THE EXCAVATION OF A MEDIEVAL SITE AT WALSINGHAM SCHOOL, ST. PAUL'S CRAY, BROMLEY, 1995

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SUMMARY

A desk-top study and field evaluation at Walsingham School, St. Paul's Cray, Bromley, Kent, led to the discovery of evidence for a site of medieval date. This was subsequently excavated, revealing the remains of a medieval farmstead.

INTRODUCTION

In May 1995, a desk-based assessment was carried out by Thames Valley Archaeological Services (Durden 1995), followed by a field evaluation in July of the same year (Fig. 1; Ford 1995) as a part of the process to develop the site for housing. These were carried out to a specification approved by Mr Ken Whittaker of English Heritage (London Region). The areas in which investigation took place lay on a parcel of land of approximately five hectares occupied by the demolished buildings and playing fields of the former girls' school. The site is located on the western side of a tributary valley of the river Cray in St. Paul's Cray, which itself lies 6 km. east of Bromley and 3 km. north of Orpington, centred on N.G.R. TQ 463 697 (Fig. 1). It is situated at a height of roughly 50 m. O.D. and the solid local geology consists of Thanet Beds (sandy clay with occasional pebble beds). Brickearth is present to the east of the site and sloping towards the Cray Valley; the valley itself is floored by flood plain gravel and alluvium. Chalk outcrops on the eastern side of the valley, capped in places by Thanet sands (BGS 1951).

THE EVALUATION

The evaluation consisted of 25 trenches, varying in length from 10 to 22 m. (Fig. 1), revealing five possible archaeological features, possibly representing elements of the medieval countryside such as field boundaries or parts of a dwelling (Ford 1995). Although the majority of the site was sterile due to modern truncation, etc., the western side

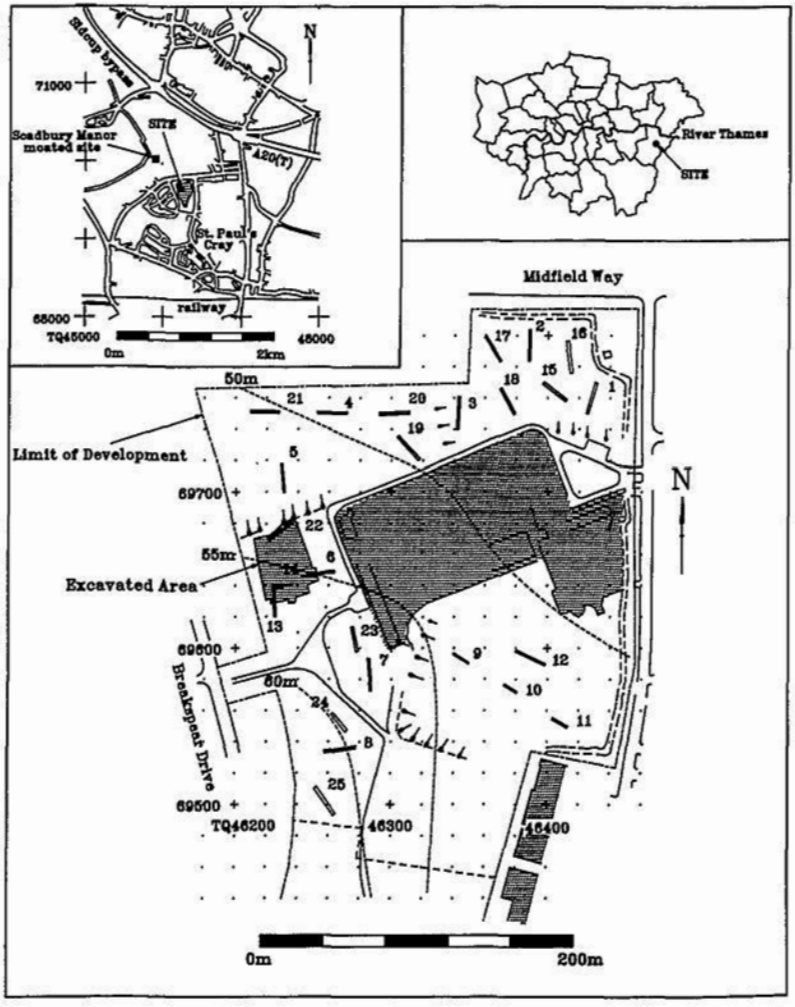

Fig. 1. Location of the site within Bromley.

appeared not to have been landscaped. There was sufficient indication of medieval activity to warrant further investigation within the area of potential identified by the evaluation and for this reason a small excavation was proposed in consultation with, and with the approval of, English Heritage.

THE EXCAVATION

The excavation consisted of archaeologically supervised topsoil stripping of approximately 549 sq. m., by a 360° mechanical excavator fitted with a toothless bucket. This revealed a sandy clay subsoil with silt-filled channels and patches and occasional areas of small pebbles.

Generally, the features were clearly visible following topsoil stripping. All likely archaeological features were investigated and ultimately 50 features (including those found in the evaluation) were recorded. Details of these features are to be found in the site archive which is to be deposited at Bromley Museum. The site code is WGS95.

DESCRIPTION OF FEATURES

The features consisted of pits and scoops, gullies and ditches, stake-holes and post-holes, post-pads, hearths, burnt areas and building structures (Figs. 2, 3 and 4), the majority of which can be subdivided for convenience into three associated groups: A, B and C (Fig. 2). In addition, a number of pits concentrated in the middle of the site can be assigned to a fourth group, D (Fig. 2). The fills of features were usually a silty clay or a sandy clay silt. Several spreads of a dark silty nature were associated with a recognisable building structure (group B, Fig. 4) and possibly represent occupation layers. Similarly, the areas of burnt soil are clearly related to structural group A (Fig. 3) and the presence of large quantities of charcoal indicate the possibility of small scale industrial activity.

Linear Features

Of the ten linear features identified in the excavation area, three proved to be plough stripes (not illustrated). Feature 103 was a ditch running roughly east–west into the western edge of the excavated area (the terminus of this feature was recorded during the evaluation as F2) (Fig. 2). Approximately 3.80 m. of the ditch was revealed; it was 1.17 m. wide and 0.14 m. deep, with sloping sides and a flat base.

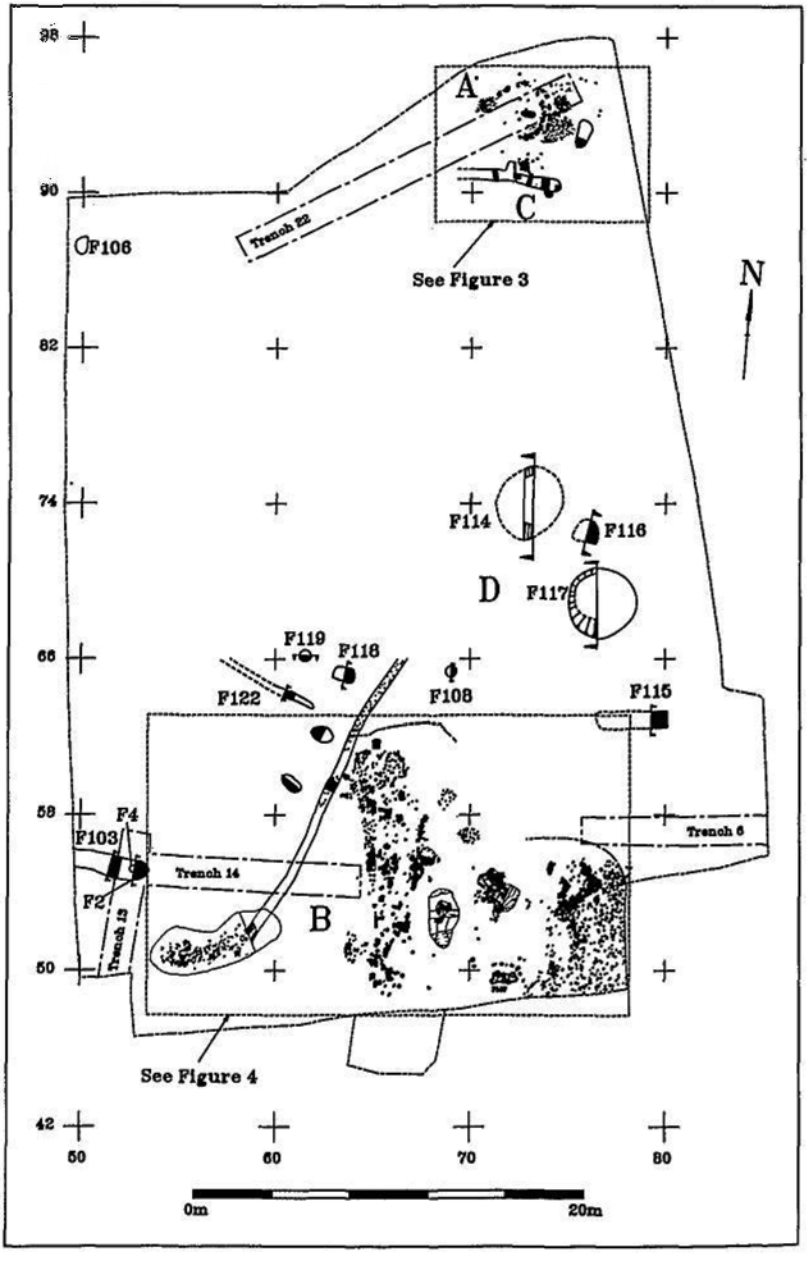

Fig. 2. Plan of excavated area showing Groups A to D and the location of Figures 3 and 4.

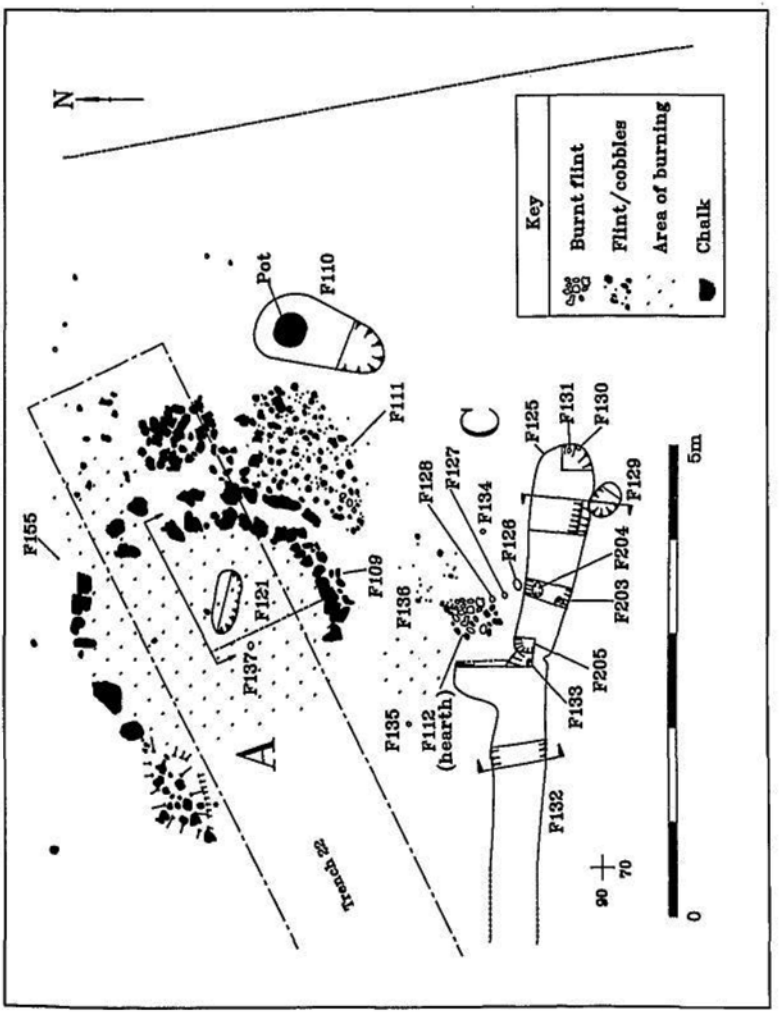

Fig. 3. Detailed plan of Areas A and C.

Pottery and burnt flint within its fill showed it to be clearly medieval in date. A second linear feature, F122, was a gully 0.38 m. wide and 0.11 m. deep running east–west towards the centre of the site. Although it was not possible to trace its entire length, a section was excavated by hand producing pottery and a small quantity of burnt flint (12 gms). Features 125 and 132 were a pair of short gullies situated towards the north-eastern part of the site (Figs. 3 and 5). They would appear to be related features as their termini butt one another. F125 (dug in three sections) had two stake-holes (F130 and 131) cut into its eastern end and two possible stake-holes (F203 and F204) towards its western end, although these were somewhat ill-defined due to root disturbance, as was a possible post-hole towards the western end (F205). The south-eastern side of this gully had also been cut by a post-hole (F129). The second gully, F132, was dug in two sections, revealing a stake-hole in its eastern terminus (F133). The fills of both these features produced pottery of medieval date.

Feature 115 consisted of a short ditch, approximately 5.50 m. in length, crossing the south-east part of the site from east to west (Fig. 2). This had sloping sides, a flat base and was of 0.30 m. average depth with modern plough marks cutting its eastern end (not shown). A total of 85 sherds of pottery was retrieved from both its fills (159 and 160) while tile was present in 159 and a nail head within 160. Feature 300 is a ditch aligned north-east–south-west towards the south-west part of the site (Fig. 4). This varied in width from 0.50 m. to 0.65 m. and in depth from 0.15 m. to 0.22 m. A length of this ditch showed signs of a recut (F202). At its south-western end the fill of this ditch was overlain by an extensive spread of tile lying in a shallow depression. None of the ditch fills yielded any pottery although the layer of colluvium surrounding the tile above produced pottery and iron nails of medieval date.

Post-holes/stake-holes

A total of ten stake-holes and two post-holes was excavated and recorded. A number of possible stake-holes, predominantly from the northern part of the site, were also noted but were so truncated that it was not possible to determine whether they were indeed archaeological features or the result of root action. They were nevertheless planned in order to ascertain whether they contributed toward the overall impression of a possible structure embodied within Group C. Both post-holes were flat bottomed and circular in plan. The first, F129, was 0.18 m. deep and 0.31 m. in diameter and cut the southern side of gully F125 (Fig. 3). A small amount of tile was present within its

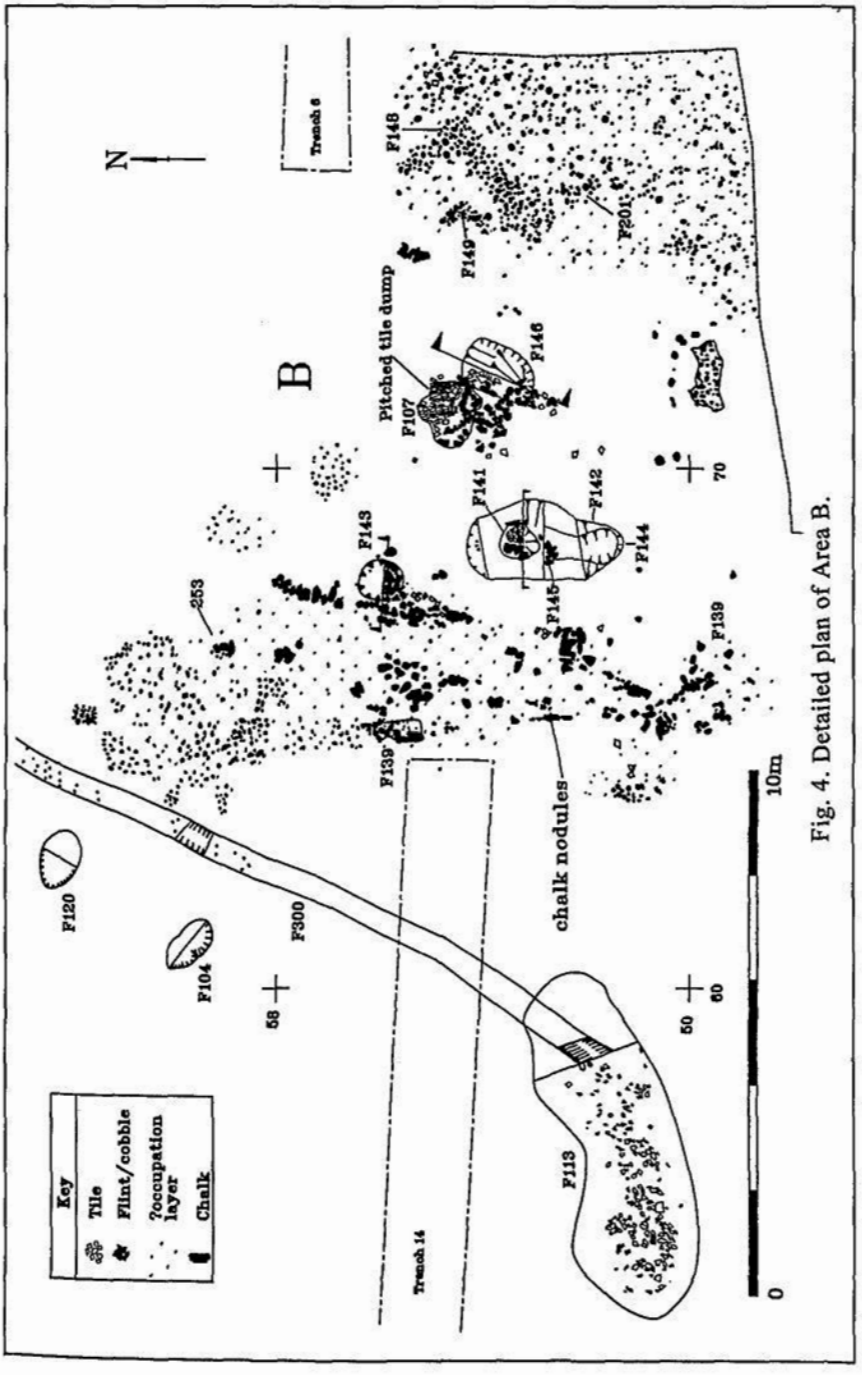

Fig. 4. Detailed plan of Area B.

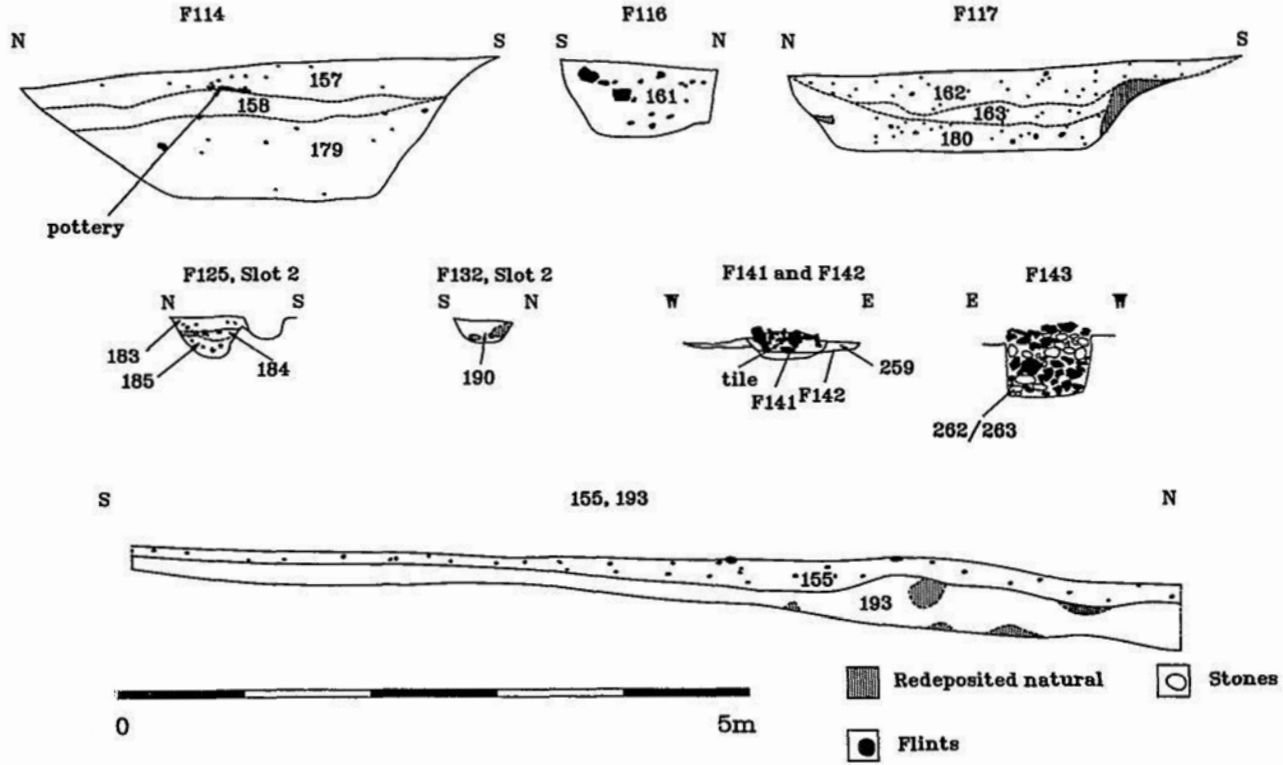

Fig. 5. Selected sections.

fill. The other, F141, was 0.22 m. deep and 0.60 m. in diameter, the post having been packed around with flint nodules (Figs. 4 and 5). Following removal or decay of the post, the post-pipe had become filled with broken tile. A number of sherds of pottery were recovered from this feature. Ten stake-holes were excavated (Fig. 3, F126-28, 130, 131 and 133-137). All were thought to be valid archaeological features although only F126 was found to contain pottery within its fill.

Post-pads

Two probable post-pad settings were identified. The first, F143, consisted of a large roughly square pit approximately 0.48 m. deep which had been tightly packed with flint nodules and water-worn cobbles (262) (Fig. 5). Both pottery and tile were present within the soil matrix of this packing (263). The other, F145, comprised a 0.40 m. setting of large flint nodules laid on the ground surface adjacent to post-hole F141 (Figs. 4 and 5).

Pits and Scoops

In total 16 pits and scoops were found on the site of which 11 were pits (Fig. 2, F108, 114 and 116-119; Fig. 3, F110 and 121; Fig. 4, F104 , 120 and 146) and five were scoops (Fig. 2, F106; Fig. 4, F107, 113, 142 and 144). Following excavation one of the scoops (F106) appeared to be a natural feature, probably a product of root disturbance, although it produced a small number of sherds of pottery. All scoops have been included in the plan.

Nearly all of the pits occupied a broad area roughly in the middle of the site with three exceptions (F110, 121 and 146). F110 was a very poorly defined ovoid pit cut through a layer of colluvium in the north-east corner of the site and immediately to the south-east of one of the elements of structure A. This feature is probably associated with structure A. It was found to contain the greater part of a large bowl of a coarse fabric dateable to the eleventh to mid twelfth century. F121 lay at the north end of the site within structure F109 and was a narrow, shallow sub-rectangular pit 0.64 m. in length. F146 was larger, being rectangular and flat bottomed some 1.60 m. by 0.64 m. with a depth of 0.30 m. A variety of artefacts was recovered including sherds of glazed and decorated pottery, flint, iron nails and an unidentifiable iron object.

The remaining eight pits could be sub-divided into three categories based on their plan: circular - F108, 114, 117 and 119; oval - F104

and 120, and rectangular/sub rectangular F116 and 118. Of those that were circular in plan, F108 was 0.65 m. in diameter and 0.22 m. deep; F119 was 0.70 m. in diameter and 0.15 m. deep. Neither produced any finds. Features 114 and 117 were by far the most impressive, being altogether much larger. F114 was the largest, with a diameter of 3.80 m. and also the deepest at 1.10 m. (Fig. 5). In addition, the recovery of pottery from this feature exceeded that from all others. F117 was 3.68 m. in diameter with a depth of 0.70 m. and its fills, stratigraphically, strongly resembled F114 (Fig. 5). It also produced finds of pottery and daub or fired clay. Both features also contained some metalwork, mainly iron nails. The two oval pits, F104 and F120 were very similar in size with mean dimensions as follows: length - 1.20 m., width - 0.63 m. and depth - 0.14 m. Only F104 produced a small quantity of pottery. Feature 116 was a square pit with sides of 1.25 m. and a depth of 0.60 m. This contained a number of large flint nodules within its single fill (161) and a small number of pottery sherds. Lastly, F118 was sub-rectangular and was 0.28 m. in depth, producing only a single sherd of pottery.

Burnt areas

The first of these, F112, was a circular area of fire-reddened flint nodules and cobbles set in a greyish silty matrix (Fig. 3). These were surrounded and underlain by a reddened area of burnt natural sandy clay (195). This feature was interpreted as a hearth. The second was a large spread (155) containing quantities of charcoal and this was situated both within and immediately surrounding Structure A (Figs. 3 and 5). Several sherds of pottery were present within this deposit.

Stone structures

It has already been mentioned that the site consists of four main areas (Groups A, B, C and D) each containing clusters of features (Fig 2). Groups A and B are approximately 35 m. apart and appear to be buildings with stone elements in their construction, while the third, Group C, may be discreet or may be associated with Group A. Group B lies to the south of the site and A and C to the north. It may be possible to extrapolate structures within each of these zones although the evidence is incomplete and interpretations are somewhat tentative.

Group A

In Group A (Fig. 3), it is possible to surmise a single circular structure F109 with an opening to the west; the south side of the opening has been partially removed by ploughing. The structure was composed of flint nodules and medium to large cobbles, sitting on the natural ground surface. A single chalk block was incorporated into the north side. The internal diameter was roughly 2.50 m. with the interior exhibiting signs of burning with considerable fire reddening of the ground surface and numerous fragments of charcoal present (155). Some parts of the structure consisted of only a single course while others were three courses high. A large number of flint nodules were spread about immediately to the east of this structure and probably represent collapse. The more southerly part of this area of tumble consisted largely of much smaller cobbles and may possibly form a deliberate surface or platform abutting the south-eastern side. Lying as it does on the lower side of a slope, the whole area surrounding this structure had been subjected to a substantial build-up of colluvium.

Two other features appeared to be associated with this building. Immediately adjacent to the area of cobbles or platform was a substantial part of a complete but badly fragmented plain large cooking-pot of possible late eleventh to mid twelfth-century date (Fig. 3). This was eventually found to be sitting in a poorly defined pit (F110), approximately 0.30 m. deep, 1.15 m. long and 0.55 m. wide, although the build up of colluvium made its north-eastern extent difficult to define. Excavation of a quadrant within the flint and cobble structure revealed that 0.15 m. below the burnt surface was a small figure-of-eight shaped pit, but no finds were present (F121). It did not appear to form part of the surrounding structure and probably pre-dates it.

Adjacent to the south side of the building were three distinct areas of burning and a concentration of fire cracked and reddened flints and cobbles, interpreted as a hearth (F112). A small number of pottery sherds were recovered from this feature.

Group B

The group of features at the southern end of the site is equally enigmatic (Fig. 4). It is clear that on this part of the site had once stood a fairly substantial structure constructed of the same materials as the building forming part of Group A. Subsequent ploughing of the majority of the site has resulted in the removal or displacement of many of the flint nodules and cobbles that otherwise appear to represent the dry stone

foundations of some sort of dwelling. This unfortunately means that an accurate ground plan of the building is impossible to achieve, but, despite this, it is possible to draw some conclusions as to its nature. In general, the southern part of the site was covered with a considerable amount of tile, particularly in an area just to the west of the apparent focus of occupation (F113). This would indicate that the building had, at some period, possessed a tiled roof. It is suggested that in the thirteenth to fourteenth century tiles still largely represented a rare and expensive material reserved for urban buildings or those of higher quality (Chapelot and Fossier 1985, 317). It is probable that those tiles that remained sound, following demolition or collapse of the building, were taken away from the site for re-use and that F113, to the west, represents a deliberate dump of discarded broken tiles. It is unfortunate that no tiles appeared to remain where they had fallen following the decay of roof timbers, so no assumption could be made regarding the pitch of the roof. The presence of localised concentrations of nails (Fig. 6) suggests that the construction included a timber element, perhaps wattle with daub infilling or the use of sill beams on dwarf foundation walls. Often the presence of large numbers of nails near an entrance suggests a collapsed porch or merely a rotted door (Steane 1985, 191). Similarly, if one were able to assume that the three iron keys (Fig. 8) discovered in association with the alignments of stone were indeed *in situ* then it might be possible to infer the position of doorways. One of the keys, of undoubted medieval type, was found in close relationship to an alignment of chalk blocks forming part of a possible wall alignment (Fig. 4). The significance of these blocks is open to question, but in many medieval contexts they are normally used to highlight a prominent aspect of a building such as a window or doorway. The most coherent alignments of the flint nodules appear to lie on a broadly north–south axis implying that the front or rear of the building faced either east or west. Bearing in mind the slope of the land it would be logical for the building to have had an east facing aspect across the Cray Valley.

Group C

Situated immediately to the south of Group A were the two abutting gullies, F125 and F132 (described above) with their accompanying post and stake-holes (Fig. 3). One possible interpretation for these features is that they represent settings for some form of hurdle fence or windbreak, or alternatively for some kind of temporary roofing structure associated with the building to the north (McCarthy and Brooks 1988).

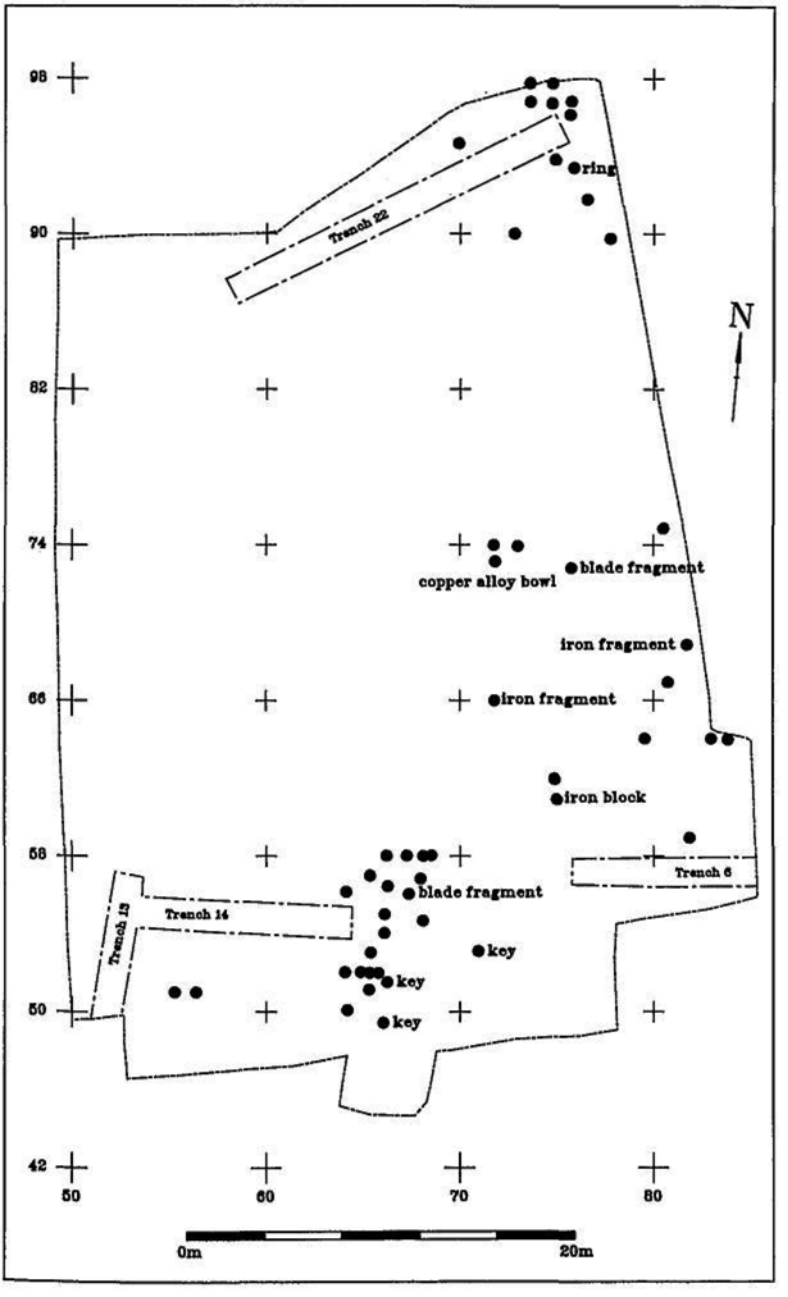

Fig. 6. Plan showing location of metal objects recovered.

THE FINDS

THE POTTERY
Jane Timby

Introduction

A medium size assemblage of *c.* 1600 sherds (16.8 kg.) of pottery was recovered from the excavations accompanied by a small amount of tile. The assemblage was relatively homogeneous with a small range of fabrics present almost exclusively dating to the medieval period. The material was of variable quality, many of the sherds being in fairly fragmented, abraded condition, particularly from the surface layers. This is reflected in a moderately low average sherd size of 10.6 gms. Forty-three per cent of the assemblage was recovered from the colluvium (context 151), 7 per cent from surface layers and 50 per cent from features. The material from the features appears to derive from one period of occupation, probably extending from the early-mid twelfth to early thirteenth century. The material from deposit 151, although largely of similar composition, is slightly more mixed with two sherds of nineteenth century Sunderland ware and English stone ware, one possible Roman grey ware flagon, and a few Surrey-Hampshire Border wares, suggesting later activity or perhaps the formation or continuing accumulation of the deposit into the fifteenth to sixteenth century or later. The assemblage was sorted into main fabric classes and quantified by sherd count, weight and estimated vessel equivalence (EVE) for each excavated context. Fabrics were correlated with the London fabric series (Museum of London).

Description of Fabrics and Forms

M1:A mainly grey, occasionally brown, sandy ware with sparse flat voids from leached shell. Equates with London fabric SSW (sandy-shelly ware) (Peters and Vince nd) which first occurs in London in the mid twelfth century. Probably also the same as Otford fabric 3 (Keller 1984, 169). Used for hand-made cooking-pots typically with flat rims, shallow dishes and handled pans. One cooking-pot is decorated with an incised wavy line on the upper rim surface and a small number of sherds have applied thumbed strips. Date: 1140-1220.

M2: A fine , sandy, orange fabric with a slightly micaceous paste. Used for jugs often with a white slipped finish with green glaze, or red and white painted decoration. One vessel has thin vertical applied strips (Fig. 7, 8). An example of a rod handle with a round cross-section came from F139. The fabric belongs to the London-type ware tradition (Pearce *et al.* 1985), code LOND. The illustrated vessel in particular is in the Rouen style (LOND-ROU). Date: 1180-1270.

M3: A coarse sandy ware. Cooking-pots, some with applied thumbed strips. Probably equates with London fabric ESUR, Early Surrey ware (Vince and Jenner 1991, 73). Found as cooking-pots and jugs. Date: mid eleventh - twelfth century.

M4: A medium sandy ware with sparse red iron. Less coarse than M3 but probably derived from the same potting tradition. Hand-made cooking pots. Date: mid eleventh -twelfth century.

M5: A plain, fine, sandy, slightly micaceous ware, slighter and softer than M2; dark grey to red-brown in colour with a grey core. Used for jugs with thumbed bases. Some sherds show stripes of red painted decoration. Related to fabric M2, and part of the London-type wares (LOND). Date: 1080-1350.

M6: Other miscellaneous sandy wares which probably derive from the Surrey industries (ESUR), in particular Limpsfield (Prendergast 1974). Date: 1150-1350.

M7: Smooth, soapy red-orange ware, occasionally grey, with frequent angular flat voids from leached shell fragments. Some sparse sand grains microscopically visible. This fabric equates with London fabric EMSS (Early Medieval sand and shell-tempered ware)(Vince and Jenner 1991, 59); Otford fabric 1 (Keller 1984, 167). Date: Early/mid eleventh - late twelfth century.

M8: Similar to M7 but with a sparse to moderate frequency of fine quartz sand and a slightly sandy feel (=EMSS type). Date: probably eleventh century.

M9: A grey, medium sandy, well-fired ware. Dark grey core sometimes with brown margins. The paste contains a common frequency of well-sorted sub-angular clear quartz sand, rare iron and carbonaceous matter. Probably from the Limpsfield kilns (London fabric code LIMP). Cooking pots.

Discussion

Nearly half the assemblage (49 per cent by count; 46 per cent by weight) falls into fabric type M1 (SSW) which appears to date from the mid twelfth century. Although a significant proportion came from layer 151, it was also associated with structural features F111, F139, F148, F201; pits F114, F116, F146; ditch F115 and hearth F112.

The second commonest ware recorded is the smooth, soapy, dense shelly ware, fabric M7 (EMSS) with a total 284 sherds, 18 per cent of the assemblage. Featured sherds were very limited with only six cooking-pot rims present. This is one of the commonest wares found in early medieval sites in north-west Kent. Similar fabrics have been noted from the excavations at Scadbury Manor (Hart *et al.* 1993) and from the Archbishop of Canterbury's Palace at Otford (Keller 1984, 167 fabric 1). Sherds first occur in early to mid eleventh century deposits in London but are most common in late eleventh to mid-twelfth century groups (Peters and Vince nd). The Walsingham

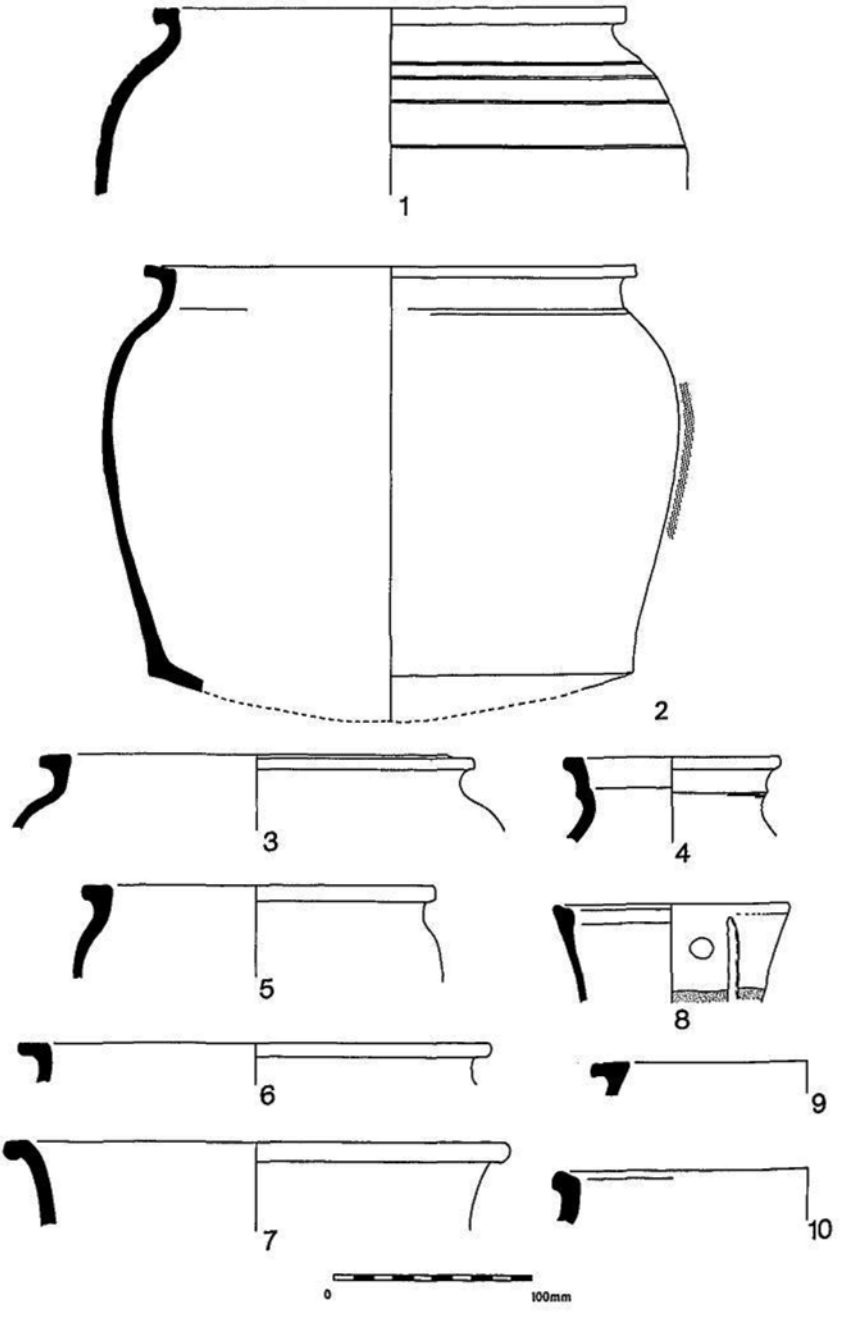

Fig. 7. Pottery.

sherds probably date from the later phases as they occur in association with SSW (sandy-shelly ware). The distribution of sherds is less extensive than fabric M1 with examples in pits F110 and F117; structure F109; scoop F106; hearth F112 and ditch F115. The substantial part of an apparently complete but very badly fragmented plain cooking-pot in this fabric was recovered from pit F110. The higher concentration of the ware in the north-east area of the site might indicate an earlier focus. A slightly sandy variant also occurs, fabric M8 (EMSS) accounting for a further 1.5 per cent by count. Fabric M3 (ESUR/LIMP) first occurs in London in the second half of the eleventh century continuing until the mid twelfth century. It accounts for 12 per cent of the assemblage here and sherds occur in association with structure F139; pits F114, F118 and ditch F115.

Accounting for less than 5 per cent of the assemblage, stratified jug sherds of finer fabrics M2/M5(LOND) were associated with pits F114, F117, F146; scoop F106; structure F139; gully F122; ditch F115 and tile dump F113. Again a late twelfth century date would fit, especially the Rouen style vessel from F115.

The remaining fabrics are only present in very small amounts alongside the above. The absence of any Surrey-Hampshire Border wares from the features suggest activity had essentially ceased by the thirteenth to fourteenth century. However, a small number of Coarse

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Pottery: catalogue of illustrated examples

Fig. 7

1. Wheel-made cooking-pot with girth grooves. Fabric M3 (ESUR/LIMP). F114 (157).
2. Wheel-made cooking-pot with a slightly sagged base. The exterior surface is sooted around the central zone. Fabric M1 (SSW). F114 (158).
3. Wheel-made cooking-pot. Fabric M1 (SSW). F114 (158).
4. Plain pitcher in a dark grey fabric with a lighter core. Fabric M3 (ESUR/LIMP). F114 (158).
5. Small cooking-pot in a dark grey sandy fabric. Fabric M1 (SSW). F115 (159).
6. Wheel-made cooking-pot. Fabric M1 (SSW). F115 (159).
7. Wheel-made cooking-pot in a slightly micaceous shelly fabric. Fabric M8 (EMSS). F115 (159).
8. Jug with a white slipped exterior, with a band of slip on the internal rim face. The lower extant neck is decorated with red paint on top of which is a narrow vertical applied strip. Fabric M2 (LOND-ROU). F115 (160).
9. Cooking-pot. Fabric M1 (SSW). F115 (159).
10. Cooking-pot. Fabric M3 (ESUR/LIMP). F115 (159).

Border Wares found amongst the large quantity of material in layer 151 and occasional Surrey type wares, either indicate continued activity in the area from the fifteenth to sixteenth century, or the intrusion of later material into a deposit formed earlier.

The assemblage presents a relatively coherent group of pottery dating to the medieval period. The range of fabrics and forms is fairly limited and suggests a main period of occupation/activity dating to the early to mid twelfth to early thirteenth century. A sparse scatter of later medieval sherds indicates continued non-intensive activity in the area, but there was a marked absence of material of post-medieval or later date.

Ceramic Building Materials

Tile

Approximately 71.5 kgs. of tile was recovered from the site. The majority of this came from the immediate vicinity of the two buildings and probably represents discarded and broken roof material. The actual quantity retrieved represents only a small sample of that present, indeed several hundred-weight formed the tile dump F113 alone. All were rectangular clay plain tiles with an exaggerated camber, indicating that they were hand-made (Brunskill 1971, 86) and several of the more complete examples displayed pairs of nail holes close to the edge of one of their shorter sides. They were clearly from the medieval period. Two bricks were also recovered, although these were too worn to be dateable.

Fired Clay/Daub

Approximately 320 gms of fired clay/daub were recovered from the excavation, from F148, the possible small structure or cobbled area to the east of the building at the southern end of the site; the remainder came from colluvial layer 151. Due to the small size of the fragments it was not possible to discern wattle impressions or conclude whether they formed a structural element of the buildings.

THE ANIMAL BONE
Kevin Rielly

Only 12 bones, probably all of cattle, were recovered from the site. These are detailed in the archive.

STRUCK FLINT
Theresa Durden

A total of ten struck flints of Prehistoric date was examined, all but two of which were not closely dateable. A blade and a flake with blade scars are possibly of Mesolithic/early Neolithic date. These are discussed in more detail in the site archive.

METALWORK
David Richards

Summary

The total assemblage comprised a collection of *c.* 90 iron objects, mostly nails and nail fragments, and one enigmatic copper alloy artefact. Only about one-third of the recoveries was reasonably stratified, i.e. from a context within features. The bulk, including five of the recognisable special finds, were from the colluvial layer 151. Figure 6 shows the distribution of nail finds and, far from it being a random distribution, there are three distinct clusters. Two, of 12 and 18 nails, are close together and centred at 75E/95N and 68E/54N, respectively. The third, a looser group of nine nails, is centred at 78E/68N. The recognisable objects which have co-ordinates are also found within these clusters.

The most significant finds are the three keys of recognised medieval type (Ward-Perkins 1964, 130 ff.) dated broadly to the thirteenth or fourteenth century (Fig 8). The alloy object is a shallow bowl-like piece of thick metal with a rudimentary spout and with two rods attached at the sides. Its use is quite unclear although a crude crucible seems the most likely interpretation.

A complete catalogue of the metal finds is to be found in the site archive.

CHARRED PLANT REMAINS
John B. Letts

Sixteen flotation samples from medieval features were submitted for archaeobotanical analysis but only a few grains of wheat, barley and cotyledons of pea/bean were found. The full report is held in the site archive.

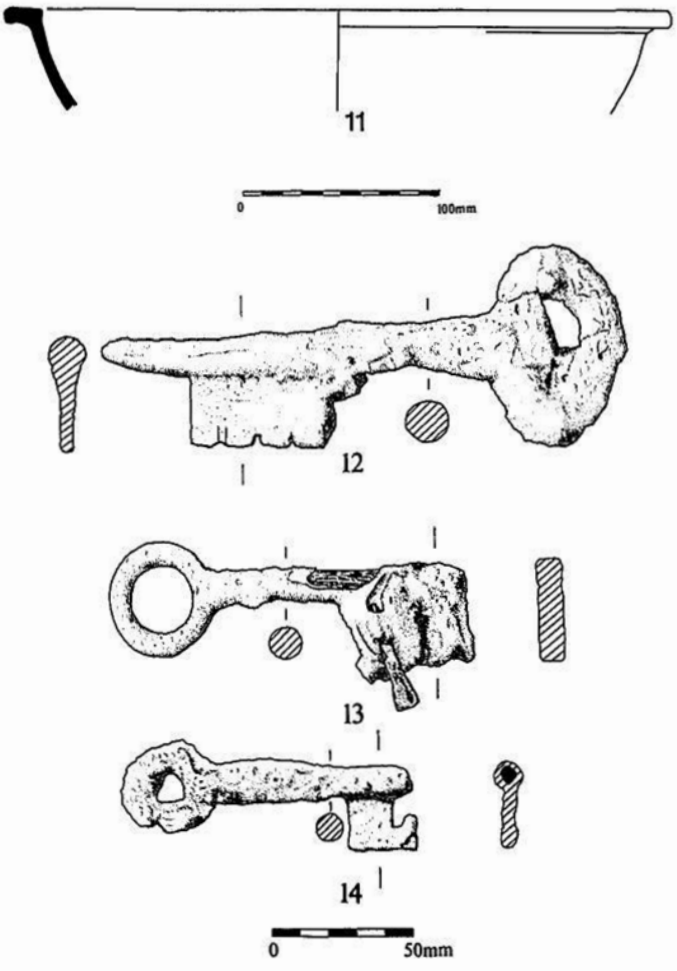

Fig. 8

11. Bowl with a flat rim in a dark grey sandy fabric. Fabric M3 (LIMP). Unstratified surface find (82E/63N).
12. Late thirteenth or early fourteenth century key with D-shaped handle and complex cruciform bit set back from the end of the shaft (Layer 150, grid position 71E/52.5N).
13. Smaller key with round handle and bit set at the end of the shaft. Medieval (Layer 253, grid position 65.5E/51.5N).
14. Key with round/oval handle and single L-shaped bit with hollow end to engage with a peg or pin fixed to the back-plate of the lock. Possibly thirteenth century (Layer 151, grid position 66E/49N).

SHELLFISH

Aquatic mollusc shells, in this case oysters, although a common feature on medieval sites were found in too few a number for detailed analysis. They were found in one feature only, structure F139, probably a dwelling.

THE STONE
David Williams

A large, heavy, reddish-grey fragment of carstone (1,815 gms) was recovered from pit F110 (181). This shows some evidence of being worked, although it is difficult to know if it was used as a quernstone or a building stone. On balance possibly the the latter is more likely, as there seems to be no great evidence of wear on the small remaining area of flat surface. This stone probably derives from the Folkestone Beds of the region, which are found south of the site in Kent, stretching into Surrey. Also from this context was a large fragment from the top section of a stone mortar (783 gms) from the Upper Greensand series, possibly from west Surrey or Hampshire. A small part of a broad flat rim remains, together with a curved smoothed inner surface. There is a wide, roughly rectangular rib at rim level, chamfered and tapering into the outer side of the vessel. In a report on the stone mortars from Winchester, Biddle and Smith (1990, 891) have suggested that this general type of mortar was introduced in the thirteenth century. However, this may be a little too late in date as more recently, in London, a Caen stone mortar was recovered from a mid eleventh century context (Pritchard 1991, 61). This latter example has a pierced, rather than a solid handle, which is thought to belong to the earliest series of stone mortars (*ibid.*). The Walsingham mortar, with its solid handle, should therefore be dated after the London example, though how long after is not certain at present.

Another, smaller piece, of Upper Greensand was recovered from layer 151 and is quite possibly from the above mortar as it has what appears to be a curved smoothed inner surface (157 gms). Also from layer 151 is a large fragment of upper stone from a rotary quern (590 gms) made from the distinctive dark grey vesicular lava associated with the Mayen-Niedermendig area of the Eifel Hills region of the Rhineland. Quarries from this part of Germany produced large numbers of quernstones and mill-stones during the Roman and medieval periods (Parkhouse 1976; Peacock 1980).

In addition, seven small pieces of Mayen lava, almost certainly from rotary querns, were discovered (four from layer 151 (77E/94N) 265 gms and three from F139 (253) 158 gms).

BURNT FLINT

A small quantity of burnt flint was also recovered and this is detailed in the archive.

GENERAL DISCUSSION

It is probable that the site stands on land which once formed part of the manors of Scadbury and Chislehurst and although there is no reference to Chislehurst in the Domesday Book there are references to the 'de Scathebury' family in deeds relating to nearby Kemnal Manor. Three members of this family appear in these deeds in 1257-61 (Archer and Hart 1994).

Several specific points have already been made regarding the interpretation of the structures and it has been noted that evidence of the ground plan is incomplete. It would appear, however, that the buildings discovered represent elements of a medieval farmstead comprising both a domestic dwelling and ancillary farm buildings.

There is conflicting evidence for the social status of the settlement. The pottery recovered does not suggest that this was a particularly high status establishment nor was the range of metal objects typical of a manorial residence. It therefore seems unlikely that this represents a fore-runner of the Manor of Scadbury. On the other hand, a number of aspects of the main building indicate a more elevated social status than that of the peasant classes. The weight of a tiled roof would suggest a building of substantial proportion, as would the presence of the keys found. This is unlikely to have been of the cruck-frame construction type for distribution maps of surviving cruck trusses show that this building technique is not normally found in east or south-east England (Brunskill 1971, 52; Darley 1981, 37). A more likely form of construction would be a box-frame set on a dwarf foundation wall of flint with or without the use of sill beams. Flint is to be found not far distant from the site and there would certainly have been a plentiful supply of timber available in this part of Kent. Features 143 and 145 have been interpreted as post-pads and it is possible that others existed. This type of arrangement can often mean that there is no trace of many load-bearing elements of a building, especially where the pad-stones have been removed or displaced. If one were to assume that the two post-pads recognised were, amongst others, aligned centrally on the long axis of the building it would indicate that the construction consisted of a ridge beam carried on

vertical supports and itself supporting transverse members or rafters. This form of design probably developed in order to clear the interiors of buildings by getting rid of as many posts as possible, thus moving away from the true aisled house. By extrapolation, should the two post-pads be the only load-bearing elements, it would seem to imply the use of a hipped form of roof, for, by positioning the two vertical supports in the shorter end walls, internal space would be gained at the expense of the overall building length. Buildings of this type are well documented in Germany although few are known in Britain. Examples can be found at Gelligaer Common (Glamorgan) from the later medieval period up to the fourteenth century, while two manorial halls, Huttons Ambo and East Haddlesey (Yorkshire) both of thirteenth century date also had roof structures of this type (Chapelot and Fossier 1985, 290). There is some indication that the two post-pads may represent a later phase of building development, for they may possibly have been preceded by a pair of post-holes designed to contain earth-fast timber uprights serving the same function, i.e. to support a ridge beam. The more northerly, F143, might originally have been a large post-hole that was later packed with flint nodules and large cobbles, while post-pad F145 may have supplanted an adjacent post-hole F141.

Approximately 2.50 m. to the east of the two post-pads was a feature consisting of pitched tile and flint nodules lying in a shallow depression (F107). Open hearths were commonly made of pitched stones or tiles set on edge (Turner 1987, 255) and were a common feature of the un-aisled hall. The building at Walsingham School may have parallels with a building complex of the thirteenth century excavated at Brooklands, Weybridge (Hanworth and Tomalin 1977, 49-76) although a number of fundamental differences are present. The Brooklands building, interpreted as being from a social level slightly less than that of a manor lord and dated to 1175-1300, was not heavily framed, had earth-fast posts and did not conform to a hall and chamber block layout. It included a detached kitchen, the house itself comprising three rooms in line. While it had a hipped roof and the position of its doors possibly correspond to those of the Walsingham School building, its roof was not tiled. Other examples are known from Ellington, Huntingdonshire and Newstead, Yorkshire (Turner 1987, 257).

To the east and west of the main building were areas of cobbling which appeared to respect the structural foundations and represent a crudely metalled surface, probably to provide an all-weather walkway. The concentrations of cobbles to the east of the building (F147, 148, 149 and 201) appear at first sight to form the footings of a secondary structure although they seem too slight to have served such a purpose.

It is equally difficult to arrive at an interpretation for the building at the northern end of the site, forming part of Group A, when considered in isolation. However, there are a number of other features of contemporary date that may be pertinent to its purpose; there are the burnt surfaces and concentrations of charcoal both within and around it; the presence nearby of a large cooking-pot sunk upright into the ground, and the hearth and cobbled surface or platform. If the main building were interpreted as horseshoe-shaped rather than circular it displays parallels with the Type 4a kiln found at Lyveden (McCarthy and Brooks 1988) and it would be only too convenient to visualise the structures in Group A and Group B as elements of a potter's toft and associated kiln. However, the complete absence of pottery wasters, kiln furniture or a recognisable stoke-pit cannot substantiate this theory. It should, nevertheless, be borne in mind that an 1810 map of the nearby Scadbury estate does depict a field known as 'kiln field' which would have been situated at not too great a distance to the north.

Likewise, there is no evidence that the stone building in Group A was a corn drier. Again there is the lack of an obvious stoke-hole and the quantity of charcoal found within the structure seems to be of insufficient quantity to represent the remains of a direct firing procedure. Indeed, analysis of the soil from within it produced only a single charred cereal grain which does not support its interpretation as a corn drier. Comparisons can be drawn between it and a structure of similar dimensions in the medieval village of Caldecotte (Zeepvat *et al.* 1994, 82, fig. 43), there interpreted as a dovecote. Even if it could be assumed that the structure was originally circular there is no indication that its function was that of a dovecote, in spite of its suitable size and shape. There were no deposits of guano, neither were any features discerned suggesting the previous existence of a potence, the revolving ladder used for access to the nesting holes for the removal of eggs.

Three other possibilities exist. It may have formed a shelter for occasional agrarian use, the hearth and cooking-pot being associated with this function. Alternatively, it may have been a domestic oven, although its relative distance from the apparent living quarters to the south seems to make this purpose unlikely. It may have been built as some form of covered shelter for animals, such as a 'Welsh' pigsty (Harvey 1970, 33). At Cosmeston, near Penarth, a semi-circular structure 1.80 m. in diameter was interpreted as the foundations of an animal's cot (Newman and Parkhouse 1989, 10).

Amongst the earliest excavated features at Scadbury Manor is a ditch in the areas adjoining the cellar and kitchen, and pottery from this suggests an early thirteenth century date. At Walsingham School,

the pottery recovered from features appears to derive from a single period of occupation probably extending from the early-mid twelfth to early thirteenth century, a period of expansion in the rural economy. This would seem to imply that the Walsingham School site was settled for a number of years prior to the occupation of Scadbury, although whether one could infer that it represents a direct precursor as the domicile of the de Scatheburys prior to their movement to Scadbury Manor is questionable, especially given its apparent low status. It seems probable that the settlement at Walsingham School represents elements of a medieval farmstead, perhaps later consolidated as part of the manorial lands of Scadbury. It may even have been the manor farm, especially if the circular structure discussed above could be shown to be a dovecote. Whatever its relationship to Scadbury, the discovery of a farmstead in this part of Kent is particularly interesting in view of the recent reassessment of the pattern and importance of dispersed settlements. It reinforces the current hypotheses that dispersed settlement was not limited solely to those marginal areas of medieval England, representing a result of late colonisation (Roberts 1983; Austin 1989). Neither can it be seen as merely a survival of pre-manorial systems in an ancient landscape, for at Walsingham School the farmstead would appear to be a post-Conquest foundation. The nature of settlement was dependent on many factors: economic, social and political, as well as geological. Recent detailed study of settlement pattern by Roberts and Wrathmell has shown that predominantly dispersed settlement was the norm for this part of Kent (Stocker 1995). The site would fit well into the regional character of historic settlement as identified by their research and is of importance locally and regionally because of the limited number of excavations that have been carried out on sites of this period in lowland areas of the country.

It would seem that there was a virtual cessation of activity by the thirteenth century and that the buildings were in due course abandoned and demolished, the site where they had stood being brought under the plough, as the remains of furrows and ditches show. This would seem to imply that desertion of the site took place before the arrival of the Black Death in 1348-49. Although the greater part of Kent was relatively little damaged by this plague, the Thames Valley, like the Severn Valley, was devastated and St. Paul's Cray lying as it does a short distance south of the Thames may have been badly affected (Ziegler 1969, 127 ff.). However, pottery recovered from a general layer at Walsingham School provides a clue to continued activity in the vicinity into the fifteenth-sixteenth century which may suggest that the site continued to make up a part of the Scadbury estates following the purchase of the Manor by Thomas Walsingham in 1424

and its subsequent ownership by the family until sold by Sir Thomas Walsingham V in about 1655.

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