

Northern Archaeological Associates

691
S70542

A ROMANO-BRITISH SETTLEMENT AT MILLFIELD FARM, WHELDRAKE, NEAR YORK

PUBLICATION REPORT

prepared for

SCOTT WILSON

on behalf of

YORKSHIRE WATER SERVICES LTD

NAA 04/118

Revised: February 2005

**A ROMANO-BRITISH SETTLEMENT AT
MILLFIELD FARM, WHELDRAKE, NEAR YORK**

by Gavin Robinson

with contributions by John Carrott, Jane Cowgill, Brenda Dickinson, Peter Didsbury, Alan Hall, Kay Hartley, Joanna Higgins, Alan Hogg, Deborah Jaques, J Tibbles, Philippa Walton, Jon Watt, David Williams and Elizabeth Wright

SUMMARY

A previously unknown Romano-British settlement was discovered during archaeological monitoring of topsoil stripping along the 14km construction corridor of the Yorkshire Derwent Aqueduct water pipeline between Elvington and Riccall. The site was located close to Millfield Farm, Wheldrake, to the south-east of York (SE 668 443) and fieldwork was undertaken during the summer of 2002.

The site comprised a concentration of settlement related features that extended for a length of 75m along the pipeline corridor. The area of excavation was dictated by the route of the pipeline and formed a narrow strip across a corner of the settlement. Due to heavy truncation and a limited area of excavation detailed phasing of the site was not possible. However, five broad phases of activity have been identified based on stratigraphic analysis of excavated features and assessment of datable finds. The pottery broadly dated to the 3rd to 4th century AD with some possibly from the late 2nd century AD.

The general layout of the features suggested a small settlement existing on high ground that dominated a largely flat landscape. The earliest phase of activity comprised two inter-cut ring gullies that probably represented two phases of roundhouse construction. These were superseded in the second phase by a sequence of short linear gullies that may have been part of rectangular timber structures within a ditched enclosure. The settlement during Phase II included at least two enclosures and a small cemetery and possibly a trackway, presumably on the edge of the area of occupation. This area may have been built on during Phase III as the settlement expanded along the trackway. The full extent of the Romano-British phases of settlement is still unknown as only limited excavation within the pipeline corridor was undertaken. The features and artefact concentrations suggest that the main focus of activity was located on the summit of the ridge, immediately to the south-east of the excavation.

Evidence that a stone walled Roman-style building may have been built within the vicinity of the excavated area existed in the form of tegula and imbrex roof tiles, box flue-tiles, concentrations of stone within a number of features and a lead wall plug. A number of iron and lead fragments were discovered along with nails, tools, part of a quern stone, a broken amber bead and a worn hollow-ware fragment of fine whiteware, moulded into the form of a female face. Limited evidence of metalworking, cultivation of cereals and animal husbandry at the site was recovered, though no specific features were identified as being associated with these activities.

All of the Romano-British period features were truncated by a later phase of activity represented by in-filled plough furrows of medieval date. The furrows were on an approximate north-west to south-east alignment. A post-medieval field boundary and a shallow scoop that cut the furrows comprised the final phase of activity.

The information gathered during the excavation was compared with the small amount of existing evidence from other similar sites within the vicinity of York. This research placed the excavation within its Romano-British landscape context, giving a brief but tantalising glimpse of rural life in the hinterland of Romano-British York.

INTRODUCTION

Northern Archaeological Associates were commissioned by Scott Wilson on behalf of Yorkshire Water Services Ltd to undertake an archaeological scheme of works during construction of a water main duplication between Elvington and Riccall to the south-east of York. The work was undertaken over a twelve week period between April and July 2002.

An archaeological appraisal (NAA 2001) was undertaken of the proposed pipeline route which identified twenty-six archaeological sites within 250m of the pipeline. Based on the results of the assessment a programme of field survey (fieldwalking and geophysical survey) was carried out (NAA 2002) followed by archaeological monitoring of areas of high archaeological potential together with archaeological inspection of the entire pipeline route. During this monitoring archaeological features were identified near Millfield Farm.

The site lay approximately 10km to the south-east of York, some 750m to the south-west of Wheldrake (SE 668 443), immediately to the north of the road (Wheldrake Lane) between Wheldrake and Escrick (Fig. 1). The features extended for a length of 75m along the pipeline where the route turned to the south and crossed Wheldrake Lane (Fig. 2) and consisted of a trackway, enclosure ditches, burials and an area of settlement activity. The site was located on a low ridge some 16m OD in height orientated north-east to south-west between the villages of Wheldrake and Escrick (NAA 2001). To the north-west and south-east of the ridge the land

was generally flat at approximately 7m OD. The ridge was composed of an underlying geology of river terrace drift overlain by soils from the Bishampton 1 series. Either side of the ridge, glaciolacustine clay overlain by soils of the Foggathorpe 2 association formed the flat and seasonally waterlogged surrounding landscape.

Prior to the identification of the site no archaeological sites or artefacts had previously been identified at this location (*ibid.*). Sample geophysical survey undertaken some 700m to the north-east of the site as part of the evaluation of the pipeline route only recorded anomalies resulting from former ridge and furrow ploughing.

The area adjacent to the site was re-cleaned by machine, with this area being further extended upon the identification of burials to reveal the full extent of the archaeological features. A length of the pipeline corridor immediately to the south of Wheldrake Lane was also re-cleaned by machine, but no archaeological features were identified extending into this area. Most of the area had been severely truncated by later agricultural activity, and any evidence for shallow archaeological features was likely to have already been removed.

RESULTS OF EXCAVATION (Figs. 2-6)

The area of excavation was dictated by the route of the pipeline and formed a narrow strip across a corner of a Romano-British settlement. Because of the heavy truncation and limited area of excavation detailed phasing of the site was not possible. However, five broad phases of activity have been identified based on stratigraphic analysis of excavated features and assessment of datable finds, the allocation of which is still tentative (Fig. 3). The first phase of activity was identified as the inter-cutting ring gullies in the south-west corner of the site which was probably abandoned sometime before the 3rd century AD. The second phase was

abandoned by the late 3rd century AD and may have comprised a trackway on the eastern edge of the site, ditches that enclosed a cemetery and a series of short straight gullies that replaced the ring gullies. This was replaced by the third phase dating from the late 3rd to 4th century AD. Activity within this phase consisted of a re-ordering of the Phase II enclosures, the continuation of the trackway and a change in function for the area of the graves. These Romano-British phases were truncated by a fourth phase of medieval plough furrows, which may date to the 12th century AD. The fifth and final phase comprised a post-medieval boundary ditch.

Phase I (late Iron Age/early Romano-British)

In the south-western area of the excavation, the remains of two ring gullies (Fig. 4) were recorded which enclosed an area of approximately 11m in diameter. Ring gully 509 was the earliest and was later repositioned as gully 443. Both cuts measured 0.35-0.4m deep by approximately 0.55-0.6m wide (Fig. 6, sections 1 and 2) and were filled by a mid greyish brown silty clay, but in the north-eastern sections of the features the deposits within them were notably darker and browner. A single sherd of undiagnostic Roman greyware was recovered from ring gully 443. These two features may relate to the construction then rebuilding of a roundhouse representing early settlement activity on the site. No closely datable artefacts were recovered from these features, but they had been abandoned before the linear gullies in Phase II were cut, dating this phase to sometime before the late 2nd or 3rd century AD.

There may have been an earlier version of the Phase III trackway (see below) contemporary with the ring gullies.

Phase II (pre late 3rd century AD)

In the south-west area of the site Phase I ring gullies (509 and 443) were superseded by a series of short linear gullies. These features were approximately aligned north-east to south-west or north-west to south-east in an alternating pattern and did not drain into any other features. They could have related to structural features such as fence lines or rectangular buildings that replaced the previous roundhouses. However the latter theory is dependent on the evidence of the other three walls of each proposed building consisted of shallow beam slots or postholes that have not survived later truncation of the land surface. All of these gullies were inter-cut and, based on the stratigraphic relationships, a sequence could be identified.

In chronological order the features associated with this phase comprised a shallow north-east to south-west aligned gully (500) followed by an irregular north-west to south-east gully (499) that was cut by an east to west linear (502) followed by a north-west to south-east gully (495). Ditch 500 measured 0.7m wide by 0.25m deep and was filled with a mid orange-brown silty clay. Ditch 499 measured 0.6m wide by 0.2m deep and three fragments of nail were found within its dark brown-grey silty clay fill. Feature 502 (Fig. 6, section 3) measured 0.8m wide by 0.4m deep and its dark grey silty clay fill contained two fragments of iron nail and fragments of pottery. The pottery included sherds of imported amphora in use from the conquest period up until the mid 3rd century AD and a Gaulish bowl from the late 2nd or first half of the 3rd century AD. Ditch 495 (Fig. 6, section 4) measured 1.15m wide by 0.3m deep and was filled with a mid grey brown silty clay. Within this fill, pottery fragments from the late 3rd or early 4th century AD Holme-upon-Spalding-Moor and Crambeck industries were found along with a piece of a necked shouldered bowl of uncertain date (Fig. 7, no. 1). A single

fragment of *imbrex* roof tile and two fragments of iron nail were also found within the fill of gully 495.

Three pits were recorded in the south-west area of the site; pit 429 cut ditch 495, pit 462 cut ditch 462 and in turn was cut by pit 460. Pit 429 measured 1.6m by 1.1m and 0.24m deep and was filled with a mid grey brown silty clay containing pottery dated to the 3rd century AD and single fragment of *imbrex* roof tile. Pit 462 measured 1.9m by 1.2m and 0.45m deep and cut into its fill was pit 460 which measured 0.8m by 0.6m and 0.44m deep. Pit 460 was completely filled with large angular stones.

A north-west to south-east aligned boundary ditch (505, Fig. 6, section 5) was placed within Phase II based on the pottery found within its fill and the fact that it was cut by the Phase III ditch 299 (see below). Furthermore, the ring gullies of Phase I would have intersected with ditch 505 making it unlikely that they were contemporary. Ditch 505 measured 2m wide by 0.6m deep and was filled with a mid brown-grey clayey silt. A single piece of *tegula* roof tile, a fragment of nail and pottery dating from the late 2nd century AD to after AD 280 were found within the ditch fill.

To the north-west of ditch 505 was another north-west to south-east aligned boundary ditch (272), which measured 1.4m deep by 0.7m wide and was filled by a mid grey-brown silty clay. It was slightly off-set from ditch 505 some 2m to the west, which could mean that both these ditches drained into a north-east to south-west aligned ditch that was completely truncated by Phase III ditch 299 (see below). It was noted during excavation of the intersection between ditch 299 and 505 that the western edge of ditch 505 curved as if to turn to the west to join a contemporary north-east to south-west aligned ditch. This theory is further strengthened by the broad chronological range of pottery recovered from the fill of ditch 299 which were dated

from the late 2nd century AD to after AD 350. It is therefore possible that this assemblage may include residual pieces from an earlier ditch. This ditch may have extended the full length of ditch 299 to link with an earlier version of the trackway (see below). However the extent of this ditch and the presence of the trackway in this phase is a matter for conjecture.

A ditch (504) orientated approximately north-west to south-east parallel to ditches 272 and 505 may have formed the western limit of an enclosure containing the structural features of this phase in the south-western corner of the site. Equally ditch 504 may have been an internal division within a much larger enclosure. It measured 0.95m wide and 0.17m deep and was filled with a mid grey-brown silty clay that contained pottery possibly of a 3rd century AD date.

Two graves (203 and 211, Fig. 8) aligned roughly north-west to south-east were recorded in the area east of ditch 272 and north of Phase III ditch 299. The graves were heavily truncated, only surviving to a depth of 0.15-0.2m and contained virtually complete, though badly preserved, skeletal remains. Grave 203 measured 1.4m by 0.42m and contained the remains of a young adult about 25 years old and no artefacts. Grave 211 measured 1.8m by 0.35m, the skeleton of a middle aged adult and a single sherd of Romano-British pottery were recovered from within its fill. One additional grave-shaped feature (216) also aligned north-west to south-east, was identified within this area of the site. Feature 216 measured 1.9m by 0.5m and only survived to a depth of 0.05-0.1m. Although no human remains were encountered an amber bead (Fig. 9, no. 1) and eighteen sherds of pottery including a rim of a necked jar (Fig. 7, no. 2) of uncertain date were recovered within its fill. These artefacts may have been grave goods, thus supporting the suggestion that this feature is also a grave. An intermediary type of slag was also recovered from the fill of this feature; this form of industrial waste has so far

only been identified at West Moor Park, Armthorpe, near Doncaster (Cowgill 2001), a site only 40km to the south of Wheldrake. A charred twig found within fill 216 gave a radiocarbon date of 60-250 cal. AD (Wk14322, 1866±38 BP) at a probability of 95.4%. Also within this area of the site was an oval shaped pit (208), which measured 2.1m by 0.8m and 0.3m deep and contained leg bones of a cow which may have been articulated at the time of deposition. It has been assumed that these four features (203, 211, 216 and 208) are broadly contemporary due to their similar alignment and spacing. Based on the dating evidence within feature 216 the four features are thought to pre-date the Phase III gullies in the area (see below) and thus were dug during Phase II. However, this theory is not entirely foolproof and these features may belong to an early episode of Phase III.

It seems likely that there was an earlier version of the Phase III trackway (see below) contemporary with the features of this phase.

Phase III (late 3rd to 4th century AD)

The major north-east to south-west boundary ditch (299, Fig. 6, section 6) appears to have been cut during Phase III based on the pottery found within its fill. The boundary ditch was U-shaped in section and generally measured 2.4m wide by 0.6m deep with a fill of mid-brownish grey silty clay. The pottery found within its fill included a sherd from an Antonine samian jar, a fragment of Gaulish mortarium *c.* AD 170-200, material from the Crambeck and Holm upon Spalding Moor industries and fragments of Dalesware Jars (Fig. 7, no. 3) and Huntcliffe Jars. The latter pottery form gives a *terminus post quem* for the final infilling of the ditch of around AD 350. Also found within this ditch were a spindle whorl (Fig. 9, no. 2) made from the base of a pedestal bowl of late 3rd or 4th century AD date, two fragments of *tegula* roof tiles, four iron nails, a dog mandible, a fragment of white pipe-clay figurine (Fig. 9, no. 3) and a lead

artefact with an iron inset. The lead object was interpreted as a plug used to anchor an iron fitting, perhaps a hinge or wall hook, into a piece of masonry.

The layout of the settlement changed during Phase III. Although the main north-east to south-west aligned boundary (formed by ditch 299 in this phase) continued in use, ditch 505 was now fully silted up. A north-west to south-east aligned boundary ditch (402) which was cut at the same time as ditch 299 represented a movement (or enlargement) of the south-western enclosure mentioned in Phase II by some 15m to the north-east. This boundary ditch (402) that adjoined ditch 299 from the south measured 1.4m deep by 0.7m wide and was filled with a dark grey-brown clayey silt.

A north-west to south-east aligned trackway was recorded at the eastern limit of the settlement. There was no surviving surface metalling but the trackway was defined by two ditches (298 and 506) approximately 4m apart at the southern limit of excavation but diverging to 7m apart at the northern limit. The eastern ditch (506) was re-cut (ditch 508) but there was no such re-cut visible in the excavated sections of the western trackway ditch (298). Ditch 506 measured 2m wide 0.5m deep at the southern limit of excavation (Fig. 6, section 7) but was completely truncated by the re-cut 508 at the northern limit. Re-cut 508 measured 1.2m wide and 0.25m deep at the southern limit of excavation (Fig. 6, section 7) and narrowed to approximately 1m wide and 0.3m deep at the northern limit (Fig. 6, section 8). Ditch 298 measured 1.6m wide 0.5m deep (Fig. 6, section 9) but narrowed to approximately 1.4m wide and 0.5m deep at the northern limit of excavation (Fig. 6, section 10). Both trackway ditches were filled with a mid brown silty clay, the fill of the re-cut (508) was slightly lighter in colour and contained a pottery assemblage dated to the first half of the 4th century AD which included Crambeck greyware (Fig. 7, no. 4) and proto-Huncliffe jars (Fig. 7, no. 5). Fragments

of *tegula* roof tiles, an iron awl and eight fragmentary nails were also recovered from the fill of ditch re-cut 508. Within the fill of the eastern trackway ditch (506) a small amount of pottery was recovered including a Crambeck greyware wide-mouthed bowl, the presence of this form of pottery meant that the ditch was open until after AD 280. A corroded scale-tanged knife and an iron nail were also found within the fill of ditch 506. The western trackway ditch (298) contained a range of pottery including fragments of vessels from Crambeck dating to after *c.* AD 280, Holme-upon-Spalding-Moor and two sherds of imported amphorae of a mid or late 3rd century AD date. The range of pottery found within the fills of ditches 506 and 298 would suggest that they were still silting up sometime after AD 280 and pottery within the fill of the re-cut (508) suggested that it was silting up sometime during the first half of the 4th century AD. This would place the date for the re-cut of the eastern trackway ditch to somewhere between AD 280 and the AD 350.

The fact that the line of the boundary ditch 299 respected the trackway, inasmuch as it was perpendicular to and terminated within ditch 298, suggested that there may have been an earlier phase of the trackway ditch 298 contemporary with ditch 299. It is reasonable to suggest that a version of the trackway was contemporary with the original phase of settlement, hence it is included within Phase I. However, later re-cutting of the trackway ditches has destroyed any archaeological evidence of this earlier version. The excavated segments do prove that the trackway continued to be maintained after ditch 299 had fully silted up.

There were no settlement features to the east of the trackway indicating that this may have formed an eastern boundary to the settlement. However, a large irregular feature (237) was recorded on the eastern side of the trackway. This feature is interpreted as a tree bole and may have been open during Phase III based on the broad chronological range of pottery found

within its fill. The feature measured 2.3m by some 2m and was 0.43m deep, pottery dated from the 2nd to 4th century AD and an iron looped fitting, possibly from a bucket (Fig. 9, no. 4) were recovered from within its silty sand fill.

A north-east to south-west aligned ditch (425) located on the southern edge of the excavated area was placed within Phase III based of pottery found within it. The feature measured 1m wide and 0.19m deep and extended for 4.6m into the area of excavation where it terminated. It was filled with a mid brown-grey clayey silt and contained a number of large sub-rounded stones up to 0.3m in size. A fragment of a quern stone (Fig. 9, no. 5) was recovered from the fill of 425 along with pottery that suggested the ditch remained open after AD 360-70.

A north-east to south-west aligned gully (503) was the last in the sequence of the Phase II features within the south-west area of the site. It measured 0.5m wide by 0.36m deep (Fig. 6, sections 1 and 3) and contained pottery dated to the 4th century AD within its dark grey silty clay fill.

Within the northern enclosed area where the Phase II graves were recorded, several short gullies and a ditch (223, 507, 256, 260, 282 and 255) were excavated. These features were included within Phase III based on dating evidence recovered from within their fills. It is probable, based on the radiocarbon date obtained from feature 216 that these features post-date the graves and thus represents a shift in activity in this area. This statement is tentative as the dating evidence for the graves is somewhat limited. Gully 507 was orientated approximately east to west and was cut at right angles by gully 223. Gully 507 measured 0.69m wide by 0.29m deep and was filled with a red-brown silty clay; gully 223 measured up to 1.17m wide by 0.33m deep and was filled with an orange-brown silty clay. Pottery dated broadly to the 3rd and 4th centuries AD was recovered from both these gullies and the fill of

feature 507 contained two fragments of box flue tile. It is interesting that these two gullies mirror the pattern observed in the series of inter-cutting gullies in Phase II and therefore may represent an expansion (or a shift) of settlement activity into an area previously used for burial. Ditch 255 was located at the northern limit of this area of the site and measured 1m wide by 0.4m deep. Within the fills of this feature were a number of sub-angular stones, three fragments of iron nails, a piece of lead melt, three small fragments of daub, up to 30 fragments of animal bone and 87 sherds of pottery. The pottery within ditch 255 included a Dales-type jar (Fig. 7, no. 6) which indicated that the ditch was silting up sometime after AD 280, the other artefacts recovered may relate to the demolition of nearby structures. The short ditch 260 measured 0.95m wide and 0.2m deep and existed for a length of 5.5m. It was filled with a dark brown silty clay that contained a mixture of pottery including a small sherd of an Antonine samian bowl. Features 256 and 282 were heavily truncated and irregular in nature.

Unphased Romano-British features

A number of discrete features could not be phased on the basis of either stratigraphic or ceramic evidence. Romano-British pottery was recovered from the majority of these, and the nature of the remaining features would suggest they also belong to the Romano-British phases of activity as opposed to being medieval or later in date.

Within the south-western limit of the excavation, adjacent to the main area of activity were two discrete ditches (472 and 484) and a square posthole (218). Ditch 472 was traceable for a length of 4.5m and survived to a maximum dimension of 0.95m wide by 0.25m deep. Ditch 484 was traceable for a length of 3.7m and survived to a maximum width of 0.75m by 0.25m deep.

A number of discrete pits (206, 258, 292 and 294) were recorded within the northern area containing the Phase II graves. Pits 206 and 294 measured 1.75m by 0.5m by 0.15m deep and 2m by 0.6m by 0.2m deep respectively. Both features were aligned approximately north-east to south-west and were filled with a dark grey silty clay. Features 258 and 292 were heavily truncated and indistinct.

Phase IV (12th century AD)

The penultimate phase of activity on the site relates to medieval agricultural activity. It comprised of a series of plough furrows spaced approximately 5-7m apart running roughly north-west to south-east across the excavated area. The furrows were generally 0.8-1.2m wide and survived to a depth of 0.1-0.2m. Along with some residual sherds of Roman pottery a single sherd of 12th century AD pottery was recovered from within the furrows. However residual sherds of pottery of the same date were found within the fills of features 272 and 298 and with the notable absence of any other medieval pottery it is presumed that these features date to the 12th century AD.

Phase V (post-medieval)

The latest feature to be excavated was a north-west to south-east aligned boundary ditch (296) which measured 1.05m wide by 0.39m deep. The field boundary cut one of the plough furrows and contained post-medieval pottery and fragments of non-diagnostic ceramic building material.

THE POTTERY

by Peter Didsbury with contributions from Brenda Dickinson, Kay Hartley and David Williams

Introduction and methodology

A total of 934 sherds, weighing 15,685g and having an average sherd weight (hereafter ASW) of 16.8g, was recovered during the excavation. The overwhelming majority of this material was of Romano-British date (Table 1).

All the pottery was quantified by the two measures of sherd count and sherd weight, according to ware or fabric type within archaeological context. Identification of form types was made where possible. Data was recorded on an Access database which now forms part of the site archive. The present summary account of the site assemblage is based upon interrogation of this database.

Table 1. Chronological distribution of the site assemblage

<u>Period</u>	<u>% sherds</u> (n = 934)	<u>% weight</u> (n = 15685g)
Roman	96.3	97.3
Medieval	1.3	1.8
Post-medieval/modern	1.4	0.7
Unattributed	1.1	0.3
TOTALS	100.1	100.1

Dating summary

The chronological implications of individual pottery assemblages have informed the site narrative. It is appropriate here to rehearse here the key pieces of evidence.

Phase I

Ring ditch 509 yielded only a single small body sherd of greyware. The sherd is not chronologically diagnostic, but is not within the typical fabric range of the Holme-upon-Spalding-Moor greyware industry (hereafter HOSM), which appears to be the major provider of greywares to the site from about the mid 3rd century AD onwards. In the disturbed northern section of ring gully 443, two sherds of greyware from segment 427 included one in a gritty fabric within the range of those employed for 3rd or earlier 4th century AD Dales-type jars.

Phase II

Pottery was recovered from Phase II gullies 495, 499, 501 and 502. Assemblages were small and evidential value limited. In gully 495, possible HOSM and Crambeck products, suggest a later 3rd or 4th century AD date for segment 464. Segment 414 contains a necked shouldered bowl in a fine light-firing fabric, of uncertain date (Fig.7, no. 1). In gully 499, segment 449 yielded only a small amount of chronologically undiagnostic greyware. In gully 502, segment 441 yielded only a single body sherd of a Dressel 20 amphora. The form is widely distributed in Britain from the Conquest period up until the mid 3rd century AD. Segment 229 had a small assemblage in its uppermost fill, comprising chronologically undiagnostic greyware, calcareously tempered scrap, and a body sherd from an East Gaulish (Rheinzaubern) dish or bowl, dating from the late 2nd or first half of the 3rd century AD.

The assemblage from the fill of pit 460 comprised three undiagnostic scraps of grey and oxidised wares. Gully 499 which was cut by pit 460, yielded only scraps of undiagnostic greyware.

Pit 429 contained seven sherds of pottery, comprising greywares, calcareously tempered ware and colour-coated ware. A greyware dish with externally grooved rim is not closely chronologically diagnostic, the form being available from at least the earlier 2nd century AD. The colour-coated ware consists of two sherds from an indented scale beaker, form KF1 in the York series (Monaghan 1997, 893-894, 995), a type current in the period *c.* AD 225-280/300. It is possible that the pottery from this feature is all of 3rd century AD date.

In ditch 505, the earliest chronologically diagnostic material was the rim of an East Gaulish (Rheinabern) form 31R, dating to the late 2nd century AD or first half of the 3rd. The only other diagnostic material from the ditch was of a later 3rd or 4th century AD date. Greywares of HOSM type included a wide-mouthed bowl and the base of a pedestal bowl, cf. forms B2a and B3-5 in the HOSM form series (Creighton 1999, 144-157). The presence of a straight-sided flanged bowl and a wide-mouthed bowl in Crambeck greyware (Corder 1937, Types 1 and 4), show that the ditch remained open for the reception of rubbish after AD 280. Monaghan (1997, 903-905) suggests that, in York itself, Crambeck greyware was available from the beginning of its production period, becoming the dominant greyware by the middle of the 4th century AD. The aggregated pottery assemblage from these ditch segments is of insufficient size or quality to allow refinement of the *terminus post quem* afforded by this product.

Ditch 272, which was parallel but off-set to ditch 505, yielded a small assemblage of worn greywares and shell-tempered scrap. The latest material was the rim of a 12th century AD jar in a white-firing North Yorkshire fabric in the Pimply Ware tradition (compare segment 226, ditch 298, below).

No pottery was found in Grave 203, and two fragments of greyware from Grave 211 were of uncertain date. Grave 216 contained eighteen sherds of coarse greyware, including the rim of a necked jar (Fig. 7, no. 2). The form is not closely datable, but the gritty fabric is distinctive, and very similar to the kinds of fabrics used for some Dales-type jars produced in East Yorkshire in the 3rd and possibly earlier 4th century AD.

A coarse gritty greyware fabric of the type employed for Dales type jars occurred in ditch 504, and might indicate a 3rd or earlier 4th century AD *terminus post quem* for the fill of this feature.

Phase III

Pottery was recovered from the fills of several segments of boundary ditch 299. This extensive feature was cut in Phase III and may have completely removed any archaeological trace of an earlier Phase II ditch on the same alignment. Therefore the fill of ditch 299 contained material from Phases II and III. The earliest chronologically diagnostic material is a sherd from an Antonine samian jar, probably with *en barbotine* decoration and probably Central Gaulish (segment 263). Also relatively early (segment 470) is a wide-mouthed greyware bowl of a type present in the later 2nd to earlier 3rd century AD at Dragonby; (Gregory 1996, Fig. 20.15, no. 1067). Segment 407 eloquently illustrates the chronological range of material in these ditch segments. Early material is represented by a white pipe-clay figurine fragment which may be of Trajanic-Antonine date (Fig. 9, no. 3, see Walton, this report) and by the collar of a Central Gaulish form 45 mortarium, *c.* AD 170-200; later material included HOSM and Crambeck components, the latter including a 4th century AD Type 6 mortarium. Ditch 299 also contains Dalesware jars (ditch segments 263 and 400) and distinctively grooved sherds which are almost certainly from the upper bodies of Huntcliff jars (ditch segment 214). In the City of

York, Dalesware in 4th century AD deposits is thought to be almost entirely residual (Monaghan 1997, 898). This may not, however, be the case in the East Riding as a whole, and it may be safer in this case to continue to date these jars to the 3rd century AD or the first half of the 4th. Huntcliff is now thought to have been in production from the mid 350s AD (Evans 1996, 73), its presence here suggesting a *terminus post quem* of this date for the final filling of the ditch.

The eastern trackway ditch (506) yielded only small amounts of material. A Crambeck greyware wide-mouthed bowl shows the feature to have been open until after *c.* AD 280. Material from the re-cut of this ditch was small and undiagnostic, though pottery from watching brief equivalents to one of them contained a distinctively late assemblage comprising HOSM greyware, Crambeck greyware, a Dalesware jar and sherds from several 'proto-Huntcliff' jars comparable to those from the lower well deposits at Rudston Villa (Rigby 1980, Figs. 49-50). The balance of probability is that this assemblage dates from the first half of the 4th century AD.

Pottery was also recovered from the fills of ditch 298 on the west of the trackway. The assemblage from segment 226 included a Dressel 20 amphora sherd, but the latest material present was a 12th century AD gritty ware jar (compare ditch 272, above). Segment 468 contained a small assemblage consisting largely of HOSM greyware, including pedestal bowls and straight-sided flanged bowls in the B3-4 and B8-11 range (Creighton 1999, 144-157). Segment 492 yielded a small assemblage including several sherds from a Crambeck greyware straight-sided flanged bowl (Corder 1937 Type 1), and a Dressel 20 body sherd. The fabric of the latter is consistent with a mid 3rd century AD or later date (see further Williams, below).

Three of the five pottery assemblages from the trackway ditches can be shown by the presence of Crambeck greyware to have been open after *c.* AD 280. At least one of them was probably open in the first half of the 4th century AD. The fill of ditch 425 contained an assemblage, in which the most diagnostic elements were: the rim of a Dalesware jar; a grooved sherd which is almost certainly from the upper body of a Huntcliff jar; and a whiteware rim fragment probably from a Crambeck hemispherical flanged bowl (Corder 1937, Type 5b). The Crambeck vessel would suggest that the ditch remained open after *c.* AD 360-70. Greywares included a hemispherical flanged bowl, and a wide-mouthed bowl, cf. form BT in the York series (Monaghan 1997, 1007). The York form-code is reserved for later 3rd or 4th century AD "Throlam-type" vessels, though the fabric is probably too coarse to admit of a HOSM provenance in this particular case. There is also a body sherd from an East Gaulish (Rheinzaubern) dish of the late 2nd or first half of the 3rd century AD; a body sherd of Black-Burnished Ware; scraps of oxidised ware; and a 3rd or 4th century AD Nene Valley colour-coated beaker base.

In ditch 503, segment 281, the only diagnostic material consisted of rim sherds from three different Huntcliff jars, suggesting that the ditch was open after *c.* AD 355. The form was in use in the region into the early 5th century AD.

Pottery was recovered from gullies 223, 507, 260, 282 and ditch 255. In gully 223, a very small assemblage from segment 265, included a HOSM-type rim sherd tentatively regarded as coming from a pedestal bowl, form B5 in the Holme form series. In gully 260, pottery came from segments 278 and 288. In segment 278, the latest pottery was two small sherds of seventeenth- or eighteenth-century AD Glazed Red Earthenware. The Roman pottery from the feature consisted of a fragment of 3rd or 4th century AD Nene Valley colour-coated ware,

greyware sherds which included a dish which could be of Severan date, and body sherds in fabrics within the range of the HOSM industry. The only diagnostic material in 288 was a scrap sherd from a Central Gaulish samian dish or bowl of Antonine date. Pottery was retrieved from three different segments of gully 507 (*viz.* 224, 261 and 276). The largest group (sixty-six sherds) came from segment 224, which yielded an assemblage consisting mainly of HOSM greywares, with a small number of coarse greyware body sherds. The HOSM component included rims of jar form J1a and bases from pedestal bowls in the B3-5 range. The jar was made at all three excavated HOSM production centres, and a later 3rd or 4th century AD date must be proposed for this assemblage. Segments 261 and 276 contained small amounts of similar material.

Gully 282 contained a small assemblage of worn greyware and colour-coated scrap. The latter derives from an indented beaker in an unidentified fabric. Formal characteristics suggest a 3rd century AD date for this vessel.

Ditch 255 yielded assemblages from both its 'general' fill (254) and upper fill (253). A fairly large assemblage from the general fill (fifty-eight sherds) contained large sherds from Dalesware and Dales type jars, scrap sherds of Nene Valley colour-coated beakers and oxidised ware, and large sherds from several HOSM vessels, including rims of forms B2e, B3a, B3-5, J1a/i, and F1c. A date of after AD 280 for the infilling of the ditch is provided by the rim of a Crambeck greyware simple-rimmed dish (Corder 1937, Type 2). The remaining elements of the assemblage would be entirely acceptable as contemporary, or up to the middle of the 4th century AD. The upper fill of the ditch had a small, worn assemblage of similar date. Residual material is represented by a rim sherd possibly from an Antonine carinated jar.

Phases IV and V

Plough furrow 476 contained three small fragments of Roman greyware. Furrows 496, 482 and 439 contained small amounts of worn Roman and unattributed material. In the case of furrow 439, an unattributed gritty ware is probably medieval, and of a twelfth-century AD date. Field boundary 296 contained a single sherd of Late Blackware, dating between the late 18th and early 20th century AD.

The pottery types

White and oxidised wares (Fig. 7, no. 1)

Both categories were sparsely represented. White wares amounted to eight sherds, with an ASW of 8.5g. These included a rim fragment from a Crambeck parchment ware Type 5b (Corder 1937). A necked bowl in a fine pinkish-cream fabric (Fig. 7, no. 1) has not been attributed to a production centre and is difficult to date. The form is essentially Belgic in origin but the basic type continued being produced in various fineware fabrics into the later 3rd and 4th centuries AD, e.g. at Oxford (cf. Young 1977, Types C.75-C.80).

Oxidised wares totalled eighteen sherds with an ASW of 7.7g. All were body fragments and there is little of evidential value. A small number of sherds may be from white slipped flagons.

Greywares (Fig. 7, nos. 2, 4 and 6)

With the exception of small amounts of Crambeck and Black-Burnished wares (see below), none of the greywares could be definitively attributed to named types. Having said this, it is clear that the great majority of the 'common' greywares are in the kinds of fabric which characterise the later 3rd and 4th century AD East Yorkshire industries, and that the Holme-upon-Spalding-Moor kilns were probably the major supplier within this component. Common

greywares amounted to 487 sherds, with an ASW of 19.3g. The following HOSM forms were recognised (types as in Creighton 1999): jar J1a/i (x 4); wide-mouthed bowl B1a/b/e (x 3); wide-mouthed bowl B2a/e (x 4); pedestal bowls in the B3-5 range (x 10, including examples of B3, B3a, B3b, B4, B5a); straight-sided flanged bowls D8-11 (numerous); dish D6 (x 1); and flagon F1c (x 1).

A smaller but distinctive component within the greywares comprises material in a number of distinctly coarse sandy or gritty fabrics. These amount to forty-five sherds, with an ASW of 10.4g. The only form types noted were the Dales-type jar (Fig. 7, no. 6) and an undated necked jar (Fig. 7, no. 2). It may be noted that the Dales-type jar was produced in the HOSM industry (type J2) in similar gritty fabrics. Fabric B3 at Bursea, used for this form, seems also to be known from late 2nd century AD contexts in East Yorkshire (Creighton 1999, 156).

Crambeck greyware amounted to twenty-four sherds, with an ASW of 24.0g. They derived from an estimated thirteen vessels, as follows (types as Corder 1937): Type 1 straight-sided flanged bowls (x 4); Type 2 straight-sided dish (x 1); Type 4 wide-mouthed bowls (x 3); Type 1 dish or Type 5a hemispherical flanged bowl (x 1). A slightly flanged rim fragment (not illustrated) may derive either from a small Type 1 open form, or from a flagon/jug. A further three vessels were represented only by body fragments.

Black-burnished ware (BB1) was represented by a single sherd (13g) from the basal angle of an open form.

Shell-tempered wares (Fig. 7, no. 3)

There were sixty-three sherds, with an ASW of 13.4g. The only form recognised was the Dalesware jar, an estimated minimum of eight vessels being represented by rim sherds.

Calcareously tempered wares (Fig. 7, no. 5)

These wares amounted to 173 sherds, with an ASW of 13.2g. A handmade dish with outbent rim from gully 502 (not illustrated) may be compared to Antonine forms in the Black-Burnished series, *e.g.* Gillam (1970) 308, apart from this, the only forms recognised were 'proto-Huntcliff' and Huntcliff jars and associated types.

Amphorae (none illustrated)

There were five amphora body sherds, probably from four different vessels. ASW is 94.2g. The material was examined by David Williams, who reported as follows.

[All belong] ...to the globular-shaped Dressel 20 amphora form (Peacock and Williams 1986, Class 25). This type carried olive-oil from the valley of the River Guadalquivir and its tributaries between Seville and Cordoba in the Roman southern Spanish province of Baetica, and was the most common amphora form imported into Roman Britain (Williams and Peacock 1983). The globular Dressel 20 form was made over a long period, beginning in the reign of Augustus and lasting until shortly after the middle of the 3rd century AD. The latest *titulus pictus* found on a Dressel 20 vessel is from Rome and dated to AD 255, during the reign of Gallienus (Rodriguez-Almeida 1989). Baetican olive-oil was still exported after this date, though on a reduced scale and in a smaller, thinner-walled version of Dressel 20 known as Dressel 23, that continued to be made until the late 5th/early 6th century AD (Carreras and Williams 2003). As the... [sherds under discussion are] ...pieces of non-diagnostic bodysherd, it is not possible to place them accurately within this period, though a consideration of the fabric of [the sherd from fill] 493 [of

ditch 298] suggests that it may belong to the later part of the Dressel 20/23 time-frame.

Colour-coated wares (none illustrated)

There were twenty-five colour-coated fragments, with an ASW of 2.9g. They derive from a maximum of nine vessels, all of which are beakers and at least six of which are probable Nene Valley products. The only forms recognised are 3rd and/or 4th century AD indented beakers, one of which (alluded to above) is scale decorated.

Mortaria (none illustrated)

There were seven sherds, from five different mortaria. ASW was 37.4g. The material was examined by Kay Hartley, whose findings are summarised here. A complete report is contained in the archive. Four vessels were from the Mancetter-Hartshill potteries, Warwickshire and unfortunately derive from topsoil and machined layers 200 and 201. They comprise a concave hammerhead type, not earlier than the 3rd century AD; two flanged types, one of which has an optimum date of *c.* AD 190-250; and a body sherd. Mrs Hartley considers that none of this material is likely to be earlier than the 3rd century AD. A single Crambeck vessel, from ditch 299, is a Type 6 with two grooves (Corder in Wilson 1989, 31, Fig. 3), of 4th century AD date.

Samian (none illustrated)

There were eleven samian sherds, with an ASW of 10.4g. These came from an estimated seven vessels. Six of these were kindly identified by Brenda Dickinson. From Central Gaul came a dish or bowl sherd and a jar sherd with probable *en barbotine* decoration (both Antonine), and a sherd from a form 45, *c.* AD 170-200. From East Gaul (Rheinzabern) came sherds from a

31R, from a dish, and a dish or bowl. All are from the late 2nd or early 3rd century AD. A further very worn vessel, identified as samian too late for specialist analysis, is tentatively identified as a Central Gaulish form 31R, *c.* AD 160-200.

Conclusions

The range of pottery in the Roman site assemblage has a probable date-range from at least the earlier 2nd century AD through to the late 4th or earlier 5th. Much of the early material is residual in later contexts. The earliest pottery from the site probably dates to the 2nd century AD and is reflected in small amounts of Central Gaulish Antonine samian and in residual fragments of carinated greyware jars of similar date. The site assemblage is, however, overwhelmingly of later 3rd and 4th century AD date, the major supplier to the site in this period appearing to be the Holme-upon-Spalding-Moor greyware industries.

The ceramic evidence as a whole suggests that, despite its proximity to York, the site was an unpretentious rural settlement. There is a dearth of finewares, mortaria, and other types indicative of investment in a fully Romanised life-style, such types accounting for a maximum of approximately 8.4% (by sherd count) of the entire Roman assemblage.

Catalogue of illustrated vessels

Illus. no.

1. Necked bowl. Wheelthrown. Fine pinkish-yellow fabric with very sparse small red inclusions and mica flecks. From fill 415 of segment 414 of ditch 495.
2. Jar. Wheel-thrown greyware. Light grey fabric with darker surfaces. Abundant ill-sorted angular to sub-rounded quartz grains *c.* 0.5-3.0mm, extrusive on both surfaces.

The rim plane is slightly distorted. From fill 217 of grave 216.

3. Dalesware jar. Wheel-thrown rim, handmade for lowest *c.* 15mm of extant profile. Grey core, very dark grey surfaces. Abundant fine shell to *c.* 3mm. Carbonised deposits on flat top of rim. From fill 401 of segment 400 of ditch 299.
4. Crambeck greyware. Rim of Type 2 dish or Type 5A hemispherical flanged bowl (Corder 1937). The vessel has been perforated below the rim after firing. A V-shaped horizontal channel extends laterally from the perforation on the interior. From primary fill 122 of segment 120 of ditch 508.
5. Proto-Huntcliff jar. Wheel-finished rim. Very dark grey fabric with light grey core and pinkish margins in places. Cf. Rigby 1980, Fig. 49, no. 247 (Rudston Villa, lower well deposit). From primary fill 122 of segment 120 of ditch 508.
6. Dales-type jar. Wheel-thrown throughout extant profile. Hard brownish fabric with dark grey core and light red margins. Abundant ill-sorted angular quartz to *c.* 2mm. Extensive carbonised deposits on exterior. From fill 254 of ditch 255.

THE CERAMIC BUILDING MATERIALS

by J Tibbles

Introduction and methodology

An assemblage of twenty-eight fragments of ceramic building material, retrieved from fifteen contexts, weighing 901g was submitted for examination. Romano-British and post-Romano-British material was identified. Only the Romano-British material is discussed here, the other

material is discussed elsewhere (NAA 2003a). All the fragments were quantified by count and weight and were visibly examined using a x15 magnification lens. Information regarding the dimensions, shape and fabric was recorded and catalogued accordingly and a Munsell colour code has been incorporated where appropriate. The presence of the original surfaces was also taken into consideration to aid identification. It should be noted that the diversity of size and colour within the brick and tile caused during the manufacturing process must be taken into consideration when comparing examples within collected assemblages and typologies. The varying sizes and colours can be attributed to that variation in the clays used, shrinkage during drying, firing within the kiln or clamp and the location of the brick/tile within the kiln.

The dating of brick and tile can be highly contentious due to its re-usable nature and therefore the date range given is that of known dates where material has been recorded.

The Romano-British material

An assemblage of seventeen fragments of Romano-British ceramic building material with a combined weight of 840g was retrieved from thirteen contexts. The assemblage is comprised of Romano-British fabrics from which three building material types could tentatively be identified. The remainder was unidentifiable by form.

Tegulae: *Tegulae* are the fundamental building material in the construction of the roof. They have particular features in the form of flanges on one face and upper and lower cut-aways that were required to allow the tile to slot into each other.

Imbrices: Used in conjunction with *tegulae*, *imbrices* overlapped the flanges of the *tegulae* to produce a solid roof.

Box flue-tile (*Tubulus*): These square pipes were set within the walls as part of the hypocaust heating system of Roman buildings. They have characteristic combing or scoring of two surfaces as a keying element for plaster or mortar. They also often have a lateral 'cut-out' vent in the sides. This allowed the warm air to circulate.

The Romano-British assemblage discussion

Due to the relatively small size, the potential of the assemblage alone is limited. Ceramic building material was considered to be a symbol of affluence or high status and a valued re-useable commodity. Its presence among the finds assemblage reflects the possibility of a high status building within, or close to, the site. The general appearance of the assemblage, although abraded, appears to represent a range of ceramic building material that would have been associated with the various aspects of Romano-British construction. There is also a paucity of evidence of mortar adhesions to ascertain use prior to deposition. Therefore, despite being within an area of Romano-British activity, it would be conjecture to suggest the presence of a structure within the vicinity that was utilising ceramic building material.

Due to the dearth of the presence of specific ceramic building materials, i.e. *bessalis*, *pedalis* etc, it is likely that the assemblage represents residual elements of Romano-British activity and suggests casual deposition. Nevertheless, this information is significant as it can add to the corpus of evidence of activity during this period for the area.

RECORDED FINDS

by Jon Watt

Introduction

The excavation produced sixty-two recorded finds (including a quern fragment and pipe-clay figurine see below); the majority were iron and difficult to date by form or function. However, with the exception of fourteen objects, either of recent manufacture (e.g. wire nails, a Dutch hoe blade, aluminium sheeting, etc.) or from medieval or later contexts, most were stratified within Roman features.

Catalogue

The catalogue of recorded finds recovered during the excavation at Millfield Farm is summarised in the post-excavation assessment report (NAA 2003a) and includes an amber bead, a ceramic spindle whorl, a looped fitting, an iron awl, a scale-tanged knife and numerous fragments of nails.

Discussion

A looped fitting (Fig. 9, no. 4), perhaps for the attachment of a handle to a vessel such as a bucket, came from the fill of a tree bole (237). Evidence of industrial activity is provided by two tool fragments, a small tanged punch or woodworking awl and part of a scale tanged knife. A third object, two iron spikes partially welded together, was perhaps a part made item or metalworking debris. All three came from the trackway ditches. The most common finds were fragments from handmade iron nails. Such nails were manufactured from the Roman

period up to the early 20th century AD, however the majority came from Roman features. All were of similar construction, with oval or rectangular heads and rectangular sectioned shanks, corresponding to Manning's (1985) type 1B, general purpose carpentry nails 40-240mm in length. Three much smaller nails with oval (domed) heads and short, broken, shanks are hobnails and probably represent casual losses from the soles of shoes (*calceus*) or sandals (*solea*) (see Charlesworth and Thornton 1973), the head of one example has been worn almost flat through use. A number of iron plate fragments, strips, one of copper alloy, and pieces of lead melt were also recovered. A roughly conical lump of lead with an iron insert, from the fill of boundary ditch (299), is interpreted as a plug used to anchor an iron fitting, perhaps a hinge or wall hook, into a piece of masonry.

Part of a spindle whorl (Fig. 9, no. 2) with an hourglass-shaped perforation chipped from the base of a Romano-British pedestal-based bowl was found within the fill of segment 400 of the main enclosure ditch (299). It was 44mm in diameter, 14mm thick weighed 35.6g and had a moment of inertia of 0.0008615 Kgm². The fabric is within the range of those used by the Holme-upon-Spalding-Moor industry in the later 3rd and 4th century AD, forms B3-B5 in the Holme type-series (Creighton 1999, Fig. 5.35). By comparison with medieval whorls from Beverley it is of a 'large' size and suitable for spinning a relatively coarse thread (Robinson 1992).

A large annular amber bead, (Fig. 9, no. 1), was recovered from the fill of probable grave cut (216). An unusual and exotic material, the principal source of amber is the Baltic, well beyond the frontiers of the Roman Empire, though it is occasionally found in glacial deposits or washed up on beaches along the East Coast (Egan and Pritchard 1991). Widely traded since the Neolithic it was also in great demand during the Roman period (Grimaldi 1996). An

isolated find, the bead was perhaps worn by itself like a ‘pendant’, although visually attractive, amber has also long been attributed magical and protective powers, a fact which probably influenced its use for beads and other items of personal jewellery (Foreman and Tweddle 1992).

THE HUMAN REMAINS

by Joanna Higgins

Introduction

During archaeological excavations near Millfield Farm the human skeletal remains of two individuals were recovered. The inhumations were interred separately, orientated roughly north-west to south-east and were not in close proximity. A third grave was excavated and was found to contain grave goods but no human remains.

Preservation and completeness

Skeleton 204 was well preserved but less than 40% complete, and extremely fragmentary. The surviving bone consisted primarily of long bone and skull fragments, and a partially complete dentition. Skeleton 212 was also less than 40% complete and extremely fragmentary. The surviving bone was in very poor condition and also consisted primarily of skull and long bone fragments.

Estimation of age at death

Skeleton 204 was estimated to be a young adult, aged about 25 years at the time of death.

Skeleton 212 was estimated to be that of a middle aged adult, of between 42-52 years at the time of death.

Health and disease

The dentition of skeleton 204 only was suitable for pathological assessment, although it was incomplete. This individual had no evidence of caries or dental enamel hypoplasia (0/13), or of dental abscess or ante-mortem tooth loss (0/12). However, slight calculus deposits were present on most teeth (11/13). There was some variation in premolar form in the dentition of skeleton 204. In the maxilla, the right first premolar had an accessory cusplet. In the mandible, the right second premolar was a three cusped variant. In addition, two small enamel pearls were present on the mesial and distal aspects of the root of the left maxillary third molar.

Discussion

The fragmentary and incomplete condition of skeleton 204 and skeleton 212 has limited the level of information each can provide about these individuals in life. The presence of slight calculus and the absence of other dental pathologies in skeleton 204 can be considered normal for a young adult from an archaeological population. The premolar variants in skeleton 204 are very common (Hillson 1996), and are most likely genetically linked. However, in isolated individuals they are of limited value as markers of populational or familial relationships. The occurrence of enamel pearls on the exterior surface (extradental) of a tooth root (radicular) is a fairly common developmental anomaly thought to occur as a result of abnormalities in embryological development, although the precise cause is unclear (Ortner 2003). The anomaly

is asymptomatic, and is most frequently found in the maxillary molars (Pindborg 1970), as was the case here.

SLAG

by Jane Cowgill

Introduction

A total of 683g (nine pieces) of slag and associated materials were submitted for recording. The slag was washed, dried and then identified solely on morphological grounds by visual examination, sometimes with the aid of a x10 binocular microscope. It was recorded on pro forma recording sheets.

Discussion

The small assemblage from the settlement site at Millfield Farm is diverse in character, and includes evidence for both iron smelting and smithing. The slag is not concentrated in any particular area and may therefore be the by-products of several different episodes of iron production and smithing at the site. There is only one definite plano-convex slag accumulation, which is from the fill of ditch segment 409 (of ditch 502), on the western side of the site. Charcoal fuel was used when this piece was formed, including large pieces measuring 60 x 55 x 30mm. The smithing slag which had coal inclusions (from the fuel) from feature 220 (context 221) may not be Romano-British in date.

The most interesting piece from this site is the smelting slag from the fill of grave 216 (context 217). The slag is neither typical of tap slags or block slags and forms part of an intermediary

group that has so far only been identified at West Moor Park, Armthorpe, near Doncaster (Cowgill 2001), a site only some 42km to the south of Wheldrake.

At Armthorpe a sequence of enclosure complexes were found but all the ditches were very truncated with often little more than 0.2m of the basal fills surviving. The dating evidence was very limited and mainly in the form of Romano-British pottery dating to between the 2nd and 4th centuries. There was also some Iron Age occupation at Armthorpe and it has been suggested that this slag is more likely to be Iron Age in date or very early/transitional Romano-British.

The tap slags found, like the piece from Wheldrake, are generally large and most seem to be composed of a number of large dense flows, much larger than those usually encountered. The size of the flows may indicate that the slag was quite viscous when tapped which could be a reflection of its temperature or composition. Some of the tap has vertical sides moulded by the tapping channel or pit. Another unusual feature is the fact that in many instances it is not possible to distinguish the top of the tap from the base, the orientation of tapped slags is usually obvious. This may be partly explained by the fact that some pieces have large charcoal imprints on the upper and/or base (resulting in some very irregular bases) and occasionally on all sides giving the impression that the slag was tapped into a charcoal heap. The Wheldrake slag has been moulded by massive pieces of charcoal, one measuring 60 x 35 x 18+mm. It is an elongated 'flow' (130 x 65 x 60mm) and once again its orientation is unclear. It is in a very fresh condition which suggests that it is in a primary deposit and has not suffered from weathering on a ground surface or re-deposition. This is an important piece and, when considered alongside the assemblage from West Moor Park, may hint at a regional form of iron smelting.

FRAGMENT OF PIPE-CLAY FIGURINE

by Philippa Walton

A fragment of a white pipe-clay figurine was recovered from the site (Fig. 9, no. 3) only the face of the figurine survives. Although quite worn, the figurine is obviously that of a woman. Her hair appears to be piled up on top of her head in an elaborate hairstyle of a type popular in the Flavian period. The pipe-clay continues to extend beyond her hairstyle, perhaps suggesting that the figure was originally depicted against some sort of background, perhaps a high backed chair.

Identification of the female depicted must remain tentative due to the fragmentary nature and wear of the surviving fragment. It is possible that the figurine was intended to represent a deified Flavian Empress, indicated by the elaborate hairstyle, which is stylistically dissimilar to those of Venus pipe-clay figurines.

Pipe-clay figurines manufactured from white clay in moulds, were produced in Central Gaul during the Trajanic-Antonine period and are found in mainly 2nd century AD contexts in Britain (Jenkins 1986). Venus figurines appear to be the most common, although Dea Nutrix and Empress types are also known. Although their distribution has traditionally been considered to be biased towards south-east England (Jenkins 1958), discoveries from throughout the north from sites including Brompton-on-Swale, near Catterick (NAA 2003b), South Shields (Allason-Jones and Milet 1984, 341, no. 9.63), Chesterholm (Green 1978, pl. 41) and Carlisle (Green 1978, pl. 36, 37 and 38) is forcing a reassessment of this view.

QUERN FRAGMENT

by Elizabeth Wright

A radial fragment from a rotary quern (Fig. 9, no. 5) of fine to medium grained well-sorted micaceous sandstone with fine specks of iron minerals (either goethite or limonite) was recovered from within the fill of shallow ditch 425 (Phase III). The original colour is difficult to distinguish as the fragment has suffered heating during some secondary use, which has reddened the fabric. The material is probably a coal measures sandstone from Yorkshire.

The fragment which measures 165 x 153 x 40mm, shows evidence of wear on both flat faces and some shaping of the curved edge. It is 40mm thick at the edge, narrowing to 27mm where broken towards the centre, probably at the central eye, which always creates a weak spot. Although the quern fragment lacks distinctive features, being very plain and undecorated, the size and shaping suggest it is part of an upper stone of a hand operated quern of Roman date. The fragment is quite thin, which, while it might result from very heavy wear, could also suggest that it was originally of a thinner, lighter design. This would accord well with the low angle of inclination of the grinding face. The grinding face has been dressed with a fine pattern of peck dressing which had not worn totally smooth since last being re-dressed before breakage. The dorsal face shows much undulating smoothing that is unlikely to have resulted from rotary use. This suggests some secondary use perhaps after the quern was broken, but certainly before the fragment was as small as it is now as the polish does not extend over the broken edges. During the Roman period such secondary uses are common and may have encompassed use as the lower stone of a saddle quern, as a whetstone or even use in an area of paving or as a threshold stone. The diameter of the complete stone, estimated from its remaining curve is about 380mm.

From the size, manufacture and signs of secondary use, this quern is almost certainly of Roman date. The thinness and plainness of the design, allied with the low inclination of the grinding surface might possibly suggest a date later in the Roman period, rather than earlier, perhaps tying in more with a 3rd to 4th century AD date than one in the 2nd century AD. The small size suggests a hand quern rather than a millstone.

BIOLOGICAL REMAINS

by Alan Hall, Deborah Jaques and John Carrott

Introduction

Sixteen sediment samples (of twenty-seven collected), two fragments of hand-collected shell, and one box of hand-collected bone, recovered from the excavation were examined during an evaluation of their bioarchaeological potential (Hall *et al* 2003).

Discussion

Soil Samples

Fourteen of the samples were processed for the recovery of plant and invertebrate macrofossils. All of the resulting washovers consisted of (at most) a few millilitres of material, much of it small clasts of concreted sediment (perhaps pan) of no more than about 1mm in size. With this were small amounts of charcoal, coal, and sometimes traces of cinder-like material, and a very few charred plant remains (thought mostly to be ancient). The latter included charred ?heather root/twig and other charred root/rhizome fragments which may represent remains from the burning of peat and/or turves. This kind of material is being recorded from many late prehistoric and Romano-British sites in southern (and especially

south-eastern) Vale of York (Hall *et al* 2003). Uncharred seeds and roots, recovered from most samples, were clearly modern. No invertebrate remains were recovered from the samples. The residues were all mostly of stones and sand and, with the exception of occasional fragments of unidentified bone, were barren of biological remains.

Shell

The two poorly preserved fragments of shell, identified as possibly oyster (cf. *Ostrea edulis* L.), were from a topsoil layer and of no interpretative value.

Animal Bone

The vertebrate assemblage totalled 717 fragments, representing forty deposits, most of which were assigned to the Romano-British phases. Ditch fills produced the largest concentrations of bone but, generally, the material was too poorly preserved and fragmented to be of much interpretative value. The more poorly preserved fragments had very degraded surfaces, which was primarily a consequence of chemical erosion while in the ground. Fragmentation was extensive and largely the result of fresh breakage damage. Many of the bones recovered could only be identified to categories such as large or medium-sized mammal, although those which could be more closely identified included cattle, horse, caprovid, pig and dog. The most numerous elements identified for both cattle and caprovids were isolated teeth and other elements of denser bone, which are more robust and generally survive better. Skeletal element representation, therefore, reflects the preservational conditions rather than any particular disposal patterns, with the possible exception of fifty-one poorly preserved fragments of bone recovered from a truncated feature (208). The remains were identified as cattle, and probably represented the bones of one front leg originally deposited in articulation. This, apparently deliberate, placement of articulated limbs within pits or ditches is a common feature of Iron

Age and Romano-British sites. Their location, and association with other artefacts, has often resulted in their interpretation as ritual or special deposits (Grant 1984; 2002). The remains recovered here may represent such a deposit, but, bearing in mind the condition of the fragments and the evidence of disturbance which may have resulted in the destruction of other bones, this interpretation can only be tentative.

RADIOCARBON ANALYSIS

by A G Hogg

A single charred twig fragment from the fill of possible grave 216 was submitted to the University of Waikato Radiocarbon Dating Laboratory for radiocarbon assay. The age of the sample was measured as 60-250 cal. AD (Wk14322, 1866±38 BP) at a probability of 95.4%. The results are shown in Table 2.

DISCUSSION

The excavated features were located on a low ridge some 16m OD in height orientated north-east to south-west. To the north-west and south-east of the ridge the land was generally flat at approximately 7m OD. Topographically the features occupied a prime location for settlement as the lower surrounding land would have been prone to flooding (Ramm 1978).

The general layout of the features suggested a small settlement existing alongside a trackway on high ground that dominated a largely flat landscape. The earliest features excavated were two inter-cut ring gullies, these were the only features confidently assigned to Phase I. The Phase II and III boundary ditches were roughly aligned or perpendicular to the ridge. These

ditches formed a number of enclosures and within the south-western corner of the excavation evidence of short internal fences or structures were recorded. The settlement during Phase II included at least two enclosures and a small cemetery, presumably on the edge of the area of occupation. This area may have been built on during Phase III as the settlement expanded adjacent to or around the trackway. The full extent of the Romano-British phases of settlement is still unknown as only limited excavation within the pipeline corridor was undertaken. The features and artefact concentrations suggest that the main focus of activity was located on the summit of the ridge, immediately to the south-east of the excavation.

The Phase I ring gullies represent two phases of roundhouse construction that were abandoned by Phase II. The short linear gullies that replaced them may represent replacement of Iron Age style roundhouses with rectangular timber structures. Evidence that a stone walled Roman style building was built within the vicinity of the excavated area existed in the form of *tegulae* and *imbrex* roof tiles, box flue-tiles, concentrations of stone within a number of features and a lead wall plug.

The replacement of roundhouses with rectangular buildings at Millfield Farm may be paralleled at the similar site of Stockton Moor West (below) where the quantity of fired clay tile and limestone tile fragments recovered also suggested the presence of a well constructed building in the vicinity. A similar pattern was recorded at site 718 close to Sike Spa, Crayke, near Easingwold during construction of the Teesside to Saltend ethylene pipeline. A possible late Iron Age roundhouse represented by a ring gully that was replaced in the 2nd to 3rd century AD by a rectangular stone building (Wood forthcoming), was recorded during an archaeological investigation of the site.

Reconstruction of the economy of the settlement is problematic as only limited evidence was present. It is clear however that metal-working occurred on or near the site as both smelting and smithing slags were found. Evidence of the cultivation of cereals and animal husbandry was also recorded suggesting that the inhabitants of the settlement practiced a mixed farming regime. However, no specific features were identified as being associated with these activities.

The Phase I ring gullies remain undated but were abandoned some time before the late 3rd century and may have been in use during the Iron Age. The second phase of activity was abandoned by the late 3rd century AD. Phase III activity was dated to between the late 3rd century to the late 4th century AD.

The pottery assemblage recovered contained mainly local wares from the nearby kilns at Holme-upon-Spalding-Moor and Crambeck with very few imported forms. As noted above the excavation was on the edge of the settlement hence the pottery assemblage may not give an accurate picture of the status of the settlement, however it is possible that due to the lack of 'high status' forms recovered during the excavation Millfield Farm may represent a 'non-villa' settlement, the most common form of rural settlement in Roman Britain (Hingley 1989).

The Phase II burials were widely spaced and few in number suggesting that this was not a formal cemetery but a less organised form of burial common at Romano-British sites such as Owslebury in Hampshire (Collis 1977) and recent excavations at Stamford Bridge some 11km north-east of York (NAA 2005). The fact that the area of burial may have been built on during Phase III adds weight to this hypothesis as it was a common Roman practice to avoid building on cemeteries (RCHM 1962; Wachter 1974; 1978). Moreover, human burials legally had to be located outwith the boundaries of settlement (Wachter 1978), so the discovery of the cemetery

at Millfield Farm would tend to confirm the suggestion that the site is located on the periphery of a settlement.

The settlement was located adjacent to a north-west to south-east orientated trackway, which appears to be aligned towards York. The settlement as a whole seems to have expanded during Phase III and the enclosure in the south-western corner of the excavation may have shifted 15m to the north-east. The trackway at Millfield Farm was only 7m wide at most which is small when compared with known Roman roads (RCHM 1962; Rowland 1974; Hunter-Mann 1997). It is therefore more reasonable to think of the trackway as no more than a small thoroughfare, part of a network of such sinuous roadways similar to those visible within the cropmarks around Wheldrake Wood (English Heritage 1998).

The Millfield Farm trackway does not line up with any known Roman road, there is however a road that is thought to have headed south-east from Roman York possibly to the area around the Holme-upon-Spalding-Moor pottery industries (road 1; RCHM 1962, Ramm 1980). The line of this road is preserved in a parish boundary and if this line were extended, it would pass some 1.6km west the site. It is interesting that a large proportion of the pottery found at Millfield Farm came from the Holme-upon-Spalding-Moor industries some 30km away and none has been identified as originating from the York based industries a mere 10km from the site. This pattern could be a product of excavation bias, an economical preference or personal taste for one form of pottery over another. However another theory is that the occupants of the settlement were largely receiving goods directly from the Holme-upon-Spalding-Moor pottery industries and not via the York markets.

The hinterland of York suffers from a dearth of archaeological evidence for rural settlement activity during the Romano-British period (Addyman 1984; Jones 1984, 1988). Even more

recently, only a few archaeological sites (see below) have been discovered within 10km of the city that relate to settlement outside of Roman York. Aerial photographs of the area give a patchy view of mostly undated field systems and possible settlements (Jones 1988). Limited dating from excavations at Lingcroft Farm suggest that at least some of these cropmarks relate to the Romano-British landscape (*ibid.* 1988). It is clear that the hinterland of York was farmed during the Romano-British period (*ibid.* 1988) but the archaeological record only reveals a partial picture.

Although there are no cropmarks recorded within the immediate vicinity of Millfield Farm, two concentrations have been located by aerial photography within a few kilometres of the site (Jones 1988; English Heritage 1998; NAA 2002). The closest is a prehistoric or Romano-British landscape comprising an extensive field system with associated smaller enclosures and settlements identified as cropmarks to the north-west of Millfield Farm (English Heritage 1998). The second concentration of field systems and settlement related cropmarks is close to Lingcroft Farm, Naburn some 5km north-west of Millfield Farm. Investigations of the cropmarks at Lingcroft Farm carried out by Bradford University recorded Iron Age field systems containing some settlement activity in the form of ring gullies. In a later phase of activity dated to the early part of the 2nd century AD, the ring gullies had been abandoned but the field system remained mostly intact with little visible reorganisation (Jones 1988). The assemblage of artefacts recovered from the excavations was smaller than that collected at Millfield Farm but included *Eburacum* ware pottery, and a high proportion of 'high status' pottery and fragments of high quality glass vessels. The artefacts were also of an earlier date than those at Millfield Farm.

A Romano-British site encountered during monitoring of the Moor Monkton to Elvington Yorkshire Water pipeline was partially excavated at Stockton Moor West (SE 648 545) (Pearson 1996; Hall and Stockdale 1997). The evidence was interpreted as a Romano-British farmstead. The excavated features included a large rectangular ditched enclosure that extended out of the area of excavation towards a low mound to the east. Within this enclosure was evidence for crude post-built structures and possible stock enclosures, a number of other boundary ditches extended from the enclosure to the north. Evidence of a single small rectangular structure to the north of the enclosure existed as a number of shallow 'sill beam' trenches. Beyond this were a number of smaller undated ditches and circular enclosures which may have been part of the Roman-British farmstead or an earlier Iron Age phase of activity. However, the pottery recovered during the excavation was dated approximately between AD 150 and AD 325 and no recognisably Iron Age pottery was collected. A quantity of building material recovered, including fired clay tile and limestone tile fragments, may indicate the presence of well constructed building in the vicinity, possibly located on the low mound outside the area of excavation. The assemblage of pottery recovered from Stockton Moor West was similar to that collected from Millfield Farm in that it contained a small amount of Nene Valley ware, Samian and Amphorae of the Dressel 20 type. However the assemblage from Stockton Moor West was almost half the size of that collected from Millfield Farm and included a small amount of *Eburacum* ware, which was noticeably absent at the Millfield Farm site. Although the excavated features at Millfield Farm covered a smaller area than those recorded at Stockton Moor West, the larger concentration of recovered artefacts and existence of multiple enclosures would suggest that the site at Millfield Farm was larger.

Another similar site was discovered at Mill House Farm on the west side of Kexby (SE 6930 5135) during monitoring of the Elvington to Harton Yorkshire Water pipeline (Pearson 1997).

The site comprised a number of probable boundary or enclosure ditches associated with two ring gullies, which may represent structures, and a number of pits and postholes. The features were interpreted as part of a larger Romano-British settlement which, based on the pottery found within the features and during field walking, was dated to span the late Iron Age and early Romano-British periods. The amount of pottery recovered was small when compared to the assemblages found at Stockton Moor West and Millfield Farm and the Roman pottery dated to the 2nd to 3rd century AD.

It is notable that the pottery from Stockton Moor West is of a similar date range to the Millfield Farm material and if the Stockton Moor West circular features were of an Iron Age date, this would suggest a similar change of structural form at a similar date to that observed at Millfield Farm. Extensive re-planning within York in the 3rd century AD has been attributed to the promotion of the settlement to a *colonia* by AD 237 (Wacher 1974; 1978 Carver *et al* 1978). However, the archaeological evidence from the area surrounding York fails to conclusively prove that these changes extended to a reorganisation of the hinterland. The dating of activities at Millfield farm and Stockton Moor West is too vague to provide any conclusive argument either way.

It is unlikely that the present distribution of cropmarks, excavated sites and artefact scatters represent the actual pattern of the Romano-British landscape (Jones 1988) and areas devoid of cropmarks could still have been occupied in antiquity (Addyman 1984). The southern boundary of the cropmarks around Wheldrake wood corresponds exactly with a change in underlying geology to glaciolacustrine clay and it was suggested that this pattern was more to do with the visibility of cropmarks in different geological conditions rather than the distribution of archaeological remains (NAA 2002). The discovery of the previously unknown

settlement at Millfield Farm in an area lacking cropmarks proves that the prehistoric and Romano-British landscape identified around York is more extensive than present cropmark evidence depicts.

This evidence presents no more than a fragmentary picture of rural life within the hinterland of Roman-British York, but by placing the site of Millfield Farm within this landscape, a broad synthesis is possible.

The formation of Roman York has been attributed to the building of a legionary fortress by AD 71 (Hartley 1980) and the subsequent development of a civilian settlement on the opposite bank of the River Ouse (Wacher 1974; 1978; Addyman 1984; Jones 1988; Millet 1990). It is clear from the investigations at Lingcroft Farm (Jones 1988), Mill House Farm (Pearson 1997) and from cropmark evidence, that the fortress at York was constructed within an existing landscape of Iron Age style settlements and field systems. However the evidence does not show a whole-scale reorganisation of this landscape (Jones 1988) due to the presence of a military base as happened at Hayton (Ramm 1980) where the auxiliary fort, Roman road, trackways and field systems were ‘...imposed on the earlier landscape.’ (*ibid*, 37). It is true that a civilian settlement grew up around the fort, probably drawn by the opportunity for trade created by the presence of the military (Wacher 1974). This settlement grew over time until at its height, as a *colonia*, *Eburacum* was a centre for international trade (Ramm 1974; Wacher 1974). The growth of *Eburacum* must have had an effect on the surrounding landscape (Addyman 1984) of farms and settlements which would have presumably provided food and raw materials for the city. Through the network of trackways and Roman roads, and via the river Ouse, the local population would have been connected to the Roman Empire as a whole, so it seems strange that there is a lack of visible signs of a more Romanised way of life.

Recognisably Roman artefacts did not reach the site at Lingcroft Farm until the early 2nd century AD (Jones 1988) and reached the sites at Millfield Farm, Mill House Farm and Stockton Moor West between the late 2nd or early 3rd century AD.

Branigan (1980) suggests that the hinterland of York would have been a prime location for retired legionary veterans or wealthy merchants to set up villa estates, so the dearth of excavated examples of such sites (Jones 1984; Sargent 2002) is interesting.

The evidence reads almost as if the local population was reluctant to take on a fully Romanised way of life and possibly invested any newfound wealth in other ways (Hingley 1989). There is some evidence of unrest amongst the native peoples of the north of England during the Roman occupation (Hartley 1980) suggesting that not all the inhabitants desired to emulate the Roman way of life. It is likely, however, due to the lack of villa estates discovered within the hinterland of York, that there was no concerted effort on the part of the Roman authorities to re-order the immediate countryside. Adoption of Roman artefacts and building styles may have therefore been driven by gradual change involving a more complicated two-way process between the occupying forces and an entrenched local population.

ACKNOWLEDGEMENTS

I would like to give thanks to the following individuals and organisations for their contributions to this project. First and foremost, recognition must go to Scott Wilson and Yorkshire Water Services Ltd whose co-operation and financial support made this project possible. I would like to give special thanks to Stephanie Walden, Kate Daly and Mick Carlin for their commitment to the project and essential aid in smoothing out the various logistical problems encountered. I would also like to acknowledge the assistance of John Oxley (Principal Archaeologist for the City of York Council) and his team for their support and assistance during the project.

The road from excavation to publication is a long and winding one and without the guidance of Peter Cardwell, Phil Neal and Damien Ronan, I would have surely gone off track. I would also like to express my gratitude to Jim Parry for his wise council and Sarah Wilkinson for her patience and thoroughness. Special recognition is due to the diggers who laboured hard under the baking sun under difficult time constraints their expertise and professionalism was the foundation of this project. In no particular order they were Ben Westwood, George Gandham, Susan Kay, Eleanor Vincent, Gerry Twomey, Dan Ferguson and his dog, Stamper.

Finally I would like to express my gratitude to the England football team and Mario Brothers, who entertained and kept us all sane during the summer of 2002.

BIBLIOGRAPHY

- Addyman, P. V. 1984 'York in its archaeological setting' in Addyman, P. V. and Black, V. E. (eds) *Archaeological Papers from York – Presented to M W Barley York Archaeological Trust*. York, 7-21
- Allason-Jones, L. and Milet, R. 1984 *The Catalogue of Small Finds from South Shields Roman Fort*.
- Branigan, K. 1980 *Rome and the Brigantes- The Impact of Rome on Northern England*, Department of Prehistory and Archaeology, University of Sheffield
- Carreras, C. And Williams, D. F. 2003 Spanish olive-oil trade in late Roman Britain: Dressel 23 amphorae from Winchester. *Journal of Roman Pottery Studies* **10**, 64-68.
- Carver, M. O. H. Donaghey, S. and Sumpter, A. B. 1978 *Riverside Structures and a Well in Skeldergate and Buildings in Bishophill*. London
- Charlesworth, D. and Thornton, J. H. 1973 Leather found in Mediobogdum, the Roman fort of Hardknott. *Britannia* **4**, 141-52
- Collis, J. 1977 'Owslebury (Hants) and the problem of burials on rural settlements' in Reece, R. (ed) *Burial in the Roman World*. Council Brit Archaeol Res Rep **22**
- Corder, P. 1937 'A pair of 4th century Romano British pottery kilns near Crambeck', *The Antiquaries Journal* **17**, 392-413. (reprinted in Wilson 1989)

- Cowgill, J. 2001 *Report on the Slags and Associated Finds from West Moor Park, Doncaster*.
Archive report for West Yorkshire Archaeology Service.
- Creighton, J. 1999 'The Pottery' in Halkon, P. and Millett, M. (eds) *Rural Settlement and Industry: Studies in the Iron Age and Roman Archaeology of Lowland East Yorkshire*. Leeds: Yorkshire Archaeological Report No. 4, 141-64.
- Egan, G. and Pritchard, F. 1991 *Medieval Finds from Excavations in London:3. Dress Accessories c AD 1150 - c AD 1450*. London: HMSO.
- English Heritage, 1998 *Vale of York National Mapping Project: Sheet SE 64 NE*. Unpub transcript map
- Evans, J. 1996 'The Roman pottery' in D. S. Neal 1996, 69-92.
- Foreman, M. and Tweddle, D. 1992 'The fired clay, jet and amber' in Evans and Tomlinson (eds), *Excavations at 33-35 Eastgate, Beverley, 1983-86*. Sheffield: Sheffield Archaeological Reports 3, 133-4.
- Gillam, J. P. 1970 *Types of Roman Coarse Pottery Vessels in Northern Britain*, 3rd Edn. Newcastle.
- Grant, A. 1984 'Animal husbandry', in Cunliffe, B. (ed) *Danebury, an Iron Age Hillfort in Hampshire*. Council Brit Archaeol Res Rep 52. London, 496-548
- , 2002 'Scales of reference: archaeozoological approaches to the study of behaviours and change' in Dobney, K. and O'Connor, T. (eds) *Bones and the Man: Studies in Honour of Don Brothwell*. Oxford: Oxbow Books, 79-87

- Green, M. 1978 *Small Cult-Objects from the Military Areas of Roman Britain*. Brit Archaeol Rep, Brit Series **52**
- Gregory A. K. 1996 'Romano British pottery', in J. May 1996, 513-85.
- Grimaldi, D. A. 1996 *Amber: Window to the Past*. New York: Harry N Abrams Inc
- Hall, A. 2003 *Recognition and Characterisation of Turves in Archaeological Occupation Deposits by Means of Macrofossil Plant Remains*. Centre for Archaeology Report **16**
- Hall, A. Jaques, D. and Carrott, J. 2003 *Evaluation of Biological Remains from Excavations at Millfield Farm, Wheldrake (nr York), North Yorkshire, a Site on the Elvington to Ricall Water Pipeline*. PRS **2003/19**. Unpub client report
- Hall, R. and Stockdale, J. 1997 *Archaeology in York – Spring 1997*. York Archaeological Trust Volume **22** No **1**
- Hartley, B. 1980 'The Brigantes and the Roman army', in K. Branigan 1980, 2-7
- Hillson, S. 1996 *Dental Anthropology*. Cambridge: Cambridge University Press
- Hingley, R. 1989 *Rural Settlements in Roman Britain*. London
- Hunter-Mann, K. 1997 A second Roman civilian settlement at York, in Hall, R. and Stockdale, J. (eds) *Archaeology in York*. Interim **22**, 33-39
- Jenkins, F. 1958 'The cult of the "Pseudo-Venus" in Kent', *Archaeologia Cantiana* **72**: 60
- , 1986 'Ceramic figurines' In Miller, L. *et al*, (eds) *The Roman Quay at St Magnus House, London*. Spec. London and Middlesex Archaeological Society Paper No. **8**

- Jones, R. F. J. 1984 'Settlement and society in north-east England in the 3rd century AD' in
 Wilson, R. F. Jones, R. F. J. and Evans, D. M. (eds) *Settlement and Society in the
 Roman North*. School of Archaeological Sciences, University of Bradford and Roman
 Antiquities Section, Yorkshire Archaeological Society, 39-43
- , 1988 'The hinterland of Roman York' in Price, J. and Wilson, P. R. (eds) *Recent
 Research in Roman Yorkshire*. Brit Archaeol Rep, Brit Ser **193**, 161-70
- Manning, W. H. 1985 *Catalogue of the Romano-British Iron Tools, Fittings and Weapons in
 the British Museum*. London: HMSO
- May, J. 1996 *Dragonby*. Oxford: Oxbow Monograph **61**
- Millet, M. 1990 *The Romanisation of Britain: an Essay in Archaeological Interpretation*.
 Cambridge
- Monaghan, J. 1997 *Roman Pottery from York*. York: The archaeology of York **16/8**
- Northern Archaeological Associates, 2001 *Yorkshire Derwent Aqueduct Duplication Main:
 Archaeological Appraisal*. NAA **01/104** (revised March 2002). Unpub client report
- , 2002 *Yorkshire Derwent Aqueduct Duplication Main: Elvington to Riccall –
 Archaeological Field Survey Interim Report*. NAA **02/43**. Unpub client report
- , 2003a *Yorkshire Derwent Aqueduct Duplication Main: Elvington to Riccall –
 Archaeological Post-Excavation Assessment*. NAA **03/68**. Unpub client report
- , 2003b *Bridge Road, Brompton on Swale, North Yorkshire: Archaeological post-
 excavation assessment*. NAA **03/141**. Unpub client report

----, 2005 *Stamford Bridge Water Pipeline, Yorkshire: Post-Excavation Assessment Report*.

NAA 05/05 Unpub client report

Neal, D. S. 1996 *Excavations on the Roman Villa at Beadlam, Yorkshire. Leeds: Yorkshire Archaeological Report No. 2*

Ortner, D. J. 2003 *Identification of Pathological Conditions in Human Skeletal Remains* (2nd ed) London Academic Press

Peacock, D. P. S. and Williams, D. F. 1986 *Amphorae and the Roman Economy*. London

Pearson, N. 1996 *The Archaeology of The Yorkshire Drought Relief Pipeline: Moor Monkton to Elvington – Assessment Report, Statement of Potential And Project Design*. York Archaeological Trust Field Report Number 15. Unpub client report

----, 1997 *Yorkshire Water Pipeline: Elvington to Harton – Assessment Report, Statement of Potential and Project Design*. On-site Archaeology Report YORYM1997.60/61. Unpub client report

Pindborg, J. 1970 *Pathology of the Dental Hard Tissues*. Philadelphia: Saunders

Ramm, H. 1978 *The Parisi*. London: Duckworth

----, 1980 'Native settlements east of the Pennines', in K. Branigan 1980, 28-40

RCHM, 1962 *An Inventory of the Historical Monuments in the City of York 1: Ebwracvm: Roman York*. London: HMSO

Rigby, V. 1980 'The Roman pottery' in I. M. Stead 1980, 136-90

- Robinson, P. 1992 'The spindle whorls' in Evans, D. H. and Tomlinson, D. G. (eds) *Excavations at 33-35 Eastgate, Beverley, 1983-86*. Sheffield: Sheffield Archaeological Reports 3. MF1: B2-5.
- Rodriguez-Almeida, E. 1989 *Los Tituli Picti de las Anforas Olearias de la Betica*. Madrid
- Rowland, T. H. 1974 *Dere Street Roman Road North, from York to Scotland*. Newcastle upon Tyne: Frank Graham
- Sargent, A. 2002 'The north-south divide revisited: Thoughts on the character of Roman Britain' *Britannia* 33, 224-26
- Stead, I. M. 1980 *Rudston Roman Villa*. Leeds: Yorkshire Archaeological Society
- Wacher, J. 1974 *The Towns of Roman Britain*. London: Guild Publishing
- , 1978 *Roman Britain*. London: Book Club Associates
- Williams, D. F. and Peacock, D. P. S. 1983 'The importation of olive-oil into Roman Britain' in Blazquez, J. M. and Remesal, J. (eds) *Produccion Y Comercio del Aceite en la Antiquedad. II Congreso*. Madrid, 263- 80
- Wilson, P. R. (ed) 1989 *Crambeck Roman Pottery Industry*. Roman Antiquities Section of the Yorkshire Archaeological Society
- Wood, P. forthcoming 'Sites 718 and 721 Sike Spa, Crake, North Yorkshire' in Cottrell, T. and Cox, P. (eds) *Five Ancient Yorkshire Landscapes-The Iron Age and Romano-British Archaeology of The BP Teeside to Saltend Ethylene Pipeline 1998-2000*

Young, C. J. 1977 *The Roman Pottery Industry of the Oxford Region*. Oxford: Brit Archaeol

Rep, Brit Ser 43

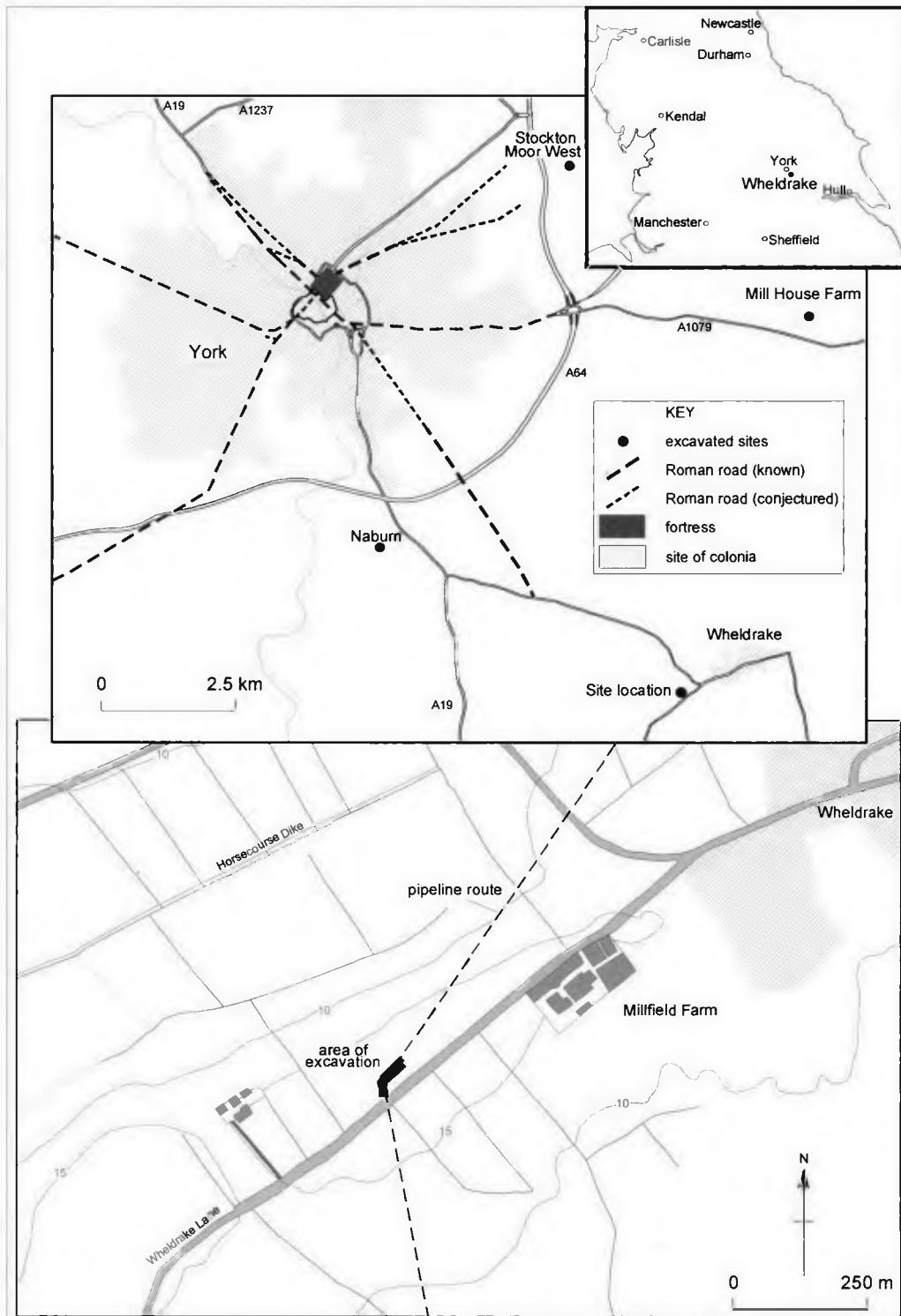


Figure 1 Millfield Farm: site location

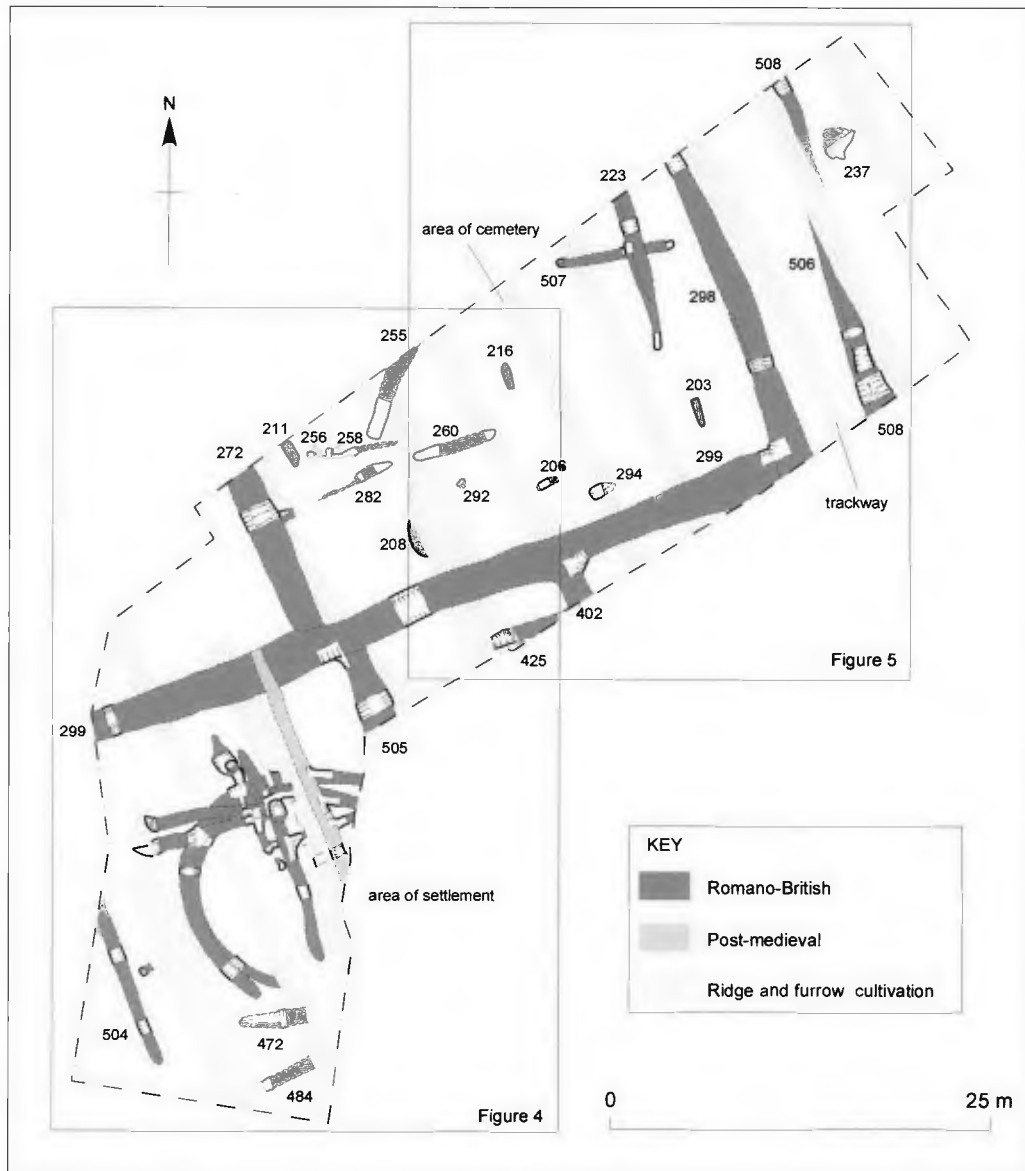


Figure 2 Millfield Farm: site plan

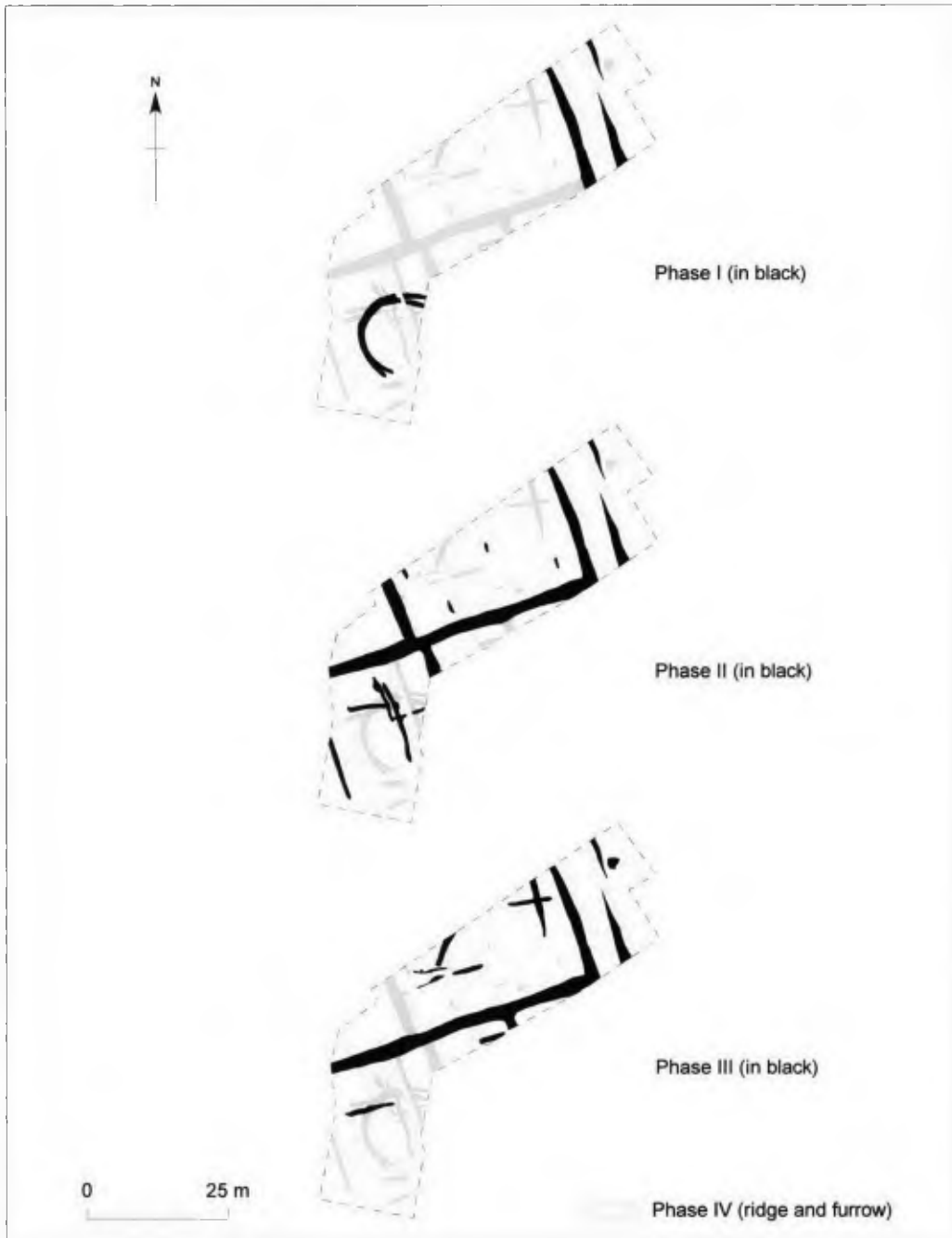


Figure 3 Millfield Farm: phase plan

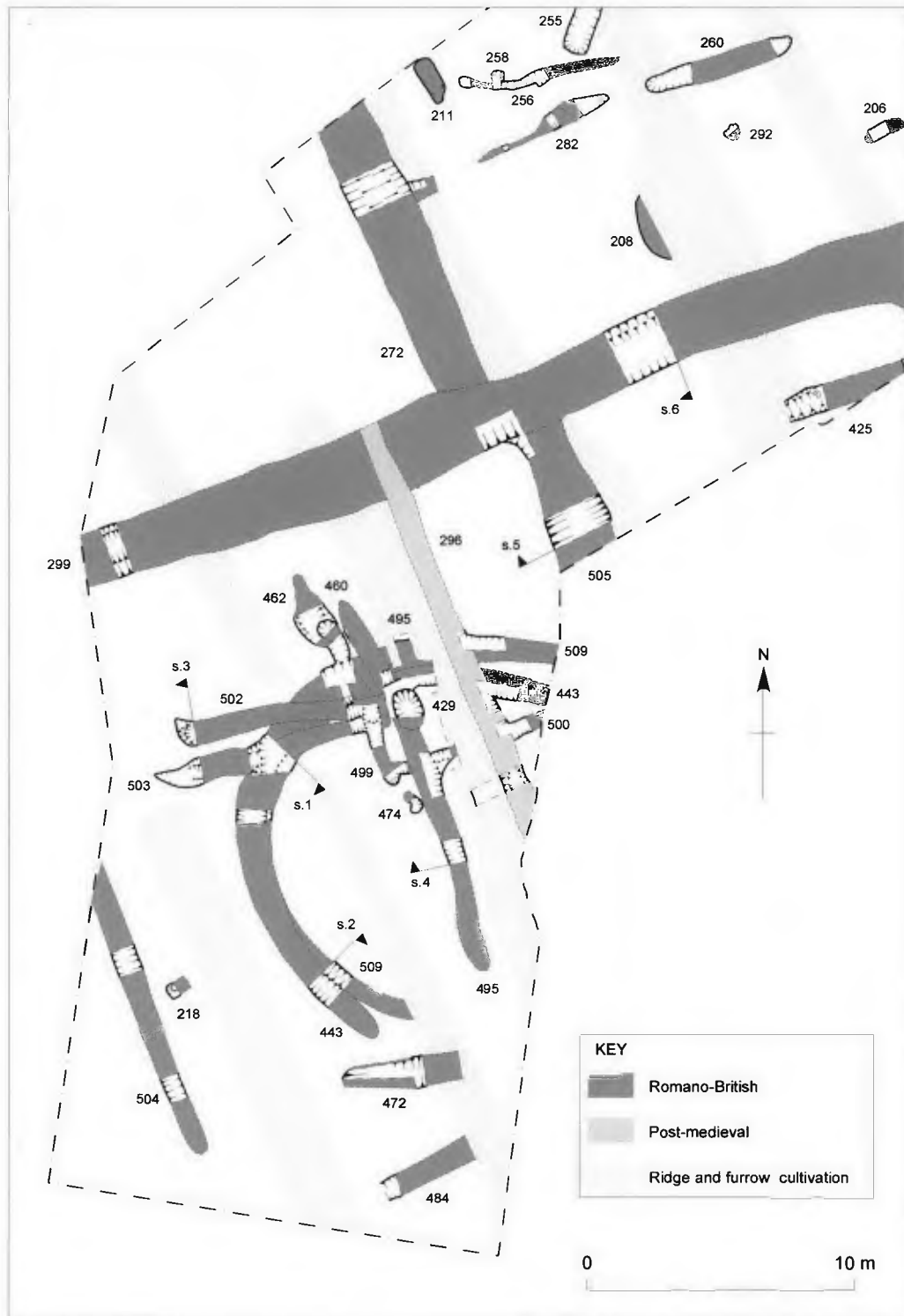


Figure 4 Millfield Farm: detailed plan of south-west corner of site

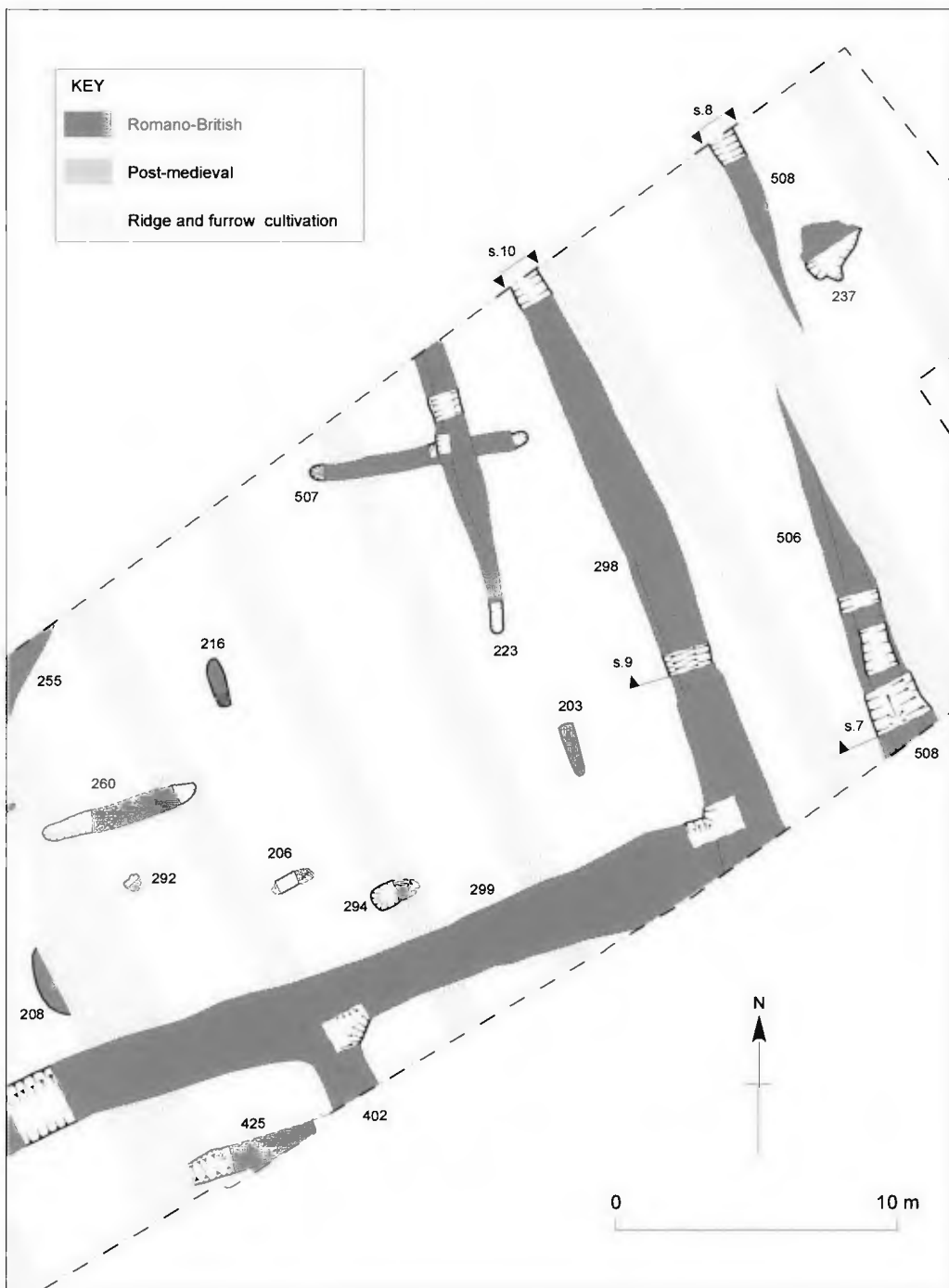


Figure 5 Millfield Farm: detailed plan of north-east corner of site

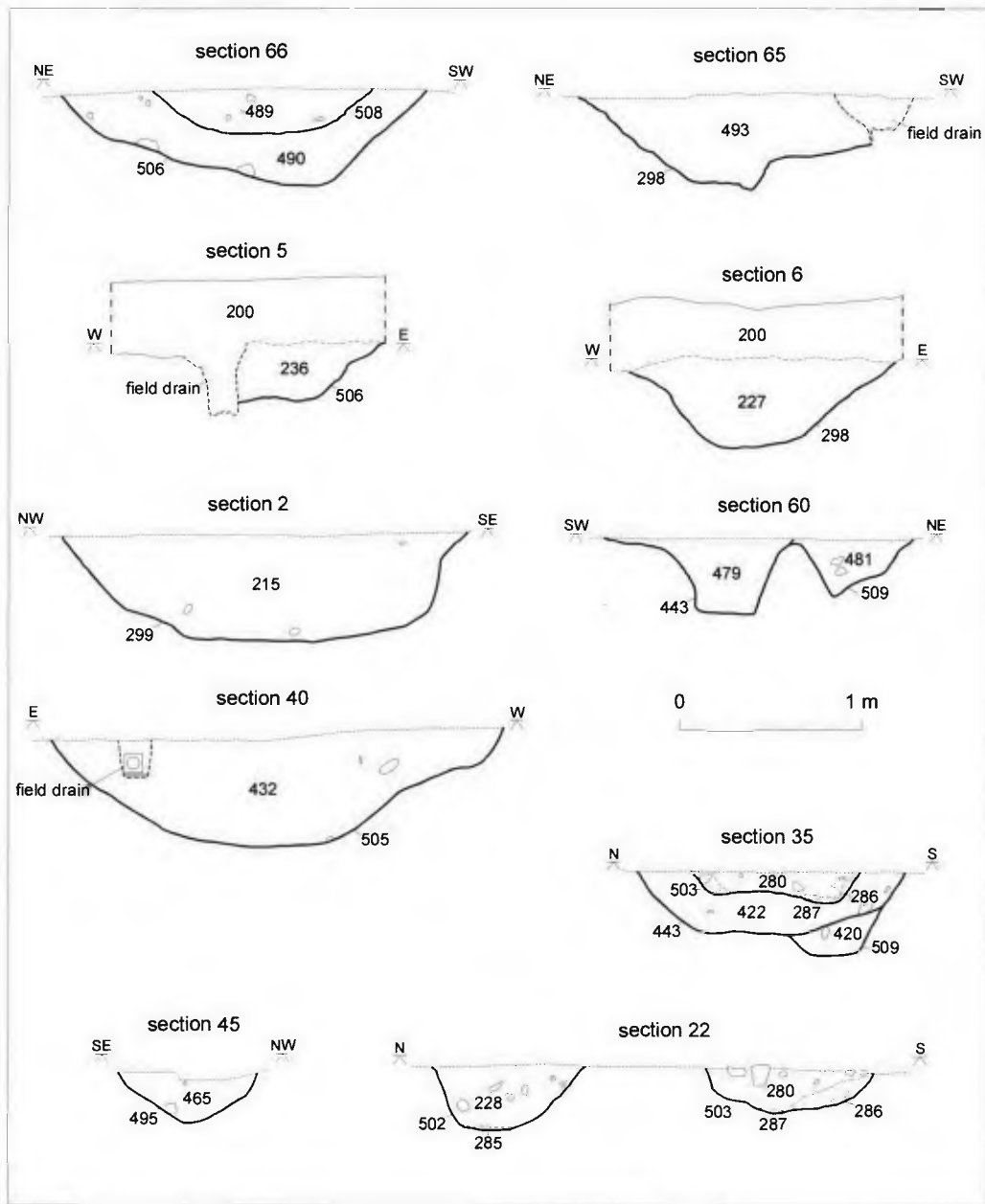


Figure 6 Millfield Farm: sections

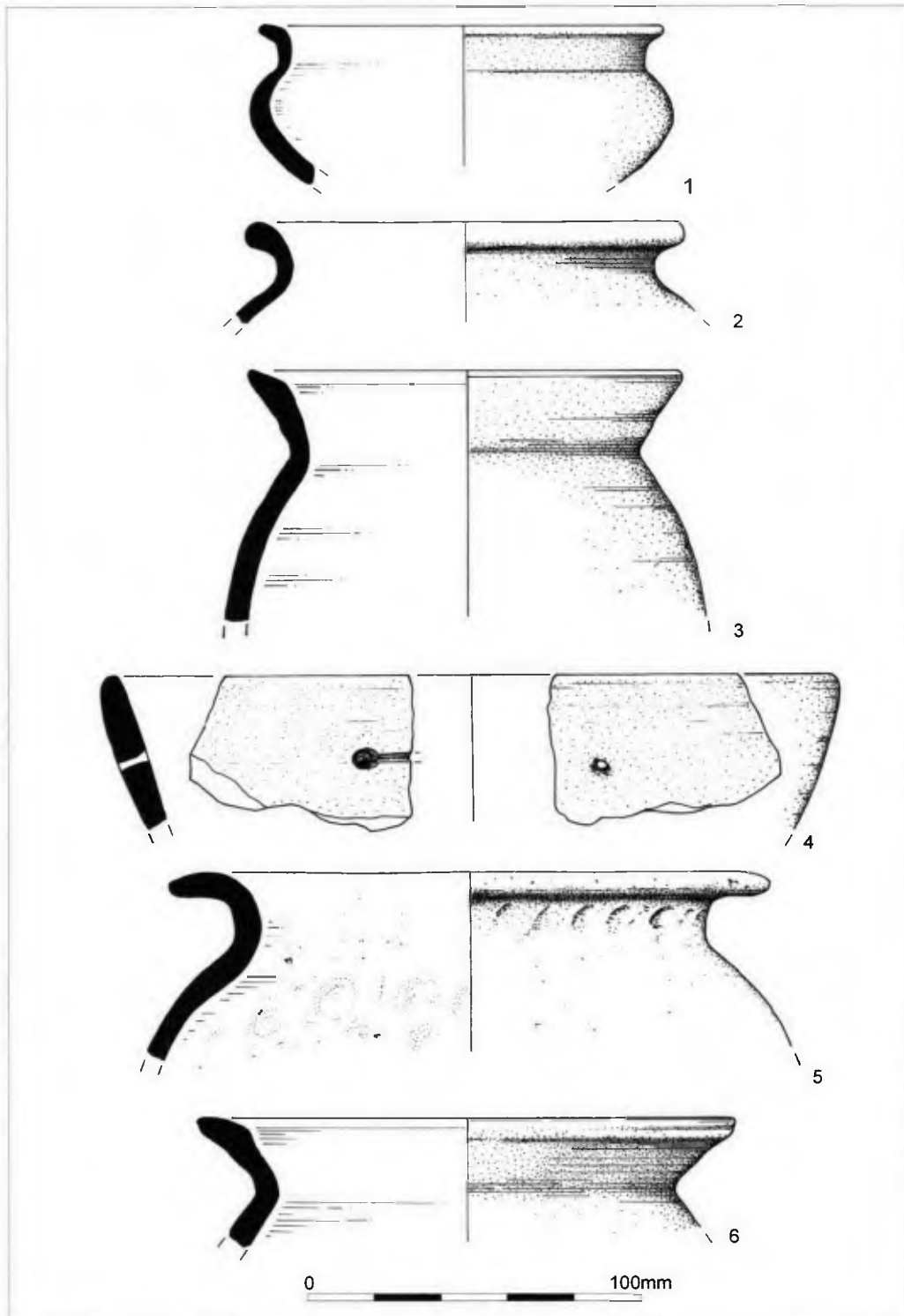


Figure 7 Millfield Farm: pottery 1:2

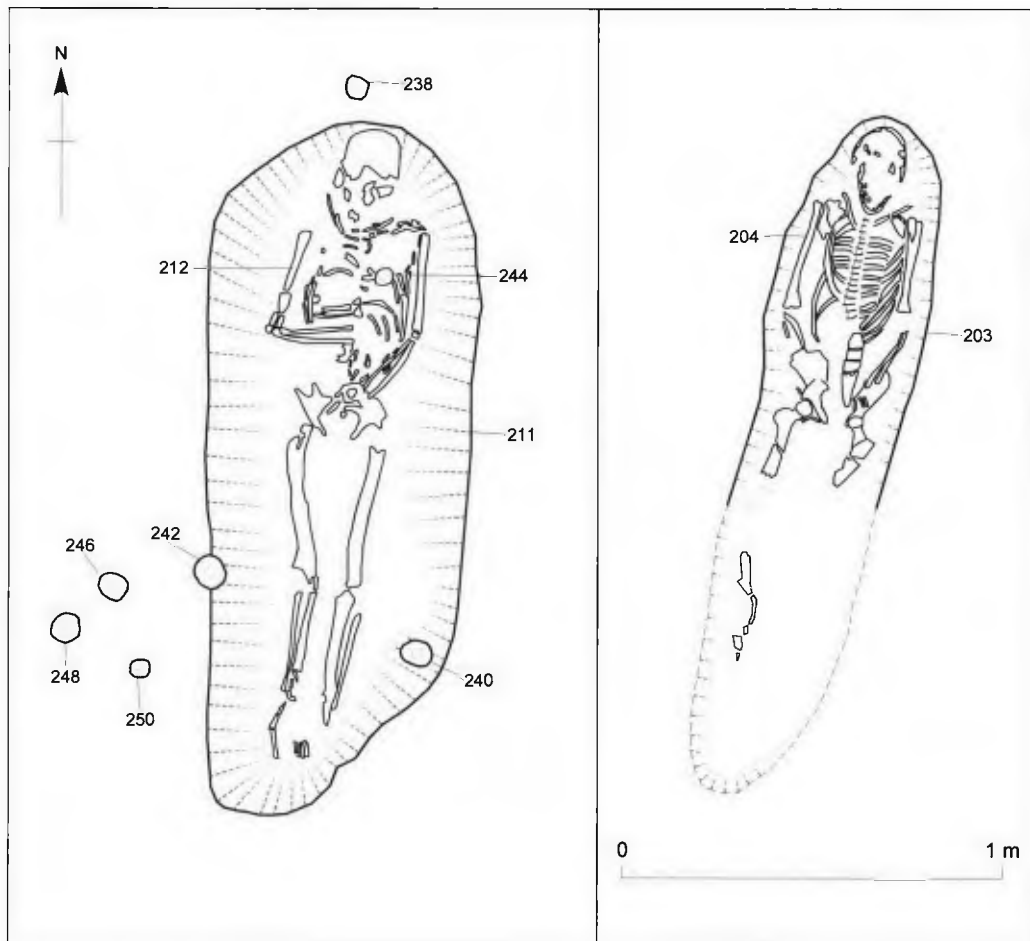


Figure 8 Millfield Farm: burials

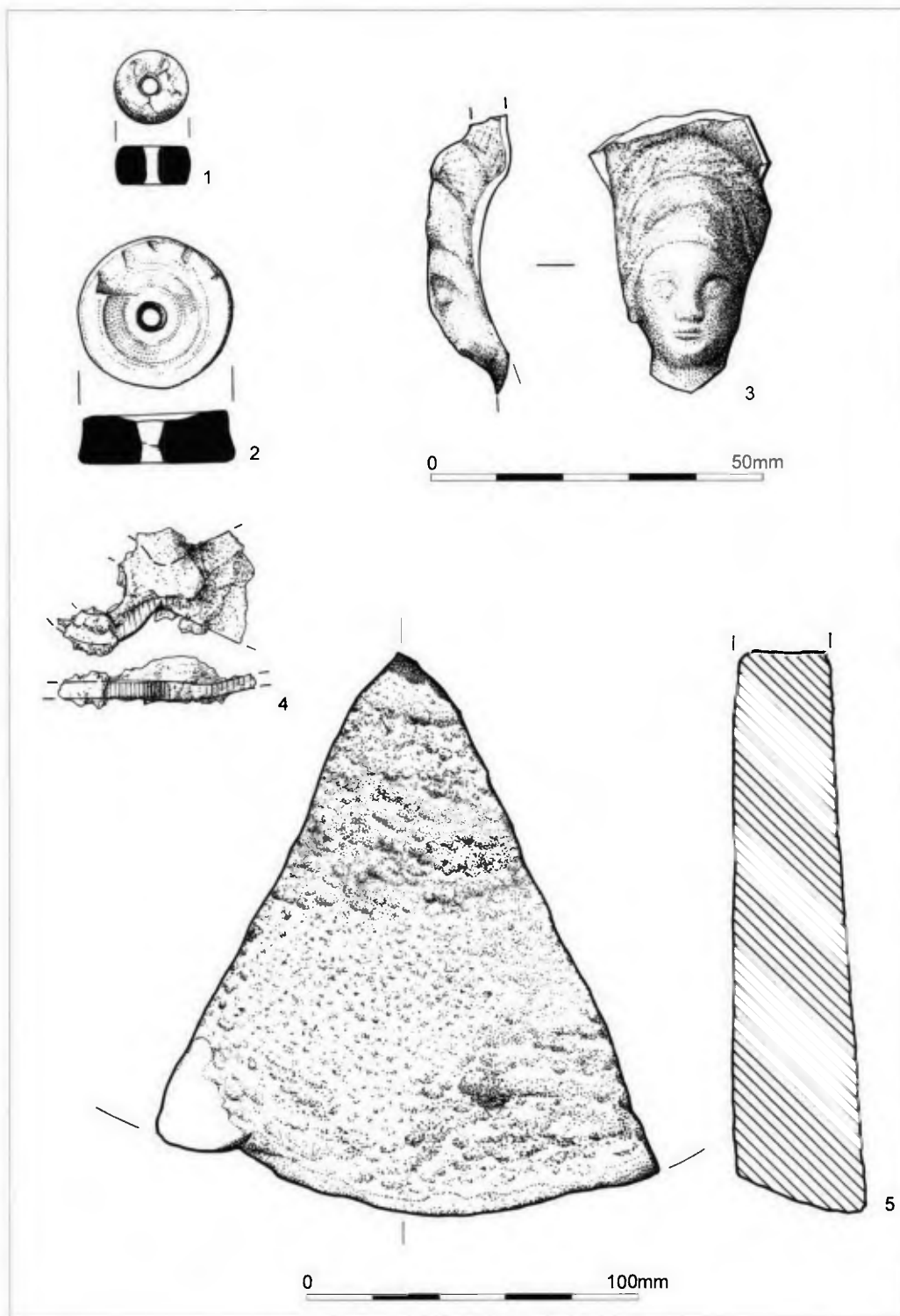


Figure 9 Millfield Farm: finds (1:2, no. 3 1:1)