

Excavations at the Royal Manor House of Guildford Park, 1972–75



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Summary

Archaeological investigations carried out at the moated site of the Royal Manor House of Guildford Park from 1972 to 1975, which were directed by the author and administered by the Centre for Adult Education at the University of Surrey, are described. The site, which has no significant standing buildings, forms part of the garden of Manor Farm and is owned by the University. Geophysical surveys, other surveys, historical records and discussions with the tenant farmer were used to decide on the relatively small parts of the site that would be most convenient and valuable to investigate. In particular, a trench was excavated across a levelled section of the moat that was thought to contain building rubble from the manor house. Parts of the northern end of the island that were anticipated to have been used for service buildings were also excavated. Finally, the area where a resistivity survey suggested that the south-east corner of the manor house was located was examined. In this report the surveys, excavations and finds are described and discussed.

Circumstances have resulted in the report being prepared over several decades and it is hoped that this has not led to too many inconsistencies. It has certainly meant that it has concentrated on the aspects of the project that have been of greatest interest to the author. However, the extensive archive of material that has been deposited at Guildford Museum (AG 24275) and is summarised here in an Appendix is being made available for others to study further aspects of the work.

General introduction

During 1971 a University of Surrey Archaeological Society was established and its inaugural lecture was entitled 'The Story of Stag Hill'. The speaker, Mark Sturley, explained that Stag Hill, upon which the main University buildings and Guildford Cathedral stand, was part of the Royal Park of Guildford, which itself formed part of the Royal Forest of Windsor. He also mentioned that the moated site of the manor house associated with the park lies in the garden of Manor Farm, which is also University property. During the discussion at the end of the lecture it was suggested that the Society should explore the possibility of carrying out an excavation at the manor house site. This led to four seasons of training excavations, from 1972 to 1975, which were directed by the author, with the support of Tony Clark, Felix Holling and many other members of the Surrey Archaeological Society, especially Glenys Crocker. However, these excavations were administered by the University's Centre for Adult Education, rather than the University Archaeological Society, which in practice was short-lived. Brief interim reports were published each year (Crocker 1973–7, 1975) and other articles, mainly on the history of the Park, have been published more recently (Anon, 1997; Crocker 1983, 1999, 2003, 2005; Davies, 1991, 1997; Davies & English 1999; Dyer, 1998; Underwood 2002). However, the present account provides the first comprehensive record of the excavations.

Guildford Park occupied about 611ha (1510 acres) of land to the west of the river Wey and north of the Hog's Back, but at the dissolution of the monasteries a further 44.5ha (110 acres) along the banks of the Wey, which had previously belonged to Guildford Friary, were added. As indicated on the location maps (figs 1a and 1b), about 71% of the land to the south lay in Artington parish, 14% to the north-west in Worplesdon and 15% to the north-east in Stoke. The site of the manor house (SU 9691 4931), shown in figures 1b and 1c, is near the south-west corner of the park, immediately east of the present farmhouse. It lies on land that has a natural downward slope of about 1 in 30 to the north-north-east and appears to have been selected to be near the sources of two independent streams. One of these fed fish ponds and the other the moat around the site.

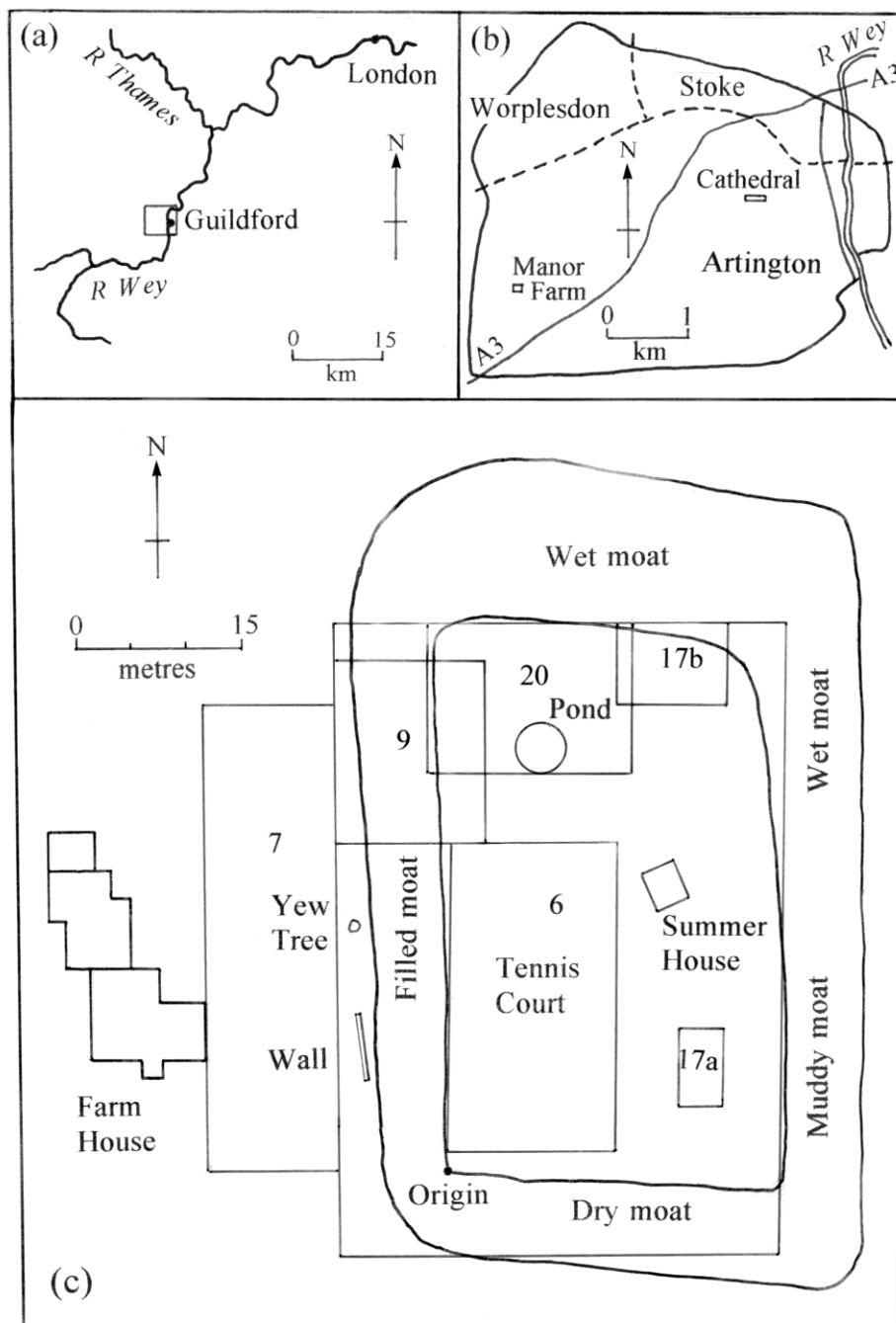


Fig 1 Guildford Park Manor. Location maps, (a) and (b), and site plan (c). The areas investigated by electrical resistivity surveys and excavations at the royal manor house are indicated by rectangles in (c), the numbers corresponding to figures that provide details. In particular 6 (large rectangle) and 7 relate to resistivity surveys and 9, 17(a), 17(b) and 20 to excavations. Grid north is indicated in each case.

The island formed by the moat (fig 1c), is roughly rectangular, being *c* 50m north–south and 28m east–west. The south-west quadrant is occupied by a disused, grass-covered, tennis court with brick foundations that was constructed in about 1930. In the 1970s there was a dilapidated timber summerhouse near the north-east corner of this court and a disused cement-lined pond to its north, but by 2009 these had disappeared. The rest of the island is covered by a scattering of trees and ornamental shrubs. The moat averages about 7m wide around the uphill southern end of the island but is up to 14m wide around the northern end. It still contains water on the north side, where it is retained by an embankment. There is also water, and in places deep thick mud, in much of the east side where there are remains of revetment walls on both the inner and outer edges and the moat is still an impressive and dramatic feature. A photograph of the north-east corner of the island, looking across the moat, is shown as figure 2. On the south side, the moat is almost full of fairly dry mud and thick vegetation, but along most of the remaining west side it has been filled and forms only a



Fig 2 Guildford Park Manor. Photograph, taken in July 1975, of the north-east corner of the island looking north-west across the moat.

slight depression in the lawn of the farmhouse garden. The surface features indicate that the moat was at least 2m deep. It is on Reading Beds clay about 100m north of its junction with the chalk. This clay is impermeable but becomes fluid when saturated, so that retaining walls were essential. Some scattered, good-quality freestone was found on the surface together with a large Purbeck marble quoin and some shaped chalk blocks. These are assumed to be from the manor house. There is also an upstanding section of flint wall 5.7m long x 1.1m high and a mature yew tree on the outer edge of the moat at the west. Some key dates in the history of the site are provided in table 1.

Table 1 Key dates in the history of the site*

1154	Guildford Park enclosed by Henry II
1318	Earliest reference to manor house
1369	Lodge built with hall, four chambers and chapel
1371	Lodge enclosed by a ditch
1514	Major repairs to the buildings
1543	Repairs to windows of royal apartments
1607	House described as ‘pulde downe & defaced’
1609	Building material from manor house sold

*Compiled from Underwood (2002), where more detailed information is provided.

Surveys

TOPOGRAPHICAL SURVEYS

A site origin was established at the south-west corner of the island (see fig 1c). It was 24m from the south-east corner of the farmhouse in a direction 26° south of east. North-south and west-east profiles of the island, taken 18m east and 33m north of this origin respectively, are given in figure 3, with the vertical scale exaggerated by a factor of 2. The level shown for the water in the four profiles of the moat is as recorded on the north and east sides of the island on 4 August 1974. Similarly, the level shown for the bed of the moat is as recorded in the trench across its west side, which was excavated in 1972 and through which the east-west profile passes. The profiles show the ground around the island sloping downwards generally to the north and east. The slope is about 1 in 25 to the north-north-east, which is close to the more general slope deduced from contours on Ordnance Survey maps and stated above. However, the north-south profile indicates that the island must have been levelled at its north end, presumably with spoil from the moat. At water level the moat is seen to be about 5m wide on the south and west sides of the island, 8m wide on the east and 13m wide on the north. The narrower parts correspond to those with the highest banks and these would have appeared particularly dramatic. There is a prominent embankment retaining the moat on the northern edge of the island and the height of this suggests that in the past the water in the moat could have been deeper.

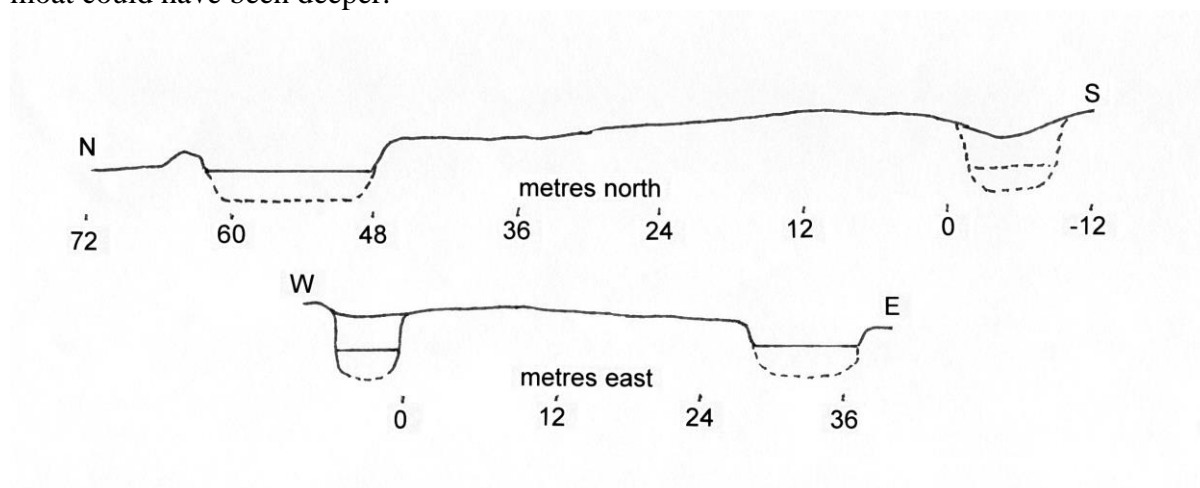


Fig 3 Guildford Park Manor. North-south and west-east profiles of the island and moat taken, respectively, at 18m east and 33m north of the origin at the south-west corner of the island. The broken lines are speculative and the vertical scale has been enlarged by a factor of 2.

A detailed topographical survey of the whole island site was also carried out, again on 4 August 1974. The island is almost level, but it dips slightly from the highest part at the south-west corner by 0.75, 0.60 and 0.95m to the north-west, south-east and north-east corners respectively. At the time of the survey the level of the surface of the water in the moat at the north of the island was about 1.30m below the north-east corner. The lowest part of the dry section of the moat along the south side was between 0.55 and 0.70m below the adjacent parts of the island. Similarly, the lowest part of the filled moat along the west side was mainly between 0.20 and 0.35m below the island, but this increased at its northern end where it approached the wet moat.

These topographical surveys were supervised by Chris Barnes of the Department of Civil Engineering, University of Surrey.

WATER-DIVINING SURVEY

On 24 August 1972, Brian Van Zyl, an experienced water diviner, surveyed the moated site using two bent brass rods, one held in each hand and both projecting horizontally in front of him by about 0.4m. He had reactions, the rods crossing each other, at 24 places on the northern half of the island. The five strongest reactions were at the locations plotted in figure 4. These have the following co-ordinates in metres east and north of the site origin (fig 1): [9.7, 23.0], [9.0, 30.3], [12.0, 41.0], [10.5, 44.6], [18.5, 46.0]. Others present (including the author) also used the rods briefly and had strong reactions in some of the same places but none elsewhere.

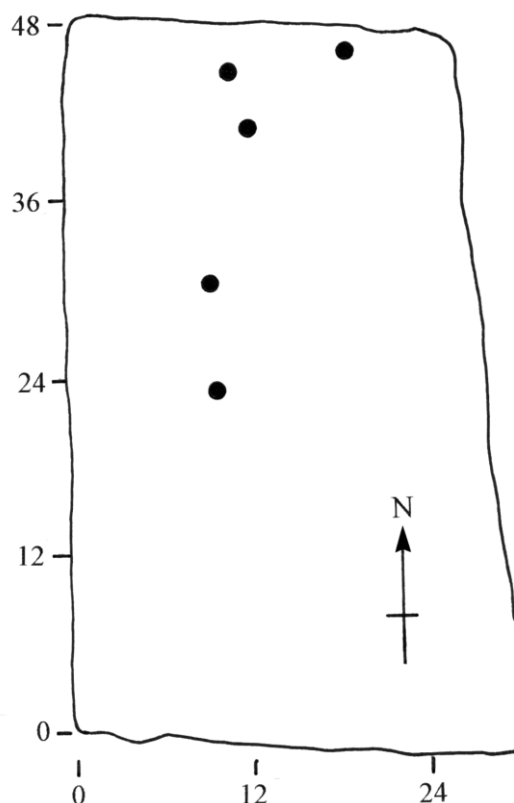


Fig 4 Guildford Park Manor. Locations of strong water-divining reactions observed on the moated island. The scales are in metres based on the origin at the south-west corner of the island.

GEOFYSICAL SURVEYS

An east-west earth resistance traverse, about 30m north of the site origin and 45m long, was made across the island and the west side of the filled moat on 13 May 1972, prior to the commencement of the excavations. This was an early application of the twin-electrode probe geometry in which two probes remain at fixed locations in a remote corner of the site while the remaining two are moved across the region being investigated (Clark 1990, 44–6). A probe spacing of 1m was used but the eastern part of the traverse was repeated at 0.75m spacing. Unfortunately, it was difficult to obtain reliable readings for the part of the island covered by the brick foundations of the tennis court. The results are shown in figure 5. The readings for the moat section (-8m to -2m) were higher than those for the island by a factor of about three. This was unexpected, as it was thought that the fill of the moat would be damp and therefore have low resistivity. The high values implied, on the contrary, that the fill was dry, which gave rise to the suggestion that this part of the moat was filled with loose building

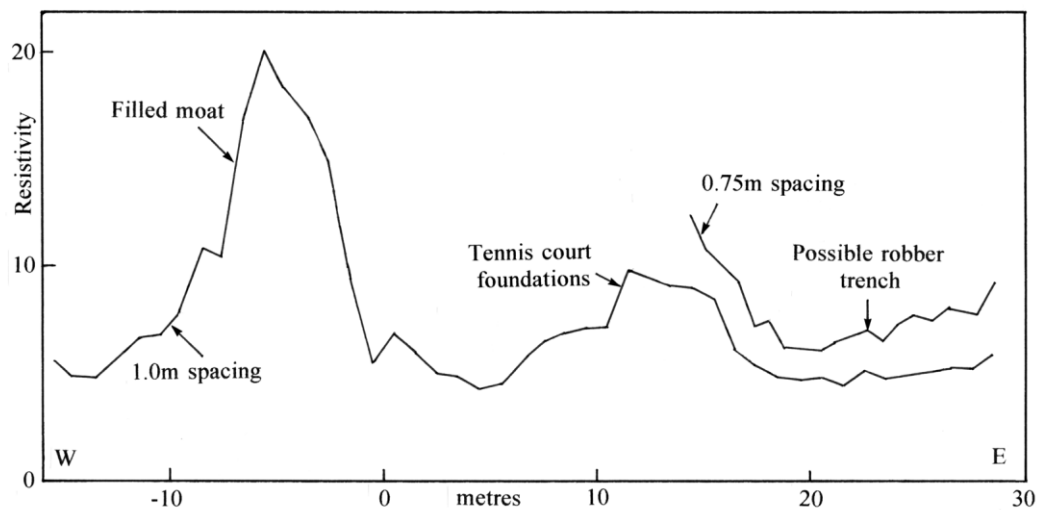


Fig 5 Guildford Park Manor. Plot of an east-west resistivity traverse across the island and the filled western side of the moat about 30m north of the site origin. The survey was carried out on 13 May 1972 using the twin electrode configuration with probe spacings of 1.0m and, for part of the traverse, 0.75m. Note the very high readings for the filled moat between -8m and -2m, high readings for foundations used to level the brick tennis court between 11m and 16m and the possible robber trench at 23m.

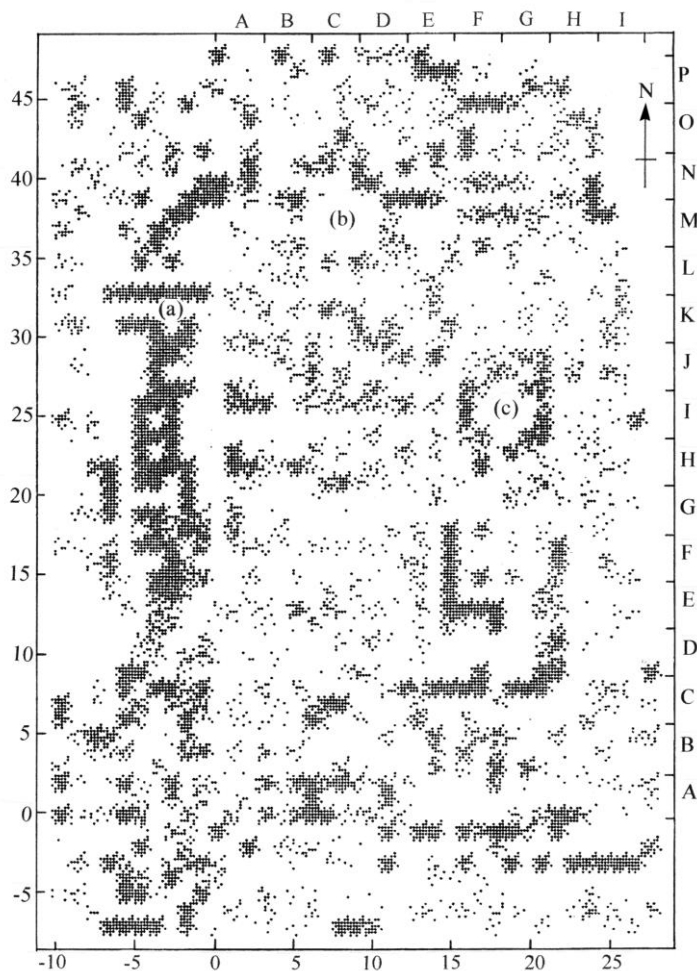


Fig 6 Guildford Park Manor. Dot-density plot of the results of an earth resistance survey of the island and the filled western and southern parts of the moat carried out on 23, 30 July and 7, 14 August 1972. The double-dipole probe geometry was used with a probe spacing of 1m. The scales at the left and the bottom are in metres and refer to the site origin at the south-west corner of the island. The code letters at the right and the top define the squares into which the island was divided during the excavations. Note the high readings for the filled moat at the west. No readings could be taken for the areas marked (a), (b) and (c), corresponding to the trench across the moat, the garden pond and the summer house respectively.

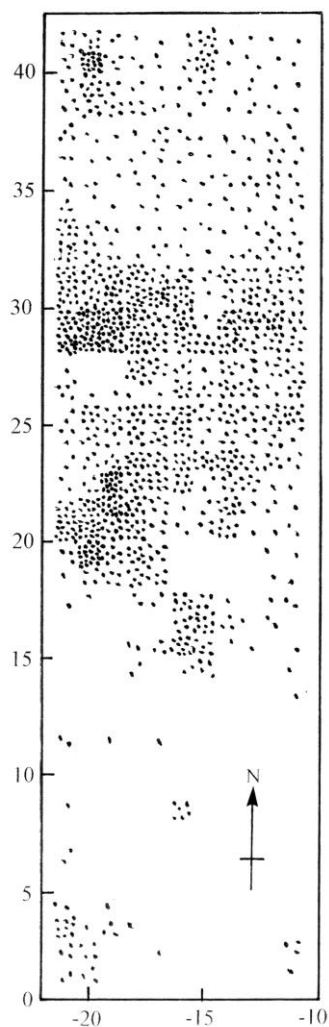


Fig 7 Guildford Park Manor. Dot-density plot of the results of an earth resistance survey of the area between the western part of the moat and the farmhouse carried out on 26 July 1975. The double-dipole probe geometry was used with a probe spacing of 1m. The plot is immediately west of that shown in figure 6 and the scales, in metres, refer to the site origin at the south-west corner of the island.

rubble from the manor house that originally occupied the island. Relatively high readings, at between 11 and 16m, could be explained by the use of rubble to level the eastern part of the tennis court. The results also suggested a possible north–south robber trench at about 23m.

A comprehensive earth resistance survey of the whole island site and the filled south and west sides of the moat was carried out, using the double dipole configuration, during July and August 1972. The probe spacing adopted was 1m and about 2500 readings were taken. These covered a range of values varying by a factor of over ten, the highest being associated with the filled western side of the moat. However, comparatively high values were also found for parts of the island. A dot-density plot of the results is shown in figure 6.

On 27 July 1975 a rectangular area of lawn, measuring 41m north–south and 11m east–west and lying between the west side of the moat and the farmhouse, was surveyed using earth resistance with both the traditional Wenner array and the double-dipole probe configurations at 1m spacing (Clark 1990, 37–44). A plot of the double dipole results, immediately west of that in figure 6, is shown in figure 7. Low readings were recorded for most of the northern and particularly the southern sections of this area, indicating very damp soil and no hidden building foundations or rubble. However, very high readings were obtained, using both configurations, for an irregular central region lying from 19 to 33m north and 12 to 21m west of the site origin. It seems likely that this corresponds to the site of a former building associated with either the manor house or the later farm.

These geophysical surveys were supervised by Tony Clark.

HEDGEROW SURVEYS

Six hedges, including two pairs on opposite sides of lanes, were surveyed in August 1975 and recorded on Hedgerow Project forms provided by M D Hooper of Monks Wood Experimental Station, Abbots Ripton, Huntingdonshire. Their locations are shown in figure 8. The survey was conducted by Mavis Gibson (now Gulliver) and a group of helpers.

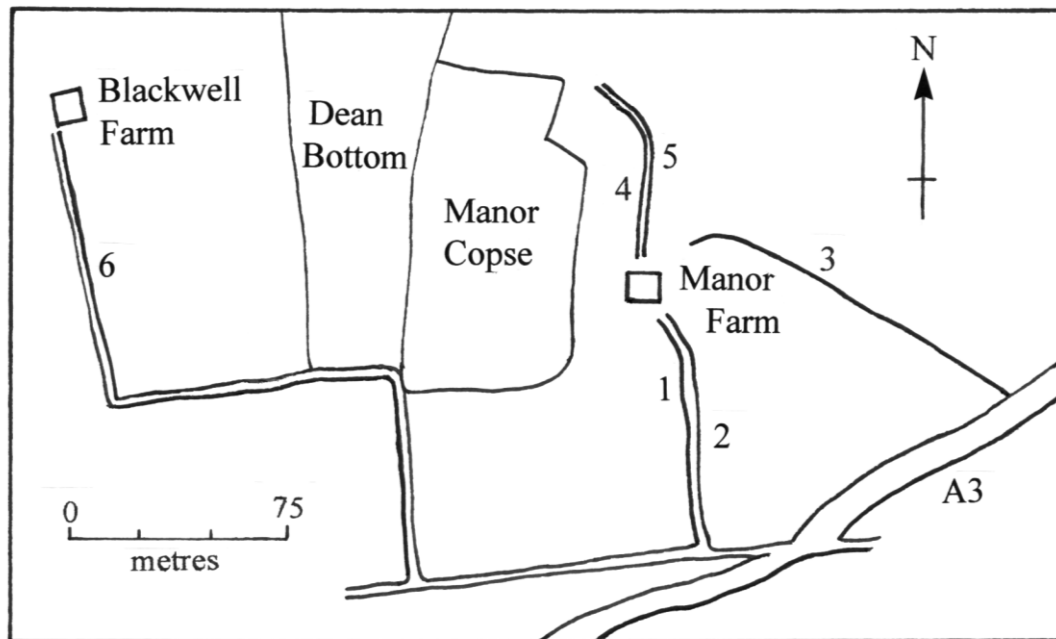


Fig 8 Guildford Park Manor. Locations of the six hedges (1–6) near the site of the excavation, which were surveyed in August 1975 to establish the number of species present and hence to estimate when they were established.

1–2. Lane leading to Manor Farm from the south (SU 969 489 to 969 492). Mixed hedges with eleven species (ash, blackthorn, crab apple, elder, elm, field maple, hawthorn, hazel, privet, rose and sycamore). Eight 27.5m stretches were surveyed on each side of the lane and gave averages of 7.5 (east) and 5.5 (west). However, some stretches appear to have been disturbed and the central ones gave counts of nine (east) and eight (west).

3. Hedge alongside a footpath that leads from the A3 at the south-east to the north-east corner of the manor house site (SU 947 492 to 969 493). Mixed hedge with three species (elm, hawthorn and rose). The entire hedge (seventeen sections of 27.5m) was surveyed and the three species found in each section.

4–5. Lane leading north and then north-west from Manor Farm towards the north-east corner of Manor Copse (SU 968 493 to 967 496). Mixed hedges with eleven species (ash, blackthorn, buckthorn, crab apple, dogwood, elder, elm, field maple, hawthorn, oak and rose). Both hedges were surveyed in their entirety and gave averages of four (south-west) and 4.2 (north-east). However, some central sections gave an average of six species and this was fairly consistent for both sides of the lane.

6. Lane leading north to Blackwell Farm (SU 961 491 to 960 495), about 500m outside the west boundary of the park. Mixed hedge with eleven species (ash, buckthorn, crab apple, dogwood, field maple, hawthorn, hazel, privet, rose, spindle, wayfaring tree). A survey of the entire length of hedge gave an average of seven species but some central sections had nine. The west side of the lane was very sparsely hedged but included spindle. It is suggested that it

has never actually been hedged so that the area along the fence is being colonised rapidly with a selection of shrubs from the hedge on the east side.

The southern boundary of Guildford Park along the Hog's Back was also examined, but it was decided that the tree and shrub cover was too wide to be considered as a hedge.

Ideally, in order to use the above information for dating, at least ten hedges of known age in the same district should be surveyed to establish a local formula. This was not done, so that any dates deduced from the above information may be very unreliable. However, using Hooper's equation, $x = 110y + 30$ (Hooper 1971), where x is the age and y the number of species in a 30-yard (27.5m) length, it would appear that hedge 3 dates from the establishment of farms during the 17th century, hedges 4 and 5 seem to be rather earlier and hedges 1, 2 and 6 could date from about 1100 and therefore be associated with the establishment of the park (Gibson 1975, pers comm).

It is convenient to note here that the yew tree on the outer edge of the moat at the west of the site (fig 1c) was measured to be 3.7m in girth at 1.5m from the ground. This is consistent with an age of 500 years (Hartman 1972; pers comm).

BUILDING SURVEYS

During the August 1974 excavation, arrangements were made for members of the Domestic Buildings Research Group (Surrey), led by Joan Harding, to visit the site and record the adjacent farmhouse and barn. The present notes are based on their reports (Harding 1974; Harding & Blair 1974). An outline plan of the farmhouse is shown in figure 1c.

The farmhouse is a symmetrical brick building facing south, with a central porched entrance and front and back rooms at either side. The front room at the east is heated by a hearth with chimney stack within the room. The west rooms are heated from a central chimney that serves the parlour at the front and the kitchen behind. On initial inspection the house appears to be double-pile two-storey, with attics and a cellar under the east front room. There is a long range of service buildings at the back. The roof is hipped and tiled at the front. The east face shows a straight joint behind the front room and a lower extension of the hipped roof extending back. The west face shows that the original house had a single span roof, and there is a smaller parallel range at the back, with a roof that laps under the front roof, although on this face the brickwork is continuous.

The house is in fact Georgian, built around an earlier 17th century cottage. This was a two-bay timber-framed structure at the back on the west side, but all the wall framing has apparently been removed except for two main posts. The external walls at the north and west have been built up with brick to match the rest of the house. The roof is side-purlin and windbraces, with collars and queen struts on the three trusses, although the struts have been removed from the east truss. All three tie-beams are probably re-used. The central one is of good quality and has mortices and peg holes for a crown post in the upper surface and descending braces in the lower surface. The room partition at this truss is framed and apparently old; the position of a doorway in it is indicated by a rebate on the lower edge of the tie at the south end. Apart from the re-used material, the framing is not of very high quality; the purlins in particular are very rough. This was evidently a small cottage standing on its own and perhaps built soon after the manor house was demolished.

The second stage was the building of the rooms at the front and the relocation of the hearth of the old cottage. The stairs up are in the centre, facing the front door, with stairs down to the cellar beneath. A three-quarter dog-leg stair extends from the old building into the roof attic space, where the roof structure is butt purlin. Later, the rectangular plan of the present building was completed by adding rooms at the north-east. The lower walls

incorporate some 'Tudor' bricks. The windows have drip boards between the lower panes and the upper lights. The kitchen hearth has an unusual fireplace surround. There are some fine old lap-boarded doors with iron latches and hinges and a corner wall cupboard retains charming curved shelves. In the garden there is a well and a wheelwright's iron wheel-plate with a central hole for the boss.

The barn became unsafe in the late 1970s and was demolished. It was aligned east-west and stood 50m north-west of the farmhouse. It was a five-bay boarded barn with tiled gabled roof and aisles extending from collars. It had a central entrance from the south but the opposite exit had been blocked. The wall framing was slight, the upright main timbers being 9 inches wide. The braces up to the wall-plate and tie were curved downward. The end trusses had clasped purlins and the principal rafters finned above the purlin. There were three queen posts up to the collar. The two inner trusses had raking queen struts and long sinuous passing braces down from the tie and pegged at each point. These passing braces did not reach the ground and there were no mortices for them in the wall posts. The rafters were machine cut and new. The carpenters' assembly marks matched. They were deep cut and clear. The aisle-ties carpenters' marks matched in type the other marks throughout the barn. Altogether it was a puzzling structure.

Photographs of the exterior of the farmhouse and of the exterior and interior of the barn have been published elsewhere (Crocker 2005).

The excavations

INTRODUCTION

A feature of the excavations was that they provided training for over 100 people, most of whom had little or no previous experience of archaeology. However, several of these had conducted a substantial amount of academic research in other disciplines and this was invaluable. Also, there were a large number of young people whose enthusiasm, dedication and keen eyesight were greatly appreciated. The overall lack of experience and the need for expert advice required that the work be carried out very cautiously. The areas to be excavated were decided after consultations with George and Jo Weaver of Manor Farm. As far as possible, they did not want their garden features, including the tennis court, summerhouse, garden pond, trees and shrubs, to be disturbed.

The first season of excavations during 1972 was carried out on 28 days at weekends and bank holidays between 27 May and 16 December. The other three seasons were each continuous blocks of nine days' duration starting on 4 August 1973, 3 August 1974 and 26 July 1975. The general areas excavated are indicated in figure 1c. The main aim in 1972 was to investigate the fill of the moat at the western edge of the island. A trench was excavated across the moat and this fortuitously revealed interesting structures. It was therefore widened and extended a little on to the island. The 1973 season was mainly concerned with excavations near the north-west corner of the island and again interesting features were discovered. Therefore, in 1974 these excavations were extended to the north-east corner but a small area on the outer edge of the western side of the moat was also examined. The final season in 1975 was mainly aimed at clarifying the results of the previous three years, but a small new area near the south-east corner of the island was also excavated. Therefore, as a result of this work, information has been obtained about the moat at the western side of the island and the material deposited in it, about the use of the northern parts of the island and about the location of the south-east corner of the manor house. In this report, rather than give a chronological description of the work, it has been convenient to divide the presentation into four sections corresponding to the moat, the garderobe pits discovered, the foundations of the

main manor house buildings, and the workshops and other features at the north end of the island.

The excavations on the island were based on a 3m-square grid with its origin located at the south-west corner, as shown in figure 1c. Each square was given a two-letter code, the first giving units to the east and the second to the north. Thus square AA was at the south-west corner, AB immediately to its north and BA immediately to its east. If the island had been accurately rectangular there would have been 144 squares on a 9 x 16 grid with AP at the north-west corner, IA at the south-east and IP at the north-east. However, the north-east corner was rather rounded and in practice only 138 squares, with a total area of 1242m², were complete. Of these squares, 24 were selected for excavation. In these cases, in principle, 2.40m squares were excavated leaving 0.6m baulks. However, in many cases, because of the presence of trees and garden structures, many of these squares could only be excavated partially. Also, as the excavation proceeded, sections of baulks were sometimes removed when it was believed that key information would then be forthcoming. Baulks between two squares are represented by the codes for the squares separated by a hyphen. For example, that between BN and BO is denoted by BN-BO. In practice an area of about 103m² of the 216m² occupied by these 24 squares was excavated.

The remainder of the excavation was carried out in twelve trenches located relative to the same origin at the south-west corner of the island. Each trench was allocated, sequentially, a single letter code from A to J, with both B and H subdivided into two parts (B, B* and H, H*). Trench A, across the filled western side of the moat, was 9m long, 1m wide and divided into 1m squares numbered -1 at the east to +7 at the west. This system was also used for B and B*, which were parallel and adjacent to A. Four small trenches (C, D, H* and I) were also excavated on the west bank of the moat, averaging 2.3m² in area. The total area of this excavated part of the moat was 38m² out of about 300m² available. A further four trenches (E, F, G and H), with a total area of 14.6m², again out of about 300m², were excavated along the east bank of the moat and the final trench (J) at the north-east corner of the island. Baulks between a square and a trench or between two trenches are represented by the appropriate codes separated by a hyphen. For example, that between FO and J is denoted by FO-J and that between F and G by F-G. In order to avoid confusion between 3m squares in row O and the first 1m square west of the origin in trenches (0), the former was written as a lower case Greek phi; it has not been necessary to adopt this convention in the present report.

THE MOAT

This section describes excavations associated with the moat at the western side of the island. They include a trench across the moat to below natural water level, eight smaller trenches along the edges of the moat and one square on the island. An outline plan of these excavations is shown in figure 9 and a section across the moat in figure 10.

The earth resistance survey undertaken prior to the excavation (fig 5) had suggested that the dry western side of the moat was probably filled with building rubble from the manor house. It was therefore decided to excavate an east-west trench 1m wide and 9m long across the moat to test this hypothesis and to determine the depth of the moat and the nature of its retaining walls. The most convenient location for this trench, allocated the letter A, proved to be between 31.7 and 32.7m north of the origin at the south-west corner of the island. This meant that its northern edge was aligned with the north edge of a possible later excavation of AK. Initially the trench was taken down, mainly through loose mortar, flints and broken tiles until water was reached at a depth of about 1.80m from the surface (fig 10). This was the current water level in the moat at the northern end of the island. The top of the outer

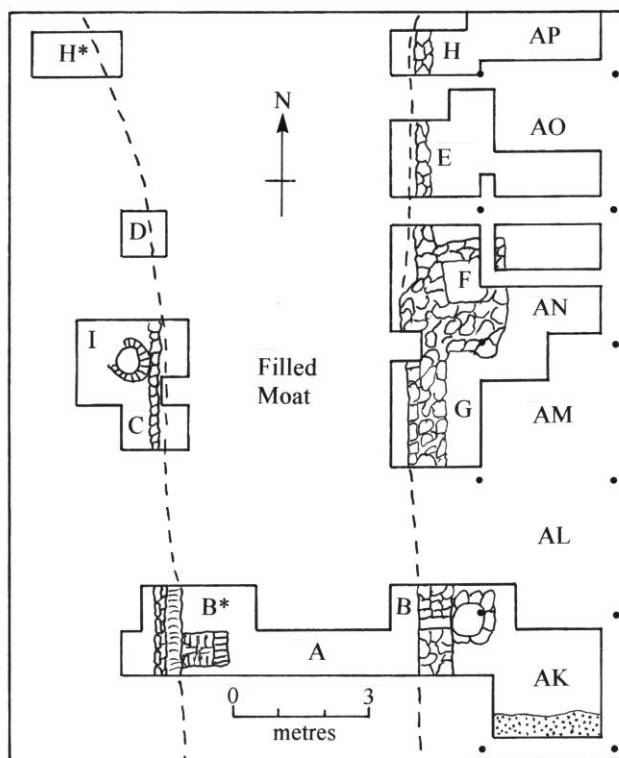


Fig 9 Guildford Park Manor. Outline plan of the excavations associated with the moat and the three garderobe pits at the west of the island. The broken lines show, approximately, the edges of the filled moat as indicated by surface features. The array of dots at the right defines the locations of AK to AP into which this part of the island was divided. The shaded area in AK represents a robber trench. Features discovered in the other squares are indicated in figure 20.

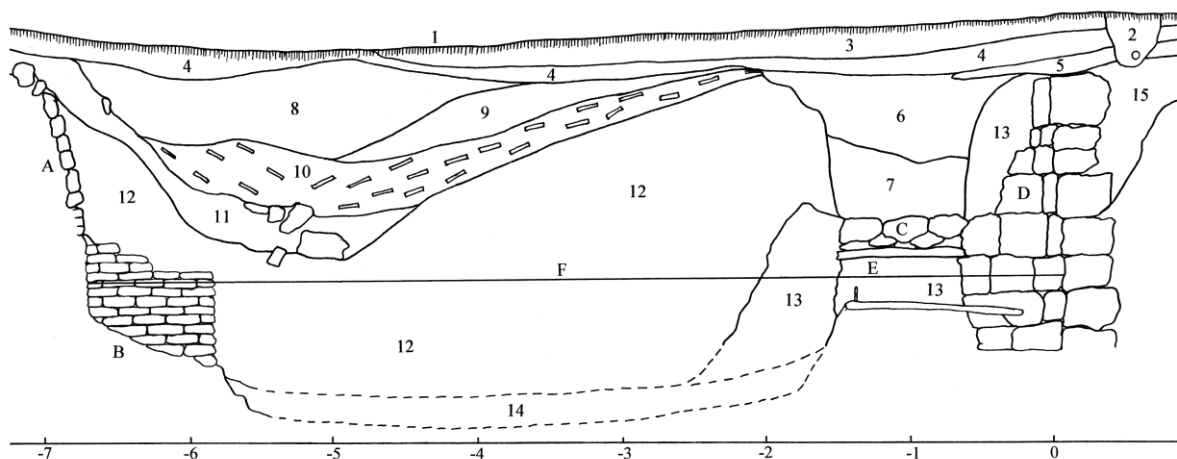


Fig 10 Guildford Park Manor. Simplified section, looking north, of the western side of the moat, showing features and levels revealed in A, B and B*, approximately 32m north of the origin at the south-west corner of the island. The letters indicate: A. Revetment wall, B. Brick pier, C. Foundations of manor house wall, D. Garderobe pit, E. Garderobe pit drain, F. Water level. Descriptions of the numbered levels are as follows: 1. Turf, 2. Modern trench (taking a water pipe to the garden pond), 3. Light grey fill, 4. Black topsoil, 5. Black soil with fine tile fragments, flints and chalk (possibly floor around the garderobe), 6. Black topsoil with small tile fragments and flints (upper part of robber trench), 7. Mortar and soil mixed (lower part of robber trench), 8. Dark brown soil with small flints and tile fragments, 9. Chalk, flint and tile, 10. Tiles, 11. Clay, flints, chalk, bricks and stone, 12. Mortar, tiles bricks and chalk, 13. Dark soil (fill of garderobe pit), 14. Silt, 15. Clay and tiles (possibly construction trench for garderobe pit). The axis below the section is marked in metres west of the origin.

revetment wall was revealed at a depth of only 0.20m. It consisted mainly of chalk rubble but also contained flint and stone and a large amount of mortar. The inner wall had been robbed to a depth of about 1.3m but the footings were substantial, being about 0.8m wide and of good quality stone and chalk. Clearly, they carried an outside wall of the manor house in addition to acting as a retaining wall of the moat. The positions of these walls indicated that the moat was about 5.5m wide at this position, whereas the surface features suggested that it might be about 8m wide. Unfortunately, because of the nature of the fill, the sides of the trench were rather unstable, so it was decided not to attempt to excavate the central part of the moat below water level.

The excavation confirmed that the content of the moat was indeed mainly building rubble. An indication of the proportions of the different materials involved, measured in buckets, is roughly as follows: flint 50%, tile fragments 36%, brick fragments 6%, chalk 5%, stone 3%. There were also some fragments of window glass and, from below water level, pieces of timber, one of which was about 0.8m in length. This material was packed in a large quantity of loose mortar and some mortar was also attached to the flints, bricks, tiles and stone. The shape of some of the mortar on the bricks indicated that they had originally been bonded to flints and some of the bricks were still attached to small pieces of timber. Thus, not surprisingly, it appears that the manor house was a complex structure embodying, at the end of its life, a wide range of building materials. From the lie of the tiles (fig 10) it was clear that most of the rubble had been tipped into the moat from the island and a few sherds of pottery indicated that this had occurred during the early 17th century. However, some rubble had clearly been tipped from the western side of the moat. The fill also contained many animal bones including those of deer, cows, pigs, sheep or goats, horses, rabbits and poultry, a large number of oyster and mussel shells and, very appropriately, some antlers. The robbing of the inner moat wall post-dated the filling of the moat.

The moat was not completely filled by the building rubble, a ditch about 0.8m deep remaining towards the outer edge (fig 10). This ditch was subsequently filled with rubbish, presumably from the farmhouse, and produced some interesting finds. These included 65 sherds of local late 17th century slipware platters between 0.30 and 0.46m in diameter, fragments of late 17th or early 18th century wine bottles, eleven articulating sherds of a white earthenware pot, probably made in Staffordshire in about 1770 and decorated in blue with a raised 'GR' cipher, and six sherds of brown stoneware jars, one of which has the cipher 'WR' surmounted by a crown stamped on the outside. There was also Victorian ornamental china, including three-quarters of a blue-and-white eggcup, a small but complete creamy-white candlestick, a complete small white pot, possibly from a condiments set, and the neck of a small elaborate cream-coloured vase.

At the western end of A, the top of a structure built of thin 'Tudor' bricks was discovered projecting from the outer revetment wall just above water level. This part of the trench was therefore widened to 2m on the north side and, by pumping out the water, which poured continuously through the wall from the wet part of the moat at the north end of the island, excavated to a depth of about 2.50m. The extension is labelled B* in figure 9. The abutment or pier proved to be 0.65m or ten courses of bricks deep, 0.73m wide and to project 0.95m from the revetment wall, which extended 1.70m above its top. The bonding was English and the structure clearly post-dated the wall (fig 10). It was originally higher and had presumably been robbed to the water level of the moat, which suggests that this level has not changed since the early 17th century. The bricks were typically 23 x 11 x 5cm and a rich red colour. In front of the abutment, the silt of the moat was reached at a depth of 2.40m and a test with an auger indicated that the silt was about 0.35m thick. A photograph of the abutment taken when the water in the trench was being pumped away is shown in figure 11.



Fig 11 Guildford Park Manor. Photograph of the 'Tudor' brick abutment or pier projecting from the revetment wall at the west end of A and B*, taken while water was being pumped away.

At the eastern or island end of A, a structure built of blocks of chalk was found projecting from its north face. This part of the trench was therefore widened to 2m on the north side, the extension being labelled B. The structure turned out to be a garderobe pit and this will be described in the next section. However, the extension also provided further information about the moat wall. This was again robbed to a depth of 1.3m and the foundations were about 0.8m wide, but the outer face retained the remains of three courses of thin brick facing.

Trench A was also extended, as shown in figure 9, on to the island in order to investigate the possible existence of an embankment pre-dating the construction of the wall and garderobe pit. This extension was in fact AK and a 2.40m square was excavated down to apparently undisturbed Reading Beds clay, which was met at a depth of about 0.8m. No well-defined structural features were discovered, but there was evidence of a robber trench 0.8m below the surface running along the southern edge of the square. Beneath this were two pits, about 0.2m deep and 0.5m across, one of which contained a single block of chalk – possibly a relic of an early structure. On the north side there was evidence of the remains of a clay embankment, about 2m wide and 0.20m high, 0.5m below the surface, but this could have been associated with the construction of the garderobe. The finds included two small poison bottles.

Further small trenches were excavated on each side of the moat north of A in order to provide more information on the alignment and structure of the retaining walls. In the plan of figure 9, these are labelled C, I, D and H* on the west or farmhouse side and G, F, E and H on the east or island side. Considering the west side first, about 9m² was excavated. In C, which was 5m north of A, the top of the revetment wall was found at a depth of 0.2m. However, it was not present at this depth in D or at a depth of 0.5m in H*, which were 9.3 and 13.3m

north of A respectively. A small trench I was then excavated adjacent to and north of C and the top of the revetment wall was again found at a depth of 0.2m. Some bricks were also partially uncovered at its northern edge. Trench I was therefore extended northwards, as shown in figure 9, and revealed that the bricks formed part of the approximately circular rim of a garderobe pit. Its structure will be described in the next section.

The four trenches, G, F, E and H, on the east side of the moat, covered 14.6m² and all revealed features of the retaining wall of the moat. This, as shown on the plan of figure 9, continues its alignment in A and B described above. In F, about 8m north of A, it narrowed from about 0.8 to 0.5m and then, after a further 1m, it narrowed again to 0.3m. Assuming that the thicker foundations supported a wall of the manor house, this suggested that gardens and outbuildings, rather than a substantial building, occupied the northern end of the island. The thicker wall had been robbed to an average depth of about 1m but the top of the narrow wall was only about 0.2m below the surface. In F, what appeared to be an approximately square garderobe pit was discovered and excavated. Again its structure will be described in the next section.

THE GARDEROBE PITS

During the excavations of the moat and its retaining walls described above, three rubbish/latrine garderobe pits were discovered. These are shown on the plan of figure 9. Garderobe 1 was the structure built of chalk blocks discovered at the eastern end of A and revealed fully in B (fig 12). It was of circular cross-section, 0.75m in diameter, 1.7m deep, and adjoined the island side of the moat wall. Again, water had to be pumped continuously in order to investigate it fully. The base was constructed of thin bricks and wood, part of which had decayed, showing a chalk floor beneath. The wood was part of a plank that also formed the base of a drain running through the footings of the moat wall. This drain was 30cm high and tapered from about 10cm wide at the inner or garderobe end to 24cm at the outer or moat



Fig 12 Guildford Park Manor. Photograph looking downwards from the west into garderobe pit 1, excavated at the edge of the island in A and B. Note the circular pit constructed of chalk blocks at the top, the robbed manor house wall across the centre and the outlet of the drain, together with the top of the iron plate at its outer end, at the bottom of the photograph. The water of the moat is present in the foreground and inside the pit.

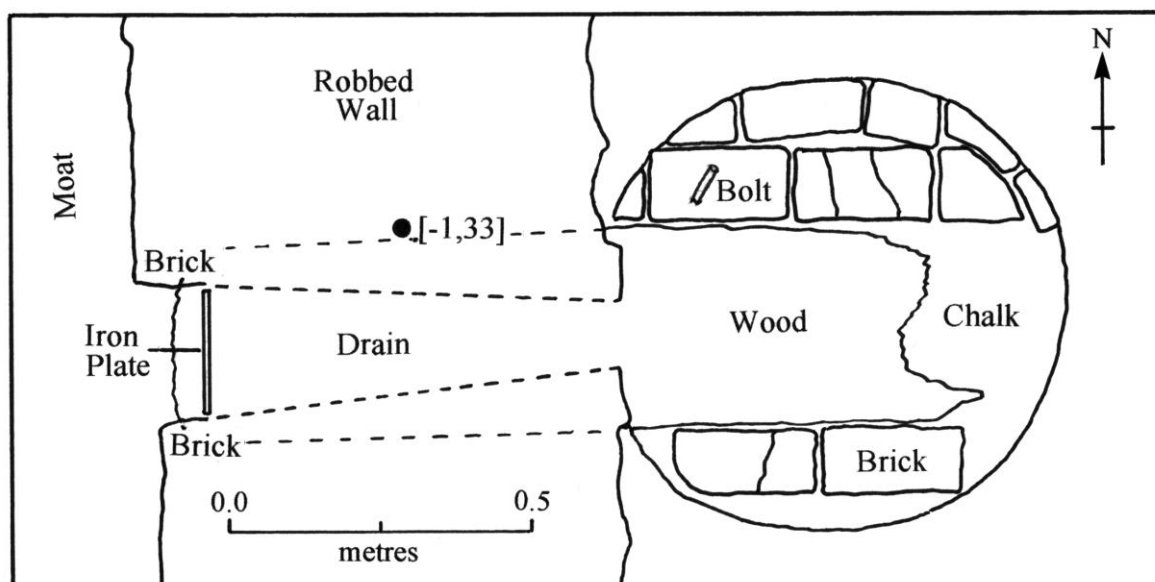


Fig 13 Guildford Park Manor. Plan of the base of garderobe pit 1 and its drain in A and B. The point with co-ordinates [-1, 33] relative to the site origin is marked.

end. Its walls were of thin bricks standing on the edges of the plank and it was capped with stone. Near the outer end, 70cm from the garderobe, the drain was partially closed by an iron plate. A plan of the base and the drain is shown in figure 13, and an elevation of the outlet of the drain in figure 14. The garderobe itself was constructed of seven courses of chalk blocks beautifully finished on the inner faces to provide a smooth surface. Slightly over one-half of the perimeter of the top of the pit, which was 30cm below the turf, had been destroyed by the robber trench associated with the moat wall. The lower half of the pit was complete.

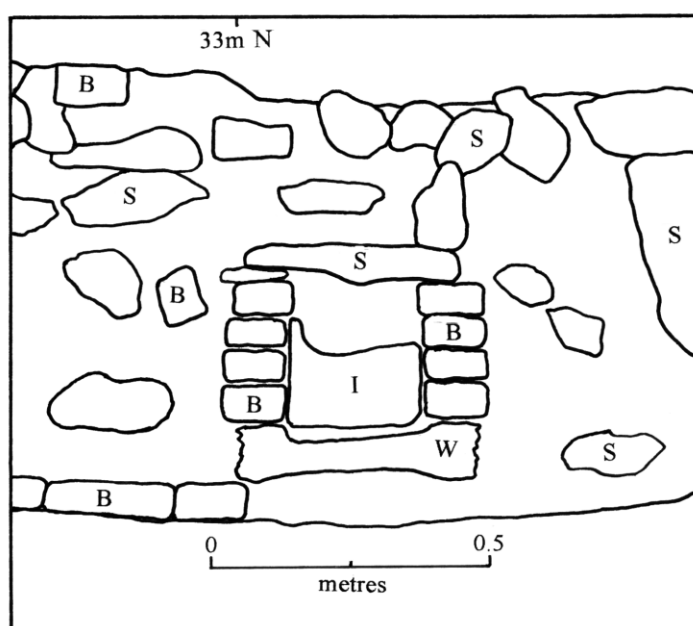


Fig 14 Guildford Park Manor. Elevation of the outlet of the drain of garderobe pit 1 in B. The section is on average 1.4m west of the origin at the south-west corner of the island; 33m north of the origin is marked at the top of the figure. The letters B, I, S and W indicate Brick, Iron, Stone and Wood respectively. The rest of the foundations of the wall were stone covered with mortar.

The garderobe contained rich black soil and a fascinating range of finds dating from the early 16th century. These included large sherds of German stoneware mugs, fragments of a large fossil that had apparently been used as an ornament, a delicate Tudor green cup handle, painted but very decayed window glass presumably made in the Weald, together with some well-preserved imported glass, a block of chalk 17cm long crudely carved in the form of an animal's head (perhaps a bear), some brass pins and a brass button, a triangular piece of lead measuring 10 x 5cm engraved with what appears to be a four-legged eagle, and over one-half of an unusual Renaissance brown earthenware jar or jug 16cm tall, probably manufactured in Northern Italy, and decorated with cream, green and purple slip. This last fill of the pit had taken place within a short period of time almost 100 years before the manor house was demolished and had been sealed with two flagstones shaped to fit the circular hole but which had later settled into the decayed rubbish below.

Garderobe 2, a square pit about 1m across, was discovered in F where the foundations of the moat retaining wall narrow from 80 to 50cm. It was excavated to a depth of about 1.5m, corresponding to the water level in the adjacent moat. It had walls constructed largely of blocks of chalk. Although it appears to have been a garderobe pit, it was not excavated below water level and no drain into the moat was discovered. The upper part contained a 60cm layer of charcoal surmounted by a crude horizontal flue constructed from a double row of five stones about 80cm long and 30cm wide with a central channel about 5cm wide. Several splashes of lead were associated with this hearth and also a block of Bargate stone that had been fired to a rich pink colour. A plan of this hearth and of some of the upper walls of the garderobe pit is shown in figure 15. Pottery dated the pit to the 13th century, and three late 15th century French jettons and a blue-on-white tin-glazed maiolica tile were found in the charcoal beneath the hearth. Pottery associated with the hearth itself indicates that it dates from the early 16th century. The walls surrounding the pit extended into AM and AN, parts of which were excavated, and into pit G. Appropriate sections of AM-AN, AM-G and AN-F were also removed, as shown in figure 9, and revealed that the south wall was about 1.1m thick and the north and east walls about 50cm.

Garderobe 3 was in I, on the farmhouse side of the moat revetment wall (fig 9). At first a semicircular arrangement of 'Tudor' bricks was uncovered, so the trench was extended to reveal this feature fully. It proved to be a pit of circular cross-section, about 80cm in diameter and 1.8m deep. The top 80cm was constructed mainly of bricks and the lower part of chalk blocks, suggesting that it had been rebuilt. Again, the bottom 30cm was flooded and the water had to be pumped away continuously. The whole of the base was constructed of chalk blocks with an east-west trough across the centre leading to a brick drain through the wall. This was about 35cm wide and 0.20m high. A photograph looking down into this pit when it was being pumped is shown in figure 16. It was last filled in the early 16th century and contained large quantities of animal bones, teeth, antlers and shells. Its location suggests that it served buildings on the west side of the moat, possibly those indicated by high resistivity readings in figure 7.

THE MANOR HOUSE

It was not the intention of the excavation to investigate the manor house in detail but some information was obtained and this section reports the results. As shown in figure 9 and discussed above, the excavation of the inner retaining wall of the moat revealed about 8.5m of substantial foundations that are considered to represent the northern part of the west wall of the house. The earth resistance surveys give an indication of where some of the other walls may have been located. That of the whole island plotted in figure 6 has high values,

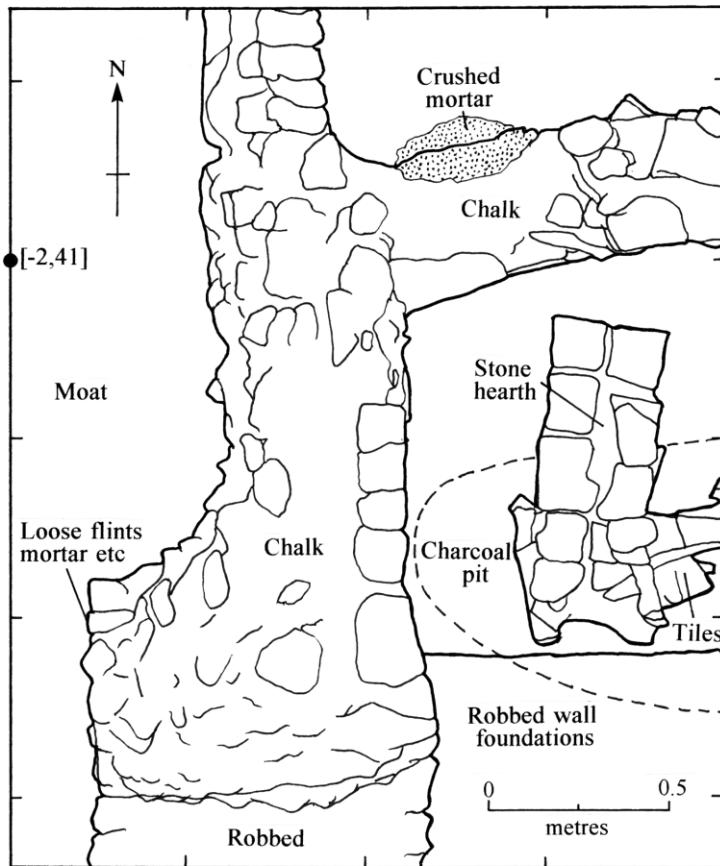


Fig 15 Guildford Park Manor. Plan of the upper walls of part of garderobe pit 2 and of the later hearth in F. The point with co-ordinates [-2, 41] relative to the site origin is marked.



Fig 16 Guildford Park Manor. Photograph, from the west, looking downwards into garderobe pit 3 in I. This was taken while water was being pumped away and reveals the base of the pit and, towards the top of the photograph, the entrance to the drain into the moat.

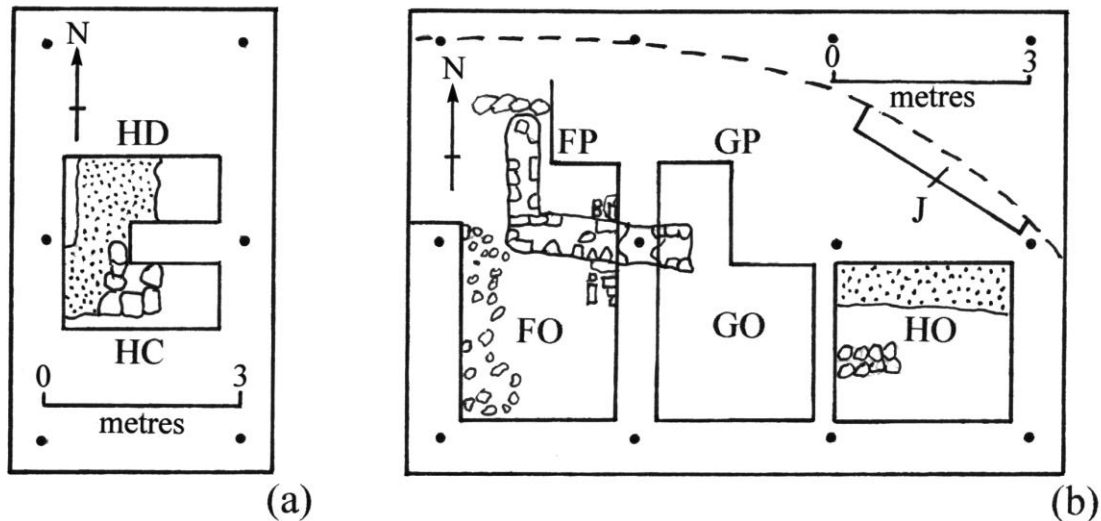


Fig 17 Guildford Park Manor. Outline plan of the excavations at (a) the south-east corner of the island and (b) the north-east corner of the island. In (a) the partially robbed foundations of the south-east corner of the manor house are revealed. In (b) substantial wall foundations in FO and GO continue as a robber trench in HO. A drain of 'Tudor' bricks passes underneath this wall in FO-FP and the remains of an early medieval wall are shown in HO.

suggesting wall foundations, in a rectangular area towards the south-east of the island. The corners of this rectangle are in FC, HC, HF and FF. It may be tempting to think that the high values surrounding low values in GI indicate an extension of the east range of buildings to the north. Unfortunately, however, the low values correspond to the 20th century summerhouse and the high values could indicate the foundations of this. On the other hand, the preliminary earth resistance traverse of figure 5 indicated a possible north-south robber trench in HK. This suggests that the east wall of the house extended at least 24m northwards from HC, but there is no indication of this in figure 6. There are, however, high readings near the north-east corner of figure 6, so it is possible that the east range extended to this corner of the island. There are also high readings in CA, DA and CC that could represent the foundations of a gatehouse projecting from the south wall of the house. Indeed, high values on the southern edge of the moat, opposite this feature, are in the appropriate position for the abutments of a bridge leading to such a gatehouse.

These observations suggest that a corner of the manor house could be in HC and therefore parts of HC, HD and HC-HD were excavated, as shown in figure 17a. The partially robbed foundations of the corner of a substantial wall, about 1.0m wide, were indeed found at a depth of about 50cm. These are illustrated in the photograph of figure 18. About 40 fragments of mixed pottery were found including unglazed gritty, sandy and shell-tempered wares, green-glazed cooking vessels and cups, heavy transparent lead-glazed ware and Victorian willow pattern china. More significant perhaps were more than 50 fragments of decorated Penn floor tiles, a small piece of a blue-on-white, tin-glazed, maiolica floor tile, 143 pieces of window glass, some of which were decorated, and several lengths of came (lead glazing bar). There were also 37 nails, seven iron hooks, an iron ring 2.3cm in diameter, a horse-shoe-shaped heel plate, a slightly curved brass pin, a button, a bone from a goat or sheep and a small horn. Unfortunately, the robber trenches had left the ground severely disturbed and most of these finds were not stratified. It appears, however, that this part of the site had been occupied from the late 12th century and that it had housed a royal chamber with glazed windows.



Fig 18 Guildford Park Manor. Photograph, looking north, of the foundations of the south-east corner of the manor house in HC, in the foreground, and a section of the corresponding robber trench in HD, in the background.

Three squares, FO, GO and HO, parts of FP and GP, FO–FP and GO–GP and J were also excavated near the north-east corner of the island. The area investigated amounted to about 22.5m² and is shown in figure 17b. In the north-west corner of GO and along much of the north section of FO part of a substantial east–west wall was revealed about 10cm beneath the surface. The excavation was therefore extended northwards into FP and GP and the wall was found to be about 3m long and 60cm wide. It was constructed from flint with some thin bricks, was about 40cm high and stood on a foundation of chalk blocks, about 25cm deep and 70cm wide. A photograph of this wall is shown in figure 19. A complete, as new, mid-14th



Fig 19 Guildford Park Manor. Photograph of the west parts of GO and GP and GO–GP showing the flint wall on chalk foundations.

century Penn tile was associated with the wall. This gave rise to the suggestion that the building may have been the chapel, which documentary evidence states was being built at the manor in 1369. However, the thin bricks used in its construction and a brick drain passing beneath it from the north-east corner of FO to the south-east corner of FP (fig 17b) indicate that it was later and the tiles must have been from an earlier building.

In HO, closer to the north-east corner of the island, an east–west robber trench continued the alignment of the above flint wall. The foundations of this wall cut into a clay embankment, again about 30cm high, along the edge of the island. Beneath this, in the original topsoil, the remains of an early medieval wall were found at a depth of 90cm. Much of this part of the island was disturbed by a complex of post-medieval and later rubbish pits. There were many broken floor and roof tiles and much charcoal.

The excavation of J, north of HO in figure 17b, was intended to investigate the structure of the moat wall at the north-east corner of the island. The wall was very decayed but it was concluded that it was essentially a chalk core faced with flint. The finds included pottery, much of it modern, glass, roof and floor tiles, bricks and stone. Two of the tiles were complete but very worn mid-14th century Penn tiles. One of these had the legend SIGNUM SCE CRUCIS, again suggesting they came from the 1369 chapel.

GARDEN FEATURES AND OUTBUILDINGS

As indicated above, the main buildings of the manor house did not in general extend to the northern edge of the island. In particular, it has been noted that at the west side of the island, the foundations of the revetment wall of the moat narrow from about 1m to 80cm and then to 30cm in F (figs 9 and 15). As shown in figure 6, this is roughly in alignment with high resistivity readings for BM–BN, DM–DN and EM–EN, which could indicate that the north wall of the house crossed the island along this line. As far as possible, this part of the island was excavated, but unfortunately CM–CN was not available because it coincided with the modern garden pond. In practice, the features discovered were more complex than anticipated. Indeed, much of the northern part of the site appears to have been occupied by pavements, surface drains and workshops. However, these had been greatly disturbed by robber trenches, rubbish pits, building rubble, the roots of ornamental trees and the garden pond with its supply and drainage pipes. Eighteen squares were excavated fully or partially on this part of the island (fig 20), and the features discovered extended into some of the squares and trenches shown in figures 9 and 17. In all, an area of about 80m² was excavated.

A 1.2m-deep east–west robber trench, filled with mortar and chalk blocks, was excavated in EM. In the adjacent DM, the waterlogged chalk foundations of a wall 0.5m high were found at the bottom of a robber trench 1.4m deep. It is considered that these features mark the north wall of the manor house. The foundations of an east–west, flint-faced wall about 1.6m long, 40cm high and 50cm wide, were found about 30cm below the surface in BN. Immediately to the north of this was a layer of mortar and flints about 1.7m wide that appeared to be the foundations of a garden pavement.

Immediately south of the robber trench in DM was a pit 1.8m deep containing much wood ash and late 13th century pottery. This could have been associated with a baked clay hearth with related stakeholes and much pottery dating from the early 13th century in the north-east corner of BM and the south-west corner of CN. Unfortunately, the full extent of the hearth could not be investigated because of the presence of the modern garden pond. This was circular, 4.5m in diameter, 50cm deep and cement lined. It covered CM completely, about one-half of DM and smaller parts of CN and DN (fig 20). The rim of a shell-tempered cooking pot was found in CN.

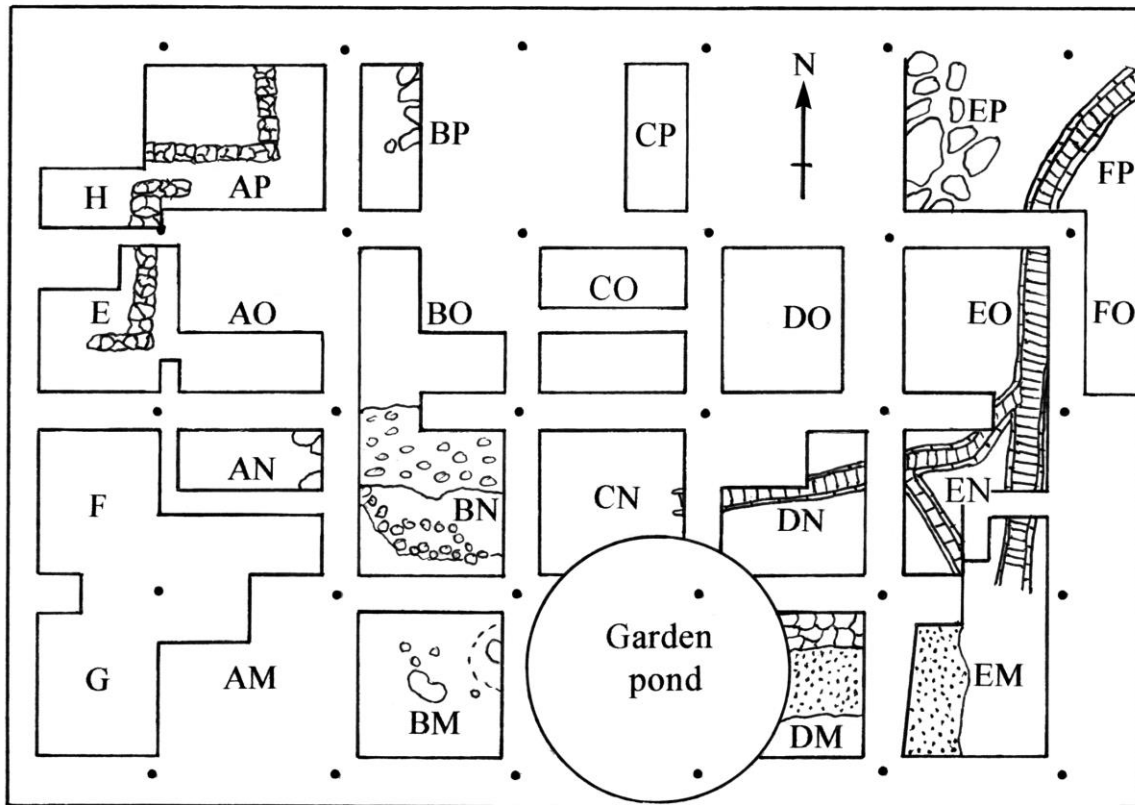


Fig 20 Guildford Park Manor. Outline plan of the excavations at the north of the island. The features shown are discussed in detail in the text but note particularly the network of brick drains at the right, the foundations of buildings at the top left and the remains of a pavement at the top.



Fig 21 Guildford Park Manor. Photograph, looking south, of the junction between two brick drains which meet in EO.

In CN, DN, EN, EO, EP and FP and EM–EN, EN–EO and EP–FP were found approximately 18m of interconnecting open drains, about 50cm below the surface. These were constructed from thin ‘Tudor’ bricks laid across or along the bottom and, in two courses, lengthwise along the sides. The channels were of rectangular cross-section from 5 to 10cm deep and from 14 to 20cm in width. Pottery found above and below these drains suggests that they were laid in the early 16th century. A photograph including one of the junctions is shown in figure 21. The drains discharged through a single channel into the moat at the north end of the island, 16m from the north-west corner. They commence about 9m south of this, near the robber trench in EM.

Near the north-west corner of the island, in E and H, about 3.5m of irregular chalk foundations of a late medieval wall were found, aligned mainly north–south. In order to interpret these, parts of the adjacent AO and AP and AO–E and AP–H were also excavated. As indicated in figure 20, this revealed that the wall was in all about 5m long. In addition, closer to the north-west corner of the island, in AP and AP–H, the stone foundations of what was probably a small, early 13th century, timber building were discovered. It measured about 2.5 x 1.5m. The finds associated with these structures demonstrate that this part of the island was occupied from the early 13th to the late 16th century. In particular, part of the rim of a cooking pot with a piece of the handle attached was found in AO. The sherd is of brown fabric with a few splashes of green glaze on the exterior. Part of the rim of a second cooking pot of grey fabric was also found in this square. In general on this part of the site the natural Reading Beds clay was reached at a depth of approximately 1.1m.

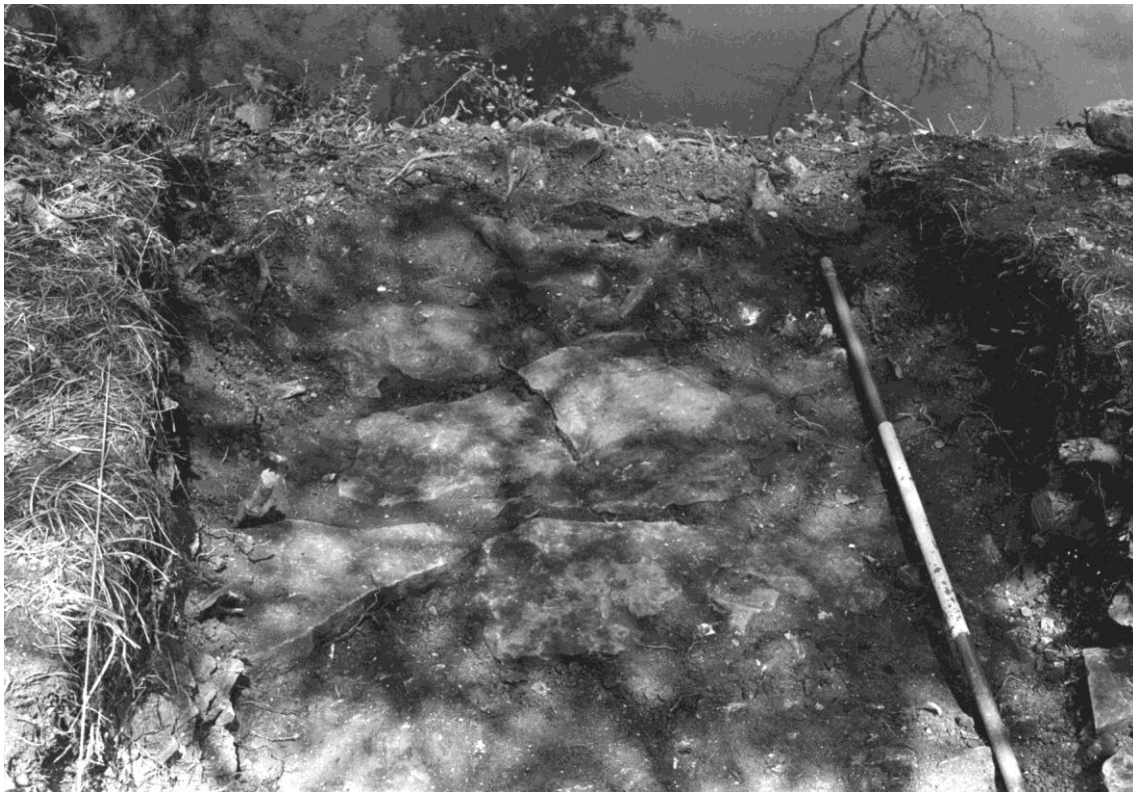


Fig 22 Guildford Park Manor. Photograph of the section of Horsham Stone pavement in EP at the northern edge of the island. Reflections of trees on the opposite side of the moat can be seen in the water at the top of the photograph.

An area paved with twelve slabs of Horsham stone was discovered at a depth of 50cm in the western half of EP, covering an area of 2.4m². Several similar slabs, but rather disturbed by tree roots, were also found 9m farther west in BP. This suggested that there was a paved path along the moat edge. However, there was no evidence of this in the east of CP. A photograph of the stones in EP is shown in figure 22. Underneath these slabs was found the remains of a clay embankment about 30cm high, presumably cast up from the moat. Beneath this was the original topsoil and undisturbed clay. Two groats of the second reign of Edward IV, dating from about 1473, were found in the topsoil about 1.5m apart, one in CP and the other in CO. Also in CO was found part of another badly worn mid-14th century Penn tile with the inscription SIGNUM SC'E CRUCIS.

It may be of interest to note here that no evidence was found of water or particularly wet deposits at the sites where high responses were recorded during the water-divining survey of the site.

The finds

INTRODUCTION

At the start of the excavations in 1972, the following four-part code was adopted for marking finds. The first part was the site code GPM, denoting 'Guildford Park Manor'. This was followed by an area code consisting of two digits within a circle. For trenches, the first digit was the letter designating the trench and the second was a number defining a part of the trench. For example, A5 stood for the fifth square metre west of the site origin in A. For squares, the two digits were the two letters defining the 3m square. For example, AK was used for the square at the eastern end of A. The third element was the level code consisting of an integer defining the stratum level or the day. Finally, after an oblique stroke, came the find code specifying the find uniquely. This was an integer, the first digit classifying the find as follows: 0 – pottery, 1 – glass, 2 – metal, 3 – bones, 4 – building material, 5 – other. The remainder of the integer then gave the sequence in which the find had been discovered.

This scheme worked well in 1972 when the excavation was conducted over 28 days between May and December and was largely concerned with building rubble and farmhouse waste in two linked trenches, A and B, across the moat. However, the excavations in 1973–5 were concentrated into blocks of nine days and much of the work involved squares on the island. The *level code* was therefore restricted to defining the stratum. Also it was decided that it was unnecessary to classify the *find code* but simply use it for the sequence.

In this section, reports on the finds will be given in the following order: pottery, building materials, small finds, animal bones. It should also be mentioned that many soil samples were taken during the excavations and retained. These have not been analysed but they are included in the archaeological archive (see Appendix).

POTTERY

Many types of pottery were discovered during the excavations, including shell-tempered ware, redware and whiteware storage and cooking vessels, fine green-glazed ware, Beauvais ware, Renaissance ware, stoneware, slipware and Victorian china. These are described in the following separate sections.

Shell-tempered ware

Large amounts of shell-tempered coarseware, which is considered to have been made until the second half of the 13th century (Jones 2005, 46), was found on the site. For example, about

30 sherds were found in CN, varying in thickness from 4 to 11mm. They included four rim-sherds from vessels with bodies about 40, 35, 30 and 25cm in diameter. The rim of the first of these would have been about 31cm in diameter and is illustrated in figure 23a. About 80 sherds, some from very large vessels, one with an applied finger-impressed strip decoration (fig 23b) and two rim sherds, were found in BM. One of these rim sherds (fig 23c) indicated a rim diameter of 25cm. Small sherds were also found in AP(4), HD(c30), GO(5), HO(c50), AK(6), AN(1), AP(21), CO(2), DN(1), EM(1) and EP(2). There were also several sherds typically 25mm across and 6mm thick from G. Much of this shell-tempered ware had sandy fabric the two surfaces being oxidised, reduced or mixed.

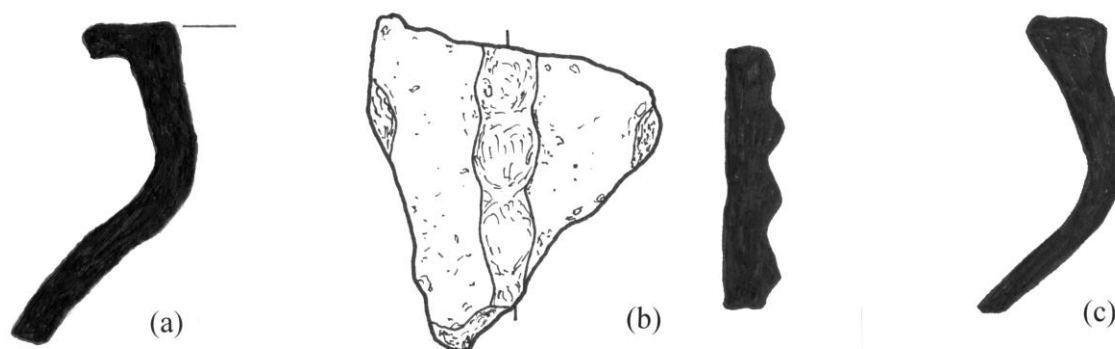


Fig 23 Guildford Park Manor. Shell-tempered ware. (a) Cooking pot, 33cm in diameter at the rim, from CN. (b) Body sherd, 54mm across, with an applied finger-impressed decorative strip from BM and (c) cooking pot, 25cm in diameter at the rim, from BM.

Redware storage and cooking vessels

Again, large numbers of sherds of redware were found, particularly at the northern end of the island, and a few of the most striking vessels are described in this section. For example, 46 sherds (about one-half of the surface) of a large decorated cooking pot (fig 24a) about 36cm maximum diameter, 23cm across the top, and at least 25cm but probably about 35cm in height, were found in EN, plus two of the same vessel in CN, three in CO one in EO, one in EP and one in GO. The fabric is of smooth pale-brown clay but the core and much of the surface has oxidised to dark grey. Much of it is about 6mm thick but it thins in places to only 4mm. The lower part of the body has been smoothed, presumably with a knife, using near-vertical strokes. The decoration consists of a band about 9.5cm deep around the neck. It has a pale colour, varying from fawn to pinky-white and appears to have been painted on the surface. It consists of four horizontal bands, the top three about 5mm and the bottom one varying from 1 to 4mm wide, three wavy bands about 4mm wide and a central design consisting of a rough circle with a superimposed tapering diagonal cross, as shown in the figure. In one place, just below the decorative band, there is an inward-facing bulge about 7.5cm across and 4mm deep. Jeremy Haslam suggested that the vessel dates from about 1450 and was perhaps made in Kent. Eighteen sherds of what appears to have been a red bowl, 0.42m in diameter, about 12cm deep and with 8mm thick walls at a slope of about 40° to the horizontal were also found in EN (fig 24b). The fabric was orangey-red and the lower parts of the inside, amounting to about 75% were lightly lead-glazed.

Fifteen joining sherds of a cooking dish, 36cm in diameter at the top and 24cm across the base, were found in DP (fig 24c). It has a sagging base that increases the height from 12 to about 14.5cm. The fabric is gritty and fawn-coloured and there is a greeny-brown glaze on the inside of the base. Thirty-three sherds, including about one-half of the rim, of a storage pot, 37cm maximum diameter, 24cm across the top and probably about 33cm in height were also

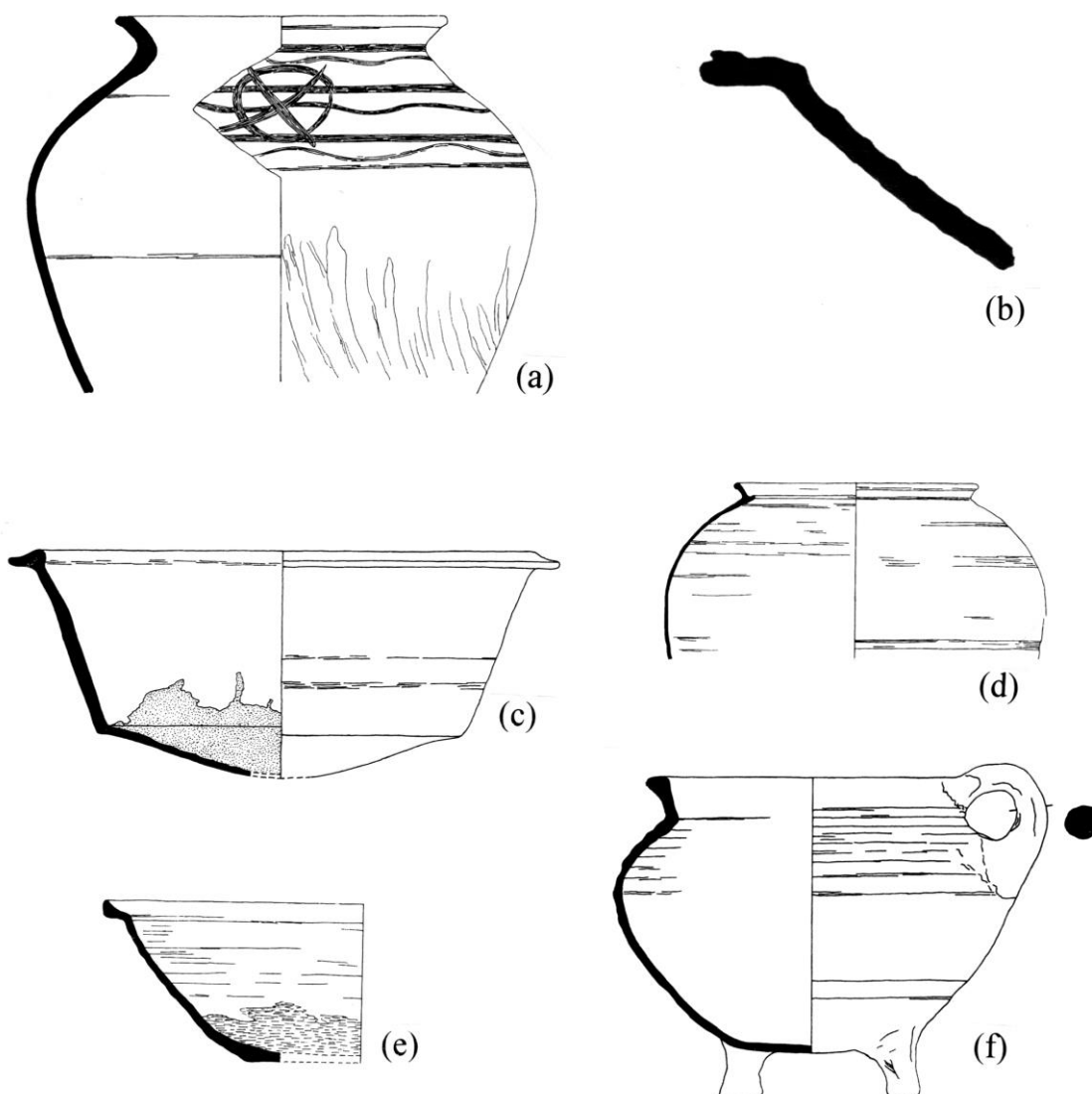


Fig 24 Guildford Park Manor. Redware. (a) Storage pot from EN of smooth light-brown fabric, with a paler decoration around the neck of maximum diameter is 36cm. (b) Section of the rim and upper wall of a redware dish 42cm in diameter and about 12cm deep from EN. (c) Cooking dish of gritty, fawn-coloured fabric, 36cm in diameter and with green-brown glaze on the inside of its sagging base, from DP. (d) Storage vessel 37cm maximum diameter from DP. (e) Cooking dish 0.50m in diameter and 15.5cm deep from F. (f) Tripod pipkin, 20cm maximum diameter, of an orange-brown fabric with plain-chocolate glaze from F.

found in DP (fig 24d). The fabric is slightly gritty, the surface being pale orangey-brown and the core consistently light grey. The walls are remarkably thin, about 3.3mm, and it is estimated that the complete vessel would have weighed less than 2kg. One sherd of a very similar fabric but about 5.3mm thick with most of one surface almost covered with an olive-green glaze was found nearby. It has not been possible to link this positively with the storage pot although the possibility of it being part the base or of a lid was considered.

Three large joining sherds of a cooking dish, 50cm in diameter and 15.5cm deep, was found in F (fig 24e). The fabric is uniformly orangey-red and the inside base and lower walls have a dark brown glaze. It is a heavy vessel and when complete would have weighed about 4.5kg. Over one-half of an orange/brown fabric, plain chocolate glazed, tripod pipkin of 20cm

maximum diameter, was found in association with the hearth in F (fig 24f). John Hurst considered that it was probably early 16th century Dutch, the sagging base and pinched handle being characteristic. However, Jeremy Haslam felt that it is more likely to be English than Dutch. Two red fabric pipkin feet, one with brown glaze the other with dark green, were also found in EO. Four green-glazed joining grey/brown sherds from the flat circular base of a cooking vessel at least 20cm in diameter and 5mm thick were found in CN. In G the upper part of the handle of a reddish-brown earthenware jug was found. It is attached to a small section of the rim which was 0.10m in diameter and splashed with patches of lead glaze.

Whiteware storage and cooking vessels

Clay from Reading Beds with little iron results in a cream or white fabric and this was often coated with lead glaze coloured green from copper additions. It was used from c 1250 to c 1600 (Pearce & Vince 1988). In this section, storage and cooking vessels of this type are described and fine green-glazed ware, including Tudor cups, are covered in the next section.

A large handle attached to small sections of the rim and the body of a storage vessel, 46cm maximum diameter, 33cm across the top and at least 13.5cm and perhaps about 40cm in height, was found in DM (fig 25a). The fabric is pinky-white but parts of the core have oxidised to a pale grey. The body is only about 3.5mm thick and there are splashes of green glaze on the exterior. The vessel is so large that there must have been two handles. The exterior surface of the surviving handle has three longitudinal incisions, twelve small holes in three irregular transverse rows and four short slashes and a thumb-sized depression just below the rim. There are also two prominent finger-made depressions where it is joined to the body. These have the same length, suggesting that they were formed by the same finger used twice, rather than by two adjacent fingers. The top of the handle was attached just below the rim by pushing it against a hole in the vessel wall, squeezing some clay into the interior and smoothing this to form a plug (Pearce 2007, 50–2). The inside surface of the handle has twelve hemispherical lumps about 3mm across in four irregular transverse rows. These would have provided a better grip on the handle. There are also two interior shallow depressions where the bottom of the handle joins the body. It is considered that this coarseware vessel was a late-medieval Border ware cauldron (Pearce 1992 2007, 50–2). Another example is provided by a small part of an even larger handle 52mm wide, found in CN, which is illustrated in figure 25b.

The stump of the lower end of the handle of a large pot was found in G. The fabric is cream with a pink tinge and is very gritty. There are splashes of pale green glaze on the top of the stump. A cream-coloured and slightly gritty sherd from the neck rim of a jug was also found. The lower part of this shows part of a green-glaze decoration in the form of two bands, which descend diagonally on to the body. The neck is about 12cm in diameter and about 5mm thick. These features were associated with much Victorian pottery.

About one-third of the rim, which would have been 19cm in diameter, of a whiteware jar was discovered in EP and the section is shown in figure 25c. The fabric is creamy but the surfaces have fired pale fawn and there is a smudge of yellow/green glaze on the underside of about 75mm of the rim. It is estimated that the diameter of the body would have been about 40cm and the height 25cm.

The tubular handle and the adjacent body rim of a partially green-glazed whiteware skillet, about 22cm in diameter, was excavated from HO and a vertical section of this is illustrated in figure 25d. The handle is 6.5cm long and on average about 4.1cm across its outer end, reducing to 3.4cm about halfway along its length. Similarly, the inside diameter of the tube decreases from about 2.7cm to end in a rough ellipsoidal base at a depth of 6.5cm.

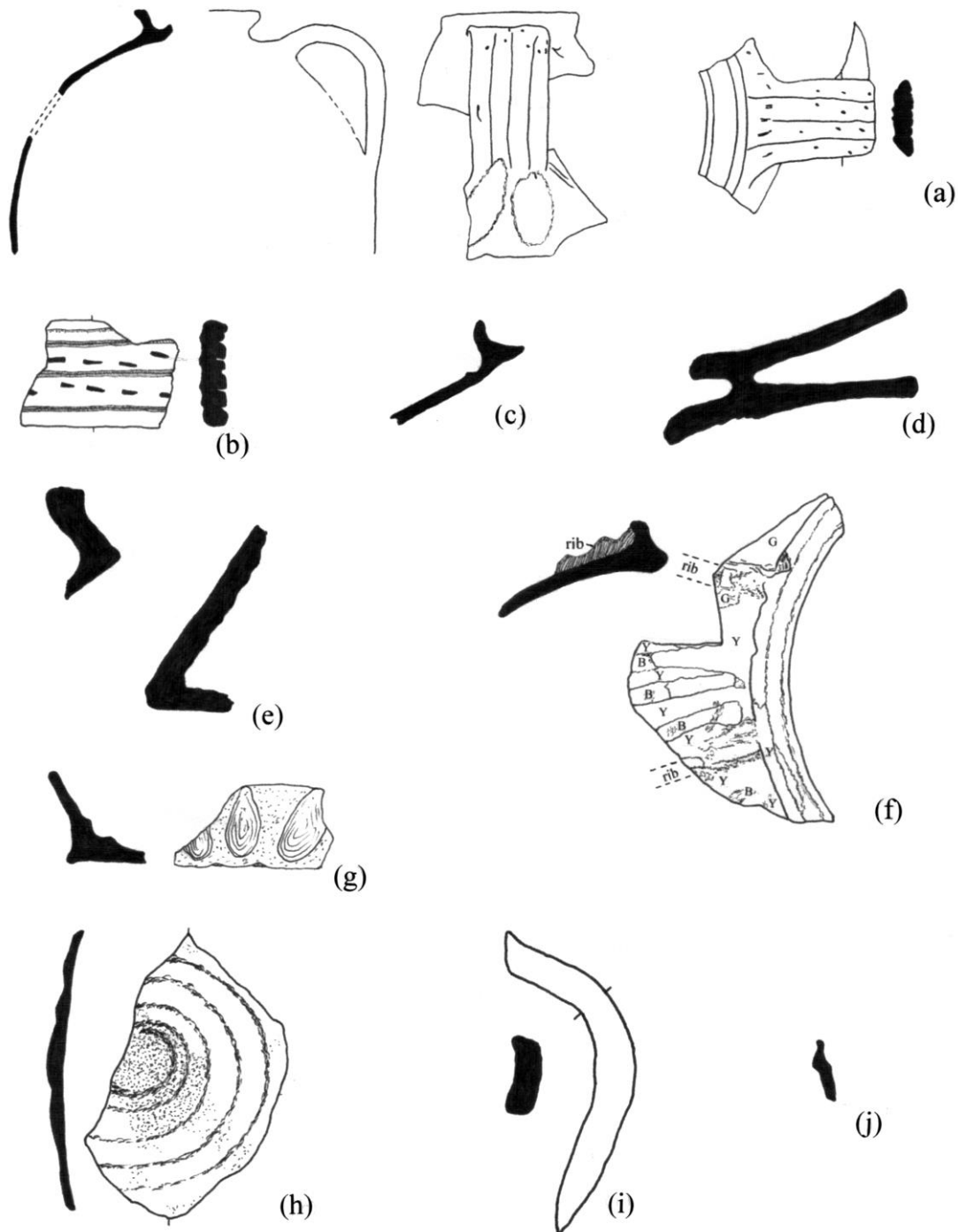


Fig 25 Guildford Park Manor. Greenware. (a) Handle of a storage vessel, 46cm maximum diameter, of pinky-white fabric with splashes of green glaze from DM. The section and profile have been brought close together in the reconstruction drawing. (b) Part of a strap handle of a late-medieval coarseware vessel from CN. (c) Section of the rim, 19cm in diameter, and upper body of a whiteware jar from EP. (d) Longitudinal vertical section of the tubular handle, 65mm long, of a partially green-glazed whiteware from HO. (e) Profile of a vessel with pale grey fabric found in EO. (f) About one-sixth of the rim, 23.5cm in diameter, of a large French vessel of rather gritty pale-fawn fabric with yellow ochre (Y) and green (G) glaze, the former partly glazed over with decorative brown (B) stripes, from EM-EN. Two decorative ribs radiate outwards from this part of the neck. (g) Sketch and section of a small part of a thumbled base, about 14cm in diameter of a large late medieval coarseware jug with gritty cream fabric from I. (h) Handle of a green-glazed jug from HO. (i) Convex side of a sherd of cream-coloured fabric, 11cm across, from H. The dark concentric circles represent depressions and the dotted area indicates green glaze. (j) Section of a rim sherd of a French white-ware bowl about 17cm in diameter and 3.5mm thick.

There is also a near-circular hole, about 1.6cm across and 2.0cm deep, opposite the tube on the interior of the vessel. The thickness of the wall between these two holes is only about 5mm. The form of the vessel was probably very similar to shallow flared skillet 489Y illustrated by Pearce (2007, 113, fig 67) but with a partial green and not yellow glaze.

Five pale-grey sherds, assumed to be from a single vessel, were found in EO. One is a base sherd of 17cm diameter with the body sloping inwards, the angle between base and body being about 58°. It has dribbles of green glaze mainly on the underside of the base. Another is part of a rim of 22cm diameter and the remaining three are small body sherds. The profiles of the rim and base are shown in figure 25e. No comparable examples have been discovered in the literature.

Four sherds of a large vessel of rather gritty, palefawn fabric were found immediately beneath the brick drain at the east end of EM–EN (fig 25f). One of these incorporated about one-sixth of the neck-rim. The diameter of this was 23.5cm and the height and maximum diameter of the vessel were estimated to be 25 and 40cm respectively. The body was about 5mm thick near the neck but two small matching-sherds from lower down the pot were only about 3mm thick. On the rim sherd, two decorative ribs radiated outwards from the neck, so presumably there would have been twelve of these on the complete pot. These ribs were about 14mm wide and 7mm thick with depressions about 10mm long and 2mm deep every 15mm. Much of the vessel was decorated with yellow ochre glaze, partly over-glazed with decorative brown stripes, again radiating outwards from the neck. Some of this glazing had peeled away from the underlying fabric. Other parts of the pot, including a section of the rim, had a green glaze. It was suggested by Felix Holling that the pot was 14th century French. Many very small sherds of unglazed sandy-white pots about 3mm thick were discovered in EP.

A small part of the perimeter of a thumbled base, which was about 14cm in diameter, of a large jug with gritty cream fabric was found in I. This is illustrated in figure 25g and is probably late medieval coarseware (Pearce 2007, 55–6). The jug handle shown in figure 25h, which is green-glazed overall, was also excavated in HO. About 35 sherds of green-glazed pottery were found in AK. Almost all of these were small and most were from cooking vessels. One of these had a base about 0.30m in diameter and another about 0.18m. One had a rim about 0.40m in diameter. A range of fabrics was represented: coarse, gritty white, grey, buff and pink. A sherd of a green-glazed cream-coloured cooking pot from CN, which was 5–6mm thick, revealed that the base was about 20cm in diameter.

An unusual sherd of cream-coloured slightly gritty fabric, 11cm across and mainly 3mm thick, was excavated in H. It is curved slightly and has concentric near-circular ridges with green glaze at the centre on its convex side. The concave side has irregular linear markings between 1 and 3cm long. It might have been the centre of a lid but does not have a central knob for lifting and does not conform to known designs (eg Pearce 2007, 125–7). It is illustrated in figure 25i.

Small green-glazed sherds of a cooking pot and of a thin-walled vessel of 8.0cm base diameter were found in F. A rim sherd of a whiteware bowl, about 17cm in diameter and 3.5mm thick, considered by John Hurst to be French, was found in I. The profile is shown in figure 25j. Green glaze covered the interior and about 15mm of the top of the exterior. Three rim sherds from vessels 30, 23 and 22cm in diameter were found in E and one from a vessel 42cm in diameter in EP. Other small sherds, 5–7mm thick, were found in E, F, H*, I, K, AK, AN, AO, AP, BM, BN, BO, BP, CP, DM, DN, FO and particularly in G, CN, CO, EM, EN, EO, EP, GO, HC and HO. One of those in EN had a rib similar to that shown in figure 23b and one in CO was considered to be French.

Fine green-glazed ware

The handle and part of the rim and body of a Tudor cup, 13.5cm in diameter and about 14.0cm deep, was found in the east end of trench B. The body is 2.5–3mm thick and the interior and much of the exterior is green-glazed (fig 26a). Other sherds of Tudor cups were found in G, I (fourteen sherds), AK (26), AN (1), AO (1), AP(32), BM (3), BN (2), BO (3), BP, CN (8), CO (72), CP(1), DM(11), DN (9), EM (13), EN (14), EO(15), EP(16), FO(13), GO(2) and HO (16). The sherds from BO included two handles of cups with rims about 10cm in diameter and most of the base, 5.8cm in diameter, of another cup. Those from EO included about the top third of the handle of a cup. Some of these sherds were only 1.9mm thick.

A sherd showing part of a face from a green-glazed 13th century face-jug was discovered on the island at the eastern end of B and is illustrated in figure 26b. One of the small sherds found in CO also appears to show part of a face. It does not match with that shown in this figure but could have come from the same vessel.

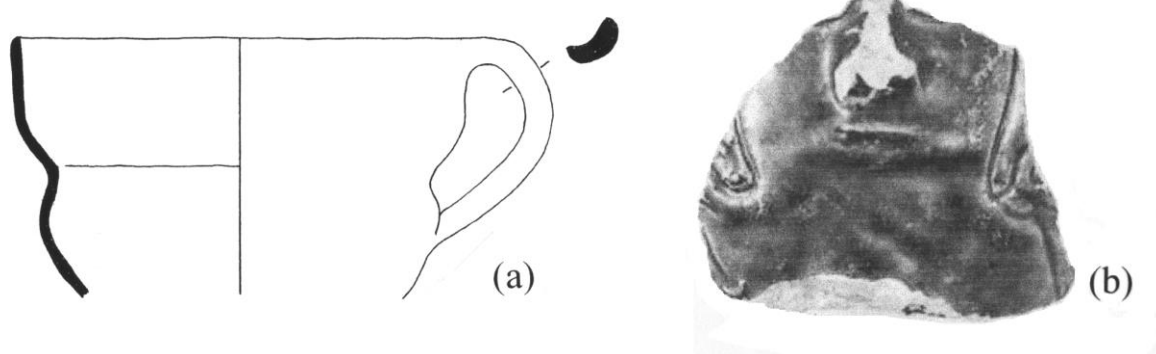


Fig 26 Guildford Park Manor. Fine green-glazed ware. (a) Part of a Tudor cup 13.5cm in diameter at the rim and 3mm thick, from B. The interior and most of the exterior are covered with a strong green glaze. (b) Photograph of a sherd of a green-glazed 13th century jug with part of a face, showing the lower parts of two eyes at the top edge, the nose from which much of the glaze has broken away, the mouth and locks of hair on either side. Vertically the sherd measures 6cm.

Beauvais ware

Large sherds of a 34cm diameter 9cm deep shallow bowl of fine white fabric covered with a brown slip and decorated internally with a sgraffito design beneath a yellow glaze was associated with the hearth in F (fig 27). The rim is pierced with a pair of holes about 3mm in diameter and 2.5cm apart, and the way in which the bowl had broken suggests that it might originally have had two further pairs of holes symmetrically placed in parts of the rim that are missing. It would then have been possible to suspend the plate horizontally from three pairs of strings. A tripod pipkin (fig 24f) found with the plate was dated by John Hurst to the early 16th century. Very similar plates, said to be made in Beauvais in the late 16th century, were seen in 1973 in the Musée des Antiquités, Rouen (Faÿ 1973, 28–33). This resulted in correspondence with Mlle Elisabeth Chirol of the Musées Départementaux de la Seine-Maritime, Professeur Jean Cartier of the Groupe de Recherches et d'Etudes de la Ceramique du Beauvais and Jean Chapelot of the Dept d'Art et Archeologie at the University of Paris. In particular, Prof Cartier confirmed that the plate was made in Beauvais but between 1500 and 1540 and with only one pair of holes. It is interesting that the sgraffito design resembles tulips, said to have been introduced into Western Europe from the Middle East only in the late 16th century (John Nevinson, pers comm).

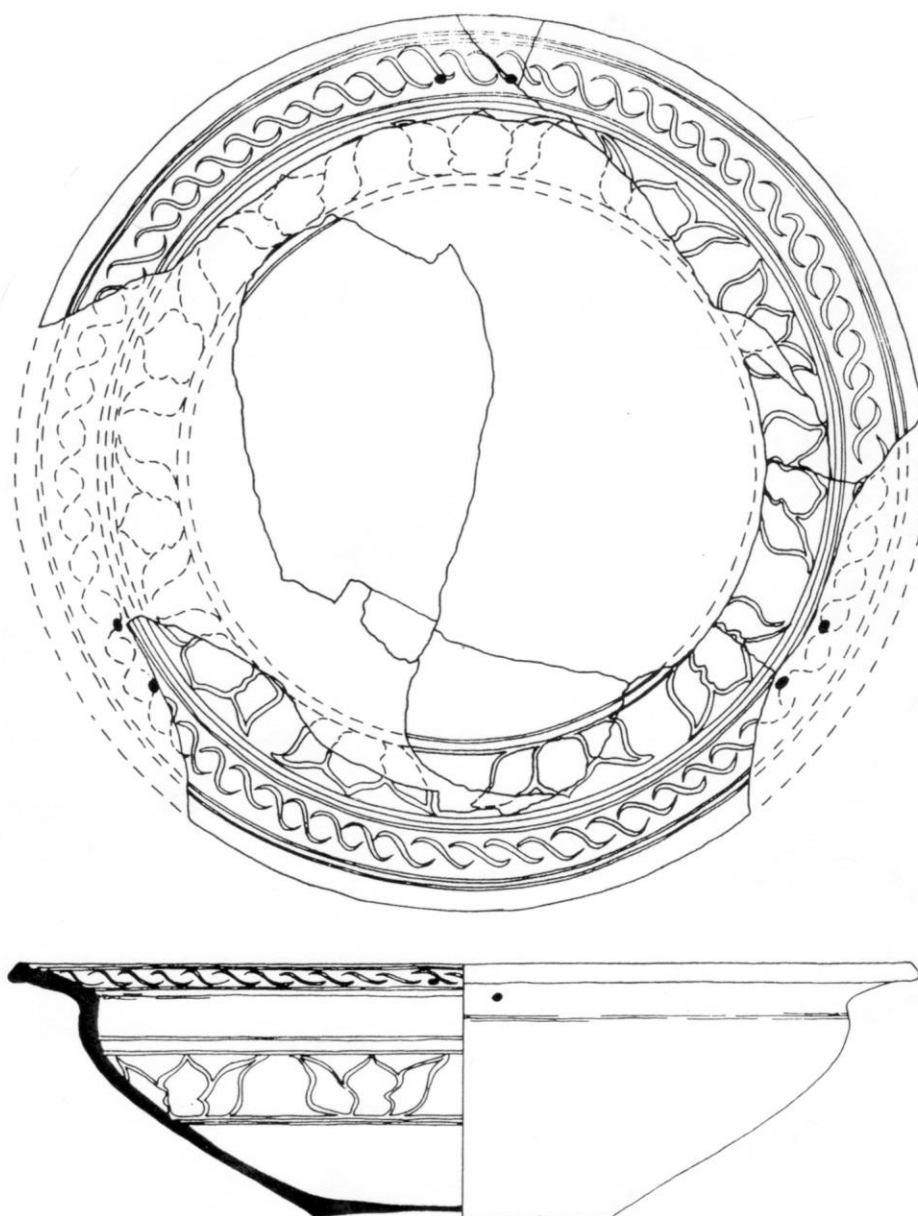


Fig 27 Guildford Park Manor. Beauvais bowl, 34cm in diameter, of fine white fabric covered with a brown slip and decorated internally with a sgraffito design beneath a yellow glaze, from F. Note that the rim is pierced with a pair of holes and the possible locations of two further pairs, symmetrically placed, are indicated.

Two sherds of a vessel of this type of were also found in I and two sherds, including part of a rim, together with eight small sherds of grey fabric, yellow-glazed Beauvais ware in CN.

Renaissance ware

Over one-half of an orange/brown earthenware, Renaissance jar, 16cm high and 12cm maximum diameter, was found in garderobe 1 (fig 28). It is decorated in a band on the outside with cream, green and purple slip. The jar was examined by John Hurst (29 Sept 1972), who

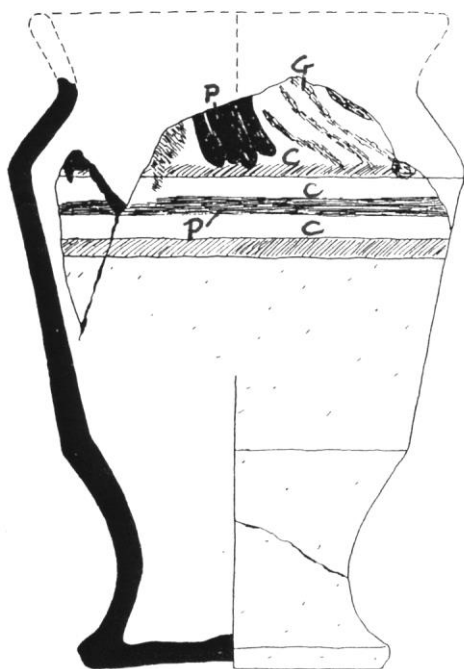


Fig 28 Guildford Park Manor. Renaissance jar, 12cm maximum diameter, of orange-brown earthenware, from garderobe pit 1 in B. It is decorated with cream (C), green (G) and purple (P) slip and the glaze is lead.

suggested that it dates from the 15th or 16th century and is unlikely to be later. It is probably northern Italian but possibly southern French – not unlike the products of the Pisa area except for white inclusions – which makes this doubtful. The glaze is lead both inside and out; the outside is lead over white slip and is not tin. The decoration is a late survival of ‘Green and Brown’ decorative style. The form is perhaps an albarello-type or maybe a jug and in any event is unusual. Other material found with the jar suggests that it is early 16th century.

Stoneware

Large quantities of Raeren (Flemish) stoneware jugs were imported from the first half of the 16th century (Hurst 1964). They have a cylindrical neck, a globular body and frilled feet. Many sherds of these jugs were discovered across the site, the most interesting group of fifteen coming from the fill of garderobe 3. These joined to form about 95% of the surface of a jug, 14.5cm high, 10.8cm maximum body diameter and 6.4cm across the neck. It has five left-handed turns of a fine helical ridge around the exterior of its neck and six more substantial but similar turns around the lower part of its globular body. Unusually, there is also a fine cordon at the bottom of the neck. It has thirteen or fourteen frilled feet around its slightly damaged base. The shape of the jug is distorted a little below the bottom end of the handle, probably caused when the handle was attached to the body. These features are illustrated in figure 29a. The colour of the fabric varies between grey and buff, the exterior glaze is brown with fawn patches and the interior glaze is fawn. A complete handle and adjacent rim and body parts of one of these jugs was also found in AP.

Considerable quantities of Frechen (Rhineland) jugs were imported during the second half of the 16th century (Hurst 1964). They again have globular bodies and a cylindrical neck, but also a prominent cordon at the junction and a flat-footed base. Some display a caricature of the features of Cardinal Bellarmine. Many grey-fabric sherds of these jugs were found in A and B, particularly in and around garderobe 1, in F, G and I and in AP, BM, CO, DM, DN, EM, EN, EO, EP, FO, GO, HC, HD and HO. The nineteen sherds found in garderobe 1 formed parts of eight jugs. Five fitted together to form the upper section of a jug, including

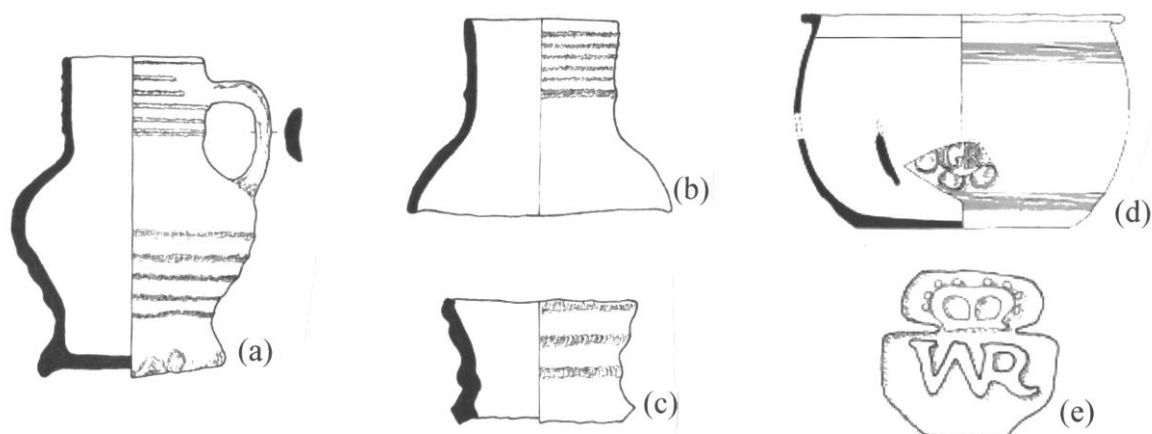


Fig 29 Guildford Park Manor. (a) Raeren stoneware jug of maximum diameter 0.108m from garderobe pit 3 in I. (b) Upper half of a Frechen stoneware jug of maximum diameter 0.12m from garderobe pit 1 in B. (c) Bottom half of a Frechen stoneware jug of maximum diameter 0.10m from garderobe pit 1 in B. (d) Staffordshire stoneware 'GR' pot of diameter 0.19m, c1770, cobalt blue incised, discovered in the moat fill in A. (e) The cipher 'WR' surmounted by a crown stamped on a piece of brown stoneware from A. The total width is 11mm and the impression is about 1mm deep at the bottom left but decreases to become negligible at the top right of the crown.

the neck rim, with grey internal and external glaze and a prominent cordon. It had maximum body diameter of 12cm and the neck is about 7cm across (fig 29b). A further five sherds formed part of the lower section of a jug with brown internal and external glaze and a flat base. It had a maximum diameter of 10cm and is illustrated in figure 29c. Two sherds formed a section of the upper part of a globular body, including a prominent cordon. It has a shiny brown exterior, a fawn interior and a maximum diameter of 10cm. Another two, brown inside and outside, formed part of the neck rim, which was about 7cm in diameter. A further two formed part of the join between the neck and body of a jug and has a prominent cordon and the stump of the top of the handle. It has a strongly speckled brown exterior and a fawn interior. The remaining three sherds are from the bodies of three different jugs. One is grey outside and brown inside, another a faintly speckled brown outside and brown inside, and the last is pale brown both outside and inside. The base of a Frechen jug found in FO was 7cm in diameter.

An English patent for the manufacture of stoneware was taken out by John Dwight in 1671 and the industry spread from Fulham to other centres including Lambeth and Staffordshire. Eleven sherds of a white, Staffordshire, salt-glazed pot, 19cm in diameter and 12cm high, were found in the western side of the moat (fig 29d), clearly deposited from the farmhouse. The pot dates from about 1770 and has cobalt blue decoration with incised lines and a moulded 'GR' in 14mm-high letters on a raised part of the body. It can be compared with a 'GR' mug and a 'GR' jug at the Victoria and Albert Museum (Case 1 3153-1852 and C186 - 1933). Several other sherds of brown fabric stoneware jars, some with a shiny brown exterior were also found in the fill of the moat in A. One of these has the cipher 'WR' surmounted by a crown stamped on the outside (fig 29e). The right of the 'W' and the left of the 'R' are merged. Presumably this piece is English and dates from the reign of William IV (1830–7). It clearly came from the farmhouse. Also, a stoneware jar, 4.2cm in diameter and 6.7cm tall, was found in AN. The type is described as an extract jar in an 1873 Doulton & Watts Lambeth pottery price list (Tyler 2005, 44).

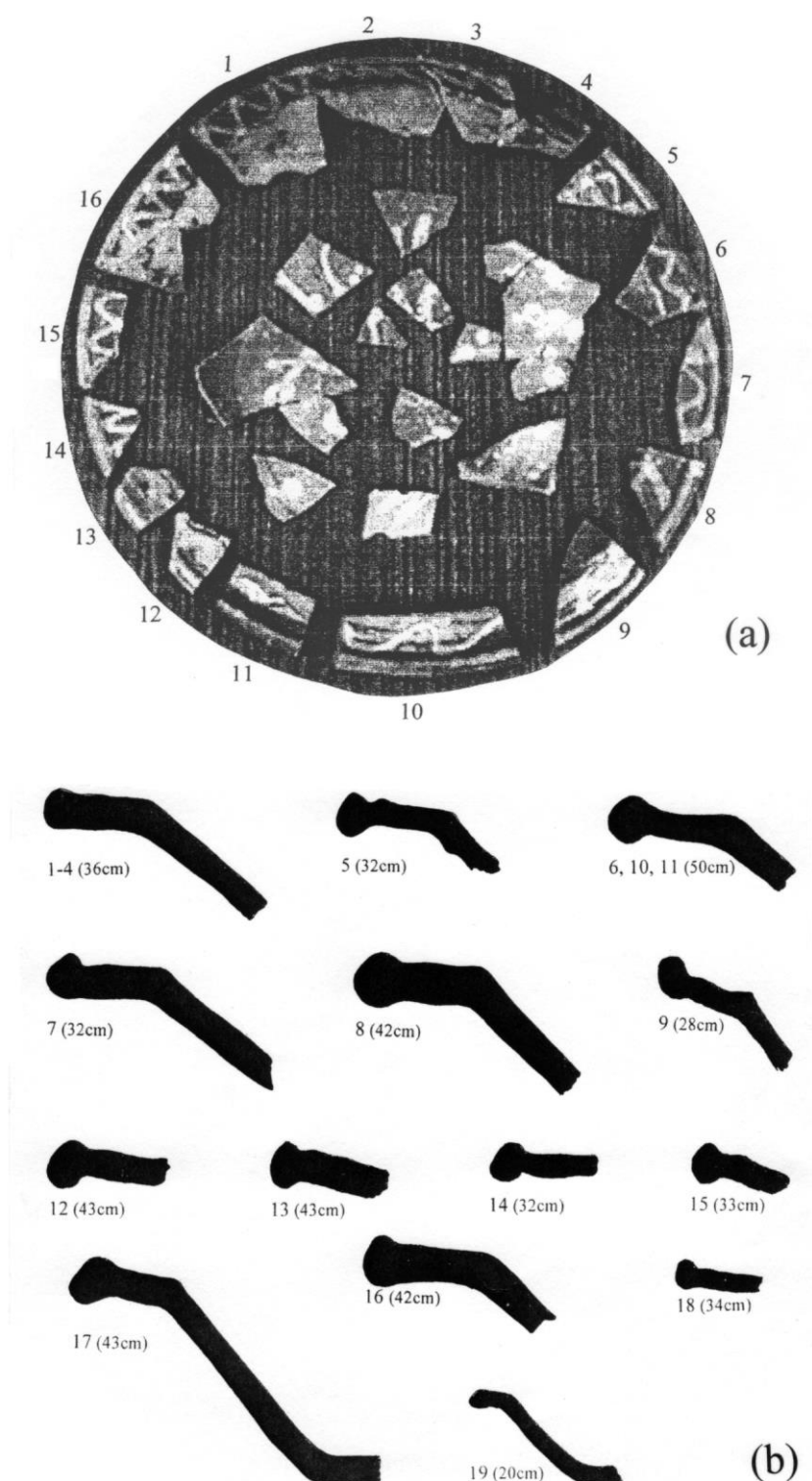


Fig 30 Guildford Park Manor. (a) Photograph of 36 sherds from eleven slipware platters found almost entirely towards the west end of A and B, arranged to suggest the appearance of a single platter about 0.36m in diameter. (b) Sections of platters. Those numbered 1 to 16 are of rim sherds illustrated in (a), 17 and 18 are similar but 19 is of a smaller slipware vessel, perhaps better described as a dish. The approximate diameters are given in brackets in each case.

Seventy-four sherds (2.7kg) of slipware platters, made near Ash on the Surrey/Hampshire border in the late 17th century, were found in A and B and in adjacent topsoil. Seventy of these were in either A or B towards the farmhouse side of the moat and above the rubble from the buildings on the island (fig 10). The fabric is pink/brown and the slip white. However, the lead glaze, which covers the interiors, makes the slip appear orange. The diameters of all but one of these platters were in the range 28–50cm (average 41cm) and the rims were between 2.8 and 3.8cm wide (average 3.5cm) for the fourteen sherds that could be measured. In only one case could the depth be deduced and this was 7cm for a platter with a diameter of 43cm. The remaining vessel had a diameter of only 20cm, a depth of 3cm and a rim only 1.5cm across and should perhaps be called a dish rather than a platter. It also has a darker glaze, which makes the slip appear orange/brown. The most characteristic feature of the slip decoration is a wavy line around the rim. The wavelength in all but one of the cases was in the range 1.5–5.5cm, with an average of 3.2cm. The thickness of these lines varied considerably, the maximum and minimum being 18 and 3mm. In the remaining case, not the dish discussed above, the wavelength, if it really was a wavy line, was about 12cm. In two cases the wavy line terminated in a blob. There were also slip decorations, consisting of curved lines and blobs on the inside walls and particularly bases, but it has not been possible to reconstruct any of these. A photograph of 36 sherds from eleven different platters arranged to give an impression of the appearance of a single platter, is shown as figure 30a. Sections of the rim sherds in this photograph and of three other vessels, including the two for which the depth could be established, are presented in figure 30b. Another small sherd of this ware was found in AK and two in EO, one of these being from a platter 0.28m in diameter but this was not glazed so that the slip decoration is still white.

Victorian china

Many examples of Victorian china from the farmhouse were found in the fill of the moat in A and B*. These included three-quarters of a blue-and-white eggcup with a foot, a complete moulded, creamy-white candlestick, comprising a holder 3.2cm across attached to a pentagonal base 4.8cm across, the total height being 4.8cm, a complete small white pot, 5cm across and 3.4cm deep, with blue, hand-painted, Japanese-style, linear decoration, perhaps from a condiments set, and the neck of a small elaborately moulded, cream-coloured vase, the oval neck measuring 13 x 10mm. Many other examples were found in G, H, H* and elsewhere on the site.

BUILDING MATERIALS

Many different types of building material were discovered during the excavations, including stone, bricks, paving tiles, roof tiles, mortar, timber, window glass, lead and iron. These are described separately in the following sections.

Stone

This section is subdivided into the different types of stone used on the site, starting with locally available materials and spreading outwards. The sequence is chalk, flint, Bargate stone, Horsham stone, sandstone, Purbeck marble and ‘Carrara’ marble.

Chalk

The most impressive chalk structure excavated was the circular garderobe 1 (figs 10, 12 and 13). It consisted of eight courses of wedge-shaped blocks measuring between 17 and 35cm

high, between 20 and 72cm high around the smooth, concave inner face, and all about 25cm thick. These blocks fitted together to form a beautifully smooth cylindrical surface. The floor of the pit was also made of chalk although this was partly covered with brick and wood. The bottom 1m of the walls and the floor of garderobe 3, on the farmhouse side of the moat, was also constructed of chalk blocks (fig 16). On the island, the foundations of the walls at the south-east corner of the manor house contained many lumps of chalk together with flint and some Bargate and other stones (fig 18) and there was a great deal of chalk rubble elsewhere. The revetment wall at the west end of A and B* was built largely of lumps of chalk but it also contained small amounts of flint, brick and Bargate stone. There was also a considerable amount of chalk rubble in the fill of the moat and some shaped chalk masonry on the surface. Of a different character was a block of chalk found in garderobe 1. This had overall measurements of 18 x 15 x 15cm, and was crudely carved into the head of a hound, a calf, or perhaps a bear (fig 31a).

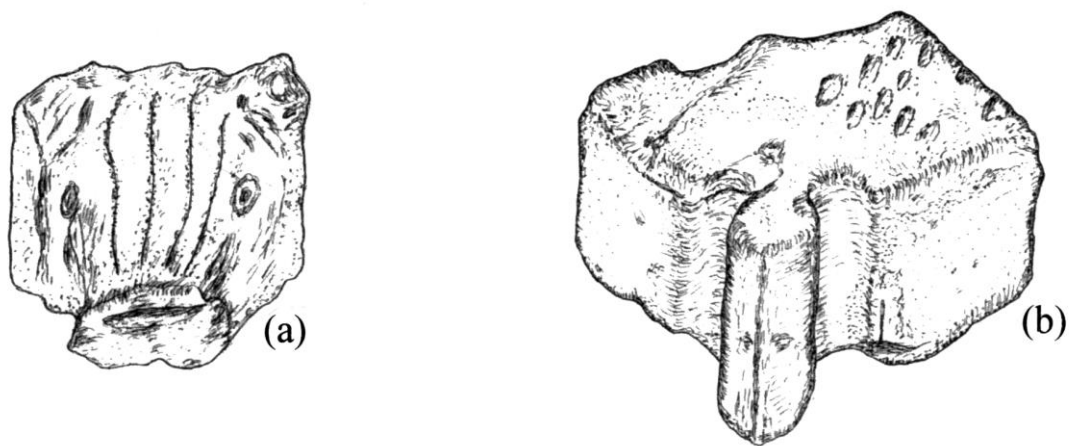


Fig 31 Guildford Park Manor. (a) Sketch of a block of chalk, overall measurements 0.18 x 0.15 x 0.15m, crudely carved to represent the head of an animal, perhaps a bear, found in garderobe pit 1 in B. (b) Sketch of a shaped but damaged rectangular block of fine-grained, grey-green sandstone, measuring 0.24 x 0.24 x 0.23m overall, that was found lying on the surface of the site. The shaped edge at the front may have been mounted vertically or horizontally. Note the mason's chisel marks on the top face.

Flint

About one-half of the solid building rubble found in the trench across the moat was flint and much of this had mortar adhering to it. Flints were also found in most of the other trenches and squares excavated. Clearly, this material came from walls associated with the manor house. Indeed, as indicated in figure 1c, one such wall, 5.7m long and 1.1m high, is still standing on the outer edge of the moat at the west of the site. Also, a substantial flint wall, 3m long, 0.6m wide and 0.4m high, was discovered 10cm below the surface in FO-FP and GO-GP. Again, the robbed foundations of the south-east corner of the manor house in HC and HD were mainly of flint and chalk. The foundations of a flint-faced wall were also found in BN and flint was used in the revetment wall of the moat. It is interesting, however, that when the manor house was demolished in about 1600 and the building material moved to Loseley House and elsewhere, the flints were evidently left behind and many of them were dumped in the moat.

Bargate stone

A relatively small amount of Bargate stone was used in the foundations of the walls of the buildings excavated and in the revetment walls of the moat. A few loose lumps were found in the fill of the moat, but unfortunately, it is not possible to deduce how much of this type of stone was taken from the site after the manor house was demolished. However, judging by the large robber trenches discovered, it is likely to have been a substantial amount. One of the stones used for the furnace in F (fig 15) was examined by Martyn Owen of The Geological Museum, London, and on 20 September 1973 he reported as follows:

The rock is a calcareous sandstone containing an appreciable amount of fragmentary fossil material (perhaps brachiopod shells) with small pebbles of glauconite, limonite and chert being particularly noticeable. A fossil worm cast is also seen. All this is consistent with the piece being Bargate stone, which is a well-known building stone used particularly in the Guildford area. Geologically the stone is a hard calcareous body found as concretionary masses in the Bargate Beds of the Lower Greensand of South East England. There is one curious feature however and that is the reddish colour, normal Bargate stone being of a more brownish hue. This could mean that the piece has suffered the effect of heat at some time and may therefore be of added interest in an archaeological context.

Horsham stone

Several broken slabs of Horsham stone, from 1 to 3cm in thickness and on average about 15cm across, were found in the rubble fill of the moat. It appeared that these had been used for roofing and two retained a single accurately circular hole for an oak pin about 12mm in diameter. Many more slabs of this kind must have been taken from the site in the early 17th century. Much larger irregular slabs of Horsham stone, of the same thickness but up to 40cm across, were found *in situ*, forming a pavement at the north end of the island in BP and EP (fig 22). Slabs of this stone had also been used for the lintels of garderobes 1 and 3 (figs 14 and 16). Also, garderobe 1 had been sealed at its top by two semicircular slabs forming a disc of 70cm diameter.

Three slabs of stone, each about 15cm across, found in garderobe 1 had attractive surface features and appeared to have been displayed as decorations, using holes drilled near their edges. These were also shown to Martyn Owen of The Geological Museum, London, and on 2 June 1973 he reported as follows:

The flat slabs are of a sandy rock with appreciable calcareous material present, presumably in the matrix. A palish pink colour is imparted to the rock by the presence of iron oxide impurities. Sole markings (probably load structures) are well developed on the bedding planes that also show very small tabular crystals of what appears to be selenite, ie pure crystalline gypsum, CaSO_4 . These are the tiny glittering specks seen by the naked eye. We could not suggest a provenance initially but on examination by Dr R Casey of our Palaeontological Department he suggested an origin in the Wealden Series of South East England. These are deposits of Cretaceous age made up of sands and clays and it is likely that this is a hard band from one of these clay beds. The pieces are therefore of fairly local material.

On 20 September 1973 Martyn Owen added the following information about these slabs. 'Some further information has been gathered about the calcareous sandstone with sole markings. We have an identical specimen in our collections, which is described as a concretionary body in Weald sandstone from Goodyears Farm near South Lodge, Horsham.'

There is also a paper on similar material by Prentice (1962) and consequently the actual horizon of the sandstone appears to be the Weald Clay division, which also yields the famous Horsham stone and Sussex marble.

Sandstone

A shaped but damaged rectangular block of fine-grained, grey/green sandstone, measuring overall 24 x 24 x 13cm, was found lying on the surface at the western edge of the island. As shown in figure 31b, about 10cm of the stone on two of the sides adjacent to one of the short edges had been shaped to form an attached column. This was 6.5cm across and had an angle of about 110°. Alternatively, the stone may have been mounted vertically with the shaped corner at the top, forming a decorative ridge. The top surface in the sketch has been dressed and the shaded grooves reveal that the blade of the chisel used was about 3cm long. The carved profile is consistent with Perpendicular Gothic architectural designs (Fletcher 1959, 450).

Purbeck marble

As noted in the General Introduction, a large Purbeck marble quoin was present on the surface of the site.

‘Carrara’ marble

A cylindrical piece of a white marble, 9cm in diameter and on average about 6.5cm long, was found in garderobe 1. It was shown to Martyn Owen of The Geological Museum who reported as follows on 2 June 1973:

This specimen was rather a problem. It is obviously part of a column of white marble but white marbles are notoriously difficult to identify even at the best of times and this specimen is so heavily weathered that it disintegrates easily. However, from its fine grain and the occurrence of a rather ill-defined grey vein passing through the sample a very tentative attribution to Carrara is suggested. Some varieties of Carrara marble are well known for their grey-veining but of course this is a rather tenuous characteristic upon which to base an identification.

Bricks

Most of the bricks discovered were a rich red in colour and measured approximately 25 x 11 x 5cm. There were three substantial brick structures. The first of these was the abutment or pier projecting from the revetment wall of the moat at the west end of A (fig 11). It appears to be solid brick and, if so, must contain about 600 bricks, and would have had many more before it was robbed to water level. The second was the top 80cm of garderobe 2 that contained some 300 bricks (fig 15). Finally, the network of open drains at the north end of the island used about 450 bricks (figs 19 and 20). In addition to this, bricks were used in a minor way elsewhere on the site, in some cases to repair or to modify pre-existing structures. For example, part of the base of garderobe 1 was of brick (fig 13).

Many broken bricks were also found as part of building rubble in the fill of the moat and at the north end of the island. One of these had been made with a sloping end at about 60° to a side face, as shown in figure 32a. It has a deep red fabric and mortar is attached to all six faces. There is a slight linear depression, about 8mm wide and 3mm deep, along the three orthogonal edges of the front face, as shown in the figure. In London, this was a common feature of bricks up to the time of the Great Fire. It is thought that they were produced when

the raised edges around a newly formed brick, which arose when the mould was removed, were pressed down using the edges of the mould (Ian Betts and Chris Evans, pers comm). This resulted in a slight swelling of the sides of the brick just below these sunken margins. Another brick, of orangey-red fabric and in a fragmentary state, was made with a sloping side face at about 55° to one of the large faces, as shown in figure 32b. On the back face, it has a well-formed impression, measuring 5cm across, of what appears to be the ends of the four fingers of a small, human, left hand. A drawing of this, based on a rubbing, is shown in figure 32c. It is considered that these two bricks were used around doorways or windows or at the edges of plinths.

It is likely that the brick structures on the site date from the end of the 15th century or later. However, it is interesting that no bricks were used in the building repairs carried out in 1514 (Crocker 2003).

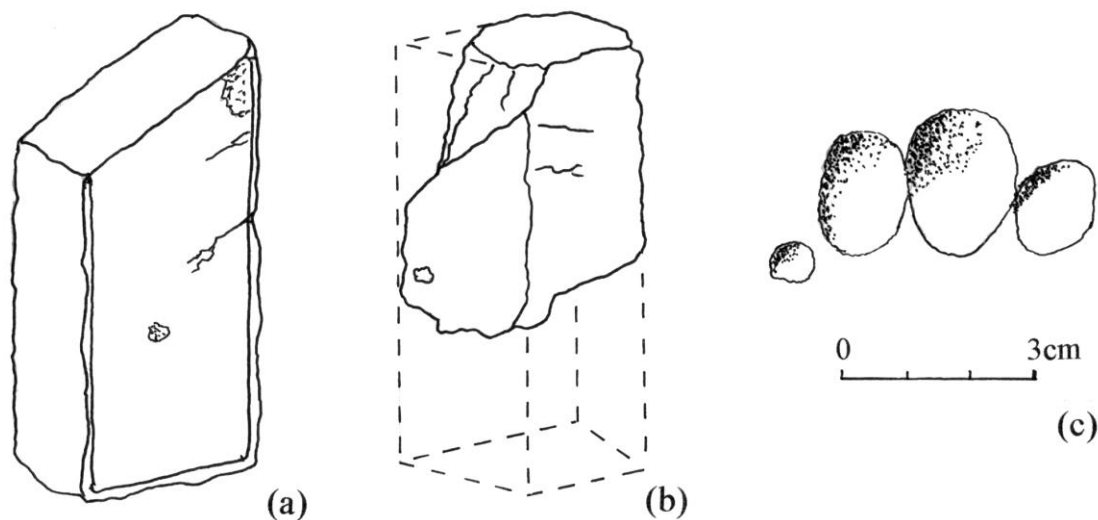


Fig 32 Guildford Park Manor. Shaped bricks excavated from the rubble fill of the moat in A. That shown in (a) is of a deep red fabric and measures 233 x 110 x 55mm. The top face is at an angle of 60° to the right-hand side face. A slight depression along the three orthogonal edges of the front face is indicated. The fragmentary brick (b) has an orange-red fabric and measures 105mm across the back, 73mm across the front and is 55mm thick. The left-hand face is at angle of 55° to the back face. A print of a left paw or small hand on the back face of brick (b), based on a rubbing, is shown in (c).

Paving tiles

This section is subdivided into the three types of paving tiles discovered on the site: decorated lead-glazed Penn tiles, decorated tin-glazed maiolica tiles and undecorated tiles.

Penn tiles

Sixty-two pieces of lead-glazed earthenware tile with reddish-brown fabric and decorated with yellow slip were found during the excavation (Eames 1968). Only three of these were complete and some were very small fragments. However, all were consistent with the original tiles being approximately square with tapered edges, about 11.5cm across at the front, 10.2cm at the back, and 2.0cm thick. One complete tile and one fragment were as new and a further fragment was in good condition; all the others were very worn. One of the first of the

fragments to be discovered, in CO, bore a partial legend and this was shown to Elizabeth Eames of the British Museum. On 5 November 1973 she commented as follows:

The piece of tile belongs to a group produced commercially in the Chilterns in the middle of the 14th century and known in some contemporary accounts as 'Penne tiles'. The industry seems to have been centred on Penn in Buckinghamshire. The principal publication on them is by Christopher Hohler (1942) and the tile is Hohler's design P2. The complete design shows an equal armed cross in the centre surrounded by the inscription: SIGNUM SCE CRUCIS. You have the bottom left-hand corner. Hohler's drawing shows the cross, pierced at the centre by a circle, but your version is pierced by a lozenge. Hohler mentions that there are two possible variants and such minor variations are common, indicating that more than one block was used at one time or another to decorate tiles. Hohler's distribution list has this design at Little Marlow Priory, Missenden Abbey, Notley Abbey and Pitstone in Bucks, Hurley Priory in Berks, Rycote and Thame Abbey in Oxon and St Alban's Abbey in Herts, the nearest to Guildford being Hurley Priory. The discovery is interesting.

Eames (1980, 224) notes that: 'An extremely worn tile decorated with this design [Hohler P2; Eames 1407] was found in 1972 during excavations on the site of Guildford manor. This was a long way from the Chilterns and the farthest south that this design has yet been noted'. Later in the excavations a complete example of this type of tile was discovered in K and a drawing of the design on this is shown in figure 33a.

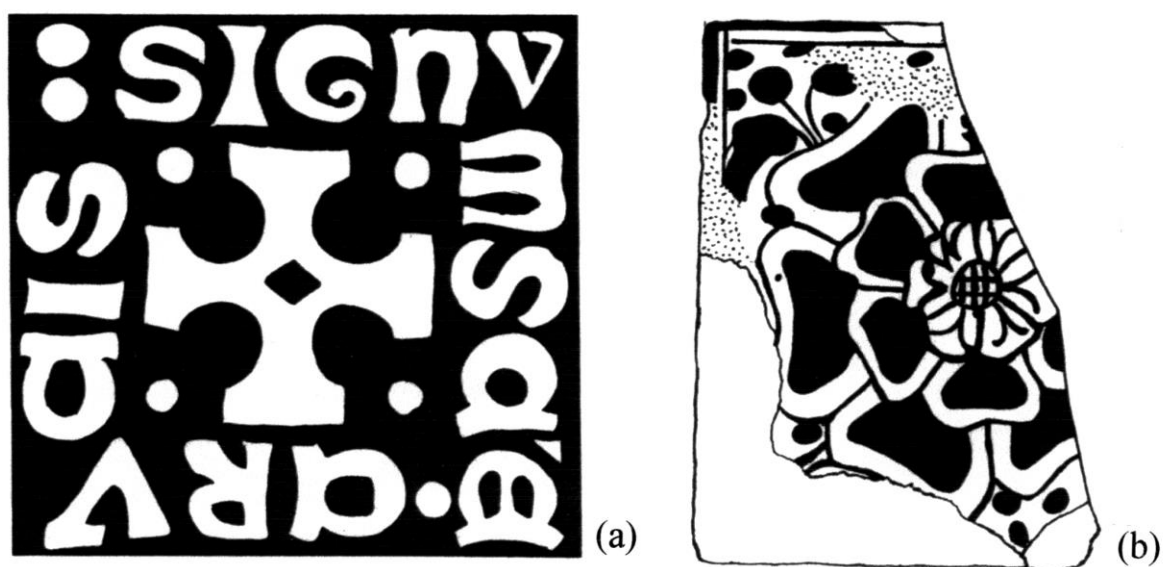


Fig 33 Guildford Park Manor. (a) Drawing of a Penn tile, 115mm across and bearing the inscription SIGNUM SCE CRUCIS, which was found in K. (b) Drawing of a fragment of a square, blue-on-white, tin-glazed, maiolica tile, 114mm across, discovered in F.

In her catalogue, Eames explains that Penn tiles appear to have been decorated, not by first stamping the design on the tiles and then filling the depressions with white clay, but by a method that combined both processes, namely by stamping the tile with a die first dipped in white slip and thus printing the design on the surface. Also the tiles were small, about 4½ inches square and less than ¾ inch thick. Manufacture probably started shortly before 1332 and continued into the 1380s. Three general types have been suggested (Eames 1980, 223–4). The early type 1 is slightly thicker than average and asymmetric; the later type 2 is a little thinner, possibly smaller in area and symmetric on both diagonals; the final type 3 is slightly

smaller, less well made, often dished and rather hard-fired with smudged decoration. Typical prices for 1000 tiles were 6s and 8s.

Of the 173 designs listed and illustrated by Hohler, only P1, P2 and P3 have legends and no examples of these are listed as being from Surrey. Indeed, only P66, P68 and P173a at Chertsey Abbey and P113 and P116 at Titsey Abbey were noted as being from Surrey. However, a further 59 examples of Penn tiles were excavated at Guildford Park Manor in 1972–5 and since then they have been found at several other Surrey sites, including Guildford Friary (Poulton & Woods 1984, 27), St Peter's church, Old Woking and elsewhere (Arnold 2005, 1–3; Keen 2002).

A summary of the 30 Guildford Park Manor Penn tiles that could be matched to Hohler's designs, in some cases variants, is given below. Each entry includes Hohler's code and description, the locations on the site where found, the condition (when not fragmentary or very worn) and (in brackets) the number of examples.

- P2 Pierced cross, surrounded by the legend SIGNUM SCE CRUCIS. K, complete (1); CO (1); EO (1); HC/D. (7).
- P35 Lion passant. G (1).
- P36 Lion passant with four quatrefoils in base. HC/D (2).
- P48 Fleur-de-lis with small crossed foot between four quadrants. HC/D (1).
- P58 Pierced eight-petalled flower in ring with quatrefoils in outer angles. HC/D (2).
- P70 Four separate petals in a ring from which spring fleur-de-lis into the angles and trefoils towards the middles of the sides. HC/D (1).
- P72a Dragon in ring from which spring fleur-de-lis into the angles and floriated trefoils towards the middles of the sides. HC/D (3).
- P88 Pierced saltire cut by a square enclosing a small circle from which spring trefoils. FO, complete, as new (1); DO, as new (1); HC/D (3).
- P90 As P88, but with floriated trefoils with extra sprigs. HC/D (2).
- P130 Formal fleur-de-lis with a dot and a halved mask on each side of it, between two quadrants, the outer having two cusps with dots in them; grotesque masks in outer and inner angles. HC/D (1).
- P153 Four quatrefoils springing symmetrically on three stems from the outer of two concentric quadrants; in the inner angle two indented petals and a triangle, with a bar across it, enclosing a trefoil; in the outer angle a mask with a ring about it. K, complete (1).
- P155 Band of four quatrefoils between two concentric quadrants, the inner powdered with lozenges and enclosing two petals, the outer powdered with billets; with a grotesque mask in a small quadrant in the outer angle. DO, good (1).

Most of these tiles were excavated at the south-east corner of the manor house in HC and HD and the baulk between them. It seems likely therefore that this was the location of the chapel, which documentary sources state was being built on the site in 1369. This date is on the border of Eames' types 2 and 3. However, designs P2, P35 and P36 correspond to Eames' type 1, which implies an early date. Also, designs P48 and P72a are asymmetrical, which again suggests an early date. P130, P153 and P155 are symmetrical about one diagonal and were used in square groups of four to create a fully symmetric design. These are also likely to be early. Only P58, P70 and P88 are symmetric and consistent with type 2. Also, several of the tiles have smudged decorations, suggesting the late type 3. Perhaps therefore the early tiles were being re-used in 1369, or perhaps the Eames' typology should be re-examined.

Maiolica tiles

About two-thirds of a badly-worn, square, blue-on-white, tin-glazed tile, 11.4cm across the front, 10.6cm across the back, and 2.1cm thick, was discovered beneath the hearth in F. It is decorated with a bold schematic drawing of a six-petalled Tudor rose (fig 33b). A colour photograph of this tile has also been published (Betts 2008, 59). Small fragments of the same type of tile, but in much better condition, were also found in HC and HO. The fabric of these tiles has fired to a pale pink and the white glaze has spread down the sloping sides and on to parts of the base.

At the time of the excavation, it was noted by John Mallet of the Victoria and Albert Museum that this type of tile was similar to polychrome tiles at The Vyne in Hampshire. A detailed study of these tiles (Rackham 1926, 67 and pl 12) concluded that they were manufactured at Antwerp and date from the time when the house was rebuilt in about 1520. However, more recently, a set of blue-on-white tin-glazed tiles has been discovered at the site of Woking Palace and one of these has the same Tudor rose design (Betts & Hughes 2005; Betts 2008). It has been concluded that this tile is from Valencia and is likely to date from between the mid-15th and early 16th centuries.

Undecorated floor tiles

A large number of fragments of undecorated floor tiles were found on the site but none of these allowed the full dimensions to be established. In DM three corner pieces and one edge piece were excavated. These show that they were rectangular, presumably square, and at least 14.5cm across. Three of them are about 3cm thick and have tapered edges, indicating that the full width of the back would have been about 12mm less than the front. The fourth piece, a corner, is 4.5cm thick and is not tapered. The fabrics of each of these four examples, all from the same context, are all different. It seems likely that they were heat-affected and the fourth piece is vitrified on the three faces that meet at a common corner. One large fragment with an orthogonal edge, found in BN was 3.5cm thick.

Roof tiles

Three types of roof tiles were purchased for the building repairs carried out at the site in 1514: 21,000 plain tiles, 175 ridge tiles and 150 gutter tiles. As indicated in figure 10, vast numbers of broken plain tiles were found in the fill of the moat and many others were discovered elsewhere on the site. They were all terracotta red in colour but broken edges usually revealed a core of reduced black fabric. The thickness of most of the tiles was about 1.6cm at their edges but often decreased to about 1.4cm away from the edges. One was only about 1.2cm thick throughout. Where possible, the original width of the tile was measured and found to be about either 16.4cm or 18.8cm, except for the 1.2cm-thick tile, which was 15.2cm wide. For four tiles it was possible to measure the full length and the results were in the range 27.2 to 29.2cm. One of these tiles, found in the fill of the moat, is illustrated in figure 34a. One of its edges has been trimmed deliberately and bears traces of mortar. The significance of the above measurements is that an Act was passed in 1477 regulating the size of plain tiles to $10\frac{1}{2} \times 6\frac{1}{4}$ inches with a thickness of at least $\frac{3}{8}$ inch, ie 26.7 x 15.9 x 1.6cm (Salzman 1952, 230–1). About 23% of the tiles satisfied these dimensions approximately, about 69% were wider and thinner and 8% (one tile) was narrower and considerably thinner. This, admittedly small, sample suggests that in the early 17th century, when the manor house was demolished, over half of the tiles were well over 100 years old. However, this may be misleading as, when useful building material was removed from the site, the older tiles may have been deliberately left behind.

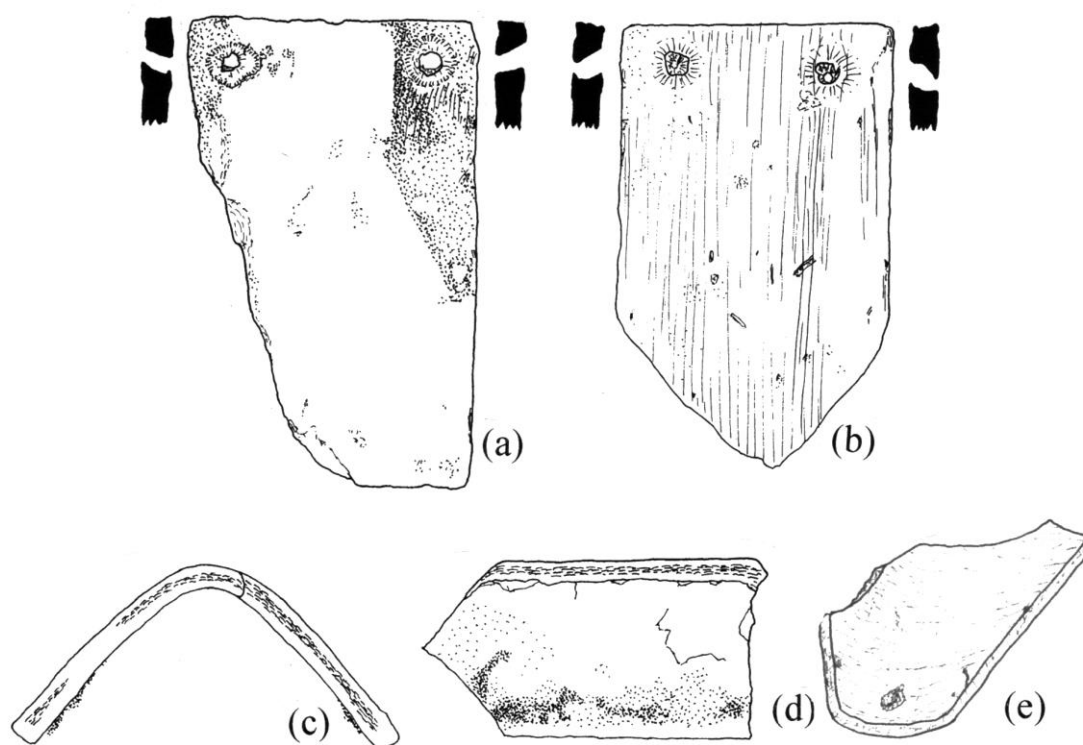


Fig 34 Guildford Park Manor. Drawings of roof tiles. (a) Back, slightly convex, face of a plain tile, 165mm across, 272mm long and 16mm thick, from the fill of the moat. The speckled shading indicates the presence of mortar, roughly proportional to its density. (b) Front, slightly concave, face of a shaped plain tile, 159mm across, 261mm long and 16mm thick, from the fill of garderobe pit 1 in B. The holes in (a) and (b) slope downwards a little from the front to the back faces, as indicated by the cross-sections. (c) Composite elevation of the two ends of a ridge tile, 230mm across, 108mm high and 16mm thick, from AK. (d) Elevation of the inner surface of this ridge tile. The linear shading in (c) and (d) represents reduced black fabric. (e) Upper part of a valley tile found in DN.

The tiles had two holes for oak pegs, known as tile-pins. The centres of these were placed roughly symmetrically between 6.0 and 9.8cm apart (average 7.4cm) and between 2.3 and 3.8cm from the top of the tiles (average 3.1cm). The holes had clearly been made crudely by pushing two tapered sticks through the damp clay. They were about 15mm in diameter on the front of the tiles but were sometimes as small as 6mm across on the back face. As only one of these holes would normally have been used for each tile, one inadequate hole may not have caused a problem. In some cases, for example the tile illustrated in figure 34a, the holes sloped downwards from the front to the back at an angle of about 15° . This would result in the tile-pins forming a more secure acute-angled hook. The clay displaced by the holes produced a raised ring between 2.5 and 3.5cm in diameter and about 1mm thick on both the front and the back of the tile. A simple calculation based on these dimensions shows that the volume of clay in the rings is roughly equal to the volume of the holes. Many of the tiles had a thin fragmentary layer of mortar on the whole of their under-surface and on the top two-thirds of their upper surface, consistent with conventional tiling practice. However, the under-surface of the tile shown in figure 34a is anomalous in this respect, as it has a large patch of mortar in a well-defined shape at the top right.

Many fragments of plain roof tiles were also found elsewhere on the site. For example, one from EM was 18.3cm wide, 1.4cm thick, and therefore pre-1477 in date. The centres of the two holes were 8.1cm apart and very asymmetric, one being 3.3cm from the left edge and

the other 6.9cm from the right. Another tile from CO was 17.5cm wide and on average 1.6cm thick. Although a little wide, it is presumably post-1477.

Another type of plain tile was found in the fill of the moat. It was complete and similar to a post-1477 plain tile except that its lower 9cm had been shaped into a curved point, as shown in the sketch of figure 34b. The tile appeared to have been fired in this shape and not to have been trimmed from a plain tile. It could have been used for tile-hanging on a wall. Again, in this case, the holes for the tile-pins sloped downwards from front to back, which would have been particularly useful when tiles were hung vertically. The tile clearly shows the fine scratches on the upper face produced when the tile-maker scraped excess clay from the top of the mould. It also has well-defined rectangular pits, believed to have arisen when small twigs were present in the clay, which would have been burned in the kiln.

About one-quarter of a ridge tile was found in AK. The dimensions of these tiles, as defined by the 1477 Act, are stated by Salzman (1952, 230–1) to be 13½ x 6¼ inches and by Neve (1726, 266) to be 13 inches long and at least ⅝ inch thick. Neve also states that they were ‘made circular breadth-wise, like a half-cylinder’. He measured ridge tiles and found ‘one of them to be 13 inches long, about 16 broad by the compass on the outside, and in breadth (from side to side) on the inside about 11 inches, some not above 9 or 10 inches’. A composite drawing of both ends of the tile excavated is given in figure 34c, and shows that it is unlike that described by Neve. It is not semicircular and only about 12½ inches measured around the curve on the outside and 8 inches broad on the inside. The total outside width is 9 inches (23cm) and the total height 4¼ inches (10.8cm). However, the fabric is about ⅝ inch thick and, significantly, the slope of the sides is close to 50°, the usual pitch of a tiled roof (Clifton-Taylor 1987, 272). An elevation of the inner surface of this tile is shown in figure 34d. It indicates that about 5cm of the lower part of this surface is covered with a rather thick layer of mortar where it was bedded on the plain tiles below. Little or no mortar was present above this level and there was none at all on the outer surface. An indication is given in figures 34c and 34d of the reduced black fabric core of this tile. It is suggested that it dates from before the 1477 Act.

The upper part of a curved gutter tile, which would have been used as part of an internal valley between pitch roofs meeting at right-angles, was found in DN, and a sketch of this is shown in figure 34e. It measures 9cm around the convex surface at the short end and, if unbroken, would have been about 28cm long to match the adjacent plain tiles. It is on average about 1.3cm thick. Its curvature results in a change of angle of about 72° between the two sides. The angle between its edges is about 48°, which implies that the pitch of the roof where it was used would be about 55°, fairly close to the 50° usually quoted. The tile has a central circular hole 7mm in diameter on its convex (underneath) side. This does not penetrate through to the concave (upper) side shown in figure 34e, but there is a corresponding lump. This suggests that the tile was hung on a nail with a small head.

Mortar

A very large amount of mortar was used in the construction of the wall foundations discovered on the site and in the revetment walls of the moat. This was necessary because of the irregular shapes of the flints, lumps of chalk and stones that were used. Also there was much mortar attached to the waste tiles and other building material dumped in the moat and elsewhere. Finally, there was an enormous amount of loose mortar in robber trenches and the fill of the moat. This indicates that before the re-usable building material was removed from the site in the early 17th century, much of the attached mortar was first removed. Samples of the mortar have been crushed and examined microscopically. This indicates that its composition is consistent with recipes for mortar that specify one part of lime to between

one-and-a-half and three parts of sand. It has been suggested elsewhere (Crocker 2003, 222) that some of the mortar used in repairs to the manor house in 1514 was used for pargetting, and this material would also have been left on the site.

Timber

The only timber found during the excavations was from below the water-level of the moat in B and B*. One piece was *in situ* at the bottom of garderobe 1 (fig 13). It was a plank, which formed about one-half of the floor of the pit and passed through the foundations of the moat wall to provide a base for the drain. Originally it must have measured approximately 1.5m long, 32cm wide and 10cm thick. However, about 20cm of the end away from the moat had decayed and it had thinned to about 5cm below the drain (fig 14). It supported the brick walls of the drain, and bricks were placed on either side of it at the bottom of the pit. As these bricks were probably inserted in the late 15th century, it seems likely that the timber also dates from that time.

The only other substantial piece of timber discovered was a board, with one square end and one broken end, 80cm long, 9cm wide and tapering from 2.5 to about 1.5cm thick across its width. A very rusty broken nail, 20mm long with a square head 1.2cm across a diagonal, was present passing through the thickness of the board 3cm from the thin side and 44cm from the square end. Also, a shaft of a broken nail of square cross-section and 32mm long was attached to the surface of the board. This suggests that the nails might originally have been about 5cm long. There was also a nail hole the same distance from the thin side and 9cm from the square end. These nails would therefore have been separated by about 35cm, which suggests that another would have been present, at an equal separation, at the broken end of the board. These details are consistent with the timber having been used for weatherboarding a building. It has also been suggested that it may have been part of a clinker-built boat used on the moat, but then copper or brass nails would have been used. Nevertheless, the suggestion has prompted the thought that a boat would probably have been needed to maintain the structure of the moat and to assist in its dredging. Small pieces of timber were also found attached to a few bricks.

Many pieces of charcoal, some of which were the remains of burned parts of buildings, were found at various locations during the excavations and samples were retained.

Window glass

Many fragments of window glass, very corroded and blackened, were found in garderobe 1. These varied in thickness from 1.7 to 2.3mm and in some cases revealed painted decorations, which appeared to be reddish-brown. Drawings of the painted pieces are given in figure 35a. The largest has a right-angled corner and the decoration consists of pairs of lines, one broad and one narrow, parallel to an edge, and a linear floral design. If it is assumed that this design is central, the glass would originally have been a rectangular quarrel (or quarry) measuring about 12 x 9cm. The other smaller pieces are not inconsistent with this format. It is assumed that this is Wealden glass and other finds in the pit indicate that it was deposited in the early 16th century, probably in 1514 when the manor house was refurbished. In the Tudor period, diamond-shaped rather than rectangular quarrels became established for domestic glazing (Salzman 1952, 177). The sides of these were about 9cm long and the acute angle was about 65° (Kenyon 1967, 87).

In HC and HD and HC-HD, near the south-east corner of the site, 143 small fragments of window glass were found. Most of these are not badly corroded, and have smooth, hard surfaces. They are between 1.5 and 3.0mm in thickness, although most are about 2.1mm

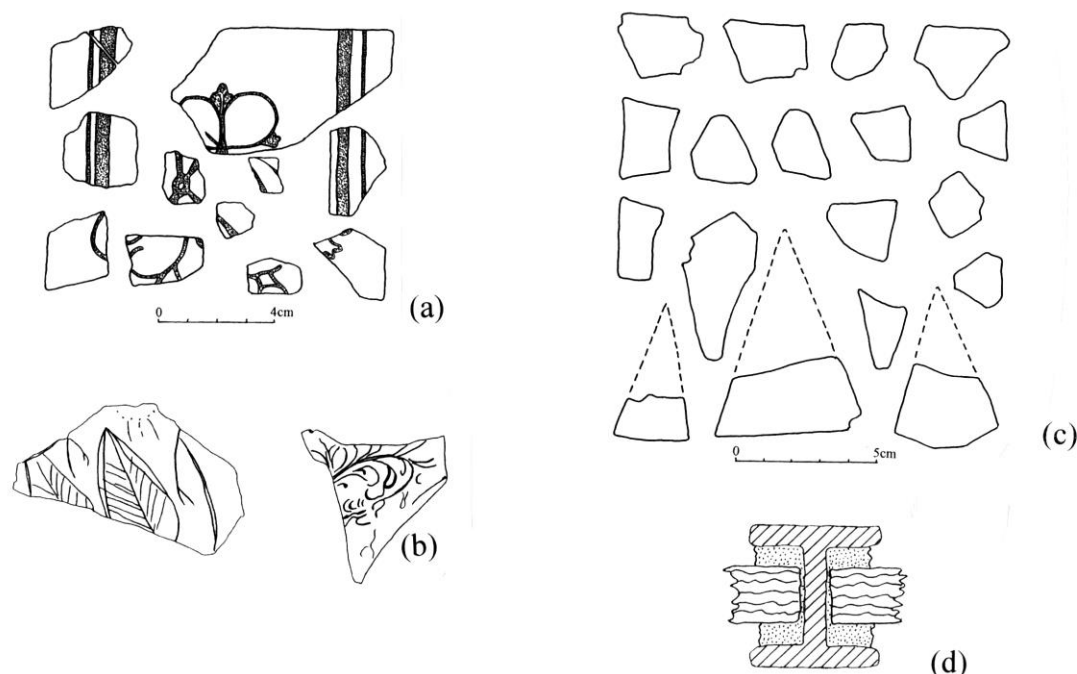


Fig 35 Guildford Park Manor. (a) Drawings of fragments of decayed and blackened window glass, decorated with floral designs with linear borders, discovered in garderobe pit 1 in B. The decoration, shown shaded, is reddish brown. (b) Drawings of the designs on two fragments of window glass excavated from square HD. The maximum horizontal measurement of the fragment on the left is 41mm and that on the right 25mm. (c) Drawings of 18 fragments of widow glass excavated in HC and HD and HC-HD. (d) Schematic cross-section of a lead came (diagonal shading) showing the method of fixing the glass (wavy shading) using tallow or cement (dotted); based on finds in HC and HD. The bar is about 5mm high and 4.5mm across.

thick. They are again blackened and opaque but on some of the pieces decoration could clearly be identified. These appear to be scratched through a surface layer of paint. The designs on the best two examples, drawings of which are provided in figure 35b, are of leaves in one case and tendrils in the other. Many of the other fragments had clearly been cut into polygonal shapes, angles of about 40° , 55° , 70° , 80° , 90° and 110° being noted. Eighteen examples of these are illustrated in figure 35c. They must have originated from an elaborate window. The quality of the glass suggests that it was either imported or made later than the window glass found in garderobe 1. It is possible that they date from 1543, when the windows of the royal apartments were repaired. However, it is also possible that they date from after 1560, when the technology of glassmaking in the Weald improved dramatically (Kenyon 1967, 43).

Window glass in much smaller quantities was also found elsewhere on the site, including BM, BN, CN, CO, CP, DM, DN, EN, EP and HO and F (including a small fragment still very transparent). One piece from CP, that could have been 16th century, was green and in good condition.

Lead

Three slightly distorted segments of lead glazing bar (comes), about 6.5, 8 and 17cm long, were found in HC. They all have an I-shaped cross-section measuring about 4.5mm across and 5mm high. The lead is about 0.75mm thick so that the opening for the glass is about 3.5mm. Window glass discovered nearby was only about 2mm thick, allowing space for the

leading to be packed with tallow or cement to make the window weatherproof, as shown in figure 35d (Salzman 1952, 181). A similar glazing bar was found in B, very twisted in CN and in a very small quantity in DN.

A solidified mass of drips of molten lead weighing 1.05kg was found associated with the hearth in F. It seems likely therefore that this hearth had been used for melting lead used for roofing, gutters, water supply and sanitation. In this connection, it is interesting that for the repairs to buildings in Guildford Park in 1514, 12lb (5.36kg) of solder was bought for mending three gutters at the manor house and one at the lodge but no lead was purchased and no plumbers were employed (Crocker 2003, 223). Small amounts of solidified molten lead were also found in I (30g), AN (30g) and CN (110g). Two folded sheets of lead weighing together 550g were found in DM and smaller pieces in BM (50g), EO (170g), EP (25g) and GO (15g).

Iron

Nails

Many hand-forged, wrought-iron nails were found in A and other trenches, particularly I, and many squares, especially AN, BM, BO, BP, CN, CO, CP, DM, DN, EM, EN, EO, EP, FO, GO, HC and HO. Most were about 3.5cm in length but one found in CN was at least 13cm. A micrograph (x100) of the cross-section of one of these nails at the junction of the shaft and head revealed recrystallised ferritic grains, manganese sulphide (MnS) stringers in the direction of working and a duplex slag structure containing MnS inclusions. Two iron spikes about 7cm long and an iron wedge 6cm long were found in HO and an iron hook in EP.

It is convenient to mention here that an irregular ball of ironstone roughly 4.2cm in diameter and weighing 175g was found in DM.

Garderobe drain plate

The iron plate or gate at the outer end of the drain of garderobe 1 is visible in the photograph of figure 12, its location is shown on the plan of figure 13 and its shape is shown in the elevation drawing of figure 14. Its top edge has an irregular shape, which suggests that it has corroded or been damaged. The purpose of this plate is unclear, since one would expect that it was desirable for the contents of the pit to flow away into the moat as easily as possible. Perhaps this is true of the liquid content but not the solid matter, which would in any case have been dug out occasionally. Another possibility is that the plate was an attempt to prevent the garderobe being flooded if the level of water in the moat was unusually high.

SMALL FINDS

Many different small finds were discovered during the excavations, including coins, jettons, copper-alloy, lead and glass objects and clay pipes. These are described in the following separate sections.

Coins

Only two early coins were discovered during the excavations. The first of these is about two-thirds of a silver coin (fig 36a), c 25mm in diameter and 0.63mm thick after cleaning. It was found in the topsoil of CO. On 5 December 1973, Marion Archibald of the British Museum reported on this as follows:

This fragmentary coin is a groat of the second reign of Edward IV of Blunt's type XIV, c 1473 (Blunt 1945–8, 321). Although the king's name and the initial mark on the obverse are not on the remaining piece of the coin, the attribution is virtually certain. The flan and die proportions are certainly those of *after* the reform of 1464 when the standard weight of the groat was reduced. There appear to be no features on either side of the neck and the cusps are decorated with *small* trefoils and the stops are saltires on the obverse and none on the reverse. All this fits with type XIV. There is, unusually, no initial mark before POSUI on the reverse. A group of type XIV does however lack an initial mark on the reverse having the annulet mark of this type only on the obverse. The lettering too seems to be consistent with this group. It is just possible that it could be an early type XV which also has, to begin with, small trefoils and DI GRA (later DEI). P.S. The date of issue provides only a *terminus post quem* as these coins (Edward IV) survived in quantity in currency until the reign of Henry VII.

The second coin is complete but otherwise identical to the first, except that there is an initial mark before POSUI and it was 0.75mm thick when uncleaned. It was found in the topsoil at the southern edge of CP, only about 1.5m north of the location where the first coin was found.

Several more-recent coins were also found in disturbed soil including an Edward VII 1908 halfpenny and a George VI 1938 penny in CO.

Jettons

In medieval times jettons were used as an aid to computation but by the 16th century they were serving other purposes, including a cheap form of medal, publicising the exploits of kings and governments, gifts at festivals and souvenirs (Barnard 1916, 5–7, 91). They usually consisted of a disc of copper-alloy, such as latten, bronze or brass, stamped or engraved on both faces with elaborate devices. Most jettons found in England are of one of three categories: (a) Anglo-Gallic, about 1200–1400, (b) Tournay about 1350–1525, (c) Nuremberg about 1525–1625. Three jettons corroded together were found beneath the hearth in F. They were examined by Marion Archibald, (British Museum) who reported as follows on 12 May 1975:

The three jettons were in a very poor state. Despite conservation, none are complete and the worst is represented by only a few small fragments. Their condition makes it impossible to provide precise references. It is useful however to record a group of jettons found together in this way since the dating of these pieces is still very imprecise and the establishment of a satisfactory chronology will to some extent depend on the noting of stratigraphically associated finds.

1 French jetton, 15th century.

Obverse: a lozenge of France Ancient surrounded by foliation all within an inner circle; initial mark, crown. Legend: VIV(E LE BON ROY DE F)RANCE.

Reverse: tressure of four arches within inner circle; details within tressure uncertain. cf Barnard, p 119, no 52, quoting records of the Paris Mint of 27 Nov 1488, which order the production of jettons with these types. Since these were common types, no significance should be attached to the precise date. It is quoted to give the general period of issue.

2 French jetton, 15th century.

Obverse: shield of France modern within inner circle, annulet between two pellets above. Legend illegible but probably a form of AVE MARIA type.

Reverse: cross fleur-de-lis with quatrefoil; other details uncertain.

cf Barnard, p 118, no 46.

3 French jetton, 15th century.

Obverse: ship type, other details uncertain. Reverse: lozenge of France Ancient; other details uncertain.

cf Barnard, p 210, no 8, suggesting that the obverse and reverse taken together recall the arms of the city of Paris. Although jettons of the ship type were produced in Nuremberg in large quantities in the 16th century, the style of this piece is finer than that normally associated with the Nuremberg-produced pieces and this is probably an earlier native French piece. The fragmentary state of the jetton however makes it difficult to form any definite judgment on this score.

On balance, it appears that this group of jettons was deposited in the later 15th century or, just possibly, in the early 16th century.

Following receipt of this information the jettons were examined again, which resulted in further discussions with Marion Archibald. In particular, it was noted that jettons 1 and 2 are both about 30mm in diameter whereas the similar jettons in Barnard are about 27 and 25mm respectively. Indeed, most of the French jettons in Barnard are smaller than 30mm across. Nevertheless, as the variety of jettons is legion, it was again concluded that it is most likely that these three are late 15th century French.

Lead objects

Seals

Drawings of the two faces (obverse and reverse) of a damaged lead disc, about 26mm in diameter, which was found 30cm below the surface in square EO, are shown in figure 36b. The speckled area of the obverse is 1mm thick and the unshaded area 2mm thick. The disc was examined by John Cherry (British Museum), who reported as follows on 21 May 1975:

The object is a leaden seal for sealing bales of merchandise. One side is plain; of the other side only the centre remains and this contains a double-armed cross surmounting a heart(?). The letter R is visible on the left and the letter L(?) on the right. I have not been able to closely identify this mark but it is remarkably similar to that employed by John Gresham (Girling 1962, 114). The initials in that case clearly indicate the mark to be of John Gresham and although the present example cannot be John, the general layout certainly suggests the Gresham family. It is not really possible to date the bale seal other than by identifying the merchant's mark. They are known from the 15th century and continued until the 18th or 19th century. I would have thought that this example is probably 15th or 16th century.

For comparison, the John Gresham mark is also shown as figure 36b. Although John Cherry reported that the reverse of the seal is plain, it does in fact have a design, perhaps the palm of a hand, impressed upon it, as shown in figure 36a. Also, it is considered that the raised centre on the obverse and its extension to the lower left indicates that it is an alnage seal, consisting of large and small lead discs joined by a connecting strip. Such seals were used as a part of the regulation and quality control of cloth. They were folded around the edge of a piece of cloth and the two discs stamped together (www, 2006). The extension would seem to be part of the connecting strip between the two discs, the rest having been snipped

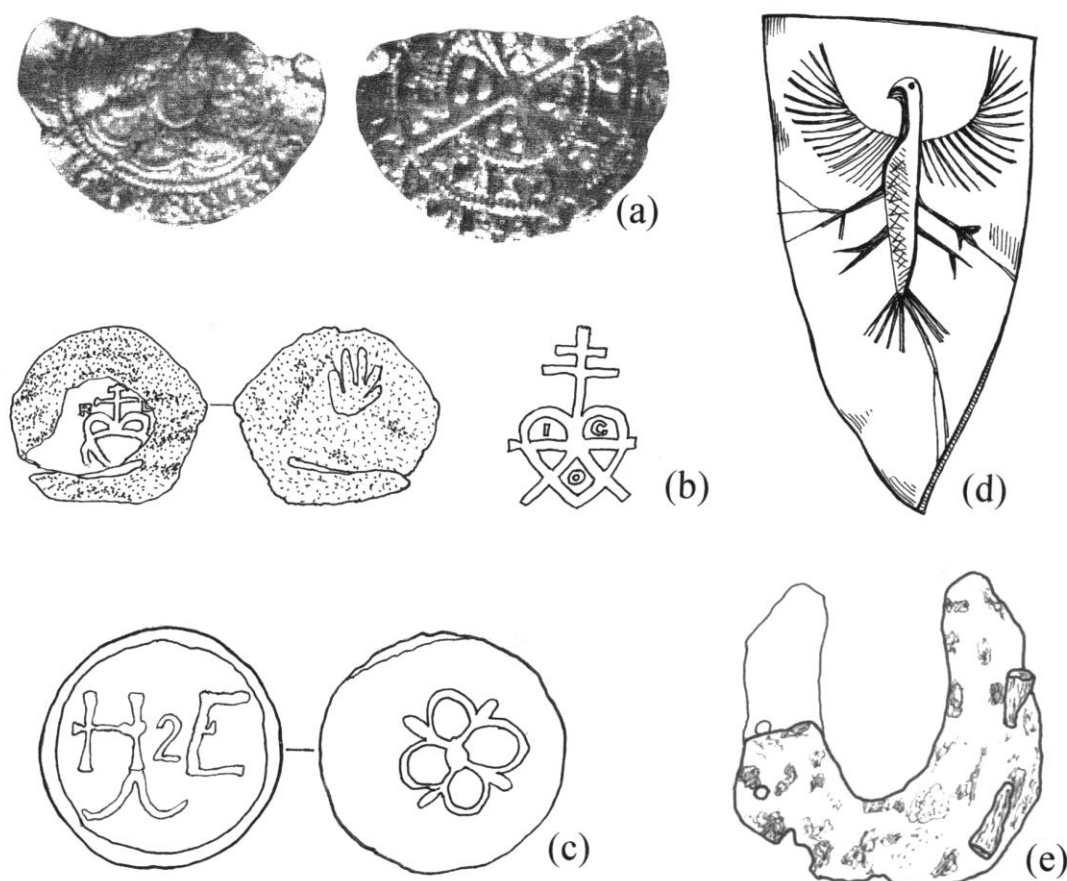


Fig 36 Guildford Park Manor. (a) Photographs of the obverse (left) and reverse (right) of a fragment of a groat of the second reign of Edward IV, c1473, found in the topsoil of CO. It is about 25mm in diameter. (b) Drawings of the obverse (left) and reverse (centre) of a lead alnage-seal found in EO. It has an average diameter of about 26mm and the outer region, is 1mm thick. The region shown without speckled shading on the obverse is about 2mm thick. The mark on the obverse is similar to that (right) used by John Gresham. However, it has the initials R (or possible K) at the left and L (probably) at the right, rather than IG. The mark on the reverse appears to be a hand. (c) The obverse and reverse of an embossed lead bale-seal or token 25mm in diameter and 1.9mm thick, found in BM. The merchant has not been identified but the design suggests that it is of early 16th century date. (d) Drawing, by Barbara Lawrence, of an eagle on a triangle of lead measuring 105mm between the top left and bottom corners. This was excavated from garderobe pit 1 in B, which was last filled at the beginning of the 16th century, probably in 1514. It is curious that the eagle appears to have four legs. (e) Sketch of a rusty horseshoe from DN with two bent-over nails at the right and a nail-hole at the lower left. The un-shaded part at the top left is a reconstruction. The horseshoe, which is considered to be early, is 90mm across.

away leaving a notch at the perimeter and, perhaps, the cut that is about 15mm long. Finally, it is possible, but rather unlikely, that the letter thought to be 'R' might be 'K'.

A second lead disc, 25mm in diameter and 1.9mm thick, was found in BM 40cm below the surface (fig 36c). It is not an alnage seal but a bale seal, leaden token or tally, consisting of a single disc, embossed on both faces (www, 2006). These were used to identify not only textiles but also parcels and bales of other trade goods and probably had many other uses. The obverse has the raised letters 'HE' or possibly 'HC', 9mm high, with two curved lines descending symmetrically from the right-hand side of the 'H'. There is a '2', 4mm high, between the letters and a raised rim about 1.5mm wide. The obverse has a raised flower with four near-circular petals separated by sepals, 14mm across and placed 2mm off-centre. The

merchant using this seal has not been identified but its character suggests a 16th century date (Girling 1962, 114; Fletcher 2005).

Eagle emblem

A small triangular sheet of lead with curved edges and measuring 5.5, 9.8 and 10.5cm between the corners was discovered in garderobe 1, which was last filled at the beginning of the 16th century. As shown in the drawing of figure 36d, it bears an engraving of an eagle. This appears at first to have four legs, but the lower pair presumably represents tail feathers. Ian Dunlop Ferguson of Wormley (pers comm 14 May 1973) has noted that the armorial bearing of an 'eagle displayed' was used by the Lords of the Manor of Witley in the medieval period (Palmer 1971). Based on comparisons between the eagle in figure 34d and those illustrated on medieval brasses, he suggests a date of between, 1150 and 1400. It is also interesting that an 'eagle displayed' appears in 'Arms of Gentlemen in the County of Surrey in the time of Charles I' (Manning & Bray 1814, pls 1–2) for Gavell of Cobham and Raymond of Guildford.

Iron and copper-alloy objects

About 75% of a rusty horseshoe was found in the disturbed soil of DN (fig 36e). It is approximately 9cm wide, 9cm long and at the front the metal is 3cm wide decreasing to about 1.5cm at the one surviving end. The width at the front is much greater than that of other known horseshoes. It has two bent-over nail heads protruding on the complete side and one nail-hole on what remains of the other side. It appears therefore that the shoe had only four holes – fewer than normal. These holes are about 9mm from the outer edge of the shoe. It does not appear to have been fullered and the calkins are not pronounced. This suggests that it may be an early example (Adkins & Adkins 1982, 189). Fragmentary remains of two further horseshoes were found in DN, one having a pronounced calkin, and of one in GO. A very rusty blade of a knife 16.5cm long and 15 to 22mm wide was found in DM. An iron model of the front part of the foot of a horse, 2.8cm across and 4.3cm high, came from BN, an iron buckle from I, a pivoted handle 17cm long from FO, a small iron hook with a shaft 5.2cm long from HO and many very corroded Victorian objects, including a pair of compasses, from the topsoil of AP.

A piece of brass sheet measuring about 8.5 x 3.5cm, with a row of four punched holes 3mm in diameter, was found in AP. It may have come from the rim of a vessel. A brass disc, 4cm in diameter and with a central small hole was also found in AP. A sheet of copper alloy measuring 8 x 4cm was found in the topsoil of H, another sheet just over half this size in I, several small sheets in AP and one in CO. A copper sheet rolled into a tube 6.5cm long and on average 11mm in diameter was found in EP. A buckle consisting of a copper-alloy ring 4.5cm in diameter with a bar across the centre supporting an iron spike came from BP. Another buckle was found in I and one in garderobe 1 with several pins. A brass button, 17mm across with four attachment holes, was found in the topsoil of GO. More pins were found in I and a medieval lace-tag in HO.

Glass objects

Nine small sherds of transparent ribbed glass were discovered in garderobe 1. These were examined by R J Charleston of the Victoria and Albert Museum, who considered that they came from a glass cistern, probably made in Venice and similar to one that is on display at the museum (ref 4360-1857) and belonged to Henry VIII (fig 37a). This is 30cm in diameter and 19cm high and the ribs form a curvilinear pattern on the base, the twelve ends continuing for

about 60mm up the sides. These ends are surmounted by twelve medallions, 3.5cm across, with gilded faces, and there are two gilded handles in the form of knotted ropes.

Part of an opaque-white glass lid of a goblet or jar was discovered in F (fig 37b). In a letter dated 9 April 1975, R J Charleston reported:

This glass is particularly puzzling, since I cannot see what, on the face of it, makes it opaque-white, unless it is a very bubbly glass and otherwise really has no opacifier in it. The Venetian opaque-white glasses have been analysed, and the early ones appear to be tin-lead compounds, whereas the later glasses (18th century) are lead-arsenic compounds: the German formulae appear to give potash-lime glasses opacified with phosphorus compounds (burnt horn or bone).

A large number of pieces of broken sack or wine bottles were found in the rubbish from the farmhouse at the western end of A. Figure 37c shows a reconstruction of one of these bottles. Its form suggests that it is late 18th century (Hedges 1975, 7–8); it would have held between 0.4 and 0.5 litres or about $\frac{3}{4}$ pint. The neck and bottom of a similar bottle was also found in GO.

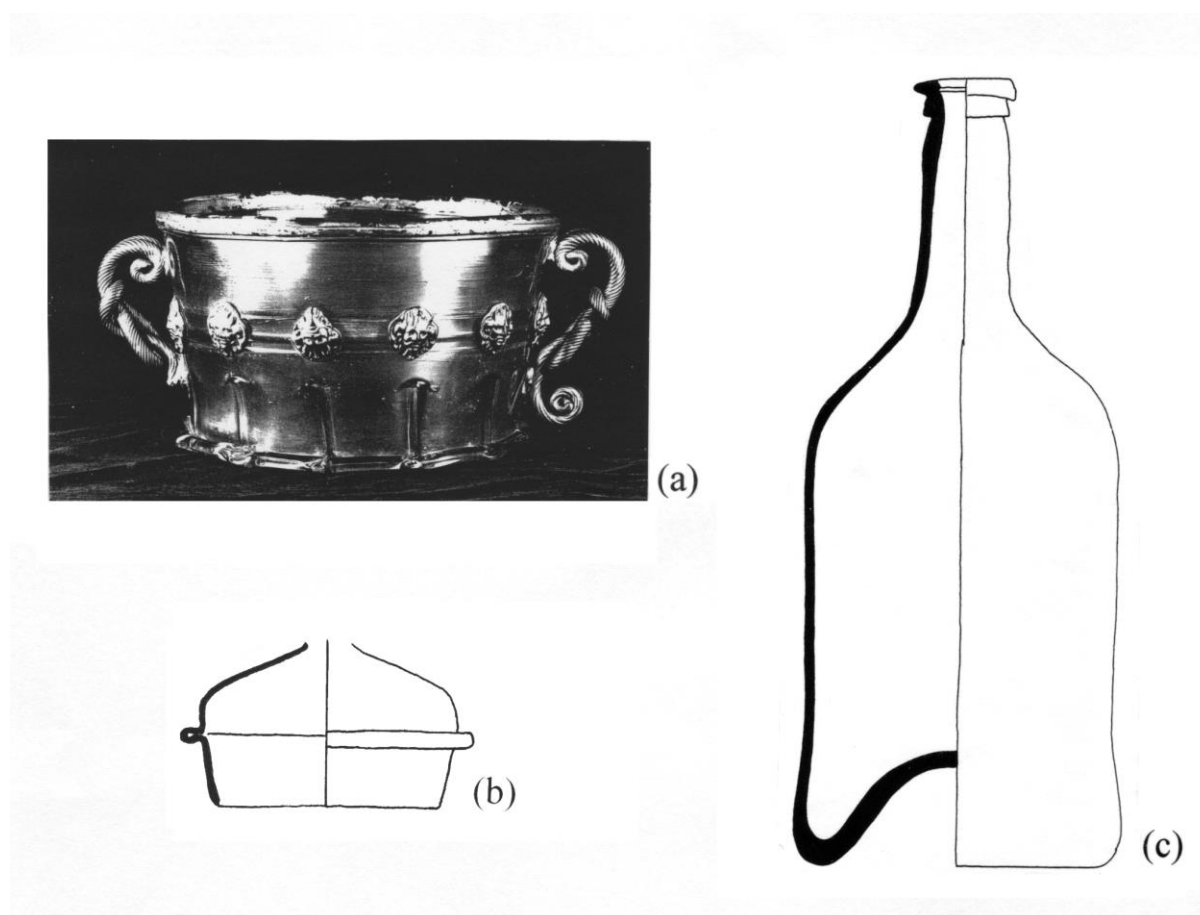


Fig 37 Guildford Park Manor. (a) Glass cistern 0.30m in diameter which belonged to Henry VIII and is on display at the Victoria & Albert Museum. Small fragments of ribbed glass discovered in garderobe pit 1 at the inner edge of the moat in B are considered to be from a similar cistern. (b) An opaque-white glass lid, 60mm across, of a goblet or jar, discovered in F. (c) Reconstruction of a sack or wine bottle from six fragments found in the fill of the moat in A. The external diameter near the base is 122mm and the capacity about 0.43 litres. It is probably late 18th century.

Two complete Victorian poison bottles with the embossed warning 'not to be taken' were found in AK. Both are hexagonal, about 8.5cm in height and 2.9cm across the base, but one is blue and the other green (Hedges 1975, 16). A Paterson's of Glasgow 'Camp' coffee bottle, containing some solidified matter, and two glass bottle stoppers, one marked 'Gartons', were also found in AK. F G Garton was a Nottingham grocer who launched HP sauce in 1903. A glass bottle stopper was also found in the fill of the moat in A. A large quantity of very decayed glass from various vessels and some small pieces of wine bottles were found in G, I, AM, AN, DM, EO, EP, FO, GO and HO.

It is also convenient to mention here a polyhedral jet bead, 8mm across, found in the topsoil of GO.

Clay pipes

Thirty-three clay pipe fragments were discovered in the fill of the moat, particularly in levels 8, 9 and 10 (fig 10). These included two bowl and two foot fragments but there were no makers' marks or decorations. The fragments of stem varied in length from 6 to 90mm, the latter being three pieces that joined together. The diameters varied from 5 to 10mm and the bores from 1 to 2.7mm. These were mainly off-centre, particularly in the thicker stems. Parts of two bowls of clay pipes with the initial 'S' on the feet were found in the topsoil of BM. Fragments of stem, varying in length from 28 to 58mm were also found in F, G, H*, I, AN, AP, BO, CO, EM, EN, EO, GO and HO.

Early clay pipes, dating from about 1600, were small and only about 7.5cm long. By 1650 the length had increased to 20–25cm and in the 18th century to 40–45cm. Also, in the 18th century, flat feet were replaced by spurs (Wood 1972, 279–81). The form and size of some of the fragments found suggest that they date from before 1670 but others could be as late as the early 19th century. They had clearly come from the farmhouse (Eric Wood, pers comm).

ANIMAL BONES

A large number of animal bones were discovered during the excavations, particularly in the fill of garderobes 1 and 2 and the moat. A preliminary discussion of these bones with Peter Davis resulted in a selection being shown to Geraldine Done, who, in October 1975, reported as follows:

The bones presented for examination consisted, almost entirely, of culinary waste. The species identified and the number of bones were: ox 6, sheep/goat 11, pig 16, sheep/pig rib fragments 17, rabbit 16, chicken 3, plus a whole skeleton, duck 5, red deer 1. In terms of minimum numbers, there are represented at least 3 rabbits, 2 chickens and 4 pigs. Also present were 52 shells, including oysters, cockles, mussels, 6 common snails, 2 ramshorn snails, and 13 fish bones. The variety of shells was impressive. The bivalves would have formed part of the diet and it is possible that the common snails were also used but the significance of the small ramshorn is doubtful.

The virtually complete chicken skeleton included the skull. In the case of such a small animal, the finding of all the bones in one place does not preclude it having been eaten, though the presence of the head would in that case be rather odd. Other chicken and rabbit bones came from all parts of the skeleton, except that no rabbit skull or jaw was found. At least one rabbit was immature.

The sheep bones were as expected in kitchen waste, ie rib, long bone and scapula fragments. The pig was represented mainly by jaw and skull pieces, including the jaw of a very young (suckling?) pig. Ox bones consisted of 2 long bone pieces, 2 fragments of

vertebra, and 2 bones of the foot. There was no evidence of horse or dog. (Some teeth not shown to Geraldine Done were considered by Peter Davis to be horse.)

The red deer bone reported by Geraldine Done is particularly interesting. In the description of the park, which accompanied John Norden's map of 1607 (Norden 1607), it is stated that 'This parke hath 600 Fallow Deere about 80 of antler, and not above 30 Buckes.' There is no mention of red deer. Several pieces of antler were found in the moat and these were all considered to be of fallow deer. However, it appears that red deer venison was eaten in the park at some stage and it would seem unlikely that this had been imported from elsewhere.

Bones, including many teeth, some in jaw bones, and oyster shells were also found in F (67), AO (3), BM (2), BN (3), CN (1), CO (9), DM (3), DN (2), EM (10), EN (26), EO (10), EP (6), FO(62) and HO (32). In some squares, these were all saved but in others, many were discarded. One of the bones in BM was a fibula and had been made into a pin.

Discussion

The structural remains excavated in 1972–5, including wall foundations, robber trenches and garderobe pits, were consistent with the partly-erased illustration of the manor house on the King James version of Norden's 1607 map of Guildford Park held at the British Library (Norden 1607, table 11). A discussion of this point has been published previously in an account of repairs to buildings in Guildford Park carried out in 1514 (Crocker 2003, 228). In particular, the map shows buildings around a small courtyard with a gatehouse at the centre of the southern side. It appears to cover about three-quarters of the moated site, leaving space for service buildings and workshops at the northern end. Several building periods would have been involved in developing this building from the mid-12th to the early 17th century, but it was not the aim of the excavations to investigate these in detail. To do so, far more extensive excavations would have been necessary, particularly on the southern part of the island site. Documentary evidence (Underwood 2002), and the wide range of building materials excavated on the site, supports the view that the manor house was frequently improved. An example of this is the chapel built in 1369, which appears from Penn tiles and window glass found, to have been at the south-east corner of the building, although a second chapel could have existed near the north-west corner of the island.

As three garderobe pits were discovered during the limited amount of excavation carried out along the edges of the western side of the moat, two on the island and one on the outer edge, it is interesting to speculate about how many existed on the whole site. A clue to this is provided by the fact that the two on the edge of the island were about 7.5m apart. These were associated with the western wall of the manor house that was probably about 33m long, stretching from AC to AN. If pits were located uniformly along this wall, there would have been space for five or perhaps six. The other walls of the house were not adjacent to the moat and might not therefore have had garderobes. The main entrance lodge at the centre of the south wall does, however, appear to have projected up to the moat but having garderobes at this location might have been avoided. The need for a garderobe on the outer western side of the moat indicates that there was a need outside the main building and there could equally have been five or six pits along that edge. Isolated latrine buildings along the northern edge of the island and, particularly, along the eastern edge, might also have existed so that the total number of garderobes could easily have been a dozen or more. This is consistent, for example, with twelve in the garderobe tower at Langley Castle at Hexham in Northumberland (www1, 2010) and the nine or more built into the town walls at Conwy, north Wales (www2, 2010).

Not surprisingly, the pottery forms excavated cover the period from when Guildford Park was enclosed in 1154, or perhaps earlier, up to the 20th century. There is, however, a major division between sherds associated with the manor house and those with the later farmhouse. In particular, those from the manor house include some very good quality pieces such as elaborately decorated medieval jugs, cooking pots and storage jars, fine Tudor cups, a renaissance jar, a Beauvais bowl and German stoneware. The farmhouse material includes much slipware from the Surrey/Hampshire border, commemorative Staffordshire stoneware and large quantities of Victorian china. Similarly, the small finds date from several centuries but none are clearly earlier than about 1400. In particular, the groats, jettons, lead seals and Venetian glass cistern are all late 15th or early 16th century. Only the eagle emblem engraved on a triangle of lead might be earlier. The later finds include clay pipes, horseshoes, sack bottles, poison bottles and 20th century coins.

It is necessary to emphasise that most of the pottery and small finds were excavated from soil that had been disturbed continually for over eight centuries. Part of this was associated with refurbishing and rebuilding the manor house many times up to the end of the 16th century, but more important was the disposal of building material in 1609, particularly to the More family of Loseley House, only 2km to the south. The resulting robber trenches contained a mixture of finds dating from a period of over 400 years. There followed several centuries of the site being used by the tenants of the farmhouse for disposal of rubbish, particularly in the western side of the moat and on the northern end of the island, where most of the excavations took place. The construction of a tennis court, summer house, a garden pond, and the planting of many trees and ornamental shrubs has also resulted in much disturbance. In most of this area medieval and Tudor finds were intimately associated with much later material. Also, sherds of one piece of pottery were sometimes found several metres apart in different excavated squares.

Because of this inter-mixture of finds, it was decided that in this report it would not be helpful to specify in detail the locations where they were excavated. There have been exceptions, particularly the garderobe pits, but these in any case were filled in a short space of time and any layers of deposit were not significant. Also, the trench across the moat provided an interesting undisturbed deposit of rubbish that had been deposited over a period of approaching 400 years. A section of the north side of this trench has therefore been provided (fig 10). Many other excavated sections and plans were prepared and are contained in the archaeological archive (see the Appendix).

The author is very conscious that this report was finalised some 35 years after the excavations took place. However, it was prepared gradually over this long period and therefore the presentation may contain unfortunate inconsistencies. Some of the procedures and techniques adopted and described will also be outdated. Again, most of the expert reports presented here were provided while the excavations were in progress or shortly afterwards, and little attempt has been made to obtain revised or new accounts from the same or different authorities. Apologies are tendered to those whose views have been reported and who might have preferred revised accounts to have been requested. To these reservations must be added the fact that most of the volunteers had not been involved in an excavation previously. Any interpretation of the results must therefore be considered cautiously. However, it is hoped that publication of this report will encourage others to re-examine at some time in the future the finds and the extensive archive of excavation notes, drawings and photographs, and be able to deduce a more coherent understanding of the site. Indeed, this could result in enthusiasm for carrying out further excavations. Only about 8% of the island, 12% of the filled moat at its western side and 2% of the whole area of the moat, was investigated. Since the site is now a Scheduled Monument, any further excavations would require special approval. The

presentation of this report also reflects the background interests and knowledge of the director and author. These are based on a career as a university teacher and researcher in the physical sciences but with a deep interest in local history and archaeology.

APPENDIX: CONTENTS OF ARCHAEOLOGICAL ARCHIVE DEPOSITED AT GUILDFORD MUSEUM (AG 24275)

This appendix is divided into sections on site notebooks, drawings of plans and sections, drawings of pottery and finds, photographs and correspondence with authorities.

SITE NOTEBOOKS

During the 1972 and 1973 seasons of excavation, notes were written by the author on A4 sheets of paper attached to a clipboard. These were later edited and stapled together to form A4 booklets. The 28 days of excavation in 1972 produced about 60 sides of paper and these resulted in two booklets labelled 72/1 and 72/2. In 1973 the concentrated nine days of excavation generated about fifteen sides of notes and these were bound as 73/1. It was decided in 1974 to use A6 booklets, one for each square or trench, and to encourage the volunteers carrying out the excavations to take responsibility for writing the notes themselves. This was done with great enthusiasm but the results were, not surprisingly, rather mixed. Part of the problem was that different volunteers were present on different days and some used one book for more than one site being excavated. Also some information was entered from the front of booklets, some from the middle, and some from the back. The result is that the notes in booklets 74/1 to 74/11 can be rather difficult to use. Therefore, in 1975, when booklets 75/1 to 75/11 were used, it was insisted that only notes for one square or trench should be written in each book, and this worked satisfactorily. Table A1 gives the book or books in which notes about each trench and square can be found, apart from C and D for which, unfortunately, books were not kept.

Table A1 Site notebooks in which the excavation of the trenches and squares are recorded.

A, 72/1, 72/2	AK, 72/2	CO, 73/1, 74/3	EO, 74/4
B, 72/2	AM, 74/1	CN, 75/2	EP, 74/8, 75/5
C, D -, -	AN, 73/1, 74/1	CP, 75/3	FO, 74/7
E, 73/1, 74/9	AO, 73/1	DM, 75/4	FP, 74/3, 74/7, 74.8
F, 73/1	AP, 74/2, 74/3, 74/8	DN, 73/1, 74/5	GO, 74/7
G, 74/1	BM, 75/1	DO, 74/4	GP, 74/7, 75/6
H, 74/2	BN, 73/1	DP, 73/	HC, 75/7, 75/8
I, 74/11, 75/1	BO, 73/1	EM, 74/6	HD, 75/8
J, 74/3	BP, 73/1	EN, 73/1, 74/6	HO, 74/10, 75/9, 75/10

DRAWINGS OF PLANS AND SECTIONS

Plans and sections of the trenches and squares excavated, drawn on site at a scale of 1:10, have been deposited. These are on 99 sheets of A4 graph paper, 23 of A3 and two of A2. The drawings have been labelled with their trench or square letters and then numbered in alphabetical order from 1 to 124. Most of those who took part in the excavation, including the children, were involved in preparing the drawings so that the standard is rather variable. However, it is considered that they provide a valuable and impressive, detailed record of what

was achieved. Table A2 gives the numbered drawings associated with each trench and square. No detailed drawings were produced for D, J and CP.

Table A2 The numbered drawings of plans and sections of trenches and squares that have been deposited.

A, 1–13	AK, 36–39	CN, 67–69	EP, 97–101
B, 8–19	AM, 30, 40	CO, 65, 70–72	FO, 96, 102–104
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H, 31–32	BN, 60–64	EM, 85–87	HD, 114–117
I, 33–35	BO, 65	EN, 87–92	HO, 118–124
	BP, 66	EO, 93–96	

DRAWINGS OF POTTERY AND FINDS

Several hundred original drawings have been deposited.

PHOTOGRAPHS

While the excavations were in progress, photographers from the Audio Visual Aids Unit at the University of Surrey made visits to the site and took many black and white photographs. Most of these were taken informally and do not pretend to be a sanitised record of the excavation. However, they do provide an accurate record of the work being carried out, the features revealed and the people involved. About 235 A5 prints of these photographs have been deposited. The locations shown are indicated on the backs of the photographs. In addition, many amateur photographs were taken by those involved in the excavations. Of these, eight large (255 x 203mm) black-and-white photographs have been deposited, again with locations indicated on their backs. However, most of these amateur photographs were coloured slides and about 400 of these have been labelled and deposited. Of these some 260 are of the excavation in progress and of cleaned-up trenches and squares, and another 60 or so of the Manor Farm and other related buildings. The remainder are of excavated and reference pottery, and finds (about 50), drawings of site plans and sections (about 10), and historical documents and historic characters associated with the site (about 20).

CORRESPONDENCE

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