 postholes (F.4099–4101, 4262, 4266, 4286–87). It is possible that some of these located at the northeastern limit of the site represent the rear portion of a timber building (F.4101, 4112–13, 4250, 4255, 4257). More noteworthy are two features whose form combined with the distinctive greenish staining of their fills indicates that they were timber-lined cesspits (F.4184, 4272). There were also two relatively deep steep-sided features, these appear to be tanks that were dug into the underlying clay and would have held water (F.4279, 4281). These may well also have been timber-lined and probably fulfilled some light industrial function. There was also a much smaller but steep-sided pit nearby (F.4276; Figure 17), which also probably fulfilled some form of specialised function. This feature was noteworthy because it contained a large number of mussel shells and a semi-complete pottery vessel.

Plot B: As with the other plots the northeastern frontage of Plot B fell outside the area of investigation, however the entire rear portion of the plot was investigated. The plot was *c.* 28m wide. The northwestern boundary of Plot A running perpendicular to Huntingdon Road, which it shared with Plot A, was defined by several phases of ditch (F.4031–32, F.261–62 in evaluation). The southeastern boundary of Plot B running perpendicular to Huntingdon Road, which it shared with Plot C, was defined by several phases of ditch (F.4031/4131/4244; Fig. 6). There were four significant ditches running parallel to Huntingdon Road, these were located *c.* 14m (F.4024/4030/4162), *c.* 19m (F.4057–58/4283), *c.* 28m (F.4029–30/4041) and *c.* 28–32m (F.4035) from the northeastern limit of excavation respectively. Although absolute stratigraphic certainty is lacking it appears that these three ditches all represent the rear boundary of Plot B and demonstrate the expansion and lengthening of the plot to the southwest over time; increasing it by 5m, 9m and 0–4m respectively.

Internally within Plot B there were a range of discrete features, these include a range of 34 relatively nondescript pits (F.4019–21, 4042, 4047–48, 4056, 4059, 4064–67, 4069, 4072–77, 4079, 4085, 4090, 4092–95, 4097–98, 4102–03, 4109, 4111, 4209–10), 19 postholes (F.4049–50, 4060–63, 4068, 4070–71, 4078, 4080–83, 4087–89, 4091, 4096) and a single post-pad (F.4084). One potential timber structure was identified, although its existence cannot be regarded as definite (F.4062, 4072, 4074, 4077, 4079–82, 4088, 4095–96). There were also short lengths of shallow linears of unknown function (F.4004, 4104, 4128–29). The most noteworthy feature was a deep near-vertical sided pit (F.4164), which was probably timber-lined and is likely to have fulfilled some form of specialised function. There was also a relatively extensive hollow (F.4242), which appears to have been deliberately created towards the front of the plot.

Plot C: As with the other plots the northeastern frontage of Plot C fell outside the area of investigation, although the southeastern boundary of the plot was not identified it appears likely that *c.* 90%+ or more of the plot width was investigated (based on the assumption that the plot is broadly comparable in width to Plot B). The plot was thus *c.* 34m wide. The northwestern boundary of Plot C running perpendicular to Huntingdon Road, which it shared with Plot B, was defined by ditches (F.4031/4131/4244; Fig. 6). The southeastern boundary of Plot C running perpendicular to Huntingdon Road, which it shared with Plot D, was poorly represented due to the limitations imposed by the presence of an electricity sub-station, but was defined by ditches (F.4292, 4295). There were two significant ditches running parallel to Huntingdon Road, these were located *c.* 14m (F.4024/4141/4171/4305, eval. F.274–75) and *c.* 21m (F.4217/4306/possibly 4318) from the northeastern limit of excavation respectively. Although absolute stratigraphic certainty is lacking it appears that these two ditches both represent the rear boundary of Plot C and demonstrate the expansion and lengthening of the plot to the southwest over time by *c.* 7m. It is possible that in common with Plots A and B this plot was extended a second time to *c.* 28m from the northeastern limit of excavation, but that traces of this have been largely removed by later features with only a few traces surviving (F.4044, 4125).

Internally within Plot C there were a range of discrete features, these include a range of 50 relatively nondescript pits (F.4002, 4114–15, 4119, 4126–27, 4137–38, 4140, 4143, 4147–48, 4150–51, 4153, 4168–69, 4174, 4195–4204, 4212–14, 4218, 4224, 4228–29, 4231–32, 4234, 4236–38, 4241, 4247, 4290–91, 4294, 4317, 4344–45, eval. F. 277) and 24 postholes (F.4121–23, 4149, 4152, 4170, 4194, 4205–08, 4219, 4221–23, 4225–27, 4233, 4235, 4239–40, 4245–46). On the northeastern limit of excavation an extent of metalled surface was identified in section (F.4160) suggesting a yard area of some kind. This surface sealed a relatively nondescript pit, which is noteworthy only for the fact that it contained a coin (F.4143). There were a number of shallow linears running broadly perpendicular to Huntingdon Road (F.4139, 4193, 4230, eval. F.272). The function of these is uncertain, their form etc. makes it unlikely that they are structural, it appears that two sets (F.4139/4193 and F.4230) may delineate a *c.* 7.5m wide access route possibly linked to the movement of livestock. Three relatively deep steep-sided features located in the northwestern half of Plot C appear to be the remnants of timber-lined wells (F.4118, 4146, 4243; Fig. 6). It is likely that were used successively rather than concurrently, unfortunately the dating evidence is insufficient to allow the relative sequence to be ascertained.

Plot D: As with the other plots the northeastern frontage of Plot C fell outside the area of investigation, additionally the presence of an electrical sub-station and concrete farm track with associated services meant that the investigation of this plot was rather fragmented. The plot appears to have been *c*. 47m wide, although there is a degree of uncertainty. The northwestern boundary of Plot D running perpendicular to Huntingdon Road, which it shared with Plot C, was poorly represented due to the limitations imposed by the presence of an electricity sub-station but was defined by ditches (F.4292, 4295). The southeastern boundary of Plot D running perpendicular to Huntingdon Road, which it shared with Plot E, was defined by a ditch (F.4367), there were also two large pits to the rear which were located on the plot boundary (F.4622, 4376). There was a single significant ditch running parallel to Huntingdon Road (F.4357/4384; Fig. 7), located *c*. 22m from the northeastern limit of excavation (this being defined as the principal limit of excavation for Plots A–C not the specific one for Plot D). There were several linear features within Plot D; these appear to represent several phases of sub-division (F.4351, 4355–56, 4358–60, 4365, 4395) although no convincing overall schemes can be reconstructed.

Internally within Plot D there were a range of discrete features, these include a range of 79 relatively nondescript pits (F.4299–303, 4307–15, 4320–21, 4324–30, 4333–37, 4340–43, 4350, 4361, 4363–64, 4366, 4368–72, 4374–75, 4383, 4385–87, 4390–94, 4396–97, 4601–06, 4608–21, 4623–25, 4627) one of which contained the skeleton of a dog (F.4610), 11 postholes (F.4289, 4293, 4296–98, 4316, 4388–89, 4398–99, 4607) and a post-pad (F.4600). A single relatively deep steep-sided feature appears to be the remnant of a timber-lined well (F.4331).

Plot E: As with the other plots the northeastern frontage of Plot E fell outside the area of investigation, as a *c*. 15m width of the plot was investigated it is likely that that *c*. 50%+ of the width of the plot was investigated. The northwestern boundary of Plot E running perpendicular to Huntingdon Road, which it shared with Plot D, was defined by a ditch (F.4367), there were also two large pits to the rear which were located on the plot boundary (F.4622, 4376).

There were three significant ditches running parallel to Huntingdon Road, these were located *c*. 22m (F.4352), *c*. 27m (F.4353) and *c*. 33m (F.4373) from the northeastern limit of excavation respectively (this being defined as the principal limit of excavation for Plots A–C not the specific one for Plot E).

Internally within Plot E there were a range of discrete features, these include a range of 17 relatively nondescript pits (F.4319, 4322–23, 4338–39, 4348–49, 4354, 4378–82, 4626, 4628–30), plus a single posthole (F.4347) and one treethrow (F.4332). Two relatively deep steep-sided features appear to be the remnants of timber-lined wells (F.4346, 4377).

Rear Area: A strip *c.* 16m wide to the southwest of parts of Plots A–C was investigated, additionally several *c.* 2.0m wide trenches extended beyond this. The more restricted area investigated to the southeast meant that no area to the rear of Plots D–E was exposed. No features were identified in the area southwest of Plot A, whilst beyond Plot B there were five relatively nondescript pits (F.4043, 4052–55). Behind Plot C there was rather more evidence for activity that behind the other plots, with a short length of gully (F.4037–38), eight relatively nondescript pits (F.4000–01, 4028, 4034, 4046, 4051, 4124, 4192), seven postholes (F.4022–23, 4026–27, 4036, 4039, 4045) and two treethrows (F.4189–90).

Post-Medieval and Early Modern Agriculture

The ceramic evidence suggests that occupation at Howes continued at a diminished level into the early/mid-16th century. The total absence of clay tobacco pipes indicates that occupation had ended by *c*. 1620 if not earlier; whist the absence of German stoneware from Raeren and Frechen plus the low quantity of 16th century pottery makes it unlikely that occupation continued after *c*. 1550. The evidence that the occupied area contracted towards the northwest (see above) means that it is possible that occupation continued beyond the limit of excavation.

The area did however continue to be utilised (Fig. 9). The boundaries between Plots A, B and C appear to have continued to be demarcated by ditches, which were apparently extended so they continued into what had previously been the open area to the rear of the plots (ditches F.4005 between Plots A and B and ditches F.4017–18 between Plots B–C; Fig. 6). Evidence from the evaluation trenches (Fig. 10) indicates that these ditches continued for a considerable distance; the boundary between Plots A and B could be convincingly traced in Tr. 206, 202 and 201 (all uninvestigated), whilst that between Plots B and C was present in Tr. 204 (F.270–01, with Modern pottery present in F.271) and 201 (F.267–68, with Modern pottery present in F.267). Located to the southeast another similar boundary ditch was identified in Tr. 209–10 and 212 (with a land drain present). The longevity of these ditches is unclear. That between Plots B and C appears to be the most long-lived as it was re-cut with the latest phase (F.4017) containing pottery of *c.* 1830+.

In addition the rear boundaries of Plots A and B appears to have continued to be demarcated, although instead of ditches it appears that these were defined by a hedgerow (F.4267). The situation with regard to the rear of Plot C is less clear. There was a large area of disturbance (F.4142, eval. F.262, 273), which was re-used for drainage in the 19th–20th centuries (F.4009–10). Although it is impossible to be certain it appears plausible that this area originated as Post-Medieval pond that was subsequently modified. There was also an area of distinctive Post-Medieval strip-quarrying (F.4285).

The University Farm

From 1909–10 onwards the area formed part of a farm owned by the University of Cambridge, which covered 700 acres by the 1930s. The close proximity of this part of the farm to Huntingdon Road and ease of access meant that it was used for a variety of specialised activities. Immediately prior to re-development the area was occupied by the Department of Applied Biology Field School. It appears to have been during the 20th century occupation of the site by the University Farm that the various Post-Medieval boundary ditches went out of use and the possible pond was backfilled. Various structures and services associated with the 20th century activity at the site have had an impact, although none of these were of archaeological significance and their impact on earlier features was in most instances relatively restricted (Fig. 10).

Figure 8. Phasing of medieval settlement

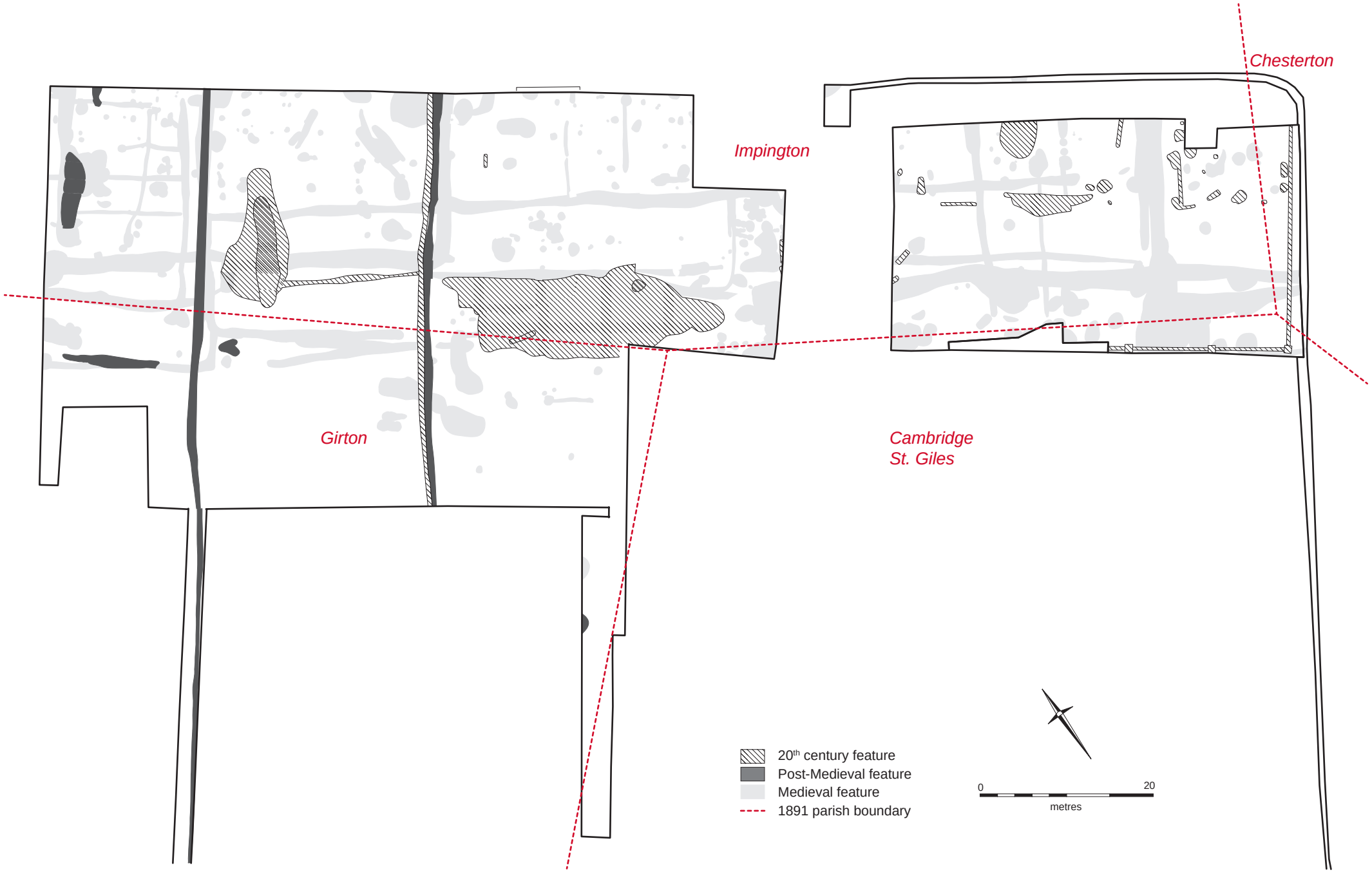


Figure 9. Plan of Post-Medieval and Modern features, also showing the 1891 parish boundaries

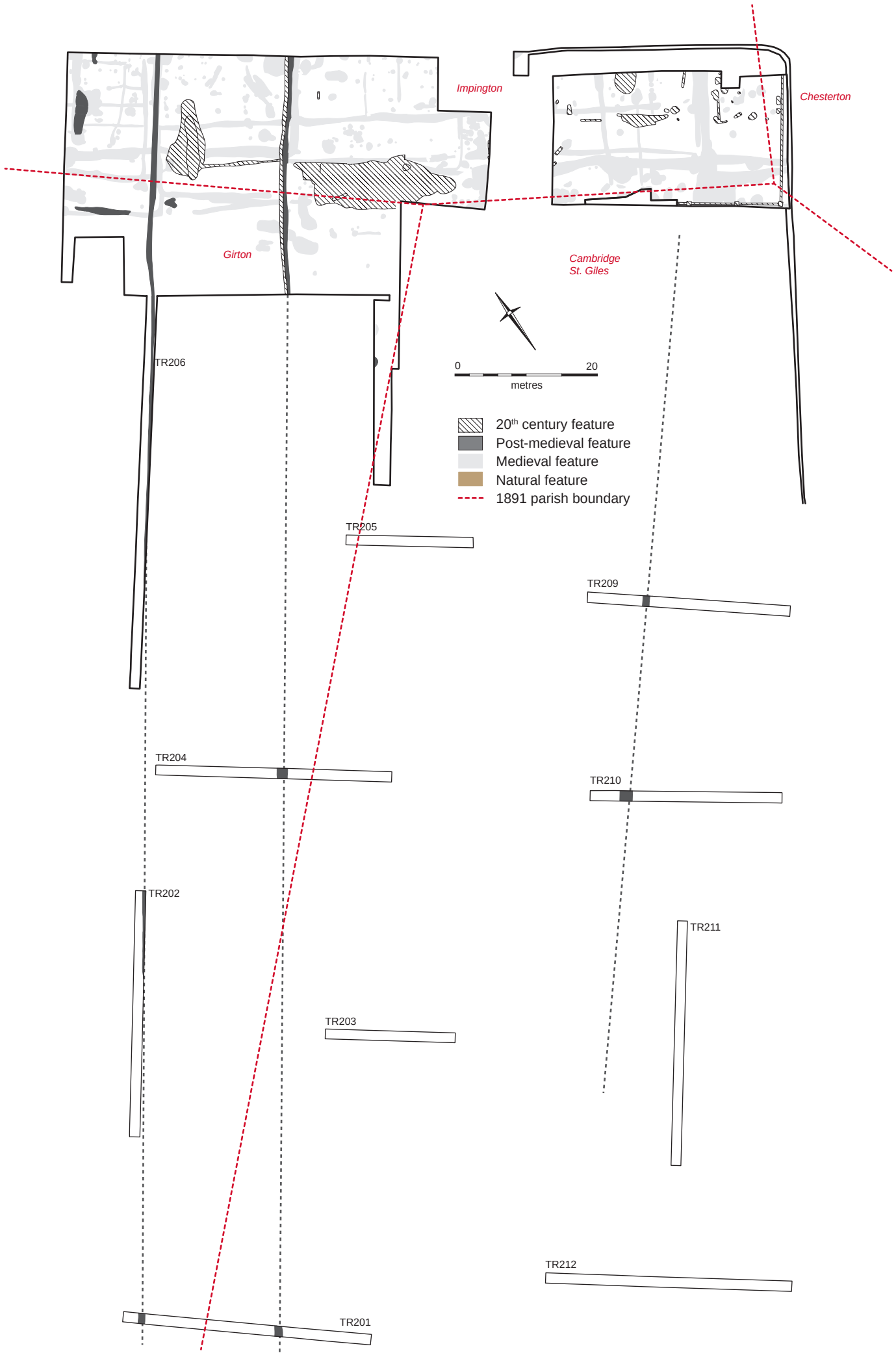


Figure 10. Plan of Post-Medieval and Modern boundaries revealed in the evaluation phase

SECTION 3: FINDS AND ENVIROMENTAL EVIDENCE

The investigations at Site IX produced only small to moderately sized assemblages of material. In comparison to other broadly comparable rural sites of the same period in South Cambridgeshire excavated by the CAU the densities of all material types appear to fall within the ranges previously identified, although they all fall within the low to medium range of the spectrum.

Pottery David Hall and Craig Cessford

In total 1260 sherds of pottery weighing 19.43kg were recovered during the excavation, additionally 88 sherds weighing 0.9kg were recovered during the evaluation phase (Table 3). When the single sherd of Romano-British material (7g) plus some 19th–20th century material that was not systematically recovered (19 sherds, 1612g) is excluded, this leaves 1328 sherds weighing 18.711kg that relate to the main occupational sequence at the site (Fig. 11a). The earliest material in this group dates to the 10th–12th centuries (Fig. 11b), although none of it need predate the 12th century. The latest material dates to the 16th–17th centuries, although none of it is necessarily later than *c.* 1550. In general the pottery is of the typical fabrics and forms of this period found in Cambridge and South Cambridgeshire during this period, although the site does represent the first recognition of Huntingdonshire Fen Sandy Ware from the Cambridge environs. The pottery types can be broadly divided into fabrics that date to the 10th–12th centuries, those that date to the 13th–15th centuries and those that date to the 16th–17th centuries. These three groups will be discussed in date order.

The 10th–12th century material consists of the typical triumvirate of fabrics found at sites of this period in South Cambridgeshire; St. Neots-type ware, Thetford-type ware and Stamford ware. St. Neots-type ware dominates the assemblage by count, with smaller quantities of Thetford-type ware and Stamford ware also present. The dominance of Thetford-type ware by weight is due to the presence of some sherds from large thick-walled storage jars. The dominance of St. Neots-type ware by count contrasts with most other sites in and around Cambridge where it and Thetford-type ware occur in more equal quantities. Evidence from various sites suggests that Thetford-type ware was introduced to the area earlier and was dominant, with St. Neots-type ware becoming more prominent later.

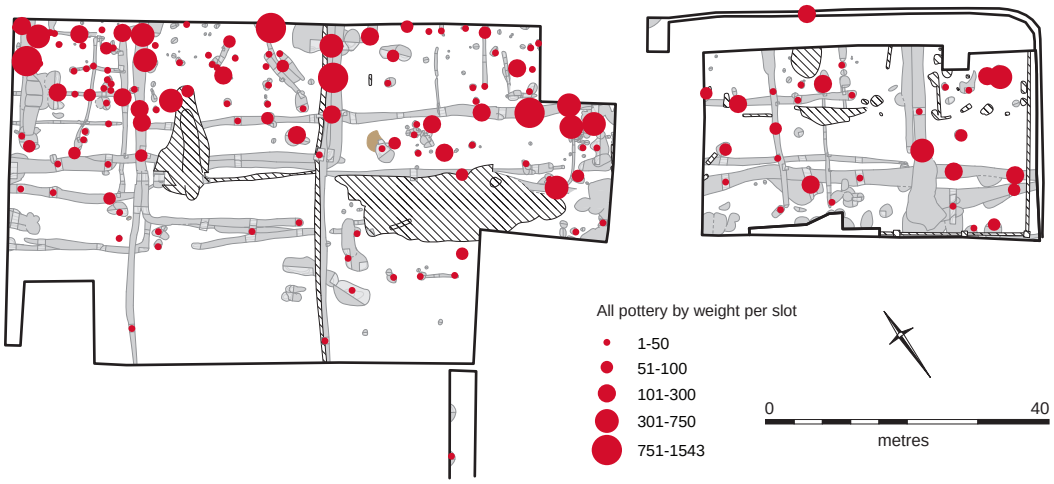
The 13th–15th century material is dominated by a range of coarsewares; whilst the sources of many of these have not been identified they include Medieval Ely ware, Pink Shelly ware and Huntingdonshire Fen Sandy ware. Huntingdonshire Fen Sandy ware has only recently been identified as a distinct fabric (Spoerry in prep) and this represents its first recognition in the immediate environs of Cambridge. Huntingdonshire Fen Sandy ware is an oxidised sandy ware of rather finer quality than most local sandy wares. It has been found in quantities in Huntingdon and most sites within 10–15km of the town; there is circumstantial evidence that it may have been produced in Huntingdon, although this is not certain. It has been dated to *c.* 1175–1300, although the evidence from Howes suggests that it may have continued in production rather longer than this. Rather better quality material that is

present, which includes Brill/Boarstall, Developed Stamford, greywares and redwares from Essex including some Hedingham ware, Grimston, Lyveden/Stantion, Surrey borders and some finewares that cannot be precisely identified. Noteworthy items include a nearly complete 15th century grey coarseware jug with banded rilled decoration and strap handle from F.4276 (<2828>; Fig. 17) and a semi-complete 14th–15th century Huntingdonshire Fen Sandy Ware vessel from F.4292 (<5000>).

The only 16th–17th century pottery present was a small quantity of glazed red earthenware and plain redware, none of which need date to after *c*. 1550 (Fig. 11d).

Fabric	No.	Wt. (g)	MSW (g)	Date range (centuries AD)	Source
St. Neots-type	101	1081	10.7	Late 9th–early 12th	Various
Thetford-type	8	1140	142.5	Late 9th–early 12th	Norfolk
Stamford	6	26	4.3	10th–12th	Lincolnshire
10th-12th century total	***115***	***2247***	***19.6***		
Brill/Boarstall	4	25	6.2	13th–15th, 13th *floruit*	Buckinghamshire
Developed Stamford	12	20	1.7	13th–14th, 13th *floruit*	Lincolnshire
Ely	35	758	21.7	Late 12th–15th, 14th *floruit*	Cambridgeshire
Essex Grey	5	22	4.4	Late 13th–15th century, 15th *floruit*	Essex
Essex Red	47	628	13.4	Late 13th–15th century, 15th century *floruit*	Essex
Grimston	2	17	8.5	12th–15th, 14th *floruit*	Norfolk
Hedingham	12	55	4.6	12th–14th, 14th *floruit*	Essex
Huntingdonshire Fen Sandy	470	7060	15.0	Late 12th–14th	Huntingdonshire
Lyveden/Stantion	2	27	13.5	13th–14th, 13th *floruit*	Northamptonshire
Pink shelly	52	682	13.1	13th	Northamptonshire
Surrey Borders	1	9	9.0	14th–15th, 14th *floruit*	Surrey
Miscellaneous coarsewares	538	6794	12.6	13th–15th	Various
Miscellaneous finewares	3	19	6.3	Unknown	Unknown
13th-15th century total	***1183***	***16116***	***13.6***		
Glazed red earthenware	16	343	21.4	16th–17th, 16th *floruit*	Ely and elsewhere in East Anglia
Plain red	2	3	1.5	16th–17th, 16th *floruit*	Ely and elsewhere in East Anglia
16th-17th century total	***18***	***346***	***19.2***		

Table 3: 10th–17th century pottery from excavation and evaluation phases of Site IX.



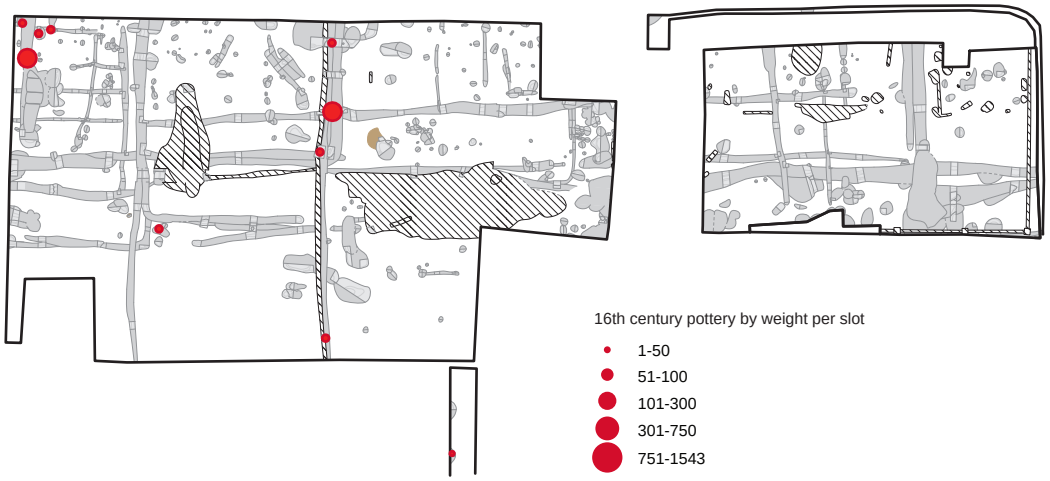


Figure 11. Pottery distributions

Metalwork Grahame Appleby

In total, some 179 pieces of metalwork weighing 904g were recovered; additionally the evaluation phase produced a single unidentified iron object. The assemblage consists of two pieces of copper alloy and 177 pieces of ironwork (883g); this latter material comprising mainly fragmentary nails and consequently, only significant or diagnostic pieces are described in detail. Of note, however, are the ironwork from a 15th century pit (F.4276), which includes a large number of hobnails, a spur (F.4018) and a possible spur fragment (F.4120).

Copper Alloy

<2858> (SF. 1523) - Small, well preserved 'D'-shaped cross-sectioned ring, slight oval in overall shape. Diameter 29.1–30.1mm, internal diameter 22.4–24.4mm, weight 4g. The ring appears to be slightly thinner on its 'longer' sides, suggesting wear. Probable suspension ring/loop.

<2860> F.4017 ([13185], sl.3131) - Rosette from a small watering can. Diameter 45.6mm, weight 17g. Post-Medieval.

Ironwork

F.4018 <2861> ([12532], sl.3010) - Incomplete rowel spur consisting of a six (?) pointed star-shaped rowel, rowel box, neck and approximately half of each arm. Length 78.3mm, weight 28g.

F.4029 <2862> (SF. 1506) - Concreted and corroded solid bar, concave on the upper surface, flat on the bottom. The bar possesses a curving taper from the rounded middle towards each end. One end has projecting shoulders and a rectangular terminal the other is rounded. Length 103.4mm, weight 68g. Possible mount, requires x-raying to aid further identification. Undated.

F.4062 <2864> ([12626], sl.3038) - Two objects: a) broken chain link or suspension loop, square cross-section 10.9–11.4mm thick, corroded; weight 42g; b) corroded and concreted nail fragment, length 46.6mm, weight 5g. Undated.

F.4109 <2865> ([12756], sl.3083) - Very corroded and concreted tapering square cross-sectioned rod or pin, the former more likely. Length 146.8mm, weight 17g. Recommend x-ray to aid further identification. Undated.

F.4118 <2866> (SF. 1504) - Substantial fragment of a joiner's dog or broken clenched nail. Concreted and corroded the object possesses a square cross-section with a maximum thickness of 8mm, length *c*. 65mm, weight 18g.

F.4120 <2868> (SF.1507) - Corroded, tapering and curved rod with rounded end; length 78.6mm, weight 18g. Probable spur arm broken below the rowel (?) box. Medieval/Post-Medieval.

F.4144 <2872> ([12884], sl.3114) - Irregular shaped plate or sheet fragment *c*. 2.7mm thick; weight 10g. Superficially, this piece (two refitting fragments) has parallel sides tapering to an irregular point on one side. Due to the extent of the corrosion and damage it is unclear if these parallel sides and 'point' are original. Undated.

F.4254 <2880> ([13261], sl.3203) - 16 objects, all corroded and some concreted; total weight 205g: a) 11 complete (8) and fragmentary (3) nails with square cross-sectioned shanks and ranging in length from 64.6mm to 20.4mm, total weight 60g; b) heavy leaf-shaped blade fragment (tang missing). The back measures 9.9mm thick; both edges are convex in shape; length 105.8mm, weight 68g; c) possible knife fragment with partial tang surviving, this forming the greater part of the piece, length 64.9mm, weight 16g; d) riveted strip or tang, bent at one end, possibly a binding strip, length 62.4mm, width *c*. 16.3mm, weight 8g; e) small lump, slightly lozenge-shaped in cross-section, possible from a bladed object, weight 3g; f) heavy triangular shaped object with potential partially surviving perforation at one corner. Where the object narrows, the metal is bent over, but it is unclear from the preservation condition if this forms a transverse break across the narrowest width of the object – possible hinge fragment – length 51.2mm, weight 49g.

F.4276 <2881> ([13344], sl.3226) - Sixteen very corroded nails (total weight 73g) of varying length and completeness (max. length 65mm, min. length 16.4mm) and a possible ferrule fragment measuring 48.3mm long, weight 21g. Medieval.

F.4276 <2882> ([13343], sl.3226) - Collection of four heavily corroded hand-made nails, one clenched and complete. Max. length 58mm, min. length 26.4mm, total weight 4g. Medieval.

F.4276 <2883> ([13345], sl.3226) - Two nail fragments (total weight 12g), one clenched, length 33.9–51.9mm; probable mineralised narrow handle or plaque, or similar, with possible traces of two small rivets – length 67mm, width 8.9mm (22mm with corrosion products), weight 11g. The mineralised organic material is shown as a sharp edged and smooth flat surface recessed within the corrosion products and the retained pattern suggest the original material may have been bone. Recommend conservation. Medieval.

F.4276 <2970> ([13346], sl.3226) - Assemblage of 91 heavily corroded items, comprising a minimum of 22 domed hobnails (total weight 23g), 16 nail fragments (total weight 63g), and a narrow, tapering blade (four refitting pieces; length 140mm, weight 19g) and the remainder unidentified lumps.

Table 4 lists nails recovered from features or during metal-detecting. None of the nails are specifically diagnostic and range from complete to fragmentary examples. All are handmade and display varying degrees of corrosion.

Cat.	Feature	Context	Slot	SF	No.	Wt. (g)	Sample
2850				1515	1	13	
2851				1516	1	2	
2852				1517	1	6	
2853				1518	1	5	
2854				1519	1	5	
2855				1520	1	9	
2856				1521	1	4	
2857				1522	1	3	
2859	4004			1508	1	9	
2863	4031	13008	3143		1	8	
2867	4118			1505	1	5	
2869	4124			1509	1	11	
2870	4139			1503	1	4	
2873	4146	12896	3119	1510	2	10	
2874	4173	12983	3193		1	6	
2875	4181	13026	3144		3	4	
2876	4184	13032	3147		1	4	
2877	4221	13119	3170		1	9	
2878	4228	13138	3176		2	9	
2879	4243	13195	3191		1	31	
2884	4279	13358	3230		8	20	
2968	4075	12688	3058		4	6	801
2969	4116	12780	3085		1	4	805

Table 4: Nails from Site IX.

This is a small and essentially insignificant assemblage, composed mainly of handmade iron nails. The watering can rosette is indicative of Post-Medieval usage and intrusive material within features. Of note, however, is the material from pit F.4276. Although dominated by nails, the recovery of 22 domed hobnails is intriguing as initial inspection suggests these may have been Romano-British (particularly as there is no reliable evidence for their use in Britain between the Romano-British and Post-Medieval periods), and thus residual. If this interpretation is correct, they may provide proxy evidence for a burial that was disturbed during the Medieval period.

Coin Martin Allen

A single mid-13th century coin of Henry III was recovered.

<2871> F. 4143 ([12878]) - England, Henry III (1216–72), silver penny, Short Cross class 7bD (*c.*1234–36), Canterbury mint, moneyer Osmund, 1.43g. The Henry III Short Cross penny was issued between *c.*1234 and *c.*1236 (Allen 2001, 10–12), and it was probably in use no later than the end of the Long Cross re-coinage of 1247–50, which removed the Short Cross coinage from circulation. Its relatively worn state suggests deposition no earlier than the 1240s.

Tile Grahame Appleby

Eight fragments of tile were recovered from five features. These are all highly fired and range in colour from pale cream/grey to pale orange or red. The fragments are Medieval or Post-Medieval in date.

<2520> F.4017 ([13185], sl.3191) - Two large fully fired refitting fragments of a peg-tile with a grog-tempered creamy coloured fabric; width 170mm, weight 340g, 12.4–13.9mm thick. Two sides are preserved and which have traces of lime mortar or similar. Post-Medieval. Similar to <2742>.

<2544> F.4031 ([12561], sl.3021) - Creamy/grey coloured tile fragment with pale orange interior, manufactured from a sandy clay with small flint inclusions, weight 25g, thickness 11.4mm. Medieval or Post-Medieval.

<2552> F.4031 ([12905], sl.3118) - Peg-tile fragment manufactured from sandy clay with small flint inclusions with a reddish outer surface and dark grey reduced interior. Weight 79g, thickness 15.6mm. Planer surfaces and one edge preserved. Medieval or Post-Medieval.

<2584> F.4056 ([12634], sl.3042) - Small irregular fragment. The fabric is sandy with small flint inclusions, similar to <2552>. Weight 9g.

<2742> F.4220 ([13118], sl.3169) - Two fragments of cream coloured and grog-tempered peg-tile similar in composition to <2520>. The larger fragment (weight 41g) is a corner piece and measures *c.* 12mm thick. The smaller fragment is irregular in shape (weight 4g), although one small area of original surface is preserved.

<2791> F.4254 ([13261], sl.3203) - Completely and highly fired ceramic tile fragment made from a sandy clay, orangey red in colour throughout. One edge and both planer surfaces are preserved. Weight 85g, thickness 14mm. Post-Medieval peg-tile.

Burnt Clay Simon Timberlake

A total of just 256g of burnt clay was recovered (Table 5); this is in addition to 21 fragments weighing 621g recovered during the evaluation phase. At least four different burnt clay fabrics were recognized in this assemblage, ranging from a dark and fairly soft charcoal-rich ash impregnated clay fabric (Fabric 1) to a substantially more chalky one (Fabric 3), to a harder sandy gritty clay (Fabric 4). All four fabrics resemble some of the ones found at Site V. This implies a common, and probably local usage of clay associated with the colluvium, alluvium and clay-silty hollow/ channel fills present within the natural gravel deposits of the adjacent valley. The majority of the burnt clay was only recovered as smaller pieces from environmental samples, suggesting that much of this was already weathered and broken-up prior to it having become incorporated within the fills of features. Most likely this represents the residues of decayed partly-burnt daub, perhaps originating from the

daub walls of dwellings, but not as a primary deposit. Whilst some of this small amount could have originated from the fabric of ovens (bread ovens) or kilns, there are no indications at all that any of this came from worked clay objects (i.e. loomweights etc.). For instance, the largest fragment recovered was just 60mm in diameter.

Burnt Clay Fabrics

Fabric 1 - Dark grey-sooty black lightweight clay fabric full of voids but otherwise no visible inclusions (similar to Fabric 1/Site II and Fabric 8/Site V)

Fabric 2 - Pink to light grey fairly hard tile-like fabric full of burnt-out plant inclusions incl. chaff (similar to Fabric 12/Site V)

Fabric 3 - Cream white to pale grey chalky silty clay fabric with sandy grit and crushed flint inclusions (similar to Fabric 2/Site V)

Fabric 4 - White to slightly pinkish sandy chalky clay fabric with some v small inclusions of reddish clay (some similarity with Fabric 5/Site V)

Cat.	Feature	Context/ sample	Wt. (g)	No.	Fabric	Inclusions	Notes
2534	4025	12547	6	1	4		
2942	4031	12952	2	3	1		
2919	4031	12768	4	2	3		
2889	4059	12648	2	4	1+4		
2601	4075	12683	46	2	1 + 2		Dark organic rich
2893	4075	12683 <801>	70	*c.* 50	1+2		Mostly Fabric 1
2926	4111	12770 <807>	2	2	4		
2912	4116	12780 <805>	4	9	1		
2929	4118	12784 <808>	12	12	4 + 1		
2933	4143	12878 <809>	4	7	1+4		Weathered
2937	4164	12954 <810>	4	4	1+4		
2712	4171	13156	30	3	4	grit+flint+organic	Finger-moulded lumps
2953	4243	13195 <815>	2	6	4		
2956	4243	13199 <816>	2	3	4		
2961	4276	13346 <817>	62	22	3+1	flint+shell	Range of colour/texture
5141	4360	13566 <822>	2	3	3+4		
5143	4610	13715 <823>	2	2	1+4		

Table 5: Burnt clay from Site IX.

Worked and Other Stone Simon Timberlake

A total of 4.518kg of worked stone was recovered, the majority of which consisted of small fragments of rotary quernstone (mostly lava quern, 4.35kg), other items included three whetstones plus a single stone spindlewhorl. The continuing domestic use of relatively small rotary quern handmills for milling grain at this site suggests that some of the occupation at least pre-dates the period of later Medieval control of quern use which was initiated by the local manorial mill(s), and which then became commonplace from the beginning of the 14th century onwards. Despite all this, John Langdon has estimated that about 20% of the grain milled in early 14th century England was still being ground by domestic handmills, much of this for profit rather than for subsistence (Watts 2002, 41). What we do begin to find

however, as handmill stones are taken out of use, is that still useable stones are broken-up, and some burnt, mostly as a result of their being used as hearthstones.

At the beginning of the occupation of this settlement there is clear evidence for the ready availability and continued acquisition of lava quern handmills which are being imported from the Rhineland (now coming from the Niedermendig quarries), either as slightly outmoded large thin flat querns in the style of later Galician mills, possessing a vertical handle for rotation, and mounted in some sort of wooden frame (i.e. <2796>), or more typically as pot querns made from lava stone (Horter *et al* 1950–51, 70). A possible example of the latter type can be seen in quern <2824a>, yet these can be difficult to interpret given the very fragmentary nature of the assemblage.

From the 12th–13th century imported quartz schist whetstone becomes common, and we see this in a number of the Cambridge urban sites, its growing abundance reflecting the vitality of the North Sea trade between the East of England and Scandinavia, much of the whetstone forming ballast within boats arriving at Ipswich from the port of Skien in Norway. The amount of whetstone recovered from here (486g including the fragment of quern re-used as a whetstone) seems small for the size of settlement, yet this low incidence might just reflect the relatively minor importance of Howes as a near-suburban hamlet.

Excluding burnt lava quern some 2.03kg of burnt stone was recovered from this site, but just as three pieces (<5027> F.4321, <1557> F.6180, <1464> F.6144). Some 0.668kg of constructional stone was collected. This consisted of just one piece of crudely-faced white micritic-bioclastic limestone, possibly of Upper Jurassic age (<2824> F.4274). An origin as walling stone seems possible (11mmx70mmx40mm). Two small phosphatic nodules from the Cambridge Greensand ('coprolite bed') were collected from F.4234 and one nodule from F.4295; these possibly as later inclusion(s) from the debris of coprolite mining activity within this general area, or else just as included erosional material

Lava Quern

<2769> F.4234 ([13174] sl.3184) - Outer rim fragment of what is probably the thin lower stone of a lava quern. This was evidently made as a thin and flat basal quern stone which is quite typical of early Medieval production at Niedermendig in the Rhineland (Horter *et al* 1950–51). In fact this stone has been dressed on both faces with diagonal to sickle-shaped groove furrows such as are commonly found on Medieval querns (see Watts 2002, 41), yet this particular quern has only been used for grinding on one (flat) face, and from this rim the edge slopes away underneath. The suggested diameter based on the existing circumference piece is between 550–600mm. The upper stone would have had a raised centre and grain hopper with a vertically placed handle for complete rotational movement. An alternative explanation is that this formed part of a pot quern, the outer upright rim of which has since all broken away. Dimensions of fragment: 275x75x40mm (thick); weight 1028g.

<2831> F.4277 ([13352] sl.3229) - A small fragment, possibly of the upper stone of a lava quern. The coarse, but quite precisely cut furrow grooves and inter-furrow flat-topped grinding ribs laid out in a gentle sickle-shaped arc (each 10mm wide and 3mm deep) suggests that this may be part of a pot quern. There are no diagnostic features on this fragment to indicate the possible diameter, although the angle of the grinding surface slopes down towards the outer edge of the quern. The sooting present suggests the stone was burnt, possibly used perhaps as part of a hearth surround or oven. Dimensions: 110mmx50mmx35–50mm (thick); weight 458g.

<2824a> F.4276 ([13344] sl.3226) - The broken-off rim edge of the lower stone of a pot lava quern. The change of angle on the break with the pot quern edge is clearly visible in this. However, the base of the pot quern is only crudely worked flat whilst the grinding surface is rough and without groove furrows. The thickness of stone (45mm) is quite typical of an unworn pot quern base. The sooting on

this suggests burning and the break-up of the quern. Dimensions: 110mmx95mmx45mm; weight 526g.

<2824b> F.4276 ([13344] sl.3226) - A small fragment, possibly of the upper stone of a lava quern, probably a pot quern. Rounded furrow grooving of similar dimensions and interval to that seen on <2831> are evident here, suggesting a considerable degree of wear. Dimensions: 70mmx65mmx40mm; weight 310g.

<2695> F.4164 ([12453] sl.3131) - A fragment of what could be the lower stone of a lava pot quern, but this is moderately undiagnostic. The underside is crudely pecked flat, whilst the grinding surface on top slopes away at about 5°, and is moderately worn (no clear grooving or pecking is visible) and also heavily sooted. Dimensions: 11mmx80mmx20–50mm (thick); weight 718g.

<2690> F.4160 ([12939] sl.3126) - A fairly weathered and fairly undiagnostic fragment of rotary lava quern with just the traces of furrow dressing still visible (at 10mm intervals). Possibly part of a pot quern made from Niedermendig lava. Dimensions: 90mmx80mmx30mm; weight 288g.

<5110> F.4377 ([13627] sl.3298) - One small weathered fragment of thin lava quern stone, part of a circumference edge of a broken-up example. The grinding surface is fairly well worn and undiagnostic. Dimensions: 65mmx50mmx25mm; weight 128g.

<2724> F.4189 ([13038] sl.3150) - Three small adjoining fragments from the rim of a fairly undiagnostic weathered piece of Niedermendig lava quern. Dimensions: 80mmx45mmx30mm (thick); weight 104g.

<2722> F.4192 [13052] Sl.3152) - One small undiagnostic fragment of Niedermendig lava quern; weight 28g.

<5079> F.4357 ([13583] sl.3283) - Five small burnt fragments of a thin worn lava quern stone, two of them with dressed pecked lines of punctated shallow and narrow grooves in semi-circular arcs. Largest piece 50mm long and 10–230mm thick. Weight 124g.

<5003> F.4295 ([13451] sl.3251) - Twenty pieces of fairly undiagnostic burnt and broken-up Niedermendig lava quern. Worn stone up to 25mm thick. Weight 430g.

Whetstones

<2760> F.4232 ([13151] sl.3181) - A fairly weathered fragment from the edge of a large and thin rotary quern stone of Niedermendig lava. This seems to have been picked up and re-used as a crude whetstone, given the number of apparent knife cut grooves on one of the (grinding) surfaces which are all at right angles to the rotational direction of the stone. Dimensions: 80mmx70mmx21mm; weight 208g.

<2819> F.4276 ([13343] sl.3226) - An almost barely used whetstone made of imported quartz schist (Fig. 17). This 'light-grey quartz schist' whetstone appears to be of a type common in England during the Medieval period, and was most probably imported from Eidsborg in Upper Telemark, Norway where there was a well-established whetstone quarrying industry. These whetstones were regularly traded across the North Sea from the port of Skien to trading ports such as Ipswich on the east coast of England from the 9th–11th centuries onwards (Daly & Bymoen 2007). In the 13th century the standard dimension of these exported blanks was approximately 50mm x 30mm x 300mm; however, many of these were still further broken up here to create smaller stones. It would appear that many Norwegian 'rag' whetstones were imported as undressed mullions, and were then finished-off within workshops in urban centres in England. For this reason many of the commonly found rough fragments may simply have been broken or off-cut pieces from the production of larger items, thereby ending up after relatively little use within typical domestic waste contexts (see Ellis & Moore 1990, 280). Dimensions: 100mmx40mmx10–15mm; weight 110g.

<5052> F.4346 ([13532] sl.3264) - A well-used and rounded rectangular-cylindrical shaped whetstone made of the same imported Norwegian quartz schist. This has been used on all sides and edges for knife blade sharpening, but particularly along the narrowest faces against the grain of the schist. Dimensions: 125mm x23–25mm x 25–30mm; weight 166g.

Spindlewhorl

<*2913*> *F.4116* ([12780] sl.3085; Sample <805> >4mm fraction) - Half of a small rounded disc-shape stone spindlewhorl (35mm diameter) with a flattened oval x-section (35mm x 22m high) and a central cylindrical to slight hourglass-shaped perforation for the distaff (of c.9mm diameter). The stone has been carved and ground but not polished. This would appear to have been made from a white (Jurassic?) fine-grained micritic limestone. Dimensions: 34mmx23mmx18mm; weight 14g.

Slag Simon Timberlake

Up to 12g of fuel ash slag was recovered from the residues of environmental samples sampled from this site, alongside just 8g of iron smithing slag (Table 6). There is no evidence to suggest that the fuel ash derives from the iron smithing activity, although it does probably indicate the presence of a relatively high temperature hearth (or debris from a large fire) somewhere within the settlement levels. The small size and weathered appearance of the fuel ash suggests re-deposition and dispersion of this material. Similarly the iron smithing slag (small fragments detached perhaps from a smithing hearth base or slag lump) is well weathered and oxidised, and almost certainly re-deposited, perhaps from a slightly more distant source.

Cat.	Feature/ context	Sample	No.	Wt. (g)	Magnetic (scale 0>4)	Iron slag	Fe concretion (F=fuel ash S=smithing)	Notes
2967	F.4272 [13326]	818	1	4	0		F	Part weathered lump pale green frothy glass
2939	F.4031 [12951]	811	2	2	0		F	
2894	F.4075 [12683]	801	1	2	0		F	
2910	F.4116 [12780]	805	4	4	0		F	Pale green with flint inclusions
2943	F.4031 [12952]	812	2	1	0		F	
5001	F.4294 [13373]		6	8	0–2	Y	S	Small fragments detached from an SHB or SSL – includes calcined fl

Table 6: Fuel ash and smithing slag from Site IX.

Animal Bone Lorrain Higbee

The assemblage comprises 1,358 fragments (or *c*. 22.4kg) of animal bone, once conjoins are taken into account this figure falls to 899 fragments (Table 7). Most (75%) of this material was recovered by hand during the normal course of excavation, and the rest was retrieved from the sieved residues of 24 bulk soil samples.

The assemblage was assessed by rapid scanning and quantified in terms of the number of identified specimens present (or NISP). Notes were also made about the preservation condition and skeletal element representation of bones from individual contexts and/or features. Information, such as fusion and tooth ageing data, butchery marks, metrical data, pathology and non-metric traits, was quantified but not recorded in detail. This information was directly recorded into a spreadsheet and cross-referenced with relevant contextual information.

Bone preservation is on the whole good to fair, cortical surfaces are intact and fine surface details such as cut marks are clear and easily observed. A few poorly preserved, unidentifiable fragments were recovered from pit F.4200 and well F.4243, and these are likely to be residual, having been reworked and re-deposited from earlier contexts. However, the preservation condition of bones was generally consistent within individual deposits, and this suggests that waste material was deposited directly into open features. Approximately 25% of fragments are identifiable to species and skeletal element. This is a fairly normal rate of identification and reflects the overall preservation condition and fragmentation state of the assemblage.

62% of fragments came from pits, a further 27% from ditches and the remainder from postholes and wells. Relatively large concentrations of bone were noted from pits F.4034, F.4234 and F.4276, ditch F.4131, and posthole F.4170. The assemblages recovered from pits F.4034 and F.4234, and posthole F.4170 include relatively large numbers of horse bones. These features were located in Plot C, and a further concentration of horse bones was noted from ditch F.4131, which forms a boundary between Plot C and its neighbour (Plot B). The spatial distribution of the horse bones suggests that certain activities relating to the processing of horse carcasses were being carried out on this part of the Site (Table 8).

33% of fragments are identifiable to species. The list (Table 7) includes the three main livestock species, as well as horse, dog and domestic fowl. Horse is the most common species overall and accounts for 53% NISP (Fig. 12a). All body parts are present including small bones from the ankle and foot, and measurements taken on several complete long bones provided withers (or shoulder height) estimates of between 12.3hh to 14.2hh, indicating that the equids were pony-sized.

As already mentioned above, most (71%) of the horse bones are from 14th–15th century contexts located in Plot C (Table 8). Pathological changes (Fig. 12b) were noted on several tarsal bones and a first phalanx; the changes are typical of a condition more generally referred to as spavin, a common condition in horses used for riding and as traction animals. Butchery marks were noted on a small but significant number of horse bones and include filleting marks on a metacarpal from pit F.4234 (Fig. 12c) and chop marks on a pelvis from pit F.4276. It is also worth noting that gnaw marks were more commonly observed on horse bones than on the bones of other species. Indeed, over half of all gnawed bones were identified as horse and the extent of the gnawing was generally quite considerable, particularly at the ends of long bones.

In terms of livestock species, sheep/goat appears to have been of prime importance to the rural economy and this is generally in keeping with local and regional trends for the period (see for example Higbee forthcoming). It is also likely that sheep/goat were primarily managed for wool at this time. Despite the small size of the sheep/goat bone assemblage it is clear that most parts of the mutton carcase are represented, which suggests that these animals were slaughtered on Site for local consumption. Cattle were also of some importance, and again most body parts are presented, which suggests local slaughter and consumption. Pig was of minor importance, perhaps because of a lack of suitable pannage in the immediate vicinity of the site. The dog bone assemblage (Fig. 12a) includes isolated bones from ditch F.4305 and pit F.4386, several bones from a juvenile animal from pit F.4098, and the near-complete skeleton of an adult animal from pit F.4610 (Fig. 12d). The skeleton is that of a medium-sized (shoulder height of 0.61m) animal with slender limbs.

Eight domestic fowl bones were recovered from several pits and ditches. Most of the bones are from adult birds and this suggests that egg production was the main aim in raising domestic poultry. The assemblage also includes a small amount of fish bone, the majority of which is from pit F.4276. Most of the bones could not be identified to species, however a few vertebrae were provisionally classified as belong to the Gadidae family of marine fishes. In addition a small number of amphibian bones (i.e.

frog or toad) were recovered from bulk soil samples. These remains are likely to represent pitfall victims that had fallen into open features.

A modest-sized, well-preserved and securely stratified assemblage of bone was recovered The assemblage is dominated (53%) by horse bones, most of which are from Plot C (Table 8) and show signs of both butchery and carnivore gnawing. The assemblage is atypical of the general domestic refuse that accumulates at most rural settlement sites, but does share some similarities with the type of waste recovered from knackers' yards located in urban areas. However, the butchery is more extensive than would be necessary just to break up a carcass of this size and this, coupled with the widespread gnawing evidence, suggests that Plot C is more than the location of a rural knacker's yard. There is little evidence for human the consumption of horseflesh in Britain, but extensive documentary and archaeological evidence that it was fed to domestic dogs (see for example Thomas & Locock 2000). There is even some evidence that horseflesh was the recommended feed for hunting hounds. For example Markham writing in 1633 (cited in Albarella & Davis 1994, 30–31) comments that horseflesh is 'the strongest and lustiest meat you can give them', while others comment that horseflesh is ideal to feed thin and ailing hounds (see Cummins 1988, 257).

The quantity and type of information available for detailed analysis is presented in Table 9. Age information based upon the epiphyseal fusion state of post-cranial bones is the most common type of detailed information available from the assemblage and can be used to reconstruct mortality profiles for livestock species. Age information based on tooth eruption and wear is more accurate; however, there are only a small number of complete mandibles in the assemblage. The assemblage also includes a modest amount of information relating to the size and conformation of animals (i.e. biometric data). Butchery marks are relatively scarce however what is significant is that the majority occur on horse bones and this will provide a basic indication of how horse carcases were processed.

The Medieval assemblage merits further more detailed analysis to record the information quantified in Table 9. This information together with more detailed spatial analysis should clarify the nature of the assemblage and facilitate comparisons with contemporary assemblages of a similar nature.

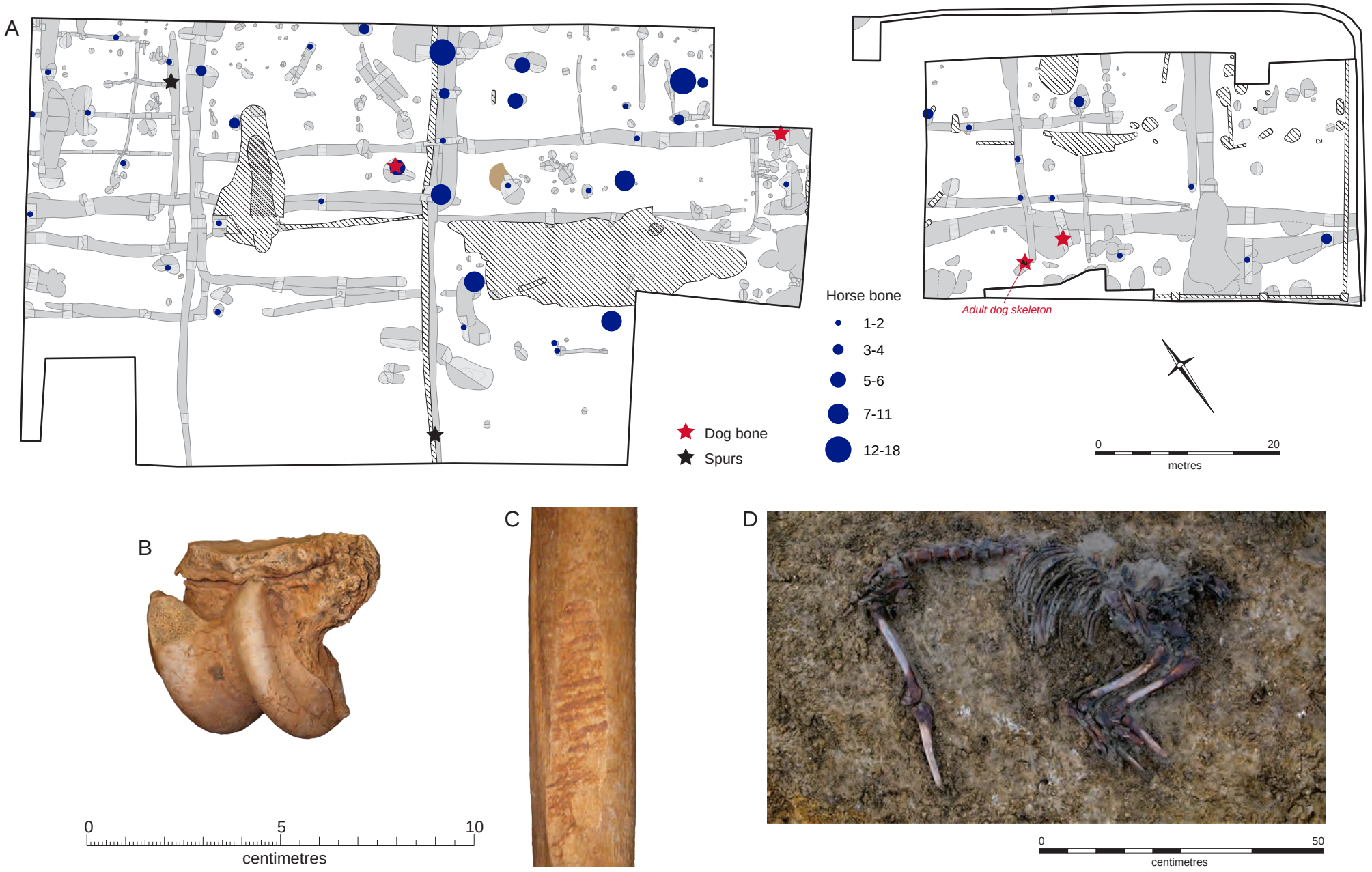


Figure 12. Animal bone: A) Distribution of horse and dog bones, B) Pathological changes (spavin) on a horse astragalus and tarsal bone from well F.4118, C) Filleting marks on a horse metacarpal from pit F.4234, and D) View of dog disposed of in pit F.4610

Species	NISP	%
Cattle	51	17.3
Sheep/goat	61	21
Pig	9	3
Horse	156	53
Dog	9*	3*
Domestic fowl	8	2.7
Total identified	294	100
Large mammal	274	
Medium mammal	32	
Mammal	248	
Bird	6	
Fish	31	
Amphibian	14	
Total unidentified	605	
Overall total	899	

Table 7: Number and percentage of identified specimens present (or NISP), * - the total for dog includes a near-complete skeleton from pit F.4610.

Plot	No. of horse bones	Horse as % of total NISP
A	9	33
A–B	2	100
B	22	69
B–C	27	96*
C	76	92
Unassigned	22	18

Table 8: Distribution of horse bones by plot, * - majority from ditch F.4131.

Type of information	No.
Age - fusion	126
Age - mandible (+2 teeth)	11
Biometric	51
Butchery	21

Table 9: Quantity and type of detailed information.

Shell Jacqui Hutton

Small assemblages of marine and avian shells were recovered and recorded from the site. These consisted of the European Flat Oyster family (*Ostrea edulis Linnaeus*), numbering 62 pieces in total and weighing 449g and the common mussel (*Mytilus edulis*) numbering 676 and weighing 1417g. In addition a small number of limpet and barnacle shells were also evident with the marine shells. Fragments of avian shell were recorded in an environmental sample from F.4276 that consisted of 50 small fragments and weighing 5g. The assemblage from the whole site was fairly small and was recovered from 25 features in total ranging from the 13th–16th centuries.

The shells were separated into species then quantified and weighed by context prior to being examined by eye with all identifiable traits recorded into a database. No attempt was made to accurately age the individual oyster shells at this stage of the assessment. All of the shells were washed and catalogued before examination. The majority of the oyster shells were in good condition with little fragmentation or attrition. The mussel shells were more fragmentary, especially those recovered from environmental samples; these were not recorded due to their limited and poor condition and only those recovered as artefacts were examined and recorded.

The majority of the oyster valves could be identified as either left or right and all valves were measured where permitted. Any evidence of parasitic activity, anomalies or intentional damage was also duly recorded. The mussel shells were not measured, although some matching of valves was undertaken where possible.

The majority of the shells recovered from this excavation were from the Bivalvia Class; the European Flat Oyster (*Ostrea edulis Linnaeus*) and the Common Blue Mussel (*Mytilus edulis*; Fig. 13). The marine shell assemblage was dominated by mussel shells, as can be seen in Table 10 below. This shows the weight of the oyster and mussel shells that were found in feature types. As highlighted, the majority of the assemblage was recovered from the specialised pits; pits which were originally purposely dug and lined which possibly highlighted their importance and made them stand out from the other pits in the excavation. The numbers of other artefacts types recovered from these features were high too.

Feature type	**Oyster** (g)	**Mussel** (g)
Pit	63	43
Ditch	6	91
Specialised pit	342	1180
Gully	0	2g
Posthole	0	3
Total	**411**	**1417**

Table 10: Shells found in feature types.

The majority of the shells were recovered from the pits, rather than the ditches, which highlight the fact that the pits would have been convenient places for the dumping of domestic debris. Table 11, below, highlights the date of the features that the marine shells were recovered from. The weight of the material was fairly low throughout the features, apart from the specialised pits as discussed before. Tables 12–13 provide a more detailed breakdown of the results.

	Oyster (g)	**Mussel** (g)
13thC pit		29
14thC posthole		3
14thC ditch		33
14–15thC ditch		12
14–15thC pit	63	8
14–15thC gully		2
14–15thC cesspit		2
14–15thC specialised pit	77	3
15thC pit		3
15thC specialised pit	265	1175
15thC boundary ditch	6	3
Medieval pit		3
Medieval ditch		43
Post-Medieval ditch		98
Total	**411**	**1417**

Table 11: Shells founds in dated features.

The majority of the European Flat Oyster shells could be identified as either left or right valves with a remaining 8% un-measureable; there were 34 left valves and 28 right valves with only one set positively matched. Out of all of the oysters there were five with possible notches, including the two valves that refit which had mirroring notches. All but one of the oysters had colour staining of varying degrees. Six of the right valves also had remains of ligaments. Seven of the left valves had additional oysters attached, especially those from F.4276 although there was a marked difference between the two contexts [13344] and [13346]. The oyster attachments from [13346] were small, approximately 6mm wide, whereas the attachments on those from [13344] were much larger 25–30mm. This suggests that they could be from either two different harvests or from different sources. In all but one valve, the shells were fairly small and thin averaging about 35–55mm wide and 50–65mm high. The single left valve recovered from the 13th century pit F.4344 was much larger and thicker than the rest of the assemblage. This valve was also possibly notched.

The Common Blue Mussel belongs to the Mytilidae family and has thin elongated shells with a pearly interior. The assemblage of common mussel shells (*Mytilus edulis*) found at this excavation were much larger than that of the oyster shells. In total, the bivalves weighed 1417g with a large sample recovered from F.4276 (a 14th–15th century pit) as seen in Table 11 (Fig. 17). In total there were 676 bivalves with nine positive refits. The mussel shell assemblage was evident in a larger variety of features than the oysters, and apart from the dumping episodes in the specialised pits, the majority of the fragments were found in the ditches whereas there was only one instance of oyster shell recovered from a ditch.

A small assemblage of avian egg shell was recovered from an environmental sample from F.4276 context [13346]. Information from egg shells has its limitations for quantitative data, and generally limited to qualitative data, i.e. species identification. And this is limited to microscopic analysis unless a large portion of the shell is recovered. In this instance, 50 small fragments weighing 5g could not provide any further information as to whether the shells derived from domestic species such as hen, goose or duck or from wild fowl.

The marine shell assemblage was dominated by mussels with only a small amount of oyster recovered. The majority of the oysters were fairly small and thin, with signs of harvesting from natural resources, as is evident from the limpets and barnacle recovered. The dominance of mussel is slightly unusual as other Medieval sites in the surrounding area, such as Grand Arcade (Cessford 2007) and Eastern Gate (Newman 2013), the marine shell assemblages was dominated by oyster. This could indicate that this occupation area had a more specialised use. Another explanation could be that the occupants of this area were a different social class; or was it perhaps cultural, or that they just had different tastes. Little is known about the domestication of avian resource, they could have used domestic birds, such as hens and geese, but also wild fowl too. The only way to possibly identify these is through microscopic analysis. All evidence from this shell assemblage, both marine and avian points towards domestic debris and that they were utilised as a food source.

				Oyster				Mussel		
Feature	**Context**	**Slot**	**Feature type**	**No.**	**Wt. (g)**	**Left/Right Valve**	**Description**	**No.**	**Wt. (g)**	**Description**
F.4011	[12518]	3007	Post-Med ditch					12+	98	2 refits.
F.4031	[12768]	3085	15thC boundary ditch					1	3	
	[12905]	3118		2	6	R				
F.4080	[12694]	3061	14thC posthole					1	3	
F.4102	[12797]	3080	14-15thC pit	2	6	R				
F.4108	[12764]	3082	14-15thC gully					1	1	
F.4114	[12776]	3088	14-15thC pit	2	25	R				
F.4120	[12800]	3093	14-15thC gully					1	1	
F.4138	[12847]	3107	Medieval pit					2	3	
F.4164	[12954]	3131	14-15thC pit (specialised)					2	3	Refit
F.4220	[13118]	3169	19-20thC disturbance					1	2	
F.4227	[13133]	3175	Medieval posthole					1	0	
F.4234	[13174]	3184	14-15thC pit	1	3	R				
F.4254	[13261]	3203	14-15thC pit	3	21	L & R		2	6	
F.4272	[13217]	3222	14thC pit (cesspit)					3	2	
F.4276	[13343]	3226	15thC pit (specialised)	2	8	R	Possible notch			
	[13344]			7	71	L & R	1 notched, 1 with ligament attached, 3 with oysters attached	8	12	
	[13345]							4	6	1 refit
	[13346]			14 +	186	L & R	1 refit, 3 notched, 5 ligaments attached, 4 with oysters attached	600	1157	
F.4279	[13357]	3230	14-15thC pit (specialised)	4	50	L & R				
	[13358]			2	27	R				
F.4295	[13452]	3251	14-15thC ditch					5+	12	2 refits
F.4338	[13490]	3260	15thC pit					1	3	
F.4344	[13515]	3263	13thC pit	1	28	L	Oysters attached, notched, slightly larger/thicker than others in the assemblage.			
F.4353	[13634]	3300	Medieval ditch					12+	43	3 refits.
F.4354	[13541]	3269	14thC ditch					13+	33	3 refits.
F.4376	[13621]	3296	13thC pit					1	1	
F.4603	[13700]	3316	14-15thC pit	1	8	R		1	x	
F.4604	[13702]	3316	14-15thC pit					2	2	

Table 12: Oyster and mussel shells recovered from Site IX.

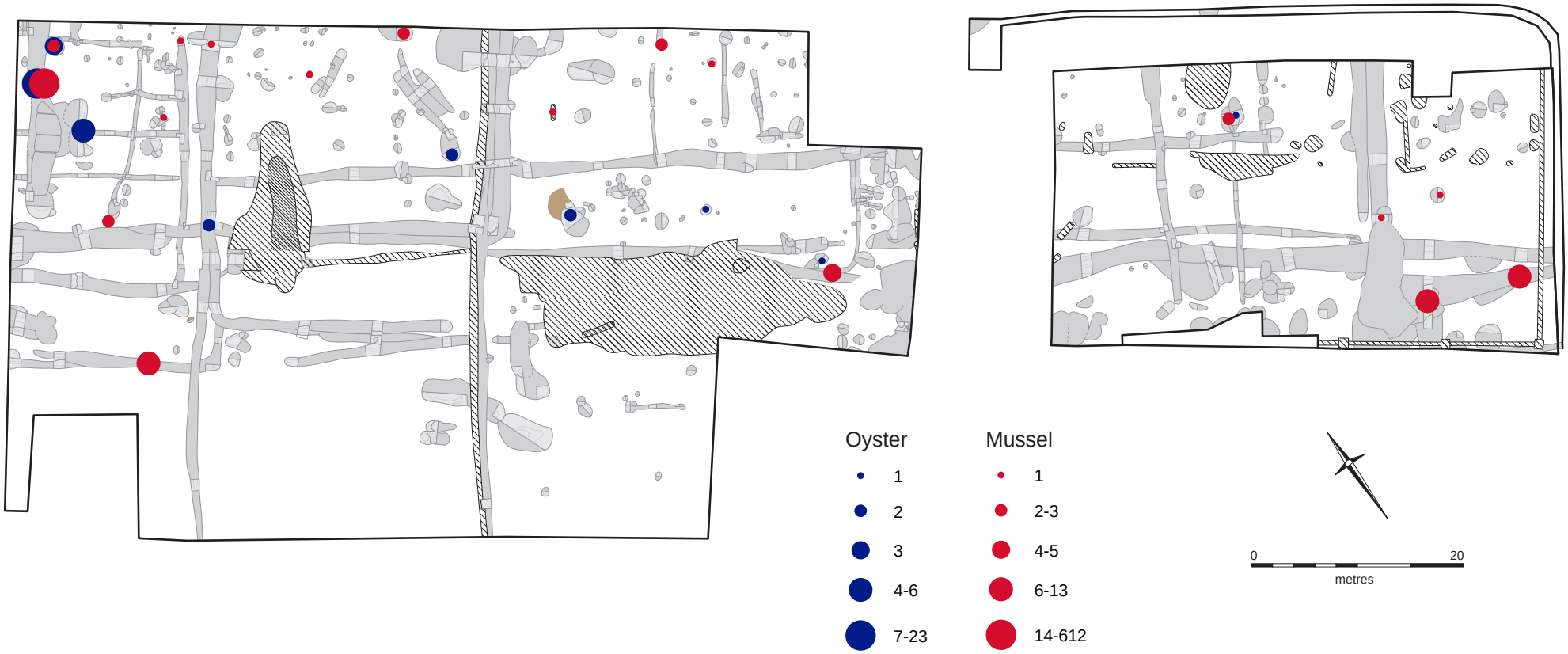


Figure 13. Distribution of shellfish

Feature	Context	Slot	Feature type	No.	Wt. (g)	Description
F.4254	13261	3203	14-15thC pit	1	2	Limpet
F.4276	13346	3226	15thC pit (specialised)	28	3	Barnacles, eggshell

Table 13: Shells other than oyster and mussel recovered from Site IX.

Charred Plant Macrofossils and Other Remains Val Fryer

Samples for the retrieval of the plant macrofossil assemblages were taken from pits, cesspits, wells and gullies within the individual plots and from the boundary ditch/ditches between Plots A and B. A total of twenty four were submitted for assessment (Fig. 14). The samples were bulk floated by CAU and the flots were collected in a 300 micron mesh sieve. The dried flots were scanned under a binocular microscope at magnifications up to x16 and the plant macrofossils and other remains noted are listed in Tables 14–19. Nomenclature within the tables follows Stace (1997) for the plant macrofossils and Kerney & Cameron (1979) for the mollusc shells. All plant macrofossils were charred. Modern roots, seeds and arthropod remains were also recorded at a low density within some assemblages.

Cereal grains/chaff and seeds of common weeds and wetland plants are present within all twenty-four assemblages, although mostly at a low to moderate density. Preservation is generally quite poor. Many of the grains are severely puffed and distorted (probably as a result of combustion at high temperatures) and many macrofossils are also very fragmentary. Oat (*Avena* sp.), barley (*Hordeum* sp.) and wheat (*Triticum* sp.) grains are recorded, along with many cereals which are too poorly preserved for close identification. A single grain from Sample 817 (Plot A, pit F.4276), which has a slightly elongated embryo and what appears to be a dorsal ridge, may be of rye (*Secale cereale*), but this cannot be confirmed and is not recorded within the tables. Rounded hexaploid type wheat grains are predominant in most instances, with a possible gristed or coarsely milled grain occurring within the assemblage from Sample 800 (Plot C, pit F.4059). Chaff is generally scarce, but bread wheat (*T. aestivum/compactum*) type rachis nodes are present within three of the assemblages from Plot A (Samples 805, 817 & 818) and Sample 817 also includes a high density of silica skeletons of cereal awn. The latter almost certainly indicate that some materials were burnt at a high temperature within a well oxygenated fire, possibly a bonfire. Other potential food plant remains, including peas (*Pisum sativum*), beans (*Vicia faba* type) and a possible lentil (*Lens culinaris*), are also recorded, although few are well preserved and most lack their diagnostic testae and hila.

Although weed seeds are recorded within all twenty-four assemblages, the density of material is generally low. Both segetal weeds and grassland herbs are recorded, with taxa noted including corn cockle (*Agrostemma githago*), stinking mayweed (*Anthemis cotula*), small legumes (Fabaceae), medick/clover/trefoil (*Medicago/Trifolium/Lotus* sp.), grasses (Poaceae), buttercups (*Ranunculus* sp.) and charlock type (*Sinapis* sp.). Occasional seeds/fruits of wetland plants namely, club-rush (*Bolboschoenus/Schoenoplectus* sp.), sedge (*Carex* sp.), spike-rush (*Eleocharis* sp.) and saw-sedge (*Cladium mariscus*), are also present along with small fragments of a hazel

(*Corylus avellana*) nutshell and a single elderberry (*Sambucus nigra*) 'pip'. Charcoal/charred wood fragments, including occasional larger pieces, are present throughout, but other plant macrofossils are scarce. However, indeterminate culm nodes are recorded within assemblages from Plot A and Plot B.

The fragments of black porous and tarry material, which are recorded within all assemblages, are mostly thought to be derived from the high temperature combustion of organic remains including cereal grains. However, occasional fragments (particularly of the tarry material) are hard and brittle and may be bi-products of the combustion of coal, small pieces of which are also recorded within a number of assemblages. Other remains are relatively scarce, but do include fragments of bone, eggshell and fish bone (some of which are burnt), pellets of burnt or fired clay, small mammal and/or amphibian bones and fragments of marine mollusc shell, including a small group of winkle (*Littorina littorea*) shells from Sample 817. The latter are heavily coated with an as yet unidentified mineral concretion, which has impregnated the shells leaving them in a semi-mineralised state.

Although specific sieving for molluscan remains was not undertaken, shells of terrestrial and marsh/freshwater slum snails are present at a low to moderate density within most assemblages. Some retain good coloration and delicate surface structures, and it is thought most likely that these may be later contaminants within the feature fills, introduced via the bioturbation of the deposits or other subsequent disturbance. However, some specimens are bleached and abraded, and these are likely to be contemporary. Open country and catholic species are predominant, but a number of pit and ditch assemblages do contain shells of marsh/freshwater slum species, probably indicating that these features were at least seasonally damp or water filled.

Plot A (Table 14): Four samples are from pit and cesspit fills of 14th–15th century date. Of these, the most notable is that from pit F.4276 (Sample 817), which contains the highest density of material of any of the assemblages studied. Cereals are particularly abundant, but most specimens are very poorly preserved, with evidence of extreme thermal damage during combustion. Notwithstanding this, barley and wheat grains are both present at a high density, suggesting that these were the prime crops, with the oats and pulses possibly being present as relicts of a rotational cropping system. Although charcoal/charred wood fragments are also common, other remains are quite scarce, and it is difficult to state with any degree of certainty how the assemblage may have formed. However, the following are, perhaps, the most likely suggestions:

- The presence of chaff elements and occasional large seeds of similar size to the grains may indicate that at least some of the material is derived from final stage processing waste, where impurities were removed by hand immediately prior to consumption/use.
- The abundance of cereals and the poor condition of the material may suggest that the assemblage formed as the result of a catastrophic fire during the drying of the grain prior to storage.
- The abundance of barley may indicate that some material within the assemblage is derived from domestic hearth waste. During the Medieval period, barley was the only cereal which was regularly used whole for human consumption, both for malting and as an ingredient within soups and stews.

Whatever the source of the material, it would appear most likely that the remains were deliberately deposited within the pit fill along with other burnt refuse and midden waste.

The assemblage from pit F.4116 (Sample 805) is broadly similar in composition to that from pit F.4276, and although a lower density of material is present, it is entirely likely that the remains may be derived from a similar source. However, the two assemblages from cesspits F.4184 (Sample 813) and

F.4272 (Sample 818) are very limited, and it is suggested that these remains were accidentally incorporated into the pit fills, possibly from the feet of those using the facilities.

Boundary of Plots A–B (Table 15): As is probably to be expected, the assemblages from the four boundary ditch samples appear to include materials generated by activities carried out in both Plot A (see above) and Plot B (see below). The density of material is low, suggesting that the remains were accidentally incorporated within the ditch fills, probably in the form of scattered or wind-dispersed detritus. Mollusc shells are quite common within all four samples, with the composition of the assemblages suggesting that the boundary ran through an area of open grassland. The ditches themselves appear to have been damp or seasonally water filled.

Plot B (Table 16): Of the five assemblages studied that from pit F.4075 (Sample 801) is of particular note because of the number of cereal grains it contains. However, most cannot be identified due to their poor condition. Other potential food residues include peas, beans, bone and eggshell fragments and a possible lentil, with the latter being of especial interest as it probably represents a continental import. Medick/clover/trefoil seeds and numerous small pellets of burnt or fired clay are also recorded. All in all, it would appear most likely that this assemblage is domestic in origin, being derived from a mixed deposit of hearth waste, midden refuse and burnt flooring materials, all of which were deliberately placed within the pit fill. The remaining assemblages are sparse, although all contain cereal grains and bone fragments, which are again possibly derived from domestic detritus. However, in these instances, the deliberate deposition of the material is not indicated.

Plot C (Table 17): The six assemblages, which are from pit and well fills of 13th–14th century date, are all broadly similar in composition. Cereal grains occur less frequently than in the Plot A and B assemblages, but grass fruits and seeds of grassland herbs are noted within all six samples, albeit at a low density. Although these could be present as segetal weeds, it is thought most likely that they are derived from burnt flooring/ bedding or fodder. It is currently unclear whether any of the remains were deliberately placed within the feature fills or whether they are all derived from scattered refuse.

Plot D (Table 18): Cereals, seeds and charcoal fragments are present within all four assemblages, but the density of material is extremely low. Although the remains are most likely derived from scattered refuse, the origin of the material is unknown. The composition of the mollusc assemblage from gully F.4360 (Sample 822) may indicate that the feature was damp or seasonally wet at its base.

Plot E (Table 19): The single assemblage is from well F.4377 (Sample 820). Plant macrofossils and other remains are very scarce, and it would appear that all are derived from detritus, which was accidentally incorporated with the well fill.

In summary, although the assemblages from this excavation are generally quite sparse, it is, perhaps, possible to pinpoint some potential activities which may have occurred within the individual properties. Properties A, B and C appear to have been particular foci of activity, a hypothesis which is generally supported by the archaeological evidence, which indicates that these areas were intensively utilised for an extended period of time throughout the Medieval period. Assuming that the recovered plant macrofossils are primarily derived from kitchen refuse, it would appear that the occupants of these properties were reliant on barley and wheat (some of which may have been dried/cleaned on site prior to consumption) as well as peas, beans and possibly lentils. This list broadly corresponds to the crops known to have been grown locally, such as the wheat, rye, barley, oats and peas recorded at Girton in *c*. 1450 (Wright 1989, 121). Meat, eggs, fish and shellfish were also prepared and eaten. Evidence from Plot C suggests that soiled bedding/flooring materials were being burnt nearby, although it is currently unclear whether these were from purely domestic usage or whether they may include stable waste and/or other animal bedding. Although the assemblages from Properties D and E are essentially similar in composition, the paucity of material does appear to indicate that these areas were less intensively used, with most of the recorded remains almost certainly being derived from scattered refuse.

Figure 14. Distribution of analysed environmental samples by slot

Sample	805	813	817	818
Context	12780	13032	13346	13326
Feature	4116	4184	4276	4272
Feature type	Pit	Cesspit	Pit	Cesspit
Date	14-15thC	15thC	15thC	14thC
Cereals and other potential food plants				
Avena sp. (grains)	xcf	x	x	
(awn frags.)	x			
Hordeum sp. (grains)	x		xxx	
(rachis nodes)			x	
Triticum sp. (grains)	xx	x	xxx	x
(rachis node frag.)	x			
T. aestivum/compactum type (rachis nodes)	x		x	x
Cereal indet. (grains)	xx	x	xxxx	x
(detached sprouts)			x	
(detached embryos)			x	
(silica skeletons - awn)			xxxx	
Pisum sativum L.			x	
Vica faba type			x	
Large Fabaceae indet.			xx	
Herbs				
Agrostemma githago L.	x		x	
Anthemis cotula L.	x		x	x
Atriplex sp.				x
Bromus sp.	x			
Chenopodiaceae indet.	x	x		
Fabaceae indet.	x	x		
Fallopia convolvulus (L.)A.Love			x	
Galium aparine L.			x	
Lychnis flos-cuculi L.			xcf	
Medicago/Trifolium/Lotus sp.	xcf			x
Small Poaceae indet.	x	x	x	x
Large Poaceae indet.	x		x	
Polygonaceae indet.	xcf			
Ranunculus acris/repens/bulbosus	x		x	
Rumex sp.			x	
Scandix pecten-veneris L.	x			
Sherardia arvensis L.	xcf			
Silene sp.			x	
Sinapis sp.				x
Wetland plants				
Bolboschoenus/Schoenoplectus sp.				x
Carex sp.				x
Eleocharis sp.			x	
Tree/shrub macrofossils				
Sambucus nigra L.	x			
Other plant macrofossils				
Charcoal <2mm	xxx	x	xxxx	x
Charcoal >2mm	xx	x	xxx	x
Charcoal >5mm	x		xxx	
Charcoal >10mm			x	
Charred root/stem			xx	x
Indet. culm nodes	x	x	x	
Indet. seeds	x		x	x

Table 14: Charred plant macrofossils and other remains from Plot A. Abbreviations: X: 1–10 specimens, Xx: 11–50 specimens, Xxx: 51–100 specimens, Xxxx: 100+ specimens, b: burnt, cf: compare, fg: fragment, pmc: probable modern contaminant.

Sample	805	813	817	818
Other remains				
Black porous 'cokey' material	xxx	x	xxx	xx
Black tarry material			x	
Burnt/fired clay	x		x	x
Burnt stone	x			
Eggshell	x		x xb	
Fish bone	x		x	
Small mammal/amphibian bones	x	x		
Vitreous material	x	x	x	
Mollusc shells				
Woodland/shade loving species				
Acanthinula aculeata			x	
Puntum pygmaeum	x			
Open country species				
Balea perversa			x	
Pupilla muscorum	x		x	x
Vallonia sp.				xx
V. costata	x			x
Vertigo pygmaea				x
Catholic species				
Trichia hispida group	x	x		x
Marsh/freshwater slum species				
Anisus leucostoma		x	x	
Carychium sp.				x
Lymnaea sp.			x	
Marine molluscs				
Littorina littorea			xx	
Mytilus sp			xfgs	
Indet. marine mollusc shell frags.			x	x
Sample volume (litres)	**10**	**10**	**15**	**16**
Volume of flot (litres)	**<0.1**	**<0.1**	**0.1**	**<0.1**
% flot sorted	**100**	**100**	**100**	**100**

Table 14: Charred plant macrofossils and other remains from Plot A (continued).

Sample	803	811	812	806
Context	12754	12951	12952	12768
Feature	4031	4031	4031	4037
Feature type	Ditch	Ditch	Ditch	Ditch
Date	15thC	14-15thC	15thC	15thC
Cereals				
Avena sp. (grains)	x		x	
Triticum sp. (grains)	x	x	x	x
Cereal indet. (grains)	x	x		x
Herbs				
Anagallis arvensis L.		x		
Anthemis cotula L.			x	
Bromus sp.		x		
Centaurea sp.				x
Fabaceae indet.	x	x	x	x
Fallopia convolvulus (L.)A.Love	x			
Medicago/Trifolium/Lotus sp.	xcf	xcf	x	xcf
Medicago lupulina L.			x	
Small Poaceae indet.	x	x		
Large Poaceae indet.	x	x		
Tree/shrub macrofossils				
Corylus avellana L.	x			x
Other plant macrofossils				
Charcoal <2mm	xx	x	x	x
Charcoal >2mm	x	x	x	x
Charcoal >5mm		x		
Indet. seeds	x			
Other remains				
Black porous 'cokey' material	xx	x	x	x
Bone	x xb			x
Burnt/fired clay		x		x
Burnt stone				x
Eggshell		x		
Small mammal/amphibian bones	x	x	x	
Vitreous material		x		
Mollusc shells				

Woodland/shade loving species				
Aegopinella sp.		x		
Zonitidae indet.	x			x
Open country species				
Pupilla muscorum	x		x	
Vallonia sp.	xx	x	x	x
V. costata	x	x	x	x
Vertigo pygmaea	x			x
Catholic species				
Cochlicopa sp.	x			
Helix aspersa		xpmc		
Nesovitrea hammonis	x			
Trichia hispida group	xx	x	x	x
Marsh/freshwater slum species				
Anisus leucostoma		x	x	
Carychium sp.	x			x
Lymnaea sp.	x	x	x	
Sample volume (litres)	**14**	**15**	**10**	**10**
Volume of flot (litres)	**<0.1**	**<0.1**	**<0.1**	**<0.1**
% flot sorted	**100**	**100**	**100**	**100**

Table 15: Charred plant macrofossils and other remains from Plot A–B boundary.

Sample	**801**	**802**	**804**	**807**	**810**
Context	12683	12741	12756	12770	12954
Feature	4075	4098	4109	4111	4164
Feature type	Pit	Pit	Pit	Pit	Pit
Date	15thC	14-15thC	15thC	14-15thC	14-15thC
Cereals and other potential food plants					
Avena sp. (grains)	x				
Hordeum sp. (grains)	x			x	
Triticum sp. (grains)	xx	x	x		x
Cereal indet. (grains)	xxx	x	x	x	xx
(detached embryo)	x				
Lens culinaris Medikus	xcf				
Pisum sativum L.	xcf				
Vicia faba type	xcf				
Large Fabaceae indet.	x				
Herbs					
Anthemis cotula L.	x				x
Bromus sp.	xcf				
Chenopodiaceae indet.	x				
Fabaceae indet.	x	x	x		x
Galeopsis sp.	xcf				
Medicago/Trifolium/Lotus sp.	xx				
Small Poaceae indet.				x	
Large Poaceae indet.	x				
Polygonum aviculare L.				x	
Polygonaceae indet.	x				
Sherardia arvensis L.	xcf				
Sinapis sp.	xcf				
Tree/shrub macrofossils					
Corylus avellana L.	x				
Other plant macrofossils					
Charcoal <2mm	x	xx	xx	x	x
Charcoal >2mm	x	x	x		x
Charcoal >5mm	x	x			x
Charred root/stem	x				
Indet. culm nodes	x				x
Indet. seeds	xx				
Other remains					
Black porous 'cokey' material	xxx	x	x	x	xx
Black tarry material	x		x		x
Bone	x	x	xx	x	x
Burnt/fired clay	xxx		x		x
Eggshell	xb				
Small coal frags.	x	x	x	x	
Small mammal/amphibian bones			x		

Mollusc shells					
Woodland/shade loving species					
Acanthinula aculeata				x	
Aegopinella sp.			x		
Zonitidae Indet.				x	
Open country species					
Pupilla muscorum	x		x		
Vallonia sp.	x	x	x	x	
V. costata		x	x	x	
V. pulchella	xcf				
Catholic species					
Cochlicopa sp.	x				
Trichia hispida group	x	x	x		
Marsh/freshwater slum species					
Anisus leucostoma	x				
Carychium sp.	x		x		
Lymnaea sp.			x	x	
Sample volume (litres)	**10**	**10**	**12**	**12**	**12**
Volume of flot (litres)	**<0.1**	**<0.1**	**<0.1**	**<0.1**	**<0.1**
% **flot sorted**	**100**	**100**	**100**	**100**	**100**

Table 16: Charred plant macrofossils and other remains from Plot B.

Sample	**800**	**808**	**809**	**814**	**815**	**816**
Context	12648	12784	12878	13165	13195	13199
Feature	4059	4118	4143	4234	4243	4243
Feature type	Pit	Well	Pit	Pit	Well	Well
Date	13-14thC	14-15thC	14-15thC	14-15thC	14-15thC	14-15thC
Cereals						
Avena sp. (grains)			x			xcf
Hordeum sp. (grains)		x	x		x	
Triticum sp. (grains)	xx	x	x	x	x	x
(?gristed grain)	xcf					
Cereal indet. (grains)	xx	x	xx		xx	x
Herbs						
Anthemis cotula L.			x		x	x
Asteraceae indet.						x
Brassicaceae indet.			x			
Bromus sp.			x			
Centaurea sp.	xcf					
Chenopodium album L.		x				
Fabaceae indet.	x	x	x	x	x	x
Galium aparine L.						x
Medicago/Trifolium/Lotus sp.	xcf	xcf	x	xcf	xcf	
Small Poaceae indet.	x	x	x			
Large Poaceae indet.	x	x		x		
Polygonaceae indet.					x	
Rumex sp.	x					
Sinapis sp.			x			
Wetland plants						
Cladium mariscus (L.)Pohl			x			
Tree/shrub macrofossils						
Corylus avellana L.	xcf	x				
Other plant macrofossils						
Charcoal <2mm	xx	xx	x	x	x	x
Charcoal >2mm	xx	x	x	x		x
Charcoal >5mm	x		x		x	
Charred root/stem		x	x			
Indet. seeds			x		x	
Other remains						
Black porous 'cokey' material	xx	xx	x	x	x	xx
Black tarry material	x	x		x		
Bone	x xb	x	x	x		x
Burnt/fired clay		x	x			
Burnt stone					x	
Eggshell	xb					
Fish bone	xx	x				
Small coal frags.	x	x		x		
Small mammal/amphibian bones	x					
Mollusc shells						
Woodland/shade loving species						
Oxychilus sp.		x	x		x	
Zonitidae indet.				x		
Open country species						
Pupilla muscorum		x	x			

Vallonia sp.	x	x	x	x	x	x
V. costata			x		x	x
V. pulchella	x					
Vertigo pygmaea	x	x	x			
Catholic species						
Cochlicopa sp.		x				
Trichia hispida group	x	x	x	x	x	x
Marsh/freshwater slum species						
Lymnaea sp.			x		x	
Sample volume (litres)	**5**	**14**	**14**	**7**	**12**	**12**
Volume of flot (litres)	**<0.1**	**<0.1**	**<0.1**	**<0.1**	**<0.1**	**<0.1**
% flot sorted	**100**	**100**	**100**	**100**	**100**	**100**

Table 17: Charred plant macrofossils and other remains from Plot C.

Sample	**821**	**822**	**823**	**824**
Context	13634	13566	13715	13585
Feature	4353	4360	4610	4357
Feature type	Gully	Gully	Pit	Ditch
Date	**14-15thC**	**14-15thC**	**14-15thC**	**15thC**
Cereals				
Hordeum sp. (grains)		x		
Triticum sp. (grains)		x	x	x
Cereal indet. (grains)	x		x	
Herbs				
Fabaceae indet.	x	x	x	
Medicago/Trifolium/Lotus sp.				xcf
Wetland plants				
Cladium mariscus (L.)Pohl			x	
Tree/shrub macrofossils				
Corylus avellana L.				x
Other plant macrofossils				
Charcoal <2mm	x	x	x	x
Charcoal >2mm	x			x
Charred root/stem				x
Indet. seeds			x	
Other remains				
Black porous 'cokey' material	x	x	x	x
Black tarry material		x	x	
Bone			x	
Burnt/fired clay			x	
Small coal frags.	x	x	x	x
Small mammal/amphibian bones		x		
Mollusc shells				
Woodland/shade loving species				
Oxychlius sp.		x		
Open country species				
Pupilla muscorum	x	x		
Vallonia sp.	x	xx	x	
V. pulchella		xcf		
Vertigo pygmaea		x		
Catholic species				
Cochlicopa sp.		x		
Trichia hispida group		x	x	x
Marsh/freshwater slum species				
Anisus leucostoma		x		
Lymnaea sp.	x	xx		
Marine molluscs				
Indet. marine mollusc shells frags.	x			
Sample volume (litres)	**8**	**12**	**12**	**6**
Volume of flot (litres)	**<0.1**	**<0.1**	**<0.1**	**<0.1**
% flot sorted	**100**	**100**	**100**	**100**

Table 18: Charred plant macrofossils and other remains from Plot D.

Sample	**820**
Context	13630
Feature	4377
Feature type	Well
Date	**14-15thC**
Cereals	
Avena sp. (grains)	x
Triticum sp. (grains)	x
Cereal indet. (grains)	x
Herbs	
Atriplex sp.	x
Fabaceae indet.	x
Small Poaceae indet.	x
Rumex sp.	x
Other plant macrofossils	
Charcoal <2mm	x
Charcoal >2mm	x
Charred root/stem	x
Indet. seeds	x
Other remains	
Black porous 'cokey' material	xx
Small coal frags.	x
Small mammal/amphibian bones	x
Mollusc shells	
Open country species	
Pupilla muscorum	x
Vallonia sp.	x
Vertigo pygmaea	x
Catholic species	
Trichia hispida group	x
Sample volume (litres)	**11**
Volume of flot (litres)	**<0.1**
% **flot sorted**	**100**

Table 19: Charred plant macrofossils and other remains from Plot E.

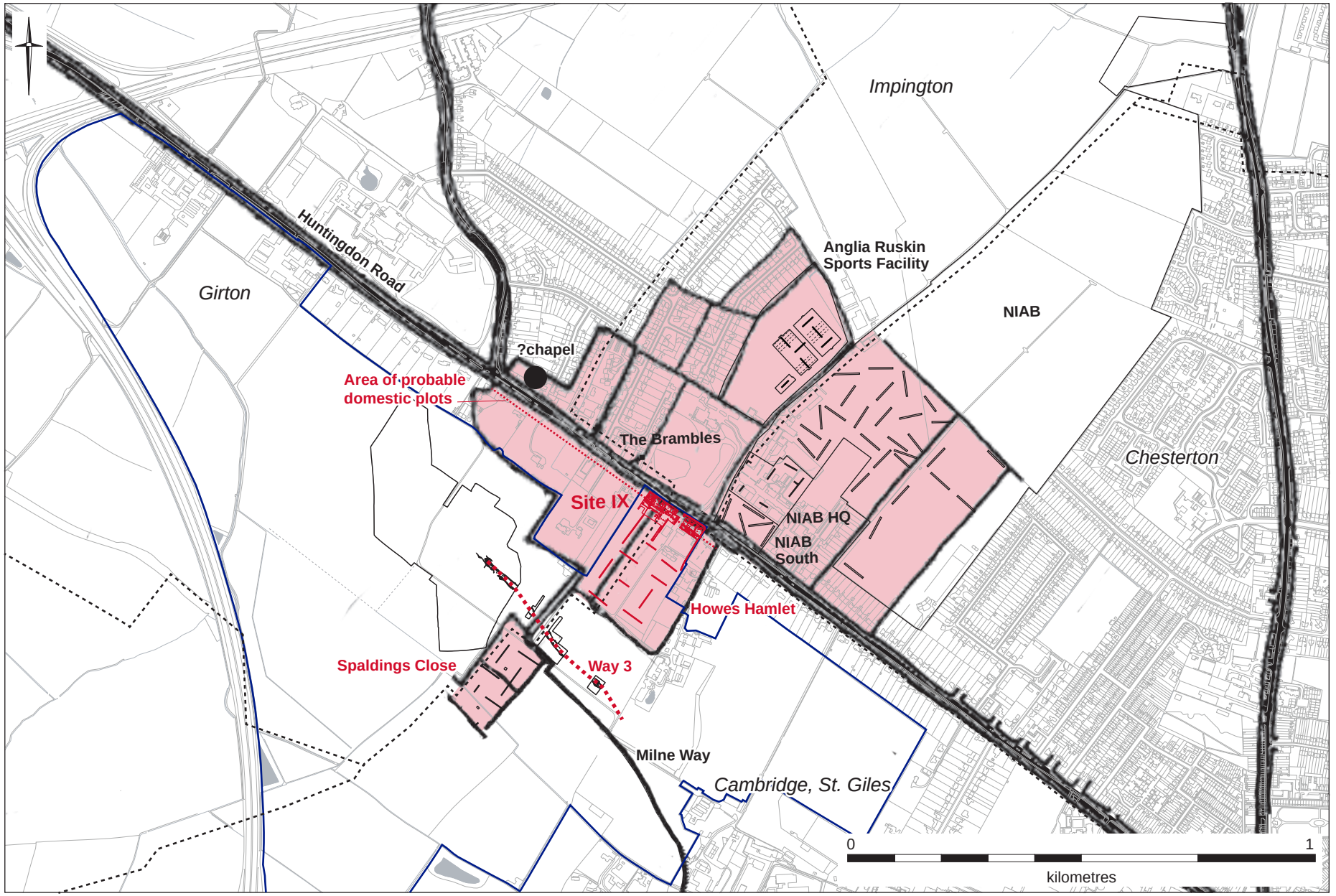


Figure 15. Reconstruction of the likely extent of medieval Howes

SECTION 4: DISCUSSION

The archaeological investigations have revealed a significant portion of the rural Medieval settlement of Howes. This indicates that a settlement consisting of square or sub-square ditched enclosures fronting onto Huntingdon Road was established *c.* 1150–1210. This settlement developed over the course of *c.* 300–400 years, with the number of plots initially increasing and individual plots being expanded. The settlement began to decline in the early/mid-15th century, with some plots going out of occupation, and domestic occupation ceased in the early/mid-16th century. As much of the area of the settlement lay beyond the limits of excavation this pattern relates only to the investigated plots and it is conceivable that occupation commenced earlier and continued later at plots outside the area covered by the excavations. Agricultural activity then continued throughout the Post-Medieval period, but by the late 19th–early 20th century when archaeologists and historians began to be interested in the Medieval settlement of Howes no clues as to its location survived beyond a few place-name elements in the vicinity. The incorporation of the area into the University Farm in 1909–10 led to a range of activities that left a minor archaeological imprint.

Howes can broadly be categorised as a Deserted Medieval Settlement, one of probably over 3000 identifiable from England. It can, however, be regarded as rather atypical as most examples are known from earthworks or crop marks neither of which survive at Howes. Although the general area associated with Howes can be reconstructed from the extent of old enclosures and other evidence (Fig. 15), covering *c.* 57.5 ha. (574529 square metres). In order of extent this is divided between Chesterton parish (*c.* 22.5 ha.), Impington parish (*c.* 19.4 ha.) Girton parish (*c.* 11.2 ha.) and Cambridge St. Giles parish (*c.* 4.4ha), although the extent within the latter excludes the detached area of Spaldings Close (*c.* 2.6 ha.). The area occupied of ditched enclosure plots is more difficult to estimate. Given the documentary and other evidence that bulk of the settlement lay in Girton parish, the archaeological evidence for plots in Impington parish to the southwest of Huntingdon road, documentary evidence that occupation was relatively limited in Cambridge St. Giles parish and a lack of definite evidence for actual occupation in Chesterton parish then it can be suggested that there was a linear arrangement of plots along the southwestern side of Huntington Road. This line of plots probably stretched for *c.* 600m, which would mean that *c.* 22% of the total area of ditched enclosure plots was excavated. The width of the investigated plots varied considerable, with examples that were apparently 28m (Plot B), 34m (Plot C) and 47m (Plot D) wide. If we assume a typical width was *c.* 35m then there would be roughly 17 plots if those investigated archaeologically were typical of the settlement as a whole. This figure appears broadly compatible with the documentary evidence. By the late 14th century there were a minimum of eight households, only one of which was located in Cambridge St. Giles parish (Hall & Ravensdale 1976, 44). As this figure appears not exclude households in Impington Parish then a breakdown of seven households in Girton parish, nine in Impington parish, one in Cambridge St. Giles parish and none in Chesterton parish would credibly fit with the reconstructed settlement (Fig. 15). The location of the Chapel of St. James within Girton parish is unclear, although it is perhaps slightly more likely that it lay to the northeast of Huntingdon Road (Fig. 15). Away from this core of domestic plots the inhabitants of Howes appear to have farmed some land to the southwest in the parishes of Girton and Cambridge St.

Giles. This included a detached area known as Spalding's Close (Fig. 15); this area was covered by the North West Cambridge evaluation (Evans & Newman 2010), but it produced no significant archaeological remains although there was evidence for the quarrying attested in the Late Medieval/early Post-Medieval period when 'much gravel hath been digged and made pits and now ploughed again' (Hall & Ravensdale 1976, 29). There is also documentary evidence for inhabitants of Howes leasing small strips of land throughout Grithow Field and Middle Field of St. Giles parish in the late 14th century. These strips were probably accessed by the inhabitants of Howes using Milneway (Fig. 15), a trackway known from documents to have been in existence by *c*. 1360 that was in fact established during the Romano-British period (Cessford & Evans 2014, 116–18).

The bulk of the agricultural activity associated with Howes appears to have taken place in Impington and Chesterton parishes. Archaeological traces of this activity within the boundaries of Howes are attested by the remnants of Medieval furrows at the Anglia Ruskin Sports Facility (Tabor 2014), whilst there is documentary evidence for inhabitants of Howes leasing land in Chesterton field located 'towards Howes' in *c*. 1250–90. Indeed, the proximity of the land in Impington and Chesterton parishes to Howes and its distance from the villages of Impington and more especially Chesterton would have rendered the land a much more attractive prospect to the inhabitants of Howes.

There are several relatively unusual aspects about the archaeology of Howes. One of the most obvious is its inter-parochial location, with elements — if not necessarily domestic occupation — spread over four parishes. If the 1891 parish boundaries — the earliest that can be accurately plotted — are a reliable indication then the archaeological excavations took place almost exclusively within Impington parish, with negligible remains associated with the other three parishes (Fig. 9). Indeed, it is noteworthy how closely the historic parish boundaries match some of the Medieval ditched boundaries.

The square or sub-square form of the plots at Howes contrasts markedly with the much narrower rectangular plots that have been identified in Cambridge (Cessford 2012), its suburbs (Cessford 2007) and most surrounding settlements such as Barnwell (Newman 2013) and Chesterton (Cessford with Dickens 2004; Newman 2014; Fig. 16). They are, however, similar to those in the Church End area of Cherry Hinton (Cessford with Dickens 2005; Cessford & Slater in prep) and the West Fen Road area of Ely (Mortimer *et al* 2005). These square or sub-square plots appear to be a distinct form that can be categorised as either 'hamlet' or 'village-edge' in contrast to the rectangular 'urban' or 'village core' plots.

It appears that throughout the Medieval period the settlement plots were enclosed by ditches, only switching to hedges in the Post-Medieval period. This contrasts to 'urban' or 'village core' plots, where stake and wattle fences (Hall & Hunter-Mann 2002, 807–10) and hedges (Bowsher *et al.* 2007, 23) became the norm in the 13th–14th centuries. This pattern is identifiable at local sites (Cessford 2008; Newman 2014). One explanation for this delay is that there was less pressure on space at 'hamlet' or 'village-edge' sites, another factor is likely to be that ditches took up proportionately more area in narrow rectangular plots than in square/sub-square plots.

In comparison to most other investigated Medieval sites in and around Cambridge there is a relative paucity of features at Howes and they are largely comparatively shallow. Both these factors appear linked to the topographic and geological situation of Howes; the mixed nature of the underlying natural rendered quarrying for either clay or sand/gravel an unproductive exercise. Indeed, there is documentary evidence that some gravel pits in an area a short distance to the south known as Spalding' Close may have been used by the inhabitants of Howes (Hall & Ravesnsdale 1976, 29). As *c.* 50–75% of the archaeologically identifiable features created at Medieval settlements in and around Cambridge are quarry pits, the density of features at Howes is broadly comparable once allowance is made for the absence of these. The nature of the geology also led to a relatively high perched water table, which would have militated against the digging of deep features.

There are several atypical elements with regard to the material culture and ecofactual material from Howes. Admittedly these are not based upon large assemblages, but do nonetheless appear to be significant. Atypically for the period the animal bone assemblage is dominated by horse (53% by NISP), with signs of both butchery and carnivore gnawing suggesting that it may have been fed to dogs. The percentages of horse bone from sites in and around Cambridge is usually significantly lower; for instance at Eastern Gate it was 6.2% in the 13th–16th century assemblage (Newman 2013) and at Grand Arcade it was 3.0% in the 13th–15th assemblage (Cessford 2007). The highest proportion of horse bone from a contemporary local site appears to be at Neath Farm, where an 'unusually' high proportion was noted, at 18.0% (Cessford & Slater forthcoming) although this is only around a third of the percentage at the present site. The presence of horses at Howes is also attested in the relatively small ironwork assemblage, with one definite and one probable spur.

As Howes is a roadside settlement it may have catered to travellers in various ways. It is possible that the travellers were accompanied by dogs and if flocks of animals were moved to Cambridge for slaughter it is possible that dogs were associated with this. Alternatively there is some evidence for hunting in the vicinity of Howes during the Medieval period. An important royal servant Peter de Chauvent acquired *Burgoynes* manor at Impington in 1272, which he held until his death in 1303. In 1289 he was granted a right of free warren at Impington, Chesterton and Howes (Lewis 1989, 131). Free warren is a form of privilege/franchise conveyed by the king, agreeing to hold a subject harmless for killing game of certain species within a stipulated area. This right of free warren continued for much of the Medieval period, as John Herries, mayor of Cambridge in 1404–05 who bought land in Chesterton in the 1390s and owned land in Impington in 1412, and others received royal confirmation of their rights of free warren at Impington, Chesterton and Howes in 1405 (Lewis 1989, 131). The fact that Howes was specifically mentioned in both documents, despite not being a parish in its own right, suggests that it was closely linked to the right of free warren. Additionally as the plots that produced this evidence appear to have lain within Impington parish (Fig. 9) where Peter de Chauvent held his manor strengthens the case. Animals covered by free warren included hare and rabbit plus pheasant and partridge, along with roe deer from *c.* 1340 onwards. Fox, wolf, cat, badger, and squirrel might also have been included and potentially woodcock, quail, and rail.

Figure 16. 13th to 16th century features at Grande Arcade (top left), Eastern Gate Hotel (top right) North West Cambridge Site IX (bottom left) and Neath Farm (bottom right)

There is nothing in the archaeological or documentary evidence to suggest that the settlement at Howes was high status and it is unlikely to have acted as a hunting lodge or similar establishment. Indeed, there is no reason that Peter de Chauvent, with his manor at Impington, or John Herries and others, who lived in Cambridge, would require such an establishment at Howes given its physical proximity. It is also worth observing that none of the animal species covered by the right of free warren are present in the animal bone assemblage, again arguing against a hunting lodge interpretation. Howes could, however, have potentially been the site of a kennel or similar establishment linked to the hunting. The horses that were butchered need not be directly linked to the hunting, but might instead simply be local animals from Howes and other nearby settlements that were used to feed the dogs.

Another unusual aspect was that the shellfish were dominated by mussels with oyster less common, a reversal of the normal situation at sites in the region. Whilst this is strongly influenced by a large assemblage from a single pit the pattern nonetheless still holds true if this feature is excluded. The reasons for this are unknown and no evidence has been identified that mussels were used for purposes other than food during the Medieval period.

The significant proportion of Huntingdonshire Fen Sandy ware, representing 40–44% of the 13th–15th ceramics from the site is worthy of note. The ware has not previously been recognised in assemblages from Cambridge and its immediate environs — although it has admittedly only recently been identified as a distinct ware — and as Howes is located *c*. 20km from Huntingdon it lies outside the 10–15km range where the ware has previously been found in quantities. Whilst it is likely that Huntingdonshire Fen Sandy ware may be present in small quantities in assemblages from Cambridge and its immediate environs studied prior to the ware's recognition, it is extremely unlikely that it occurs at anything approaching the percentages identified at Howes. There is currently no obvious reason for the predominance of Huntingdonshire Fen Sandy ware at Howes, there is no other documentary or archaeological evidence for a particular connection to the Huntingdon area that the pottery might be a by-product of. It is conceivable that the location of Howes on the road between Huntingdon and Cambridge and outside the town boundaries of Cambridge meant that it in some respects — possibly due to the imposition of tolls or taxes by the town of Cambridge — it fell within some form of 'Huntingdon ceramic sphere'.

The plot frontages lay largely beyond the limit of excavation to the northeast, although a range of features, particularly a metalled surface (F.4160), suggest that it was immediately adjacent. This partly explains the absence of buildings, apart from two possible examples, although given the date of the establishment of the settlement it is unlikely that much structural evidence survived. Structures utilizing timber-frames supported on earth-fast sill beams began to be constructed in the late 12th century (Walker 1999), stimulated by the re-adoption of sawing as a technique *c*. 1180 which improved the squaring of timber and allowed better built timber-frames (Schofield & Vince 2003, 109). Timber framed buildings are much shallower and therefore less visible archaeologically, especially at sites such as Howes where activities such as ploughing have taken place subsequently.

Figure 17. Section and view of Pit F.4276, facing southwest (A), plus photographs of semi-complete pot (B), whetstone (C), and mussel and oyster shells (D)

The bulk of the material recovered from Site IX can be broadly characterised as low-density 'background noise' that was inadvertently incorporated into features. There are a few apparent exceptions to this, the most significant of which was pit F.4276 (Fig. 17). This sub-rectangular pit was 1.40m by 0.62m in depth and over 0.7m deep; it was probably timber-lined, had a stone lining in the base and would have naturally filled with water, suggesting a light-industrial function. There is no indication that the material in the fills related to this function, apart from some quern stone fragments that formed part of the basal lining. Intriguingly a group of ironwork including 22 domed hobnails that may derive from a Romano-British shoe that were also associated with the basal fill. The other material appears to relate to the rapid disposal of a group of domestic waste. Elements present in the backfilling of F.4276 included a nearly complete 15th century grey coarseware jug with banded rilled decoration and strap handle, over 600 mussels shells plus a smaller number of oyster shells, a barely used imported whetstone, animal bone including butchered horse bone, fish bone, a high density of charred plant remains including barley, wheat and potentially rye, plus also eggshell. Overall this group provides a high-resolution snapshot of life at Medieval Howes, relating to one particular plot at a specific point in time, that compliments the more generalised view from the overall assemblages.

Acknowledgements

The realisation of the current fieldwork programme has been facilitated throughout by Roger Taylor, Gavin Heaphy and Heather Topel of University Estates Management and Derek Newman, Vyas Totaram and Jon Neve of Turner and Townsend. The fieldwork was monitored by Andy Thomas, Development Control Archaeologist at Cambridgeshire Archaeology Planning and Countryside Advice (CAPCA), and we have been grateful for his advice. The machining was skilfully undertaken under extremely challenging circumstances by the staff of LOC and we particularly thank Mick Mufritt.

The initial machine stripping was variously overseen for the CAU by Marcus Brittain, Michael Tierney and Simon Timberlake. The excavations were managed for the CAU by Chris Evans and directed by Craig Cessford and Richard Newman; survey was by Donald Horne and Jon Moller and the fieldwork was undertaken by Tony Baker, Rob Barrett, Joe Berry, Selina Davenport, Katie Hutton, Matt Jones, Tim Lewis, Dan Lovelace, Chris Wakefield, Laura Watson and Matt Woods. Metal-detecting was undertaken by Matt Woods. The finds processing was overseen by Justin Wiles and Jacqui Hutton processed and sorted the environmental samples. Thanks to Richard Newman for commenting upon a draft of the report.

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APPENDIX: FEATURE DESCRIPTIONS

Dating evidence relates to pottery unless otherwise stated.

Abbreviations:
Dist.: Disturbance
Ditch sys.: Ditch system
Gen. Loc.: general location
Med: Medieval
Mod: Modern
N/A: Not applicable
Nat: Natural
P-Med: Post-Medieval
Strat.: Stratigraphy
Unk: Unknown

F.	Slot(s)	Cut(s)	Fill(s)	Type	Length (m)	Width (m)	Depth (m)	Dating evidence	Period	Plot
4000	3000	12502	12500-01	Pit	2.50	0.73+	0.50	Gen. loc.	Med	Rear
4001	3001	12504	12503	Pit	2.10	0.7+	0.5+	16th-17th	P-Med	N/A
4002	3002	12509	12506-08	Pit	2.04	0.6+	0.52	Gen. loc.	Med	C
4003	Void	Void	Void	Void	Void	Void	Void	Void	Void	Void
4004	3004, 3048, 3050, 3060	12513, 12666, 12670, 12709	12512, 12665, 12669, 12707-08	Pit	5.00	0.90	0.20	15th	Med	B
4005	3005	12515	12514	Ditch	15+	0.70	0.24	15th	P-Med	N/A
4006	3006	12516	12517	Pit	0.62	0.29	0.05	15th	Med	A
4007	N/A	N/A	N/A	Dist.	c.13.0	c.2.5	0.80	Fill type	Mod	N/A
4008	3073	12736	12734-35	Dist.	c.16.0	c.6.0	0.80	Fill type	Mod	N/A
4009	N/A	N/A	N/A	Drain	Unk.	0.40	0.60	19th-20th	Mod	N/A
4010	N/A	N/A	N/A	Drain	Unk.	0.40	0.60	19th-20th	Mod	N/A
4011	3007	12519	12518	Ditch	2.4+	0.66	0.42	Fill type	P-Med	N/A
4012	3007, 3015, 3030	12521, 12544, 12586	12520, 12545-46, 12587-88	Ditch	6.70	0.70	0.37	Ditch sys.	Med	A
4013	3008	12523	12522	Pit	1.30	1.20	0.30	15th	Med	A
4014	3008	12525	12524	Pit	2.70	1.30	0.35	Gen. loc.	Med	A
4015	3009	12527	12526	Hollow	0.70	0.60	0.09	None	Nat	N/A
4016	Void	Void	Void	Void	Void	Void	Void	Void	Void	Void
4017	3010, 3100, 3191, 3195, 3197	12530, 12858, 13186, 13220, 13237	12528, 12857, 13185, 13219, 13236	Ditch	50+	0.80	0.20	19th-20th	Mod	N/A
4018	3010, 3100, 3191, 3195, 3197-98	12533, 12860, 13223, 13232, 13239, 13241	12531-32, 12859, 13187, 13221-22, 13238, 13240	Ditch	50+	1.10	0.30	17th-19th	P-Med	N/A
4019	3011	12535	12534	Pit	1.15	1.15	0.32	15th	Med	B
4020	3012	12537	12536	Pit	1,5	1.13	0.16	16th-17th	P-Med	N/A
4021	3012	12539	12538	Pit	0.75	0.68	0.35	16th	P-Med	N/A
4022	3013	12541	12540	Posthole	0.54	0.54	0.28	Gen. loc.	Med	Rear
4023	3014	12543	12542	Posthole	0.80	0.54	0.08	Gen. loc.	Med	Rear
4024	3040	12640	12641-42	Ditch	30+	1.27	0.42	14th	Med	C
4025	3016, 3022	12548, 12566	12547, 12565	Ditch	17+	1.20	0.43	12th	Med	A
4026	3017	12550	12549	Posthole	0.42	0.42	0.12	Gen. loc.	Med	Rear
4027	3018	12552	12551	Posthole	0.50	0.44	0.38	Gen. loc.	Med	Rear
4028	3019	12554	12553	Pit	0.92	0.72	0.22	Gen. loc.	Med	Rear
4029	3020, 3028-29	12557, 12585, 12590	12555-56, 12583-84, 12589	Ditch	c.25.0	1.02	0.30	15th	Med	B
4030	3020	12560	12558-59	Ditch	c.1.5.0	0.80	0.55	Ditch sys.	Med	B
4031	3021, 3083, 3085, 3114, 3118, 3130, 3143	12562, 12755, 12769, 12887, 12908, 12949, 13002	12561, 12754, 12768, 12886, 12905-07, 12950-52, 13008-09	Ditch	35+	1.85	0.63	15th	Med	A-B
4032	3021	12564	12653	Ditch	28+	1.1+	0.26	15th	Med	A-B

4033	3022	12568	12567	Ditch	26+	0.55	0.18	Ditch sys.	Med	A
4034	3023	12570	12569	Pit	1.10	0.96	0.32	14th-15th	Med	Rear
4035	3024, 3029, 3035	12572, 12599, 12611	12571, 12597-98, 12609-10	Ditch	17.5+	1.50	0.35	15th	Med	B
4036	3025	12574	12573	Posthole	0.52	0.52	0.41	14th-15th	Med	Rear
4037	3025-26	12576, 12578	12575, 12577	Ditch	5.80	0.43	0.32	Gen. loc.	Med	Rear
4038	3027	12580	12579	Ditch	5.80	0.70	0.12	Gen. loc.	Med	Rear
4039	3027	12582	12581	Posthole	0.60	0.46	0.21	15th	Med	Rear
4040	3029	12592	12591	Ditch	Unk.	0.45	0.25	Ditch sys.	Med	B
4041	3029	12594	12593	Ditch	5.0+	0.90	0.20	12th	Med	B
4042	3029	12596	12595	Pit	0.40	0.40	0.25	Strat.	Med	B
4043	3031	12602	12600-01	Pit	4.25	1.18	0.42	Gen. loc.	Med	Rear
4044	3032	12603	12604	Ditch	1.8+	0.20	0.90	Ditch sys.	Med	C
4045	3033	12606	12605	Posthole	0.70	0.34+	0.16	Gen. loc.	Med	Rear
4046	3034	12608	12607	Pit	5.30	2.20	0.24	14th-15th	Med	Rear
4047	3036	12613	12612	Pit	1.00	0.4+	0.20	14th-15th	Med	B
4048	3039	12621	12618-20	Pit	1.10	0.95	0.45	14th-15th	Med	B
4049	3037	12615	12614	Posthole	0.3+	0.2+	0.13	Gen. loc.	Med	B
4050	3037	12617	12616	Posthole	0.28	0.15+	0.08	Gen. loc.	Med	B
4051	3034, 3041	12623, 12625	12622, 12624	Pit	3.50	3.20	0.10	Gen. loc.	Med	Rear
4052	3038	12626	12627	Pit	1.20	1.00	0.50	Gen. loc.	Med	Rear
4053	3038	12629	12628	Pit	1.50	1.10	0.40	Gen. loc.	Med	Rear
4054	3038	12631	12630	Pit	0.90	0.80	0.30	Gen. loc.	Med	Rear
4055	3038	12633	12632	Pit	1.20	1.20	0.40	Gen. loc.	Med	Rear
4056	3042	12635	12634	Pit	1.60	1.20	0.47	14th-15th	Med	B
4057	3043, 3118	12637, 12911	12636, 12909-10	Ditch	15+	1.10	0.40	13th	Med	B
4058	3043, 3198	12639, 13248	12638, 13247	Ditch	15+	0.85	0.47	Ditch sys.	Med	B
4059	3044	12649	12647-48	Pit	1.45	1.40	0.34	13th-1th	Med	B
4060	3044	12651	12650	Posthole	0.41+	0.41+	0.09	13th-1th	Med	B
4061	3044	12653	12652	Posthole	0.50	0.50	0.16	Gen. loc.	Med	B
4062	3045	12644	12643	Posthole	0.32	0.26	0.12	Gen. loc.	Med	B
4063	3046	12646	12645	Posthole	0.27	0.18	0.03	Gen. loc.	Med	B
4064	3047	12655	12654	Pit	0.75	0.75	0.23	13th-14th	Med	B
4065	3047	12657	12656	Pit	0.70	0.30	0.20	Gen. loc.	Med	B
4066	3047	12659	12658	Pit	0.60	0.45	0.11	13th-14th	Med	B
4067	3049-50	12668, 12672	12667, 12671	Pit	1.90	0.60	0.10	14th-15th	Med	B
4068	3051	12661	12660	Posthole	0.66	0.60	0.18	Gen. loc.	Med	B
4069	3052	12662	12663-64	Pit	0.84	0.68	0.20	Gen. loc.	Med	B
4070	3053	12674	12673	Posthole	0.45	0.30	0.04	14th-15th	Med	B
4071	3054	12676	12675	Posthole	0.50	0.40	0.12	Strat.	Med	B
4072	3055	12677	12678	Pit	1.19	0.88	0.08	14th-15th	Med	B
4073	3056	12680	12679	Pit	0.60	0.35	0.09	14th-15th	Med	B
4074	3057	12682	12681	Pit	1.10	0.78	0.28	Gen. loc.	Med	B
4075	3058	12685	12683-84, 12715	Pit	1.60	1.20	0.30	15th	Med	B
4076	3058	12687	12686	Pit	0.55	0.55	0.20	Strat.	Med	B
4077	3059	12688	12689-91	Pit	0.62	0.56	0.14	Gen. loc.	Med	B
4078	3060	12706	12704-05	Posthole	0.35	0.33	0.19	Gen. loc.	Med	B
4079	3061	12693	12692	Pit	0.55	0.35+	0.10	Gen. loc.	Med	B
4080	3061	12695	12694	Posthole	0.35	0.30	0.26	14th	Med	B
4081	3062	12697	12696	Posthole	0.31	0.31	0.15	Gen. loc.	Med	B
4082	3063	12699	12698	Posthole	0.30	0.30	0.07	Gen. loc.	Med	B
4083	3064	12701	12700	Posthole	0.48	0.48	0.28	Gen. loc.	Med	B
4084	3064	12703	12702	Post-pad	0.30	0.30	0.17	Gen. loc.	Med	B
4085	3066	12723	12720-21	Pit	0.63	0.58	0.17	14th-15th	Med	B
4086	3089	12804	12803	Pit	1.15	0.95	0.19	14th-15th	Med	A
4087	3065	None	12710	Posthole	0.24	0.22	0.03	Gen. loc.	Med	B
4088	3067	12712	12711	Posthole	0.74	0.50	0.21	Gen. loc.	Med	B
4089	3068	12714	12713	Posthole	0.26	0.26	0.21	14th-15th	Med	B

4090	3069	12725	12724	Pit	0.77	0.77	0.16	Gen. loc.	Med	B
4091	3070	12727	12726	Posthole	0.27	0.27	0.12	Gen. loc.	Med	B
4092	3070	12729	12728	Pit	0.50	0.50	0.14	Gen. loc.	Med	B
4093	3070	12731	12730	Pit	1.50	1.50	0.25	Gen. loc.	Med	B
4094	3071	12733	12732	Pit	0.93	0.93	0.12	14th-15th	Med	B
4095	3072	12717	12716	Pit	0.85	0.35	0.32	Gen. loc.	Med	B
4096	3072	12719	12718	Posthole	0.35	0.20	0.09	Gen. loc.	Med	B
4097	3074	12738	12737	Pit	0.90	0.90	0.43	Gen. loc.	Med	B
4098	3075	12742	12741	Pit	3.80	2.90	0.60	14th-15th	Med	B
4099	3076	12739	12740	Posthole	0.22	0.21	0.19	Gen. loc.	Med	A
4100	3077	12743	12744	Posthole	0.21	0.19	0.20	Gen. loc.	Med	A
4101	3078	12745	12746	Posthole	0.33	0.31	0.10	Gen. loc.	Med	A
4102	3079-80	12747, 12798	12748, 12797	Pit	2.30	1.58	0.36	14th-15th	Med	B
4103	3079	12749	12750	Pit	0.30	0.25	0.05	Strat.	Med	B
4104	3079, 3099, 3113	12751, 12824, 12881	12752-53, 12823, 12880	Pit	7.80	1.00	0.25	14th-15th	Med	B
4105	3082, 3089	12759, 12806	12758, 12805	Pit	1.86	0.85	0.11	14th-15th	Med	A
4106	3082	12761	12760	Pit	0.51	0.30	0.08	Gen. loc.	Med	A
4107	3082, 3091	12763, 12808	12762, 12807	Pit	0.85	0.57	0.14	14th-15th	Med	A
4108	3082, 3091-92	12765, 12810, 12812	12764, 12809, 12811	Ditch	4.0+	0.46	0.27	14th-15th	Med	A
4109	3083	12757	12756	Pit	1.70	0.9+	0.46	15th	Med	B
4110	3084	12766	12767	Pit	0.62	0.29	0.20	14th	Med	A
4111	3085	12771	12770	Pit	2.0+	1.5+	0.19	14th-15th	Med	B
4112	3087	12772	12773	Pit	1.80	0.62	0.14	Strat.	Med	A
4113	3087	12774	12775	Ditch	1.56	0.25	0.21	Gen. loc.	Med	A
4114	3088	12777	12776	Pit	2.97	2.10	0.23	14th-15th	Med	C
4115	3088	12779	12778	Pit	0.90	0.66	0.07	Gen. loc.	Med	C
4116	3085	12781	12780	Pit	1.70	1.20	0.50	14th-15th	Med	A
4117	3088	12783	12782	Treethrow	c.3.0	c.2.0	c.0.15	None	Nat	N/A
4118	3090	12794	12784-93	Well	2.22	1.70	1.14	14th-15th	Med	C
4119	3090	12796	12795	Pit	2.65	2.43	0.24	14th-15th	Med	C
4120	3093, 3104-05, 3115, 3128, 3138	12799, 12844, 12856, 12888, 12946, 12980	12800-02, 12843, 12855, 12889-90, 12945, 12979	Ditch	26+	0.90	0.32	14th-15th	Med	A
4121	3094	12814	12813	Posthole	0.55	0.55	0.10	Gen. loc.	Med	C
4122	3095	12816	12815	Posthole	0.56	0.56	0.16	Gen. loc.	Med	C
4123	3096	12818	12817	Posthole	0.70	0.37	0.11	Gen. loc.	Med	C
4124	3097	12820	12819	Pit	1.45	0.5+	0.18	14th-15th	Med	Rear
4125	3098	12822	12821	Ditch	1.7+	0.56	0.23	14th-15th	Med	C
4126	3101	12830	12829	Pit	0.63	0.58	0.08	13th	Med	C
4127	3101	12832	12831	Pit	0.77	0.33	0.04	Gen. loc.	Med	C
4128	3099, 3113, 3127	12827, 12883, 12942	12826, 12882, 12941	Pit	6.90	1.20	0.20	14th-15th	Med	B
4129	3099, 3116	12829, 12892	12828, 12891	Pit	5.40	1.00	0.30	14th-15th	Med	B
4130	3100, 3140	12864, 12990	12861-63, 12987-89	Ditch	30+	1.30	0.45	14th-15th	Med	B
4131	3100, 3191, 3195, 3197-98	12872, 13192, 13225, 13243, 13246	12869-71, 13191, 13224, 13242, 13244-45	Ditch	35+	1.80	0.66	14th-15th	Med	B-C
4132	3102	12834	12833	Pit	0.95	0.95	0.05	13th-14th	Med	A
4133	3103	12836	12835	Pit	0.80	0.45	0.10	13th-14th	Med	A
4134	3103	12838	12837	Pit	0.80	0.80	0.10	13th-14th	Med	A
4135	3103-04	12840, 12842	12839, 12841	Pit	0.85	0.55	0.15	13th-14th	Med	A
4136	3105-06	12852, 12854	12851, 12853	Ditch	1.5+	0.75	0.21	13th-14th	Med	A
4137	3081	12846	12845	Pit	0.66	0.47	0.07	13th-14th	Med	C
4138	3107	12848	12847	Pit	0.40	0.40	0.10	Gen. loc.	Med	C
4139	3108	12850	12849	Ditch	0.8+	0.51	0.11	13th-14th	Med	C
4140	3109	12866	12865	Pit	0.81	0.75	0.14	Gen. loc.	Med	C
4141	3100, 3110, 3141	13868, 12875, 12994	12867, 12873-74, 12991-93	Ditch	30+	1.55	0.73	13th-14th	Med	C

4142	3111, 3192-93	12877, 13212-14	12876	Dist.	c.20	c.10	0.80	19th-20th	Mod	N/A
4143	3112	12879	12878	Pit	1.65	0.82+	0.31	14th-15th	Med	C
4144	3114	12885	12884	Pit	1.10	1.10	0.20	Gen. loc.	Med	A
4145	3117, 3120	12895, 12913	12893-94, 12912	Ditch	4.10	0.50	0.38	15th	Med	A
4146	3119	12904	12896-903	Well	1.84	1.31	1.01	15th	Med	C
4147	3121	12915	12914	Pit	0.48	0.48	0.07	Gen. loc.	Med	C
4148	3122	12917	12916	Pit	0.94	0.94	0.15	15th	Med	C
4149	3122	12919	12918	Posthole	0.30	0.30	0.18	Gen. loc.	Med	C
4150	3123	12921	12920	Pit	0.65	0.65	0.11	Gen. loc.	Med	C
4151	3123	12923	12922	Pit	1.10	1.10	0.25	14th	Med	C
4152	3123	12925	12924	Posthole	0.42	0.42	0.18	Gen. loc.	Med	C
4153	3122-23	12927, 12929	12926, 12928	Pit	0.80	0.80	0.16	Gen. loc.	Med	C
4154	Void	Void	Void	Void	Void	Void	Void	Void	Void	Void
4155	Void	Void	Void	Void	Void	Void	Void	Void	Void	Void
4156	3124, 3128	12931, 12944	12930, 12943	Ditch	4.0+	0.70	0.19	14th-15th	Med	A
4157	3125	12933	12932	Pit	0.75	0.75	0.10	14th-15th	Med	A
4158	3125	12937	12934-36	Pit	1.40	1.40	0.25	Strat.	Med	A
4159	3126, 3133	N/A	12938, 12965	Topsoil	N/A	N/A	0.38	Strat.	Mod	N/A
4160	3126	N/A	12939	Metalling	Unk.	5.5+	0.17	Quern	Med	C
4161	3126, 3133	N/A	12940, 12966	Subsoil	N/A	N/A	0.19	Strat.	Med	N/A
4162	3129, 3143	12948, 13003	12947, 13004-06	Ditch	30+	0.92	0.47	14th-15th	Med	B
4163	Void	Void	Void	Void	Void	Void	Void	Void	Void	Void
4164	3131	12958	12953-57	Pit (special)	3.20	1.30	0.80	14th-15th	Med	B
4165	3132	12960	12959	Pit	1.05	0.66	0.06	Strat.	Med	A
4166	3132	12962	12961	Pit	2.0+	1.67	0.34	14th	Med	A
4167	3132, 3138	12964, 12978	12963, 12977	Ditch	18.0+	1.40	0.29	Ditch sys.	Med	A
4168	3134	12968	12967	Pit	1.00	0.63	0.09	14th-15th	Med	C
4169	3135	12970	12969	Pit	0.76	0.62	0.09	Gen. loc.	Med	C
4170	3136	12972	12971	Posthole	0.60	0.58	0.42	14th-15th	Med	C
4171	3137, 3182-83	12976, 13158, 13161	12973-75, 13155-57, 13159-60	Ditch	30+	1.60	0.40	14th	Med	C
4172	3139, 3215	12982, 13295	12981, 13296	Ditch	7.0+	1.32	0.36	Ditch sys.	Med	A
4173	3139	12985	12983-82, 12986	Pit	1.0+	1.80	0.46	Fe. Nail	Med	A
4174	3142	12997	12995-96	Pit	1.58	1.33	0.43	14th-15th	Med	C
4175	3142, 3165	12999, 13061	12998, 13060	Ditch	1.5+	0.65	0.27	Ditch sys.	Med	C
4176	3100	13001	13000	Ditch	2.0+	0.4+	0.55	Ditch sys.	Med	B-C
4177	3145	13013	13010-12	Pit	2.0+	1.30	0.50	Gen. loc.	Med	A
4178	3145	13017	13014-16	Pit	1.7+	0.8+	0.32	Strat.	Med	A
4179	3145	13020	13018-19	Pit	2.2+	1.00	0.27	Gen. loc.	Med	A
4180	3144	13022	13021	Pit	0.70	0.63	0.09	Gen. loc.	Med	A
4181	Void	Void	Void	Void	Void	Void	Void	Void	Void	Void
4182	3146	13029	13028	Pit	0.92	0.33	0.13	Gen. loc.	Med	A
4183	3147, 3226	13031, 13342	13030, 13341	Ditch	14.0+	1.45	0.40	15th	Med	A
4184	3147	13033	13032	Cesspit	0.7+	0.7+	0.55	15th	Med	A
4185	3148	13035	13034	Ditch	0.6+	0.50	0.05	14th	Med	A
4186	3148	13037	13036	Pit	0.5+	0.4+	0.1+	Strat.	Med	A
4187	3149, 3221	13047, 13318	13044-46, 13051, 13319	Ditch	18.0+	1.64	0.58	14th-15th	Med	A
4188	3149	13050	13048-49	Pit	2.0+	1.2+	0.33	Gen. loc.	Med	A
4189	3150	13039	13038	Treethrow	4.85	3.10	0.27	14th-15th	Med	Rear
4190	3150	13041	13040	Treethrow	2.10	1.6+	0.20	None	Med	Rear
4191	3151, 3216	13043, 13299	13042, 13300	Ditch	17+	1.40	0.32	14th-15th	Med	A
4192	3152	13053	13052	Pit	1.33	1.33	0.13	12th	Med	Rear
4193	3153-54, 3183	13063, 13065, 13163	13062, 13064, 13162	Ditch	9.60	0.35	0.16	Gen. loc.	Med	C
4194	3155	13067	13066	Posthole	0.50	0.45	0.36	Gen. loc.	Med	C
4195	3165	13055	13054	Pit	0.45	0.44	0.19	Strat.	Med	C

4196	3165	13057	13056	Pit	1.40	1.10	0.36	14th	Med	C
4197	3165	13059	13057	Pit	1.40	0.56	0.30	14th-15th	Med	C
4198	3157	13069	13068	Pit	1.10	1.10	0.25	Gen. loc.	Med	C
4199	3157	13071	13070	Pit	0.5+	0.43	0.53	Strat.	Med	C
4200	3157	13073	13072	Pit	0.6+	0.59	0.45	Strat.	Med	C
4201	3157	13075	13074	Pit	0.45	0.45	0.37	Strat.	Med	C
4202	3157	13077	13076	Pit	0.51	0.51	0.14	Strat.	Med	C
4203	3157	13079	13078	Pit	0.60	0.60	0.20	Strat.	Med	C
4204	3157	13081	13080	Pit	0.45	0.45	0.20	Strat.	Med	C
4205	3158	13083	13082	Posthole	0.35	0.30	0.06	Gen. loc.	Med	C
4206	3159	13095	13084	Posthole	0.53	0.41	0.20	14th-15th	Med	C
4207	3160	13087	13086	Posthole	0.34	0.30	0.09	Gen. loc.	Med	C
4208	3161	13089	13088	Posthole	0.44	0.39	0.11	Gen. loc.	Med	C
4209	3162	13097	13098, 13103	Pit	1.28	1.1+	0.23	Gen. loc.	Med	B
4210	3162	13099	13100	Pit	1.18	1.15	0.17	Gen. loc.	Med	B
4211	3162	13101	13102	Ditch	1.18	0.8+	0.42	Ditch sys.	Med	B
4212	3163	13091	13090	Pit	0.75	0.75	0.36	14th-15th	Med	C
4213	3164	13093	13092	Pit	0.50	0.50	0.12	Gen. loc.	Med	C
4214	3165	13096	13094-95	Pit	1.00	1.00	0.21	Gen. loc.	Med	C
4215	3166	13106	13104-05	Posthole	0.85	0.83	0.28	Fill type	Mod	N/A
4216	3166	13108	13107	Pit	1.90	0.96	0.12	Fill type	Mod	N/A
4217	3167, 3192-93	13111, 13202, 13206	13109-10, 13201, 13203-05	Ditch	29+	0.85	0.39	13th-14th	Med	C
4218	3167, 3193, 3247	13114, 13209, 13421	13112-13, 13207-08, 13420	Pit	1.0+	1.13	0.37	Ditch sys.	Med	C
4219	3128	13115	13116	Posthole	0.26	0.25	0.10	Gen. loc.	Med	C
4220	3169	13117	13118	Dist.	1.30	0.30	0.25	19th-20th	Mod	N/A
4221	3170	13121	13119-20	Posthole	0.96	0.70	0.40	15th	Med	C
4222	3171	13122	13123	Posthole	0.60	0.58	0.11	Gen. loc.	Med	C
4223	3173	13127	13126	Posthole	0.64	0.46	0.35	Gen. loc.	Med	C
4224	3172	13125	13124	Pit	1.55	1.26	0.32	15th	Med	C
4225	3174	13129	13128	Posthole	0.30	0.28	0.18	Gen. loc.	Med	C
4226	3174	13131	13130	Posthole	0.61	0.40	0.06	14th-15th	Med	C
4227	3175	13132	13133	Posthole	0.82	0.79	0.43	Gen. loc.	Med	C
4228	3176	13139	13134-38, 13140	Pit	1.40	1.20	0.63	14th-15th	Med	C
4229	3177	13141	13142	Pit	0.29	0.29	0.12	Gen. loc.	Med	C
4230	3172, 3178-79	13144, 13146, 13148	13143, 13145, 13147	Ditch	7.80	0.57	0.32	15th	Med	C
4231	3180	13150	13149	Pit	0.92	0.63	0.13	13th-14th	Med	C
4232	3181	13152	13151	Pit	1.46	0.90	0.14	Gen. loc.	Med	C
4233	3181	13154	13153	Posthole	0.66	0.66	0.30	14th-15th	Med	C
4234	3184	13166	13164-65, 13174	Pit	1.10	1.00	0.60	14th-15th	Med	C
4235	3185	13167	13168	Posthole	0.08	0.06	0.04	Gen. loc.	Med	C
4236	3186	13169	13170	Pit	0.59	0.35	0.09	14th	Med	C
4237	3186	13171	13172-73	Pit	0.95	0.65+	0.28	14th-15th	Med	C
4238	3187	13176	13175	Pit	0.30	0.26	0.09	Gen. loc.	Med	C
4239	3188	13178	13177	Posthole	0.32	0.32	0.22	Gen. loc.	Med	C
4240	3189	13180	13179	Posthole	0.28	0.28	0.16	Gen. loc.	Med	C
4241	3190	13182	13181	Pit	0.43	0.38	0.15	Gen. loc.	Med	C
4242	3191	13184	13183	Hollow	5.0+	4.0+	0.10	14th	Med	B
4243	3191	32000	13193-99	Well	2.50	2.20	1.10	14th-15th	Med	C
4244	3191, 3195	13190, 13231	13187-89, 13228-30	Ditch	35+	2.00	0.80	14th	Med	B-C
4245	3193	13211	13210	Posthole	0.58	0.50	0.14	Gen. loc.	Med	C
4246	3191	13216	13215	Posthole	0.30	0.20	0.10	Gen. loc.	Med	C
4247	3195	13227	13226	Pit	0.80	0.80	0.12	Gen. loc.	Med	C
4248	3196	13235	13233-34	Ditch	2.4+	0.70	0.30	14th	Med	C
4249	3197-98	13250, 13252	13249, 13251	Pit	0.8+	0.7+	0.76	Gen. loc.	Med	B-C

4250	3199	13254	13253	Pit	0.50	0.44	0.11	Gen. loc.	Med	A
4251	3200	13256	13255	Pit	0.60	0.54	0.04	14th-15th	Med	A
4252	3201	13258	13257	Pit	0.50	0.50	0.06	Gen. loc.	Med	A
4253	3202	13260	13259	Pit	0.70	0.50	0.08	14th-15th	Med	A
4254	3203	13263	13261-62, 13321	Pit	1.55	1.33	0.43	14th-15th	Med	A
4255	3204	13264	13265	Pit	0.60	0.32	0.19	14th-15th	Med	A
4256	3203-04, 3219-20	13324, 13266, 13310, 13314	13323, 13267, 13309, 13313	Ditch	9.5+	0.55	0.21	14th-15th	Med	A
4257	3205	13268	13269	Pit	0.78	0.58	0.20	14th-15th	Med	A
4258	3206	13270	13271	Pit	0.28	0.26	0.20	Gen. loc.	Med	A
4259	3207	13272	13273	Pit	0.36	0.35	0.11	Gen. loc.	Med	A
4260	3208	13275	13274	Pit	0.96	0.70	0.14	14th-15th	Med	A
4261	3208-09, 3217	13277, 13279, 13304	13276, 13278, 13303	Ditch	1.0+	0.42	0.15	14th-15th	Med	A
4262	3209	13281	13280	Posthole	0.50	0.50	0.18	Gen. loc.	Med	A
4263	3210-11, 3227	13283, 13285, 13349	13282, 13284, 13348	Ditch	9.5+	0.60	0.16	14th-15th	Med	A
4264	3211-12, 3217, 3224	13287, 13289, 13306, 13334	13286, 13288, 13305, 13333	Ditch	12.80	0.48	0.12	Ditch sys.	Med	A
4265	3213	13292	13290-91	Pit	1.04	0.70	0.32	14th-15th	Med	A
4266	3214	13294	13293	Posthole	0.78	0.71	0.31	14th-15th	Med	A
4267	3215	13297	13296	Hedgerow	5.0+	0.70	0.28	Strat.	P-Med	N/A
4268	3216	13301	13302	Pit	1.40	0.8+	0.48	14th-15th	Med	A
4269	Void	Void	Void	Void	Void	Void	Void	Void	Void	Void
4270	3219-20	13312, 13316	13311, 13315	Ditch	1.0+	0.80	0.22	16th	P-Med	N/A
4271	3221	13317	13318	Pit	1.14	0.86	0.15	14th-15th	Med	A
4272	3222	13325	13326	Cesspit	0.90	0.80	0.39	14th	Med	A
4273	3222-23	13327, 13329	13328, 13330	Pit	1.62	1.08	0.16	15th	Med	A
4274	3223, 3225	13331, 13338	13332, 13337	Ditch	1.1+	0.54	0.10	Ditch sys.	Med	A
4275	3218, 3224-25, 3228	13308, 13336, 13340, 1335	13307, 13335, 13339, 13350	Ditch	2.0+	0.47	0.27	Ditch sys.	Med	A
4276	3226	13347	13343-46, 13369	Pit (special)	1.40	0.62	0.72	15th	Med	A
4277	3144, 3229	13027, 13354	13023-26, 13352-53	Pit	2.55	1.2+	0.87	15th	Med	A
4278	3229	13356	13355	Pit	0.70	0.6+	0.30	Strat.	Med	A
4279	3230	13360	13357-59	Pit (special)	2.60	1.90	0.80	14th-15th	Med	A
4280	3230	13362	13361	Pit	1.50	1.2+	0.15	12th	Med	A
4281	3230	13363	13364-66	Pit (special)	2.78	1.30	0.55	14th-15th	Med	A
4282	3230	13367	13368	Pit	1.34	0.92+	0.10	14th-15th	Med	A
4283	3118	12911	12909-10	Ditch	2.5+	0.6+	0.34	13th-14th	Med	B
4284	N/A	N/A	N/A	Pit	c.0.8	c.0.6	Unk.	Gen. loc.	Med	A
4285	N/A	N/A	N/A	Pits	c.8.0	c.1.4	Unk.	Form	P-Med	N/A
4286	N/A	N/A	N/A	Posthole	c.0.5	c.0.5	Unk.	Strat.	Med	A
4287	N/A	N/A	N/A	Posthole	c.0.5	c.0.5	Unk.	Strat.	Med	A
4288	N/A	N/A	N/A	Pit	c.7.5	c.4.0	Unk.	Strat.	Med	A
4289	3236	13382	13381	Posthole	0.38	0.38	0.32	Gen. loc.	Med	D
4290	3231	13374	13371	Pit	0.50	0.38	0.06	Gen. loc.	Med	C
4291	3232	13376	13375	Pit	0.40	0.34	0.04	Gen. loc.	Med	C
4292	3233	13378	13377	Ditch	3.0+	0.35	0.06	14th-15th	Med	C-D
4293	3236	13384	13383	Posthole	0.30	0.30	0.18	Gen. loc.	Med	D
4294	3234	13372	13373	Pit	1.27	0.92	0.13	Gen. loc.	Med	C
4295	3235, 3242, 3248, 3251	13380, 13404, 13437, 13449	13379, 13403, 13436, 13450, 13451, 13452	Ditch	10.0+	0.71	0.29	14th-15th	Med	C-D
4296	3237	13386	13385	Posthole	0.78	0.37	0.33	Gen. loc.	Med	D
4297	3238	13388	13387	Posthole	0.34	0.34	0.08	Gen. loc.	Med	D
4298	3239	13390	13389	Posthole	0.55	0.55	0.14	Gen. loc.	Med	D
4299	3240	13391	13392	Pit	1.56	0.43	0.24	Gen. loc.	Med	D
4300	3241	13393	13394	Pit	1.06	0.90	0.13	13th	Med	D
4301	3242	13396	13395	Pit	1.30	0.85	0.28	13th-14th	Med	D
4302	3242	13398	13397	Pit	0.63	0.42+	0.30	Strat.	Med	D

4303	3242	13400	13399	Pit	0.90	0.62	0.27	Strat.	Med	D
4304	3243, 3259	13407, 13499	13405, 13406, 13498	Ditch	6.0+	1.40	0.80	15th	Med	D
4305	3243, 3259	13410, 13497	13408, 13409, 13495, 13496	Ditch	Unk.	1.20	0.36	15th	Med	C-D
4306	3244, 3247	13412, 13419	13411, 13418	Ditch	1.8+	0.46	0.03	Ditch sys.	Med	C
4307	3245	13415	13414	Pit	0.40	0.25	0.08	Gen. loc.	Med	D
4308	3246	13417	13416	Pit	0.84	0.56	0.25	15th	Med	D
4309	3248	13423	13422	Pit	0.76	0.60	0.20	Strat.	Med	D
4310	3248	13425	13424	Pit	0.66	0.42	0.18	Strat.	Med	D
4311	3248	13427	13426	Pit	0.50	0.40	0.22	Strat.	Med	D
4312	3248	13429	13428	Pit	0.4	0.35	0.17	Strat.	Med	D
4313	4328	13431	13430	Pit	0.3+	0.2+	0.17	Strat.	Med	D
4314	3248	13433	13432	Pit	0.50	0.50	0.15	Strat.	Med	D
4315	3248	13435	13434	Pit	0.4+	0.40	0.15	Strat.	Med	D
4316	3249	13439	13438	Posthole	0.44	0.28	0.11	Gen. loc.	Med	D
4317	3250	13440	13441	Pit	1.02	0.91	0.09	Gen. loc.	Med	C
4318	3251	13447	13448	Ditch	8.0+	0.80	0.10	14th-15th	Med	C
4319	3257	13474	13475	Pit	1.17	0.85	0.11	14th-15th	Med	E
4320	3252	13444	13442, 13443	Pit	1.20	1.20	0.40	14th-15th	Med	D
4321	3252	13446	13445	Pit	2.80	1.80	0.30	Gen. loc.	Med	D
4322	3253	13453	13452	Pit	0.17	1.30	0.23	15th	Med	E
4323	3253	13455	13454	Pit	0.70	0.43	0.10	Strat.	Med	E
4324	3254	13457	13456	Pit	0.52	0.30	0.06	Gen. loc.	Med	D
4325	3255	13459	13458	Pit	0.60	0.53	0.20	13th	Med	D
4326	3255	13461	13460	Pit	0.4+	0.40	0.24	Strat.	Med	D
4327	3255	13463	13462	Pit	0.70	0.40	0.14	Strat.	Med	D
4328	3255, 3262	13465, 13514	13464, 13511, 13512, 13513	Pit	0.64	0.35	0.22	15th	Med	D
4329	3255	13467	13466	Pit	0.50	0.45	0.23	Strat.	Med	D
4330	3255	13469	13468	Pit	0.45	0.2+	0.14	Strat.	Med	D
4331	3256	13473	13470, 13471, 13472	Well	1.90	1.40	0.80	14th	Med	D
4332	3258	13478	13476, 13477	Treethrow	2.90	2.15	0.15	14th-15th	Med	E
4333	3259	13480	13479	Pit	0.80	0.80	0.20	14th-15th	Med	D
4334	3259	13482	13481	Pit	1.10	1.10	0.25	Strat.	Med	D
4335	3259	13484	13483	Pit	0.85	0.85	0.25	12th	Med	D
4336	3259	13486	13485	Pit	0.50	0.40	0.15	12th	Med	D
4337	3259	13488	13487	Pit	0.55	0.50	0.20	14th-15th	Med	D
4338	3260	13489	13490, 13525	Pit	1.50	1.40	0.75	15th	Med	E
4339	3261	13491	13492	Pit	1.50	1.10	0.08	Gen. loc.	Med	E
4340	3259	13494	13493	Pit	2.5+	2.5+	0.50	15th	Med	D
4341	3262	13502	13500, 13501	Pit	3.2+	1.6+	0.4+	Strat.	Med	D
4342	3262	13506	13503, 13504, 13505	Pit	2.2+	0.8+	0.3+	Strat.	Med	D
4343	3262	13510	13507, 13508, 13509	Pit	2.2+	1.0+	0.4+	15th	Med	D
4344	3263	13516	13515	Pit	1.00	0.80	0.20	13th	Med	C
4345	3263	13518	13517	Pit	0.50	0.50	0.05	Strat.	Med	C
4346	3264	13534	13532, 13533, 13535	Well	2.10	1.60	0.95	14th-15th	Med	E
4347	3264	13520	13519	Posthole	0.50	0.40	0.20	Gen. loc.	Med	E
4348	3265	13522	13521	Pit	0.5	0.50	0.12	Gen. loc.	Med	E
4349	3266	13524	13523	Pit	1.00	0.95	0.16	Gen. loc.	Med	E
4350	3252	13527	13526	Pit	2.80	1.80	0.40	Gen. loc.	Med	D
4351	3252, 3267	13529, 13531	13528, 13530	Ditch	4.0+	1.30	0.45	Ditch sys.	Med	D
4352	3268, 3297	13537, 13626	13536, 13623, 13624, 13625	Ditch	14.0+	1.90	0.52	14th	Med	E
4353	3269, 3300	13539, 13635	13538, 13634	Ditch	14.0+	1.40	0.51	Ditch sys.	Med	E
4354	3269	13542	13540, 13541	Pit	Unk.	1.20	0.50	14th	Med	E
4355	3270	13543	13544	Ditch	15.0+	0.87	0.29	Ditch sys.	Med	D

4356	3271, 3273, 3281, 3289, 3290, 3301	13545, 13550, 13574, 13597. 13605, 13646	13546, 13551, 13573, 13596, 13604, 13644, 13645	Ditch	22.0+	1.00	0.35	14th	Med	D
4357	3272, 3276, 3283, 3292, 3302	13549, 13558, 13586, 13609, 13651	13547, 13548, 13559, 13583, 13584, 13585, 13608, 13649, 13650	Ditch	30.0+	2.30	0.80	15th	Med	D
4358	3273, 3276, 3277, 3278, 3308, 3316, 3324, 3326	13552, 13560, 13563, 13564, 13678, 13713, 13723, 13728	13553, 13561, 13562, 13565, 13677, 13714, 13722, 13729	Ditch	11.5+	0.48	0.18	Ditch sys.	Med	D
4359	3274, 3275, 3289, 3292, 3309, 3323	13555, 13557, 13599, 13611, 13680, 13721	13554, 13556, 13598, 13610, 13681, 13720	Ditch	23.0+	0.85	0.25	14th-15th	Med	D
4360	3279, 3280, 3282, 3294, 3323, 3326	13568, 13572, 13580, 13614, 13719, 13730	13566, 13567, 13571, 13579, 13615, 13718, 13731	Ditch	21.0+	1.30	0.30	14th-15th	Med	D
4361	3280	13570	13569	Pit	0.30	0.30	0.11	Strat.	Med	D
4362	Void	Void	Void	Void	Void	Void	Void	Void	Void	Void
4363	3281	13576	13575	Pit	2.10	1.85	0.25	Gen. loc.	Med	D
4364	3282	13578	13577	Pit	1.50	1.50	0.18	Strat.	Med	D
4365	3282	13582	13581	Ditch	3.0+	0.60	0.07	Ditch sys.	Med	D
4366	3284	13588	13587	Pit	0.65	0.57	0.13	Gen. loc.	Med	D
4367	3285, 3296	13589, 13620	13590, 13591, 13619	Ditch	15.0+	1.41	0.57	14th-15th	Med	D-E
4368	3286	13593	13592	Pit	0.40	0.20	0.06	Gen. loc.	Med	D
4369	3287	13595	13594	Pit	0.50	0.25	0.14	Gen. loc.	Med	D
4370	3290	13601	13600	Pit	0.55	0.55	0.10	Gen. loc.	Med	D
4371	3290	13603	13602	Pit	1.00	1.00	0.10	Gen. loc.	Med	D
4372	3291	13607	13606	Pit	0.94	0.5+	0.34	14th-15th	Med	D
4373	3293	13613	13612	Ditch	6.0+	1.08	0.45	Ditch sys.	Med	E
4374	3294	13616	13617	Pit	0.86	0.64	0.17	Gen. loc.	Med	D
4375	3295	N/A	13618	Pit	2.05	0.6+	Unk.	14th	Med	D
4376	3296	13622	13621	Pit	1.30	1.00	0.40	13th	Med	D-E
4377	3298	13631	13627, 13628, 13629, 13630	Well	2.4+	2.10	0.78	14th-15th	Med	E
4378	3299	13633	13632	Pit	1.40	1.40	0.63	14th-15th	Med	E
4379	3300	13637	13636	Pit	0.70	0.50	0.30	Strat.	Med	E
4380	3300	13639	13638	Pit	0.94	0.26	0.31	Strat.	Med	E
4381	3300	13641	13640	Pit	1.30	1.00	0.51	14th-15th	Med	E
4382	3300	13643	13642	Pit	1.30	1.00	0.30	14th-15th	Med	E
4383	3302	13648	13647	Pit	0.55	0.55	0.08	Strat.	Med	D
4384	3302	13653	13652	Ditch	Unk.	0.70	0.65	Ditch sys.	Med	D
4385	3302	13656	13654, 13655	Pit	1.80	1.80	0.28	14th-15th	Med	D
4386	3302	13659	13657, 13658	Pit	5.5+	4.0+	0.37	14th-15th	Med	D
4387	3303	13661	13660	Pit	0.96	0.80	0.14	Gen. loc.	Med	D
4388	3304	13663	13662	Posthole	0.40	0.40	0.09	Gen. loc.	Med	D
4389	3305	13665	13664	Posthole	0.45	0.45	0.16	Gen. loc.	Med	D
4390	3306	13667	13666	Pit	0.40	0.40	0.10	Gen. loc.	Med	D
4391	3307	13667	13668	Pit	1.95	0.90	0.26	Gen. loc.	Med	D
4392	3307	13671	13670	Pit	1.60	1.20	0.55	Gen. loc.	Med	D
4393	3307	13676	13672, 13673, 13674, 13675	Pit	1.20	1.00	0.45	Gen. loc.	Med	D
4394	3310	13681	13682	Pit	0.81	0.76	0.09	Gen. loc.	Med	D
4395	3311	13683	13684	Ditch	2.0+	0.76	0.18	Ditch sys.	Med	D
4396	3312	13685	13686	Pit	0.80	0.80	0.16	13th-15th	Med	D
4397	3307	13688	13687	Pit	1.60	1.30	Unk.	Gen. loc.	Med	D
4398	3313	13689	13690	Posthole	0.21	0.18	0.06	Gen. loc.	Med	D
4399	3314	13691	13692	Posthole	0.08	0.08	0.04	Gen. loc.	Med	D
4600	3315	13693	13694	Post-pad	0.36	0.31	0.02	Gen. loc.	Med	D
4601	3316	13695	13696	Pit	0.95	0.54	0.12	Strat.	Med	D
4602	3316	13697	13698	Pit	1.04	0.92	0.19	Strat.	Med	D

4603	3316	13699	13700	Pit	1.04	0.69	0.12	14th-15th	Med	D
4604	3316	13701	13702	Pit	1.51	0.50	0.07	14th-15th	Med	D
4605	3317	13703	13704	Pit	1.09	0.79	0.11	14th-15th	Med	D
4606	3318	13705	13706	Pit	0.23	0.13	0.01	Gen. loc.	Med	D
4607	3319	13707	13708	Posthole	0.94	0.90	0.07	Gen. loc.	Med	D
4608	3321	13711	13712	Pit	0.42	0.41	0.05	Gen. loc.	Med	D
4609	3320	13709	13710	Pit	0.44	0.38	0.07	Gen. loc.	Med	D
4610	3322	13717	13715, 13716	Pit	1.20	0.90	0.12	14th-15th	Med	D
4611	3324	13725	13724	Pit	2.00	1.50	0.28	14th-15th	Med	D
4612	n/a	n/a	n/a	Pit	2.5+	1.2+	0.64	Gen. loc.	Med	D
4613	n/a	n/a	n/a	Pit	2.5+	1.60	0.52	Gen. loc.	Med	D
4614	n/a	n/a	n/a	Pit	2.00	1.20	0.32	Gen. loc.	Med	D
4615	n/a	n/a	n/a	Pit	1.50	1.20	0.16	Gen. loc.	Med	D
4616	n/a	n/a	n/a	Pit	2.20	1.8+	0.24	Gen. loc.	Med	D
4617	n/a	n/a	n/a	Pit	1.6+	0.6+	Unk.	Gen. loc.	Med	D
4618	n/a	n/a	n/a	Pit	1.5+	0.6+	Unk.	Gen. loc.	Med	D
4619	n/a	n/a	n/a	Pit	1.40	1.14	Unk.	Gen. loc.	Med	D
4620	n/a	n/a	n/a	Pit	1.6+	1.6+	0.22	Gen. loc.	Med	D
4621	n/a	n/a	n/a	Pit	2.8+	1.60	0.18	Gen. loc.	Med	D
4622	n/a	n/a	n/a	Pit	6.60	1.6+	0.56	Gen. loc.	Med	D-E
4623	13727	13726	n/a	Pit	1.39	1.34	0.22	Gen. loc.	Med	D
4624	n/a	n/a	n/a	Pit	1.60	1.1+	Unk.	Gen. loc.	Med	D
4625	n/a	n/a	n/a	Pit	1.40	0.80	Unk.	Gen. loc.	Med	D
4626	n/a	n/a	n/a	Pit	3.30	1.2+	Unk.	Gen. loc.	Med	E
4627	n/a	n/a	n/a	Pit	1.5+	1.3+	Unk.	Gen. loc.	Med	D
4628	n/a	n/a	n/a	Pit	1.9+	0.7+	Unk.	Gen. loc.	Med	E
4629	n/a	n/a	n/a	Pit	1.50	1.20	Unk.	Gen. loc.	Med	E
4630	n/a	n/a	n/a	Pit	1.8_	1.0+	Unk.	Gen. loc.	Med	E
4631	n/a	n/a	n/a	Pit	1.0+	1.0+	Unk.	Strat.	Med	A
4632	n/a	n/a	n/a	Robber cut	16.0+	0.25	Unk.	19th-20th	Mod	N/A
4633	n/a	n/a	n/a	Pit	0.4+	0.4+	Unk.	Strat.	Med	A

OASIS FORM

OASIS ID: cambridg3-184898	
Project details	
Project name	NORTH WEST CAMBRIDGE ARCHAEOLOGY, University of Cambridge 2013-14 Excavations, Site IX
Short description of the project	Excavations between April and June 2014 covering 0.47 ha. undertaken as part of the archaeological investigations in advance of the North West Cambridge development revealed remains of a Medieval rural settlement, which can be identified as the document settlement of Howes. Occupation began c. 1150-1210 and consisted of a series of square or sub-square ditched enclosures fronting onto Huntingdon Road. The settlement appears to have increased in size gradually until around the mid/late 14th century, before declining from the early/mid-15th century onwards. Occupation ceased in the early/mid-16th century, although agricultural activity continued and the site was later occupied by the University Farm in the early 20th century. The archaeological evidence is atypical of Medieval rural settlements in South Cambridgeshire in a number of respects. The settlement occupies an unusual location, at a point in the landscape where four parishes meet, and is a late addition to the Medieval settlement pattern. The ceramics are dominated by Huntingdonshire Fen Sandy ware, which is not usually found in significant quantities in and around Cambridge, and there is an atypical preponderance of mussel shells compared to oyster shell. The animal bone assemblage is dominated by horse, with signs of butchery and carnivore gnawing suggesting that it may have been fed to dogs. It is possible that some of the atypical elements of the site relate to Howes as a roadside settlement potentially playing a specialised role with regard to travellers. Alternatively the horse bone may relate to a kennel or similar establishment, as documentary sources attest to hunting in the immediate vicinity.
Project dates	Start: 20-01-2014 End: 04-06-2014
Previous/future work	Yes / Not known
Any associated project reference codes	ECB4180 - HER event no.
Any associated project reference codes	NWC13 – Site code
Type of project	Recording project
Site status	None
Current Land use	Cultivated Land 2 - Operations to a depth less than 0.25m
Monument type	DITCH Medieval
Monument type	WELL Medieval
Monument type	PITS Medieval
Monument type	POSTHOLES Medieval
Significant Finds	POTTERY Medieval
Significant Finds	ANIMAL BONE Medieval
Significant Finds	SHELLFISH Medieval
Significant Finds	METALWORK Medieval
Significant Finds	QUERN Medieval
Significant Finds	COIN Medieval
Significant Finds	PLANT REMAINS Medieval
Investigation type	"Open-area excavation"
Prompt	Direction from Local Planning Authority - PPS

Project location	
Country	England
Site location	CAMBRIDGESHIRE CAMBRIDGE CAMBRIDGE North West Cambridge Site IX
Postcode	CB3 0LX
Study area	0.50 Hectares
Site coordinates	TL 4300 6035 52.2223449901 0.0937196566673 52 13 20 N 000 05 37 E Point
Height OD / Depth	Min: 22.60m Max: 23.40m
Project creators	
Name of Organisation	Cambridge Archaeological Unit
Project brief originator	Local Authority Archaeologist and/or Planning Authority/advisory body
Project design originator	Christopher Evans
Project director/manager	Christopher Evans
Project supervisor	Craig Cessford
Type of sponsor/funding body	Developer
Name of sponsor/funding body	University of Cambridge
Project archives	
Physical Archive recipient	Cambridgeshire County Archaeology Store
Physical Archive ID	NWC13 Site IX
Physical Contents	''Animal Bones'',''Ceramics'',''Environmental'',''Glass'',''Metal'',''Worked stone/lithics'',''other''
Digital Archive recipient	Cambridgeshire County Archaeology Store
Digital Archive ID	NWC13 Site IX
Digital Contents	''Animal Bones'',''Ceramics'',''Environmental'',''Survey'',''Worked stone/lithics'',''other'',''Glass'',''Metal''
Digital Media available	''Database'',''GIS'',''Images raster / digital photography'',''Spreadsheets'',''Text''
Paper Archive recipient	Cambridgeshire County Archaeology Store
Paper Contents	''Animal Bones'',''Ceramics'',''Environmental'',''Glass'',''Metal'',''Stratigraphic'',''Survey'',''Worked stone/lithics'',''other''
Paper Media available	''Context sheet'',''Photograph'',''Plan'',''Section'',''Survey '',''Unpublished Text''
Project bibliography 1	
Publication type	Grey literature (unpublished document/manuscript)
Title	NORTH WEST CAMBRIDGE ARCHAEOLOGY, University of Cambridge 2013-14 Excavations, Site IX (NWC Report No. 6)
Author(s)/Editor(s)	Cessford, C.
Other bibliographic	CAU Report Number 1248

details	
Date	2014
Issuer or publisher	Cambridge Archaeological Unit
Place of issue or publication	Cambridge
Description	A4 laminate covered wire bound document. It is 85 pages long with 17 illustrations. Also PDF.
Entered by	Craig Cessford (cc250@cam.ac.uk)
Entered on	17 July 2014

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