

Excavation of a multi-period settlement site at the former St John's Vicarage, Old Malden, Kingston upon Thames

PHIL ANDREWS

with a major contribution on the documentary evidence by

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Summary

Excavations in 1997 on the site of the former St John's Vicarage, Old Malden, revealed a variety of features of prehistoric, Romano-British, medieval and post-medieval date. Earlier excavations in the vicinity had recorded features and finds spanning broadly the same periods and these, together with a study of the documentary sources, have provided sufficient information to begin to elucidate the settlement history of this part of the Hogsmill valley.

Settlement on the site probably began in the Late Iron Age, but is more certainly attested in the early Romano-British period by various features including a possible enclosure ditch. Settlement of a similar, rural nature appears to have continued into the 3rd–4th centuries AD.

The earliest medieval activity has been assigned to the 11th–12th centuries, and the available evidence indicates that Malden developed as a linear rather than a nucleated settlement at this time. Subsequent medieval activity comprised two phases of shallow ditches and other features assigned to the 12th–15th centuries. No contemporaneous buildings were identified, but a vicarage is known from documentary sources to have existed in 1279. No medieval features later than the early 15th century were found and pottery of 15th–17th century date was almost entirely absent. This may reflect a decline in the settlement which is indicated from documentary sources.

Substantial remains of the early 17th to early 20th century vicarage(s) survived, along with various horticultural features related to the associated pleasure gardens and orchard.

Introduction

PROJECT BACKGROUND

In 1997 Wessex Archaeology was commissioned by McAlpine Homes Southern Ltd to carry out an archaeological excavation (MoL site code OLM97) at the former St John's

Vicarage, Old Malden, Kingston upon Thames (centred TQ 2120 6615; fig 1). This was undertaken prior to redevelopment of the site for housing and followed an earlier archaeological evaluation by Thames Valley Archaeological Services (MoL site code OMV94) that demonstrated the presence of potentially significant Romano-British, medieval and post-medieval remains within the proposal area (Hall & Ford 1994). It is intended that the site archive (including finds) be deposited at Kingston Museum.

The site lies within a conservation area and a zone of archaeological priority, as defined in the borough council's Deposit Unitary Development Plan. It fronts Church Road to the north, and is bounded to the west by open woodland, and to the south and east by existing areas of housing with associated gardens. Overall, the site extended across an area of *c* 1 ha, and at the time of excavation was occupied by the former St John's Vicarage (built in 1937) and its gardens, much overgrown and including a number of mature trees (several with tree preservation orders), to be retained in the new development.

TOPOGRAPHY AND GEOLOGY

The site lies on the western edge of a plateau that rises gently to the chalk downlands to the south and overlooks the Hogsmill valley to the west. It is about 100m from the river Hogsmill, generally flat, and rises from *c* 27m OD in the north-west to 31m OD in the south-east.

The geology comprises London Clay, which extends to the south and east and overlies Woolwich and Reading Beds at the southern edge of the London Basin. The London Clay was recorded during the excavations as a yellowish-brown to orange clay with occasional sand and pebble banding; it was present in all evaluation and excavation trenches where it has been described as 'natural'.

ARCHAEOLOGICAL AND HISTORICAL BACKGROUND

Several assemblages of Mesolithic worked flint are known from the Hogsmill valley, the most recent having been found during excavations in 1996 by the Museum of London Archaeology Service (MoLAS) at Manor Farm Buildings approximately 100m to the north-west of the vicarage site.

Iron Age features and finds were first identified by L W Carpenter during investigations in two contiguous areas during the 1940s and 1950s. The first lay in the area formerly known as 'Lady Hay' (fig 1) and the second, immediately to the west, within the vicarage gardens (which at that time extended further to the east than they did at the time of the 1997 excavation). Using extant topographical features he projected the line of a group of ditches to form an oval enclosure, which included the vicarage site at its west end. Later, in 1950, he excavated five 'Belgic huts' to the east of the vicarage site, during the laying out of The Manor Drive, one with a ring-gully and a central hearth (Hanworth 1987, 142, 146, fig 6.3). Carpenter's work and more recent excavations suggest that there may have been occupation throughout the Iron Age, with possibly two phases of enclosed settlement. The Early-Middle Iron Age settlement may have lain in the immediate vicinity of the vicarage site, with a subsequent expansion or movement downslope to the north-west during the Late Iron Age.

Romano-British features and finds have been recorded on virtually all excavations in the vicinity of the vicarage site. Carpenter identified a complex of late Romano-British ditches as well as pottery spanning the whole Roman period during work to the east of the vicarage in the 1940s and 1950s, and he concluded that 'the main Roman occupation was in the 4th century when there was an extensive Romano-British village occupying the site' (SyAS 1949, xxii). This and the evidence from recent excavations suggest agricultural exploitation and settlement in the early as well as late Romano-British periods, with possible continuity of occupation from the Late Iron Age. However, pottery of the late

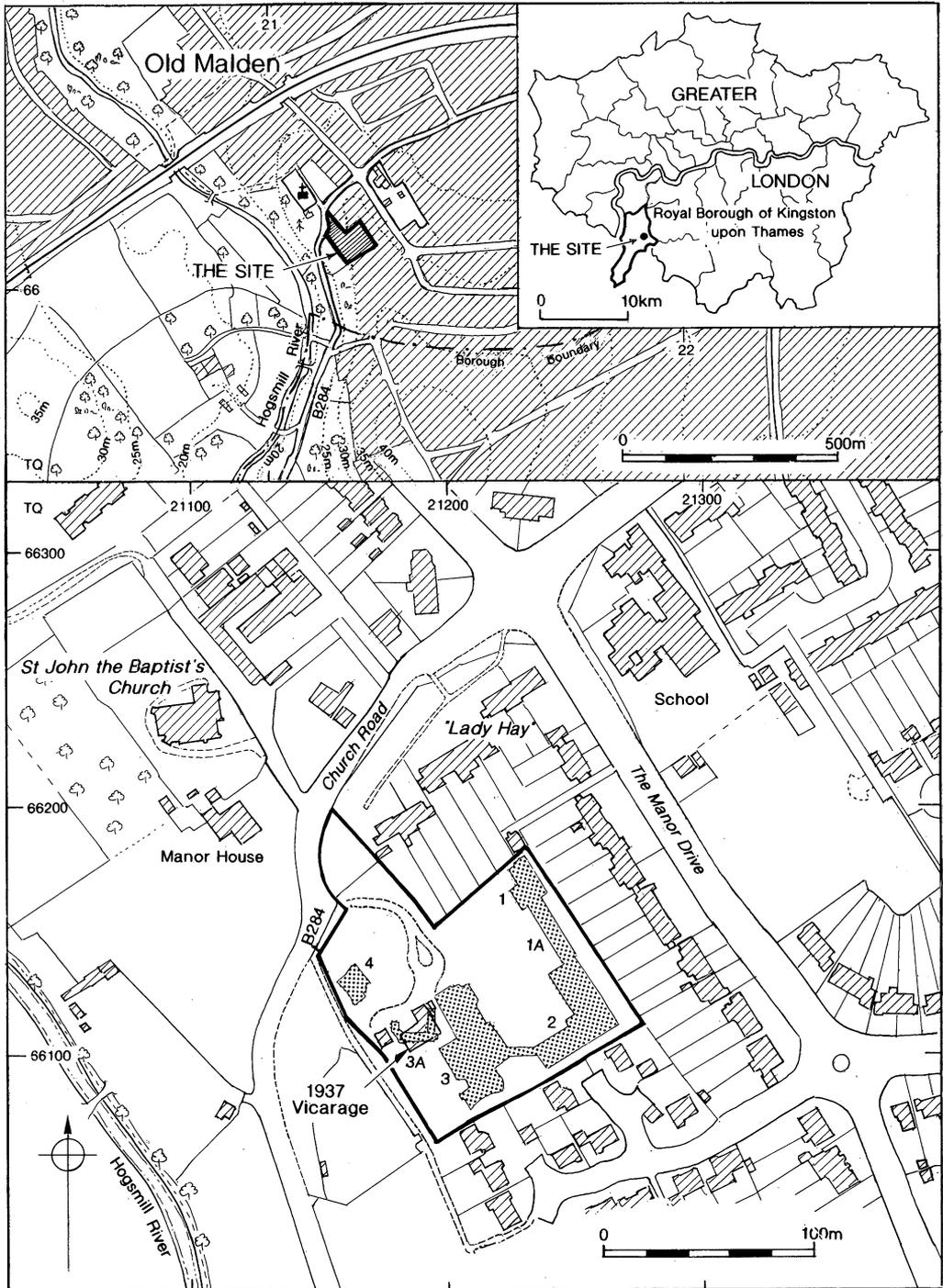


Fig 1 St John's Vicarage, Old Malden: site location plan. (Reproduced by kind permission of the Ordnance Survey, © Crown Copyright NC/01/24321)

Romano-British period predominates and may indicate that the main phase of settlement was during the 4th century AD.

Clear archaeological evidence for Saxon occupation at Malden is lacking, although the Domesday survey of 1086 notes the existence of a church or chapel and also indicates that the land around Malden was divided into two holdings, both parts tenanted by members of the Watteville family. The smaller holding belonged to Chertsey Abbey, and the larger to Richard, son of Count Gilbert, an ancestor of the Clare family. In 1249 the whole manor passed to Walter de Merton, chancellor of England and bishop of Rochester, who used his manors of Malden, Chessington and Farleigh to endow his house of the Scholars of Merton, which became Merton College at Oxford in 1274. Overlordship of the whole manor descended through the Clare and Despenser families, and eventually passed to the Crown in the 15th century.

Evidence for medieval settlement from at least as early as the late 11th or early 12th century has been forthcoming from several sites. Carpenter, reporting on excavations in 1946–7, either within the vicarage orchard/gardens or immediately to the north-east, noted that 'shallow pits with early medieval pottery overlie, and in places disturb, the Roman levels, and a group of 11th–12th century Norman cooking pots, found together at one point, forms a most important group of vessels of that period' (SyAS 1949, xxii).

Archaeological evidence for later medieval and post-medieval occupation largely comprises features found during the evaluation and earlier finds of pottery and tile from the vicarage garden and adjacent area to the north-east. A vicarage is known from documentary sources to have existed in 1279 and maps indicate it in a position similar to that of today from at least as early as the 17th century. These maps also show that the main concentration of houses in Malden village lay along the south side of Church Road to the north-east of the vicarage site, and it is possible that this reflects the medieval layout of the settlement. The parish church of Old Malden, dedicated to St John the Baptist, and the adjacent manor house lie less than 100m to the north-west of the vicarage site, at the west end of Church Road (fig 1). The chancel of the church is of medieval (13th century) date, but the nave and tower were rebuilt in the early 17th century, and the present manor house probably dates to no earlier than the 17th century.

The 1994 evaluation

The original evaluation specification provided by English Heritage requested fifteen machine-dug trenches with a total length of 280m, but severe constraints due to the presence of dense woodland, including some trees with preservation orders, led to a revised scheme. This scheme, undertaken by Thames Valley Archaeological Services (TVAS) in March and April 1994 (Hall & Ford 1994), comprised eight machine-dug evaluation trenches (ET 1–8) with a total length of 122m, and one hand-dug test pit (ET 9). The locations of all of these trenches are shown in figure 2, with the exception of ET 8 which lay in the extreme north-eastern corner of the site (this was the only trench devoid of features of archaeological interest).

An unexpectedly high density of subsoil features was revealed in all but ET 8. 'All features were planned but few were excavated, and in most instances dating relied on very small assemblages of artefacts recovered from the interface with the overlying garden soil' (Hall & Ford 1994, 1). These features, including ditches, gullies, postholes, pits, a hearth and some possible occupation surfaces, were mostly interpreted as representing rural settlement of Saxo-Norman to medieval date (spanning the 11th/12th to the 13th/14th centuries). Some evidence for Romano-British activity as well as post-medieval settlement was also found.

The paucity of features and finds of later medieval date led to the suggestion that medieval occupation on the site lasted approximately 200 years, and that the focus of

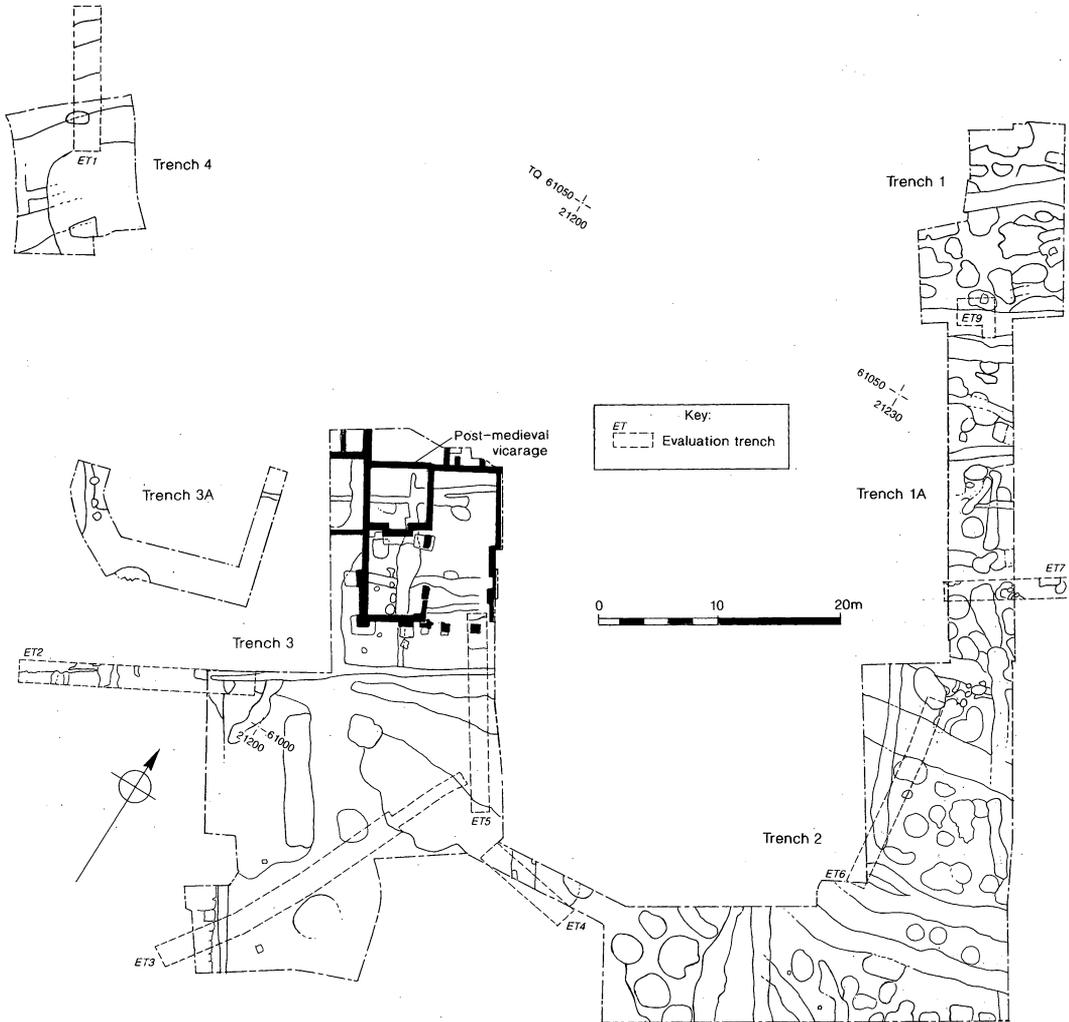


Fig 2 St John's Vicarage, Old Malden: plan of all excavated features

settlement then moved elsewhere within the parish, probably to the north-east, in the 13th or 14th century.

As a result of the archaeological importance of the site established by the field evaluation and other excavations in the vicinity, and the potential significance of the medieval occupation in the context of medieval settlement studies (Phillpotts 1995), English Heritage's Archaeology Advisor considered that an open-area excavation would be an appropriate mitigation strategy, given the likely impact of the proposed development on the archaeological deposits.

The 1997 excavation

INTRODUCTION

A detailed specification for the excavation was prepared by Phillpotts (1995) and subsequently revised by TVAS (1995). Four areas of excavation were initially specified:

trenches 1 and 4 to the north-east and north-west of the site respectively being the smaller, with trenches 2 and 3 to the south-east and south-west respectively being substantially larger (figs 1 and 2). Trenches 1 and 2 were subsequently linked by a 6m wide trench (trench 1A) along the east side of the site, and trenches 2 and 3 linked by a 2m wide trench. A watching brief was maintained and a limited amount of additional excavation undertaken after the demolition of the 1937 vicarage, bringing the total area investigated to approximately 0.2ha.

The layout and extent of the excavation trenches largely reflects the presence of trees on the site which were to be retained in the proposed development, and the 1937 vicarage which was not demolished until trenches 1–4 had been completed. Because of these restrictions and the necessity of retaining all spoil on site, it was not possible to strip and excavate all the trenches concurrently. Therefore, trenches 1 and 2 were excavated first, in February and early March 1997, and trenches 1A, 3 and 4 immediately after in late March and April 1997. The watching brief (trench 3A) was undertaken in July 1997.

Methods and dating

Following undergrowth and tree clearance in the area of the trenches, all topsoil and other layers of overburden were removed by a 360° hydraulic excavator under constant archaeological supervision, to either the surface of undisturbed geology or the level at which archaeological remains could be identified, whichever was first encountered. All structural remains associated with the pre-1937 vicarages were retained.

The natural had been subject to late post-medieval truncation in the south-east part of trench 4 (by a possible clay pit), in the south-west part of trench 3 (by post-medieval garden landscaping), and possibly in the north part of trench 3 (by the construction of the post-medieval vicarages). Elsewhere, horticultural activity, and in particular the planting of an orchard and other trees in areas covered by trenches 1/1A and 2 respectively, appears to have caused considerable superficial truncation and disturbance to the surface of the natural clay as well as to archaeological features.

The majority of the pits and postholes were fully excavated, and a minimum of 25% of all linear features was excavated. All tree holes and features of horticultural origin were investigated, many of which were at least half-sectioned in order to ascertain their origin.

All archaeological features and many of the tree holes were sampled for environmental information and to enhance the recovery of artefacts. A total of 236 bulk samples (of 30 litres each) was taken, the majority of which were processed. The environmental strategy is discussed further below.

Approximately 0.5m of topsoil and subsoil overlay natural clay, with a minimum thickness of 0.35m in trench 2 and a maximum of approximately 1m in parts of trenches 3 and 4. Few finds came from topsoil stripping and the vast majority were recovered from negative features. Little stratigraphy was present, even in areas where structural remains survived, and the majority of features were shallow (<0.5m deep) and contained no more than two fills.

The dating of the sequence of features described below is based largely on the relatively small quantities of pottery recovered from their fills. The general homogeneity and similarity of fills in features of different periods meant that few relationships could be distinguished between features on the basis of stratigraphy. Furthermore, the sequence has been further confused by the presence of a substantial number of tree holes and horticultural features that had similar fills to the archaeological features and contained residual pottery. Features thought on the basis of their morphology to be of natural origin are included in figure 2 but are not shown on subsequent plans. It is possible, however, that a few genuine archaeological features, particularly small pits, have been classified wrongly as tree holes, whereas a smaller number of tree holes may have been wrongly interpreted as archaeological features and included on figures 3 and 6.

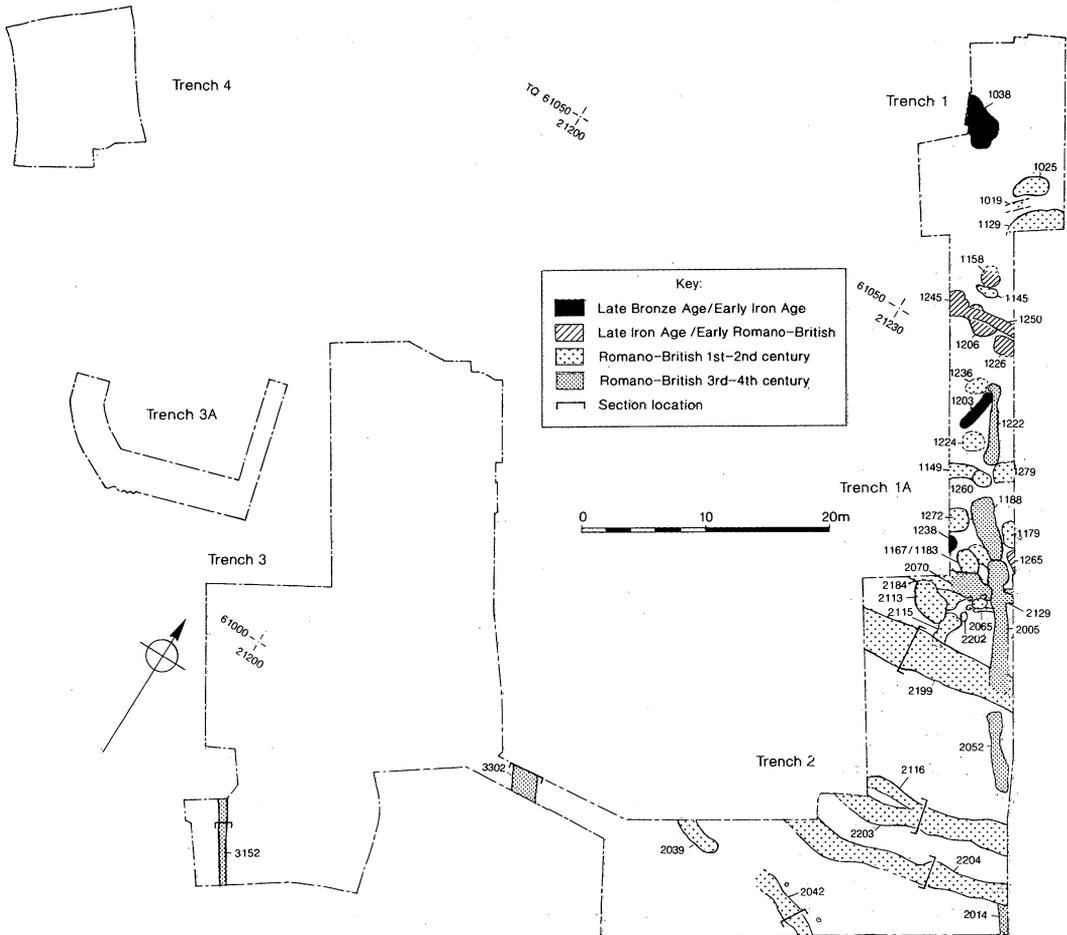


Fig 3 St John's Vicarage, Old Malden: plan of prehistoric and Romano-British features

PREHISTORIC (fig 3)

A small quantity of worked flint was recovered, all residual in later contexts. A few pieces could be of Mesolithic or Neolithic date, but the remainder, which are not chronologically distinctive, are likely to be mainly of Bronze Age date. A single feature in trench 2 (2023 — not illustrated) produced three sherds of Middle Bronze Age pottery. However, this feature has been interpreted as a tree hole and the finds are likely to be residual.

A moderate number of sherds of Late Bronze Age–Late Bronze Age/Early Iron Age pottery was recovered, mainly as residual finds in features from trench 1, trench 1A and the north end of trench 2 (fig 3). In the same area were at least three insubstantial and somewhat amorphous features (1038, 1203 and 1238), which contained only pottery of this date, albeit in very small quantities. The interpretation of these features is uncertain; feature 1038 may have been a tree hole, but 1203 was a shallow slot approximately 3.5m long, and 1238 possibly a small pit.

Evidence for Late Iron Age–early Romano-British settlement on or in the immediate vicinity of the site is provided by several features, all of which lay in trench 1A and contained pottery broadly assigned to the 1st century BC to early 2nd century AD (figs 3 and 5). These comprised a shallow curvilinear ditch or gully (1250), and four or five shallow pits or scoops (1158, 1206, 1226, 1245 and 1265), two of which (1206 and 1245)

appeared to be cut by gully 1250. The gully extended beyond the limits of excavation and may represent part of an eaves-drip gully or foundation trench associated with a round-house, but no trace of a continuation was found to the south and this interpretation must therefore remain conjectural.

ROMANO-BRITISH (fig 3)

A variety of Romano-British features was found, the majority of which have been assigned to the earlier part of this period (1st–2nd century AD) with a smaller number dated to the later Romano-British period (3rd–4th century AD). The composition of the Romano-British pottery assemblage as a whole also supports an emphasis of activity in the earlier part of this period. With two exceptions the archaeological features were confined to the eastern half of the site in trenches 1, 1A and 2. Romano-British pottery was also concentrated in the eastern half of the site, with a clear decrease to the west where only small quantities were present, virtually all as residual material in later features.

1st–2nd century AD (figs 3–5)

The most substantial early Romano-British feature was ditch 2199, 3.5m wide and approximately 0.7m deep, running west to east across the north end of trench 2. All three excavated segments showed this ditch to have an asymmetric profile, being much steeper on the south side than on the north, with some evidence in the profile (though less obvious in the fills) to suggest that it had been recut (fig 4). The original ditch may have been approximately 2.5m wide and U-shaped. The principal fill was a homogeneous greyish-brown loamy clay, but there was a slight indication (in at least one section) of material derived from an associated bank (fig 4, layer 2051). Ditch 2199 produced 87 sherds of pottery, all but seven of which are Romano-British coarsewares, with none definitely later than the early 2nd century AD.

The Romano-British features to the north of ditch 2199 were generally shallow and difficult to define, and comprised almost entirely small ditches or gullies, shallow pits or scoops and limited structural evidence including postholes and stakeholes. The few features identified to the south of this ditch were all linear, several apparently following the same alignment as ditch 2199. It is suggested below that ditch 2199 represented a settlement boundary rather than part of a field system, and may have defined the limit of an oval or circular enclosure that extended further to the north.

Features north of ditch 2199

The greatest concentration of features lay within 20m of ditch 2199 (fig 5). These included a group of small postholes or stakeholes and slots (group 2202) 4m to the north of ditch 2199, several of which contained burnt daub, and likely to represent the remains of one or more structures. However, no coherent structural plan could be deduced from these features, and no other Romano-British structural remains were recognized within the excavated area with the possible exception of features 1149 and 2184 (see below).

Immediately to the north of structural group 2202 was a group of shallow pits and scoops including 1167, 1179, 1186 and 1272, with several apparently isolated examples including 1025, 1129 and 1145 beyond. Other, more irregular and less well defined features including, for example, 1224, 1236 and 1279, may represent tree holes. All of these pits and scoops were sub-circular or oval in plan, between 1.5 and 3m in diameter, and less than 0.5m deep with rounded or flat bottoms. They were filled with generally homogeneous silty or sandy clays that contained comparatively few finds, and there was little to indicate their function.

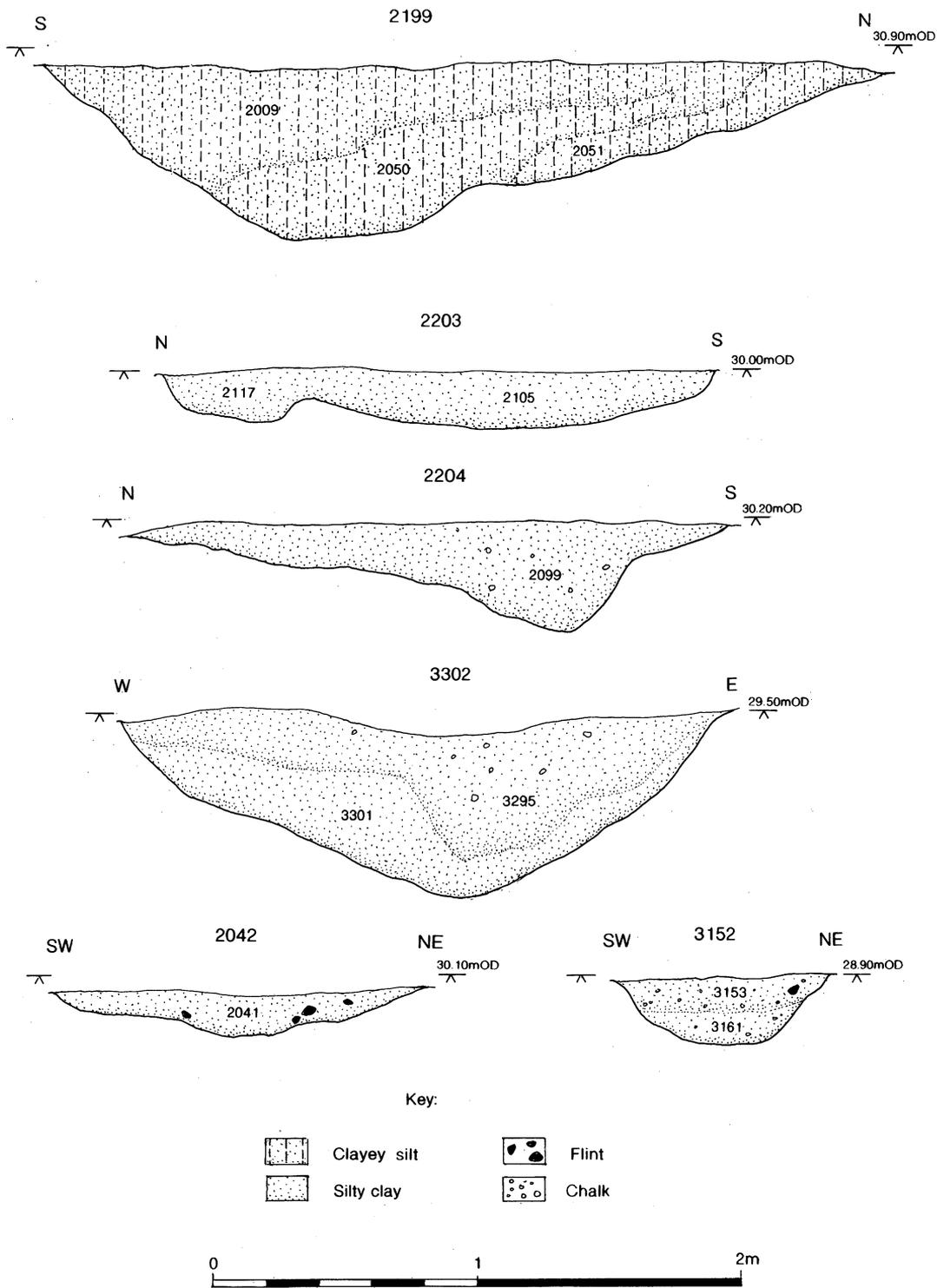


Fig 4 St John's Vicarage, Old Malden: sections of Romano-British ditches

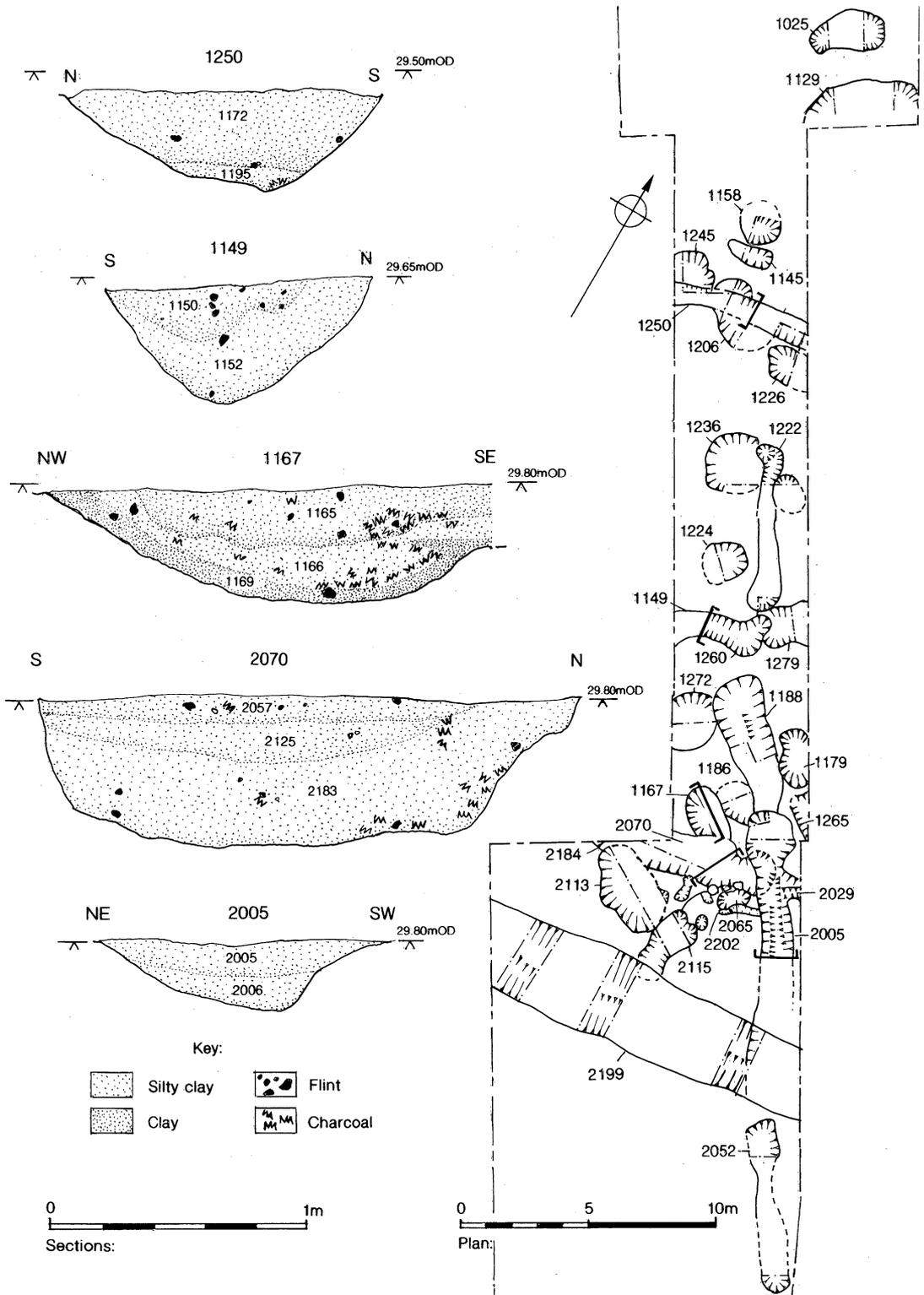


Fig 5 St John's Vicarage, Old Malden: plan and sections of Late Iron Age and Romano-British features in trenches 1 and 2

Parts of two possible east–west linear features were identified. One, 1149, was U-shaped in profile and may have been part of a curvilinear ditch or gully perhaps terminating as feature 1260, though the latter may have been a small pit or large posthole unrelated to gully 1149. It is possible that feature 1149/1260 was part of a ring-gully associated with a round-house, and the other linear feature, 2184, 9m to the south, though apparently straighter and more irregular in profile, may also have been part of this. On balance, however, this interpretation is not convincing. Feature 2184 lay immediately to the north of structural group 2202 and had been cut by two later Romano-British features (gully 2005 and pit 2070). It was unclear whether it also terminated within the trench; feature 2029 may have been a continuation of 2184 to the east rather than related to later gully 2005. No traces of posts were detected within the fills of any of these linear features.

Features south of ditch 2199

Three broad, shallow, curvilinear, concentric ditches (2203, 2204 and 2039/2042) lay less than 20m to the south of ditch 2199 and appeared to run approximately parallel to it (figs 3 and 4). This suggests that they were all related and perhaps formed part of the postulated enclosure to the north. The outermost of these ditches, 2039/2042, was generally narrower, deeper and better defined than the others, with a gap of approximately 5m possibly representing an entrance from the south. None of the ditches was more than 0.4m deep, and only 2203 showed any evidence for having been recut with gully 2016 perhaps representing an earlier or later phase of this feature. Two, shallow postholes just beyond the northern edge of 2042 may have been associated with this ditch.

Ditches 3302 and gully 3152, apparently unrelated to ditches 2203, 2204 and 2039/2042, lay further to the west. Both were aligned north-west to south-east and it is considered likely that they were later rather than early Romano-British features, although the dating is equivocal. This is discussed further below.

3rd–4th century AD

Only two features have certainly been attributed to the later Romano-British period, with several others possibly of this date (figs 3 and 5). This reflects the pottery assemblage as a whole which indicates an emphasis on the earlier rather than the later period.

Pits 2070 and 2113 were comparatively large, shallow features which lay adjacent to each other and cut the complex of earlier Romano-British features immediately to the north of ditch 2199 (fig 5). They produced few finds and their function is unclear.

Along the east edge of the site lay as many as five lengths (1188, 1222, 2005, 2014 and 2052) of what appears to have been a narrow, linear, segmented gully or ditch, 2005. This was aligned north-west to south-east, and extended over a distance of at least 45m, with gaps of approximately 2m between each segment. The segments were between 7m and 8m long, generally up to 1m in width but widening slightly at either end, 0.3m deep, and had U-shaped profiles. The central segment of 2005 appeared to have a gully, 2029, extending at 90° to the north-east, but the stratigraphic relationship was unclear and it is possible that 2029 represented a continuation of putative ring-gully 2184 (see above). The pottery and few stratigraphic relationships that could be determined suggest that segmented gully 2005 represented a late Romano-British feature rather than, for example, a medieval boundary, although the recovery of a single sherd of 13th–14th century pottery from one segment of ditch means that the latter possibility cannot be entirely ruled out. The alignment of gully 2005 did not follow that of the other Romano-British features in the eastern half of the site, but it was parallel to ditch 3302 and gully 3152 to the west.

Ditch 3302 was a relatively substantial V-profiled feature approximately 2m wide and 0.8m deep, sealed beneath deposits of 12th–13th century date. Only a small segment of this ditch, which lay in the narrow trench joining trenches 2 and 3, was excavated and this

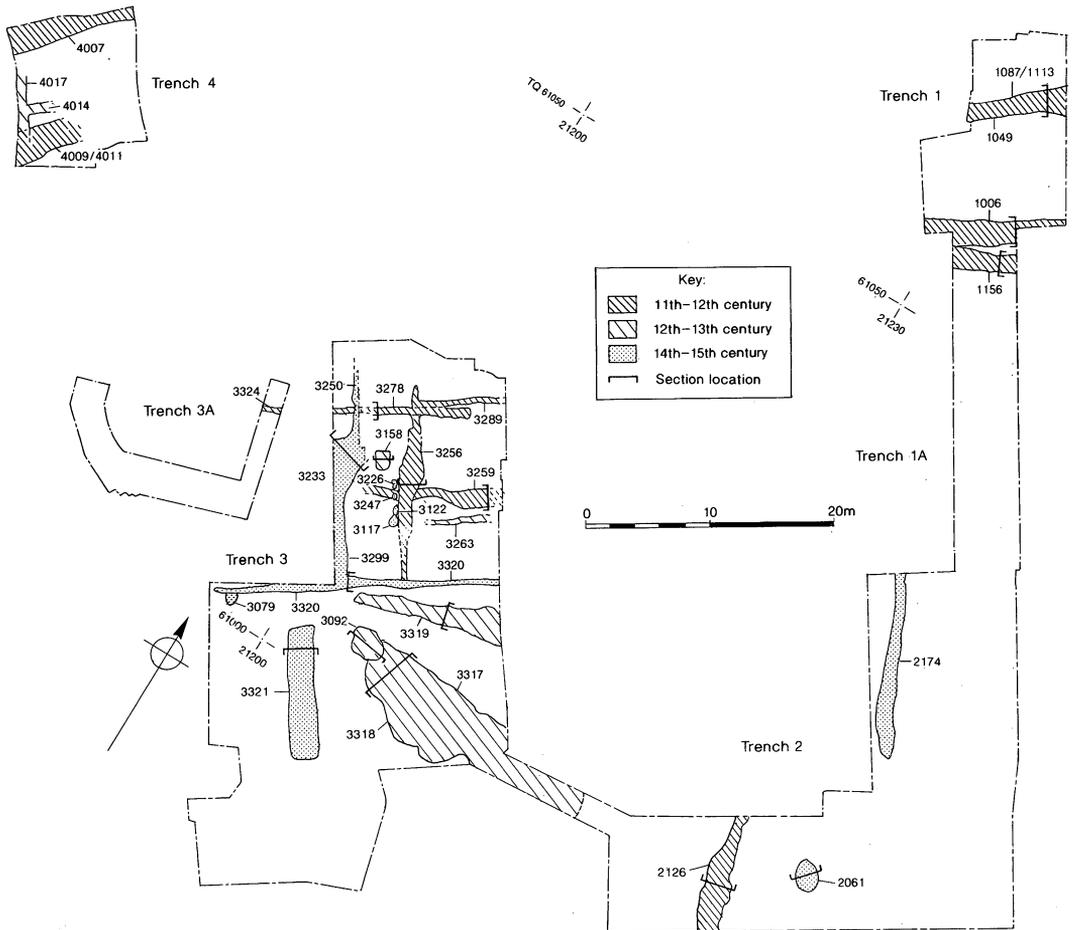


Fig 6 St John's Vicarage, Old Malden: plan of medieval features

revealed a relatively thick upper fill of dark greyish brown silty clay sealing redeposited clay, the latter possibly derived from an associated bank. The size of ditch 3302 suggests that it may have marked an important boundary, but the dating of this feature is equivocal; the only finds were three small sherds of pottery from the upper part of the ditch, of which one is later Romano-British and two are medieval, of 11th–12th century date, the latter possibly intrusive in this context. Clearly, a medieval date for ditch 3302 cannot be ruled out although, on balance, a Romano-British date is considered more likely. Approximately 25m to the west of ditch 3302 was a small ditch or gully, 3152, possibly forming part of a field boundary. It is unclear how far this feature extended to the north-west as this area had been extensively disturbed by later horticultural features. The pottery recovered comprises entirely undiagnostic Romano-British coarsewares.

MEDIEVAL (figs 6–7)

There was no evidence for activity on the site between the 4th and 11th centuries AD, and the earliest medieval features appear to have been a series of ditches at the north end of the site which have been assigned to the 11th–12th century and are probably of post-Conquest date (fig 6). Later medieval and post-medieval features were largely confined to the western

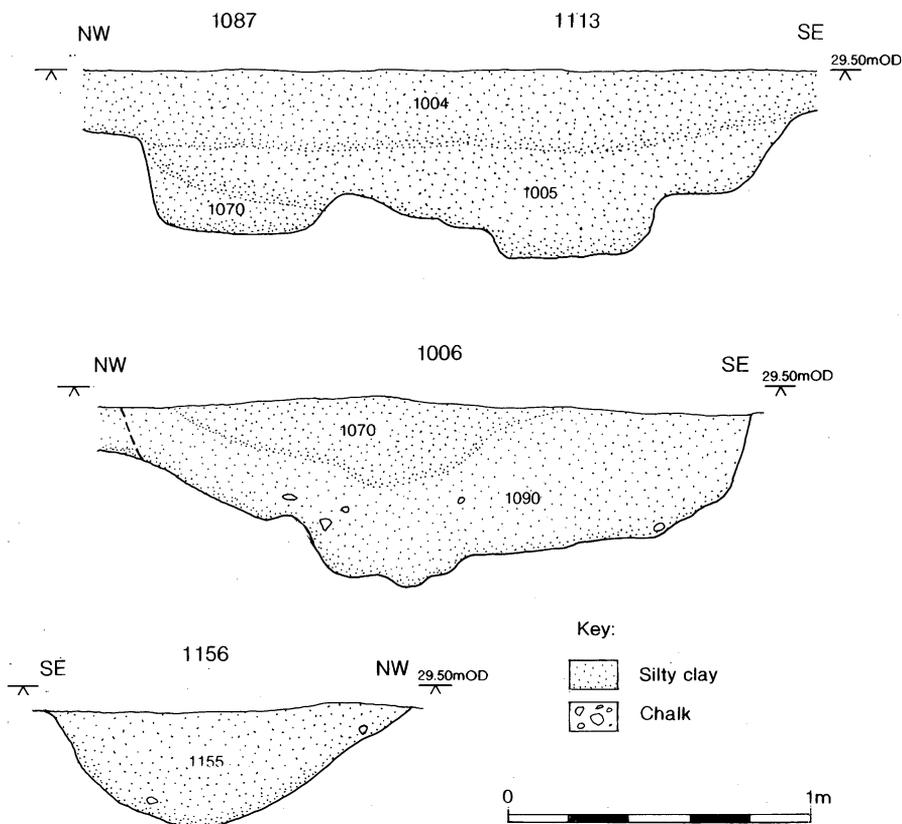


Fig 7 St John's Vicarage, Old Malden: sections of medieval ditches

half of the site, in trenches 3 and 4, in marked contrast to the distribution of Romano-British features which were concentrated in the eastern half of the site, in trenches 1 and 2.

11th–12th century

Two approximately parallel pairs of relatively substantial ditches were found in trenches 1/1A and two further pairs of ditches in trench 4, in both cases near to the northern edge of the site (figs 6–7). It is suggested that these groups of features, approximately 70m apart may have been parts of the same features, and all appear to have been dug in the 11th or 12th century.

The most northerly ditches in trench 1, 1087 and 1113, converged to the west as 1049 which presumably represented a single recut ditch, but it was impossible to determine which of the two ditches was the earlier. The same is the case for ditches 1006 and 1156 some 10m to the south, which also converged to the west. All these ditches were between 1.5m and 2m in width and up to 0.9m deep, and filled with silty clays varying from dark greyish brown to brownish yellow in colour. 'Slots' along the bottoms of ditches 1087 and 1113 indicate that they had been cleaned out on at least one occasion, and some later, 13th century pottery from the top of 1006 and 1156 suggests that these ditches became infilled slightly later than those to the north.

The ditches at the north end of trench 4 (4007), and those to the south (4009 and 4011), were of broadly similar dimensions to those in trenches 1/1A, although none showed evidence of having been cleaned out. The ditches at the north end lay partly outside the

excavated area and those to the south had been partly cut away by a post-medieval pit, and it was not possible to establish any sequence in their digging and infilling.

No features clearly associated with any of these ditches were identified which, it is suggested, may have defined an unmetalled track between 6m and 10m wide. If so, then there must have been a slight change in alignment of this track between trenches 1/1A and trench 4.

At the north end of trench 3 was a series of similarly aligned shallow gullies of varying width. These comprised two south-west to north-east aligned groups, 3278/3324 and 3289 to the north and 3259 and 3263 approximately 6m to the south, and a more irregular north-west to south-east group, 3256. It seems from the limited stratigraphic evidence that not all these gullies were open at the same time, with a possible recut of 3256 post-dating gully 3259 and perhaps other elements in the system. The southern limit of this system appears to have been established in trench 3, but its extent to the north, east and west is uncertain; it does not, however, appear to have extended as far to the east as trench 1A.

Ditch 2126 further to the south-east may, on the basis of the pottery, have also been of 11th–12th century date, but its alignment does not reflect that of the other features of this date and it is discussed further below as possibly having been a later feature.

12th–13th century

In trench 4, ditch 4009/4011 was probably cut by gully 4017 which lay on a slightly different alignment, although the relationship between them was unclear. Gully 4017, with 4016 at 90° to it, perhaps formed part of a 12th–13th century sub-rectilinear system of plot boundaries (fig 6).

In trench 3 (fig 6) a single, small, sub-rectangular pit, 3158, lay towards the northern end of the trench in the area formerly occupied by the plots defined by gullies 3256, 3263 and 3270. This pit had near-vertical sides on all but the west side, a flat bottom, and the principal fill of dark grey sandy clay loam contained a comparatively large amount of charcoal flecking.

Feature 3092 lay to the south and has been interpreted as a well or, more probably, a watering hole (figs 6 and 8). This was a large, sub-circular pit measuring approximately 3 x 2.5m and was 1.2m deep. The sides were irregular, with some evidence for undercutting and collapse (context 3132), and no evidence of any lining survived. The majority of the fills (contexts 3090, 3091 and 3129) were virtually undifferentiated dark greyish-brown/brown silty clay containing 12th–13th century pottery, but the bottom contained a grey silt (context 1368) containing 12th century sherds. This feature was 'fed' by two somewhat irregular ditches, 3317 and 3318, of variable width, depth and profile which extended at least 15m to the east. Their edges became very indistinct towards the east end and they appeared to merge, perhaps reflecting the existence of a shallow, elongated hollow or pond-like feature; this area was filled with a grey clayey silt with no clear boundary between this and the underlying natural clay. When excavated, a very small quantity of standing water accumulated in this area, even in the dry conditions prevailing, perhaps indicating the presence of a spring, now virtually dry.

Ditch 3319, immediately to the north of 'watering hole' 3092 was a relatively broad, shallow feature which probably originally extended further to the west but had been truncated by post-medieval landscaping. Towards the west end of trench 2 was a shallow somewhat irregular ditch, 2126, which lay at approximately 90° to ditch 3319, although any junction between these features lay outside the excavated area. These ditches lay on a different alignment to the possible plot boundaries to the north-west, and they may have partly enclosed 'watering hole' 3092 and the ditches feeding it. However, the pottery from ditch 2126 is of earlier, 11th–12th century date, and if this was not residual then it would indicate that ditch 2126 is unlikely to have been associated with 'watering hole' 3092.

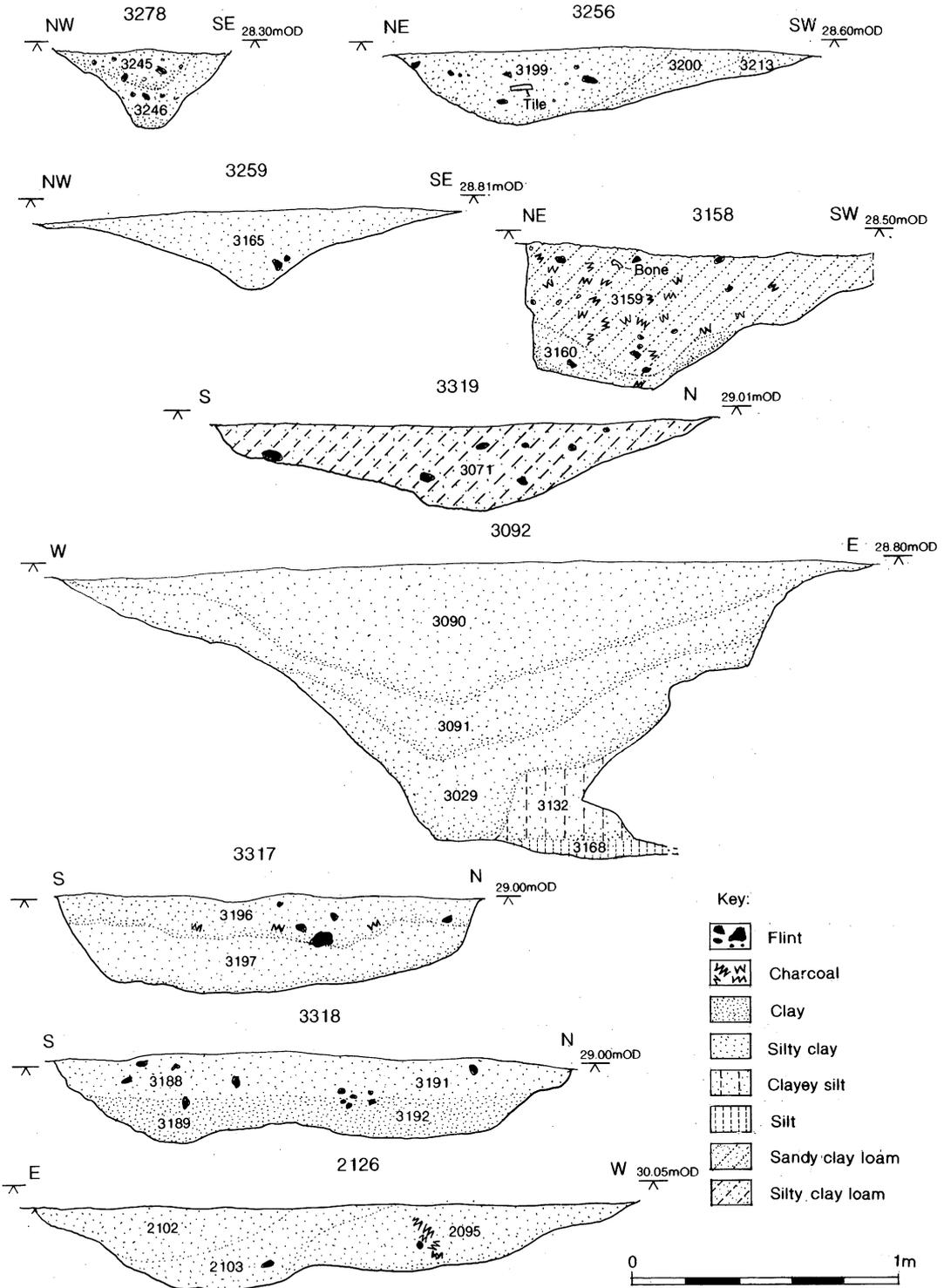


Fig 8 St John's Vicarage, Old Malden: sections of medieval features

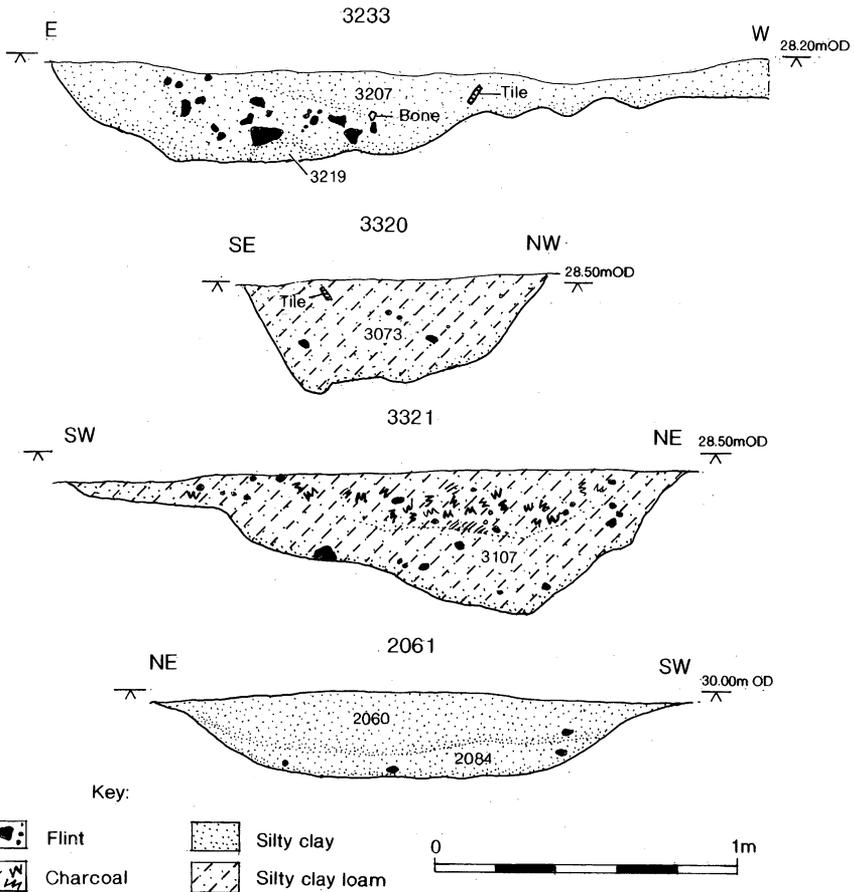


Fig 9 St John's Vicarage, Old Malden: sections of medieval features

14th–15th century

Towards the north end of trench 3, and covering much the same area as the earlier sub-rectilinear layout of gullies, was a T-shaped arrangement of gullies or small ditches, also likely to have been part of a more extensive system of plot boundaries (figs 6 and 9). Ditch 3320 ran north-east to south-west for at least 20m, with a terminus to the west possibly marking the location of an entrance. Ditch 3299 ran north-west, at 90° to ditch 3320, for at least 16m, and the two features seem clearly to have been contemporary. Ditch 3299 lay partly under the edge of the excavation and curved slightly before continuing north (as ditch 3250) where it was partly obscured by walls forming part of the post-medieval vicarage. At the point where the ditch turned north it widened (as feature 3233), and the fill here was notably darker and contained larger quantities of pottery along with some oyster shell; this may represent a midden deposit.

A north-south line of shallow, truncated, possible postholes (3117, 3122, 3226 and 3447) lay approximately 4m to the east of feature 3233 and cut the earlier gullies in this area. These features may represent fragmentary structural remains, and several undated postholes in the vicinity (not illustrated) may have been contemporary with them, but no coherent structural plan was apparent.

Three metres to the south of ditch 3320, and probably contemporary with it, was a short length of ditch (3321) aligned north-west to south-east. This was just over 10m long with

square terminals, approximately 2m wide, 0.5m deep and flat-bottomed. The gap between ditches 3320 and 3321 may represent an entrance, possibly to an enclosure, although there was no evidence for a continuation of ditch 3321 to the south-east.

In the west corner of trench 3 was a small, shallow pit (3079) with a layer of burnt clay surviving at the top; this appeared to have been a burnt layer within the pit rather than a deliberately constructed hearth. The relationship between pit 3079 and ditch 3320 was not clear, but the pit is considered most likely to have been later.

Only two features assigned to this phase were found in trenches 1, 1A and 2. A shallow ditch (2174) lay towards the north end of trench 2 and was aligned north-west to south-east. This ditch continued to the north beyond the limit of excavation, but terminated to the south within the trench. Approximately 10m to the south of this terminus was a small, bowl-shaped pit (2061). There was a virtual absence of medieval pottery of 13th–14th century date in trenches 1A and 2, other than in features 2061 and 2074 (where it occurred in very small quantities), though more was present in trench 1 either as residual material in later features (mainly tree holes) or in the upper fills of earlier features.

No features and virtually no pottery which can be dated to between the early 15th century and the 17th century was found, and the earliest post-medieval remains have been assigned to the early 17th century.

POST-MEDIEVAL

The vicarage buildings

All the structural remains of this period lay in the north half of trench 2 and belonged to four phases, each incorporating and extending its predecessor, with the earliest part probably dating to the early 17th century (figs 10 and 11). Documentary and map evidence indicate that the four phases date to the early 17th century (before 1623), 1675, 1795 and 1878 respectively, and that this vicarage was finally demolished in 1934–5. No evidence was found within the excavated area of any structures pre-dating these post-medieval remains, although documents record a vicarage on the site in 1279 (see below).

The front wall of the 17th–20th century vicarage lay beyond the limit of excavation to the north-west, but most of the ground plan was exposed within the excavated area. The foundations and lower parts of most of the walls were present, razed to ground level on the east side but surviving to a maximum height of approximately 1m on the west side. In this area they had been buried by soil derived from terracing associated with the construction of the replacement vicarage immediately to the west in 1937. No floor surfaces or interior wall plastering survived, except in a cellar beneath demolition debris (the only place where this was encountered), and it would appear that floors, plaster etc had been comprehensively stripped during demolition in 1934–5. The areas between the walls had been subsequently backfilled with soil, which directly overlay natural clay cut by medieval features, and then grassed over.

Phase 1: early 17th century

The earliest part of the building, possibly dating to before 1623, lay partly outside the excavated area, but appears to have been L-shaped in plan with a cellar beneath part of the front (north) range and a room with a chimney stack on the back forming the rear (south) range (fig 11). The walls, built of brick, were set in shallow foundation trenches, with offsets around the bottom around both the inner and outer faces. The bricks had been laid with the headers exposed along either face, and were two bricks thick in the outside walls and one brick thick in internal walls.

The front range measured approximately 11.5m in length, was at least 3m wide, and had a cellar, 6m long, beneath the west end. Only a small part of this cellar was investigated, revealing a concrete floor and a flight of steps of 19th or 20th century date in

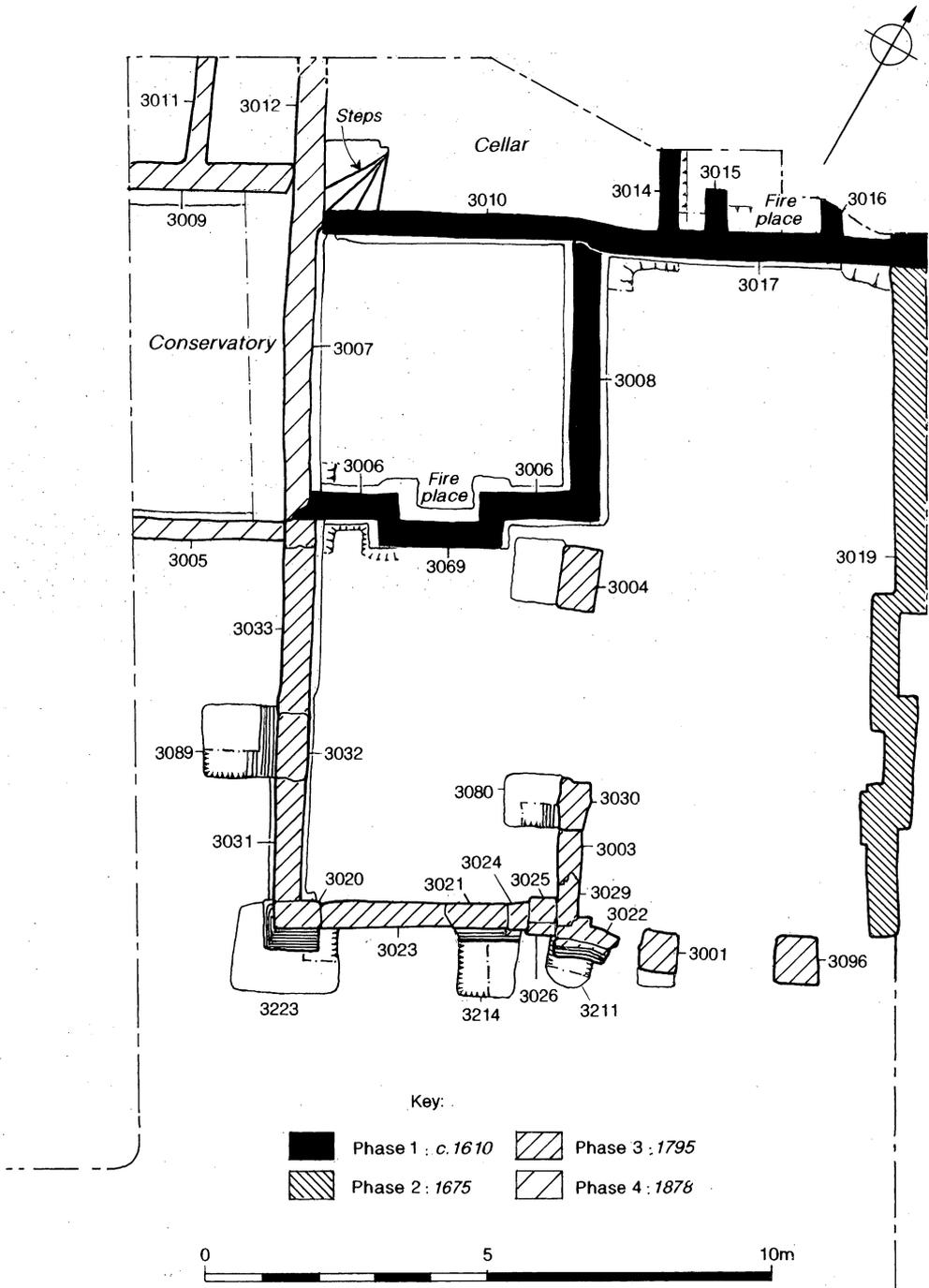


Fig 10 St John's Vicarage, Old Malden: plan of post-medieval vicarage

the south-west corner. These steps may have been built in 1878 when the front range was extended and the original west wall replaced. Only a limited area at the east end of the front range was exposed, showing a possible fireplace represented by two stubs of walls



Fig 11 St John's Vicarage, Old Malden: post-medieval vicarages — the 17th/18th century remains

(3015 and 3016) with wall 3014 to the west forming an internal division corresponding with the extent of the cellar.

The rear range measured 5 x 5m and had a fireplace centrally placed in the south wall with a rectangular stack projecting to the rear. Only fragmentary traces of a brick hearth survived and it appears that this had been robbed out.

Phase 2: 1675

Documentary sources record the vicarage as having been destroyed by fire and subsequently replaced in 1675 at a cost of £300. If the phase 1 remains did date to the early rather than the late 17th century, then it was this building that was destroyed, and the excavated evidence suggests that it was rebuilt on the earlier foundations with an additional range on the south side. Whether the earlier building was demolished to ground level prior to rebuilding is not clear, but a large rear wing was added to the east side, abutting the earlier rear range. Only the east wall (3019) of this wing survived, the south and west walls having been demolished and partly replaced during the late 18th century rebuilding. This additional wing was 12m long and probably approximately 6m wide, built in brick with no foundation trench, and survived to a maximum height of two courses. The remains of a probable fireplace in the east wall survived and there may have been a doorway in this side.

Phase 3: 1795

The vicarage was 'repaired and improved' by Rogers Ruding (vicar of Malden and Chessington 1793–1820) in 1795 at a cost of £630, and was often referred to subsequently as the 'Rogers Ruding vicarage' or 'Queen Anne vicarage'. Archaeological evidence indicates that this repair and improvement involved building an extension to the phase 1 rear range as well as a substantial remodelling of the adjacent phase 2 rear range. The

latter work included removing and partly replacing the former south and west walls, apparently in order to create one large room at the rear. It is unclear what, if any, changes were made to the front of the building.

This phase of work was characterized by the digging of substantial foundation pits in excess of 1m deep for the two internal, mortared rubble piers (3004 and 3030) and also for the substantial stepped brick piers (3020, 3021 and 3032) of the new rear wing to the west. The stepped brick piers were linked by flint and mortar footings (3023, 3031 and 3033) set in shallow foundation trenches. The substantial foundation pits of this phase may have been dug to avert the threat of subsidence, a problem that was to arise subsequently. It may have been the style of brickwork employed in this phase (in, for example, the stepped brick piers) which gave rise to this building sometimes being referred to as the 'Queen Anne vicarage'. There is no evidence for any work having been undertaken at the beginning of the 18th century, and perhaps this term referred to the style rather than the date of the building.

Phase 4: 1878

The front range was extended to the west by the addition of a new wing, only a small area of which was exposed in the excavation. It was also at this time that the original, phase 1, west wall was partly rebuilt with substantial concrete footings (3007/3012) set in a large foundation trench. The rebuilding of this wall may have been necessitated by subsidence; the walls on the east side sat directly on London Clay which lay at shallow depth in this area, but towards the west a greater depth of topsoil and subsoil overlay the clay where this begins to slope down more steeply towards the Hogsmill valley.

A conservatory was also added at this time, and maps and drawings indicate further additions including a porch and a narrow structure on the east side. By the end of phase 4 the vicarage comprised a very substantial two-storey building occupying an area approximately 15m square.

This vicarage was entirely demolished in 1934–5 and replaced by another approximately half the size built immediately to the west in 1937. The 1937 vicarage was itself demolished in 1997 prior to redevelopment.

The vicarage garden and other features

Traces of various post-medieval garden features were recorded, several pre-dating the late 18th century, buried by topsoil and other deposits up to 1m thick. There was evidence for terracing into the gentle slope in the eastern half of trench 3, perhaps undertaken in order to lay out a circular gravel walk (traces of which survived); along the east edge of trench 3 was one deep and several shallow bedding trenches. The circular gravel walk and a series of what appear to be six or seven rectangular plant beds separated by paths are depicted on the 1794 map of Malden parish (see below) and on the 1834 tithe map (these garden features may not have been maintained for they are not shown on later 19th century maps). Numerous features interpreted as tree holes or horticultural features, particularly in trenches 1, 1A, 2, probably reflect the presence of trees, shrubs and a series of plant beds or a (?later) orchard to the north-east of the house which are also depicted on the 1794 and later maps.

A large, shallow, undated scoop in the south-east part of trench 4 had truncated medieval deposits and may have been the result of terracing for the construction of a series of outbuildings, or it may have been dug to extract clay. The fragmentary remains of several brick structures were found, probably the outbuildings shown grouped around a yard on maps of 1794 and later, and a trapezoidal-shaped, brick-lined cesspit lay within one of these structures.

Finds

WORKED AND BURNT FLINT, by P A Harding

Sixty pieces of worked flint were recovered. These vary in condition from relatively fresh pieces to others showing a high degree of edge damage. A large proportion of the flint assemblage was found redeposited in Romano-British and later contexts. Raw materials represent local gravel sources, and a few pieces of Bullhead Beds flint were noted. For the most part the assemblage is not chronologically distinctive, contains little evidence of retouch, and is likely to be mainly of Bronze Age date. It does include a few pieces which could be of Mesolithic or Neolithic date, such as two multi-platform cores, one blade, and a micro-denticulate with edge gloss.

Burnt, unworked flint was recovered in greater quantities (669 pieces/12,022g), mainly from trenches 1–3. This material type is intrinsically undatable but is frequently found in association with prehistoric artefacts. Here the largest quantities derived from trench 2, which also produced the highest concentration of prehistoric pottery and worked flint, although largely redeposited in later contexts.

POTTERY, by M Laidlaw and Lorraine Mephram

A total of 1955 sherds (13,535g) was recovered during the excavation. The assemblage includes material of prehistoric, Romano-British, medieval and post-medieval date. The overall condition of the pottery is poor; the sherds are mostly small and heavily abraded (mean sherd weight 7g). Diagnostic vessel forms are also lacking, and the bulk of the rim sherds present have less than 5% of their original diameter surviving. The quantities from each context are generally small with no feature producing more than 80 sherds of any chronological period.

Methods

Post-medieval pottery (78 sherds/2702g) is not included in this report. The remaining pottery has been analysed using the standard Wessex Archaeology pottery recording system (Morris 1994), in which fabrics are defined and coded on the basis of the frequency and size of inclusions. Fabrics are coded alpha-numerically, combining a letter denoting dominant inclusion type (F = flint; G = grog; Q = quartz sand; S = shell) with a chronologically distinctive number (1–99 prehistoric; 100–399 latest pre-Roman Iron Age and Romano-British, 400–599 post-Roman). Group E ('established' wares) is also used here for fabrics of known type or source (eg Kingston-type ware). The fabrics have been correlated, where possible, with the Museum of London fabric type series.

The shelly fabrics in particular have proved extremely difficult to attribute to chronological period, since prehistoric, Romano-British and medieval shelly wares all contain visually similar inclusions. Where possible, these have been dated by association with other, more chronologically distinctive fabrics and/or on the presence of diagnostic forms; where this has not been possible, shelly fabrics have been assigned to an 'undated shelly ware' code (S999).

Pottery has been recorded by fabric type within each context, noting details of vessel form, surface treatments, decorations, surviving residues and manufacturing techniques. The data gathered were entered on to a database (Access) and full records exist in archive. Pottery fabrics are described in appendix 1 (M21–M25) and totals by fabric type are listed in table 1.

TABLE 1 Pottery fabric totals by period (not post-medieval)

Fabric Type	No sherds	Weight (g)	% of period (by weight)	% of total (by weight)
MIDDLE BRONZE AGE TO EARLY IRON AGE				
F1	92	372	35.8	
F2	7	75	7.2	
F3	82	19	1.8	
Q1	76	278	26.7	
Q2	16	104	10.0	
Q3	2	23	2.2	
S1	39	170	16.3	
<i>sub-total</i>	<i>314</i>	<i>1041</i>	<i>—</i>	<i>9.6</i>
LATE IRON AGE/EARLY ROMANO-BRITISH				
F100	12	37	4.9	
G100	108	543	72.2	
G101	4	66	8.8	
G102	9	64	8.5	
G103	7	35	4.7	
Q107	1	7	0.9	
<i>sub-total</i>	<i>141</i>	<i>752</i>	<i>—</i>	<i>7.0</i>
ROMANO-BRITISH				
<i>Imports</i>				
Amphorae	22	198	6.6	
Samian	5	5	0.2	
<i>British finewares</i>				
Oxford colour coat	25	123	4.1	
Oxford oxidized	1	10	0.3	
M100	18	72	2.4	
<i>Coarsewares</i>				
Overwey Tilford	8	23	0.8	
Q100	46	341	11.4	
Q101	176	975	32.6	
Q102	171	806	27.0	
Q103	55	351	11.8	
Q104	11	24	0.8	
Q105	3	13	0.4	
Q106	1	6	0.2	
S100	4	43	1.4	
<i>sub-total</i>	<i>546</i>	<i>2990</i>	<i>—</i>	<i>27.6</i>
MEDIEVAL				
<i>Imports</i>				
Andenne ware	2	29	0.5	
<i>Early Surrey wares</i>				
Q402	88	672	11.2	
Q406	77	717	11.9	
Q411	1	7	0.1	
Q412	12	89	1.5	
Q414	13	189	3.1	
<i>Other early medieval coarsewares</i>				
C400	5	29	0.5	
Q400	9	99	1.6	
Q401	67	355	5.9	
Q404	126	1106	18.4	
Q405	66	423	7.0	
Q409	10	84	1.4	
S400	46	129	2.1	
S401	247	1340	22.2	

TABLE 1 (continued)

Fabric Type	No sherds	Weight (g)	% of period (by weight)	% of total (by weight)
<i>Late Surrey wares</i>				
Coarse Border ware	2	9	0.2	
Kingston-type ware	55	454	7.5	
Cheam-type ware	2	10	0.2	
'Tudor Green'	1	2	—	
<i>Other later medieval wares</i>				
London-type ware	4	8	0.1	
Q407	6	41	0.7	
Q408	33	147	2.4	
S402	1	88	1.5	
<i>sub-total</i>	<i>874</i>	<i>6027</i>	<i>—</i>	<i>55.6</i>
UNKNOWN DATE				
S999	2	23	—	0.2
OVERALL TOTAL	1877	10833		

Middle Bronze Age to Early Iron Age

A moderate number of sherds are attributed to a period potentially spanning the Middle Bronze Age (MBA) to Early Iron Age, mainly on the basis of fabric type, as diagnostic vessel forms are lacking. The seven fabrics identified comprise three flint-tempered, three sandy and one shell-tempered fabric. The term 'tempered' is used here since it appears that the inclusions have been added deliberately as opposed to occurring naturally within the clay matrix.

All these fabrics could have been produced using locally accessible resources. The site is located near to the clays of the Reading Beds, while the origin of the shell could have been the Woolwich Beds which outcrop at Ewell.

Very few vessel rims were recovered (nine in total) and four are too small to attribute with certainty to diagnostic forms (small rims in fabrics F2, Q1 and Q3). Those which are recognizable comprise a thick-walled bucket-shaped vessel with plain upright rim from tree hole 2023 (fabric F3); a thinner walled vessel of similar profile but with a thickened, flattened rim, in fabric S1, from Late Iron Age/early Romano-British scoop 1226 (fig 12, 3); a thin-walled jar or bowl with out-turned rim, in fabric F1, from medieval ditch 1113; a jar with short, thickened and out-turned rim, in fabric F1, from layer 1243 (fig 12, 1), and a small, thin-walled, carinated bowl in fabric F2, from Romano-British pit 1167.

Decoration is limited to one rim sherd in fabric F2, with small impressions on the shoulder (fig 12, 2). No signs of any surface treatment beyond simple smoothing of the exterior surfaces was observed, although post-depositional abrasion may have removed any such traces.

A very small number of sherds in the coarse flint-tempered fabric F3, including the thick-walled, bucket-shaped vessel from tree hole 2023, could be considered characteristic of the MBA Deverel-Rimbury ceramic style, while the majority could be placed within the plainware phase of the post-Deverel-Rimbury (PDR) ceramic tradition (Barrett 1980). On the basis of the predominance of flint-tempered fabrics over finer sandy wares, combined with the scarcity of decoration, a broad date range from the 11th to 8th centuries BC may be suggested for the PDR material.

Most of the Middle/Late Bronze to Early Iron Age material was found as residual sherds within Romano-British and medieval features in trenches 1, 1A and in the northern part of trench 2. Six sherds occurred in features unassociated with later material and which

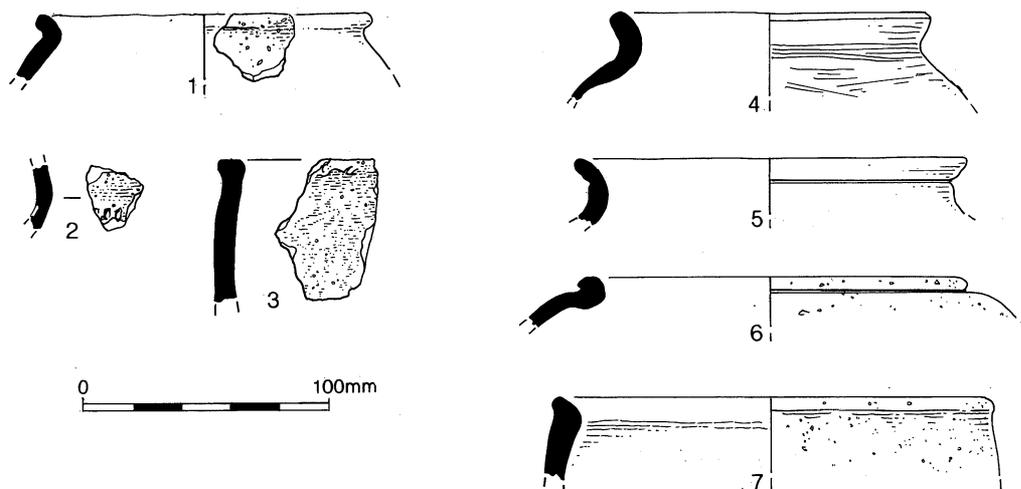


Fig 12 St John's Vicarage, Old Malden: prehistoric pottery

have, on this basis, been dated to this period (pit 1038, ditch 1203 and pit 1238), and another six sherds were found in tree holes (1134, 1202, 2023).

Late Iron Age/early Romano-British

This chronological group comprises a number of fabrics, including sandy, shelly, flint-tempered, and grog-tempered wares, which continue the native Iron Age traditions of the area. While these wares could be pre-conquest, their survival into the Romano-British period is well documented, and there is likely to be some overlap with the later, 'romanized' wares. An overall potential date range of 1st century BC to early 2nd century AD is proposed for these Late Iron Age/early Romano-British wares.

Diagnostic vessel forms, which occur in shelly and grog-tempered fabrics, are scarce, but include high-shouldered jars (eg fig 12, nos 4, 5), some necked and some cordoned, and bead-rim jars (fig 12, nos 6, 7). Where manufacturing technique can be discerned, these vessels are handmade. They have a potential date range of 1st century to early 2nd century AD, and could be pre-conquest.

As for the prehistoric pottery, the distribution of Late Iron Age/early Romano-British material is concentrated in trenches 1 and 1A, with only sporadic occurrences in trenches 2 and 3. Again, this material occurs largely as residual sherds in later contexts, although four features (1158, 1206, 1245, 1265), all shallow pits or scoops in trench 1A, can be tentatively dated to this period.

Romano-British

This chronological group includes 'romanized' wheelthrown coarsewares, finewares and imported wares, which have a potential date range spanning the Roman period (later 1st to 4th century AD).

Imports

Imports consist of a small quantity of amphorae and samian. Amphorae are represented by small body sherds which are most likely to be derived from Spanish Dressel 20 vessels, one of the most common amphora types found in Britain, with a date range from the Late Iron Age to the 3rd century AD (Peacock & Williams 1986). The samian consists of five

small, very abraded body sherds. A central Gaulish source is likely, which would indicate a date range for the samian in the 2nd century AD.

British finewares

British finewares consist mainly of Oxfordshire colour-coated and fine oxidized wares, with a small quantity of fine micaceous wares (fabric M100) from unknown sources, possibly local. All sherds are small and abraded, and colour coats have frequently been completely removed. The rim forms surviving are too small to assign to specific vessel forms, and only broad dating to the main production phase of the Oxfordshire industry (3rd/4th centuries AD) is possible.

Coarsewares

The sandy greywares are likely to derive from a number of sources, including the Alice Holt kilns, and the Oxfordshire and Hertfordshire (*Verulamium* area) production centres. The rim sherds cover a rather restricted range of early Romano-British vessel forms, such as necked and cordoned jars (eg Lyne & Jefferies 1979, class 1), everted-rim and bead-rim jars, wide-mouthed jars/bowls with flat-topped rims and a moderate quantity of plain-rimmed dishes. These vessel forms occur most frequently in fabrics Q101 and Q102. Three body sherds in fabric Q101 derive from a jar/beaker with barbotine decoration.

Characteristically later Romano-British forms are rather scarce but include a small number of drop-flanged bowls and jars with flaring rims. The sherds in Overwey/Tilford type fabric E181 may also be included in this later Romano-British group. This characteristic buff/yellow sandy ware appears at Alice Holt from c AD330, associated with the Overwey kilns, although it has also been identified at Portchester, and it is likely that it was produced at other centres apart from Alice Holt, including central Surrey (Lyne & Jefferies 1979, 35). All the sherds in E181 identified here are body sherds, but one has the horizontal rilled decoration characteristic of the late Roman (4th century AD) hooked-rim jars produced at Alice Holt and elsewhere (Lyne & Jefferies 1979, class 3C).

Once again, the distribution of Romano-British pottery shows a marked concentration in trenches 1 and 1A, with less in trenches 2 and 3, although the later material (3rd/4th century AD) marks an extension southwards into the southern part of trench 2; four of the seven sherds of Overwey/Tilford type fabric E181 came from trench 2 (the other three came from trench 3), as well as two of the three examples of drop-flanged bowls, and both of the two examples of flared-rim jars.

Medieval

The medieval pottery accounts for just under half of the total assemblage recovered by weight. This group is dominated by unglazed coarsewares with a smaller proportion of finer glazed wares. As for the rest of the pottery assemblage, condition is generally poor; sherds are small and abraded and diagnostic vessel forms are scarce.

This assemblage, from a rural site outside London, provides an interesting contrast with assemblages from sites closer to and within the city itself, both in the range and varying proportions of the fabric types represented, and in the range of vessel forms.

Twenty-one different fabric types have been defined, and these fall into five groups on the basis of dominant inclusions, type, and/or known source:

- 1 imported ware
- 2 iron-rich sandy coarsewares characteristic of Early Surrey wares
- 3 other early medieval coarsewares, probably relatively locally produced
- 4 finer white-firing wares, often glazed and typical of later Surrey industries
- 5 other later medieval wares, both fine and coarse

TABLE 2 Medieval vessel forms by fabric (no of occurrences)

RIM/VESSEL FORM	Early Surrey wares						Early medieval coarsewares						Later Surrey wares				Late med	TOTAL
	Q402	Q406	Q412	C400	Q401	Q404	Q405	S400	S401	E451	E452	E454	S402					
rim, vessel form unknown	3				1		1	3	1								10	
jar, upright thickened rim	4		1	1	1	7	3	3	52								72	
necked jar, everted rim		2				22	1				2						25	
necked jar, moulded rim		5	2										1				3	
jar, lid-sealed rim																	7	
jar/bowl, T-headed rim										2							2	
flared bowl, inturned rim									3								3	
convex bowl, necked, everted rim						11											11	
small cup/bowl														1			1	
bowl, bifid rim											6						6	
TOTAL	7	7	3	1	2	40	5	6	56	2	9	1	1	1	1	140		

Correlations with the Museum of London fabric type series are given in parentheses (M23–M25). Vessel forms by fabric are presented in table 2.

Import

Sherds of a single imported vessel are present. The fabric has been identified as Andenne ware. Although Andenne ware has been found in London rarely in early to mid-11th century contexts, it is most frequent in contexts of later 11th to mid-12th century date, and may have continued in use into the early 13th century (Vince & Jenner 1991, 106). The most common vessel type known from London is the pitcher; insufficient survives of the vessel from the vicarage site to ascertain overall form. The two conjoining sherds were recovered from ditch 4009.

Early Surrey wares and iron-rich sandy ware

Four fabrics have been identified as early Surrey coarsewares, characterized by the presence of iron-stained quartz grains in an iron-poor (pale-firing) clay matrix. These fabrics are equivalent to the London codes ESUR and ESIR, and are subdivided here on the basis of the range and coarseness of inclusions. Also included with this group, because of similarity of fabric, is the finer fabric Q414, which equates to the London code EMIS (Early Medieval Iron-Rich Sandy ware). A small number of sherds are glazed with a thin, patchy, mottled green glaze.

The precise source for the Early Surrey wares is unknown. Although the similarity in iron-poor clay matrix and iron-rich compounds derived from iron-cemented sandstones suggests a similar source area to the later medieval Surrey whitewares, the inclusions in the early medieval wares are not as heavily weathered as those in the later wares, indicating that the clay originated closer to the sandstone source. The occurrence of these wares at the vicarage site in some quantity suggests a source at least fairly local to the site, and it is possible that the well-documented Kingston-type ware industry of the 13th/14th century had an earlier predecessor as yet unlocated. The date range of Early Surrey wares in the capital is mid/late 11th to mid-12th century.

Other early medieval coarsewares

This group includes shelly, chalk-tempered and sandy fabrics. The shelly fabrics (S400, S401) can be correlated with Early Medieval Shelly ware as identified in London, and are subdivided here on the basis of the size of the shell inclusions. The five sandy fabrics correspond to the London types EMS/EMSS and EMFL. A small number of sherds are in a coarse vesicular fabric (C400), with voids representing leached out (?)chalk, which equates to Early Medieval 'Chalky' ware as identified in London.

There are no diagnostic sherds in the ?chalk-tempered fabric C400. Early Medieval 'Chalky' ware in London has a date range from the mid/late 11th century to the mid-12th century, and has a presumed source area to the north-west of the city, in Hertfordshire or Buckinghamshire (Vince & Jenner 1991, 70–2). Its occurrence here south of the river, however, and the identification of similar fabrics on early medieval sites at West Shefford, Wiltshire and Frilsham, Berkshire (Vince 1997, 64), would suggest that this fabric forms part of a widespread tradition of calcareous wares with more than one source. It may be noted that the Upper Chalk outcrops fairly locally to the site, at Ewell, in conjunction with the Reading Beds.

The precise source for the shelly fabrics is unknown. Similar fabrics are widespread on early medieval sites in north-west Kent, and the identification of the shell in these fabrics as Tertiary suggests a source on the Woolwich Beds, which outcrop from north-west Kent to Southwark (Vince & Jenner 1991, 63). The closest outcrop of the Woolwich Beds to St John's Vicarage is at Ewell.

The shelly fabrics S400 and S401 form a large proportion of the medieval assemblage from the vicarage site; in contrast to sites in London where Early Medieval Shelly ware (EMSH) is rare in comparison to other early medieval coarsewares (eg EMS, EMSS). The dating for EMSH in London suggests a currency from the early/mid-11th century to the mid-12th century (Vince & Jenner 1991, 64), and there is no reason to question this dating for the assemblage from St John's Vicarage.

Rim sherds in both shelly and sandy fabrics derive mainly from jars, although there are some bowls (table 2). Decoration is restricted to a single shelly-ware jar with finger-impressed rim (fig 13, 9), and two sherds in fabric Q405 which are rouletted in horizontal bands.

Later Surrey wares

All the three major later medieval Surrey whiteware industries are represented, as well as a handful of sherds of Tudor Green ware. These fabrics have been defined following published descriptions (Pearce & Vince 1988, 9–10). The majority consist of Kingston-type wares. This emphasis is due not so much to geographical location but to the chronological limitations of the site — there is very little pottery overall which can be definitively dated later than the mid-14th century.

Diagnostic forms are scarce (table 2); the Surrey wares comprise mainly body sherds, both glazed and unglazed. There is little evidence here of the highly decorated jugs so characteristic of the Kingston industry — only one small body sherd is decorated, with applied scales.

Other later medieval wares

Three other fabrics are each represented by a handful of sherds. London-type ware occurs as body sherds only, mostly glazed and some with an external white slip, almost certainly deriving from jugs. Given the absence of more diagnostic pieces, these sherds may only be dated broadly to the currency of London-type wares in London, ie early/mid-12th to mid-14th century.

Fabric Q407 is represented by just six sherds, and can be identified as a fabric in the coarse greyware tradition for which potential sources include south Hertfordshire and Limpsfield in east Surrey. One is a squared rim sherd from a necked jar, recovered from ditch 3282.

Fabric S402, which corresponds to the later medieval Sandy Shelly ware (SSW), is represented by a single rim sherd, from a wheelthrown jar (fig 13, 8). Sandy Shelly ware is found in London from the early 12th to mid-13th century (Vince 1985, fig 12), and is presumed to have a similar source area to the earlier shelly wares (Vince & Jenner 1991, 64).

Discussion and distribution

The majority of the medieval wares can be seen to fall within a date range of 11th to mid-12th century — this includes the shelly, chalky and sandy wares, early Surrey wares and the imported Andenne ware. All these wares are dated here by reference to the London sequence (Vince & Jenner 1991), but there is no reason to suppose that the ceramic dating for this rural site varies significantly from sites closer to the city. A similar emphasis on the early medieval period was noted at the adjacent site at Manor Farm (Blackmore 1996, 53).

The range of fabrics present within this early group indicate several sources of supply to the 11th/12th century settlement, although all (except for the Andenne ware) could be at least relatively local to the site, and some (the early Surrey wares) could even derive from an antecedent to the later medieval industry in Kingston. Given this predominance of locally-produced coarsewares, the presence of the imported Andenne ware vessel is interesting on this small rural site.

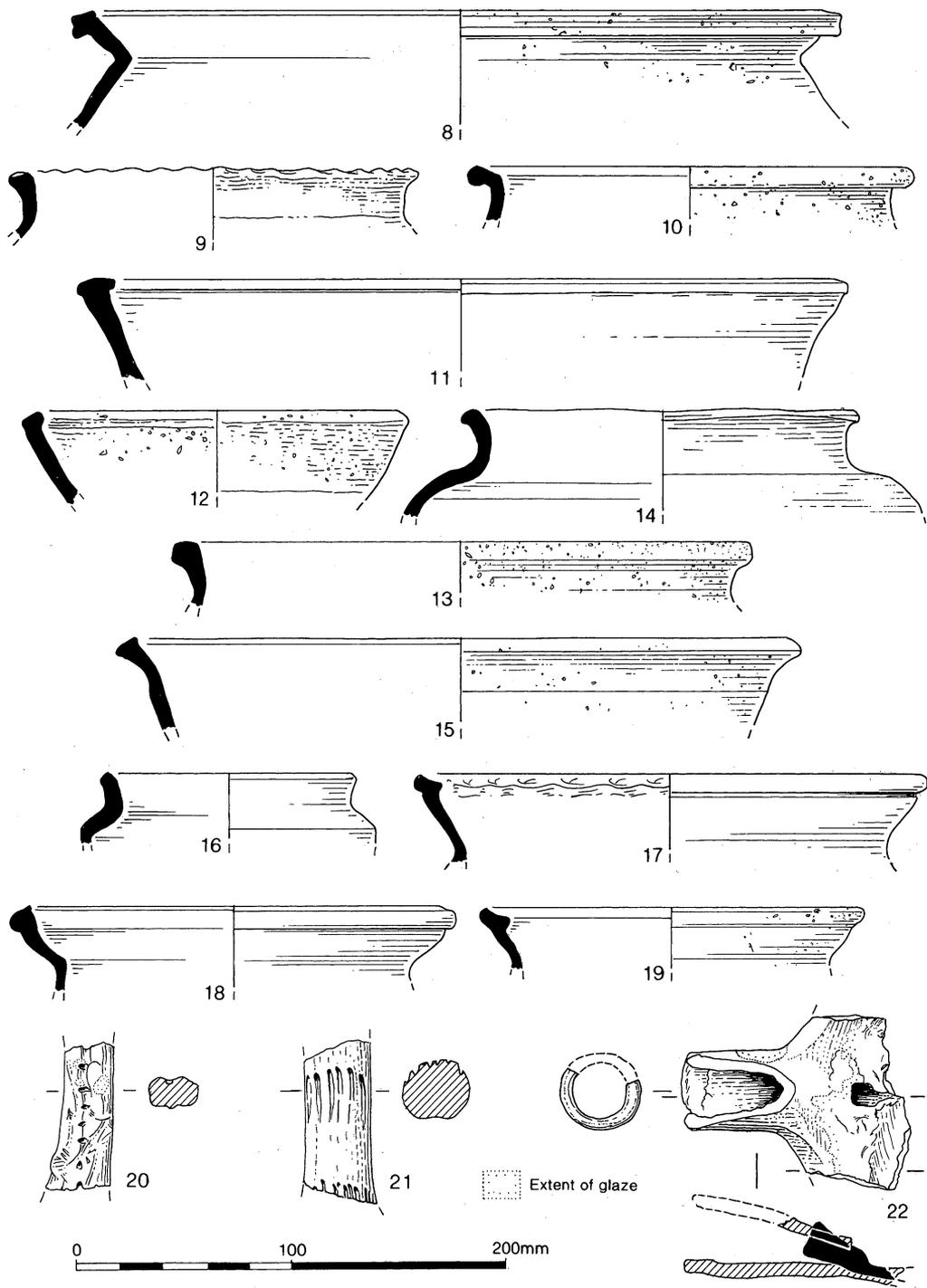


Fig 13 St John's Vicarage, Old Malden: medieval pottery

These early medieval wares are found in features across the site in all trenches, although occurrences in trench 2 are very sporadic. In trenches 3 and 4, however, they occur largely as residual sherds in later medieval contexts.

After the mid-12th century, the quantities of pottery decline, although the apparent hiatus seen here between the decline of the early medieval industries and the beginnings of the Kingston industry in the mid-13th century may be illusory. Assemblages of this period in London are dominated by London-type wares, both coarse and fine. These wares are very poorly represented at St John's Vicarage, and may never have formed a significant part of assemblages at this distance from the capital, where the locally-produced coarsewares may have continued in use for longer. Another dominant coarseware of this period in London, Sandy Shelly ware, is again almost completely absent here, although it should be noted that small body sherds may have been missed amongst groups of the earlier shelly wares.

Kingston-type wares are present in some quantity, and these are dated here conventionally no earlier than the mid-13th century. While the possibility exists that the Kingston industry was supplying local markets before its adoption in London, no firm evidence as yet exists to support earlier production of these wares. Other wares which may be dated to the later 13th or early 14th century include the coarse greywares (Q407). Very small quantities of Coarse Border ware, Cheam-type ware and Tudor Green ware indicate a limited continuation into the later 14th century and possibly early 15th century.

It is noticeable that practically all the pottery of 13th century date and later has a distribution concentrated in the western part of the site, in trenches 3 and 4.

List of illustrated sherds

Late Bronze Age (fig 12)

- 1 Rim, flint-tempered, fabric F1. PRN (Pottery Record Number) 341, layer 1243.
- 2 Decorated body sherd, fabric F2. PRN 499, context 2103, medieval ditch 2126.
- 3 Rim sherd, fabric S1. PRN 317, context 1225, LIA/ERB scoop 1226.

Late Iron Age/early Romano-British (fig 12)

- 4 Rim sherd, fabric G100. PRN 202, context 1144, Romano-British pit 1145.
- 5 Rim sherd, fabric Q107. PRN 201, context 1144, Romano-British pit 1145.
- 6 Rim sherd, fabric S100. PRN 240, context 1157, LIA/ERB pit 1158.
- 7 Rim sherd, fabric S100. PRN 605, context 2168, Romano-British ditch 2167.

Medieval (fig 13)

- 8 Rim sherd, fabric S402. PRN 715, context 3090, medieval pit 3092.
- 9 Rim sherd, finger-impressed; fabric S400. PRN 660, context 4008, medieval ditch 4009.

- 10 Rim sherd, fabric S401. PRN 759, context 3159, medieval pit 3158.
- 11 Rim sherd, fabric S401. PRN 30, context 1005, medieval ditch 1006.
- 12 Rim sherd, fabric S401. PRN 899, context 1076, medieval ditch 1087.
- 13 Rim sherd, fabric S400. PRN 10, context 1004, medieval ditch 1006.
- 14 Rim sherd, fabric Q404. PRN 284, context 1187, medieval ditch terminal 1208.
- 15 Rim sherd, fabric Q404. PRN 228, context 1155, medieval ditch 1156.
- 16 Rim sherd, fabric Q404. PRN 565, context 2151, Romano-British ditch terminal 2152.
- 17 Rim sherd, fabric Q406. PRN 707, context 3090, medieval pit 3092.
- 18 Rim sherd, fabric Q406. PRN 707, context 3090, medieval pit 3092.
- 19 Rim sherd, fabric Q400. PRN 900, context 1091, tree hole 1092.
- 20 Handle, stabbed, crudely made, Q414. PRN 886, context 3107, medieval ditch 3321.
- 21 Handle, stabbed, fabric Q406. PRN 697, context 3071, medieval ditch 3319.
- 22 Skillet handle/rim, partially glazed, fabric Q406. PRN 697, context 3071, medieval ditch 3319.

OTHER FINDS, by Emma Loader and Lorraine Mephram

Metalwork

Seventy-two metal objects were recovered from the site, comprising 64 iron objects, seven copper-alloy objects and one lead object. Twenty-six of these are of post-medieval date

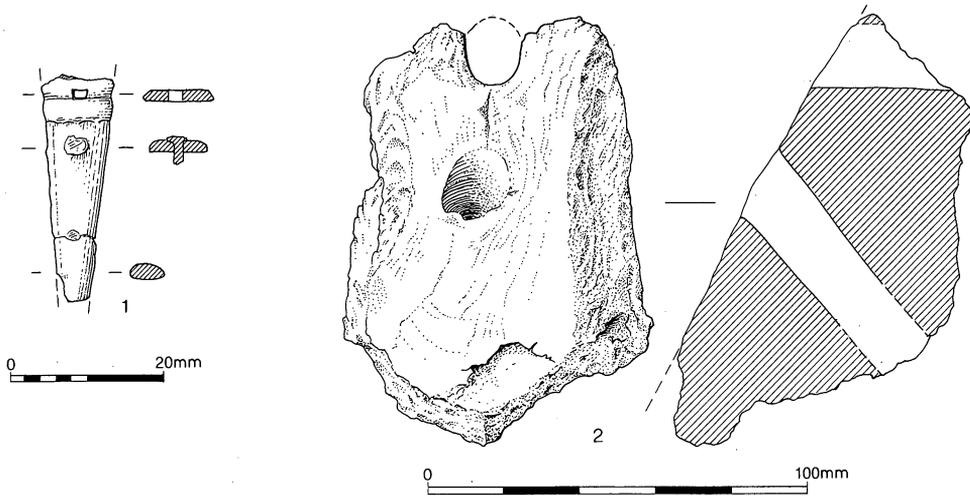


Fig 14 St John's Vicarage, Old Malden: copper alloy and fired clay objects

and nineteen are of uncertain date; these objects are not considered further here. The rest of the assemblage comprises ten objects recovered from Romano-British features and seventeen recovered from medieval features.

Of the copper-alloy objects, a possible strap end came from Romano-British ditch 2100 (fig 14, 1). The tapering, slightly thickened strip is broken at both ends, and two rivets, still *in situ*, are placed centrally along it; at the widest end are the remains of a third rivet hole. It is most likely that this object is from an item of dress, although it is possible that it was part of a decorative mount from, for example, a wooden box. The objects recovered from medieval ditches 3298 and 3102 comprise, respectively, a fragment of flat sheet, and a small circular object, possibly a stud.

One fragment of rolled lead waste was recovered from medieval ditch 4009.

Twenty-two iron objects were recovered from securely-dated features. Nineteen of these are nails, of which eight came from Romano-British and eleven from medieval features. All are heavily corroded, and such small quantities are insufficient for any functional interpretation to be made. Two flat fragments recovered from medieval ditch 3292 are too corroded and fragmentary for any identification of their original form or function. One unidentified, heavily corroded object was recovered from medieval ditch 1006. This appears to be a small, rectangular-section socket, 45mm in length and 9mm in width.

Slag

A small amount of slag (15 pieces/868g) came from Late Iron Age/early Romano-British, medieval and post-medieval contexts. It includes possible iron smelting as well as iron smithing slag, but the quantities recovered are insufficient to demonstrate iron working on the site in any period.

Ceramic building material

The assemblage of ceramic building material comprises 910 fragments (40,636g), and includes fragments of brick and roof tile of Romano-British, medieval and post-medieval date. The general condition of this material is poor, and fragments are small and abraded, as has been observed for the pottery assemblage.

Although a detailed fabric analysis has not been carried out, broad fabric groups for Romano-British and medieval ceramic building material were identified on the basis of

macroscopic inclusions, following methods used for the pottery. The ceramic building material has been quantified by fabric type within each context, with details of form also recorded, together with details of surviving original dimensions and distinguishing features such as presence of glaze and peg holes where appropriate. A total of 77 fragments (452g) comprised small undiagnostic pieces which were too fragmentary to identify as originating from either flat roof tile or brick. Where possible, fragments are dated on their association with other artefactual evidence and/or fabric type. Full data are available in the project archive. Fabrics are described in appendix 2 (M26) and fabric totals by chronological period are presented in table 3 (M31).

A small proportion of the assemblage (71 fragments; 1450g) has been identified as Romano-British. Six *tegula* fragments (337g), two fragments of *imbrices* (74g) and one fragment of combed box-tile (36g) were noted, and a further 62 fragments (1003g) were identified as being of similar Romano-British date on the basis of fabric type. Four fabrics have been defined, all sandy.

A total of 323 fragments (13,899g) have been identified as medieval on the basis of associated pottery. This group consists entirely of fragments of roof tile. Seven fabric types have been defined, six sandy and one calcareous. The overwhelming majority of the pieces derive from flat roof tiles. No complete tiles were found. Twenty-six fragments have round peg holes, of which two are incompletely perforated. Four fragments of glazed tile were noted, all with a thin and patchy lead glaze, and one curved tile, possibly part of a ridge tile. None of these types are chronologically distinctive, but are dated here on the basis of associated pottery to the later 13th century or later.

The sources of the tile are uncertain, although it seems likely that most if not all would have been of at least fairly local manufacture, and the occurrence of chalk and/or shell inclusions, as noted in some of the pottery fabrics, may be noted. Fabric Q420, however, constitutes a visually distinct group of tile fragments; this is comparable to a fabric identified in the Lower Kennet Valley in Berkshire and tentatively dated there to the medieval period (Lobb & Rose 1996, 29, fabric A).

The majority of the assemblage is post-medieval (516 fragments; 25,287g) and is associated with the 17th century and later vicarage buildings. This group consists largely of representative samples of bricks (two or three bricks per sample) which were collected from the various structural elements within different phases of the building. No detailed fabric analysis has been carried out on these.

A sample recovered from the cellar belonging to the earliest phase of the building, dated to the first half of the 17th century, comprised one unfrogged, handmade brick. Other samples from the 18th and 19th century phases of the vicarage reflect the changing technology of brick manufacture. All six bricks retained appear to be moulded, with the exception of one example, which is possibly wire cut. These later bricks are frogged, though the frogs are relatively shallow, and the bricks are still hand rather than machine moulded.

Two bricks show evidence of vitrification. One is vitrified at one end, and the other on all its edges and approximately one-third of its surface. The latter also has the letters 'SS' stamped on one surface. Two fragments of pantile were recovered from trench 4.

Fired clay

The fired clay comprises 376 fragments (4468g) which can be divided into featureless fragments (355 fragments; 3704g) and recognizable objects (21; 764g). The latter derive from three loomweights. One, of uncertain original form, came from Late Iron Age/early Romano-British ditch 1250. The most complete example is of a triangular form, a common Iron Age to Romano-British type, recovered from Romano-British posthole 2055 (fig 14, 2). The third, also of uncertain form, came from a tree hole (1147) containing medieval pottery.

The remaining fragments are of uncertain date and function, though some have flat surfaces and wattle impressions, indicating a structural origin for at least some of the fired clay. Most of this material came from trenches 1 and 2, with only sporadic occurrences in trenches 3 and 4. This concentration in trenches 1 and 2 coincides with the distribution of the Late Iron Age and Romano-British pottery, and indeed 60% of the total weight came from Romano-British features.

Worked stone

This category comprises four small fragments of lava quern, and one fine-grained sandstone whetstone. The quern fragments, all from rotary querns, were recovered from ditch 3282 and linear feature 4009, both medieval in date. Basaltic lava querns were imported from the Rhineland from the Iron Age through to the early medieval period (Rahtz 1981, 1). The whetstone was recovered from a rubble fill in trench 4, and is probably post-medieval.

Worked bone

Three fragments of worked bone were recovered from medieval features in trench 3. Two have polished surfaces, though no other diagnostic features, and are from objects of unknown form. The third is a goose bone which has two small, circular perforations, and is possibly a fragment from a musical pipe.

Environmental evidence

ANIMAL BONES, by Sheila Hamilton-Dyer

Animal bones were recovered from a variety of features mainly of Romano-British and medieval date, but no context contributed more than 50 bones and most produced less than ten. Fragmentary bones have been joined and counted as single bones where practical. Species identifications were made using the modern comparative collections of the author. Sheep and goat were separated as far as possible, according to Boessneck (1969) and Payne (1985). Undiagnostic fragments have been divided into cattle/horse sized (LAR) and sheep/pig sized (SAR), with a further group identified only as mammalian. The few measurements are in millimetres and follow the methods of von den Driesch (1976). Withers heights of the domestic ungulates are based on factors recommended by von den Driesch and Boessneck (1974). The archive lists further details for each bone including anatomy, butchery, ageing, measurements, and fragmentation.

The total of 1026 individual animal bones recovered is composed of 673 hand collected bones and a further 353 fragments resulting from wet-sieving of soil samples. The bones are generally well preserved but brittle; some show gnawing damage, others are eroded, and some fragments have been charred or even calcined.

Horse, cattle, sheep, goat, pig, deer, dog, hare, fowl, goose and a fragment of fish were identified (table 4, M32). Overall, cattle bones are the most frequently identified taxa (130 bones/12.7%) with sheep/goat close behind (110/10.1%). Eleven sheep and two goat bones were positively identified, and it is assumed that most of the ovicaprid bones are of sheep. Horse (50/4.9%) is a little more frequent than pig (43/4.2%), whilst other taxa are rare. A high proportion of the cattle/horse-sized fragments are likely to be of cattle, and sheep/pig-sized fragments are probably mainly of sheep.

Only the Romano-British and medieval assemblages are discussed here, the prehistoric (59 bones), post-medieval (23 bones) and undated (47 bones) assemblages being too small to warrant further consideration (they are, however, included in table 4, and details are contained in the archive).

Romano-British

There are 366 bones from contexts of this period, 107 of which could be positively identified. The identified bones are mainly of cattle (48 bones), with sheep (31 bones) and horse (20 bones) relatively well represented. Pig is uncommon (four bones). There are also four dog bones from two individuals, but no other taxa were identified.

Burnt bones were occasionally encountered and gully 1260 contained several bones which were either charred or altered by exposure to heat.

Measurable bones were few but one bone, a cattle metatarsus, was complete and offers an estimated withers height of 1.172m. An astragalus of 63.7mm (greatest length) is large; several Romano-British assemblages have produced cattle bones larger than those from Iron Age sites, particularly from the south and east of England (Maltby 1981).

The assemblage is too small to discern any changes through time, but there are differences between feature types. It is significant that fifteen of the twenty horse remains are from ditch fills as ditches were frequently used for the disposal of large waste. The amount of pig is negligible, even in pit contexts where more might be expected, although the quantity of pig bones in Romano-British assemblages is often variable. The highest amounts are usually found at urban sites, for example Dorchester (Maltby 1993), whereas rural settlements are often low in the amount of pig (King 1984; 1987/8). None of the distinctive butchery marks found at Dorchester and other urban and military sites was noted here, but this is a small sample. The lack of fowl bones is not unexpected; these generally form only a small percentage of Romano-British assemblages and are less common from rural sites.

Medieval

Identified bones were mainly of the expected domestic ungulates comprising horse, cattle, sheep, goat, and pig. There are also two bones of deer, two of dog, one of hare, an unidentified fragment of fish bone, and the only datable bird bones from the entire assemblage (three fowl and one goose).

Cattle bones are typically dominant at 39% of the identified bone and 47% of the cattle/sheep/pig total. Sheep are in close second position at 34%. Pig bones are more frequent than in the Romano-British assemblage, comprising 18% of the cattle/sheep/pig total.

Both of the deer bones are from ditch 3299. One is a small fragment of antler from the tip of a tine, the other a second phalanx with the appearance characteristic of dog digestion. The latter bone is intermediate in size between red and fallow deer and could be either. Although these bones do not offer proof of consumption of venison, they may indicate use of the antler and skin.

The three fowl bones include an ulna with knife cuts probably made when removing the waste end of the wing. The single goose bone is a section of ulna with two worked holes, part of a musical bone pipe. Fowl and goose are the most commonly identified birds in medieval assemblages, and the lack of other species here may be due in part to the relatively small sample size and the fact that bird bones are more likely to be found in cesspits directly associated with buildings. This is also true of fish bones, but the complete lack of herring and eel is unusual as even small assemblages from medieval settlements usually have some of these in the sieved material. The larger collection from Jennings Yard, Windsor (Bourdillon 1993) was also rather poor in bird bones, but at least five species of fish including herring and eel were present.

As with the Romano-British assemblage, almost all the horse bones are from ditch contexts whereas the other taxa are more evenly distributed.

Most anatomical elements are present with the expected under-representation of the smallest and the most vulnerable bones. Many bones showed evidence of dog gnawing, including some scraps of bone which had probably been part digested, and it is likely that

many bones have been destroyed. A few bones had been burnt, but there were no concentrations.

With the limitations of sample size and taphonomy, detailed analysis of butchery, ageing and sizes is impractical, but the limited data appears similar to other medieval material. A complete cattle metacarpus gives an estimated withers height of 1.072m, typical of the small cattle of the period. There are two complete horse limb bones which give estimates of 1.28m and 1.36m. Though not large these would have been suitable for both riding and as pack ponies.

Discussion

The assemblage is not large and is unlikely to offer a complete picture of the animal economy on the site in either the Romano-British or medieval periods. The bones appear to be from general mixed waste with little evidence for primary slaughter and no evidence for industrial or craft activity. Throughout both periods cattle and sheep bones are predominant, with lesser amounts of pig and horse, the latter mostly being disposed of in ditches. Gnawing indicates the presence of dogs in all periods. Other taxa are rarely represented, and then only in medieval contexts where they provide evidence of hunting deer and hare, and of keeping domestic poultry. Differences in the material are largely due to feature type, but the higher proportion of pig in the medieval assemblage is probably genuine. None of the samples appears to indicate waste from high status households (apart, perhaps, from the deer and hare), but it should be remembered that disposal could be localized and only a small and rather peripheral area of the settlement has been examined. The faunal assemblages from individual features at Jennings Yard, Windsor (Bourdillon 1993), not far upriver, were extremely variable, but also rather poor in terms of species variety.

CHARRED PLANT REMAINS, by Pat Hinton

There were 132 bulk soil samples processed (56% of the total of 236 taken), mostly of 30 litres each. This was carried out by flotation, with flots retained on 0.5mm mesh and residues on 1mm mesh, and the results were assessed for their potential for detailed analyses of charcoal and charred plant remains. Thirty samples were then selected for full identification and interpretation of charred plant remains.

Flots, and extracted items from residues, were sorted by stereo microscope at x7–x40 magnification with higher magnification for the study of some surfaces. Identification was aided by reference to standard works and to modern comparative material.

Results from the prehistoric and Romano-British phases are recorded in table 5 (M33–M34) and those of medieval date in table 6 (M35–M38). In table 6 seeds of *Pisum* (pea) and larger *Vicia* species (vetches) are listed as pulses (edible seeds of leguminous plants) but small vetch seeds are included with arable weeds. Nomenclature accords with Stace 1991. The word 'seeds' is used loosely to include all fruits, achenes, caryopses etc. Amounts of small fragments of cereals and other charred organic material have in some cases been estimated from sub-samples and this is indicated in the tables.

Late Bronze Age/Early Iron Age

The charred remains in three samples are poorly preserved and there are many small fragments, some perhaps part of an agglomerated mass, some 'clinkered', and some probably of cereal origin (recognizable by the characteristic texture), but other organic material may well be included. Identification, therefore, is only possible for some of the better preserved items and these have been identified as mainly *Triticum* spp (wheat), with a small amount of *Hordeum vulgare* (hulled barley) and *Avena* sp (oats). Among the wheat

grains in two pit samples are small (*c* 4mm) compact forms of free-threshing bread wheat (*Triticum aestivum* s.l.) and two grains of glume wheats, probably *Triticum dicoccum* or *spelta* (emmer and/or spelt). All identifiable wheats from pit 1038 are bread wheats. The only diagnostic chaff fragments are two glume bases of the glume wheats in pit 1238. The few seed remains are of common field weeds but a less typical find is one *Calluna vulgaris* (heather) flower in the gully.

In addition to these remains there are many uncharred root and twig fragments and seeds of *Corylus* (hazel), *Ilex* (holly), *Rubus* (bramble), *Sambucus* (elder), and fruit stones of *Prunus spinosa* (sloe) and *Crataegus monogyna* (hawthorn) which are obviously of more recent origin. Also present are small fragments of coal in all three samples from this period and slag in one sample indicating that these features had suffered some later disturbance.

Late Iron Age–early Romano-British

The two samples contained spelt, and possibly emmer, with corroborating evidence from spelt glume bases. In contrast to the earlier samples, no convincing evidence of free-threshing bread wheat was found, although there are some indeterminate grains and many fragments. There is a range of typical field weed seeds, mainly from pit 1158. The samples include recent root and small twig fragments but, in contrast to the earlier samples, very few uncharred seeds:

Romano-British

Throughout the Romano-British period glume wheats are predominant, most probably spelt, but free-threshing wheat occurs in three, possibly five, samples and apparently in greater quantity later in the period. It is not always possible to distinguish spelt grains from a less compact form of bread wheat, and there are grains and fragments which are too poorly preserved to be identified any more closely than as *Triticum* sp. Among the fragmentary rachis nodes from ditch 3302 are six of free-threshing wheat species.

In most cases the numbers and proportions of cereal grains and chaff fragments are insufficient to indicate the stage of processing, but the wheat grains (of both glume and free-threshing wheat) and the rachis node fragments from ditch 3302 suggest that in this case the wheat was burned as ears.

Hulled barley occurs in small numbers, but preservation on the whole is poor and in some cases identification is not certain. There are rather more oats than barley, but none of the floret parts necessary to distinguish *Avena sativa* (cultivated oats) from *Avena fatua* (a wild oat). In addition, there are some grains indistinguishable from those of *Bromus* spp. As in earlier periods, there are varying amounts of charred organic material much of which is probably cereal.

A half seed of a legume, ie one cotyledon (seed leaf), in slot 2068 has been identified by its hemispherical shape and diameter of *c* 5.7mm as *Pisum sativum* (pea).

Wild plant seeds in the samples from this period are similar to those from the prehistoric samples, but stinking mayweed occurs more often in the later phases and there is one seed of *Danthonia decumbens* (heath grass) in slot 2110.

Medieval

In all the medieval samples free-threshing bread wheat *Triticum aestivum* sl is the major cereal. Most of the grains have the characteristic short stubby form as found in the earlier periods, a few (in ditch 3321) are unusually broad, others are slimmer (with length greater than width), and a number of more severely damaged grains can only be described loosely as *Triticum* sp. In some cases variations are probably distortions resulting from the burning. The possibility of tetraploid free-threshing wheats, *Triticum durum/turgidum* (macaroni/rivet

wheat) was considered, but there is no evidence in the chaff fragments. These are present usually only in small numbers and in most cases only the densest part of the rachis node remains. In a few cases where part of the internode is preserved there are features indicative of hexaploid wheats, ie the characteristic curved outline (from watering hole 3092, pit 3158, ditch 3233, and ditch 3256), indistinct striations at the borders of the abaxial surface (from ditch 3233 and ditch 3218) and the presence of a narrow 'tuck', rather than a bump, below the site of the glume insertions.

Secale cereale (rye) is a possible identification in four samples and may be no more than undeveloped or atypical wheat, but one grain in ditch 3321 shows clearly the characteristic blunt distal end and the markedly oblique radicle depression.

There is more barley than in the prehistoric and Romano-British samples and oats also occur in larger numbers but, as before, it is not always possible to distinguish oats from brome species where preservation is not very good.

Pulses are more frequent in the medieval samples, and particularly abundant from the ditch 3321. Most of the seeds lack their testa, very few retain the diagnostic hilum and many occur as separate cotyledons. Size is then an important factor in identification and the large number in the ditch sample provided an opportunity to study a wider range. One large seed (9.8 x 7.8mm) can be confidently identified as *Vicia faba* (broad/field bean) and one detached testa fragment with a similar linear hilum of c4mm length was found in the same sample. A very distorted and damaged seed of c7.1mm is probably a bean.

All other pulse seeds are more or less spherical and the diameter of those sufficiently complete were measured as they were examined. The range is from less than 2mm to 6.6mm, and plotting of diameter measurements and seed numbers indicates two peaks at 4mm and 5mm, suggesting two populations.

The short oval hilum of *Pisum sativum* (pea) was detected on six seeds with diameters of 4.5–6.5mm, and seeds identified as peas from other medieval samples at this site measure from 5mm to 5.9mm. Longer straight-sided hila of *Vicia* sp were found on eleven seeds with diameters of 2.8–4.6mm. All the charred seeds of 5mm and over are, therefore, almost certainly peas, and those of c3–4.5mm are likely to be *Vicia sativa* ssp *sativa* (cultivated common vetch). However, one confirmed vetch seed of 4.6mm means that the 4.5–5mm span may include both peas and vetches and indeed the size range of both may overlap further.

The many cotyledons, measured where possible, have been counted as half seeds and included in the totals in table 6 (M35–M38). In addition, there are c5ml of fragments which cannot be further identified and therefore totals represent the minimum possible numbers.

Seeds of 2–2.9mm with traces of a longer hilum are recorded as *Vicia sativa* ssp *nigra* (common vetch) and those between 2mm and 3mm without diagnostic features as *Vicia* or *Lathyrus* sp. Seeds of less than 2mm are probably *Vicia hirsuta* (hairy tare) or *V tetrasperma* (smooth tare) and in a few cases this is supported where the hilum remains. All these have been listed in the tables as weeds.

In addition to typical field and/or grassland plants in the 13th–15th century samples are a heather flower and two spiny tips of *Ulex* sp (gorse) in ditch 3321.

Discussion

Some evidence of cereals in the earliest periods has been lost owing to poor preservation, most probably as a result of burning at high temperature in open, oxidizing conditions. In the Late Bronze/Early Iron Age samples there is a relatively large volume of fragments of burned organic material, probably mostly of cereal origin, but only a small number of cereal grains which may be studied with a view to closer identification. Of these, bread wheat appears as the greater proportion and this is not necessarily unlikely. However, these samples also include uncharred fruit stones, nut shell fragments and seeds, suggesting

contamination of these from post-medieval orchard and woodland, with the bread wheat possibly deriving from several 11th–12th century ditches which cut some of the earlier features. More typical, however, are the two Late Iron Age–early Romano-British samples with glume wheats, and although they contain some indeterminate wheat grains and cereal fragments there is no evidence of free-threshing bread wheats

The cereals and weeds from the Romano-British phases are those commonly found from this period. Spelt is the main cereal, and there is some bread wheat which occurs in larger quantities in the later samples. Wild plant seeds are typical field weeds with *Anthemis cotula* (stinking mayweed) a very characteristic weed of clay soils. *Eleocharis* sp. (spike rush) from slot 2110 is a common plant of muddy places by ponds or ditches, but the seeds are not infrequently found in association with cereals and arable weeds, when they probably indicate damp field conditions such as probably existed nearby in the Hogsmill valley. *Lathyrus nissolia* (grass vetchling), in two, probably four, Romano-British samples is now an infrequent plant of disturbed or grassy places in south-eastern England. No seeds of this plant were found in the medieval samples.

The samples from the medieval phases are richer than those from the earlier periods and preservation is better. In all samples bread wheat is the major cereal, with lesser amounts of barley and oats, and some evidence of rye, and pulses appear to have had an important role. This may well reflect local agricultural circumstances where bread wheat and pulses would have been appropriate for the heavy clay soils, and perhaps also oats which are tolerant of many soil types. Barley which is more suited to lighter conditions may well have been brought in from elsewhere. The documentary evidence for exchange of crop surpluses with Leatherhead and Farleigh in Surrey in 1270 (see below) suggests this, and could explain the one seed of *Valerianella dentata* (narrow-leaved cornsalad), a plant typical of chalky fields.

Peas and beans occur occasionally from prehistoric times onwards, but cultivated vetches only in medieval contexts. Historical records of seeds purchased for sowing indicate that vetches were cultivated in south-eastern England from at least the very early 13th century, and probably before then (Currie 1988), and that their use spread progressively in southern England during the 13th and 14th centuries (Campbell 1998). Whereas peas and beans were grown principally for human consumption vetches were used as winter fodder for animals. The additional advantage of soil improvement by nitrogen fixation of all leguminous plants made them a valuable crop.

There are a few more grassland plants in the sample from ditch 3321, but it may be that they illustrate no more than better preservation. They perhaps should be included among the arable weeds, but *Cynosurus cristatus* (crested dog's-tail) and *Phleum* sp. (timothy) are typical old grassland species, and hay might be a source of these seeds.

The charred plant remains in all samples seem to represent either chance accumulation or deliberate disposal of domestic rubbish burned elsewhere.

In the case of the charred remains from ditch 3321, the various major constituents represent valuable human and animal foods, presumably accidentally burned, and although the remains were closely associated when deposited they may have had diverse sources. Perhaps all came from a store of cereals, pulses dried for storage and, possibly, hay, or they are an accumulation of sweepings of burned remains from various sources. It is possible that the wheat and the rye may have been grown together, or amalgamated before grinding for the production of maslin flour. Similarly, oats and barley may have been sown together, and peas, vetches and beans also grown as a combined crop. If a system of rotation was practised harvests might well include remnants from a preceding year and fallow might account for the small grassland element.

The oak buds, fruit stones and seeds of woodland or hedge species are likely to have been part of fuel, and could have been obtained locally, but the gorse spines and the heather flower indicate contact with heathland, or an area of sandy or gravelly soil. A heather flower in Late Bronze Age/Early Iron Age pit 1038 suggests similar conditions, as

does the heath grass in the Romano-British slot 2110, although this grass will also occur locally in damp base-rich soils and could possibly have been a field weed.

CHARCOAL, by Rowena Gale

Charcoal from eleven bulk soil samples taken from a variety of features of prehistoric, Romano-British and medieval date was selected for analysis. These samples were comparatively rich in charred plant remains (see above), but much of the charcoal was relatively small with few fragments measuring > 5mm in radial cross-section and some was poorly preserved. The features and their associated contents suggested that most of the charcoal was fuel debris, and environmental evidence was sought to indicate the character of local woodlands and the use and/or management of woodland resources.

The charcoal was prepared for examination using standard methods (full details are contained in the archive). Where possible the maturity (ie sapwood/heartwood) of the wood was assessed and growth rings counted.

The results are summarized in table 7 (M39; full details are contained in the archive), with classification according to Tutin *et al* (1964–80).

Although comparatively few samples were examined from each period, the consistent dependence on, or preference for, oak (*Quercus*) wood fuel is evident throughout. This appears to have consisted usually of a mix of wood mature enough to have developed heartwood, and twigs or narrow stem wood. Oak wood has a high calorific value, and it is likely that most of the material examined represents fuel debris discarded along with other waste.

Oak fuel was supplemented with wood from a range of other taxa which included maple (*Acer*), hazel (*Corylus*), ash (*Fraxinus*), hawthorn etc (Pomoideae), blackthorn (*Prunus spinosa*), and elm (*Ulmus*). Interestingly, some taxa only occurred in medieval contexts, eg beech (*Fagus*), privet (*Ligustrum*), willow/poplar (Salicaceae), and heathland tax comprising heather (Ericaceae), gorse/broom (*Ulex/Cytisus*) and birch (*Betula*). With the exception of the salicaceous woods, the remaining taxa would have provided high energy fuel. In view of the limited number of samples examined the significance of this diversity is difficult to interpret, although the presence of heather may indicate the importation of this material as bedding for animals, and the other taxa may have served a variety of household and agricultural purposes (eg in wooden vessels, hurdles etc).

The site is located on London Clay and lies close to the Hogsmill river. The area appears to have supported a variety of woodland taxa, although oak, which grows well on heavy clay soils, was probably the dominant species. Other large trees included ash (*Fraxinus*), maple (*Acer*), elm, beech and birch. Willow and/or poplar probably grew near the river. Numerous shrubby species including hazel, blackthorn, hawthorn and/or other members of this group, gorse/ broom and heather were also local and are more characteristic of open or sparse woodland.

Many of these taxa were sporadic in terms of the charcoal present which may indicate either a patchy distribution or the preferential selection of other species. It is interesting that heathland species (heather, gorse/broom, and birch) only appear in the medieval period which could reflect changes in the environment (to a cooler, damper climate) and exhaustion of the soil leading to the development of thinner or more acidic soils. Beech made a similarly late appearance, but this is unlikely to have grown in very acid conditions.

The evidence for coppicing/pollarding was not conclusive, although it seems likely that this would have been established at least by the medieval period, particularly if settlement was continuous from the 11th/12th century and much of the land had been cleared for the cultivation of crops and grazing.

Documentary evidence, by Christopher Phillpotts

THE MEDIEVAL PERIOD

The origins of the settlement of Malden in the Anglo-Saxon period are uncertain. The name of Malden is generally thought to derive from *Mael-dune*, meaning 'the hill with a cross on it'. This perhaps implies the presence of an early chapel (Ross 1947, 5). The proximity of St John's Church to the manor house suggests that it originated as a proprietary church founded by the owner of the estate in the late Saxon period, and that the first nucleated settlement was concentrated around these two points and the adjacent green. It was probably associated with the re-organization of agriculture into communally-worked open fields.

The Domesday Book of 1086 is the first known written evidence for the settlement of Malden. At this time the Malden estate was divided into two units, both tenanted by members of the Watteville family in 1086. A tenant population of one knight, nineteen villeins (bond tenants), three bordars (cottagers) and three slaves operated five and a half plough-teams on their holdings, while another plough was used on the demesne land, or home farm of the manor. Meadowland, a mill and a chapel were mentioned as appurtenances of the estate (Morris 1975, 8.13, 19.23, 19.25).

The Wattevilles continued as tenants in the 12th and 13th centuries (*VCH*, 3, 523; Ross 1947, 7–8). In 1249 the whole manor passed to Walter de Merton, chancellor of England and bishop of Rochester, probably a member of the Watteville family. In 1264 Walter used his manors of Malden, Chessington and Farleigh to endow his house of the Scholars of Merton, which became Merton College at Oxford in 1274. In the early years of the foundation the manors were administered by a house of three or four priests and a warden, based at Malden, for the benefit of the twenty scholars at the nascent college. This body of scholars moved to Oxford when the foundation was complete. The possession of the manors passed to the college on his death in 1277, and the manor has been held by Merton College ever since (*VCH*, 3, 523 and n10, 524; Briggs 1935, xxvii–xxviii; Ross 1947, 9, 17; Saaler 1996; BL: Add MS 6167, f241; Harley Charter 53.H.12).

The medieval county of Surrey lay within a region of dispersed settlements, but groups of nucleated villages occurred at infrequent intervals in this general pattern (Wrathmell 1993, 9). Malden is part of such a group. According to Blair (1991, 64), there was a major expansion of settlement in the 10th–13th centuries which completed the colonization of the London basin. Some nucleated villages were still developing on the London Clay at the end of this period. Most of the nucleated settlements of this area were of simple linear form, sometimes with back lanes bounding the rears of the crofts. Most of them were regular in layout and communal field systems were present (Blair 1991, 58, 61). Later map evidence suggests that the Malden settlement was linear in form, lining the north and south sides of Church Road, and probably originally extended as far west as the manor house and church (figs 15, 16). Excavated evidence suggests that in the 11th/12th centuries a trackway may have run to the rear of the house-plots and tofts on the south side of Church Road, bordering on the arable crofts and common fields to the south.

The Domesday Book entry suggests that Malden contained a population of about 25 families, and therefore at least 100 people. In 1225 there were 250 inhabitants living in 41 houses (Ross 1947, 7, 113). There is little evidence to show that the settlement ever expanded beyond this size. In 1287 Richard le Parker was tenant of a plot on which a house had formerly stood (MCO: 4709). It appears from a dispute between the vicar and his parishioners in c1300 that new houses were still being built, and that they were constructed on timber frames with beams and rafters (MCO: 2780). In 1342 a one-acre plot in Parkfeld was let to William le Grower and his heirs as a bond tenement on the condition that he built a suitable house there within two years. William died before the agreement could take effect (MCO: 4744). A few years later the impact of the Black Death ended the requirement for any further expansion.

As the surviving manorial accounts are chiefly concerned with the income and expenditure of the demesne lands, or home farm of the manor, it is not surprising that of all the buildings of the settlement most is known about the manor house complex. Here are found 13th and 14th century references to a great hall aligned north-south with a chamber attached, and a kitchen. There are also references to a variety of agricultural buildings including a great grange, a small grange, a granary, a cowhouse, a stable, a hen house and a pig house, a dairy and a dovecote. The buildings were grouped around a courtyard, entered by a bridge over the surrounding great ditch or moat, and through a gate with a gate loft over it. There was also a garden, with its own gate opening from the courtyard in 1279-80 (Briggs 1935, 3, 62-3, 66; MCO: 4633-6, 4638, 4654, 4659, 4662, 4667, 4671, 4673, 4679, 4682, 4688, 4730-1).

The other central buildings of the settlement were the mill and the church. The mill was noted in the Domesday survey of 1086, valued at an annual rent of 12s (Morris 1975, 19.23). This was a watermill fed by a millpond on the east side of the Hogsmill river at Millhaw Mead, across the road to the south-west of the vicarage. The bond tenants were obliged to grind their corn at the mill, which was therefore a valuable manorial asset. In 1350 it was tenanted by a family called Whitlok, and in 1358-9 by William Walsch (Ross 1947, 26, 31; MCO: 4673).

A chapel was mentioned in the Domesday Book as an appurtenance of the manor (Morris 1975, 19.23), but at an enquiry held in the manor court in 1293 the tenants stated that the church was founded by Lady Gunora de Saint Clare. She endowed it with two cows and their pasture, received by the church in the form of annual rents, which were then in arrears (MCO: 4720). This probably represents the refoundation of the church on a larger scale for an expanded population in the early years of the 13th century. The church was later appropriated to Merton College, which therefore received its dues as rector and appointed vicars to serve in it (Manning & Bray 1804-14, 3, 10; *VCH*, 3, 524-5; Ross 1947, 8, 11, 14; BL: Add MS 6167, f 241; MCO: 4795). Fellows of the college served as vicars in 1313-16, 1316-28 and 1400-3 (Ross 1947, 29, 34).

The vicar's endowment was established in 1279 on generous terms. It included the rectory house, half a croft on the east side of it, a house and sixteen acres of arable land enclosed with hedges and ditches, some pieces of meadow land, the great and small tithes of the tenants' lands in Malden, and the tithe of hay in the whole parish (MCO: 1.9, f 201; 5.26, f 75; 5.27 p2, 898 and 1304).

A rectory or vicarage is therefore known to have existed in 1279. In the agreement of this year it was described as 'all the *curia* in which the rector of the church formerly lived with all its buildings'. This implies a group of agricultural buildings around a courtyard, probably positioned on Church Road alongside the other farmsteads of the settlement. A barn and other buildings would certainly have been needed to house the products of the tithe, and a church grange is known to have existed in 1270. In this year the college was receiving the tithes as rector of the church. Payments were made to the chaplain of Malden and the clerk of the church of Malden, apparently two separate people (Briggs 1935, 2-5). In 1271-2 grain was purchased from the vicar's tithes by the manorial bailiffs to make up shortfalls on the demesne (MCO: 4633), and in 1293-4 wheat, dross-corn, barley and oats were sold from the tithes by the grainger (MCO: 4788). In the 1330s and 1340s the vicar, Richard de Oswaldestre, was in dispute with the college over the tithes of Chessington, and with his parishioners over tithes and other dues which he was extorting from them by withholding confession and absolution (MCO: 23, 2780, 3097, 4789). A lease of 1456 which included the rectory probably referred to the rights of the college as rector rather than to a structure (see below).

The agriculture of the manor was based on common or open fields, the arable lands divided into characteristic strips or selions apportioned between the farmsteads of the village, including the demesne lands. This field system was probably established in the late Saxon period at the same time as the house-plots were delineated along Church Road.

The three main fields of East Field, Downe Field and Meadow Field are still apparent on the maps of the 17th century and later, with subsidiary furlongs of strips at Tonfurlong and Bunney Furlong. The meadow land along the Hogsmill river was also divided between the tenants and the demesne in allotted strips (Lambert 1933, 35–6; Ross 1947, 21).

The intermingling of the demesne and tenant selions is clear from land transactions concerning the Brown family in *c* 1240 and 1335 (MCO: 914, 1057). Farmers of parts of the demesne lands leased out in 1358–9 were forbidden to make hedges around them (MCO: 4673). Originally the bond tenements were each composed of a virgate of sixteen acres, but by the 15th century they had ceased to be uniform in size (Ross 1947, 45; Blair 1991, 72). There is little mention in the manorial accounts of the tenants' holdings or how they worked them.

In the early years of the accounts, when the warden and priests were still controlling the college's manors from the house at Malden, there is some evidence of the free exchange of grain surpluses between them, presumably to answer local needs. In 1270 corn and vetch were brought from Farleigh and peas from Leatherhead; beans and wheat were delivered to Leatherhead (Briggs 1935, 1, 3, 4).

The accounts show what crops were grown on the demesne land. Since the arable strips of this were intermingled in the common fields with the strips of the free and bond tenants, they must also have grown the same crops in similar proportions (table 8, M40). The most important crops were wheat and barley, with oats grown largely as a fodder crop. Rye, various mixed grains, and peas, beans and vetch were also grown in smaller quantities. Malt was made from several varieties of grain, not just the barley.

Tables 8 and 9 (M40) show the stock totals for the various categories of crops and livestock processed and held on the demesne lands of the manor in each of the sample years. As totals they include items bought into the manor, as well as those produced on it. The intention is to indicate the proportions of these categories present on the demesne at these times. The proportions were probably reflected on the tenants' holdings also, although more certainly for the crops than the livestock.

Raising a variety of crops gave some insurance against the failure of a particular crop in any one season. As barley and oats were normally sown in spring, and wheat and rye in autumn, the work of ploughing, manuring and sowing was spread more evenly over the year. This made the utilization of tenants' services and the rotation of crops easier. The leguminous crops of peas and vetch were cultivated extensively in England in the late 13th century to replace nitrates in exhausted soils, suppress weed growth and improve fodder supplies. Manorial accounts and agricultural treatises indicate that weeding crops was regarded as relatively unimportant; environmental samples of plant remains from medieval sites normally contain a rich weed flora (Greig 1988, 112, 114; Langdon 1988, 99).

From the sample of accounts reviewed it appears that arable production reached its peak between 1280 and 1315, and then began to decline over the next few decades. The impact of the Black Death and the subsequent plagues caused a drastic reduction in the annual totals of crops grown before a temporary recovery in the 1380s and a longer-term decline in the 15th century.

A system of crop rotation was practised in the three common fields and subsidiary furlongs. A bye-law pronounced in the manor court in 1281 required each of the fields to lie fallow every three years, with animals turned on to the stubble for common grazing by all the tenants (Blair 1991, 70). In 1358–9 it was noted that rye and white peas were sown in Medeforlong, beans and peas in Chircheforlong, vetch in Chirchecroft, barley in Monekenedych, and dredge in Boneforlong (MCO: 4673). Details of the fields sown were not normally noted however, and it is difficult to locate these particular furlongs now. The lease of the manor in 1467 specified that there were 30½ acres of fallow land on the demesne, of which 23 acres were to be manured by movements of the sheep-fold, and thirteen acres were to be ploughed (MCO: 1835). It appears therefore that an essentially

inter-field rotation was practised. This was normally associated with nucleated settlements, whereas more dispersed settlements operated intra-field rotation systems.

The demesne meadows in the 14th century included one called the Parson's Meadow, perhaps formerly belonging to the church. It was always mown in conjunction with a meadow called Brians (MCO: 4654, 4659, 4662, 4667, 4671). Another demesne asset was the garden, where fruit trees and vegetables were grown and grazing was sold. Horticulture was very undeveloped in medieval land-use, and gardens occupied only a small percentage of cultivated land (Dyer 1988, 31). Leeks, beans and vegetables were planted at Malden in the late 13th century. Spinach was sold in 1270. Cider was made from the apples in 1358–9, but in 1380–1 there was no fruit (Briggs 1935, 2, 62; MCO: 4634–6, 4638, 4673). Presumably the manorial tenants grew a similar range of garden crops at this period.

Most of the woodland of the manor lay in the park at the outlying portion in Chessington. However, there were elm trees next to the Bercary at Malden (MCO: 4667). The Bercary, where the demesne sheep were housed, was mentioned in 1270 and repaired in 1281–2 (Briggs 1935, 1; MCO: 4636). It probably lay in a field called le Schephawe, which was leased out as an arable croft in 1357–9 (MCO: 4673, 4754). The sale of wool was the most profitable source of income for the manor. In 1293–4 a total of 247 sheep and lambs was purchased for the manor. In the early years of the manorial accounts the wool crop, sheep and lambs were frequently sent between the manors of Malden, Farleigh and Leatherhead. The reasons for these movements were probably a degree of specialization in different stages of sheep husbandry and differing availability of grazing between the three manors. Lambs and sheep of different ages were transferred accordingly (Briggs 1935, xxxiii; Ross 1947, 22; MCO: 4788). They occurred again in 1329–30 and 1353–4 (MCO: 4662, 4671). Sheep husbandry was at its peak in the first decade of the 14th century, but revived again strongly after the Black Death, perhaps taking advantage of uncultivated tenancies for grazing land (table 9, M40). In 1381–2 a total of 112 sheep were grazing on the common fields (MCO: 4755).

Besides sheep the manor kept working horses, cattle, pigs, geese, ducks and chickens on the demesne (table 9, M40). In this table there is probably some double counting of juvenile animals as they moved from one age grade to another. For cattle, sheep and pigs the age and sex categories of the accounts have been simplified to adult and new-born animals, as they were not consistently applied. All the indications from the court rolls are that the manorial tenants kept the same range of animals and fowls, although not necessarily in the same ratio. Livestock was commonly moved between the manors of Malden, Farleigh and Leatherhead in the late 13th century, and some movements of this sort continued until the 1340s. This was probably to compensate for particular local shortages rather than to apply a unified system of stock control (Briggs 1935, 3, 72; MCO: 4634–5, 4667). There was also a rabbit warren, around which 21 perches (105.6m) of ditch were dug in 1271–2 (MCO: 4633).

Herrings were bought in to feed the manorial servants. In addition peacocks were occasionally kept and also swans in 1278–9 and 1376 (Ross 1947, 22; MCO: 4634). These birds were probably reared exclusively as delicacies for the dinner table of the warden and scholars of the college at Oxford. Foodstuffs were often sent for consumption in the college in the late 13th century. Bread was provided for the infirmary in Lent 1271, presumably at the college. Oxen, fish, a capon and a boar were taken to Oxford in 1300–1, along with a riding horse called Blakehakeneye (Briggs 1935, xxxiv, 4, 65, 74).

The rectors and vicars of Malden engaged in agriculture alongside the manorial bailiffs and tenants. Hugh the parson held $3\frac{1}{2}$ acres in Alfelmyscroft which passed to Merton Priory in 1212 (MCO: 4795). In 1286–7 Laurence the vicar was grazing his animals with the other tenants, and his horse, cows, pigs and geese strayed into the demesne crops and pastures (MCO: 4708). In 1295 and 1298–9 vicar Peter de Hetfeld was involved in similar disputes in the manor court because his cow, boar, pigs and geese had done damage in the manor courtyard, grange and garden, and the demesne crops and pastures (MCO: 4728,

4730–1). Vicar Richard de Oswaldestre purchased three acres of land in East Field and Meadow Field from John Brown senior in 1335; this free tenement was sold a few years after his death by his nephew Richard de Chirk (MCO: 1057, 4671, 4751). In 1353–4 vicar John Waleys was selling wheat and wood, and the reapers alleged his pigs had trespassed in the demesne corn. In 1357 he pastured a cow in the demesne oats and his geese did damage in the demesne meadow (MCO: 4671, 4754). Presumably the vicars required a range of agricultural buildings at the vicarage as a base for these activities.

The vicars also occasionally served as the college's representative in manorial business. Robert the vicar appears to have acted as reeve of the manor for part of the year 1271–2 (MCO: 4633). In 1299 Peter de Hetfeld was among those receiving expenses for the mediation of a dispute between the college and its tenant Roger atte Spotton (Briggs 1935, liii). In 1353–4 John Waleys acted as the warden's agent for making small payments, buying tiles and selling a bull (MCO: 4671). He also appears to have had custody of the manor for part of the year 1358–9 (MCO: 4673). In 1370–1 vicar John Potton acted as steward of the manors of Malden, Farleigh and Leatherhead for 42 weeks after the departure of the lessee, and himself farmed the manor on lease in 1383–4 (MCO: 4673, 4680; see below).

Like most manors in England, for example those discussed by Saaler (1991–2; 1996), the fortunes of Malden began to change with the transformation of climatic conditions and the increase in population late in the 13th century. The climate became colder and wetter, and crops were increasingly likely to fail as the following century proceeded. In the first half of the 14th century agriculture and animal husbandry at Malden entered a period of accelerating decline, culminating in the Black Death of 1349–50. There was a famine year in 1293–4 according to a later endorsement on a grainger's account of that year (MCO: 4788). In 1300–1 murrain (a general term for animal disease) killed cattle, sheep and pigs, geese, ducks and chickens, although in relatively small numbers (Briggs 1935, 60, 72–6). In 1333 it resulted in the loss of 179 sheep, more than half the total. In the following two years more than a quarter of the sheep were lost (Ross 1947, 21–2). By 1321–2 there were three vacant bond tenements, and in 1329–30 five vacancies, resulting in a loss of 25s 11d in rent revenue. By 1339–40 three of these had been re-let (MCO: 4659, 4662, 4667).

It appears that the Black Death caused heavy mortality at Malden, from which the population never fully recovered. This had a severe impact upon the economy of the manor, although some of the survivors among the tenants were able to take advantage of the changed situation. Two vicars were among the casualties of the plague. In 1349 William de Waryndene was appointed as successor to Richard de Oswaldestre, but within a year he had also died and was replaced by John Waleys (Ross 1947, 31). The surviving court rolls of 1349, 1352 and 1354, and the account of 1353–4, show that several tenements remained in the college's hands because of a lack of heirs to the dead tenants. These included the mill and the free tenement which the vicar Richard had held. Other tenements had been rented out on new terms; many of them changed hands in these few years. In 1354 there was a loss of rent revenue of 53s 4d and many animals died of murrain (MCO: 4671, 4749–51). In 1356–7 Richard de Bylyngham, a Fellow of Merton College, was buying up many of the vacant pieces of land to construct a larger composite holding (Ross 1947, 32). By 1358–9 the loss of rent revenue had risen to 76s, either because of a return of the plague, or as an effect of new renting terms (MCO: 4673).

In the changed economic circumstances Merton College withdrew from demesne farming at Malden, and turned to farming the manor out on leases. However, the transition was not an easy one. Some parts of the demesne lands and other assets were leased out in 1357–9, including Schephawe, the mill, the garden and the dairy. In 1370 the college leased the farm of the manors of Malden, Farleigh and Leatherhead to Ralph Thurbar, but he soon abandoned the lease and John Colyn or Potton, vicar of Malden, had to take over as steward. In 1380–1 the manor of Malden was again under the direction of a bailiff called John Cokefeld, but in 1383–4 John Potton was the farmer of the manor

for £24 per annum. The subsequent accounts were drawn up by the farmers rather than a manorial official and are less informative about agriculture on the manor. Potton was succeeded by Cokefeld in 1384 with a seven-year lease at £20 per annum, William Pynnor in 1390 with a seven-year lease, and Vincent Karter in 1400, still at £20 per annum. From 1407 Karter paid £16 13s 4d, and from 1420 £14 13s 4d, and from 1429 John Vincent paid £14 per annum (MCO: 4673, 4675, 4679–80, 4682–4, 4688, 4783–5).

In 1456 the college leased the manor house and rectory (effectively the manor and its appurtenances) to John Vincent for five years at £14 13s 4d per annum. In 1467 the manor was leased to Richard atte Hole or Constable of Great Bookham for seven years, in 1484 to John Pygon for twelve years, and in 1486 to John Leverens of Chessington for twelve years, all at £14 per annum. The horses and cattle were listed as part of the stock of the manor in these leases, but other animals were not specified (MCO: 77, 1835, 2973). Leverens abandoned the lease in 1501, leaving the manor impoverished by his neglect. He was followed by John Fox and his widow Elizabeth. Another lease for 21 years was made in 1504 to Robert Durant at £14 per annum. The college had problems with him as a bad tenant who neglected the manor in 1507 and 1517 (Ross 1947, 49–51). Therefore during the late 14th and 15th centuries the leases of the manor increased in length, while its value decreased.

In the 15th century the economy of the manor continued to be depressed. Rent revenue was still less than its pre-plague levels (MCO: 4688). In 1487 three oxen and seven cows died of murrain. By 1496 the bond tenements (copyhold or customary lands) had been thoroughly reorganized. There were now only seven copyholders, each with several tenancies. The vicarage was considered to be too poor a living in the 15th and 16th centuries to attract any of the college Fellows, because of the reduction in tithe revenue (Ross 1947, 45, 48, 56).

Building work and repairs continued after the decline of the 14th century and the farming out of the manor in the 15th century. A new cowhouse was built in 1416 and another new building in 1417 (MCO: 4688). The college continued to be responsible for the repairs of all the buildings in the lease of 1456, except for two cart-loads of thatching straw to be provided by the tenant (MCO: 2973). In 1467 and the later leases the responsibility for the repair of thatched buildings was placed on the tenant, the college undertaking to repair only the tile-roofed manor house (MCO: 77, 1067, 1070, 1835). In 1487 the college paid for the construction of a new stable with a chamber. In 1513 and 1517 the farmer's dwelling the Heyhouse (probably the manor house) needed rethatching, and in 1517 it was noted as ruined (Ross 1947, 48, 51).

Now that the manor was farmed out the first evidence appeared of the enclosure of parts of the demesne lands. There was new ditching around of fields in 1434–8. This included a ditch around *Hal Ladyhawe*, the first mention of Lady Hay, the field to the north-east of the vicarage (MCO: 4688). A croft called *Lemylehawe* appears in a rental of 1456–7, perhaps the same field (MCO: 4782). Lady Hay was probably composed of former house-plots and tofts. The population decrease had led to a movement away from the west part of the linear settlement and its green, leaving the manor house, church and vicarage in relative isolation. This shift in the focus of settlement probably accounts for the almost complete absence of pottery from the early 15th to the mid-17th century on the excavated site.

THE POST-MEDIEVAL PERIOD

In the 16th century Merton College's leases of the manor of Malden continued the trend of lengthening terms at decreasing rents. In 1535 Richard Mylles took a 50-year lease of the manor at an annual rent of £10 3s, but in 1540 he was able to replace this with a term of 60 years at £9 per annum. He also leased Chessington Park from the college for four years in 1537 (MCO: 5.34, 16, 1067, 1070). When his widow Urith Gage made her will in 1580, she was receiving a rent of £14 a year from her sub-tenant of the manor, George

Evelyn (PRO: PROB11/65 sig 16). The effect of this long lease was to deprive the college of any meaningful income from its property at Malden at a period of economic recovery and rising inflation in the second half of the 16th century.

The parish also came under pressure from the park of Henry VIII's new palace at Nonsuch, whose construction in 1538–47 had removed the village of Cuddington to its south. Henry took 120 acres from the manor of Malden to add to the park, later called Worcester Park (*VCH*, 3, 523; PRO: REQ2/24/41). The way in which the curving park boundary cut across the furlongs and selions of Downe Field to the south of the vicarage can be plainly seen on the maps of 1627, 1794 and 1839 (figs 15 and 16). After Henry's death the palace and park passed to the earl of Arundel.

Queen Elizabeth coveted the manor of Malden and Chessington because she wanted to grant it to the earl of Arundel in exchange for Nonsuch. In 1578 she bullied the college into granting her a 5000-year lease of the manors, including the advowson, at a rent of £40 per annum. The queen passed on the lease almost immediately to the earl of Arundel, who sold it to Lord Lumley. Lumley bought out the remainder of Richard Mylles' 60-year lease. In 1583 he sold the 5,000-year lease to Joan Goode, who was succeeded by her son John in 1589. The Goodes held their own manorial courts in Malden. John Goode had a map and survey made of the manor by Elias Allen in 1623. His son and successor Sebastian had another map and survey made by Nicholas Lane in 1627 (*VCH*, 3, 524; Lambert 1933, 34–5; Ross 1947, 68, 70; MCO: 2.9b f 9; 5.34, 9–18, 34–9; 3331; 3351; PRO: PROB11/65 sig 47).

The college applied to Parliament to have this long lease quashed. In 1627 a compromise was agreed, by which trustees would hold the lease for 80 years for the benefit of Sebastian Goode and his heirs, and then the manor would revert to the college. The advowson was to return to the college immediately. This agreement was confirmed in 1633 by Charles I, who reserved the 120 acres which Henry VIII had taken for the park. Sebastian Goode was succeeded by his son Charles in 1659. In 1672 the Goodes sold the lease of the manor to Sir Thomas Morley to pay off their debts and the mortgage of the lease. When the 80 years expired in 1707 the manor was surrendered to the college by Penelope, Morley's widow (Manning & Bray, 3, 3; *VCH*, 3, 524; Ross 1947, 90–1; PRO: PROB11/290 sig 231).

The holding of manor courts was resumed in the name of the college in December 1707. The college leased the demesne lands of the manor to Richard Willis, dean of Lincoln and later bishop of Gloucester and Winchester, for £40 per year. His descendants held the lease until the 19th century, except for an interruption in 1783–99. The manor was surveyed again in 1794. The manor house was always sub-let to tenants (Aubrey 1718–19, 1, 48; Manning & Bray, 3, 3; *VCH*, 3, 524; Ross 1947, 91, 93; MCO: 1.12, f 115; 2.9A; 5.34 p60).

Joan Goode repaired the manor house and its outbuildings in the 1580s. Charles Good paid tax for seventeen hearths in the manor house in 1664 and fourteen in 1673–4. The existing manor house (listed Grade II) was built in the early 18th century. In 1756 Francis Bowry paid tax on its 36 windows and in 1777 on 26 windows. In 1794 it was described as the Court House, because the manorial courts were held there. The church of St John the Baptist was largely rebuilt by John Good in 1610 (Ross 1947, 72, 87, 99, 102; MCO: 5.34, 20; PRO: E179/188/496; SHC: 2473/6/2 and 8).

The maps of 1623, 1627, 1794 and 1839 show the main concentration of houses of Malden village on the south side of Church Road to the north-east of the vicarage (figs 15 and 16). There appears to have been no expansion since the shrinkage of the 14th century. The settlement now consisted of a small series of substantial farmsteads. The inventory of the goods and chattels of John Browne in 1615 recorded them in a two-storey dwelling-house called Briens, consisting of a hall, a parlour, a buttery and a kitchen, two chambers upstairs, a chamber adjacent to the hall and another over the milk-house. There were also



Fig 15 St John's Vicarage, Old Malden: map of Malden 1627. (Reproduced by permission of Merton College, Oxford)

barns and outhouses (LMA: DW/PA/7/9, f 11v; SHC: 258/11/13). This was probably typical of the dwelling-houses of the village.

The population and number of buildings remained at late medieval levels. At the first court of Joan Goode in 1583 nine copyholders were listed in the manor (MCO: 4779). This had been reduced to three by 1844 (Ross 1947, 119; MCO: 5.27, 64). There were 21 owners of land in the parish in 1627 and hearth tax was paid for 21 houses in 1673-4. In

1725 vicar Henry Stephens reported that there were 110 inhabitants in the parish in 22 houses. In 1794 this had declined to seventeen houses. In 1801 there were 24 houses containing 210 people in 37 families, and in 1811 there were nineteen houses containing 32 families. The parish retained a rural character until the early 20th century (Lambert 1933, 36; Ross 1947, 113; PRO: E179/188/496).

The common fields of the manor with their cultivation strips were still operational in the 16th century and the first half of the 17th century, but progressively gave way to enclosures established both by the lords of the manor and the tenants. In 1544 vicar Dennis Coventre was ordered to remove bushes from his field called Vicar's Close. In 1549 the rotation of fallow years between Meadow Field, East Field and Downe Field was restated in the manor court (MCO: 1.8, 151, 163). Surveys of 1550 and 1554 referred to selions in the common fields of Meadow Field, East Field and Tonfurlong. Elm trees were growing in the fields and their loppings were used to make hedges around them (PRO: LR2/190; SC12/38/23). When Joan Goode took possession of the manor in 1583 she found the buildings dilapidated and 150 acres of land overgrown with furze bushes and untenanted. She had this land cleared and divided into enclosures with quickset hedges and ditches, the origin of Mott's Furze Farm (MCO: 5.34, 19–20). In 1613 the manor court ordered John Browne to fill in the ditch with which he had enclosed three acres of arable land in Downe Field (MCO: 5.26 f53, 4779). The land he bequeathed in his will two years later comprised 5½ acres in Downe Field, enclosures near High Ditch and in Tonfurlong, ten acres in Meadow Field and fourteen acres in East Field. Eight of the Meadow Field acres and twelve of the East Field acres had been enclosed (LMA: DW/PA/7/9, f 11v).

On the maps of 1623 and 1627 parts of the three common fields are still divided into selions. In the survey of 1623 Downefurlong was divided down the middle with rails. In 1627 the enclosed fields of Mott's Furze Farm occupied 141 acres in the north-east quarter of the manor. This was held by the Goodes along with the manor (Lambert 1933, 35–6; MCO: 2.9b, f 9v; fig 15). A manor court of c 1650 noted the recent enclosure of arable copyhold lands in the common fields, and its conversion from tillage to pasture, mostly in small fields. Evidence of the boundaries of free and copyhold tenancies was ordered to be produced in the next court held (MCO: 4779). The pattern of some of the cultivation strips is still visible on the maps of 1794 and 1839, with a few still not enclosed with hedges (fig 16).

The post-medieval vicars held several pieces of land in the parish, both as an adjunct of their incumbency and as private tenants, on which they raised crops and livestock. In 1535 Dennis Coventre had fifteen acres of glebe land and three acres of woodland. He received wood, wheat, rye, barley, peas, vetch, oats, hemp, beans, hay, apples, pears and pearmaines as tithes (Ross 1947, 57). Prior to making his will in 1597 vicar John Thomas had sold a mare to Nicholas Saunder of Ewell. He was related to Agnes Roberts, his executrix, and Thomas and John Roberts, who witnessed his will (LMA: DW/PA/7/7 f151). In 1612 John Roberts put five acres in Meadow Field and Downe Field in trust for his brother Thomas Roberts the vicar, and his successors. In 1617 an encroachment was made on two acres of land which Thomas Roberts held abutting Hollands on the east side of Downe Field, blocking his access to them (MCO: 5.26, f 57; 4779). These farming activities suggest that a barn, a stable and other agricultural buildings continued to be required at the vicarage.

From the 17th century to the early 20th century the vicars held a small meadow called the Grove between Lady Hay and the entrance to the vicarage, another called Little Mead to the west of the vicarage garden, and a larger meadow to the east of the garden, lying south of Lady Hay, all parts of the twelve acres of glebe land. Part of the large meadow was an orchard by 1794 (SHC: 863/1/62, 2473/1/44; MCO: 5.22, 7.8f; figs 15, 16). From 1707 the college leased the tithes of all the demesne lands of the manor and the field of Lady Hay to the vicars at a token rent, in addition to the endowment established in 1279 (Manning & Bray, 3, 3; MCO: 5.34 p60; F342).

The enclosure of Lady Hay, to the north and east of the vicarage site, was mentioned in the survey of 1623 and appears on the map of 1627, when it was tenanted by Mr Lawford (MCO: 2.9b, f 9v; fig 15). From the repossession of the manor by Merton College until 1922 it was always leased to the vicar (Ross 1947, 91, 98; MCO: F342, 7.8f; SHC: 2473/1/30, 2473/6/26). Throughout this period its size and shape remained constant. It is said to have been ploughed for centuries, but it was certainly meadow land in 1794, 1839 and 1922 (MCO: 5.22, 2, 7.8f; SHC: 863/1/62, 2473/1/44). In the 19th century a pond lay on its western side, partly within the northern tip of the excavation site (where it was found to have truncated archaeological deposits in evaluation trench 8). It was in a dangerous condition in 1844 (Ross 1947, 119) and had grown larger by the time it appeared on the OS maps of 1881–1933.

There was also a watercourse to the south in Downe Field, which Bartholomew Rogers was ordered to mend in 1573. In 1624 all the tenants of the manor were ordered to bring stones to mend it (MCO: 5.26, f 60; 4779). When Stapylton became incumbent in 1850 'there were no wells in the village with the exception of the well at the Rectory ... The general water supply was provided by the rain, and from ponds frequented by cows and ducks' (Ross 1947, 126). The well at the rectory or vicarage was dug 326 ft (99.4m) deep through the London Clay to the chalk beneath (*ibid.*). It was housed in a small round structure with a domed roof, which appears on an early 19th century watercolour of the vicarage by G Yates of Chessington (held at Old Malden Library), and on OS maps from 1881 to 1933.

In 1614 in Downfield Lane to the west of the vicarage the hedges were uncut, the ditches not cleaned out, and the gate into the field was in disrepair (MCO: 4779). In 1760 the same road between Downe Field and Millhaw Mead was in disrepair. After some discussion it was decided to mend it by filling the holes with faggots of brushwood and re-surfacing it with stones or flints. The widening of roads in the parish was overseen by vicar Stapylton in the second half of the 19th century (Ross 1947, 100–1, 126), and truncation of the remains of the medieval street frontages probably occurred as a result of these operations.

In 1535 vicar Dennis Coventre held a house and orchard (Ross 1947, 57). At some time before 1623 the vicarage was moved south from its presumed medieval position on the Church Road frontage, and was perhaps rebuilt at the same time as the church in about 1610. It appears on the map of 1623 as a simple building. Its grounds abutted Downe Field to the south and Lady Hay to the north (MCO: 2.9b, f 9v). On the map of 1627 it is shown as a substantial house with two wings and a central gable on the south side. A footpath ran southwards to Downe Field on its west side. Another building lay to its north and a small structure on the road frontage (fig 15). Excavation has found an L-shaped building probably of this period with at least one chimney stack. Vicar John Love paid tax on four hearths in this house in 1664 and 1673–4 (Ross 1947, 87; PRO: E179/188/496). Shortly afterwards it was destroyed by fire and Merton College built another larger vicarage on its site in the 'Queen Anne style' in 1675 at a cost of £300 (letter from W Rowley Hall to Rev H J Theodosius, 1 Oct 1975, held at Old Malden Library). Three of the 17th century vicars who lived here were Fellows of the college (Ross 1947, 81, 89, 90).

Vicar Charles Moseley paid tax on 27 windows in this building in 1756 and the same number was paid for by his successor Robert Bean in 1777 (SHC: 2473/6/2 and 8). It was a substantial rectangular building with three floors and a cellar, a double roof and a central porch. The map of 1794 shows it with a single, large wing projecting southwards into an ornamental garden with a wide, circular, gravel path. To the east the orchard extended along the south side of Lady Hay, and a collection of agricultural buildings including a barn and a stable were grouped around two yards to the north-west (SHC: 2473/1/44; fig 16). The house was repaired and apparently extended to the west by vicar Rogers Ruding in 1795 (letter from W Rowley Hall to Rev H J Theodosius, 1 Oct 1975, held at Old Malden Library).

The house and garden are depicted in a very similar way on the tithe map of 1839 and the apportionment describes the buildings and grounds in the same way as the 1794 survey (SHC: 863/1/62). In the 1870s the ground floor consisted of a hall with a staircase, a dining room, a drawing room, a study, a parish room, passages, a kitchen, a scullery, a dairy, a butler's pantry, a new pantry and a conservatory. A passage from the butler's pantry led to the wine cellar, the beer cellar and a brick-paved cellar opening from it. The roof of the house was tiled. Outbuildings grouped around a yard with a pump to the north-east of the house included a knife house, a coal house and a laundry. The laundry measured 12 x 15ft (3.6 x 4.6m) and was considered to be beyond repair. It is probably the small rectangular building adjacent to the well house in G Yates' watercolour. The buildings around the stable yard to the north-west of the house included two stables, a corn place, a coach house, a hen house, a cowhouse with a concrete floor, a pigsty, a calving shed, a fodder shed, a tool house and a workshop. Also in the property were a dung yard and dung pit, and a kitchen garden (SHC: 2473/1/35, 38–9).

In 1878 the house was extended by the addition of a new two-storey wing at the front on the west side, with a rebuilt and enlarged conservatory immediately to the south of this. The western foundations were laid very deep to counteract the tendency to subsidence, the wall between the study and the drawing room underpinned, and the upper part of the drawing room chimney stack rebuilt (architect's drawings at SHC: 2473/14/12). The expanded house appears on the OS maps of 1881–1933. In this period the garden to the south was less formal and closely planted with trees.

The composite 17th to 19th century house became difficult to maintain and was demolished in 1936, and another vicarage less than half its size was built immediately to the west of the old site in 1937 (Ross 1947, 94, 148; SHC: 2473/1/40).

Discussion

The relatively large-scale excavations undertaken at St John's Vicarage in 1997 and the subsequent study of the documentary sources have provided an opportunity to synthesize much of the available evidence for settlement in this part of the Hogsmill valley, an important tributary of the Thames which it joins at Kingston approximately 5km to the north-west.

Archaeological investigations in the area have a long, if sporadic, history with valuable early work having been undertaken at Old Malden by L W Carpenter between 1941 and 1950. Virtually no further work took place until the 1990s when the Museum of London Archaeological Service (MoLAS) carried out excavations at Percy Gardens in 1991 and Manor Farm Buildings in 1996 (fig 17, sites E and F respectively). Detailed descriptions of all this work remain unpublished, and the precise location and extent of Carpenter's excavations are uncertain; summaries have appeared in print, but his notes and the finds were dispersed following his departure from the area in the early 1950s. However, it is clear that he undertook investigations in three main areas:

- 1 The allotments to the south-east of Church Road between the school house (where Carpenter lived) attached to Malden Parochial Primary School and the grounds of St John's Vicarage. This area was formerly known as 'Lady Hay' (fig 1; fig 17 site B).
- 2 The orchard in the north-eastern part of St John's Vicarage gardens which formerly extended approximately 50m further to the east, up to what is now The Manor Drive (fig 17, site C).
- 3 The Manor Drive which was built in 1950, extending to the south-east of Church Road (fig 17, site D).

The earlier work carried out by Carpenter and MoLAS offers some tantalizing glimpses of settlement which appears to have spanned the Iron Age and Romano-British periods and continued, following a hiatus, from the Late Saxon period up to the present. One of the particularly interesting aspects of this sequence is the evidence for a settlement shift in

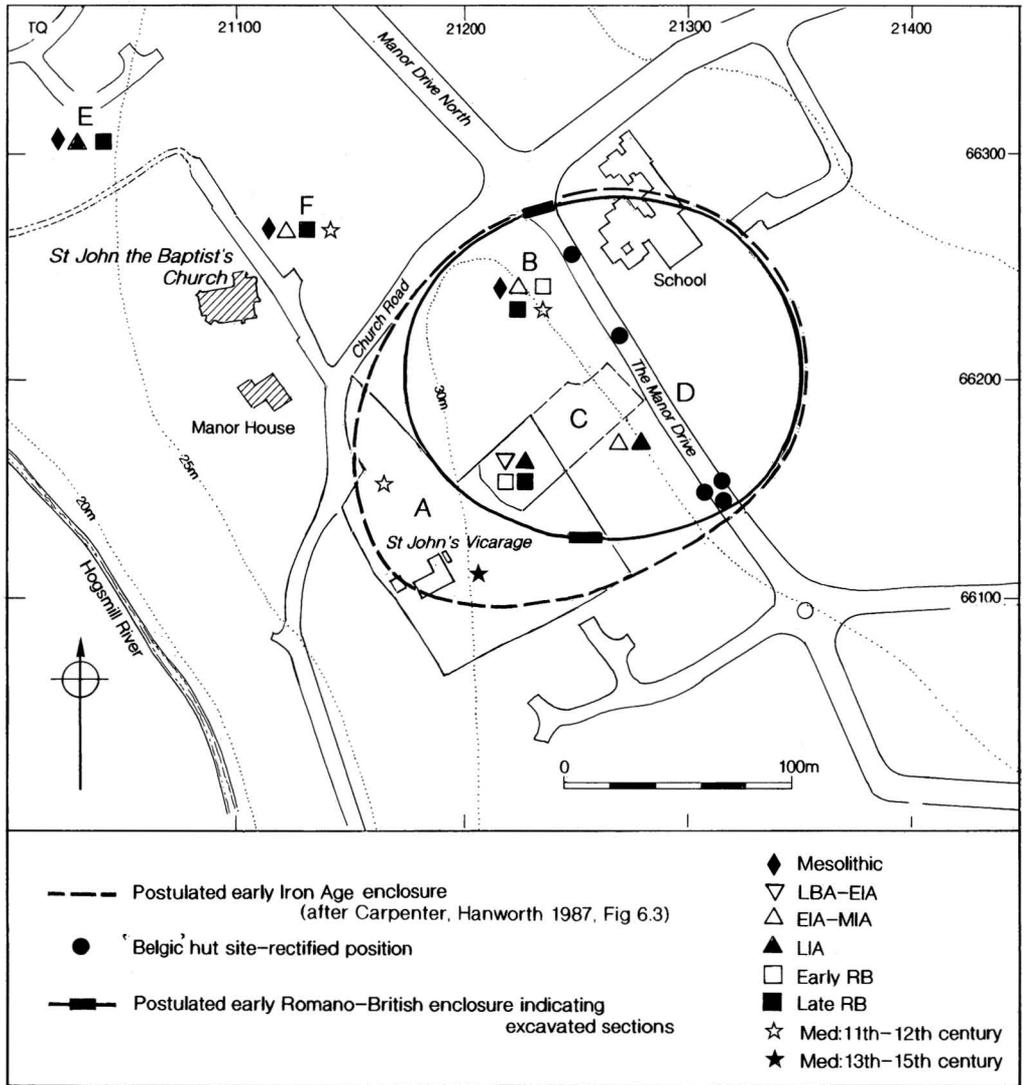


Fig 17 St John's Vicarage, Old Malden: locations of archaeological sites and findspots in Old Malden

both the earlier (prehistoric to Romano-British) periods and later (Late Saxon to medieval) periods, and elucidating this further formed the principal research aim of the work at St John's Vicarage in 1997.

MESOLITHIC-MIDDLE IRON AGE

The small quantity of worked flint recovered from the 1997 vicarage excavation appears to represent nothing more than a background scatter of mainly Bronze Age date (along with a small quantity of possible Mesolithic and Neolithic material) manufactured from locally obtained flint. Worked flint assigned to the (Late) Bronze Age was also recovered by Carpenter during his work in the area (SyAS 1949, xxii), and his identification of Mesolithic material including cores, blades and serrated blades (Carpenter 1958, 155) suggests that he found a larger assemblage of this period than was recovered in 1997.

Certain or probable Mesolithic material was also recovered in some quantity on the Percy Gardens site (Nielsen 1993, 3), all in secondary contexts, and two Mesolithic flint adzes were found apparently deliberately redeposited in a (Middle) Iron Age pit at Manor Farm Buildings (Cotton 1996, 58). In addition to this, a large quantity of lithic debitage on the latter site has also been provisionally dated to the (Middle) Iron Age (Cotton 1996, 59).

A few sherds of Middle Bronze Age pottery found in the 1997 vicarage excavation (redeposited in a tree hole) probably derive from a single vessel and represent the only pottery of this period known from the area, but little more can be deduced from this meagre evidence.

A larger quantity of Late Bronze Age/Early Iron Age pottery was recovered from the 1997 vicarage excavation, although virtually all of this occurred as residual material in later features in the eastern half of the site. Only three insubstantial features have been assigned to this period, all of indeterminate form and function, and the environmental evidence indicates that at least two of them had suffered considerable later disturbance. Dating of the pottery to the 11th–8th centuries BC does not appear quite to correspond with the evidence from Carpenter's excavations and the Manor Farm Buildings site, both of which suggest activity in the Early–Middle Iron Age rather than the Late Bronze Age–Early Iron Age. No Early–Middle Iron Age features or finds were identified from the 1997 vicarage excavations. At Manor Farm Buildings, a variety of shallow features were found including postholes, a ditch, a gully and several pits which have been dated to c 400–300BC (Nielsen 1996, 33–6). Carpenter's excavations on the allotment site ('Lady Hay') record that 'the Iron Age A material, at the lowest level includes pottery, [and] pieces of loomweights' (SyAS 1949, xxii); during further work there and immediately east in the school house garden he found a possible four-post structure and several lengths of what he interpreted as a shallow, single or double ditch, all of Early Iron Age date. Using extant topographical features he projected the line of the ditch to form an oval enclosure measuring approximately 220 x 180m which included the vicarage site at its south-west end (fig 17; Hanworth 1987, 142, fig 6.3). On the basis of Carpenter's work, a local historian wrote in 1947 that 'what is certain is that there was an Early Iron Age settlement at Malden, ie sometime after 500 BC' (Ross 1947, 4).

No evidence for an enclosure of Early Iron Age date as postulated by Carpenter was found during the 1997 vicarage excavation, although the site lay across the projected line of this enclosure. It is conceivable that such an enclosure did not exist, particularly as Carpenter did not apparently observe or record any ditch(es) on its projected course to the south-west during the construction of The Manor Drive in 1950, although he did record several 'hut sites'. However, the possibility is suggested below that a smaller, sub-circular enclosure of probable early Romano-British date may have occupied part of this area, and this may be the same enclosure postulated by Carpenter on the basis of the ditch(es) he found in the school house garden.

Much of the uncertainty surrounding the nature and date of the Iron Age activity at Malden has arisen because Carpenter's work has never been fully published and the records and finds have been subsequently dispersed. As a result, it is not possible to assign a secure date to any of the features that he excavated, and it may be significant that only four sherds of Iron Age pottery are present in the assemblage held by Kingston Museum. These have been assigned various date ranges within the Middle–Late Iron Age, including 7th to mid-2nd century BC (Waugh 1992), early 5th to mid-2nd century BC (Bishop 1971), and c 500–300BC (Close-Brooks 1977), although it is not certain that all these dates were based on examination of the same assemblage of pottery.

If Carpenter's postulated enclosure was not of Early Iron Age date, then it might be suggested that there was a more dispersed spread of unenclosed, shifting Late Bronze Age–Middle Iron Age settlement activity which occupied a spur of higher ground projecting into the Hogsmill valley. The topography of this site is likely to have been the most significant factor in the location of the prehistoric and later settlements, outweighing

the benefits offered by the more easily tilled soils of the nearby sand and gravel floodplain terraces or the chalk downland to the south.

LATE IRON AGE—EARLY ROMANO-BRITISH

A small number of features found towards the north-east corner of the 1997 vicarage excavation site have been assigned a Late Iron Age to early Romano-British date. However, the pottery cannot be closely dated and has been ascribed a broad range spanning the 1st century BC to the early 2nd century AD, although there may be more Iron Age material present in the assemblage than has been identified. No structural remains were recognized, perhaps reflecting low density or dispersed occupation, or the relatively narrow strip of ground investigated in this part of the site. However, amongst the small quantity of finds were fragments of at least one triangular loomweight which does suggest settlement in the vicinity.

Carpenter's work in the vicarage orchard immediately to the east of the 1997 excavations apparently revealed one or more Iron Age ditches, as well as pottery and burnt flint, although it is unclear whether these features and finds were considered to be of Early, Middle or Late Iron Age date. An Early Iron Age date might be assumed, to match that of his postulated enclosure, but the finds from the 1997 vicarage excavation suggest otherwise, and it is pertinent to note Carpenter used the term 'Belgic' (ie Late Iron Age) to describe circular huts found during construction of The Manor Drive (SyAS 1949, xxii). Unfortunately, no artefactual or written evidence appears to survive which could confirm this description, and it is possible that the term was used to indicate a broad Iron Age date rather than specifically the Late Iron Age.

Carpenter was able to recover Iron Age pottery and record five 'Belgic' huts during construction of The Manor Drive in 1950 (SyAS 1949, xxii). It should be noted that their positions have been changed on figure 17 from those depicted in Hanworth 1987 (fig 6.3), so as to lie beneath the line of The Manor Drive. The one hut recorded in detail was 4.2m in diameter and surrounded by a 1.2m wide ditch or drip gully with a 2.1m wide north-east facing entrance, presumably marked by a gap in the ditch. A central flint-packed posthole was surrounded by a gravel floor, and a hearth lay near to the centre (George 1992). Together, these details provide reasonably convincing evidence that what Carpenter actually saw were the remains of small roundhouses. All the hut sites lay inside the line of Carpenter's postulated Early Iron Age enclosure or the alternative, but smaller, early Romano-British enclosure discussed below.

Carpenter's Early Iron Age enclosure is not the only one suggested to have existed in the area. Excavations by MoLAS at Percy Gardens in 1991 (Neilsen 1993), less than 250m to the north-west of the vicarage site and Carpenter's postulated enclosure, revealed a possible settlement enclosure of Late Iron Age date. This also lay on high ground on the eastern edge of the Hogsmill valley, and contained rubbish pits, storage pits and postholes, along with pottery of Middle–Late Iron Age date and numerous fragments of triangular loomweights.

To sum up, it is possible that one, both or none of these postulated enclosures existed, but if both existed then it is unlikely that they were contemporary. Carpenter's Early Iron Age enclosure is suggested below to have been of early Romano-British date, whereas that at Percy Gardens seems more certainly to have been constructed during the Late Iron Age. Whichever, the pottery recovered from the various excavations clearly represents different phases of activity associated with occupation which probably continued throughout the Iron Age. The overall impression is that there was Early–Middle Iron Age occupation to the north-east of the vicarage site, at Manor Farm Buildings and in the area investigated by Carpenter, and that there was a subsequent expansion downslope to the north-west with a corresponding shift in focus, followed by later expansion to the south-west into the north-east corner of the vicarage site. At no time is there any evidence for a large-scale,

densely occupied settlement, but it appears instead that there were small clusters of buildings, some of which, in the Late Iron Age at least, were built within an enclosure.

Recent excavations at Alpine Avenue, Tolworth, less than 1km to the south-west on the other side of the Hogsmill, have revealed traces of possible roundhouses and other features of probable Late Iron Age date. It has been suggested that this was one of a number of smaller settlements in a developed agricultural landscape (Hawkins & Leaver 1999).

EARLY ROMANO-BRITISH (1st–2nd centuries AD)

The lack of stratigraphy, the general homogeneity of the fills of the features and the proliferation of later treeholes (particularly in trenches 1, 1A and 2) have made it very difficult to construct a sequence of activity for the Romano-British period. This was exacerbated by the paucity of diagnostic vessel forms amongst the pottery. However, the bulk of the Romano-British pottery assemblage appears to belong to the 1st–2nd centuries rather than the 3rd–4th centuries AD and, largely on this basis, the majority of the features have been assigned to the earlier rather than the later part of the Romano-British period.

Ditch 2199, the most substantial Romano-British feature found during the 1997 excavation, is also likely to be the most significant. It is suggested here that this ditch, dated to not later than the early 2nd century, may have formed part of a sub-circular enclosure, possibly the same enclosure postulated by Carpenter which he indicated was of Early Iron Age date. This difference in dates is not easily resolved, but it is not certain on what basis Carpenter dated his enclosure, and it is possible that if the pottery recovered by him from the ditch was in poor condition and comprised largely undiagnostic coarsewares (similar to that from ditch 2199) then it may have been misidentified. Furthermore, it should be noted that Carpenter was especially keen to establish the existence of a Roman building at Old Malden, more specifically a villa, and it is possible that this may have influenced him in the dating of his postulated enclosure.

In 1970 the Kingston upon Thames Archaeological Society (KuTAS) dug a small trial trench and 'to the south of ... Carpenter's work of the late 1940s ... a clay bank of Roman or Iron Age date was located along with other cut features' (Bloice 1971). Where exactly this was dug is unknown; it could have been within the school grounds to the east of The Manor Drive or somewhere within the vicarage gardens. Whichever, it seems unlikely that this bank formed any part of Carpenter's postulated enclosure, but little more can be deduced from the available information.

The early Romano-British enclosure postulated on the basis of the 1997 excavation has an estimated diameter of approximately 180m (fig 17), and would have occupied the edge of the higher ground which begins to drop away immediately to the west. There is evidence from ditch 2199 for this feature having been recut on at least one occasion, and a slight indication that the fill of a bank may have been used to partly backfill the ditch at a later date. The majority of Romano-British features lay to the north of ditch 2199, within the enclosure, but three parallel, shallow ditches or gullies lay to the south and appear to have formed part of the enclosure arrangements. The outermost of these shallow ditches (2039/2042) had a gap possibly marking an entrance facing south, but it could not be ascertained whether there were corresponding gaps in the remainder. The function of these shallow ditches is unclear; they would not have provided a substantial barrier, but could have been dug as an additional boundary (or boundaries) to the enclosure and perhaps accompanied hedges. No chronological sequence could be determined for ditch 2199 and the ditches to the south, but it is considered on the basis of their layout that all were contemporary. It may be of significance to note that Carpenter's plan of his postulated Early Iron Age enclosure (Hanworth 1987, fig 6.3) shows it to be surrounded by one larger ditch and two smaller ditches or gullies, although in this case the larger ditch is the outermost rather than the innermost of these three parallel features which appear to lie approximately 10m apart.

The features to the north of ditch 2199, within the enclosure, were generally of uncertain form and function, but there was a group of small, intercutting bowl-shaped pits close to the ditch and several postholes, slots and at least one shallow gully are best interpreted as representing structural remains. Unfortunately, the restricted width of the excavation in this area and the high degree of tree-hole disturbance means that no coherent building plans were discernible. The charred plant remains from this period are relatively sparse but, as in the Late Iron Age–early Romano-British period, glumed wheats predominate (mainly spelt) with no certain evidence for bread wheat.

It is possible that the ‘Belgic’ huts found by Carpenter beneath The Manor Drive in 1950 (see above) were of early Romano-British rather than Iron Age date, though this now appears impossible to prove or disprove.

Carpenter’s interpretation of the evidence from his excavations in both the vicarage gardens and the former allotments does not correspond with that from the 1997 vicarage excavation as regards the dating of the Romano-British remains. Carpenter reported in 1948 that ‘the Roman material includes some pottery and coins of 1st to 3rd century date, but the main Roman occupation was in the 4th century’ (SyAS 1949, xxii). The evidence from the excavations at Manor Farm Buildings (which produced only a small quantity of abraded pottery of early Romano-British date) supports this emphasis on a later date for the main period of activity (Neilsen 1996, 74–5), although the 1997 vicarage excavation suggests the reverse. However, it is suggested below that, as in the Iron Age, this apparent contradiction might be explained by continuing settlement of the area throughout the Romano-British period, but with a slight shift in focus (to the north-west) between the earlier (?enclosed) and later (unenclosed) phases of occupation.

LATER ROMANO-BRITISH (3rd–4th centuries)

The evidence for later Romano-British activity on the 1997 vicarage excavation was largely restricted to one or more ditches or gullies running approximately north-west to south-east. Segmented gully 2005 clearly cut across and bore no apparent relationship to any of the earlier features in the vicinity including, most significantly perhaps, postulated enclosure ditch 2199. Two other features, gully 3152 and ditch 3302, may on the basis of their similar alignments, have formed part of the same system of linears as gully 2005, although the pottery dating for both these features is equivocal.

This system of gullies and ditches may have been part of, or was at least contemporary with, the field system found at Manor Farm Buildings which extended downslope to the north-west, as far as the site at Percy Gardens, and which has been provisionally dated to the late 3rd–5th centuries (Neilsen 1996, 74–5). It may also be significant in this respect that the ditches on all three sites were on the same orientation, and that this same orientation was recorded in the medieval and subsequent periods at both Manor Farm Buildings and on the 1997 vicarage excavation. It is perhaps most likely that this field system(s) was associated with arable agriculture, and it should be noted that this phase of activity appears to correspond with the first certain appearance of bread wheat amongst the charred plant remains from the 1997 vicarage excavation, identified in three of the four samples analysed from this period.

It seems certain that this field system was associated with a settlement that lay nearby, and it is suggested that this lay immediately to the north of the 1997 vicarage excavation, partly within the area investigated by Carpenter around the Malden Parochial School and adjacent allotments. This concurs with Carpenter’s recorded observation noted above that ‘the Roman material includes some pottery and coins of 1st to 3rd century date, but the main occupation was in the 4th century when there was an extensive Romano-British village occupying the site, and a complex of ditches of various sizes ... containing a large quantity of late Roman pottery, which includes New Forest and Farnham types’ (SyAS 1949, xxii). The suggestion of a later Romano-British settlement in this area is further

supported by the discovery of a comparatively substantial ditch at the southern end of the Manor Farm Buildings site which contained a notable assemblage of large, unabraded sherds of 3rd–4th century pottery, part of a quern and fragments of loomweights (Neilsen 1996, 46–7). This, the excavator argues convincingly, could have been a boundary ditch defining the north-west limit of the 'extensive Romano-British village' of 4th century date proposed by Carpenter.

In conclusion, the discoveries at St John's Vicarage have added some useful information to our comparatively meagre knowledge about Romano-British settlement in the London area outside the city itself. Recent work has produced a considerable amount of new evidence but, as at St John's Vicarage, this has generally comprised pits and ditches with few structural remains, and has not contributed greatly to an overall understanding of the landscape and economy of the area (Merrifield 1976, 55). Little evidence for settlement and agriculture has been discovered on the London Clay, with geological boundaries being the preferred location (Sheldon & Schaaf 1978, 60), and much woodland is likely to have been present on the heavier, clay soils in Surrey (Rackham 1994, 8, 10) which probably supplied a variety of woodland industries during this period. The settlement at Malden, although on London Clay, lies close to a geological boundary on the higher ground overlooking the river floodplain, and it is likely that topography was an important factor in its location. It may have been a small, enclosed rural settlement in the 1st–2nd centuries which was replaced in the 3rd–4th centuries by an unenclosed settlement and associated field system, perhaps reflecting a change in occupation identified more generally in Surrey (Applebaum 1972, 40) and elsewhere towards the end of the 2nd century. Ewell was the nearest substantial settlement, lying approximately 2.5km to the south-west, although the evidence suggests that it was not of sufficient size to be classed as a small town (Orton 1997), and it may have developed at the centre of a sheep raising area (Bird 1996, 224). Kingston, less than 5km to the north-west, seems to have been the site of a small, unenclosed rural settlement dating to the 1st–4th centuries, perhaps acting as a transport link rather than a crossing point on the river, and one of several similar sites recently identified along this part of the Thames (Hawkins 1996).

MEDIEVAL

The earliest phase of medieval activity identified in the 1997 vicarage excavation appears to post-date the Conquest. Although a Late Saxon presence might be expected on the evidence of the Domesday survey of 1086 which records the existence of 25 houses, no unequivocal Late Saxon features or finds have yet been found on any of the excavations undertaken in Old Malden, even at Manor Farm Buildings which lay immediately to the north-east of the church and manor house. On this basis it might be assumed that any Late Saxon occupation was on a very small-scale and restricted to the immediate vicinity of the church, most probably to the south on the site of the manor house. However, it is also possible that occupation lay closer to the site, immediately adjacent to Church Street in areas not yet investigated.

There was certainly a major expansion in settlement in Surrey between the 10th and 13th centuries, with settlements still developing on the London Clay towards the end of this time, and this appears to be broadly reflected in the occupation sequence at St John's Vicarage. It is likely that the medieval settlement took a simple linear form with the church and manor house at the west end, a village green at the east end, and settlement strung out along both sides of Church Road in between.

11th–12th centuries

The pairs of parallel, recut ditches which lay at the extreme northern end of the excavated area, in trenches 1 and 4 respectively, are interpreted as boundaries marking the rear

extent of properties lying alongside Church Road approximately 75m to the north. It is possible that the gap between them functioned as an unmetalled track, perhaps a back lane, which ran parallel with Church Road and separated the individual properties containing houses from fields to the south. The series of shallow ditches or gullies in trench 3, to the south, may represent small garden plots rather than fields which probably lay a short distance further away. Small garden plots are recorded from at least as early as the late 13th century for growing leeks, beans and other vegetables. Other crops including wheat, barley, oats, rye, peas, beans and vetch listed in contemporary documents and recovered in varying quantities from the charred plant remains are likely to have been grown in the surrounding strip fields. These fields were left fallow every three years and used for grazing, with arable production reaching a peak in the late 13th–early 14th century.

This suggested layout appears to be supported by Carpenter's work, for the only recorded medieval finds were probably made in the former allotments to the east of the Malden Parochial School. As early as 1941 Carpenter makes reference to pottery being found on the allotments, and in 1949 he reported that 'shallow pits with early medieval pottery overlies, and in places disturbs, the Roman levels, and a group of 11th–12th century Norman cooking pots, found together at one point, forms a most important group of vessels of that period' (SyAS 1949, xxii). These vessels have been published by Carpenter (1949), where he records them as having come from a midden of kitchen refuse alongside a Romano-British ditch, and although he does not say where this was, it seems probable that it was somewhere on the allotments.

Excavations at Manor Farm Buildings to the north of Church Road revealed a substantial ditch running north-east to south-west along the northern edge of the site (Neilsen 1996, 38–9). This feature, interpreted as a boundary ditch, contained a relatively large assemblage of late 11th–early 12th century pottery, and it may be significant that it lay parallel and approximately 75m to the north of Church Road, possibly reflecting the arrangement found to the south on the 1997 vicarage excavation. Few other features of this date were found and only a small quantity of pottery, the majority residual in later features, but this layout of ditches may provide evidence for organized land tenure indicated in the Domesday survey.

As in other periods, little animal bone has survived, but the charred plant remains have proved plentiful in all samples analysed from the ditches of this period. Bread wheat is common, with lesser amounts of barley, oats and possibly rye, and the weed seeds are typical of crops grown on clay soils.

12th–13th centuries

This period saw a shift, or more probably an expansion of medieval activity away from Church Road, into the area investigated during the 1997 vicarage excavation. By 1225 the number of houses in Malden had increased to 41 and the population to perhaps around 250, probably the highest it ever reached prior to the 20th century, and in 1249 the manor, formerly tenanted by members of the Watteville family, passed to Walter de Merton.

It is pertinent to note that features were concentrated in trench 2, towards the south of this area, and that the earlier ditches to the north, interpreted as marking the rear of properties on Church Road, had by this time become infilled and, in trench 4, overlain by a different system of ditches. It would seem, therefore, that the earlier layout of properties or boundaries had been superseded, although it is suggested below that this may have been linked to the possible establishment of a vicarage on the site in the 13th century.

The most substantial feature (3092) has been interpreted as a watering hole, apparently fed by two channels which perhaps tapped a natural spring. Boundaries marked by ditches 2126 (possibly an earlier feature) and 3319 lay to the east and north respectively, and the irregular nature of the feature and the absence of any evidence for a lining suggest that it

served as a source of water for animals rather than for domestic consumption. No reference to this feature is made in any of the (post-1270) documents examined which relate directly to the site, and this might provide further support for a 12th or early 13th century date.

The watering hole and small plots may have belonged to the vicarage which, along with agricultural buildings to hold the product of the tithe, are first recorded in 1279. It is also recorded that the rectors and vicars were actively engaged in agriculture. The construction of the vicarage and associated buildings is likely to have involved some reorganization in the layout of the site and it is unfortunate that no traces of these structures have been identified; it must be assumed that they lay closer to Church Road to the north, outside the area excavated. The vicarage at Malden may have been similar to the medieval vicarage excavated at Reigate that comprised a hall-house (?aisled) built *c* 1200 which subsequently had a cross-wing added at one end and was extended at the other around 1300 (Poulton 1986).

Surprisingly little evidence of settlement during the 13th and 14th centuries has been recorded on other sites in Malden, although Carpenter did note the presence of some glazed pottery, probably of this date, during his work in the allotment and vicarage garden areas. It is likely that most settlement remains are to be found along the Church Road frontages, perhaps mainly along the south side based on later cartographic evidence, and therefore the apparent absence of material simply reflects the lack of excavations along the street frontages.

14th–15th centuries

The watering hole had been infilled by this time and the earlier system of shallow ditches and gullies replaced by a new layout on the same alignment. These ditches and gullies also appear to have defined plots, though larger than those before. The possible midden deposit in ditch 3233 and the relatively large quantity of charred plant remains from the north end of ditch 3321 suggest occupation nearby, but no structural remains were identified and, as before, it seems probable that the vicarage buildings lay to the north of the excavated area.

The documentary evidence indicates the importance of sheep farming at the beginning of the 14th century, although this is not reflected in the small assemblage of animal bone from this period, and arable crops continued to play an important part in the economy. However, climatic deterioration in the late 13th century was followed by a decline in the settlement at Malden during the first half of the 14th century. Crop failure and animal sickness (in 1339 more than 50% of the sheep died) and the Black Death in 1349–50, which caused heavy mortality at Malden, caused a setback from which the settlement never really recovered. Several properties remained untenanted, the leases of the manor increased while its value decreased, and in 1456 Merton College leased the manor house and rectory because of changed circumstances. Throughout the 15th and 16th centuries the vicarage was considered too poor to attract college fellows because of the reduction in tithe revenue. The virtual absence of features and the paucity of 15th and 16th century pottery recovered from the vicarage excavation (and also from Carpenter's work and sites in the vicinity of the church and manor house) is likely to reflect this decline of the settlement as well as the changed circumstances of the vicarage.

POST-MEDIEVAL (figs 10–16)

The 16th century probably saw a shift or decline in settlement from around the manor house, with most houses now lying further to the east along the south side of Church Road. The construction of Nonsuch Palace in 1538–47 also had a marked effect on the appearance of the settlement, with the surrounding park boundary cutting a large swathe across the fields to the south-west of Malden (fig 15). Some upturn in Malden's fortunes may be indicated towards the end of the 16th century by the repair of the manor house in

the 1580s, and in 1610 the church was extensively rebuilt with a new tower constructed in brick. However, there was no expansion of the settlement which had remained more or less constant since the end of the 14th century and now comprised approximately 20 farmsteads.

The rebuilding of the church early in the 17th century may provide a context for the rebuilding of the vicarage on a new site to the south of its former location, probably represented by the earliest phase of the post-medieval structural sequence identified in the excavation (fig 10). It appears in this position as a simple building on the 1623 map, and as a rather more substantial building on the 1627 map with another large building, possibly a barn, to the north, and a smaller building on the street frontage (fig 15), both of the latter buildings lying outside the excavated area.

Common fields continued to the mid-17th century, but there was increasing enclosure of land. From this time, the vicars held several meadows part of one of which was a orchard by 1794 (fig 16), and also the field known as Lady Hay (fig 1) which may have been vacant properties occupied by buildings prior to the decline of the settlement in the 14th century.

Three of the 17th century vicars were Fellows of Merton College and this may reflect a resurgence in the value and status of the vicarage at this time. Following a fire, the vicarage was rebuilt on a larger scale in 1675, and extended again in 1795 with a new group of agricultural buildings including a barn and a stable constructed to the north-west. Remains of these phases of vicarage and associated buildings were uncovered on the excavations, although few internal features survived, and traces of the surrounding 18th century gardens (fig 16) were also identified.

The settlement at Malden remained a village comprising approximately 20 houses until well into the 20th century, and did not develop further until the construction of Malden Manor station in the 1930s which provided a commuter link to Waterloo and thus a catalyst for suburban expansion.

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 LMA: London Metropolitan Archives
 MCO: Merton College, Oxford
 PRO: Public Record Office, London
 SHC: Surrey History Centre, Woking

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