

A medieval manorial farm at Lime Street Irthlingborough, Northamptonshire

by

ANDY CHAPMAN, ROB ATKINS AND ROWENA LLOYD

with contributions by

Paul Blinkhorn, Pat Chapman, Steve Critchley, Karen Deighton,
Roy Friendship-Taylor, Dennis Jackson, Tora Hylton and Alex Thorne
Illustrations by Mark Roughley and Jacqueline Harding

SUMMARY

Excavations on land off Lime Street, Irthlingborough, found activity from the early-middle Iron Age, Roman, Saxo-Norman and medieval periods. Part of an Iron Age settlement comprised some pits and a roundhouse ring ditch set within a small enclosure. Roman activity was represented by a scatter of residual pottery, some minor ditch systems and a small pit group.

The 11th century medieval settlement comprised a sparse group of postholes and pits, and a system of boundary ditches was probably of the same date. Through the 12th and 13th centuries activity was still sparse, comprising a scatter of small pits and deep quarry pits. A pit containing a primary pottery assemblage of early 13th century date denotes the nearby presence of a house.

By the early 14th century a group of three buildings were established: a long malthouse/barn, a circular dovecote and a building with mortared walls that might have served as a kitchen/bakehouse range. These buildings are clearly appropriate to a manorial farm, and probably served a nearby manor house. Later documentary evidence indicates that the land was owned by the Bataille manor of Irthlingborough. The scale of the malthouse suggests that it was used for commercial production. These buildings and associated pit groups were abandoned at the end of the 14th century, after less than a century of use. After partial robbing the site seems to have been left undeveloped until terracing and further robbing occurred in the 18th century.

INTRODUCTION

Excavations by Northamptonshire Archaeology were undertaken in 2001 in advance of a proposed housing development at Lime Street, Irthlingborough, Northamptonshire (NGR: SP 949 708; Fig 1). A desk-based assessment and trial excavation was carried out during April and May (Atkins 2001), and an area excavation took place between September and November (Atkins and Lloyd 2002). The work was carried out on behalf of Acorn Homes and the owners of the former allotment plots in fulfilment of planning conditions by East Northamptonshire District Council (EN01/0031) and in accordance with an archaeological Recording Action Brief issued by Northamptonshire Heritage (Flitcroft 2001). A watching brief was carried out in 2002 and 2003 during groundworks for the new houses on the area to the immediate west of the excavations, but no further features were located.

ACKNOWLEDGEMENTS

We are grateful to Acorn Homes as well as the owners of the former allotment plots for funding the excavations. Ron Bousted and Bob Kirkham of Acorn Homes were helpful in organising the various stages of work. Helpful advice was given by Myk Flitcroft, Archaeological Planning Officer at Northamptonshire Heritage (now Northamptonshire County Council's Historic Environment Team). Vikki Pearson, Northamptonshire County Council Countryside and Heritage Interpretation Officer, organised a very successful site Open Day and

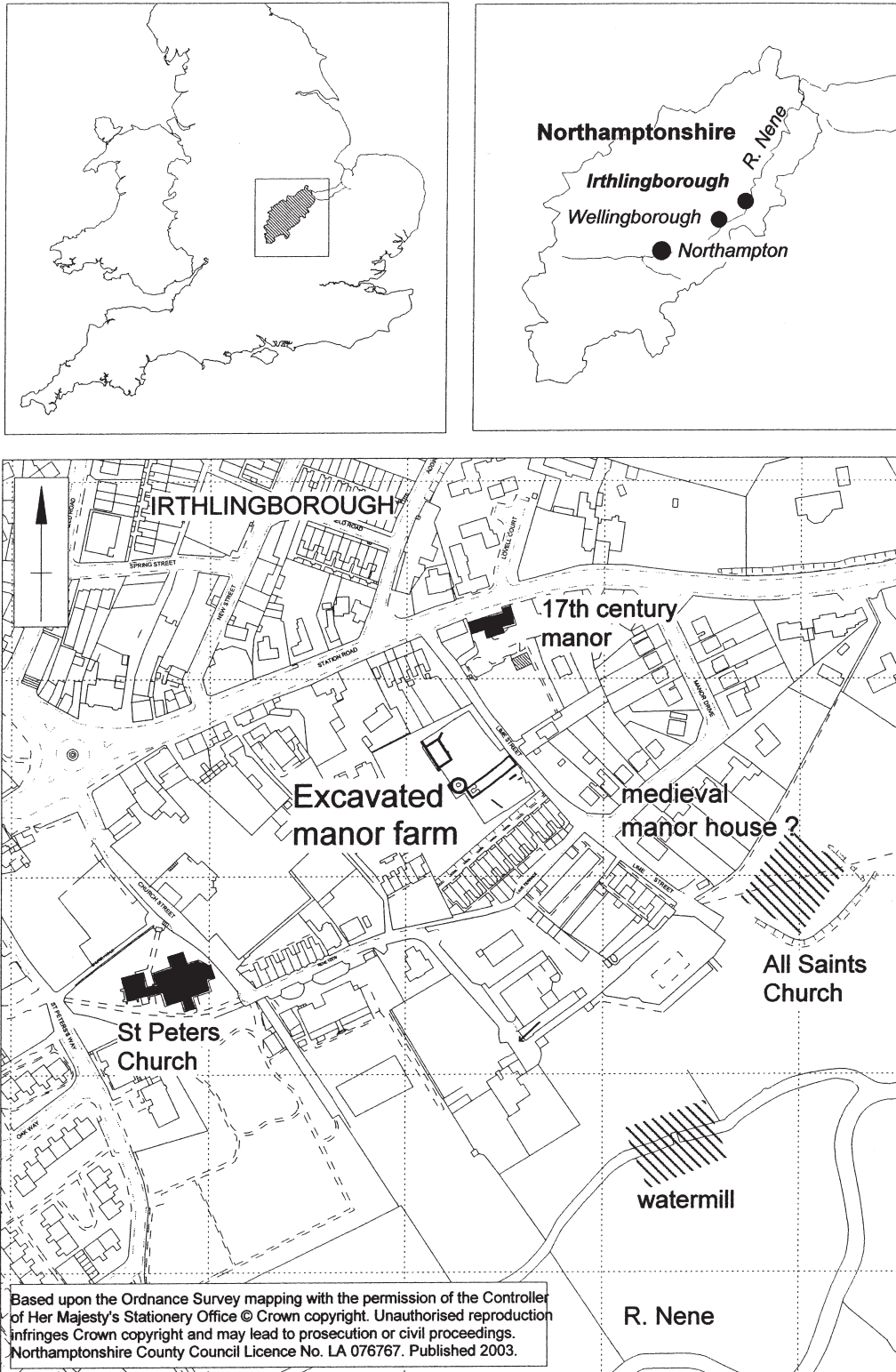


Fig 1 Location of site

school site visits. The excavations were managed initially by Sean Steadman and later by Iain Soden. Rob Atkins led the fieldwork team assisted by Rowena Lloyd. The team of site assistants consisted of David Anstee, Andrew Buckley, Mick Garside, Paul Geldherd, Steve Giddings, Pat Kent, Dave Leigh, Danny McAree, Ian McGregor, Kevin Moore, Rob Smith, Richard Swann, Ed Taylor and Kassie Walker. Thanks also go to John Richardson and Roy Cox who volunteered throughout the excavation and to Steve Critchley for metal detecting surveys. Following excavation an assessment report was prepared (Atkins and Lloyd 2002) and work on a first draft of the report was carried out by Rob Atkins and Rowena Lloyd. Following their departure from Northamptonshire Archaeology, Andy Chapman and Pat Chapman carried out further post-excavation analysis, and Andy Chapman has completed the preparation of the report.

TOPOGRAPHY AND GEOLOGY

The site is located to the east of Irthlingborough town centre, near the top of a south-facing slope, at 55-53m above Ordnance Datum, and overlooking the valley of the River Nene. It is bounded to the north by properties fronting on to Station Road, to the east by Lime Street and to the south by the houses forming Lime Terrace. Properties fronting onto Meeting Lane form the western boundary. All Saints church, abandoned in the 17th century and excavated in the 1960s, lay at the southern end of Lime Street. The development area covers 0.42 ha in total. However, the excavation was focussed on the eastern half of the site as the evaluation had identified this as the area of archaeological interest.

The underlying geology has been mapped as Upper Estuarine Limestone, part of the Great Oolite Series of the Middle Jurassic (British Geological Survey 1989). However, the excavation and geological borehole evidence revealed a solid geology of Blisworth Limestone and clay, with limestone bedrock exposed in the higher northern area. The natural subsoil was an accumulation of structureless sediment comprising rock fragments in a sandy, silty and clayey matrix.

DOCUMENTARY BACKGROUND

The documentary evidence suggests that Irthlingborough was an early foundation. The first recorded

name was *Yrtlmyaburg* in AD 780, which probably refers to the *burh* of the sons of *Yrtla*. The settlement origin was possibly early Germanic and may have originally been called 'Urtilinga' (Gover et al 1933, 182). The possible high status of this *burh* site has been referred to by Foard (1985, 207) and there is documentary evidence that Offa was present at Irthlingborough (Birch 1885-93, no 1334; cf Birch 1892). The development area may possibly be within the late Saxon settlement of Irthlingborough; late Saxon pottery has been found about 50m to the west and a spearhead 200m to the south.

By the later Saxon period Irthlingborough was included in King Edgar's grant of Kettering to the Abbot and convent of Peterborough (VCH 1930, 207). The Domesday Book (1086) records that the Abbey held five hides and one virgate and that four men-at-arms held five hides, less one virgate for the Abbot. Irthlingborough had two medieval parishes, All Saints and St. Peter's, as well as two manors. One manor was owned directly by the Abbey and was located directly to the east of St. Peter's church and the other of St. Bataille Fee. There is some doubt whether the latter was held directly of the Abbot of Peterborough or of the Basingborne fee, which was held of the Abbot (VCH 1930, 208).

In 1189, William de la Bataille (de Belle) and Richard del Peak held three knights fees in Irthlingborough and Addington. In 1214 William claimed the advowson of the church of All Saints. The manor passed to the de Drayton family and in 1316/17 Henry de Drayton conveyed a manor of Irthlingborough to Simon de Drayton, who is recorded as holding it of the fee of Bataille (VCH 1930, 208).

In 1353 the manor was conveyed to John Pyel, citizen and mercer of London, but by 1402 the Huddleston family owned the manor. The 1405 survey by the Abbot of Peterborough shows the excavated site to be within part of the Bataille manor of Irthlingborough (of the Fee of Drayton, anciently Robert de Belle). Glenn Foard has used the 1808 Inclosure Map as a base to calculate the locations of the land ownership using Bridge's notes on the Survey of 1405, as held in the Bodleian Library, vol. C.22 f.28. This shows that the development site fronted onto Stevens Lane (now Lime Street) and formed part of John Stevens capital messuage, previously Henry Huddleston. Lime Street ran from the High Street (now Station Road) past All Saints Church towards the Nene. The lane also led

to a watermill recorded in 1405, and situated on a secondary channel of the River Nene (Fig 1).

The church of All Saints had fallen to just eight parishioners by 1428, which may imply that the attached manor was also in decline. By *c.* 1500 the manor was owned by the Cheyney family. The probable poor state of the manor may be further seen by the continued decline in All Saints church, which was recorded as in a poor state of repair in 1570, when the glass in the windows was broken and two altars were half standing, and as ‘utterly ruined’ in 1637. However, burial in the churchyard seems to have continued into at least the later 17th century (Brown 1966, 8). A new manor house, with a rectangular stone dovecote added to the rear, was built fronting onto the High Street (Station Road) to the immediate east of Lime Street in the 17th century. The graveyard attached to All Saints church was recorded on the Inclosure Map of 1808 and as late as 1900, on the 2nd edition Ordnance Survey map, it is shown as ‘graveyard (disused)’. It lay to the east of the lower end of Lime Street, and occupied a sub-rectangular plot measuring some 55m east-west by 45m north-south (Fig 1).

PREVIOUS ARCHAEOLOGICAL EXCAVATION

The excavation of All Saints Church in 1965, which lies just over 100m to the south-east of the site, recovered some Roman pottery and building materials (see below; Brown 1966, 16 and 18). Tile, pottery and other Roman artefacts have also been found less than 200m east, north, and west of the site, including to the rear of the Manor House in the 1920s. The presence of Roman settlement in the vicinity of the site therefore complements known occupation along the valley, as represented to the east by the villas of Redlands Farm, Stanwick and Woodford, and other minor settlement sites.

In relation to the medieval settlement, All Saints Church, which is probably part of the same manorial holding as the excavated manorial farm buildings, was extensively excavated in 1965 (Brown 1966, 2-18). Bulldozing to level the field had uncovered remains of stone walls and human bones and, as a result, a rescue excavation was carried out by Gwen Brown between July and December, sponsored by the Ministry of Public Buildings and Works.

The full plan of the church was uncovered. It possessed four major phases of development. The earliest was a simple nave and chancel, with a presbytery to

the east with an apsidal end. The whole building was 68feet (20.75m) long and was dated on stylistic grounds to the second half of the 12th century. It was later completely rebuilt and subsequently modified, in part perhaps following a fire. In its new form it possessed both north and south aisles, the latter with a porch, and a small tower at the western end, and had a total length of 90feet (27.45m).

In addition, some 350-400 burials were recovered from within and immediately around the churches, but the full extent of the churchyard was not investigated. The burials included at least three priests, identified by the presence of poorly preserved chalices, with one also including a pattern. The chalices were dated to the 13th and 14th centuries (Brown 1969, 25-27).

It was suggested that remains of masonry found 40feet north-east of the church and apparently comprising a large cess-pit in association with fine walls of dressed stone, may have been part of the manor house of the Bataille family, but the nature of these remains was not further investigated.

METHODOLOGY

The evaluation of the full development site comprised three trenches with an overall length of 100m (Atkins 2001). Trench 1 lay to the east and was aligned north to south, parallel to Lime Street; it located the malthouse range. Trench 2 ran east to west across the centre of the area and located the dovecote. Trench 3 lay to the west and was aligned north to south; it contained no archaeological deposits.

Given the absence of archaeological features in the western trench, the eastern half of the site was defined as the area of archaeological interest. A roughly rectangular area, measuring 53.0m north-south by 30.0-35.0m east-west, an area of 0.17ha, was subject to open area excavation (Fig 2). The site sloped down from north to south, the exposed surface dropping from 55.0m at the northern end of the site to 53.3m at the southern end.

The site was stripped of topsoil under archaeological supervision using a 360° excavator with a toothless bucket. In addition, much of the amorphous soil horizon occupying the central area of the site between the medieval buildings was also removed by machine to the top of the natural. The medieval buildings were exposed and recorded and then, in agreement with Northamptonshire

A MEDIEVAL FARM AT LIME STREET, IRTHLINGBOROUGH, NORTHAMPTONSHIRE

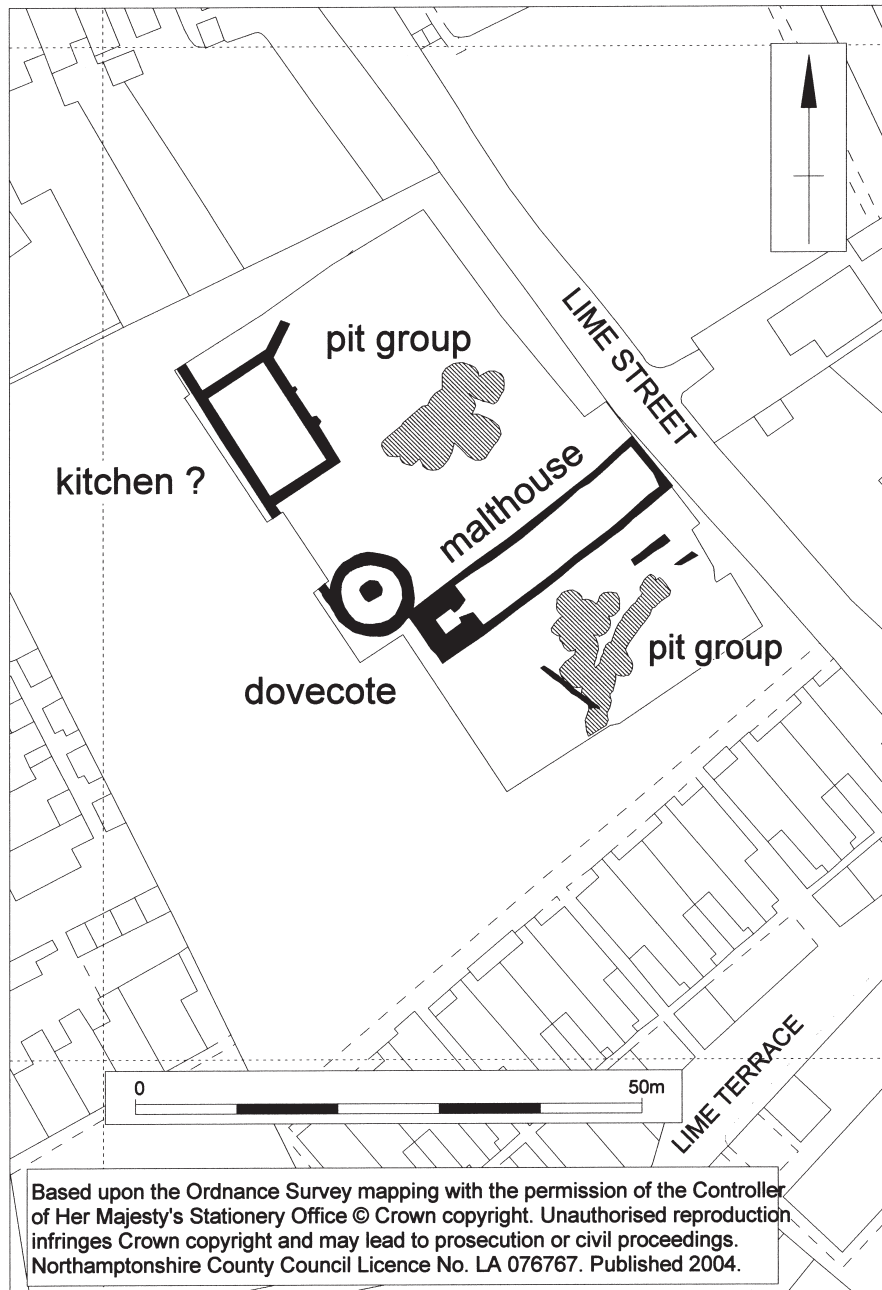


Fig 2 The excavated area, showing the medieval buildings

Heritage, a JCB-type excavator was employed to remove remaining medieval soil horizons to reveal underlying deposits and features. The site was metal detected at various stages through the excavation by Steve Critchley.

During the course of site development during 2002 and early 2003 a number of site visits were made to examine the western half of the site as individual building plots were stripped down to natural and construction trenches were excavated. This work all confirmed the conclusions drawn from evaluation trench 3 that there was an absence of archaeological deposits and finds on this western area, despite lying adjacent to such an intensively occupied plot.

SITE CHRONOLOGY

The site was characterised by stratified archaeological deposits representing intermittent occupation from the *c* 4th century BC onward, with intensive medieval activity spanning the 11th to 14th centuries. The phasing of the site has taken into account a combination of pottery dating, stratigraphic relationships and the overall site layout (Fig 3).

IRON AGE AND ROMAN SETTLEMENT (4TH CENTURY BC TO 4TH CENTURY AD)

At the northern end of the site there was part of an Iron Age settlement of unknown extent (Fig 3a). Three pits produced pottery datable to the middle Iron Age, but the main evidence comprised a roundhouse ring ditch, 10m in diameter, set within a small concentric enclosure of later Iron Age date (1st century BC- early 1st century AD).

The nature of the Roman activity is less clear. It comprised a small rectangular enclosure and a parallel ditch, and a cluster of small pits to the south. In addition, there was a background scatter of residual Roman pottery in the medieval features and deposits. The pottery and the coins indicate that the Roman activity spanned the 2nd to 4th centuries.

MEDIEVAL BOUNDARIES AND PITS (1000 –1200AD)

On the northern part of the site there were two ditch systems broadly dated to this period (Fig 3b). The system running near west-east, and obliquely to Lime Street, may be the earlier in origin and

was certainly abandoned prior to the ditch system running along the eastern margin of the site and parallel to Lime Street. This system was only finally infilled immediately prior to the construction of the malthouse. The 11th century activity comprised a scatter of postholes and small pits in the south-western part of the site, while the two parallel curvilinear gullies in the same area fell out of use in the early 12th century.

MEDIEVAL QUARRY PITS (1100 -1300AD)

Two deep quarry pits at the northern end of the site were of earlier 12th century date, while a scatter of pits, some similarly deep, were excavated across the southern part of the site through the later 12th and 13th centuries as a sparse utilisation of the area (Fig 3b). The quarry pits would have served to extract the underlying Blisworth Limestone. One pit contained a primary pottery assemblage of early to mid 13th century jugs and jars that must have come from a nearby house, and may indicate the establishment of a manor house by this time.

THE MEDIEVAL MANORIAL FARM (1300-1400AD)

By the earlier 14th century a group of major buildings occupied much of the site (Fig 3c). They comprised a 28.5m long malthouse/barn, a circular dovecote and a possible kitchen/bakehouse to the north, while remnants of minor boundary walls and some limestone surfacing lay to the south of the malthouse. These appear to have formed the farm buildings attached to a manor house, which is likely to have stood on a nearby plot. As noted above, the manor house probably dates to the 13th century or earlier, with the manorial farm being a later addition. Numerous, inter-cut pits lay both to the south and north of the malthouse, and the southernmost group produced a broad range of pottery and other domestic finds that indicate the continued deposition of debris from a nearby house.

These buildings had a relatively short lifetime of less than a century, as they had been abandoned by around the end of the 14th century. The almost total absence of earlier 15th century pottery may suggest that the associated house had also fallen into disuse, while a small amount of later 15th century pottery comes mainly from the demolition rubble and so appears to relate to the final levelling of the buildings.

A MEDIEVAL FARM AT LIME STREET, IRTHLINGBOROUGH, NORTHAMPTONSHIRE

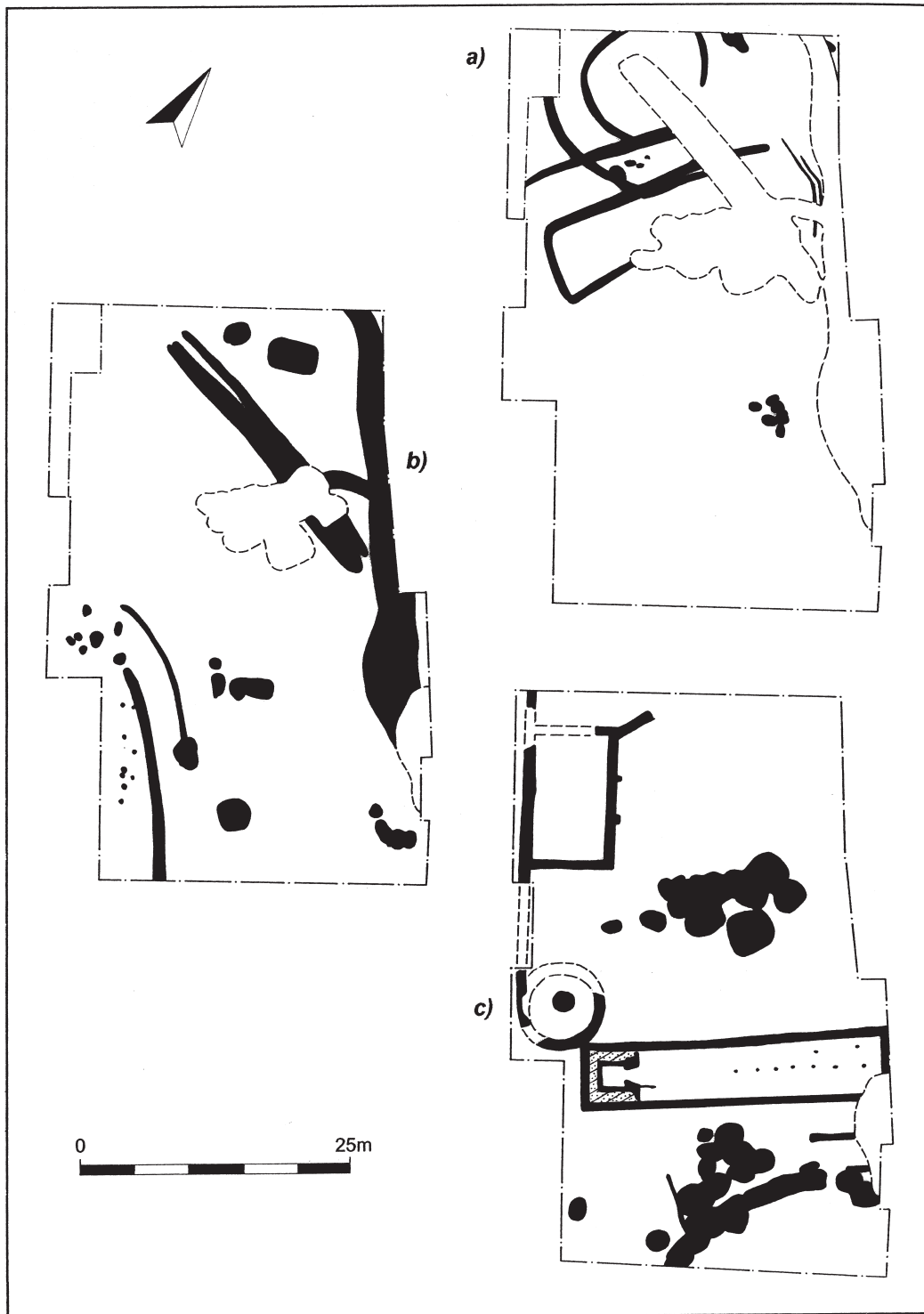


Fig 3 The site chronology

POST-MEDIEVAL ACTIVITY

There was little evidence for any further activity on the site until the 18th century, when there was another episode of wall robbing associated with the cutting of a series of terraces, presumably to prepare the plot for horticultural use. All the maps of Irthlingborough from 1801 onwards show the excavated site as undeveloped, and it remained open ground until the advent of the development proposals, with the site divided into a several allotments held by the residents of Lime Terrace.

THE EXCAVATED EVIDENCE

THE IRON AGE PITS, ROUNDHOUSE AND ENCLOSURE

The earliest activity comprised a number of pits that contained pottery dated to the middle Iron Age (Fig 4). The largest assemblage came from a feature, either a pit or ditch (60) in the very north-east corner of the site, partly as residual material in the fills of the later ditches that had disturbed it. Further pits lay to the east (56) and south (329) of the later roundhouse. These were sub-circular, c 1.9m in diameter with steep sides and flat bottoms, and respectively 0.73 and 0.35m deep. Both were filled with grey-brown sandy clay, and in (56) there were frequent fragments of limestone. Pit (329), which was cut by the ditch of the concentric enclosure, might have been contemporary with an adjacent cluster of smaller pits and postholes. Some further middle Iron Age pottery was recovered from a small cluster of pits to the south (459 and 460) but probably as residual finds in small pits of Roman date.

A sub-circular ring ditch enclosed an area with an internal diameter of 9.0-10.0m, which would have contained a roundhouse of no more than 8.0m diameter. There was an entrance causeway to the east that was at least 2.0m wide. The ditch was generally U-shaped in profile, 0.7-0.8m wide and 0.15-0.22m deep, and had not been recut. The fill was mid grey-brown clayey loam around the entire circuit, but it was the excavated terminal and the section on the southern side that produced the bulk of the small pottery assemblage. No internal features had survived, but later features had disturbed much of the interior.

A ditch running parallel to the southern and western sides of the ring ditch presumably formed a concentric enclosure at least 20m in diameter. The northern part would have lain beyond the excavated area, but no trace was found of the north-eastern side, which would have entered the site if the enclosure had been fully concentric to the ring ditch. The ditch was 0.90m wide by 0.25m deep, and the fill was generally similar to the fills of the ring ditch, but it produced less pottery. There was no evidence of recutting. Two lengths of curvilinear gully to the east (111 and 113), 0.3-0.5m wide by 0.1m deep, may relate to either the eastern approach to the Iron Age enclosure or to the eastern side of the Roman enclosure. The small assemblage from the ring ditch and the enclosure ditch is dated to the later middle Iron Age (1st century BC - early 1st century AD).

ROMAN ACTIVITY

A few features produced only late Roman pottery, but much of the Roman pottery assemblage was recovered as residual finds in later features. The main features attributable to this period comprised a small sub-rectangular enclosure, a linear ditch running parallel to the northern side of the enclosure and a small cluster of pits further to the south (Fig 4).

The enclosure was 22.0m long but had an internal width of only 5.0-6.0m. It was open to the east, although it may have been partially closed by two small gullies (111 and 113). The ditch was typically U-shaped and 1.0m wide. The southern arm was up to 0.5m deep but to the north it was no more than 0.3m deep as a result of later truncation, and the fill was a brown to brown-grey sandy clay. The western arm of the ditch and the western end of the northern arm were very different. Here the ditch had a V-shaped profile, 0.30m deep, and the fill contained substantial quantities of large limestone pieces, and it was considered during excavation that this part may have been deliberately filled with stone to act as a drain.

A linear ditch lay 2.5-3.5m beyond the northern side of the enclosure. To the east it must have terminated beneath a later ditch system. It was 0.8-1.4m wide and 0.3-0.4m deep, becoming broader but shallower towards the east. The fills were similar to the fills of the enclosure.

From 15-19m to the south of the enclosure there was a cluster of six small pits and a posthole. The pits were oval to circular in plan, 1.2-1.5m in diameter and 0.2-0.3m deep, with steep sides and flat bottoms. The fills were of brown and grey brown sandy clays containing some limestone pieces as well as pottery and animal bone. Two of the pits produced small assemblages of Iron Age pottery (459 and 460), but a number of them also contained small groups of Roman pottery.

The pottery is largely later 2nd to 3rd century AD in date, and this suggests there may have been a break or relocation in occupation between the Iron Age and the early Roman period. The presence of small amounts of 4th century pottery and a 4th century coin suggest that activity in the area did run through to at least the mid-4th century.

MEDIEVAL ACTIVITY

THE MEDIEVAL BOUNDARIES AND PIT GROUPS (11TH AND 12TH CENTURIES)

While the pottery assemblage suggests that there may have been some activity in the area as early as the 10th century, the commencement of occupation can only be dated to the 11th century.

The earliest activity was concentrated in the south-western corner of the site and probably also continued beyond the excavated area (Fig 5). A series of nine postholes extended north-south in a very rough line for 9.0m, but the arrangement was too haphazard to be interpreted as anything more than a fence line. The postholes were all sub-circular in plan, 0.3-0.5m in diameter and typically 0.20-0.35m deep, though three were shallower. To the north of the postholes there was a cluster of circular and irregular pits (266, 278, 280, 282, 306, 308 and 310) and a further contemporary pit lay to the east (497). They ranged from 1.0-1.5m in diameter and from 0.14-0.40m deep, with fills of grey-brown sandy clay containing some limestone pieces and a little pottery. Most of these features lay immediately to the west of a pair of parallel and slightly curving ditches (298 and 515), 1.1m

A MEDIEVAL FARM AT LIME STREET, IRTHLINGBOROUGH, NORTHAMPTONSHIRE

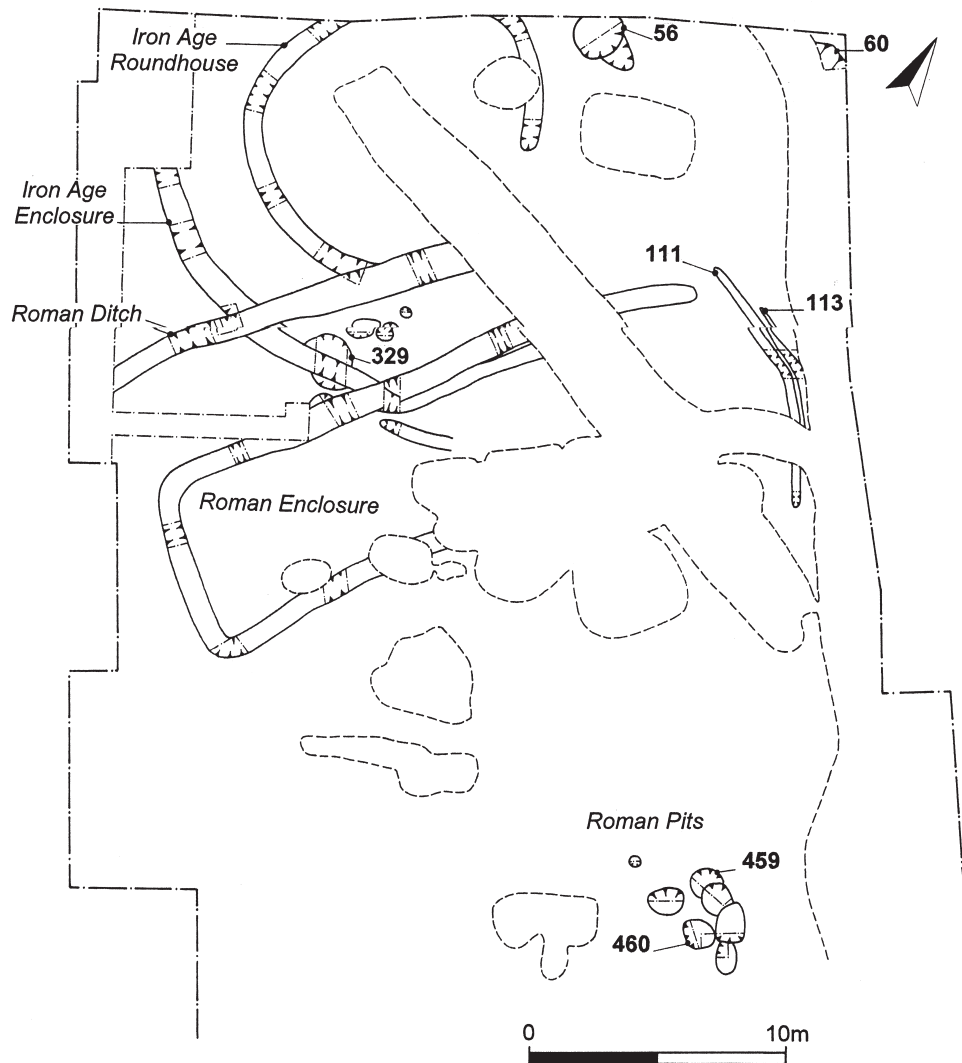


Fig 4 Iron Age and Roman features

wide by 0.40m deep and 0.70m wide by 0.15m deep respectively. They were filled with brown to grey-brown clayey silt, and the pottery from the larger, western gully indicates that it was only filled in during the early 12th century. A scatter of poorly defined pits and gullies to the east of these boundaries (373, 430 and 504) also date to the earlier 12th century.

In the northern part of the site, three parallel linear ditches ran east to west for c 28m (394, 396 and 487). There were terminals at either end, and to the east they lay adjacent to the eastern boundary ditches running parallel to Lime Street, suggesting that the two systems were in contemporary use, if not of contemporary origin. The complex spanned a width of 3.3m with

the individual ditches 0.6-1.4m wide and 0.2-0.4m deep, with shallow, bowl-shaped profiles. They were filled with grey-brown clays containing some limestone pieces. The intercutting was too marginal to establish a sequence, and their 11th century date is based on a very small quantity of recovered pottery.

A further series of parallel ditches ran along the eastern margin of the site (137 and 139). They ran parallel with Lime Street and it may be suggested that it was the formation of this boundary system that probably established the layout of the medieval plots, the road alignment and the alignment of the major medieval buildings. They were U-shaped, 0.8-1.2m wide by 0.3-0.4m deep, with steep sides and flat bottoms. At least two ditches were

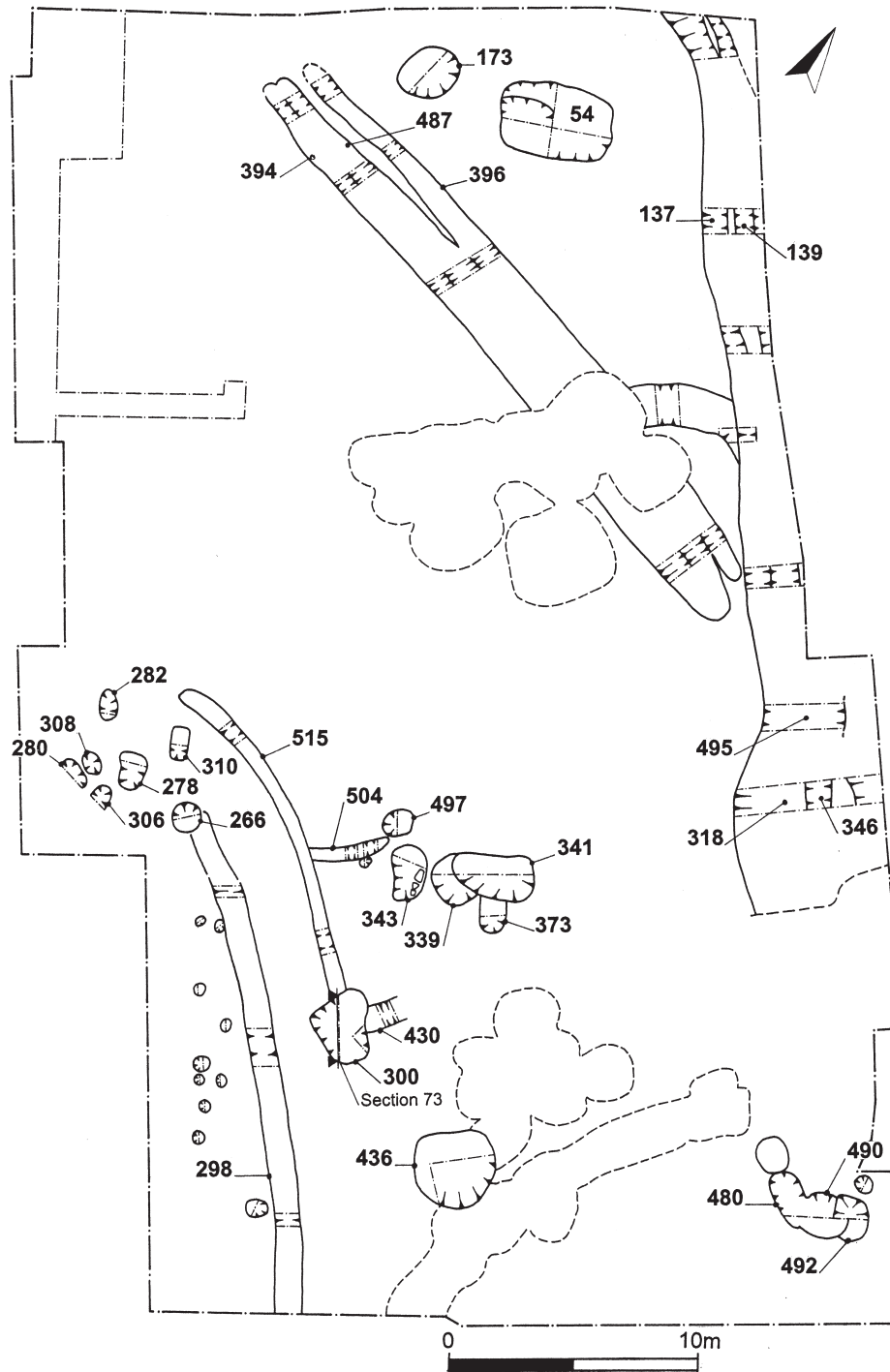


Fig 5 Medieval boundaries and pit group

located in every section, and most sections indicated that the eastern ditch had been recut. They were filled with grey-brown clayey loam, containing small pieces of limestone and charcoal flecking was observed in several sections. Both pottery and animal bone was recovered, but much of the pottery was residual Iron Age and Roman material. The small quantity of medieval pottery recovered leaves the date of formation uncertain. The ditches were certainly in use through the 11th century and away from the malthouse the latest material from the ditches is of early 12th century date. The sections beneath the malthouse produced some 13th and 14th century pottery (318, 346 and 495), this material may have been associated with later pits cut into the ditch fills (see below).

MEDIEVAL QUARRY PITS (12TH AND 13TH CENTURIES)

At the northern end of the site there were two pits of early 12th century date. A large rectangular pit (54), 4.50m long, 3.0m wide and 1.4m deep, with vertical to undercutting edges appears to have been a quarry for the underlying Blisworth limestone. The fills of orange brown clays contained many small pieces of limestone and a substantial pottery assemblage. A nearby smaller pit (173) was 1.5m in diameter by 0.6m deep.

Through the later 12th and 13th centuries activity was sparse, comprising a small group of three pits under the malthouse and a few pits further to the south. The pits beneath the malthouse were from 2.0-3.3m long and from 0.1-0.4m deep, although they had been truncated by the later building works (Fig 5; 343, 339, and 341). Pit (343), which is dated to the later 12th century had been lined with three courses of flat-laid limestone along its eastern edge, and its fill contained much charcoal and small pieces of burnt limestone, suggesting that it was used for some industrial process. The adjacent pits (339 and 341) are dated to the first half of the 13th century.

To the south, and within the complex of 14th century pits, a single pit (436) is dated to the early-mid 13th century by a major primary pottery assemblage. A total of 21kg represents most of seven vessels comprising three jugs and four jars, including a fine Lyveden/Stanton jug and an unusually large jar (Figs 8 and 9, 1-7, Plate 5). The pit was 3.0m in diameter and 0.9m deep, with very steep sides and a flat base, and the pottery assemblage was clustered within the secondary fill towards the western edge, although the vessels had all been broken prior to or at deposition. In the south-eastern corner of the site there was a cluster of a further three or four contemporary pits which were from 0.45-0.75m deep (480, 490 and 492). All of these pits were filled with brown sandy clays containing varying quantities of limestone pieces. A single pit (300) is dated to the later 13th century, and this was 3.0m in diameter and 1.5m deep, with near vertical sides and a flat bottom. Its primary fill (323) comprised redeposited natural of orange sand and small fragments of limestone, presumably the quarrying debris after the extraction of the larger slabs and fragments of limestone. The upper fill (299) was grey-brown sand that contained only a little limestone and a pottery assemblage that included part of a Potterspurw ware lamp.

In the area later lying beneath the malthouse, the upper fills of the eastern boundary ditches contained quantities of 13th century and some 14th century pottery. The nature of this activity was not clearly defined in excavation, but it is possible that a number of pits had been cut into the ditch fills, with this perhaps accounting for the bulge in the western edge of the ditches.

THE MEDIEVAL MANORIAL FARM (14TH CENTURY)

In the earlier 14th century three major buildings were constructed on the site; a malthouse/barn, a dovecote and a building to the north that had mortared walls and may have served as a kitchen/bakehouse, although no internal features had survived (Fig 6). A group of intercut pits lay to the north of the malthouse. To its south there was a further group of pits, at least some of which were intercut quarry pits whose fills produced a range a domestic pottery and other finds, as well as remnants of boundary walls and limestone surfaces. All of these features are broadly dated to the 14th century, but some of the pits may pre-date the construction of the buildings.

The malthouse/barn

Soil layers under the eastern end of the malthouse produced some 14th century pottery, although this may include pottery from an early earthen floor.

The malthouse, the best-preserved building, was 28.5m long by 6.2m wide, with an internal width of 4.7m and an open floor length of 22.3m excluding the malting oven (Plate 1). The eastern end of the northern wall still stood above floor level, and the western wall also partially survived. The whole of the southern wall had been robbed, although a short length of the wall foundations was uncovered in a single section. The location of the eastern wall was confirmed, but it had been partly removed and extensively damaged by the construction of a modern boundary wall adjacent to Lime Street.

The northern wall (5) was 0.75m wide and survived up to 11 courses (0.85m) high. It was faced with roughly squared limestone blocks with an average size of 250mm long, 150mm deep and 80mm thick. There was a core of disordered rubble and it was bonded with brown clay loam. The occasional burnt stone suggests robbing from an earlier structure. To the east, part of the foundation course, with an external offset, was exposed. The short length of the exposed foundations of the southern wall was 1.0m wide (65), although the robber trench (22) was only 0.8m wide. This indicates that there was an external offset between the foundations and the standing wall, as was less clearly seen to the north, so the southern wall was most probably of the same build as the northern.

On the external face of the northern wall there was a vertical butt joint but this was not investigated further, leaving its interpretation uncertain. However, it seems most likely to relate to the blocking of a doorway, which would indicate the presence of a near central northern doorway at least 4.0m wide. This arrangement would imply that the building functioned as a barn with cart access. The robbing of the southern wall means that no direct evidence for a doorway had survived, however, an area of disturbed clay floor suggests that this too had a central doorway at least 4.0m wide.

The blocking the northern doorway was abutted by the final clay floor, indicating that it had fallen out of use, while the disturbed clay floor shows that the southern doorway was in use. As a length of wall foundations lay within the southern doorway area, it is possible that this was a replacement for the blocked northern doorway, and that the two never functioned as opposing barn doors. This interpretation may be supported by the presence of pits to the immediate south, which would have restricted access to this doorway if in contemporary use, while the presence of minor boundary walls and limestone surfacing would be consistent with the later presence of a doorway.

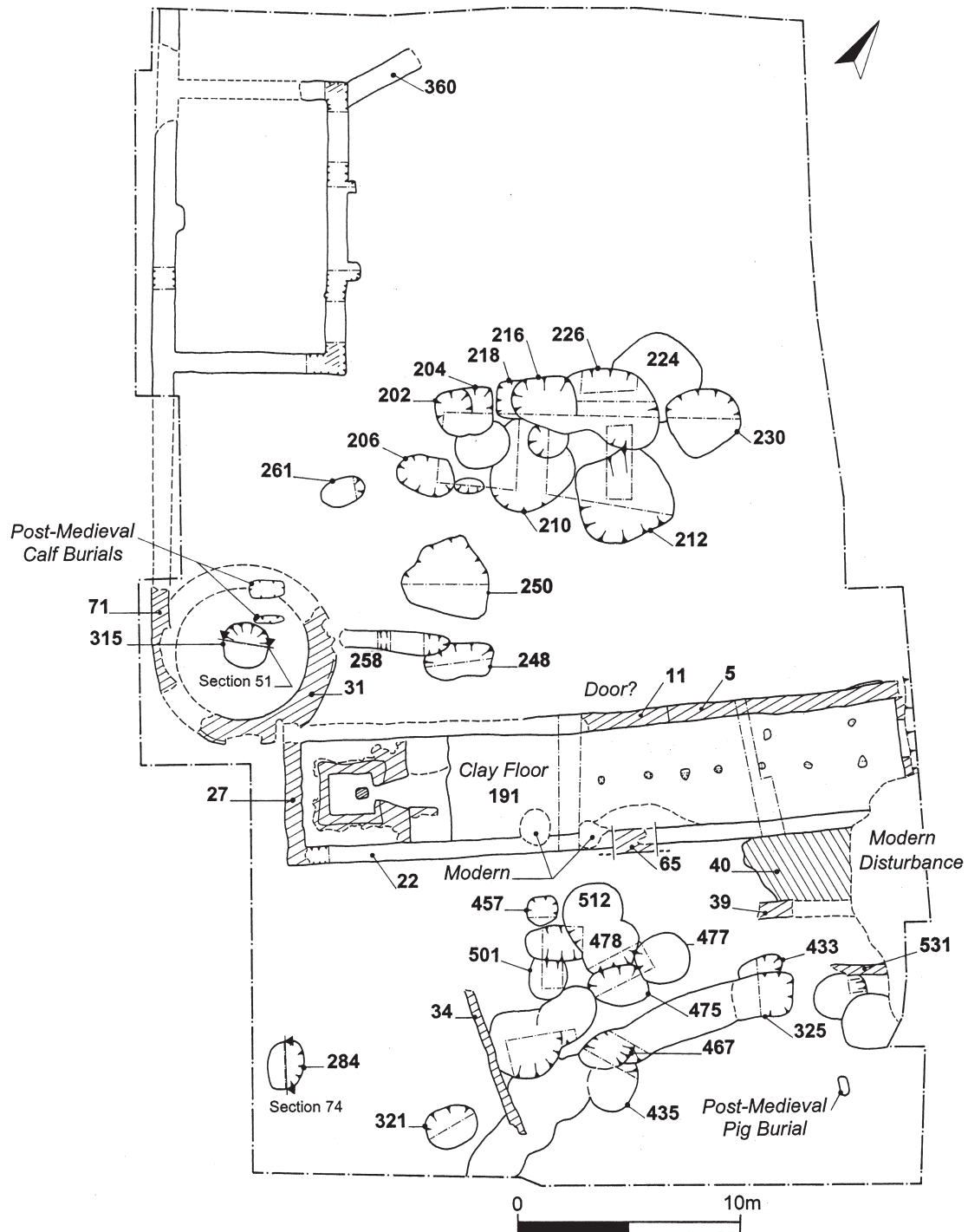


Fig 6 The medieval manorial farm

A MEDIEVAL FARM AT LIME STREET, IRTHLINGBOROUGH, NORTHAMPTONSHIRE



Plate 1 The malthouse, looking east

With the malting oven occupying a space 5.0m long at the western end of the building, there would have been a further space 8.0m long between the oven and the central doors, while to the east there would have been a general storage space 10.0m long.

The malthouse/barn may originally have had an earth floor. The final floor was a 130mm thick layer of pale grey-green clay (191). Sections cut across the floor produced no evidence that this was an accumulation of several floor levels, and the insertion of a revetment wall to extend the ramp leading into the malting oven also indicates that the laying of this floor had produced a significant raising of the floor level.

Seven postholes were cut through the clay floor along the central axis on the eastern half of the building. They were spaced roughly 2.0m apart, and were 0.34-0.45m in diameter and 0.3-0.4m deep, and contained fragments of limestone from displaced post-packing. They are of uncertain function, but may have held a partition wall. Two further postholes at the eastern end of the building and close to the north wall may mark another internal subdivision.

The malting oven was situated at the western end of the building (Fig 7, Plate 1). It was a later insertion, as its structure abuts the standing walls of the building (27), although this may merely reflect the necessary sequence of construction. Between the

building walls and the lining of the oven chamber there was a fill of dark grey brown sandy clay with a few small stone inclusions (29), that formed a deep insulating layer around the chamber. The oven was built within a shallow construction pit that cut into the underlying natural. The stone lining of the chamber (18) survived up to 18 courses high (0.9m) and was battered at an angle of 65°. As a result, the chamber floor measured 2.1m by 1.8m while at its highest surviving level it measured 3.4m by 3.2m.

The flue was 1.55m long, sloping steadily upwards to the east and broadening from 0.65m wide at the chamber to 1.55m wide at floor level (Fig 7, Plate 2). To the west it stood 0.90m high and to the east it was 0.28m high, with the flue ramp continuing a further 0.80m to the east before it reached floor level. The flue walls were more substantially built than the chamber lining, comprising good courses of large, closely fitting limestone blocks (15). They were carried across in a similar build to abut the main building walls, and were backed by a core of mixed soil and limestone rubble.

Built into the surviving top of each flue there was a box-like recess (195 and 196). They were 0.30m and 0.38m high, 0.28m wide and recessed up 0.40m into the flue walls (Plate 3). Both were lined with thin slabs of limestone set upright to form the sides of the recess. While they were opposite each other, as they were built on the line of the flue walls they lay at an angle to each other, and so do not appear to have held a timber beam supporting



Plate 2 The malting oven, looking down the flue

A MEDIEVAL FARM AT LIME STREET, IRTHLINGBOROUGH, NORTHAMPTONSHIRE

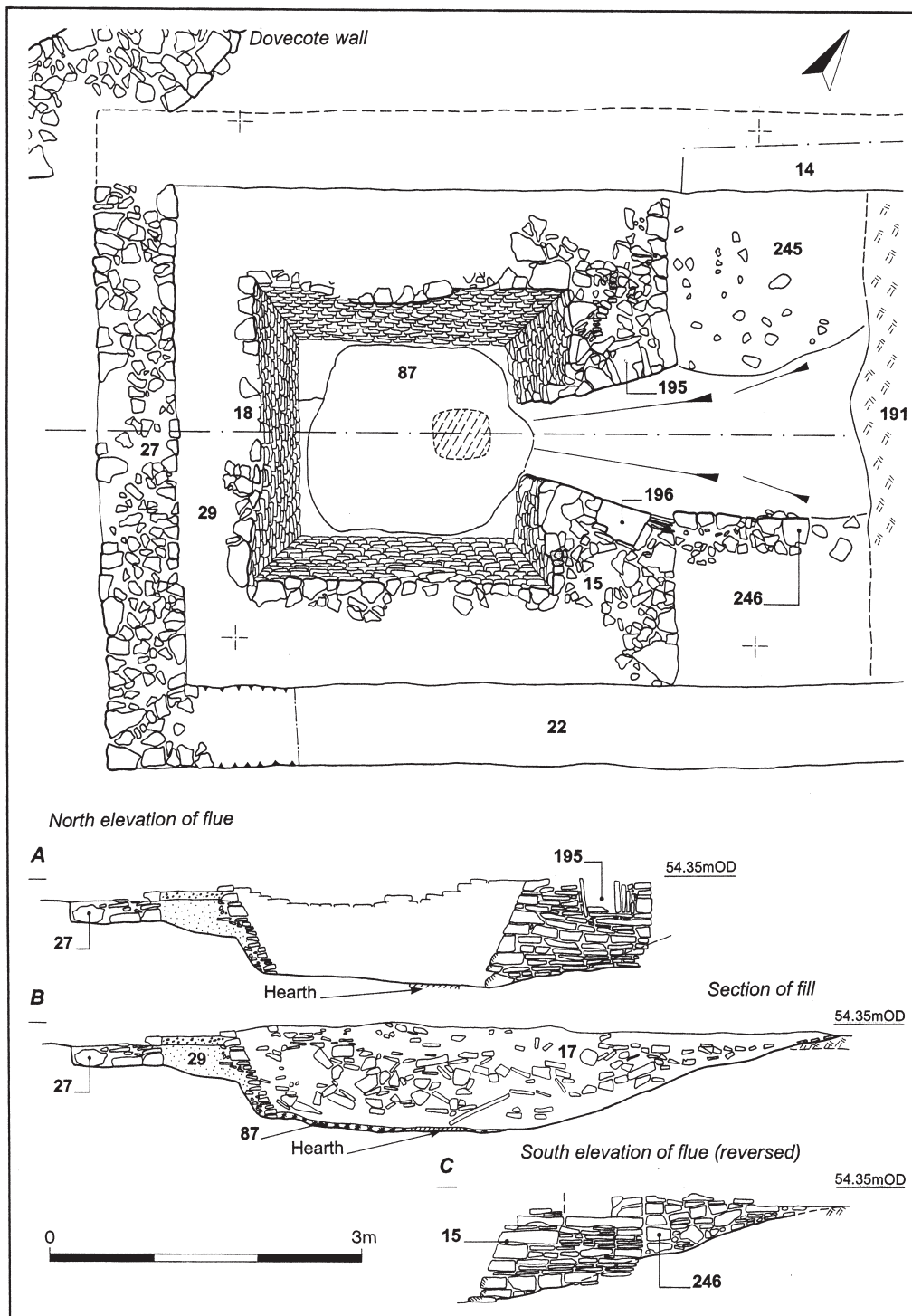


Fig 7 The malting oven



Plate 3 The malting oven, showing a recess in the flue wall

a flue arch. Their function is uncertain, but it is possible that they acted as small storage chambers, perhaps for goods that needed to be kept warm and dry.

The lower three stones at the junction of the flue and chamber on each side were the only stones scorched red. Immediately within the oven chamber there was an area of bright red soils, which was probably a result of scorching beneath a lost hearth stone. This was at least 0.55m long, but as it was only recorded in a photograph of the sectioned chamber fill its full extent is uncertain. However, this and the scorched corners of the flue opening clearly indicate that the fire had been set in the usual location immediately inside the flue opening. Across the bottom of the oven there was a layer of black debris (87) up to 0.10m thick (Fig 7, Plate 2) containing mostly charred barley and weed seeds.

At a later date, at least the southern side of the flue was extended by the insertion of a roughly built stone revetment (246). This was 1.50m long and five courses (0.55m) high where it abutted the oven flue, reducing to a single course where it abutted the clay floor to the east. The insertion of this revetment to extend the ramp was probably a modification required by the laying of the clay floor (191), which had significantly raised the floor level within the malthouse. In this final form, there was a fall of 0.89m from the clay floor to the base of the oven chamber. There may have been a similar revetment extending the northern side of the

flue, but this area had been heavily disturbed (245), probably when the adjacent length of the building wall was robbed. It had left a mixed deposit of brown clayey loam containing frequent small fragments of disordered limestone.

At demolition the malting oven was filled with stone rubble that included many large limestone pieces and slabs, and some limestone roof tile (17). It is possible that some of the larger slabs came from a stone floor set above the oven chamber. A layer of building rubble up to 0.40m thick lay across the floor of the building. It is likely that the building was levelled shortly after abandonment at around the end of the 14th century and was left undisturbed until the 18th century when the sloping site was terraced. The southern wall lay towards the rear of a terrace and the building rubble was removed and the wall was probably re-exposed and more extensively robbed at this time. The eastern end of the north wall lay at the raised front of the next terrace and so was buried and protected from further robbing.

The malthouse can be dated by substantial pottery assemblages recovered from secure contexts that both predate its construction and relate to its demolition and all of these assemblages are dated to the 14th century, indicating the relatively short lifetime of the building.

The dovecote

The circular dovecote had been extensively robbed, so that less



Plate 4 The dovecote and the later boundary wall (left)

than a half of its full circumference survived (Fig 6 and Plate 4). It was 8.2m in diameter, with an internal space 6.0m in diameter. The walls were up to 1.35m thick at foundation level, but a partially surviving offset of 0.30m indicates that at ground level they were 1.05m thick (31). The walls survived up to four courses (0.57m) high on the eastern side, and were faced with large limestone blocks while the core comprised slightly smaller limestone pieces bonded with clayey loam.

A central pit (315), 2.20m in diameter and 0.45m deep, would have held the post supporting the rotating ladder, the potence, which gave access to the dove holes set in the upper walls. The pit fill was largely stone-free but a central, near vertical-sided post-pipe, 0.80m in diameter, contained many large limestone pieces presumably from former stone packing.

Pottery from the demolition rubble suggests that the building was in use and demolished during the 14th century, prior to the construction of the western boundary wall (see below).

The northern building (kitchen/bakehouse?)

The northern building was rectangular with internal dimensions of 11.6m long by 6.8m wide (Fig 6). The walls had been totally robbed, leaving robber trenches 0.80m-0.90m wide by 0.28m deep, with vertical sides and flat bases, although much of the

northern wall had been totally lost. Along the eastern wall two external buttresses, up to 0.80m long by 0.30m wide, were seen as extensions of the robber trenches. They were placed at equal distances from the northern and southern ends and were set 2.80m apart, perhaps flanking a central doorway. The robber trenches contained a single fill of yellow brown sandy clay with frequent small limestone chips and pieces. This was quite different from the robber trench fills of the malthouse, and appears to derive from decayed mortar wall bonding. This suggests that this building was of a higher status than the others.

No extensive floor levels had survived, although there was a layer of soil and scattered limestone within the south-western corner, which may have been a remnant of an earthen floor and overlying demolition rubble. This included a few Collyweston-type roof tiles and pottery dated to later 15th century, suggesting that this building may have continued in use, or was at least demolished, later than the others. No internal features survived, but the location of the building in respect to the malthouse/barn and dovecote and the greater internal width of this structure might suggest that it was a detached kitchen/bakehouse range. A direct comparison can be made to the arrangement of the late 12th-13th century manorial range at nearby West Cotton, Raunds (Chapman forthcoming).

At the north-eastern corner of the building a length of robber trench (360) ran away from the building at an oblique angle for at least 3.5m. The fill was similar to that of the building robber trenches and it may have formed a northern boundary to the building complex.

The western boundary wall

A boundary wall ran between the dovecote and the northern building, and continued northward beyond the excavation. To the north it had been robbed but it must have abutted the corner of the northern building, and the western wall of the building appears to have been retained as part of the boundary into the 19th century, the date of its robbing.

To the south it was 0.80m wide built in limestone with clay bonding (71). The preferential survival of the western face may suggest that there were offset foundations with the standing wall *c* 0.60m wide. The relationship of the boundary wall to the dovecote was not established, but the way the boundary wall met a probable remnant of the dovecote wall makes it unlikely that they could have been in contemporary use, as the boundary wall would have cut into the structure of the dovecote. It is therefore considered most likely that the dovecote fell out of use and was largely demolished, but the south-western part was partially retained and incorporated into the boundary wall.

The northern pit group

To the north of the malthouse a group of at least 18 pits occupied an area measuring 19m east-west by 6.0-9.0m north-south (261, 206, 202, 204, 218, 216, 226, 224, 230, 212 and 210). In the central part of this area there was much intercutting, and some smaller later pits lay fully within the fills of the earlier pits. They were investigated by cutting longitudinal sections along the northern and southern margins of the main group, with a number of arbitrary box sections between them. The pits varied in plan form and size but most were sub-square to sub-circular and from 1.2-4.2m in diameter. As excavated they were only 0.10-0.25m deep, but had clearly been much truncated. The fills were consistently dark grey brown sandy clay with some small stone inclusions, animal bone and pottery assemblages dated to the 14th century.

To the south of the main group, and in the angle of the dovecote and malthouse, there were further but more irregular pits (248, 250 and 258). These had fills of brown sandy clay and are all undated. They may have either been contemporary with the others or of post-medieval date.

The southern area

To the south of the malthouse there was a cluster of eight intercutting pits, with further isolated pits to the west and east. In addition, a feature originally seen as a curvilinear ditch was found upon partial excavation to comprise a chain of intercutting quarry pits.

The pits to the immediate south of the malthouse were oval to circular in plan, 1.3-2.7m in diameter and from 0.50-0.75m deep, typically with steep sides and flat bottoms. The fills were typically dark grey brown clayey loams containing occupation debris (457, 512, 478 and 501), but pits (475) and (477) contained secondary fills of redeposited natural sands and limestone. To the west there was an isolated quarry pit (284) that was 2.1m in diameter and 1.5m deep, with near vertical sides and a flat bottom. The lower fill against the northern side comprised mixed redeposited natural of orange sand and small limestone mixed

with darker soils containing occupation debris, while the upper fills also contained much charcoal, pottery and animal bone and part of a Millstone Grit quern or millstone. A similar pit, but only 1.0m deep lay nearby (321).

The curvilinear arc of intercut pits was only sectioned in two places, but these lengths both produced quantities of domestic debris with pottery, animal bone and a range of other finds, including part of a quern and the two bone whistles (Fig 10, Plate 6). The pit to the east was 0.8m deep, with near vertical to undercutting sides and a flat bottom (325), while the cluster of three intercutting pits at the centre of the feature were from 0.85-1.2m deep, again with near vertical sides and flat bottoms (435 and 467). The fills were a mixture of darker soils containing occupation debris and steeply inclined dumps of redeposited natural orange sands and smaller limestone.

These pits probably went out of use at some point during the lifetime of the malthouse, perhaps when the postulated southern door replaced the blocked northern doorway. Subsequently the area took on the appearance of a yard, with walled boundaries and an area of limestone surface to the east. The area was bounded to the west by a wall (34) set at a slight angle to the malthouse. A length of 7.0m survived, and it was 0.5m wide with up to three courses built in rough limestone and included pieces of burnt stone and some large cobbles. In part, it also acted as a low revetment against a higher ground level to the east, perhaps suggesting that the south-west corner of the site had been subject to greater erosion.

To the east the sequence of activity was not fully resolved in excavation. However, it seems most likely that an area of limestone to the east and immediately south of the malthouse (40) was contemporary with the malthouse. It extended 5.0m east-west and 3.0m north-south and comprised disordered angular pieces of limestone over a lower level containing smaller, flat-lying limestone. Whilst interpreted on site as a 'cobbled' surface, there is no record that this was a well-laid surface with indications of wear. To the south the limestone abutted a roughly built limestone wall (39), 0.54m wide with only a single course surviving, that ran parallel to the malthouse. Given the fragmentary nature of the evidence it is difficult to interpret these deposits. However, one possibility is that the wall may have been part of a lean-to structure set against the south wall of the malthouse, and the spread of limestone may have been an earthen floor overlaid by demolition rubble.

A further 2.0m to the south there was another length of wall, also *c* 0.5m wide (531). This may be a remnant of a boundary wall.

POST-MEDIEVAL ACTIVITY

The pottery evidence clearly indicates that the malthouse and dovecote were abandoned at the end of the 14th century, as just nine sherds are dated to the earlier 15th century. A small quantity of later 15th century pottery associated with the northern building suggests that this may have continued in use through the 15th century. All buildings were probably reduced to ground level soon after abandonment, with reusable stone removed from the site while the debris was spread across the interior of the buildings as a layer of demolition rubble.

In the 18th century parts of the remaining medieval walls were robbed as part of a process of landscaping and terracing. The robbing of the southern wall of the malthouse occurred at this time and the higher northern part of the site was particularly affected, with truncation of the building levels and the earlier

A MEDIEVAL FARM AT LIME STREET, IRTHLINGBOROUGH, NORTHAMPTONSHIRE

features. Subsequently, the site was used as horticultural land, and the two calf burials and a pig burial probably all relate to this modern usage (Fig 6). The two calf burials lay within the area of the dovecote, and both were in pits that had been cut through the demolition rubble. The pig burial was in a small, deep pit cutting a group of medieval pits in the south-east corner of the site, and had been covered in lime, suggesting that it was deposited no earlier than the 19th century.

The boundary wall along the western margin was also retained until the 19th century, when it was finally demolished and robbed. It was shown on the 1801 plan of the area and it continued up to Station Road (formerly High Street). Along the eastern margin of the site the construction of the modern wall alongside Lime Street had involved cutting a construction trench into the eastern boundary ditches and the eastern wall of the malthouse. The southern wall of the malthouse and the area to the immediate south were more extensively disturbed, possibly by a former inclined ramp providing access down to Lime Street, which lies well below the ground level within the site. Apart from minor recent allotment or tree disturbance the site had been protected from further disturbance by the long-term presence of the allotments.

THE WORKED FLINT by Alex Thorne

Thirty-nine pieces of worked flint were recovered as residual finds. They include 16 flakes, 4 blades, 3 cores, 4 scrapers, 9 miscellaneous retouched pieces and a possible fragment from a polished flint axe.

The raw material used comprised small nodules of a fine-grained grey-brown flint that had probably originated from either rivers or glacially derived deposits. Most flints have been worked with hard-hammers, but several have been soft-hammer struck. The four blades had been struck from prepared cores and these are all patinated grey/white or blue/white, unlike the majority of the assemblage which had retained its grey-brown coloration, and this could indicate that the blades are older perhaps early Neolithic. The assemblage includes three 'thumb-nail'-type scrapers which are characteristic of the Beaker/early Bronze Age period. The presence of cores and waste flakes show that flint-working took place on site and the scrapers and flake tools also suggest that subsistence activities were also occurring here. No contemporary features or pottery was recovered.

THE IRON AGE POTTERY by Dennis Jackson

A total of 448 sherds of handmade Iron Age pottery, weighing 4.5kg, were recovered. The assemblage consists of pottery that is derived from the following features or contexts:

Pottery from features of Iron Age date	348 sherds (2698g)
Residual pottery found in later features	75 sherds (1220g)
Unstratified pottery	15 sherds (350g)
Pottery of late Iron Age or early Roman date (medieval pit 278)	10 sherds (277g)

All the Iron Age pottery contains shell of varying size and density. The pottery was initially quantified into 20 different combinations of shell, but the number was finally reduced to the six main types.

A few sherds contained grog or stone grits in addition to shell but their number is insignificant. There is a fine distinction between the fabrics containing fine to medium shell, whilst the percentage of sherds containing coarse shell is relatively small.

There are only 16 rim sherds in the assemblage, of which five are direct and probably derive from bowls. There are no complete profiles in the assemblage and only four rim to shoulder profiles survive. Most of the vessels appear to be bipartite in form, with profiles that are mainly ovoid or globular. A small number of sherds (4%) derive from thick walled jars, and there is one angular shoulder, probably from a carinated bowl. Evidence of decoration, scoring, or burnishing is sparse. There are two sherds with fingertip decoration on the shoulder, and two with decoration on the top of the rim. Scoring occurs on the face of ten sherds, and three sherds retain evidence of burnishing.

The date range of the pottery suggests there was Iron Age activity in the area for at least 300 years, with occupation likely to be spread over a much wider area than that excavated. Jars with fingertip decoration on the shoulder and carinated bowls occur and these vessels are unlikely to date to a period after the middle of the 3rd century BC. The later middle Iron Age rim profiles, particularly the jars, find parallels in the assemblage from the Hunsbury hillfort at Northampton (Fell 1936). However, the pottery as a whole is not immediately comparable to the material from the nearby site at Stanwick, excavated as part of the Raunds Area Project, where globular vessels and late Iron Age forms predominate.

THE ROMAN POTTERY by Roy Friendship-Taylor

There is a total of 163 sherds of Roman pottery, weighing 1.56kgs. Much of this material was recovered as residual sherds in medieval features, and this is reflected in the small sherd size and the fact that many sherds are quite abraded.

The date range for the group as a whole suggests mainly a later 2nd to 3rd century AD date, perhaps extending only a decade or so into the 4th century as only minimal amounts of possible later 4th century pottery types are present. Perhaps not surprisingly, the 3rd century pottery is dominated by Lower Nene Valley colour coated types, but even here there is nothing very significant. However, this does run contrary to the evidence from Bedfordshire sites along the Bedford Southern Bypass and evidence from the villa at Piddington, Northamptonshire (Friendship-Taylor pers comm), where Oxford region colour coated and mortaria pottery outnumber that of Lower Nene Valley pottery by up to three to one. Therefore it is surprising that there is a general lack of Oxford red colour coat (two sherds) and Much Hadham red colour coat (one sherd) wares. Also, there is a total lack of mortaria from both the lower Nene Valley and Oxford regions and only one sherd of a flagon with a frill around the base of the neck from an unknown source. The small amount of Samian present (four small sherds) reinforces the later date of the assemblage proposed.

OTHER ROMAN FINDS by Tora Hylton

A small number of Roman finds were recovered from the site, these include a brooch fragment, three coins and two sherds of possible Roman glass. Structural debris is represented by a small

Fabric	Date	No of sherds	Weight (g)	EVE
F100: St Neots ware	AD850-1100	94	569	0.36
F200: T1 (2) type St. Neots Ware	AD1000-1200	163	1153	0.75
F205: Stamford ware,	AD850-1250	11	58	0.12
F207: Oolitic ware,	AD975-1150	25	273	0.35
F330: Shelly Coarseware,	AD1100-1400	1298	15058	7.31
F331: Developed Stamford ware	late 12th-mid 13th century	1	1	0
F344: Gritty Glazed ware,	AD1200-1400?	5	120	0
F360: Miscellaneous Sandy Coarsewares	AD1100-1400	1	31	0
F319: Lyveden/Stanion 'A' ware,	AD1150-1400	687	19121	6.09
F324: Brill/Boarstall Ware,	AD1200-1600	11	59	0
F320: Lyveden/Stanion 'B' ware,	AD1225-1400	143	5227	0.93
F375: Glazed Oolitic ware	?13th-14th century?	2	41	
F329: Potterspury ware,	AD1250-1600	191	1800	1.43
F322: Lyveden/Stanion 'D' ware,	AD1400-?1500	3	21	0
F366: Raunds-type Reduced Ware	AD1300 - 1400	69	517	0.47
F401: Late Medieval Oxidized ware,	?AD1450-?1500	4	240	0
F404: Cistercian ware,	?AD1475-1700	1		
F403: Midland Purple ware,	AD1450-1600	7	183	0
F409: Staffordshire Slipwares,	AD1680-1750	1	33	
F411: Midland Blackwares,	AD1550-1700	10	250	
Miscellaneous 19th century wares (late English stoneware, white earthenwares, etc).		20	270	

fragment of roof tile (tegula). The brooch fragment is unstratified, but although incomplete enough survives to identify it as a bow fragment from a headstud brooch. It is ornately decorated with a cast lozenge and triangle motif, which may originally have been enamelled. Brooches of this type date from the late 1st century through to the 2nd century.

An illegible 1st/2nd century coin was residual in a medieval context. Two coins recovered from the upper fills of the Roman enclosure ditch date to the 3rd - 4th century, but only one is legible, a coin of Constantius II (AD 337-361). There are two small fragments of glass, a clear fragment, possibly part of a squared bottle, and a blue fragment, both were residual in medieval contexts.

THE SAXON AND MEDIEVAL POTTERY by Paul Blinkhorn

The Saxon and medieval pottery assemblage comprised 2,478 sherds with a total weight of 45.2kg. The estimated vessel equivalent (EVE), by summation of surviving rimsherd circumference was 17.81. All the pottery is of types well known in the region, and was largely fragmented, but the assemblage is notable for a group of seven largely complete but broken pots from a single 13th century deposit, which forms nearly a half of the recovered assemblage (Figs 8-9).

ANALYTICAL METHODOLOGY

The material from each context was recorded by number and weight of sherds per fabric type, with featureless body sherds of the same fabric counted, weighed and recorded as one entry. Feature sherds such as rims, bases and lugs were individually recorded. Decorated sherds were similarly treated. In the case

of the rimsherds, the form, diameter in mm and the percentage remaining of the original complete circumference was all recorded. This figure was summed for each fabric type to obtain the minimum number of vessels (MNV).

The terminology used is that defined by the Medieval Pottery Research Group's Guide to the Classification of Medieval Ceramic Forms (MPRG 1998) and to the standards laid out in the Minimum Standards for the Processing, Recording, Analysis and Publication of Saxon and medieval Ceramics (MPRG 2001). All statistical analyses were carried out to the minimum standards suggested by Orton (1998-9, 135-7).

FABRIC

The late Saxon and medieval pottery was quantified using the chronology and coding system of the Northamptonshire County Ceramic Type-Series (CTS) shown above.

All these fabrics have been noted at medieval sites in Northamptonshire in the past. Some of the minor wares are worthy of further discussion. The sherds of Gritty Glazed ware (F344) were all noted in contexts dating to ceramic phase Ph2/2 (AD1250-1300; see below) or later. This fits broadly with the suggested chronology on the evidence from other sites. Both the sherds of Glazed Oolitic ware (F375) were unstratified.

CHRONOLOGY

Each context-specific group was given a relative seriated phase-date (RSP), as shown in Tables 1 and 2.

QUANTIFICATION

The pottery occurrence per ceramic phase is shown in Table 3. The data show that there was little activity before the Saxon-

A MEDIEVAL FARM AT LIME STREET, IRTHLINGBOROUGH, NORTHAMPTONSHIRE

Table 1: RSP Phases and Major Defining Wares for the Saxon Ceramics of Northamptonshire, c 450-1100

RSP Phase	Defining Wares	Chronology
ES	Decorated Early Saxon	c. AD450-650
E/MS	Undecorated Early/Middle Saxon	c. AD450-850**
MS	Ipswich Ware, Maxey-type Wares	c. AD650-850
LS1	T1(4) St. Neots Ware	c. AD850-900
LS2	T1(3) St. Neots Ware, Stamford Ware, Northampton Ware	c. AD900-975
LS3	Cotswolds-type Oolitic Ware	c. AD975-1000
LS4	T1(2) St. Neots Ware	c. AD1000-1100

Table 2: RSP Phases and Major Defining Wares for the Medieval Ceramics of Northamptonshire

RSP Phase	Defining Wares	Chronology
Ph0	Shelly Coarsewares, Sandy Coarsewares	c. AD1100-1150
Ph1	Lyveden/Stansion 'A' Ware	c. AD1150-1225
Ph2/0	Lyveden/Stansion 'B', Brill/Boarstall ware	c. AD1225-1250
Ph2/2	Potterspurty Ware	c. AD1250-1300
Ph3/2	Raunds-type Reduced Ware	c. AD1300-1400
Ph4	Lyveden/Stansion 'D' Ware	c. AD1400-1450
Ph5	Late Medieval Oxidized Ware	c. AD1450-1500

Table 3: Pottery occurrence per ceramic phase (all Saxon and medieval fabrics)

Phase	No	Weight (g)	EVE
LS1	2	12	0
LS2	0	0	0
LS3	0	0	0
LS4	73	532	0.04
Ph0	96	736	0.29
Ph1	60	2622	0.46
Ph2/0	573	23124	8.89
Ph2/2	282	2561	1.70
Ph3/2	1346	12100	5.82
Ph4	9	92	0
Ph5	112	1077	0.43
Total	2553	42856	17.63

Norman period (phase LS4). From then, there is constant activity throughout the medieval period, with only Ph4 (AD 1400-1450) producing a small assemblage.

The pottery occurrence data (Table 4) shows that there was a degree of residuality in the later medieval phases, particularly Ph2/2, Ph3/2 and Ph5. Ph2/2 and Ph3/2 saw the backfilling of the majority of the medieval pits on the site, with most dating to the latter phase, with earlier deposits disturbed. Both types of St. Neots ware (fabrics F100 and F200) total 3.9% and 6.0% of the pottery (by weight) were from this phase, despite the fact that they had both long fallen from use by this time. This compares with a total of 0.4% of the pottery from Ph1, when F100 was no longer current, and F200 had all but ceased to be made and used. In Ph5, St Neots types and defunct medieval wares represent 58.6% of the phase assemblage, showing that the robbing of the stone structures at the site had caused a great deal of disturbance of earlier deposits.

FRAGMENTATION ANALYSIS

Table 5 shows the mean sherd weight per fabric type per phase for the major fabrics. The data shows a fairly similar picture to that for pottery occurrence, in that the sherd weight of most fabrics

Table 5

Phase	F100	F200	F330	F319	F320	F329	F366	Totals
LS4	10.3%	85.9%	-	-	-	-	-	532g
Ph0	2.2%	6.8%	83.8%	-	-	-	-	736g
Ph1	0	0.4%	31.0%	67.3%	-	-	-	2622g
Ph2/0	>0.1%	0.1%	35.4%	46.2%	17.2%	-	-	23124g
Ph2/2	1.7%	2.1%	37.7%	37.7%	3.0%	16.1%	-	2561g
Ph3/2	1.9%	4.1%	31.8%	41.0%	7.2%	8.2%	3.8%	12100g
Ph5	10.8%	0.8%	25.2%	12.1%	9.7%	14.8%	1.1%	1077g
	471g	1088g	14723g	18508g	5035g	1563g	466g	42752g

Table 5: Mean pottery sherd weight (in g) per major fabric type per phase

Phase	F100	F200	F330	F319	F320	F329	F366
LS4	5.0	7.5	-	-	-	-	-
Ph0	8.0	8.3	7.7	-	-	-	-
Ph1	0	3.7	18.0	220.6	-	-	-
Ph2/0	5.5	2.3	20.1	109.0	71.1	-	-
Ph2/2	5.4	3.5	7.3	11.4	8.6	15.3	-
Ph3/2	7.	8.2	7.0	11.5	13.9	8.2	7.1
Ph5	4.8	9.0	6.0	14.4	52.5	8.8	6.0

Table 6: Vessel occurrence per medieval ceramic phase (expressed as a percentage of the phase total EVE)

Phase	Jars	Bowls	Jugs	Lamps	Total EVE
Ph0	82.8	17.2	0	0	0.29
Ph1	47.8	26.1	26.1	0	0.46
Ph2/0	79.5	23.6	18.1	0	8.89
Ph2/2	31.8	8.2	54.1	5.9	1.70
Ph3/2	42.3	41.4	16.3	0	5.82
Ph5	20.9	20.9	58.1	0	0.43
Total EVE	10.62	3.02	3.85	0.10	17.59

does drop in the phases after the material ceased to be made and used. However, there are some anomalies; the St. Neots wares (F100 and F200) have relatively high sherd weights during Ph3/2 and Ph5, indicating that the early deposits which were disturbed during this period had originally contained fairly well-preserved and perhaps even primary deposits of late Saxon pottery. Certainly, in both cases, the mean sherd weight of these fabrics in the Ph3/2 and Ph5 deposits is greater than that of the stratified material in LS4, suggesting that the apparently late Saxon and Saxo-Norman assemblages are very much secondary in terms of their depositional nature.

VESSEL USE

The pattern of vessel use at the site (Table 6) is fairly typical of rural sites in Northamptonshire, *ie* it comprises almost entirely jars, bowls and jugs.

The only exceptions were a single fragment of a Pottersbury ware (F329) lamp rim noted in a Ph2/2 context, and a fragment that may have been part of a curfew from a Ph3/2 group. Tablewares were entirely absent, although this could be for a number of reasons. The area of the site excavated contained pits and ranges of manorial farm buildings, so it is likely that the pottery used here would not be related to dining. Certainly, at West Cotton (Blinkhorn forthcoming), fairly large amounts of jugs were noted in middens which were related to the malthouses. Malting requires large amounts of water and the jugs may have been used for transporting water for soaking the grain. However, the peak occurrence occurs in phase 2/2, prior to the construction of the malthouse when the material is evidently coming from somewhere away from the excavated site, probably a nearby manor house. There is also the fact to consider that the site is of manorial status. The inhabitants of the manor would have been relatively wealthy, and perhaps more likely to have used metal and glass rather than pottery for dining. Both are eminently

recyclable materials, and rarely found in an archaeological context.

In addition, note should be made of a shelly ware bowl repaired using copper wire, only the second example known from the region.

A GROUP OF NEAR-COMplete 13TH CENTURY VESSELS

Pit (436) at the southern end of the site produced a large assemblage of early-mid 13th century (Ph2/0) material. The group comprised 421 sherds with a total weight of 20.99kg, with the EVE = 7.52. The bulk of the material consisted of seven near-complete vessels (Figs 8 and 9, 1-7): three jugs (one each in shelly coarseware, Lyveden/Stansion 'A' ware and Lyveden/Stansion 'B' ware) and four jars (three in Lyveden/Stansion 'A' ware, one in shelly coarseware), with one of the jars being particularly large. Two of the jars and one of the jugs had considerable amounts of limescale on the inner surface, and all the jars were sooted, showing that they had been heated at some point during their use-lives.

The vessels are products of both the Lyveden/Stansion kilns and those further to the south on the Northamptonshire-Bedfordshire border, and both glazed and unglazed vessels are present. Groups of near-complete vessels of this date are somewhat unusual in the county. For example, at West Cotton, many thousands of sherds of glazed Lyveden/Stansion 'B' ware were present, but it was not possible to reconstruct a single vessel of this type to a full profile. Many vessels of various types from West Cotton were reconstructed, but most dated the 12th or 14th centuries. The glazed jug from this group is decorated in a very similar style to a vessel noted during excavations at a windmill site at Tansor, Northamptonshire (Blinkhorn 1997, fig 22). Otherwise, the group is difficult to parallel, and provides a useful and almost unique snapshot of earlier 13th century pottery use in this area of the county. The volumes of these vessels have also been calculated

A MEDIEVAL FARM AT LIME STREET, IRTHLINGBOROUGH, NORTHAMPTONSHIRE

Table 7: Volumes of reconstructed pottery vessels

Vessel	Volume (litres)	Ale/beer gallon (4.621 litres)	Corn/grain gallon (4.404 litres)
1	20.7	4.48	4.70
4	12.0	2.60	2.72
5	8.1	1.75	1.84
6	56.5	12.23	12.83
7	19.2	4.15	4.36

(Table 7), and converted to the ale/beer and corn/grain gallons, using the standardised values established in the reign of Elizabeth I (Zupko 1968, 69-72).

Some possible patterns emerge. The larger jug, vessel 1, had a capacity of some 20 litres or around 4 gallons, similar to the medium sized jar, vessel 7. The three squat jars also have values that are very approximately multiples of two gallons. The smallest, vessel 5 would have contained slightly less than two gallons; the middle sized jar, vessel 7, would have contained around twice this at slightly over 4 gallons; while the exceptionally large jar, vessel 6, at around 12 gallons, would have contained three times the volume of the middle sized jar. The more upright jar, vessel 4, appears to be an exception, with a volume of around 2.5 gallons, although perhaps the two small

jars represent the range of variations around a nominal two-gallon volume jar.

Illustrated pottery (Figs 8-9)

- 1 Jug, Lyveden/Stanion 'B' ware. Grey fabric with orange surfaces. Upper half of vessel has green glaze over white slip decoration, with the latter appearing yellow through the glaze (extent of surviving glaze demoted by dotted line). Inner surface of vessel abraded and flaking off. Pit 436.
- 2 Jug, Shelly Coarseware. Grey fabric with pale orange-brown surfaces. Pit 436.
- 3 Jug, Lyveden/Stanion 'A' ware. Grey fabric with orange-brown surfaces. Inner surface thickly and evenly lime-scaled. Pit 436.
- 4 Jar, Lyveden/Stanion 'A' ware. Grey fabric with orange surfaces. Lower outer surface thickly sooted, lower inner surface and base lime-scaled. Pit 436.
- 5 Jar, Lyveden/Stanion 'A' ware. As 4. Context 436
- 6 Large jar, Lyveden/Stanion 'A' ware. Grey fabric with orange surfaces, sooting near base, no lime-scale. Pit 436
- 7 Large jar, Shelly Coarseware. Grey fabric with yellow-brown surfaces. Entire outer surface sooted below shoulder. Pit 436



Plate 5 A Lyveden/Stanion jug and a large coarseware jar

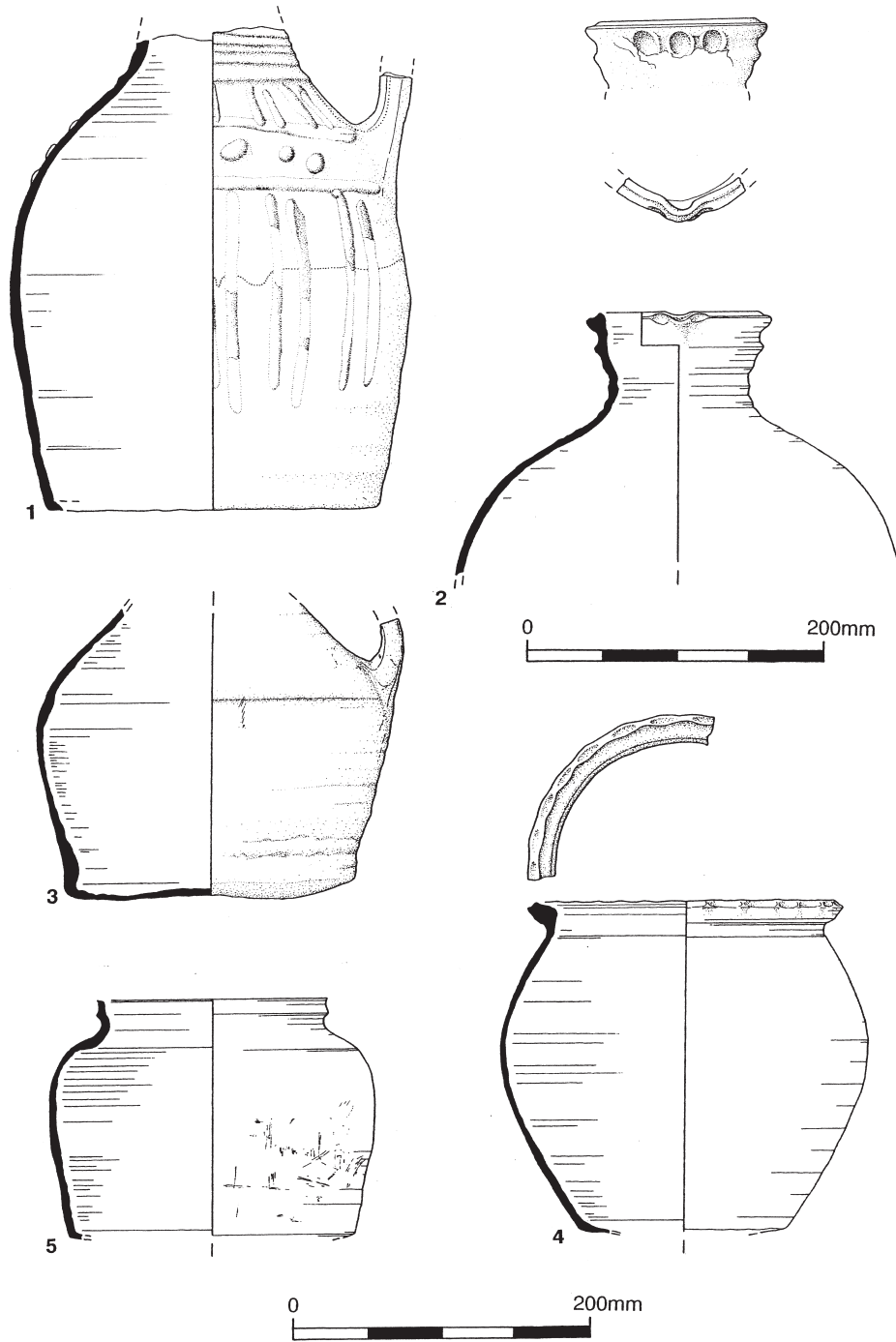


Fig 8 The medieval pottery 1-5

A MEDIEVAL FARM AT LIME STREET, IRTHLINGBOROUGH, NORTHAMPTONSHIRE

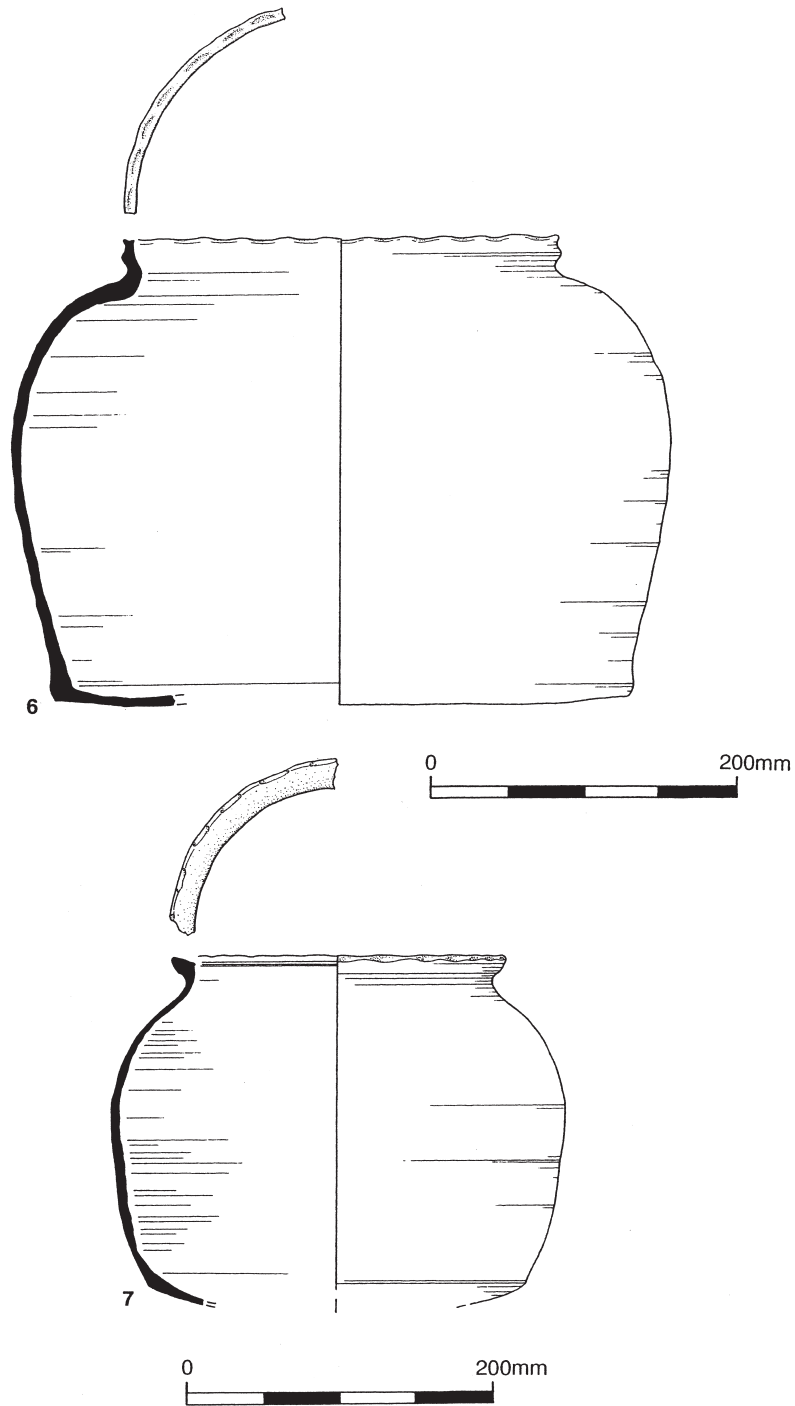


Fig 9 The medieval pottery 6-7

SAXON AND MEDIEVAL FINDS

by Tora Hylton

The majority of the artefacts came from a series of pits and the demolition deposits relating to the barn and malting oven, of 13th and 14th century date. A small number of medieval finds were retrieved as residual items within post-medieval demolition deposits associated with 18th century stone robbing and terracing. The range of finds is small, but there are individual items representing agricultural activity and textile manufacture, and of particular interest is the presence of two musical flutes/whistles. Bulk finds include ceramic tiles and brick, limestone roof slates, clay tobacco-pipes and a small quantity of metal working debris. The majority of artefacts were recovered by hand, but the use of a metal detector at regular intervals during the excavation increased the recovery of metal objects.

There are no finds that are stylistically Saxon in date, but there are three objects from 11th century contexts. These include a limestone disc that may have been used as a lid, a fragment of sheet lead and a iron nail with square-sectioned shank and large triangular head. Only four objects were found in 11th -13th century boundary ditches and the pits; part of a sickle blade, an iron nail, a fragment of sheet copper alloy and a piece of undiagnostic glass.

The majority of the finds from 14th century deposits came from the pits to the south of the malthouse and within the demolition rubble over the malthouse. The group includes fragments of querns or millstone, a spindle whorl, and two musical instruments, together with a small group of miscellaneous iron and copper alloy items.

Eight unstratified fragments of lava quern were recovered, along with two pieces from one of the southern pits (435). Two pieces of Millstone Grit, probably from the same upper stone of a quern or, more probably, a millstone, came from southern quarry pit (284). The larger piece is 75mm thick with a well-worn grinding surface while the upper face is uneven with pecked tool marks. Textile manufacture is represented by a single, lathe

turned, limestone spindle whorl, from one of the small pits to the north of the malthouse.

Two musical flutes/whistles were found in the southern arc of intercut quarry pits, a complete example from pit (435) and a fragment from pit (325). Instruments of this type are not uncommon finds in medieval contexts, for example three flutes/whistles were recovered from the nearby excavations at West Cotton, Raunds (Lawson forthcoming) and Furnells, Raunds (Audouy forthcoming).

The complete whistle is manufactured from a sheep/goat tibia (K Deighton pers comm), a bone often utilised for simple musical instruments (Fig 10, 1, Plate 6). The exterior surfaces have been trimmed with a knife and both ends are open (the epiphyses have been removed). The rim of the proximal end is slightly undercut, and just below there is a D-shaped sound-hole. Towards the distal end there are two conical perforations or finger-holes, set 19mm apart, and the immediate area around these and the sound-hole is highly polished by use.

The incomplete instrument has been manufactured from a bird bone, possibly a goose humerus (K Deighton pers comm), and has an internal diameter of 5mm (Fig 10, 2). At the distal end there is a small knife-cut finger-hole, 3mm wide and 2mm deep, and half of a larger perforation, 5mm wide, survives at the broken end. Polishing around the finger-holes and underneath suggests that when complete it was in use for some length of time.

The demolition deposits filling the malting oven chamber (17) produced small quantities of limestone roof slates together with a key for a mounted lock, three nails and a stud. The small number of medieval objects residual in post-medieval contexts included items that would have been used as accessories for dress: three mounts, a strap-loop and a strap-end. There are two D-sectioned bar mounts and a repousse quatrefoil mount; similar examples are known from London (Egan and Pritchard 1991, fig 133, 1188 and fig 117, 943). The strap-loop is rectangular with an integral internal rivet (ibid, fig 147, 1247), and the two piece strap-end, although incomplete, is rectangular in shape with a squared terminal; the upper surface decorated with a linear motif.



Plate 6 The bone flute

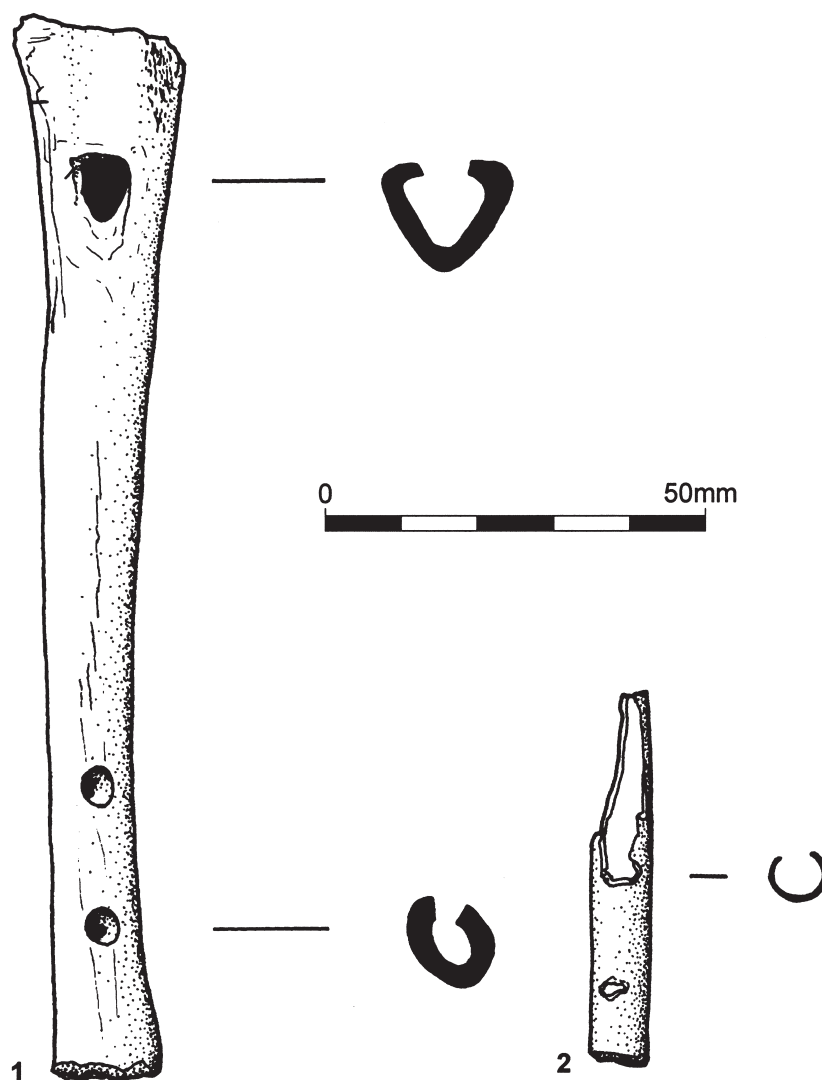


Fig 10 The bone flutes

Post-medieval finds worthy of note include: two coins, a George IV farthing dated 1821 an illegible coin; a Hans Krauwinkel jetton of 16th/17th century date; a finger-ring decorated with a stamped motif, giving the impression of twisted strands, and a thimble (post 17th century). In addition, parts of a knife and a three-pronged fork were found within the construction trench of an 18th/19th-century wall.

Illustrated finds (Fig 10)

1 Musical flute/whistle, bone, sheep/goat tibia. A flute, exterior surfaces have been worked with a knife. Close

to the proximal end, there is a D-shaped sound-hole and two conical finger-holes are set towards the distal end. Extensive polishing through use is evident around the sound-hole and finger-holes. Length 141mm. SF 39, Pit 435, southern pits, 14th century

3

Musical flute/whistle, bone, possible goose humerus (fragment only). One complete knife cut perforation and the vestige of one other. Exterior surface around holes display extensive wear through use. Length (incomplete) 50mm, diameter 8mm. SF 57, Pit 325, southern pits, 14th century

THE ANIMAL BONE
by Karen Deighton

Approximately 32.7kg of animal bone hand collected from a range of contexts were analysed. Initially bone was sorted into identifiable and recordable fragments according to selected anatomical units (Halstead after Watson 1979). Unidentifiable fragments and those not belonging to the selected units were counted but not included in quantification. Material from the general soil horizons was excluded from the analysis due to the mixed nature of these deposits.

Identifications to species where possible were made with the aid of Schmid (1972) for large mammals (horse to rabbit size) and Serjeantson and Cohen (1996) for birds. Recording follows Halstead (1985) and uses minimum anatomical unit (Min A.U.) whereby each bone element is held to have a proximal and a distal half. Any matching fragments from the same context were rejoined and where more than one fragment appears to belong to the same anatomical unit only the one with the most information was recorded. This should avoid over recording.

To control for differences in the number of foot bones between species, pig and dog lateral metapodials and phalanges were discarded and possible matching M3 and M4 were paired. For each identifiable bone fragment the following was recorded; element, taxon, proximal fusion, distal fusion, side, modification, butchery and fragmentation. Ribs and vertebra were counted but not identified to species. Partial skeletons and skeletons were recorded separately and not included in quantification to avoid species bias.

Recognition of canid gnawing and butchery follows Binford (1981). Pathologies are described after Baker and Brothwell (1980). Tooth wear for cattle was recorded after Halstead (1985) after Payne (1973) and for ovicaprids after Payne (1973). Fusion follows Silver (1969).

The assemblage is divided into three broad phases (Table 8).

Table 8: Summary of animal species by phase
(number of fragments)

Taxon	IronAge/ Roman	Early Medieval	Medieval
<i>Equus</i> (horse)	5	8	3
<i>Bos</i> (cattle)	51	44	161
<i>Ovicaprid</i> (sheep/goat)	80	41	181
<i>Sus</i> (pig)	10	4	52
<i>Cervid</i> (deer)			6
<i>Canid</i> (Dog)	1	2	7
<i>Felis</i> (Cat)			2
<i>Ovicaprid</i> / <i>Capreolus</i>			2
Large ungulate	17	6	40
Small ungulate	20	39	28
<i>Avis</i> (Bird)			69
Indeterminate	125	86	251
Total	309	230	802

The frequency of butchery was low at only 1.1% of identified fragments. Chopping appeared to be the most common although

evidence for dismembering and filleting were also seen. Canid gnawing was low at 6.9 %, fragmentation was moderate with only 40% of bones exhibiting old breaks. Few bones exhibited fresh breaks. Surface abrasion was low and burning was very low at only 0.6 % of total fragments. Preservation remains were homogeneous across the phases and contexts.

SKELETONS

Three partial skeletons were recovered from the rubble fill of the malting oven (17); a juvenile pig of approximately six months, and a dog and a cat skeleton. A partial dog skeleton came from the dovecote demolition rubble. A partial pig skeleton of an immature animal came from the burnt layer within the malting oven chamber (87).

In addition, two articulated calf burials were recovered from within the dovecote, but these were both of post-medieval date and had been buried in pits cut down through the demolition rubble. In the south-east corner of the site there was a recent pig burial, covered with lime, in a deep steep-sided pit.

DISCUSSION

This is a small assemblage with species typical of the periods represented, and some changes though time can be observed.

Iron Age /Roman

Only 147 identifiable fragments were available which precludes any in depth analysis. The assemblage was dominated by sheep. The species range and assemblage composition appears typical for the period and is evidenced at sites such as Hardingstone (Gilmore 1969) and Great Houghton (Deighton 2001).

Medieval (12th-13th centuries)

With only 99 identifiable fragments, the paucity of evidence precludes any in depth analysis. The assemblage is dominated by cattle, but only slightly so and this could be an artefact of the quantification method. This assemblage seems typical for the early medieval period although numbers of pigs seem low.

The manorial farm (14th century)

This was the largest and most informative assemblage, with the largest number of identifiable fragments. It shows the occupants of the site to be utilising a range of domesticates, with on site butchery apparently taking place in a designated area. Unfortunately the exact economy of the site for this period remains unclear, but the assemblage does highlight some of the principle differences between medieval urban and rural assemblages. It should be noted that the partial skeletons were associated with demolition rubble rather than occupation deposits.

The assemblage was dominated by sheep. All neonates were concentrated in this phase; three sheep and three cattle. Bird bone was concentrated in contexts associated with the dovecote. Again the numbers of pigs seem slightly lower than expected. This could suggest a lack of access to pannage although it should be remembered that pig bones have the poorest survival of the major domesticates (Stallibas 1985).

Some tooth wear analysis was attempted, however, tooth wear data is sparse. That available for cattle (ten mandibles and teeth; four of 8-18 months, one of 18-30 months, two of 30-36 months, two adult and one senile) and sheep (four mandibles; one of 1-2 years, one of 2-3 years, one of 3-4 years and one of 4-6 years) does not suggest a coherent slaughter pattern.

Some analysis of spatial distribution was attempted with bones grouped as demolition rubble and southern and central pits. Most of the material was from the central and southern pits (approximately 65.5% of fragments identified for the phase). Species comparisons between the groups are tentative because of the small numbers in each group, but a higher percentage of pigs are seen in rubble and more sheep in pits.

No change in body part distribution was noted between groups so the 14th century assemblage was treated as a whole for the purposes of body part analysis as a larger data set will give more reliable results. Concentrations of radius and metacarpals are seen for sheep when compared to a preservation index (Brain 1981). As these elements do not have a high meat yield this could be due to primary butchery waste rather than kitchen or table waste. This is perhaps confirmed by the comparative absence of relatively robust and high utility elements (Binford 1978) such as scapula and pelvis. This is more apparent in the pit groups, which would suggest that butchery debris from the nearby slaughter of sheep was dumped in these pits. For cattle a dominance of femur is noted and an absence of axis and atlas. As femur has a high meat yield this could suggest cattle carcasses were being supplemented with joints. The absence of neonatal remains suggests stock rearing was not taking place on site. The lack of burning suggests this was not the preferred method of disposal and the fairly low level of canid gnawing and low surface abrasion suggests rapid burial following deposition. The overall absence of wild species from all phases suggests no reliance on hunting.

For the 14th century some comparisons are possible. The presence of cat is now expected and is also seen at other rural sites for example Copt Hay Tetsworth (Pernetta 1973) and nearby West Cotton, Raunds (Alberella and Davis forthcoming), its value being in its use for pest control and fur. The dominance of sheep seems typical for the region (Robinson and Wilson 1983) and for rural sites as a whole (Grant 1988). Although it has been suggested (Albarella 1999) that sheep still remain underrepresented in the archaeological record when compared to documentary evidence for the medieval period.

Brief comparisons with medieval urban sites such as Greyfriars, Northampton (Harman 1978) highlight the differences between the urban and the rural sites. Although a similar range of species is seen at both, much higher percentages of sheep (the more marketable animal) are seen at Greyfriars, than at Irthlingborough. A greater concentration of high meat yielding bones are also seen at Greyfriars which suggests consumption waste as opposed to the primary butchery waste seen at Irthlingborough. Unfortunately without more evidence for the structure of herds associated with Irthlingborough it cannot be confirmed whether the animal economy there was geared towards the needs of the immediate population, the manor, or was also servicing urban markets, as is likely to have been true for the production of malt.

THE CHARRED PLANT REMAINS by Karen Deighton

Six selected 20 litre samples from well-dated contexts were processed using a siraf tank fitted with a 500-micron mesh and flot sieve. The resulting flots were sorted and ecofacts examined with a microscope (10x magnification), and where possible

identified with the aid of a small reference collection and a seed atlas (Schoch, Pawlik and Schweingruber 1988). Results were quantified and are tabulated below (Table 9). They give some indication of the crops utilised on site and their associated weeds, but preservation was moderate to poor with a high frequency of fragmentation and surface abrasion making distinctions between cereals difficult.

With only a single sample available little can be said of the Iron Age agricultural economy. The sample produced a moderate amount of charred grain including a single twisted barley grain, possible spelt (*Triticum spelta*), a small amount of oat (*Avena sativa*) and possible pulses and weeds. All the cereals represented are typical of the period (Robinson and Wilson 1983).

The medieval samples are dominated by cereals which, along with low percentages of weeds and a lack of chaff, suggest a late stage in crop processing. Most of the samples appear to be dominated by barley, although this is tentative due to the large numbers of indeterminate wheat/barley grains present as further distinctions were not possible without chaff. The only chaff present was culm nodes in sample 6 from pit 344, and this could have resulted from the burning of straw as fuel.

The small numbers of oat suggest it is present as a contaminant rather than as a staple crop. The wild/weed species present appear to be common crop weeds. These would be brought in with crops at the time of harvest and removed during preparation. Although some can be consumed, for example corn salad and elderberry, others such as bindweed have medicinal uses.

For the 12th-13th century samples the high concentrations of cereals would appear to suggest the presence of grain charred during final preparation for use or for storage, indicating the nearby presence of buildings prior to the construction of the malt house in the 14th century.

The 14th century samples represent the remains of malting in sample 1 from the floor of the malting oven. This contains much barley, but the presence of significant amounts of bread wheat suggests that the oven was also used for parching wheat grains. The other sample is from a nearby contemporary pit, which may have held dumped debris from the malting process. A similar dominance of barley was seen at Marefair, Northampton in association with a 15th century malting oven, but with small amounts of rye, oats and horsebean and a range of weeds also present (Slater 1979). The 12th -14th century malthouses at the deserted medieval hamlet of West Cotton, Raunds also produced a predominance of barley. However, the presence of some oat, rye and wheat suggested some use for drying other crops, while the presence of a range of large legumes, including common vetch, peas and lentils, suggested an additional use for drying both fodder and legumes for winter storage (Campbell forthcoming).

For the medieval deposits the apparent lack of pulses could be due to the fact they were grown on a smaller scale and to differences in processing, while the dominance of free threshing wheat over other wheat types is typical. The lack of chaff is fairly unusual for a medieval rural site. This suggests that processing was taking place elsewhere, perhaps within another part of the manorial holding. This may suggest a high degree of specialisation of tasks, and does indicate that the barn containing the malting oven was not used as a threshing barn but presumably purely for storage in relation to the malting and general crop drying functions.

Table 9: Charred plant remains, Taxa by context

Sample Context	10 55, pit 56 IA	4 303, ditch 298 M	6 342, pit 344 M	12 340, pit 341 M	1 87, malt oven C14th	11 474, pit 475 C14th
Einkorn (<i>Triticum monococcum</i>)		2				
Einkorn/emmer (<i>T.monococcum/dicocccum</i>)			1			
Emmer (<i>T.dicocccum</i>)						2
Spelt (<i>T.spelta</i>)	1	5	12		3	
Spelt/Bread wheat (<i>T.spelta/aestivum</i>)					1	
Bread wheat (<i>T.aestivum</i>)		17	13	3	69	5
Wheat indet (<i>Triticum indet</i>)	1		3			
Wheat/Rye (<i>Triticum/Secale</i>)	5	19	17			1
Barley (hulled) (<i>Hordeum vulgare</i>)		6			1	
Barley (naked) (<i>Hordeum vulgare</i>)		7				24
Barley indet (<i>Hordeum indet</i>)	12	39	32	12	62	
Wheat/Barley (<i>Triticum/Hordeum</i>)	17	433	293	28	150	32
Oat (<i>Avena sp</i>)	1		2	1	9	
Cereal indet	7	52	16	10	17	5
Total cereal	45	581	389	54	312	69
Broad?bean (<i>Vicia faba</i>)			1		9	
Pea (<i>Pisum sativum</i>)	1	8	14	3	1	3
Lentil (<i>Lens culinaris</i>)			1	1		
Small pulse (<i>Leguminosae</i>)		35	10			
Fruit stone (<i>Prunus sp</i>)		1				
Cleavers (<i>Galium aparine</i>)					6	
Fat Hen (<i>Chenopodium album</i>)	5	7	11	7	5	1
Bindweed (<i>Bilderdykia covolvulus</i>)		2	4		7	
Corn salad (<i>Valerianella dentate</i>)		1			114	
Elder (<i>Sambucus</i>)		1				
Panicled Sedge (<i>Carex paniculata</i>)		1				
White Campion (<i>Melandrium album</i>)		3	3			
Shepherds purse (<i>Capsella busra-pastoris</i>)	1	1	3			
Dock (<i>Rumex sp</i>)		4				
Daisy family (<i>Compositae</i>)		1				
Cabbage family (<i>Cruciferae</i>)					20	
Pink family (<i>Caryophyllaceae</i>)					1	
Culm node			24		1	
Total weed	8	72	108	26	171	4
Grand total	53	653	497	80	483	73

Abbreviations used in table: IA, Iron Age; M, Medieval (12th-13th century); C14th, 14th century (the manorial farm)

DISCUSSION

Part of a middle Iron Age settlement of unknown extent lay within the northern part of the site, suggesting that the rest of the settlement was on the higher ground to the north. There was no evidence for direct continuity of occupation through the early Roman period, but by the 2nd century AD the site appears to be on the margins of a Roman settlement, as indicated by the residual pottery and a sparse number of datable features. A further possibility is that some of the residual Roman pottery may have arrived on the site as a result of building stone coming from the robbing of a local Roman villa.

Medieval activity began no earlier than the 11th century, and this first phase only comprised a scatter of postholes and small pits in the south-western part of the site. Through the 12th and 13th centuries there was still no direct occupation of the site, but a sparse scatter of deep pits used for quarrying limestone, and containing small assemblages of pottery and animal bone, do attest to nearby occupation. The pits were presumably supplying building stone or material for lime kilns, and by the early-mid 13th century a primary deposit of pottery in one of these pit was perhaps domestic debris from a nearby building of high status, perhaps a manor house.

The nature of the excavated buildings of the 14th century, a major malthouse and barn, an adjacent dovecote and a building with mortared walls, possible a detached kitchen range, leaves no doubt as to their manorial associations. Dovecotes were the preserve of landlords, monasteries and parochial clergy and the malthouse/barn is of an exceptional size. They therefore must have formed part of the demesne farm of a manor.

Nearby comparisons for the excavated buildings are available from the deserted hamlet of West Cotton, Raunds (Chapman forthcoming, Windell et al 1990). At West Cotton there was a small manor house of 12th to 13th century date. It comprised a manor house standing on the eastern side of a courtyard, with a long malthouse/barn to the south, and a dovecote between the malt oven and a detached kitchen/bakehouse on the western side of the yard. By the mid-13th century the manor had been rebuilt further to the east, but with separate domestic and agricultural ranges, but the farm buildings still included a barn, malthouse and a detached kitchen/bakehouse.

The Irthlingborough malthouse/barn was the

one building where internal organisation could be seen. Access to the building was through a wide central doorway, so that two long storage areas were provided to either side. The eastern end may have been for general storage, while the western end probably included the germinating floor, where the soaked barley was left to sprout prior to drying in the low temperature oven that occupied the western end of the building (Brunskill 1999, 98-101). The absence of chaff indicates that threshing was not being carried out within the barn, and chaff was clearly not forming part of the fuel for the oven. Charred plant remains from the accumulated debris on the floor of the oven chamber indicate that it was used for malting barley. The additional presence of bread wheat, pulses, including peas, and weeds such as Bedstraw, Cornsalad and Fat Hen also indicate a more general use as a drying oven, as has been seen at other examples.

The malting oven at Irthlingborough was exceptionally large; the chamber floor measuring 2.1m by 1.8m. At West Cotton the early malting oven chamber measured only 1.2m by 1.1m, while a further three malting oven chambers within the 14th century tenements measured 1.5m by 1.4m, 1.4m by 1.1m and 0.95m by 0.9m (Chapman forthcoming). At Brackley, a contemporary malting oven chamber measured 1.05m by 0.80m (Atkins et al 1999, 13). The size of both the oven and the malthouse within which it stood indicate that the potential for producing malt was well in excess of the other quoted examples, and this must be seen as implying that this was a commercial operation intended to produce a healthy surplus. The commercial viability in malt has been well documented locally as three miles away, at Higham Ferrers, there are records in 1355-6 of malt being sold sixty miles away in London rather than locally (P Courtney forthcoming). The manorial farm at Lime Street may well have been similarly producing malt for sale at distant urban centres.

The eastern boundary of the site seems to have been established from at least the 12th, if not the 11th century, with Lime Street (formerly Stevens Lane) aligned on this boundary. The longevity of this lane is denoted by how far it has become sunken with respect to the ground level within the site. To the south it led to All Saints church and presumably an adjacent manor house. However, the excavation of the manorial farm buildings has complicated the understanding of the development of this manor.

It does seem most likely that the original manor house would have been situated on a plot immediately adjacent to All Saints church, and the excavation has shown that prior to the 14th century the excavated area was certainly peripheral to any main focus of domestic activity. However, the primary pottery assemblage of 13th century date from a pit at the southern end of the site does suggest the nearby presence of a substantial domestic dwelling. One possibility is that the manor house may have been relocated away from the church and further to the north, perhaps in the early 14th century and contemporary with the construction of the manorial farm buildings. The presence of a building with mortared walls at the northern end of the excavated site, possibly serving as a kitchen/bakehouse might suggest that this was the southern margin of such a new manor house complex.

Such a relocation of the manor house to another part of the manorial enclosures has also been seen at the nearby deserted medieval hamlet of West Cotton, Raunds (Chapman forthcoming) and also at Furnells manor in Raunds (Audouy forthcoming). At West Cotton this occurred towards the end of the 13th century, following the loss of the watermill associated with the original manor house, while at Furnells manor it occurred in the later 14th century with the manor house moving onto the adjacent abandoned church and churchyard plot. At Irthlingborough there may have been a similar economic impetus to that at West Cotton for such a relocation. It may be speculated that a shift from a site towards the bottom of the hill, with its emphasis on the surrounding farmland, to a site nearer to the High Street (Station Road) and the main axis of communication, may relate to a more direct interest in the commercial exploitation of cash crops. The probable surplus provided by the output from the malthouse may have been part of this increased economic turnover, and a new site with extra space to create this new farming and processing complex may have been the determining factors.

The church and its graveyard evidently did not move, and this is not surprising as numerous examples could be quoted of churches retaining their locations when their associated settlements have moved away. By 1428 the church had been reduced to eight parishioners, and this decline may parallel the short lifetime of the excavated manorial farm, which had been abandoned at around the end of the 14th century after less than a hundred

years of use. The direct cause of the abandonment is unknown, but these changes must probably be viewed as part of the widespread social upheaval and reorganisation of settlement that followed in the wake of the depopulation caused by the Black Death around the middle of the 14th century. The excavated site was to remain unoccupied, but by the 17th century a new manor house, with a new dovecote, was built directly fronting onto the High Street (Station Road). This perhaps completed the process of relocation of the manor house away from the old church on the edge of the river floodplain to a prime location on the main street of the growing town, and taking place in direct response to changing economic and social circumstances.

However, it is likely that all of this movement took place within the scope of the direct manorial land holding, which must therefore have occupied a block of land extending from All Saints Church to the High Street (Station Road). The width of this land holding is not established, but it must have been some 2.4ha (6 acres) in extent with Lime Street forming the central axis of the rectangular plot as the main access road within the manorial complex. This would make it of a similar overall size to West Cotton, which may have contained two manor holdings, and of the same size as the manorial enclosures of Furnells manor, Raunds (Audouy forthcoming).

The excavation of the manorial farm at Lime Street has therefore provided a glimpse of the complexity of the medieval manor and the dynamic social and economic changes of a period often viewed as being relatively static and unchanging.

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ANDY CHAPMAN, ROB ATKINS AND ROWENA LLOYD

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