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Middle Iron Age and Late Iron Age/Early Roman enclosures at the former sports ground, Alma Road, Peterborough

by

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with contributions by
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SUMMARY

Archaeological fieldwork was carried out ahead of housing development on the former sports ground off Alma Road, Peterborough. A single radiocarbon date suggests that occupation had begun in the middle Iron Age, but the majority of the examined ditches and pits belonged to a late Iron Age/early Roman settlement. The quantity and nature of the finds suggest that the later features were peripheral to a farmstead of modest status which would have lain principally to the north of the site. There was a possible indication of pottery production nearby. A medieval pit was also excavated.

INTRODUCTION

A small excavation was undertaken on the site of the former sports ground, Alma Road, Peterborough ahead of redevelopment for social housing (NGR TF 190 005, Fig 1). Peterborough City Council Archaeology Service (PCCAS) required a programme of archaeological work to ensure the recording of any archaeological remains on the site. The work was undertaken by Northamptonshire Archaeology for Davis Langdon Project and Cost Management Consultants, acting on behalf of the client Nene Housing Society.

A trial trench evaluation of the 2.7ha site, undertaken in May 2005, had identified early Roman ditches and other features, which appeared to be agricultural enclosures on the margins of a settlement lying mainly to the north of the application site (Fig 2). In addition, there were possibly earlier features on the eastern side of the site and an isolated pit to the south. The subsequent excavations, undertaken in September and October 2005, were targeted on these three areas (NA 2005a; Fig 2). The works followed an approved Project Design (NA 2005b) and the results were brought together in an Assessment Report (NA 2006), which included the recommendation for this summary publication.

The site lies on river gravels at a height of about 14m OD, a little over 2km west of the fen edge and about 1.5km north of the historic core of Peterborough. Before the archaeological evaluation in connection with the present development, there were no known archaeological remains from the application site itself, although prehistoric or Roman remains were recovered nearby during housing development in the 20th century. This includes a site, within 100m to the north-east, where Roman burials and pottery had been discovered in 1911 (NA 2005a). It is not known how extensive this site was, but it was significant enough to be depicted on Ordnance Survey maps from the 1920s to the 1970s. These maps also show that, with the exception of pavilions and other light structures, the site had not been built on. The area was agricultural land in the late 19th century, but by 1926 the site was shown as a sports pitch bounded by housing. At the time of the archaeological work the pitches had been disused for some time and the land was overgrown.

ACKNOWLEDGEMENTS

Northamptonshire Archaeology is grateful to Nene Housing Society for funding the archaeological

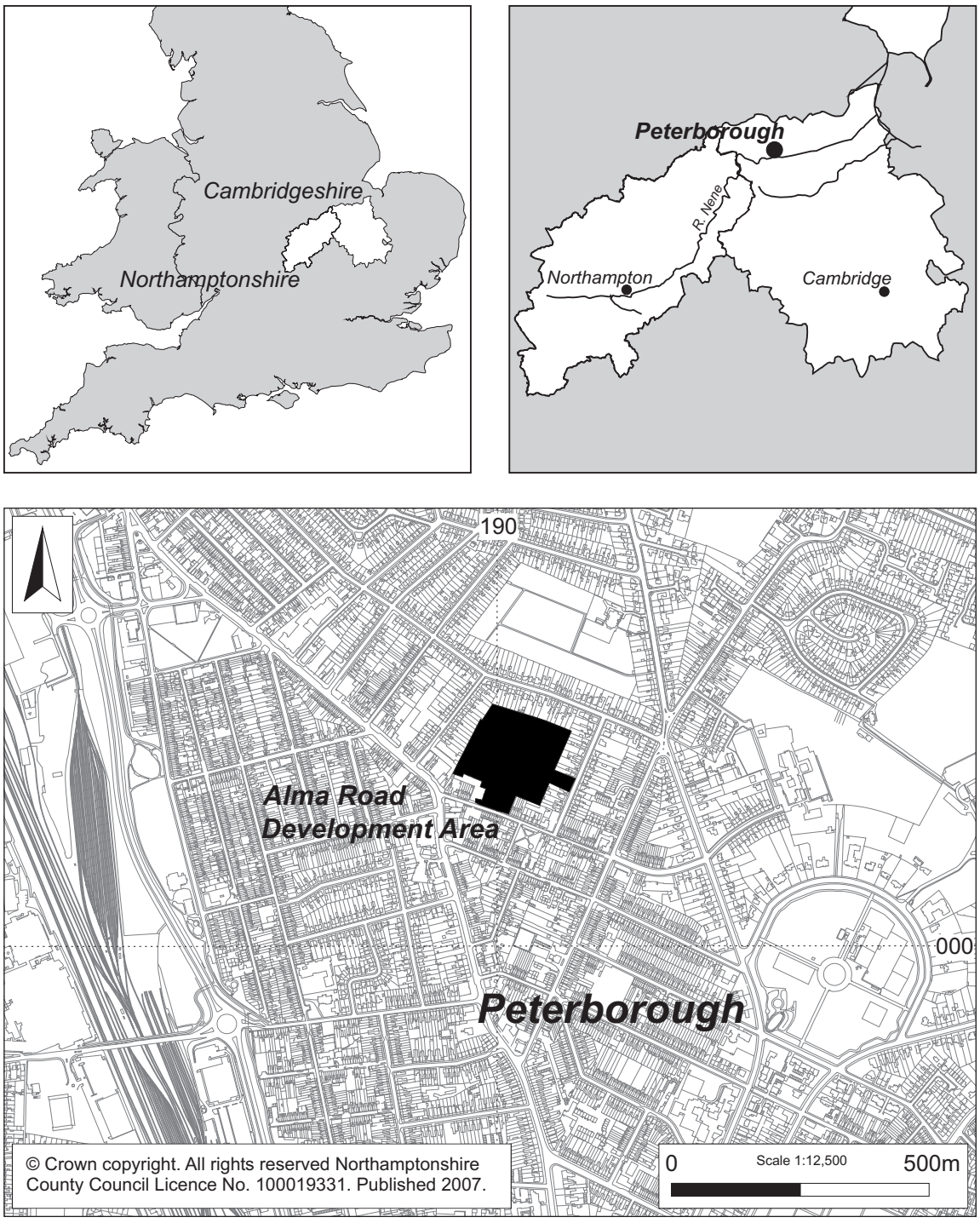


Fig 1 Site location

programme and, as landowners, they have offered the finds to the Peterborough Museum and Art Gallery.

The evaluation was directed by Steve Morris and the later excavation by Anne Colby-Foard and Tim Upson-Smith. The excavation team comprised Keiran Armitage, Jim Burke and Miranda Haigh. Steve Critchley undertook the metal detecting. Individual contributors to this report are acknowledged throughout. The radiocarbon date was provided by Scottish Universities Environmental Research Centre, East Kilbride (SUERC). Illustrations are by Drew Smith, Jane Timby and Jacqueline Harding.

THE EXCAVATED EVIDENCE

MIDDLE IRON AGE DITCHES

On the eastern side of the site, Area 2, a ditch, 2059, ran north-east to south-west (Figs 2 and 3). The ditch was 2.6m wide by 0.38m deep with an asymmetrical profile. It yielded 13 sherds of pottery, including a sherd with finger-impressed decoration and a flared rim from a small, thin-walled bowl or jar (Fig 4, 1-2). A radiocarbon measurement on associated animal bone suggests a date in the early part of the middle Iron Age (420-340 calBC and 300-200 calBC, 95% confidence level, 2310+/-35 BP, SUERC-10810), perhaps the early 4th century BC, which would not be inconsistent with the pottery.

To the immediate east of the ditch, there was a curvilinear gully, 2107, 0.84m wide by 0.21m deep, which may have been part of a roundhouse ring ditch approximately 15m in diameter. This produced a few sherds of pottery, indicating that the roundhouse may have been contemporary with the linear ditch, which might therefore have formed the western boundary to an area of middle Iron Age settlement.

Small quantities of middle Iron Age pottery were also recovered from features in the northern part of the site, Area 1, perhaps suggesting that occupation had begun in this area in the middle Iron Age.

LATE IRON AGE/EARLY ROMAN DITCHES AND PITS

Area 1 showed a simple layout with ditches running approximately north-south and east-west (Fig 3). Ditch 2103 was a substantial boundary ditch, 0.5m deep. It contained some Iron Age pottery, perhaps suggesting an early origin for the ditch, but the upper fills included Roman pottery through to the 2nd century AD, indicating that it was long-lived. In origin it may have been contemporary with ditches 2071 and 2097 to the west, which produced no datable artefacts.

To the east, ditches, 2005 and 2106, which ran at right angles to the east-west boundary, apparently respecting it, contained mixed assemblages similar to those from ditch 2013. There was an undiagnostic iron rod fragment from ditch 2106.

The only feature certainly of Roman origin was a large pit, 2100. This was 4m in diameter and 1.4m deep, and cut ditch 2106 at its terminal (Fig 3). The lower fills contained fragments of fired clay which appear to be pottery kiln lining, while the pottery assemblage is dated to the 1st-2nd centuries AD.

Of the other small pits, only pit 2013, which contained possible crop processing waste, is of intrinsic interest (Fryer this report).

MEDIEVAL PIT

Area 3 contained a single feature, 2099; a pit 1.6m in diameter and 1.75m deep (Figs 2 and 3). A total of 73 sherds of pottery are dated to the 10th-12th centuries. Animal bones and charred plant remains were also recovered. The feature had near-vertical sides but seems too shallow to have been a well and its purpose is unclear. There was no surviving indication that it had originally been lined.

The pottery was largely of two fabric types. A grey sandy ware, Thetford ware, includes sherds with applied thumbed strips and a bodysherd decorated with roller stamping. A wheelmade shelly ware, St Neots ware, includes several sherds from jars decorated with roller stamping around the upper body.

MEDIEVAL TO POST-MEDIEVAL CULTIVATION

A series of linear features traversed the site in a north-east to south-west direction, at a slight variance from the orientation of the Roman ditches (Figs 2 and 3). The majority were the remnants of furrows, identified in 13 of the evaluation trenches. The spacing of the furrows averaged 10m, varying between about 8m and 12m. Two adjacent furrows in Area 1 had been recut, and these gullies may suggest the provision of a later, intermediate field boundary that respected the alignment of the furrows. The gullies lay 6m to 7m apart and were 0.10 - 0.30m deep at the stripped level.

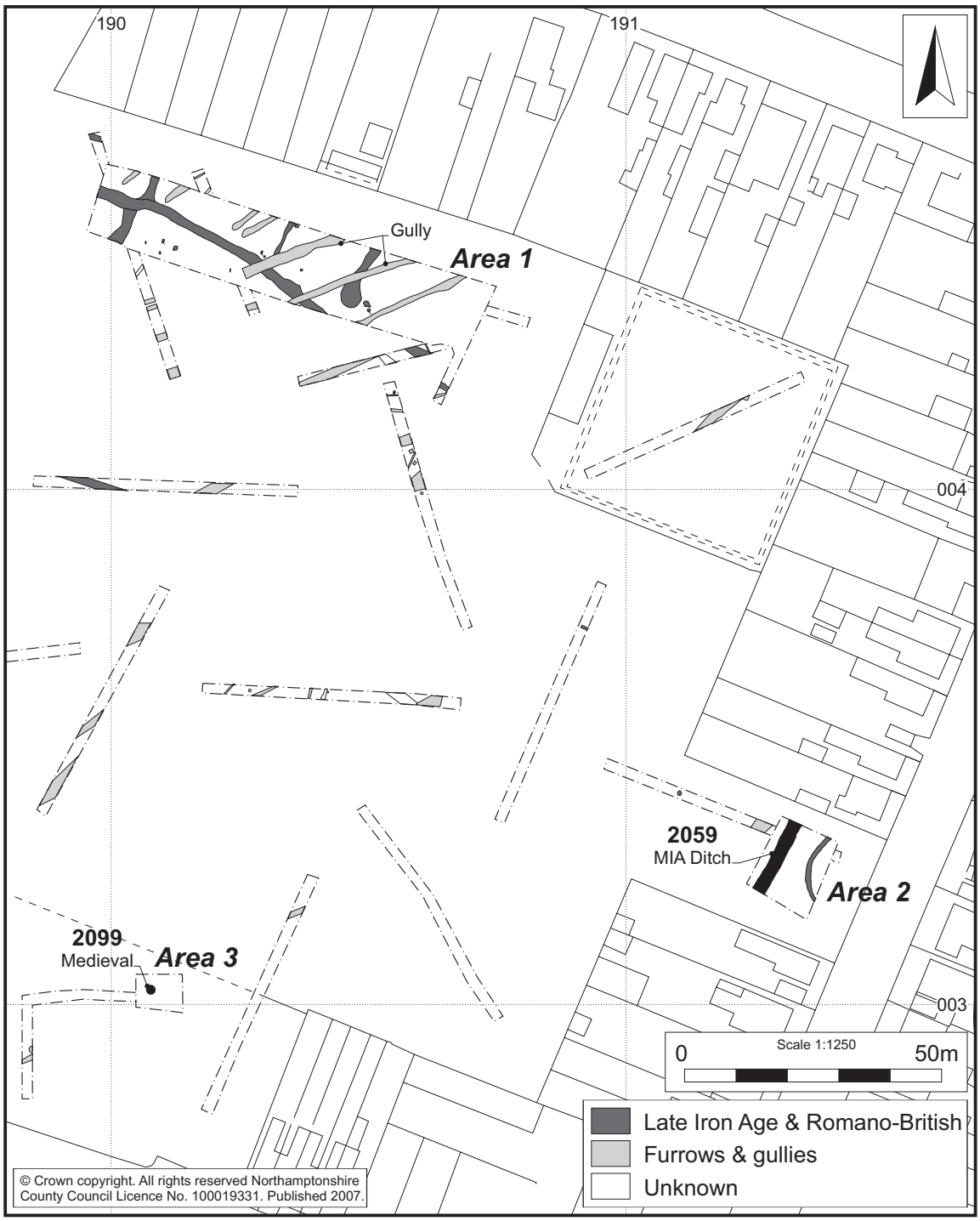


Fig 2 The excavated areas and the trial trenches

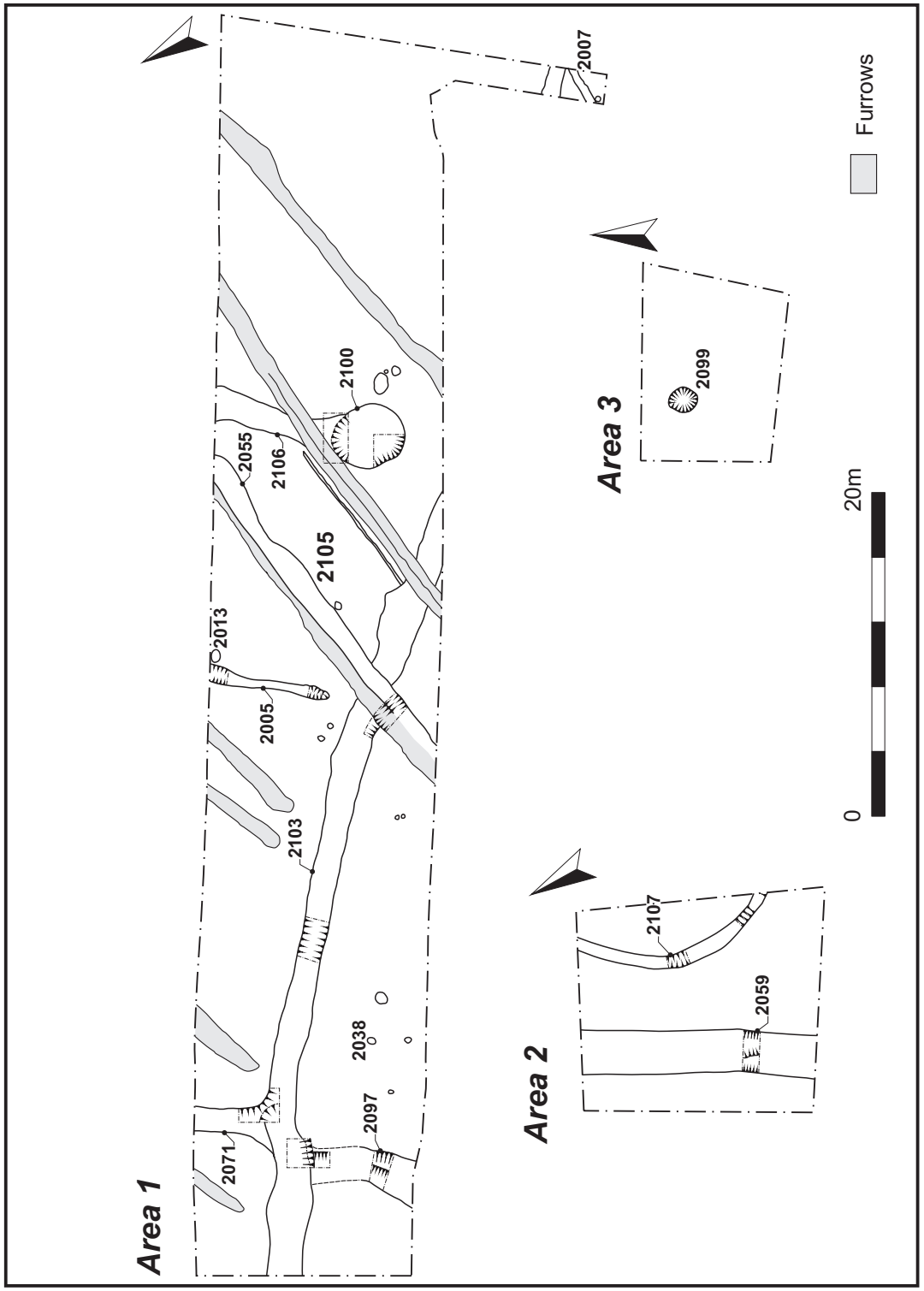


Fig 3 The excavated features

Medieval finds include a circular mount for connecting a pendant to a horse harness, made from copper alloy with patches of gilding evident on the exterior surface, length 30mm (see Griffiths 1986, fig 21b). There was also a clipped lead disc from the post-medieval period. Four sherds of post-medieval pottery, all glazed red earthenware, were recovered from furrow 2105.

IRON AGE AND ROMANO-BRITISH POTTERY

by Jane Timby

The excavation resulted in the recovery of 334 sherds of pottery, weighing 6.07kg, dating to the middle-late Iron Age and Romano-British periods. Of this, 60 sherds, approximately 17.9% by sherd count, is probably Iron Age, the remainder spanning the late pre-Roman Iron Age-early Roman period, through to the 2nd century AD. An additional 41 sherds of similar chronology were recovered from the evaluation.

Overall the assemblage is quite well preserved with an average sherd size of 18g. Although it is clear from featured sherds that there are several different periods represented, the dominant fabric for all periods is a shelly ware which makes discrimination of unfeatured sherds difficult in some cases.

IRON AGE

The only fabric present of the later prehistoric period was a hand-built calcareous ware, generally with sparse to moderate shell or with grog/clay pellets and calcareous inclusions. Middle Iron Age fabrics tend to be highly varied with minor differences between vessels and in this respect the small group from Alma Road conforms to this pattern. Possible residual sherds in later contexts are very difficult to discriminate from the later shelly wares.

Potentially the earliest feature on the site is ditch 2059 which produced an assemblage of ten thick-walled hand-built sherds, one of which carries a line of finger depressions (Fig 4, 1), and two thin walled everted rim jar/bowl sherds with a smoothed finish (Fig 4, 2). A radiocarbon date from this feature indicates a middle Iron Age date for the fill, perhaps in the early 4th century BC (see Table 1). The adjacent curvilinear ditch, 2107, produced four hand-built shelly ware sherds, including a rim sherd from a thin-walled vessel, and this group might also date to the early middle Iron Age.

Other features which appear to belong to this episode of activity on the basis of the pottery include gully 2005, which produced 16 sherds of shelly ware, amongst which is a single rim from a slack-sided jar with an undifferentiated rim (Fig 4, 3). Ditch 2103 produced another small group of 22 bodysherds of shelly ware, some of which were scored on the exterior, as well as a beaded rim jar which could be middle or later Iron Age in date (Fig 4, 4). There is a single shelly ware sherd from posthole 2038.

From the assemblage as a whole there is at least twelve sherds with a scored surface. This feature, usually seen as typical of the middle Iron Age is often confined to larger jars (Elsdon 1992) (see Fig 4, 8). Many of the scored sherds here are in later contexts; either the trait continued into the later Iron Age or there is an element of redeposition. Recent work at Haddenham (Hill and Braddock forthcoming) has suggested that the practice of scoring may be a cultural identifier and not a good indicator of date.

(Editors note: in the report on the pottery from a late Iron Age/early Roman settlement at Newton Bromswold (Upson-Smith 2006), which appears elsewhere in this volume, it is suggested that there are scored ware vessels of late Iron Age date that are distinguished by the regularity of the scoring, including the use of combed scoring, which contrasts with the irregular scoring characteristic of middle Iron Age assemblages.)

ROMANO-BRITISH FABRIC AND FORMS

The assemblage mainly comprises local fabrics, some of which could be Late Iron Age or early Roman in date. There are no regional wares and just two continental imports. Named wares are coded following the National Roman fabric reference collection codes (Tomber and Dore 1998) (T & D). Local wares are coded according to the principal inclusions or firing colour.

IMPORTS

South Gaulish samian
Two joining sherds of South Gaulish samian from a dish came from pit 2100.

South Spanish amphora (Cadiz fabric) (T & D 1998, 87, CAD AM)
A single large sherd was recovered from ditch 2103, which may be a *Camulodunum* type 186 usually used for transporting fish sauce.

LOCAL WARES

Lower Nene Valley grey ware (LNV RE)
The second commonest fabric accounting for 16.4% by count. Vessels include everted rim jars, necked cordoned jars, and everted rim neckless jars. One sherd is decorated with impressed crescents.

?Lower Nene Valley white ware (T & D 1998, 119, LNV WH)
A single abraded sherd, the identification is tentative.

Shelly ware (SHELL)
Handbuilt and wheelmade shelly wares the largest fabric group, 46.9% by count of the total assemblage. Vessels include large handmade storage jars (Fig. 4.9-10), beaded rim jars, simple everted rim jars (Fig. 4.6-7) and lid-seated jars (Fig 4, 5).

Flint and calcareous sandy ware (FLSACA)
Slow wheelmade red-brown sandy ware with a grey core. The paste contains sparse calcined flint and calcareous/shell inclusions. A single unfeatured sherd.

Sandy ware with shell/ calcareous inclusions (SACA)
Handmade and wheelmade vessels in a sandy ware with sparse calcareous lined voids or shell fragments. Sparse quartz grains are visible at x20 magnification.

Miscellaneous grey and black sandy wares (GREY/BW)
Collectively these wares account for 10.8% of the assemblage by count. Vessels are wheelmade and include necked, cordoned jars (Fig 4, 11).

Sandy oxidised ware (OXIDSA)
A group of 13 sherds including pieces from a butt beaker and from a bevelled rim jar (Fig 4, 12).

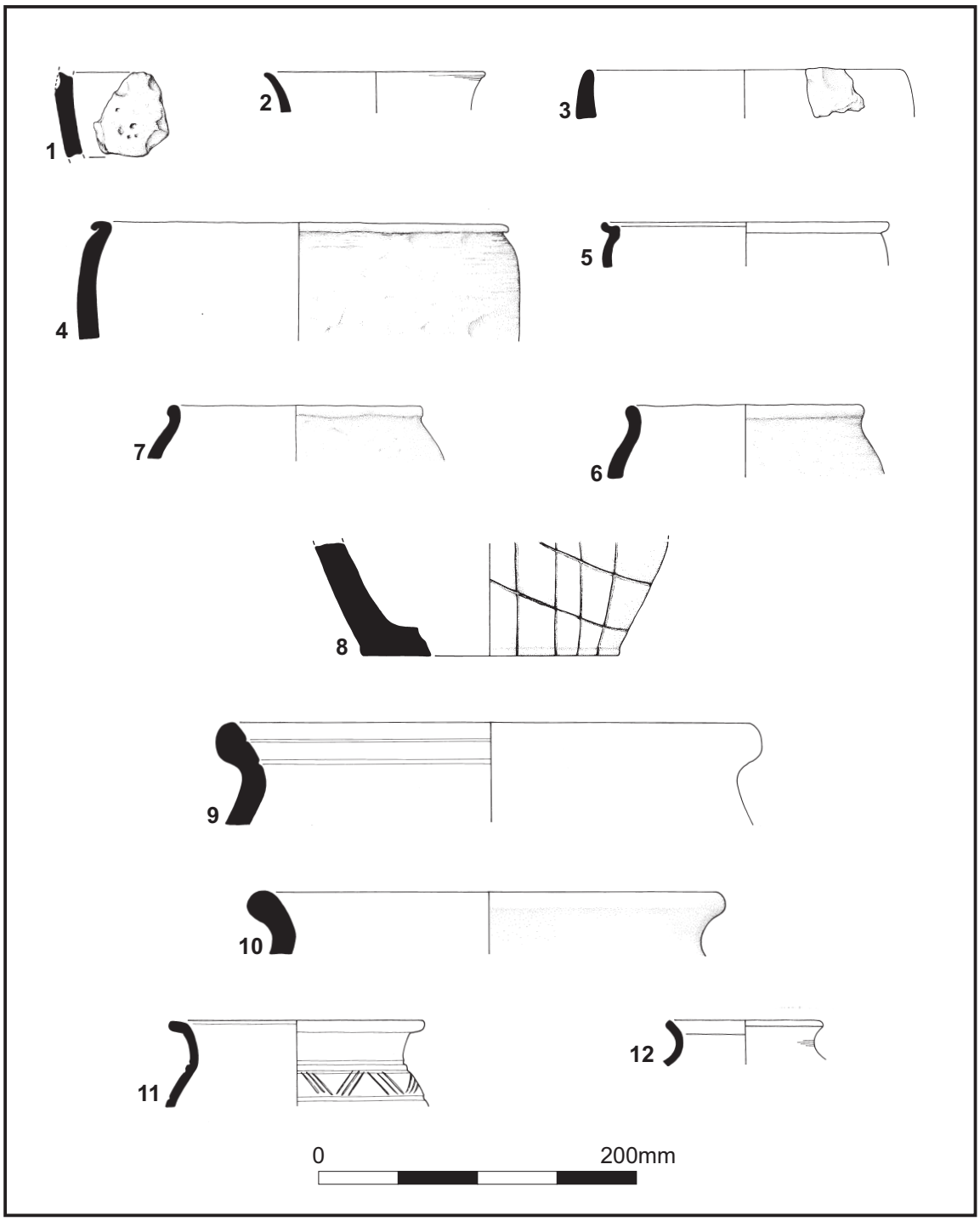


Fig 4 The Iron Age and early Roman pottery

DISCUSSION

The assemblage suggests a level of activity in the early middle Iron Age on the eastern part of the site, while to the north the activity spans the middle to late Iron Age into the early Roman period, although it is difficult to ascertain from such a small group whether there is continuity of use from the early middle Iron Age through into the early Roman period.

Ditches 2103 and 2106 both produced sherds of a fine oxidised sandy ware from a copy of an imported butt beaker, which is likely to date to the second half of the 1st century AD. Good well-fired Roman grey wares, probably early Lower Nene Valley grey ware were recovered from ditch 2103 and pit 2100 and these are probably the latest Roman features on the site likely to have been backfilled in the early-mid 2nd century.

The largest group, 160 sherds, came from the various interventions along ditch 2103, the latest of which would suggest that this feature was also abandoned in the 2nd century.

The Romano-British assemblage largely comprises local shelly wares and grey sandy wares. Despite an apparent absence of regional imports there are two continental wares, a sherd of South Gaulish samian and a fragment of Spanish amphora. The overall repertoire is quite restricted, comprising predominantly jars and thus typical of a rural, moderately low status settlement. The imports, although limited, add a new dimension to the assemblage and show that the settlement was acquiring new Roman forms and produce (samian and amphora). Copies of imported forms are also evident in the butt beaker.

CATALOGUE OF ILLUSTRATED SHERDS (Fig 4)

1 Bodysherd with a very slight carination, angle uncertain. The decoration could be around the girth of the vessel or from the shoulder. Fabric: SHSA. Ditch 2059
2 Bowl, flared rim, rimsherd. Lightly burnished exterior. Fabric SHSA. Ditch 2059
3 Jar, slack sided, simple rimsherd. Patchy red-brown to grey exterior, black interior. Fabric SHSA. Gully 2005
4 Jar, slack sided, large with uneven 'fingered' surfaces, rimsherd. The rim has been turned and slightly flattened. Dark brown to grey exterior with a light buff interior and dark grey core. Fabric SHSA. Ditch 2103
5 Jar, lid-seated with a slightly rilled exterior, wheelmade. Fabric SHELL. Pit 2100
6 Jar, simple everted rim, hand-built. Slight sooting on the interior surface. Fabric SHELL. Pit 2100
7 Jar, beaded rim, hand-built. Fabric: SHELL. Pit 2100
8 Jar, large hand-built, basesherd, widely spaced two-directional scored lines. Fabric: SHELL. Ditch 2106
9 Storage jar, hand-built with two lightly tooled horizontal lines on the inner rim face. Fabric: SHELL. Ditch 2106
10 Storage jar, hand-built. Fabric: SHELL. Ditch 2106
11 Jar, necked, cordoned, wheelmade, with combed chevron decoration. Black sandy ware. Fabric BW. Ditch 2106
12 Jar, small wheelmade with an internally bevelled rim. Pale oxidised sandy ware. Fabric OXIDSY. Ditch 2106

TILE AND FIRED CLAY

by Tora Hylton

There were seven undiagnostic fragments of ceramic tile weighing 0.497 kg.

In total 5.691kg of fired clay were recovered. The largest concentration of material by weight, 4.442kg was recovered from the fill of pit 2100, while much smaller amounts were recovered from ditches 2103, gully 2055 in furrow 2105, north of the terminal of ditch 2106, pit 2100, gully 2005 and pit 2099. Macroscopic examination of the material indicates that three main fabric types and two object categories are represented. There appears to be a differentiation between the fabric type and its use.

Fabric 1 (1.108kg) is a compact, hard, abrasive fabric containing a high percentage of sand. This fabric type appears to have been used as wall daub, as many of the fragments display the remains of recesses where the interwoven wattles would have been; both horizontal rods and vertical sails are represented. The wattle impressions are spaced *c* 30mm apart and measure from 7-17mm in diameter. Fragments of daub with wattle impressions were recovered from gully 2005 and ditch 2103.

Fabric 2 (0.141kg) is tempered with large amounts of organic material, together with a little sand; the surfaces are oxidised and the core black. The pieces are thin and plate like and measure up to 8mm thick.

Fabric 3 (4.442kg) is a poorly mixed natural looking clay with sparse sand and stone inclusions, it fractures easily. Large fragments of this fabric were recovered from pit 2100. Four of the fragments join together to form a piece measuring up to 235 x 170mm and *c* 50mm thick. Although incomplete, the shape of the piece suggests that originally it may have been part of a pre-fired rectangular block. Such blocks were specially made for lining kilns, particularly in the Nene Valley (Swan 1984, pl 30). Curved blocks have been recovered from Sibson and Stibbington, while rectangular blocks, like the example from Alma Road, have been recovered from kilns at Chesterton (Kilns P and R) and Stanground (Kilns I and II). For a discussion see Swan 1984 (95-97).

ANIMAL BONES

by Mark Maltby

ASSEMBLAGE SIZE AND PRESERVATION

Eighteen animal bones and teeth from an early middle Iron Age ditch, together with 243 from 15 early Romano-British contexts, and 31 from a medieval pit, were examined. Of the Roman group, 150 were recovered from ditches and gullies and 93 from pits. General preservation of the bones ranged from quite good to quite poor with the majority being recorded as moderately preserved. Surface preservation of the bones was generally good, although 21 identified bones were recorded as eroded, mostly from ditch 2103. At least 26 bones had been damaged by gnawing indicating they were subjected to scavenging before or subsequent to deposition. Many (47) of the identified bones bore evidence of modern breakage inflicted during or subsequent to excavation. Only three specimens from the hand-recovered material were burnt, although a few charred unidentified fragments were also found in the sieved samples.

SPECIES REPRESENTATION

A total of 146 (50%) of the fragments were identifiable to species. The percentage of unidentified fragments is to be expected given the moderate preservation of most of the assemblages. Of these 128 were from Roman contexts.

Cattle bones and teeth (65) dominated the identified Roman assemblage, providing 51% of the identified elements. They tended to be better represented in ditch fills (56%) than in pits (44%).

Sheep/goat elements (17) were comparatively poorly represented in the overall assemblage (13%). Only sheep (two positive identifications) were definitely present. Sheep/goat bones were relatively more abundant in the pits (20%) than in ditch contexts (8%). Horse bones and teeth (19) were quite well represented (15%). Like cattle, they were better represented in the ditches (17%) than in other features (12%). It is assumed that most of the equid bones belonged to horse but the presence of mule cannot be ruled out. Dog (21) was the second most common species contributing 16% of the identified elements. Dog elements formed 15% of the ditch assemblage and 18% of the material from the ponds, pits and well. Only one bird bone was recovered and was identified as a carpometacarpus of a corvid, the size of a rook or crow.

DISCUSSION

Although it is unwise to make sweeping statements from such a small sample, the indications are that cattle were the most common species exploited. However, the large size and robustness of their bones would have favoured their survival and recovery. Higher percentages of cattle and horse often tend to be found in ditch deposits than in other types of feature on Iron Age and Romano-British rural sites due to a combination of taphonomic factors (Maltby 1995; 1996). High percentages (over 50%) of cattle bones have been found on a number of rural Romano-British sites in Bedfordshire including Biddenham Loop and Marsh Leys Farm near Bedford. However, the relative abundance of cattle and sheep/goat is quite varied on contemporary sites in the East Midlands (Maltby in prep.).

The poor representation of pigs is typical of many Iron Age (Hambleton 1999) and rural Romano-British assemblages (King 1984), whereas horses tend to be better represented on Romano-British rural sites than in Roman urban assemblages (Maltby 1994). Horse bones also can form quite high proportions of assemblages from Iron Age sites (Moore-Colyer 1994), as can be seen for example in some areas of the settlement complex at Wilby Way, Wellingborough (Maltby 2003).

The percentage of dog bones is unusually high. However, there are indications that several of their bones are associated and may represent either the remains of disturbed or redeposited burials or, perhaps less likely, the deliberate placement of parts of their bodies in these features. Probable associations include a pair of tibiae and a humerus in ditch 108. Minor exostoses (abnormal bone growth) on two of the bones probably indicate they belonged to quite an old animal. Pit 2100 produced eight elements, probably all from the same adult dog scattered between two contexts. The bones recovered consisted of a pair of ulnae, and parts of the left radius, humerus, femur, tibia and fibula and a rib. Similarly, all the five dog bones from one section in ditch 2103 could have belonged to one elderly animal (a pair of tibia, mandible, radius and metatarsal). The same section produced substantial portions of mandibles of two cattle and a horse, and two largely complete right horse tibiae and a femur.

Element counts show no unusual biases in the assemblage, although both cattle and horse assemblages included quite high numbers of mandible fragments. At least six different cattle mandibles were represented. A minimum of two horses were represented by mandibles, tibiae and femora. The sheep/goat sample consists mainly of the more robust elements of the skeleton and at least four individuals are represented by shafts of tibiae. At least two pigs are represented by mandibles.

Metrical data was taken from 14 bones (retained in archive). A complete tibia of a dog produced a shoulder height estimate of 447 mm based on Harcourt's (1974) conversion factors, indicating it was a medium-sized animal. Cattle mandibular toothwear evidence indicated the presence of at least four adult cattle, including one with very heavy wear on all three molars (Mandible Wear Stage = 52: Grant 1982) from an old animal kept for breeding, milking or working purposes. Two cattle jaws belonged to immature animals probably culled for meat between the ages of 2-3 years old. Both horse mandibles from pit 2100 had heavy wear on their molars and belonged to mature, presumably working, animals. Epiphysial fusion data were too sparse to merit analysis.

Butchery marks were recorded on three bones. Fine incisions were observed near the distal end of a cattle humerus and the proximal end of a cattle radius. Both marks would have been made during the disarticulation of the elbow joint using a metal knife. This type of butchery is typical of methods employed in the Iron Age and there is no evidence in this small sample that cleavers were used in the processing of cattle carcasses, as became increasingly common in the Roman-British period, particularly at more Romanised sites (Maltby 1989). On the other hand, a sheep/goat scapula from pit 2100 had evidence of relatively heavy marks alongside finer incisions across the neck. These could have been made by a cleaver during disarticulation from the humerus.

The sample is too small to provide much information about animal exploitation at the settlement. The assemblage appears, however, to be fairly typical of other early Romano-British rural sites, in which there is little evidence for changes in the meat diet, processing and disposal practices and the sizes of animal from the Iron Age.

CHARRED PLANT MACROFOSSILS AND OTHER REMAINS

by Val Fryer

A rapid scan of the three plant macrofossil assemblages from the evaluation trenches showed moderate densities of cereal grains and charcoal (Deighton in NA 2005a). Further sampling was recommended from any dated features encountered during the excavation and, as a result, samples were taken from six of the Romano-British features and from a medieval pit, 2099.

The samples were bulk floated by Northamptonshire Archaeology, and the floats were collected in a 500 micron mesh sieve. The dried floats were scanned under a binocular microscope at magnifications up to x 16, and the plant macrofossils and other remains were noted. Nomenclature follows Stace (1997). All plant remains were charred. Modern fibrous roots were present within most assemblages.

RESULTS

Cereal grains and/or seeds of common weed plants were present at a low density within all but one posthole. Preservation was moderately good, although many of the grains were puffed and distorted, probably as a result of combustion at very high temperatures.

Oat (*Avena* sp.), barley (*Hordeum* sp.) and wheat (*Triticum* sp.) grains were recorded, with wheat occurring most frequently. Both elongated 'drop-form' grains typical of spelt (*T. spelta*) and more rounded hexaploid forms were noted, along with rare fragments of wheat chaff including a single spelt glume base and a bread wheat (*T. aestivum/compactum*) type rachis node.

Weed seeds occurred in only three assemblages. Segetal and

grassland taxa were predominant and included brome (*Bromus* sp.), ribwort plantain (*Plantago lanceolata*), grasses (Poaceae), wild radish (*Raphanus raphanistrum*), dock (*Rumex* sp.) and vetch/vetchling (*Vicia/Lathyrus* sp.). A single large fragment of hazel (*Corylus avellana*) nutshell was recorded from the medieval pit. Charcoal fragments were present throughout along with occasional small pieces of charred root/stem.

Other remains were particularly scarce although small pieces of black porous and tarry material were noted within all but Romano-British pit 2100. Most would appear to be residues of the combustion of organic materials at very high temperatures. Small vitreous globules (possibly pieces of fuel ash slag) were recorded from pits 2100 and 2013. (Complete table in archive.)

CONCLUSIONS

Of the eight assemblages studied, only two, from Romano-British pit 2013 and medieval pit 2099, contain sufficient material for outline assessment. The sample, from Roman pit 2013, comprises a very low density of probable cereal processing waste including grains, chaff and weed seeds. Although two assemblages studied during the evaluation showed that cereals were possibly of significance within the local economy of the Roman period, the assemblage from pit 2013 does little to support this hypothesis, other than establish that cereal processing may have been conducted somewhere nearby. However, the site itself appears to have been peripheral to any main centre of either domestic or agricultural activity.

Although the assemblage from medieval pit 2099 may include small quantities of processing and/or domestic waste, it appears very unlikely that the material constitutes a deliberate deposit of refuse within the pit fill. It is perhaps far more likely that the remains accidentally accumulated, possibly in the form of either scattered or wind-blown detritus.

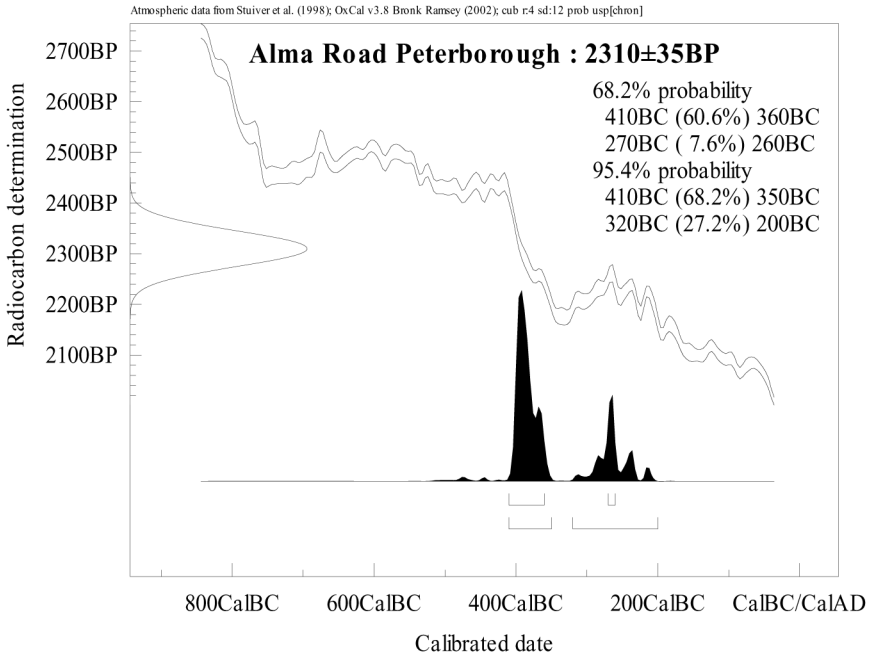
As none of the assemblages studied contain sufficient material for quantification (ie 100 + specimens), no further analysis was undertaken.

RADIOCARBON DATE FOR MIDDLE IRON AGE DITCH

A piece of cattle radius weighing 33g from context 2058, fill of ditch 2059 in Area 2, was sent for AMS measurement to

Table 1: The radiocarbon determination

Laboratory Numbers	Context	Sample details	dC13	Conventional age BP	Cal BC 68% confidence (95% confidence)
SUERC-10810	Area 2 Ditch 2059 Fill 2058	Cattle bone	-25.5	2310 +/-35	410-360 270-260 (420-340 300-200)



the radiocarbon dating laboratory of the Scottish Universities Environmental Research Centre (SUERC). The bone was one of the larger pieces from the small group of animal bones from this feature.

The calibrated date of 420–340 and 300–200 CalBC (95% confidence level; 2310+/-35BP, SUERC-10810) is consistent with the pottery in suggesting a date at the beginning of the middle Iron Age, most probably the early 4th century BC, although a date in the 3rd century is also possible given the "wiggle" in the calibration curve in this period.

DISCUSSION

LOCATION AND EXTENT OF IRON AGE AND ROMAN SITE

The site is located on the extensive gravel terrace of the lower Nene Valley. Archaeological records show that the region, including the higher claylands further west, was densely populated in the Iron Age and Roman periods (see Mackreth 2001, fig 2 for a regional distribution map) although many of these records relate to opportunistic findings made during urban development in the 19th and earlier 20th centuries and are not reliable indicators of the distribution or nature (nor sometimes even the exact location) of sites. Opportunities for fieldwork ahead of development have been relatively limited, but a useful synthesis of the more extensively excavated sites has been published and provides some context for the present excavations (Hinman 2003). These present excavations were limited in extent and show part of a diffuse pattern of occupation which seems to have been peripheral to main foci of nearby Iron Age and Roman settlement.

The immediate context for the Alma Road excavations are the finds of Roman pottery and burials, made in 1911, lying within 100 m to the north-east (HER No. 02224) which found their way onto Ordnance Survey mapping from the 1920s to 1970s (Fig 5). The nature and status of this site are not known and it is not even known whether it was contemporary with Alma Road. It seems probable that Alma Road was an outlier of this site, although there were no features in the north-eastern corner of the Sports Field which might have linked the two and the relationship between the sites remains conjectural. Roman pottery is also recorded 500m to the south-east (HER No. 08263). To the south-west, a major Roman site at Westwood lies about 1km away (HER No. 01751) and numerous other finds come from this area including part of an Iron Age and Roman settlement at Westfield Road (JHMS 2000) which is one of the few modern excavations in this part of the city.

Further afield there have been more extensive excavations at Werrington (Mackreth 1988), Orton Hall Farm (Mackreth 1996), Monument 97 (Mackreth 2001), Haddon (Hinman 2003) and Yaxley (Brown 2006). These provide a useful framework for discussing the wider patterns and trajectories of settlement in the region. Recent evaluations at Stanground have identified extensive Iron Age and Roman settlement on the fen-edge which in due course will add considerably to the more disparate earlier findings in this area (Taylor and Aaronson 2006).

PERIODS OF OCCUPATIONS

The impression from the pottery assemblage is that two periods of occupations are represented; one in the early middle Iron Age while the second is broadly late Iron Age to early Roman, with no certain continuity between the two. The occupation did not extend beyond the 2nd century, but again the dating is no more precise than this. It should be emphasised that since only a small part of the site was available for excavation, earlier or later dating may be present from features nearby.

The establishment of new farming settlements in the late Iron Age, the century or so before the Roman conquest, but with no middle Iron Age antecedents as at Alma Road, has been shown from more extensively excavated sites such as Werrington, Monument 97, Longthorpe Farm I, Tort Hill West and Haddon, catalogued by Hinman (Hinman 2003, fig 25). The reason for this is not clear, but it would not seem to relate to the retreat from fen-edge locations due to the rising water level since this is archaeologically documented as taking place at the beginning of the first millennium BC rather than towards the end (French 2001, 400-4; Pryor 2001, 408-13).

The cessation or reconfiguration of settlements at the end of the 1st century AD, or in the 2nd century, is also a regionally attested pattern. This was the case at Werrington, and also at Monument 97 where it has been suggested that the residents moved to a larger farming establishment at Orton Hall Farm at the end of the 1st century AD (Mackreth 2001). The site at Tort Hill West was abandoned by the end of 1st century AD and at Haddon it has been suggested that settlement changed function and became a stock-yard at about this time (Hinman 2003). The overall pattern suggests a movement to larger settlement

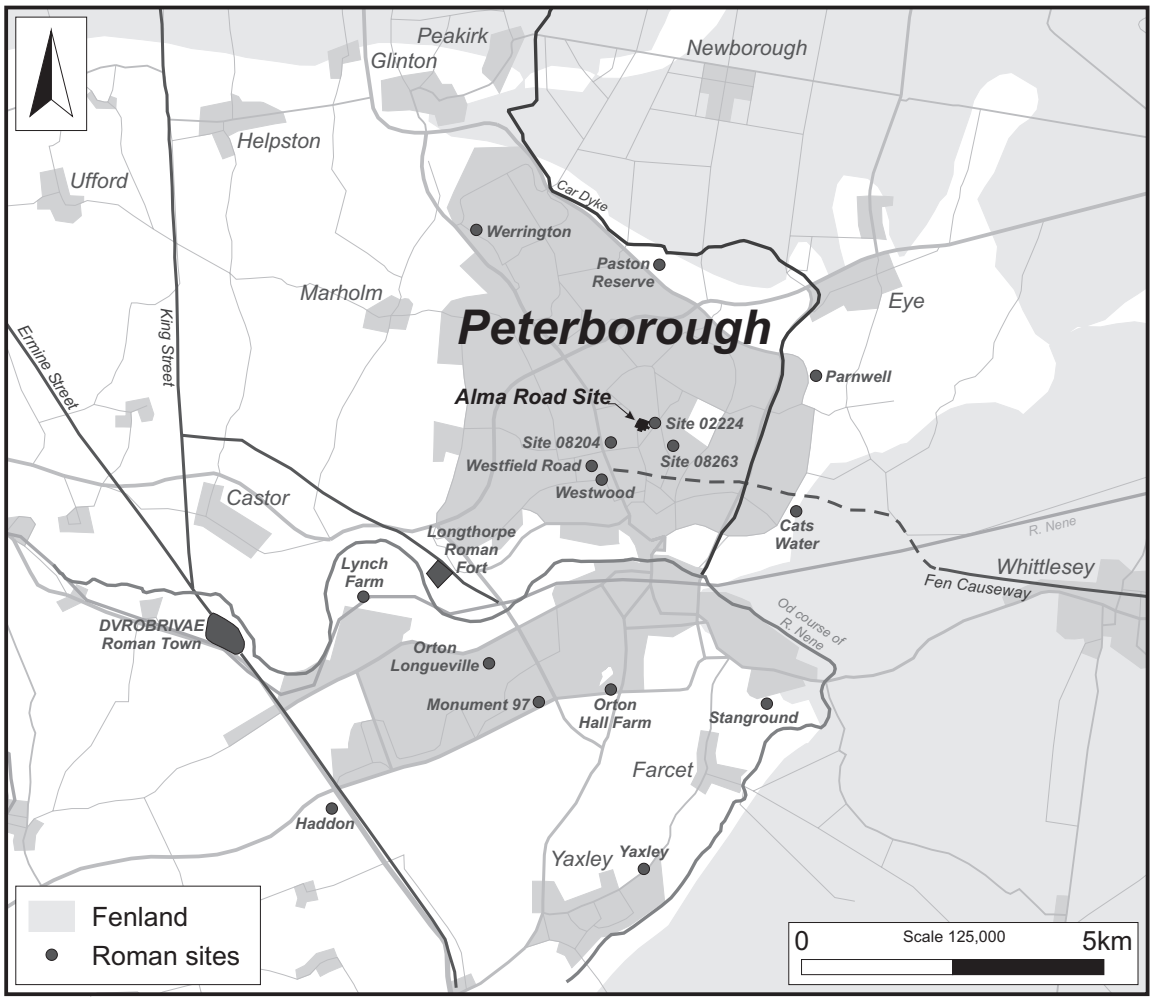


Fig 5 Contemporary settlement in the Peterborough area

units – to farms/villa estates, and perhaps also to the urban centre at *Durobrivae*. It is possible that the occupation at Alma Road also reflects this pattern, but at a slightly later date.

Mackreth (1996) has linked these changes in settlement pattern to the creation of an imperial estate in the fens and the construction of Car Dyke, official ventures associated with a reorganisation of landholding in the wider region in the earlier 2nd century AD. It is also at about this time that the Lower Nene Valley pottery industry becomes established, and this would appear to have replaced local production at a number of these abandoned sites including Haddon, Tort Hill West and perhaps Alma Road, although here pottery kiln lining is not securely identified.

There are other sites which do not seem to see the same developments. These include Cat's Water where the Roman occupation appears to have continued until the early 3rd century (Pryor 1980). At Westfield Road there was Roman occupation until the late 2nd or early 3rd century (JMHS 2000) and the site at Parnwell shows a similar date of demise (OA 2006). However, only relatively small parts of these settlements were excavated so it is not certain that the date ranges reflect the whole occupation

sequences, and there may have been changes in the scale or nature of the occupations which such partial investigations are unable to reveal.

MEDIEVAL AND LATER LAND USE

The medieval pit is without recognisable context. Given the presence of pottery, animal bone and charred cereals it is probably associated with an as yet undefined settlement nearby.

The gravel terrace was cut by an extensive system of plough furrows of a kind associated with ridge-and furrow cultivation. This is assumed to have had an origin in the medieval period, although the limited dating suggests that they were in use in later times, probably until Inclosure. The furrows are orientated approximately at right-angles to Lincoln Road rather than the more recent alignment of Alma Road and surrounding streets which are based upon post-Inclosure fields.

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