

# CHAPTER 7 SYNTHESIS

## 1 Earliest Developments on the Site by Rob Poulton

ch 2:3 The site yielded no evidence for human activity before the medieval period, with the exception of  
M159 a few mesolithic flints and a few fragments of ox bones from the top of the 'natural' (W95/5).  
However, a number of features can be shown to belong to a period immediately preceding the

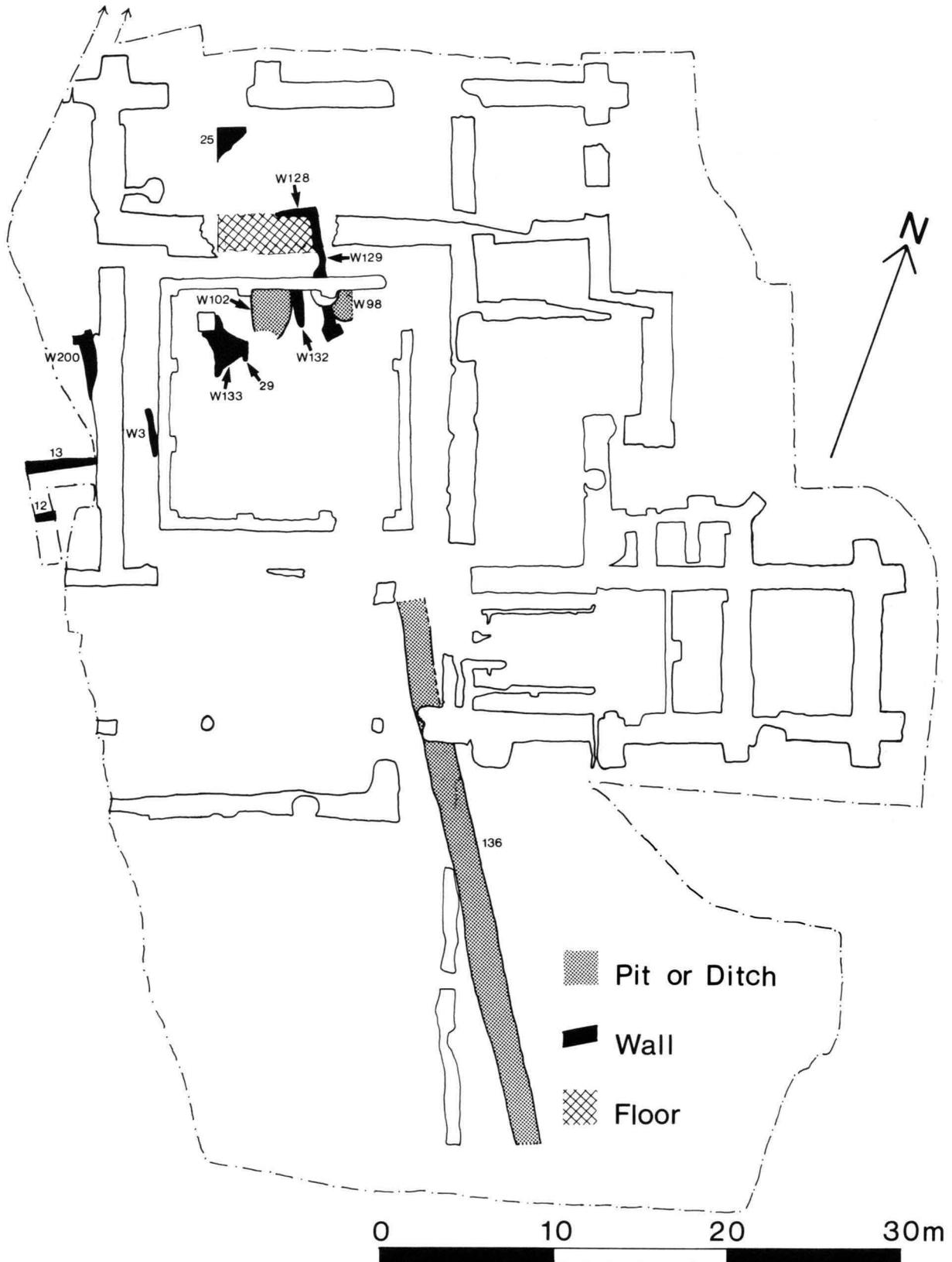


Fig. 4 Plan of features pre-dating the main friary buildings.

- fig 4 construction of the major complex of Friary buildings on the basis of stratigraphic or other considerations. These may be summarised as:
- (a) Six walls – 12, 13, W3, W128, W129 and W200 – could all be shown stratigraphically to be earlier than walls or floors of the main friary period. All were built of chalk blocks, sometimes mixed with flint, and all were built on the same or a very similar alignment. The width of these walls, where it can be established is variable, though two – W129 and W200 – terminate in small buttresses of similar shape and size.
- figs 4, 5, 19 & 21
- (b) Three walls or foundations – 25, W132, W133 (26) – were composed entirely of flint. All were shown to be stratigraphically earlier than main period structures. 25 and W133 were possibly on related alignments, while the alignment of W132 appeared similar to the walls in group (a). Despite this, it must surely be of a later date since it survived to a higher level than the floor (below, group (c)) associated with W128 and W129. W133 also survived at a higher level than the floor, though it must be emphasised that no direct relationship was discovered between walls in group (a) and those in group (b).
- fig 7
- (c) A floor associated with the room or building enclosed by W128 and W129. This floor was composed principally of crushed chalk and mortar, with a few fragments of red tile scattered on it.
- figs 4 & 5 M20-1
- (d) A culvert, W131, with a vault formed from red tiles is of one build with wall W129 and was presumably intended to discharge into the sump W98. The infilling of the culvert by W95/4 and the sump by W98/3 is clearly later than the destruction of W132 and hence (see (b) above) almost certainly later than the dismantling of W129: in other words material found within those layers dates only the disuse of the sump and culvert.
- fig 19
- (e) A pit, W102, cut by W23, the garth wall.
- fig 7
- (f) A ditch, 236, sealed by walls in the nave of the Friary church, on the same alignment as walls in group (a).
- fig 19
- (g) Several layers, principally of sand (30 and ?14) but possibly including one of chalk blocks from a demolished wall (11), were part of a levelling operation of unknown extent, which took place before the main conventual structures were built.
- figs 8 & 15
- fig 5 M45 ch 1:3

The evidence for these pre-friary developments has been set out at some length because it is important to realise both the variety and extent of the early features. At least three phases are involved; more are possible but cannot be demonstrated. Phase 1 can be taken to include features of groups (a), (c), (d) and (f); phase 2 the features in groups (b) and (e) and phase 3 the layers in (g).



Plate 6 Footing W129 and culvert W131 cut by feature W130/1, the footing for buttress W130 (right). In the background is footing W132, cut by the garth wall, feature W23, and in the foreground is pit W98. The fill of the culvert, layer W95/4, is unexcavated in the photograph. The vault of the culvert is turned in red earthenware roof tile, and its floor is lined with the same material.

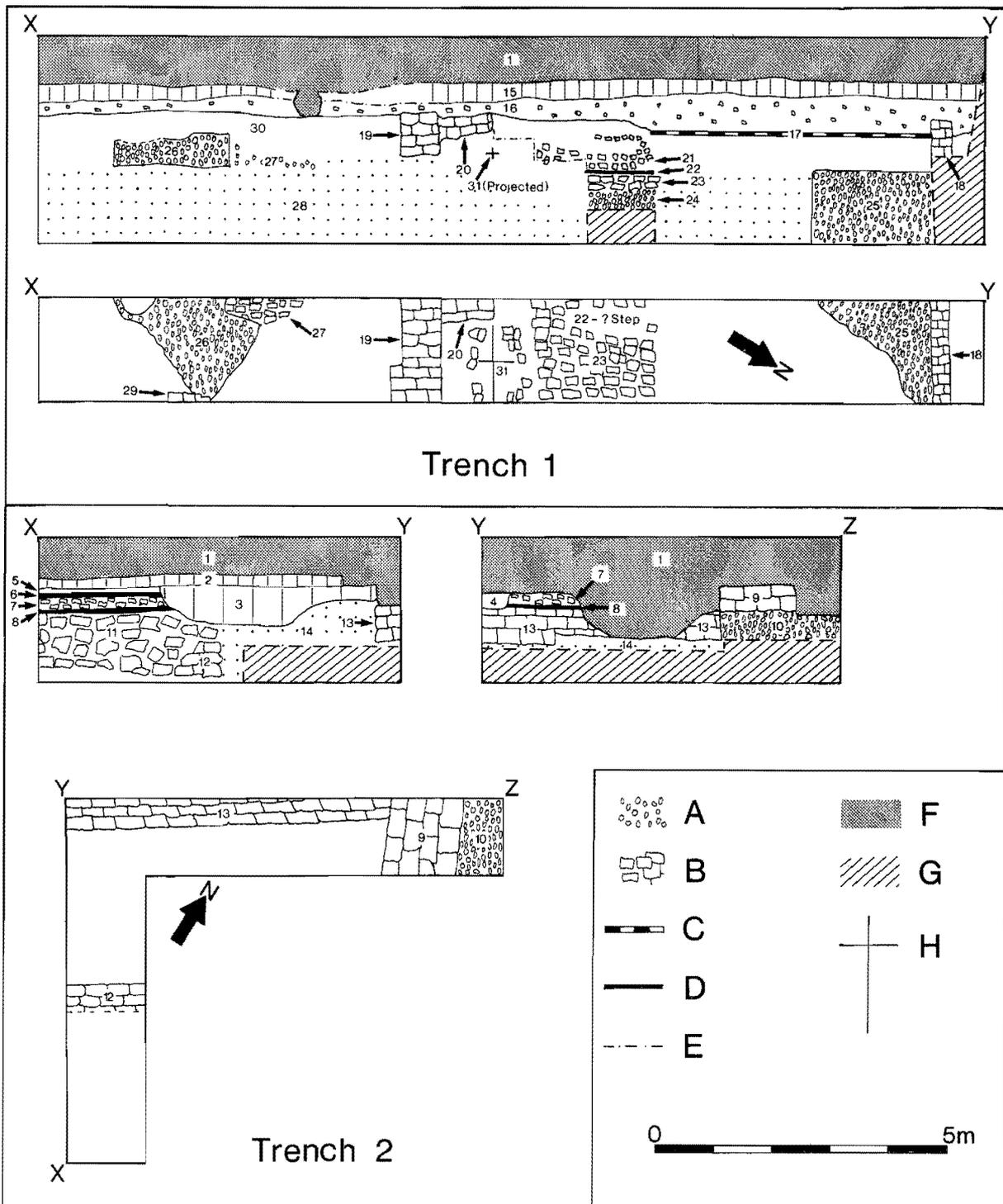


Fig. 5 Plans and sections of the 1973 trial trenches. Their location and relationship to other discoveries may be found by reference to figs 19 & 21:

- |                   |   |
|-------------------|---|
| Key               | E Inferred Line (not on original section) |
| A Flint           | F Post-friary levels                      |
| B Chalk           | G Unexcavated                             |
| C Tiles           | H Skeleton                                |
| D Mortar flooring |   |

M148-51  
& appen-  
dix 1

It should be emphasised that the assignment of features to phases is only rarely made on the basis of clear stratigraphic evidence. However, even if this were to have been wrongly done in many cases, it would not significantly affect the general flow of the arguments presented below. Absolute dates for this sequence are difficult to establish. Pottery was found in the foundations of W133, and in the fills of W102 and W98; in each case the date could not be earlier than 1275 by many years. As explained above, the infilling of W98 must post-date the destruction of its associated features, and the obvious context is the levelling work for building the north range. The same might also be true of the material in W102, which leaves only the pottery in W133 to suggest a date for the phase 2 features, with phase 1 quite undated.

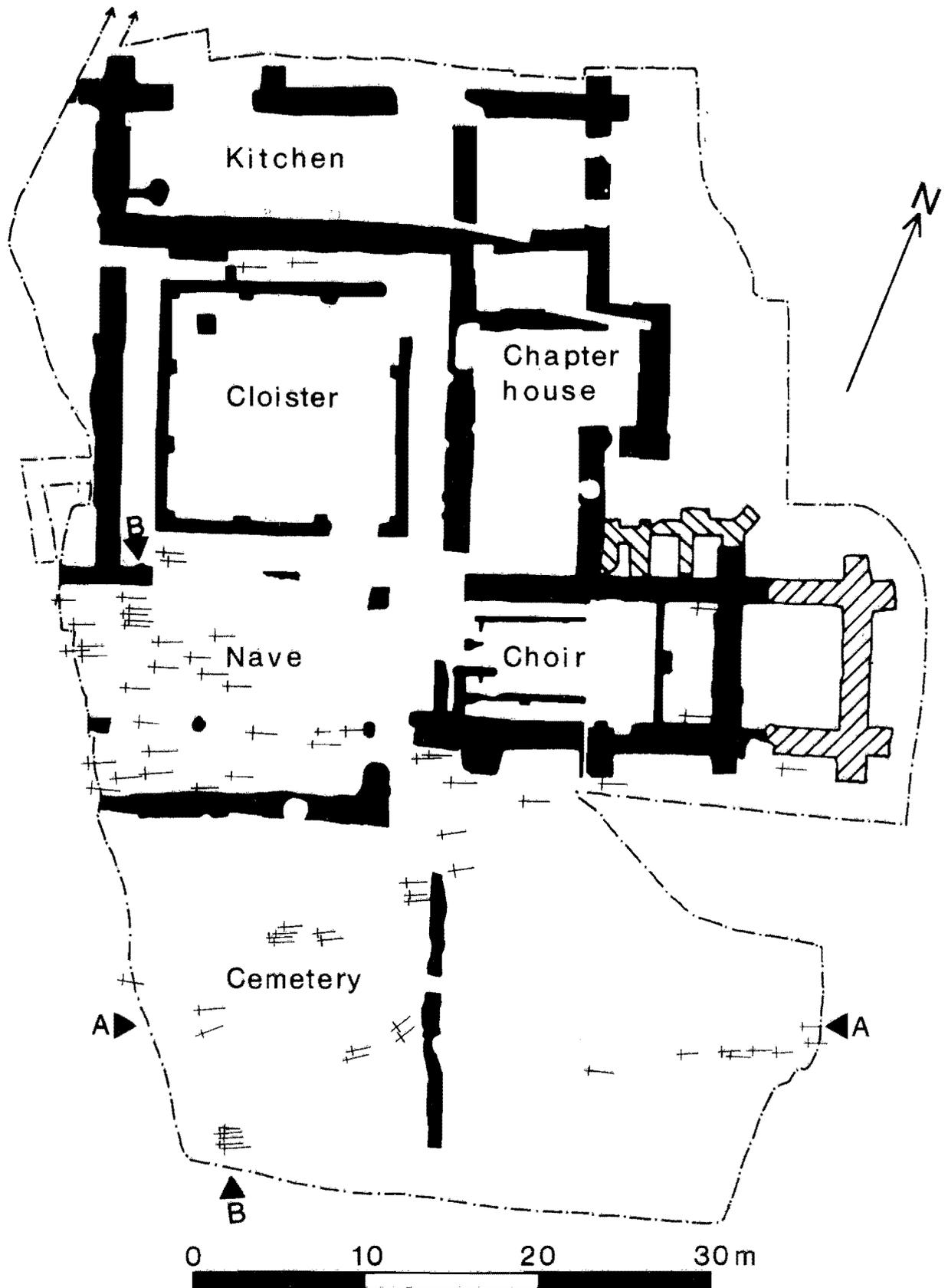


Fig. 6 Overall plan of conventual footings as excavated 1973-8. Both masonry walls and robber trenches are shown in solid black. A-A and B-B indicate the positions of the sections drawn on fig 2.

ch 2:1 Later building on the site caused the destruction of much of the evidence, both deliberately and accidentally. Neither was it possible to excavate these early levels fully. In consequence, it would be unwise to attempt to account in detail for all the elements noted, though enough was discovered to suggest a number of explanations.

The first possibility is that these structures represent a rapidly abandoned first plan for the

East

West

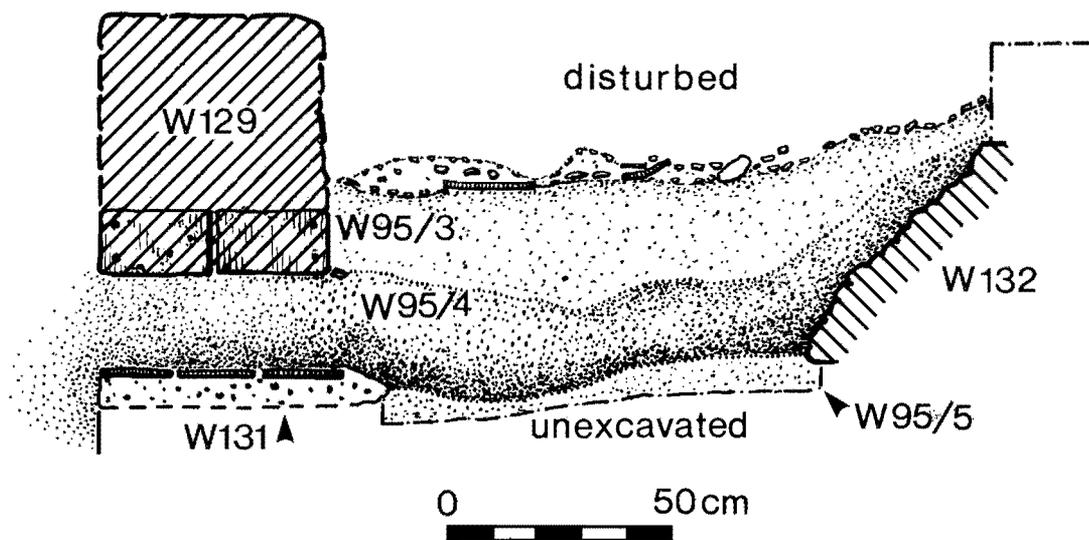


Fig. 7 Section showing culvert W131, running through wall W129, together with associated early layers. The section has been reconstructed from field notes and plans.

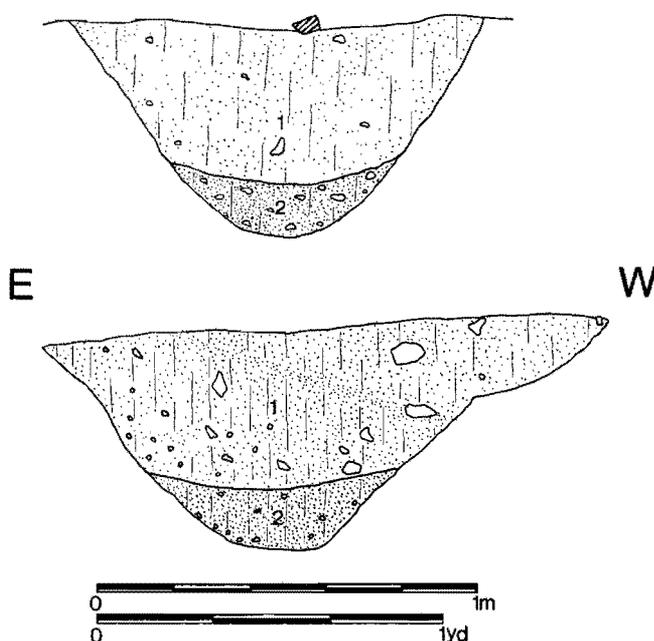


Fig. 8 Sections through the pre-friary ditch, 236  
 Key 1 Light brown sand with occasional pebbles  
 2 Mid-brown sand with many pebbles.

ch 6:1.1  
 pl 3  
 fig 1  
 fig 4

Dominican Friary, but this suggestion is unlikely to account for the full range of features discovered as a consideration of the documentary evidence shows. We have seen that the Dominican Priory was almost certainly founded in 1275 in commemoration of the young Prince Henry, who had died the previous year at Guildford Castle. This 1275 reference comes in a grant to enlarge the Friars' grounds by enclosing a 'Chiminium', likely to mean a way or path, rather than a major road, leading to Guildford Park. The route for this must be envisaged heading roughly north-west through the friary precinct to cross the Wey, by ferry or bridge perhaps at the point indicated as a crossing by Norden in 1607. At all events it is quite easy to think of such a path running to the east of these early walls, but difficult to imagine a route along low-lying and potentially boggy ground leading from the north-western corner of the town and passing to the west of the excavated walls. It may even be that ditch 236 ran alongside the 'Chiminium'. Certainly it seems very significant that early features are found only to the west of ditch 236 and its projected line and none was discerned to the east in what would have been the new land taken into the grounds in 1275. Very little time would then have been available for building work to

start before the grant of (let alone the application for) the extension to the grounds. In consequence it would be difficult to explain all the early walls as part of an initial plan for the Dominican Friary. It is perhaps just possible that this is the true explanation of the otherwise enigmatic phase 2 foundations. The second interpretation is the one made soon after the 1974 excavations, that the walls represent the remains of masons' workshop(s) (Woods 1974), used while the Friary was being built. In order to support this interpretation, it is necessary to suppose that the choir of the church and the east range were built first; the workshops would then have been demolished, the masons given accommodation in the completed east range, and the rest of the Friary built subsequently. Certainly, the south wall of the great kitchen (in the north range) was butt-jointed to the west wall of the east range. The objections to this interim interpretation are many. The friary precinct had plenty of room outside the area designated for the completed buildings which could have been used for workshops. This is not, of course, to deny that, once the site had been landscaped and laid out, building may have proceeded in piecemeal fashion, perhaps starting with the choir and east range and finishing with the nave. Further, the early foundations themselves seem too many and in some cases (eg 12 and 13) too substantial for temporary structures even if, as is probable, the stone foundations supported a timber superstructure.

fig 24

fig 5

It remains possible, though, that some of the phase 2 features could have been created when work began on the new Friary. The pit, W102, in particular, makes little sense when considered with the other features. The date of the pottery is, as already noted, consistent with such an interpretation. That said, the following remarks will be confined to the phase 1 features which are definitely structural, and very probably all related and contemporary. They imply a considerable occupation of the area before 1275. Given the pattern of development of medieval Guildford (O'Connell 1977, 29–33), this seems an unlikely position for secular expansion, especially at a period when the suburb of St Nicolas was first emerging and backlands development far from complete. It would be more plausible therefore to connect this occupation with laying out of the grounds for religious use – a suggestion already made independently on the basis of the documentary evidence. In 1260, the Friars *de Ordine Martyrum* were settled in Guildford. In 1274, the order was disbanded by order of the Council of Lyons, which would have enabled the Friar Preachers to take over grounds already consecrated to religious use and speedily in 1275 obtain permission to expand.

ch 5:3

No material, apart from the structural features themselves, was found associated with phase 1. From the phase 2 contexts, and from the infilling of pit W98 which seems likely to be contemporary, animal bones were recovered. These, however, are too few to allow any deductions other than that a varied diet of ox, sheep, hare, rabbit and chicken was enjoyed, though how often is completely unknown since, if found together rather than scattered through a number of contexts, they would represent no more than one meal for several people.

ch 7:2.1

fig 10

M 49

Whatever the precise interpretation of the earlier features, it is clear from documentary evidence that in 1275 or just probably a little later, building works for the Dominican convent began. Archaeological dating is not sufficiently refined to indicate the speed with which building work proceeded, though the change in construction technique evident in the south wall of the nave suggests a delay of some years.

## 2 The Friary Buildings by Rob Poulton and Humphrey Woods

The excavations recovered a considerable quantity of evidence for the character and plan of the conventual buildings. This is discussed in the first two parts and is occasionally illuminated by documentary evidence. In the final part, these results are used in an attempt to see the Guildford Friary in relation to the character and architecture of other Dominican Friaries.

### 2.1 THE STRUCTURAL EVIDENCE

figs 5 &amp; 9

fig 10

fig 16

It was clear from the excavations that the friary buildings were conceived as a single plan with only the chantry chapel and chancel extension forming later additions. It is surprising in these circumstances to find some notable variations in the character of the wall foundations. These are most commonly constructed from chalk blocks bonded with mortar set in a foundation trench. In the case of load-bearing walls, the footings are about 1.5m wide, with the wall itself about 1m wide. The major exception to this is the south wall of the nave of the church most of which was constructed over a foundation trench filled with gravel and flints and topped with crushed chalk. At its west end, however, the wall had no construction trench and was simply laid direct on the natural sand. The other major exception was the foundation trench (374) filled with alternate layers of sand and crushed chalk with a layer of sandstone fragments at its base, which lay beneath the possible site of a tower (represented by footings 269 and 310).

The walls themselves were, in most cases, represented only by their bottom course. Where



Plate 7 The extension to the chancel of the church, butt-jointed onto the primary buttress. The chancel is founded on blocks of chalk ashlar and its walls are of flint core faced with knapped flint. By comparison the extension is constructed entirely of roughly cut chalk blocks, which must have been externally rendered with plaster.

survival was better, principally in the east range and choir, a fairly uniform pattern emerged of chalk block walls faced externally with flint and internally with plaster. The main exception to this is the small garth walls which were built of greensand blocks with tile lacing courses. These walls also had arched footings, a method of saving stone made possible by the fact that they were intended to support lean-to pentices. When the chantry chapel was added to the choir, a conscious effort seems to have been made to maintain an appearance of structural unity with the walls faced with flint externally and plastered internally, the only slight variation being the use of a tile lacing course above the footings. When the chancel extension was built, however, the use of external flint facing was abandoned and the chalk block walls were presumably rendered.

One other structural technique, the use of substantial external buttresses apparently normally faced with flint, may also be noted. These appear in a fairly regular pattern over most of the Friary and the technique continued to be used in the later additions. Two major exceptions exist: firstly, the east wall of the chapter house has shallow clasping buttresses, flint-faced with greensand cornerstones, which would more usually be found in 12th century contexts; and, secondly, the south wall of the nave is unbuttressed.

Turning from the walls to the floors, it is apparent that much of the Priory originally had tiled floors. This was shown not only by the survival of tile impressions in their mortar base, but also occasionally by *in situ* tiles. The mortar base was sometimes laid directly on natural sand and sometimes over a layer of crushed chalk.

In one case, the unidentified small chamber in the east range, there were at least two re-floorings, with the mortar matrix of the earlier floors covered by a layer of clean sand before the new tiles were laid. If similar re-flooring took place elsewhere, the old mortar base must simply have been dug up and removed. At the junction of the south and west cloister walks, tile impressions of Penn-type tiles were discovered but, immediately to the west, in the alley which presumably would not have been so heavily used, the impressions were of the larger Chertsey-type tiles, which are earlier in date. This strongly suggests a repair, and a considerable amount of patching as needed is suggested by the variety of tile designs recovered, for example,

pl 9

figs 11 &  
12



Plate 8 The median wall of the western range (foreground) meeting the north church wall. Scaffolding holes are clearly visible.

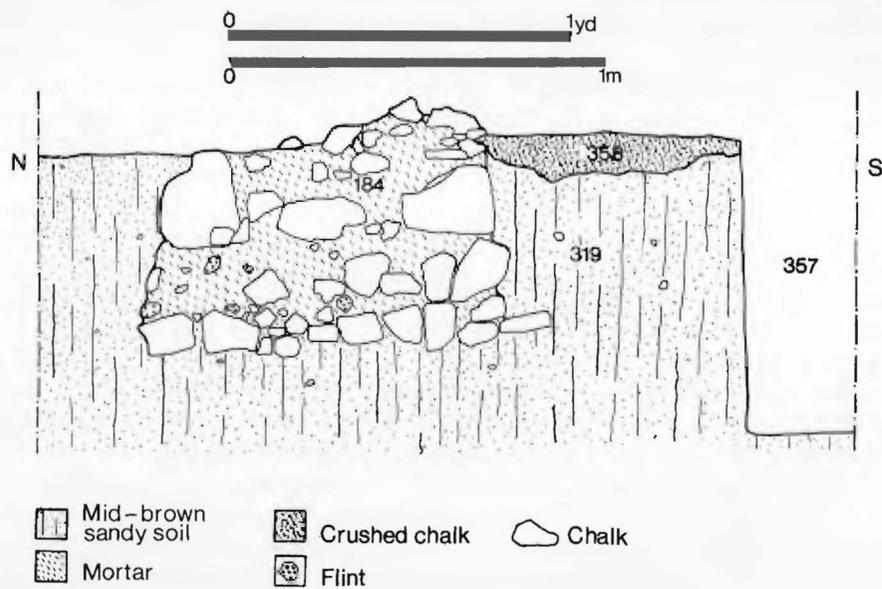


Fig. 9 Sections through the north wall, 184, of the nave.

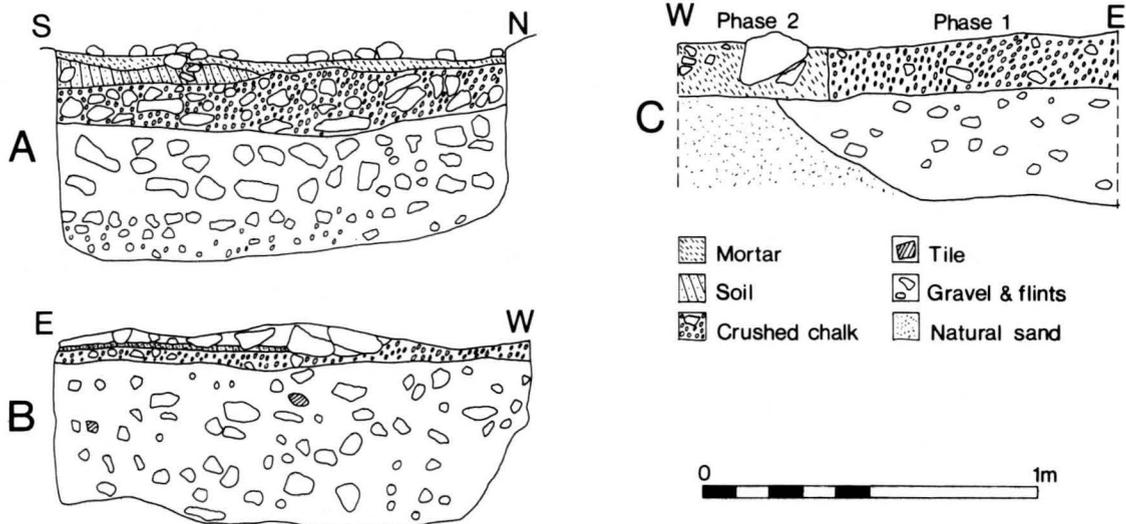


Fig. 10 Sections through the south wall, 120, of the nave.

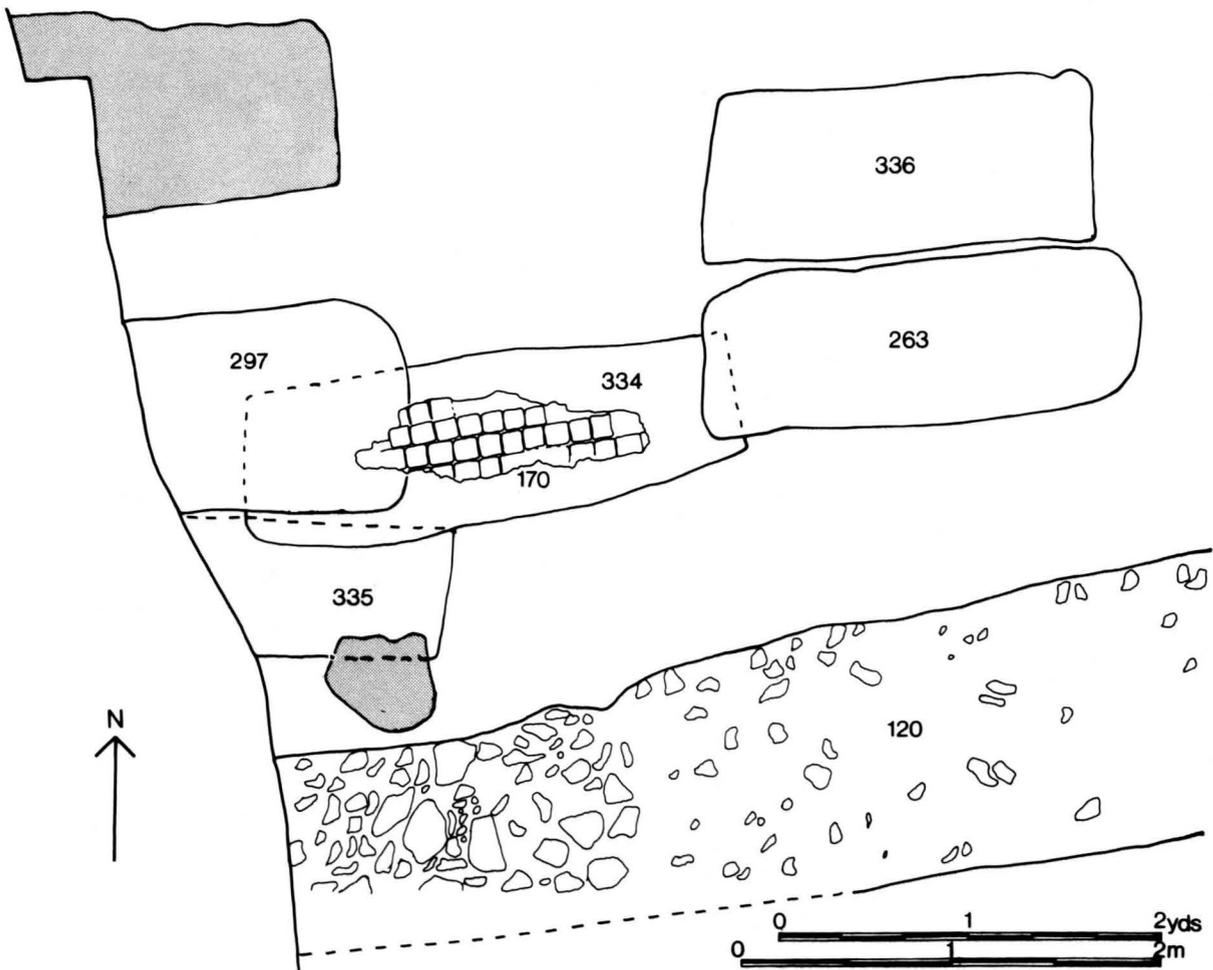


Fig. 11 Tile impressions in the nave. The shading indicates later disturbance.

from the nave which produced examples of no less than thirteen of the 20 designs recovered from the whole Friary, though only two of them were unique to the nave. Grave 282 alone produced five different designs of both late 13th century (Chertsey-type) and 14th century (Penn-type) tiles.

figs 13 & 14

In the area of the sacristy, but associated with the later mansion, a group of tiles was uncovered laid as a pavement. These tiles were of the Chertsey-Westminster-Surrey type and Mrs Eames comments that tiles of this group are quite widely distributed in Surrey and over into Hampshire and West Sussex as well as having some comparisons and derivatives in Kent and Sussex. The examples found here come fairly late in the main group (nos 1, 4 & 5) and she would date them

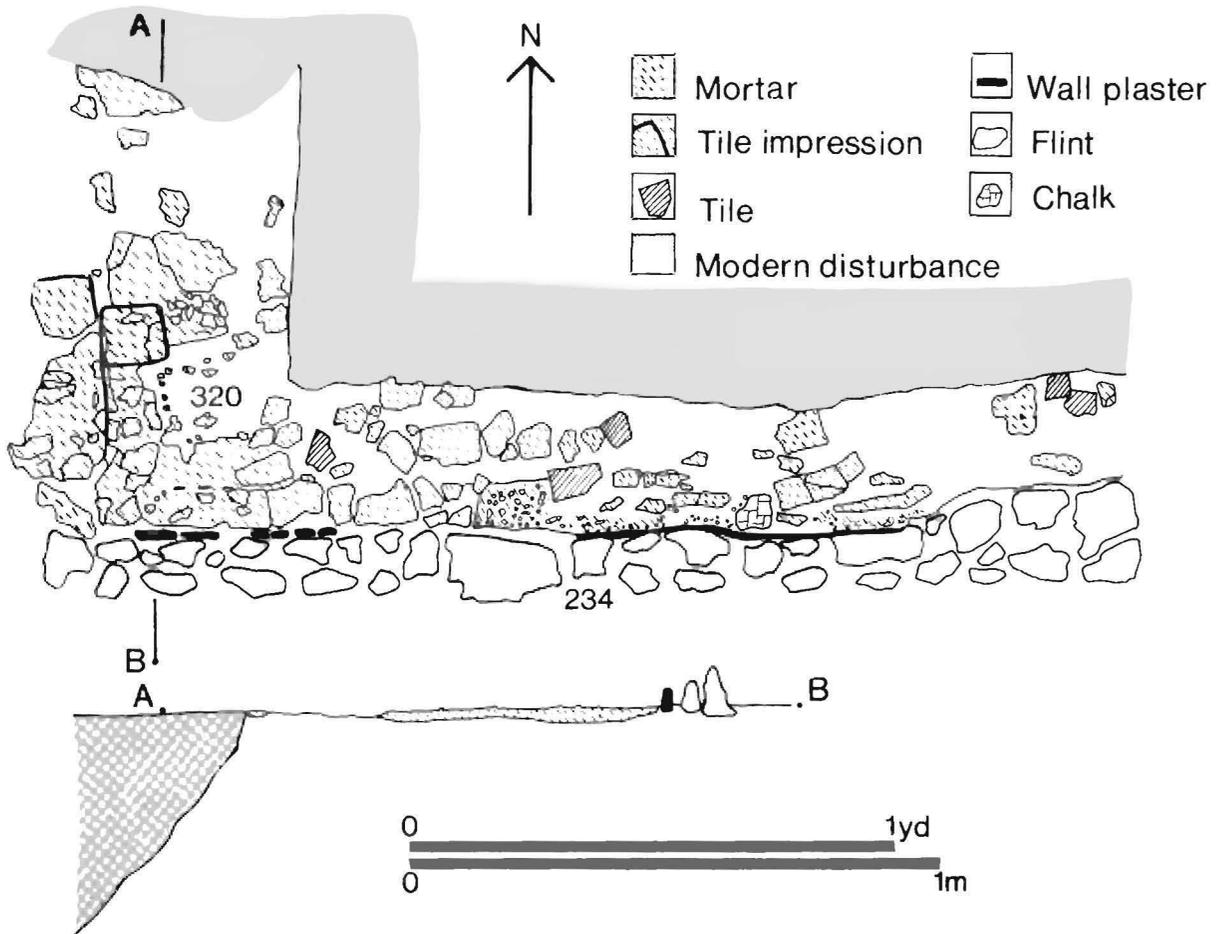


Fig. 12 Tile impressions and mortar flooring against the north wall, 234, of the nave.



Plate 9 The arched footings of two bays of the north garth wall, feature W23.



Plate 10 Drain W33/7 and its soakaway, feature W113, at the west end of the great kitchen. These features were sealed beneath layer W107/2, one of the layers of debris from oven W136.

ch 6:1.4

after 1280. Nos 2 & 3 are even further from the originals and must be late 13th century at the earliest. Westminster chapter house had been completed by 1258 and she thinks that there could have been a gap of 25 to 40 years between the two works. The problem of where these tiles were originally used is difficult. The sanctuary has been tentatively suggested but if, as seems likely, they had survived in their original position until re-used, then this location would not be possible since documentary sources clearly indicate that the church was demolished during the 16th century. The chapter house, which almost certainly did survive until the mansion was built is therefore the most likely original position for these tiles and indeed an example of no 4 was found there. The chancel was floored with tiles of much later date so must, when it was built, have had a surface of some other material, possibly chalk and mortar. The tiles were from the kilns at Penn in Buckinghamshire. Eames (1980, 2216) has demonstrated that the manufacture of floor tiles at Penn began in the second quarter of the 14th century and persisted for two or three generations. The chancel pavement must therefore have been laid at some time within this period and seems to have been composed of panels, some with the tiles parallel to the walls and some diagonal to them. It is possible that the chancel was floored with tiles when the chantry chapel to the north (see below) was built, as the tiles in the chantry were also from Penn. Perhaps the founder of the chantry chapel paid for the re-flooring of the chancel. The tiling of the chancel, the chantry chapel, and the doorway connecting them could have been undertaken as a single job by a travelling paviour.

In two areas, the flooring was definitely not of this type. In the great kitchen, a more complex sequence of flooring layers was uncovered. This must undoubtedly be due to the greater wear in a working area and, in particular, debris associated with the oven sealed earlier floor levels, one (W107/2) of chalk mixed with earth, flints and clay. At the eastern end of the room an area of crushed chalk floor bedding was uncovered. Since tile fragments were not found in the area of the great kitchen, this was probably not surmounted by floor tiles as elsewhere.

In the area of the choir stalls floorboards were laid, as the discovery of the deposits which had accumulated beneath them showed. A large number of small finds were recovered from these layers, including many jettons. The dates of the jettons cluster around three main points: the 1330s, the 1480s and the 1520s. It has therefore been suggested (pers comm, the late S E Rigold) that the floorboards were renewed on three occasions with quite large holes present immediately before renewal. This may be right, though the intervals between renewals are very different and it is possible that on the occasion of other renewals the latest, clearly visible, objects were picked up. Indeed, the dates given above may also predate the renewal in a similar way with, for example, the 1520s group actually representing the final ripping up of the floorboards at the dissolution.

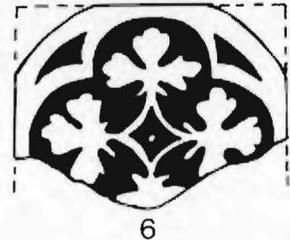
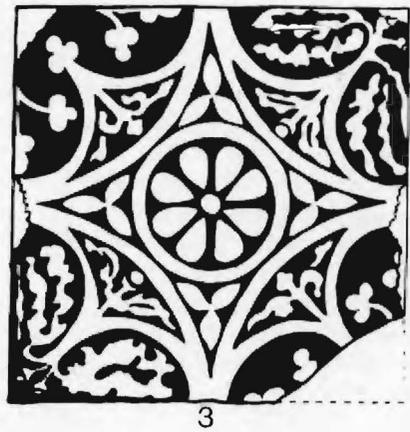
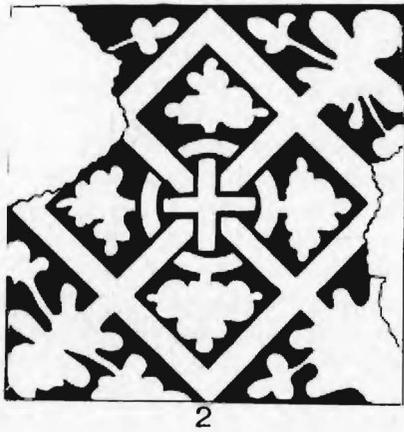
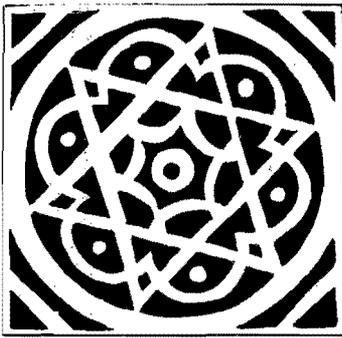
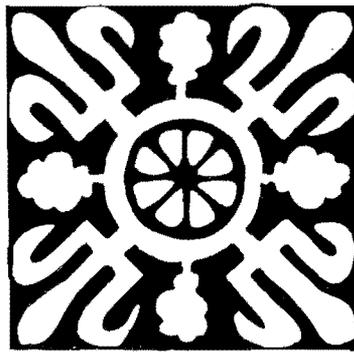


Fig. 13 The paving tiles.



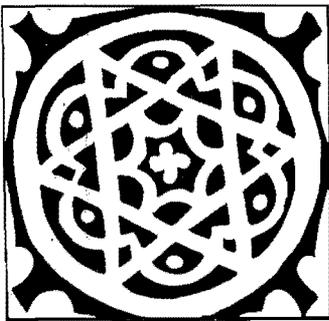
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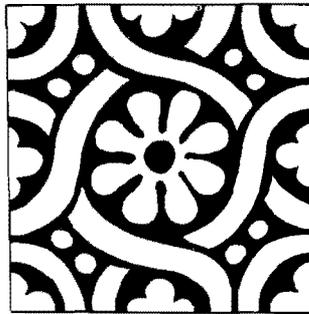
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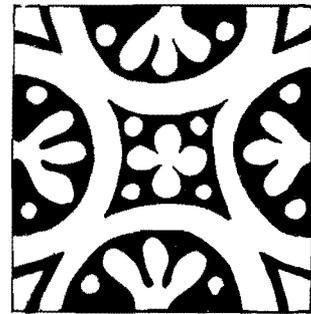
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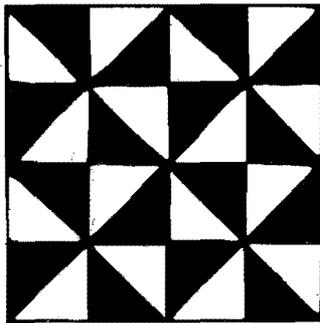
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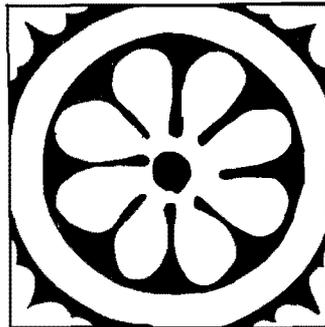
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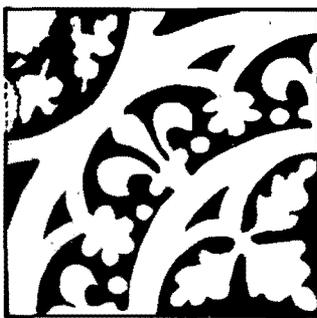
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15



19



12



16



20

Fig. 14 The paving tiles.



Few other structural details emerged from the excavations. No mouldings were recovered and the only evidence relating to the appearance of the windows was the recovery of fragments of lead comes in the area of the nave, which suggested small triangular glass panes of c35 x 30 x 28mm, four of which formed a 70 x 70mm square. Finally, it may be noted that the roof was tiled, not leaded, as numerous finds and the suppression inventory made clear.

The overall impression is of a well-designed and well-built structure. In view of the royal origins of the Friary, one might suspect the influence of one of the king's master masons, perhaps detached from Guildford Castle where, incidentally, parallels may be found for the archaic shallow clasping buttresses of the chapter house. In the south wall of the nave, however, the techniques used are both different and inferior to the rest of the convent. As the nave is the least essential area to the functioning of the Friary, it seems possible that it was the last of the first-period buildings to be put up, perhaps after the master mason had departed and/or when funds were low.

## 2.2 THE ROOMS AND THEIR FUNCTIONS

### *The Church: the Nave and Walking Place*

ch 3:3.1 The position of the Friary to the north of the town dictated an arrangement whereby the cloister, which was private to the friars, lay to the north of the church, whose nave was for public use.  
fig 24 Documentary evidence indicates that the entrance to the Friary was very probably from what is now Woodbridge Road, and the path leading to the church may well have been close to the line defined by the Bounds of the Corporation, on Richardson's and later maps. A robber trench, context 136, interpreted as a wall, was excavated in 1978. It might define another path running due south from the nave but if so the use of the path is more likely to have been for access to the cemetery than to the town.  
pl 4

The position of a door into the walking place from the south, between contexts 193 and 269, is however clear enough. The gap between the north end of 120 and context 193 was presumably closed by a door into the south aisle. The wall defining the eastern side of the walking place (275), which cut it off from the choir, was also excavated in 1978, and a central door leading through this wall into the choir might also be inferred. No corresponding wall on the western side was found, so it must be presumed that there was a timber partition on this side, as at the Oxford Greyfriars (Hassall 1970). As has been described above, the northern end of the walking place was badly damaged by the contractors, but footing 307 might be the respond for an arch. Footing 193 could be the equivalent footing to the south. This would give an arch the width of the choir. The suppression inventory makes mention of a steeple, with 'ii bellys, a grete and a small'. Such a steeple, which may have been a relatively slight structure, could have been supported on the arch and on wall 275, the wall defining the eastern side of the walking place.

figs 15, 16 An alternative location for the steeple is above the fragmentary footings 269 and 310 which were probably once continuous over the substantial foundation raft 374. The fact that the footing, feature W75, which could be for a newel stair giving access to the steeple, is so close to foundation raft 374 supports the idea that 374 represents the location of the steeple. There are no surviving Dominican steeples, but the Franciscan equivalent which survives at King's Lynn may give an idea of what the Guildford steeple might have looked like, though it is a masonry, not timber, structure (Martin 1937, 19 and pl 1).  
& 17

fig 15 At the western limit of the 1978 excavation a footing, feature 171, was found which can best be interpreted as a pier base for an arcade dividing the nave from a south aisle. Context 190 is also interpreted as a pier base between grave 214 and grave 367, and there is room for another between grave 367 and grave 339 though no evidence for it survived. A line of scaffold holes, features 217, 218, 219, 220, 286 and 293, was found running parallel to the presumed arcade. The last of these scaffold holes cut a grave, so the scaffolding must have been for the dismantling of a structure after the dissolution. It is suggested that the structure in question was an arcade

ch 3: 3.1.5 supported on piers without a sleeper wall. The northernmost pier would have been engaged into feature 193. In the area excavated there would thus have been three bays of arcading and it is apparent that the span between 190 and 171 would have been greater than the others. Further, negative, evidence for the existence of an aisle is provided by the absence of burials at the right-angle east end of wall 120, suggesting that this position was occupied by an aisle altar. The position of the nave altar can similarly be deduced from the absence of burials in an area west of the walking place and north of 193/282. The west end of the church proved to be outside the western limit of excavation. There are two likely positions for it. It could have lined up with the back wall of the west range and if it is presumed that the west range was the same width as the east and north ranges, as documentary evidence indicates, it is easy to work out where, under the pavement of Onslow Street, it would be. This arrangement, however, would have resulted in the church having a blind final bay on the north side, because at this point the upper storey of the  
table 1

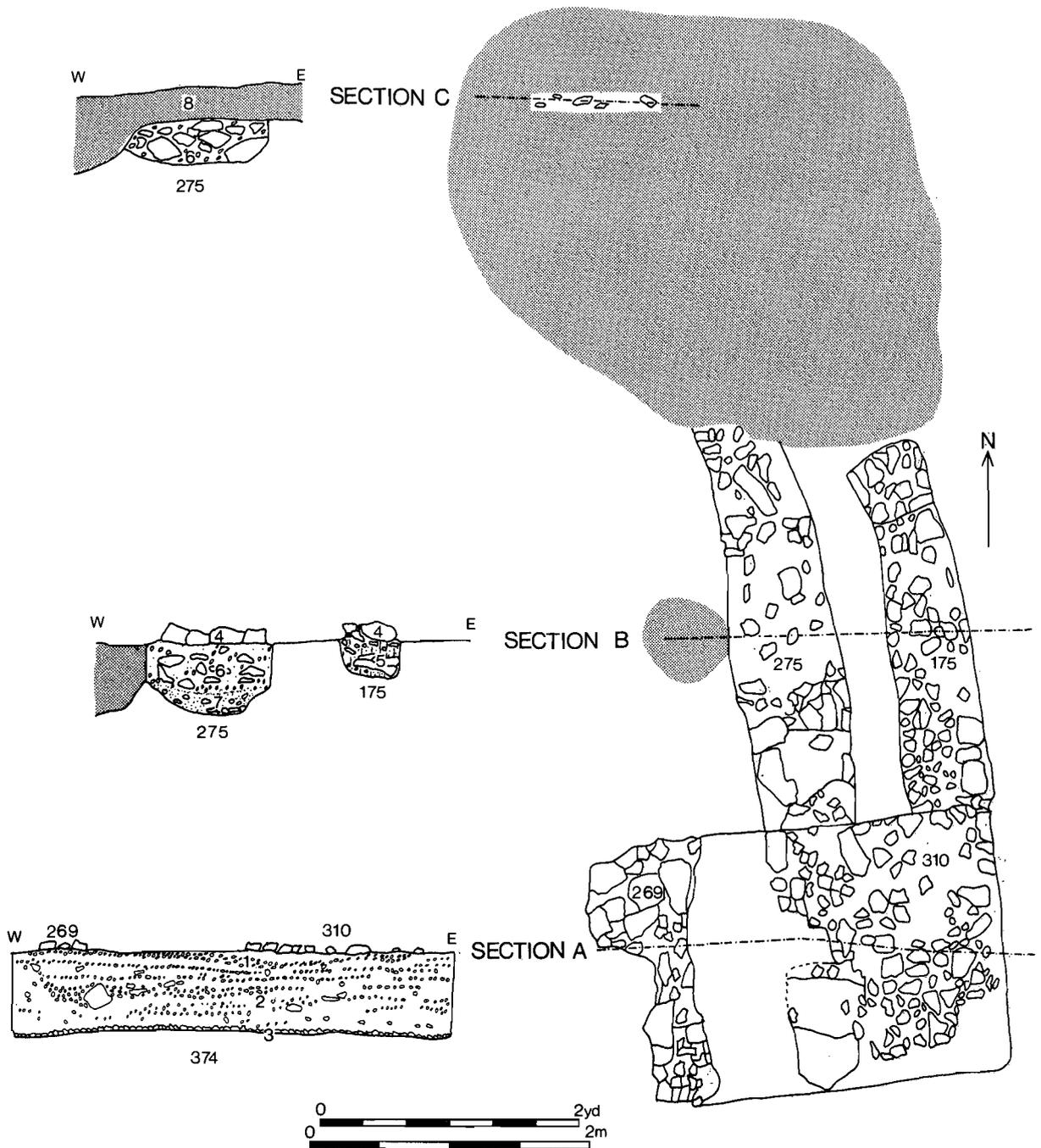


Fig. 16 East end of nave, plan and sections. Key to layers numbered in section:

1 Crushed chalk	5 Chalk lumps mixed with sand and mortar
2 Orange sand	6 Chalk lumps mixed with sand
3 Green sandstone	7 Small chalk fragments with sand
4 Cut chalk blocks	8 Modern disturbance

west cloister range would have met it at window level. The alternative is that it extended a bay beyond the west range as shown on pl 11 so that the west end of the church was lit from the west, figs 6 & 24 north and south. If this is correct, the nave was five bays long.

*The Church: the Choir and Chancel*

fig 17  
ch 2: 4.6 In contrast to the nave, the part of the church east of the walking place was found to be remarkably well preserved. The primary structure consisted of a choir and chancel, which were probably among the first of the friary buildings to be erected. In the 14th century, a chantry chapel was attached to the north side of the chancel and, as a result, at some subsequent period, the chancel had to be extended by one bay in order to regain the light which had been excluded by the chapel. The choir was of one bay and the chancel was also of one bay. Within the chancel, the extent of the sanctuary is indicated by the impressions of stones interpreted as a step, feature W72, leading into it. In the sanctuary and against the east wall would have stood the high altar,

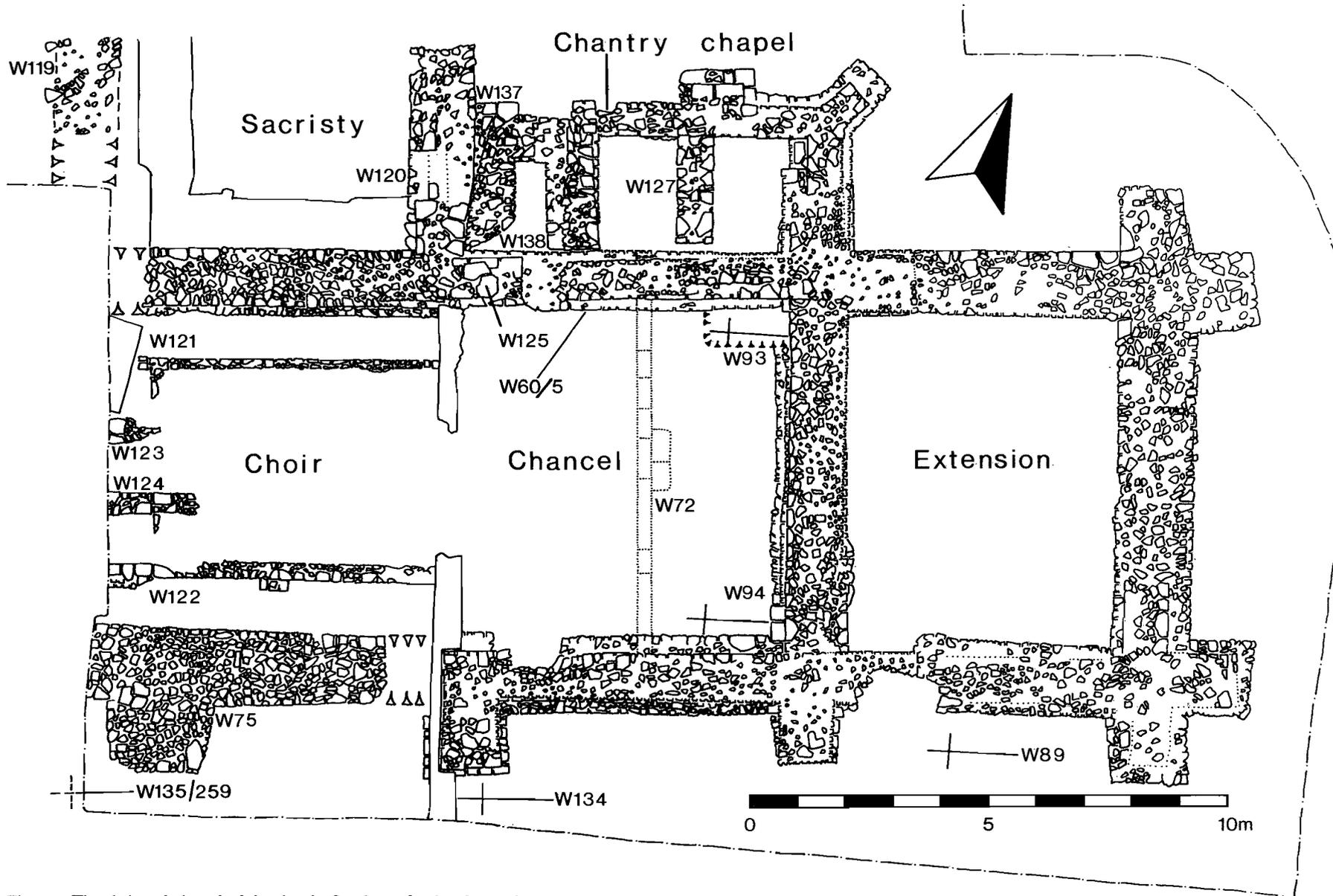


Fig. 17 The choir and chancel of the church. See fig 15 for the plan at the west end of the choir.

though its footing did not survive. On either side of the altar were two graves, features W93 and W94. The suppression inventory mentions 'a tumbel with a marbill stone on the north side of the quere', and this must be the tomb represented by grave W93. The prominent position of these graves beside the high altar indicates that their occupants were persons of importance, such as priors of the house or major benefactors (some of whose names appear in the Obituary Kalendar).

The suppression inventory in its description of the choir mentions 'feyer stallys well sileid with an orgeyne lofte' and 'a peyer of orgaynys'. The thickness of choir stall footing W122 and the presence of the little buttress attached to its south side suggest that the organ loft with its pair of organs was over the row of choir stalls on the south side of the choir (cf Martin 1937, 27). The footing W75, mentioned above, which is interpreted as the base of a newel stair giving access to the 'stepill', may also have afforded access to the organ loft. No evidence of any other access to the loft was found.

*The Church: the Chantry Chapel*

fig 17 The addition of the chantry chapel to the north side of the chancel involved the partial  
M39-41 destruction of the buttress which took the thrust from the gable end of the chancel. The east wall  
of the new chapel was superimposed for most of its length upon the remnant of the reduced  
pl 7 buttress.

The buttress was 1.50m wide, whereas the new wall was only 70 cm wide, so the effect of jointing the new and old work together in this ingenious manner was to leave a recess at the northern end of the east wall of the chapel 60 cm wide. This could have accommodated the tomb of the founder, and the altar would have been set over the footing of the chancel buttress and against the east wall of the new chapel. The western end of the founder's tomb would have been defined by footing W127. This could have served to support either an altar rail, or possibly a metal grille dividing the tomb and its chantry altar from the rest of the chapel. At the north-east corner of the chapel was an angle buttress. Angle buttresses first entered the architectural repertoire in the 14th century, and the fact that the chantry chapel has one indicates a date in the 14th century or later for the chapel. The chapel was floored with Penn tiles west of footing W127 and this serves to confine the date more closely to between 1325 and 1400 unless, of course, it had been completely refloored.

*The Church: The Extension to the Chancel*

M41-2 The effect of building the chantry chapel would have been to block the lancet windows lighting the chancel on the north side. It was doubtless because of this that the chancel had to be extended by one bay. Large traceried windows would probably have been employed in the extension to make good the lighting deficiency (pers comm Dr Richard Gem). There is no reason to believe that the high altar would have been moved, as it would have then been too distant from the choir stalls. It would have been free-standing as a result of the extension, and access to the extra bay would have been to either side of it. A notable difference between the extended east end and the primary chancel and 14th century chantry chapel was that its walls were faced with chalk externally, whereas both the chancel and chantry chapel were faced with knapped flint. This would suggest that although it was the building of the chantry chapel which created the need for an extra bay, it was not built at the same time as the chantry chapel.

There may have been a lapse of some years before the friars decided that the poor light in the modified chancel made it essential to provide extra fenestration. They might have decided on the use of chalk because hewing of chalk blocks required less skill in a mason than the knapping of flints and was therefore cheaper. The apparently shoddy construction of the extended east end compares unfavourably at first sight with both the 13th century choir and chancel and the 14th century chantry chapel; the 13th century flint work shows exceptional craftsmanship. But while one could argue that a period showing decline in standards is indicative of the friars' poverty, this might not be justified if the walls were roughly finished because they were to be rendered externally. The change may be more of fashion than anything else.

The use to which this addition was put is not clear. A will of 1465 refers to burial in 'the chancel of the B Mary . . . next the High Altar' (Palmer 1891, 267) which suggests the possibility that it was a lady chapel – but the dedication to the blessed Mary may be that of the whole church.

*The East Range*

ch 2: 4.5 Of the four ground floor apartments in the east range two can be identified with certainty by  
fig 18 analogy with the standard layout of Dominican houses throughout Britain, one tentatively from the suppression inventory, and one cannot be identified.

The sacristy occupies the conventional position immediately north of the choir. North again, the chapter house also occupies the conventional position in the centre of the range and projecting from it. The third apartment is the one that cannot be identified, but the northernmost

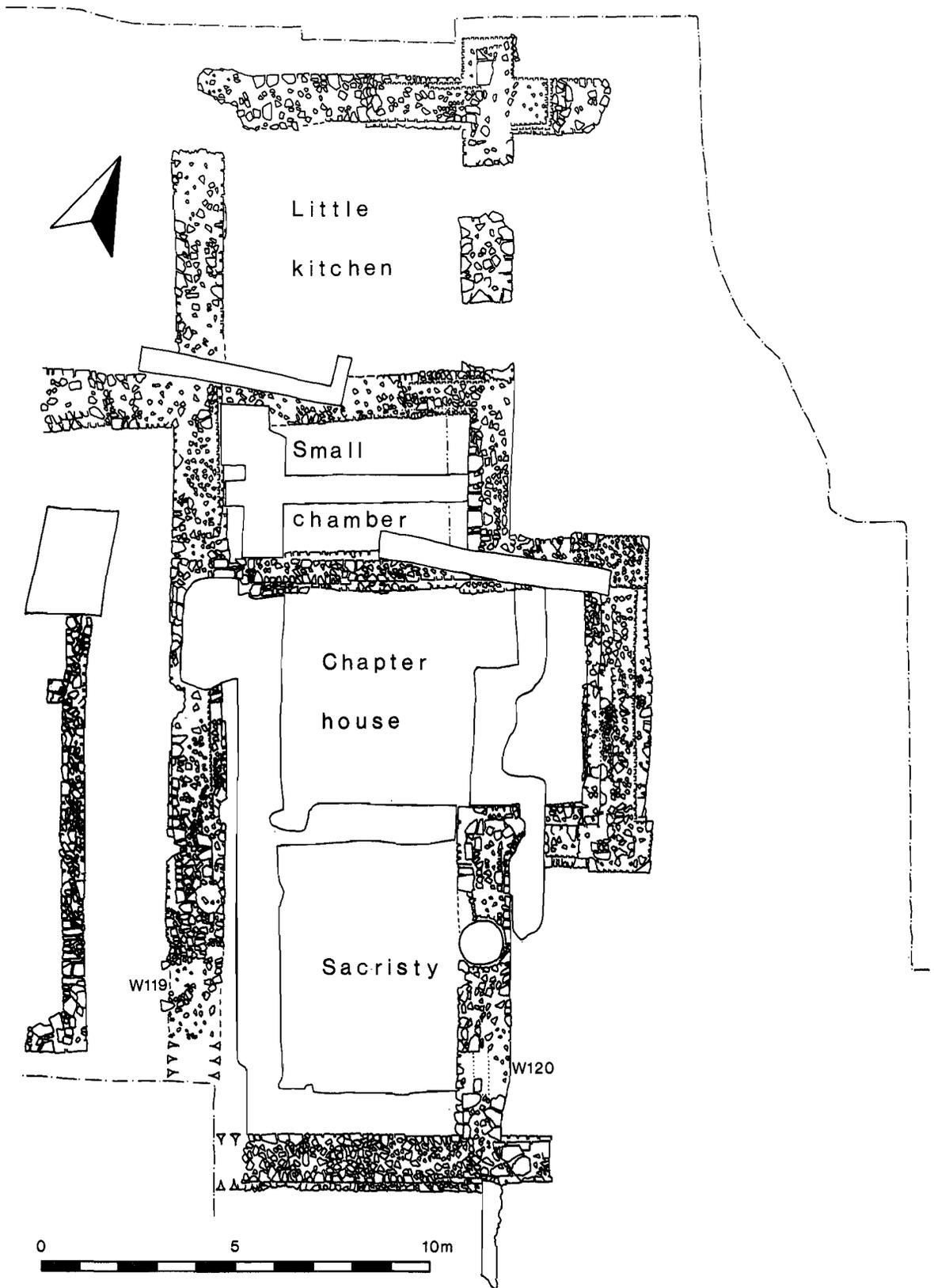


Fig. 18 The east range.

apartment (which is also the easternmost apartment of the north range) is probably the little kitchen referred to in the suppression inventory of 1538. The inventory mentions two kitchens, 'the grete kechin' and 'the littill kechin' and itemises a number of fixtures in them. The apartment which, it is suggested, was the little kitchen was exceptionally well preserved at the north-east corner and, here again, the very high standard of craftsmanship is the hallmark of a master mason. No evidence of an oven was found in this room, which fits with the description of it in the suppression inventory as a room for food preparation and storage. An alternative possibility is that this room is the 'pastre' (ie bakehouse) referred to in the suppression inventory, in which case

table 1

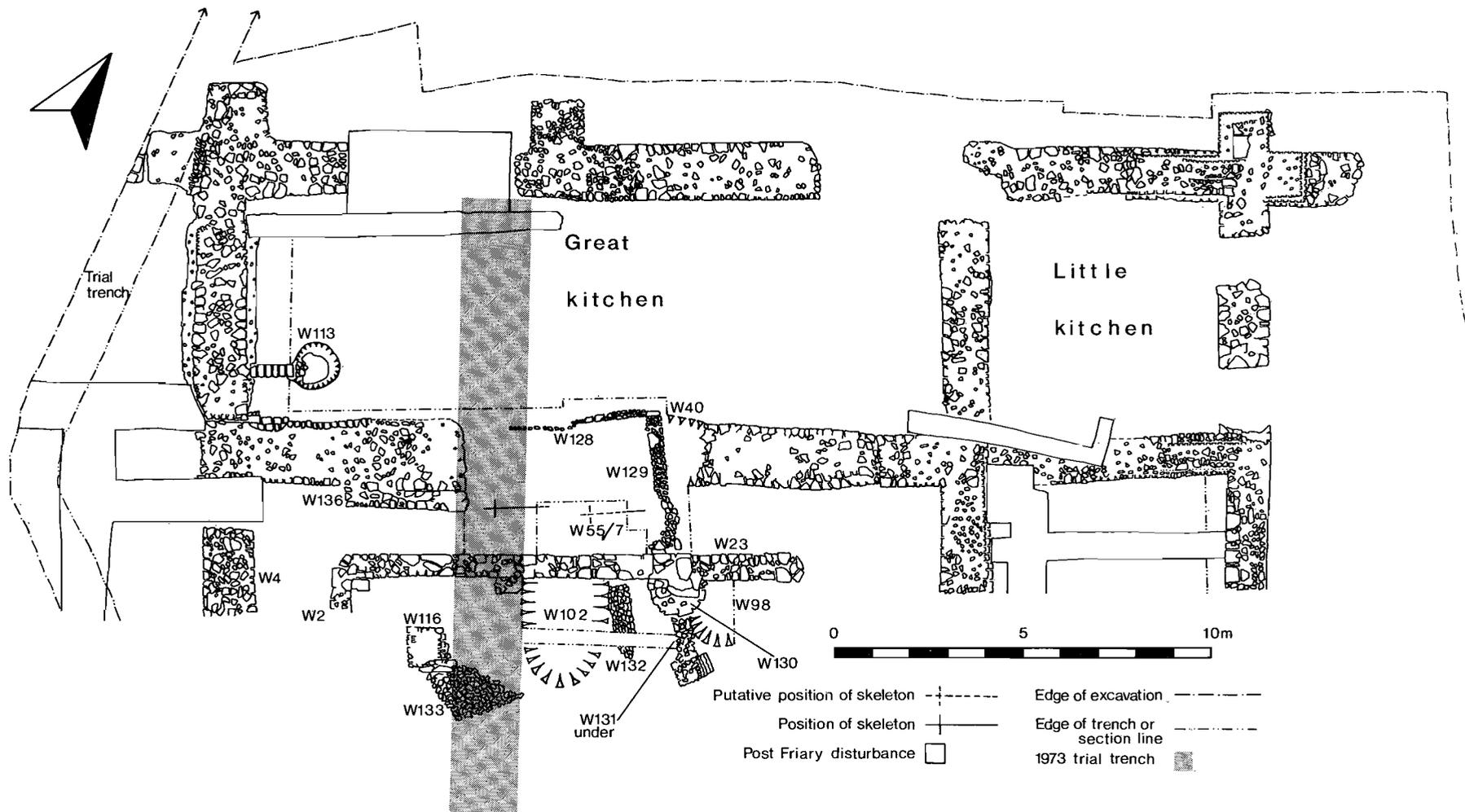


Fig. 19 The north range. The main south wall of the range was observed as a robber trench over W128 and W129.

the little kitchen would have formed the northernmost apartment of the west range. The great kitchen is discussed more fully below as it is part of the north range.

The friars' dormitory is likely to have been on the first floor of the east range. After the chantry chapel was built access to the choir and chancel seems to have been via a nightstair leading down to the footings W137 and through the doorway W138. There is no clear evidence as to how access from the dormitory to the choir was originally effected.

### *The North Range*

ch 2: 4.2 The north range consisted of three apartments on the ground floor, but only two of them were  
fig 19 within the area of excavation, the westernmost apartment being under the modern Onslow Street.

The very large apartment which occupied most of the ground floor can be identified without doubt as the great kitchen mentioned in the suppression inventory. Against the footing of the west wall was the soakaway, feature W113, for a sink or cistern, which must have been used for washing and preparing the food before cooking. The drain channel W33/7 which led from the sink to the soakaway was also uncovered. Oven W136, with its chimney breast, which projected from the south face of the wall, must be one of the 'ii grat chimineis wt. racks to rost' itemised in the suppression inventory. Associated layers yielded sherds of table vessels together with animal bones, fish bones and oyster shells. A second chimney was not evident, but it could have been opposite the first in the area destroyed by cellar W30 of the Earl of Annandale's mansion or in the stretch of south wall which had been robbed. The presence of a burial, feature W55/7, very close to the edge of the robber trench perhaps argues against this latter suggestion, as does the possibility indicated by the 1973 excavations that stairs, either down to the great kitchen or up to the refectory (see below) were located close to W136, but side-by-side chimneys were quite common. A particularly good example of this may be seen at the Augustinian abbey at Haughmond, Shropshire.

fig 20

fig 3

fig 19

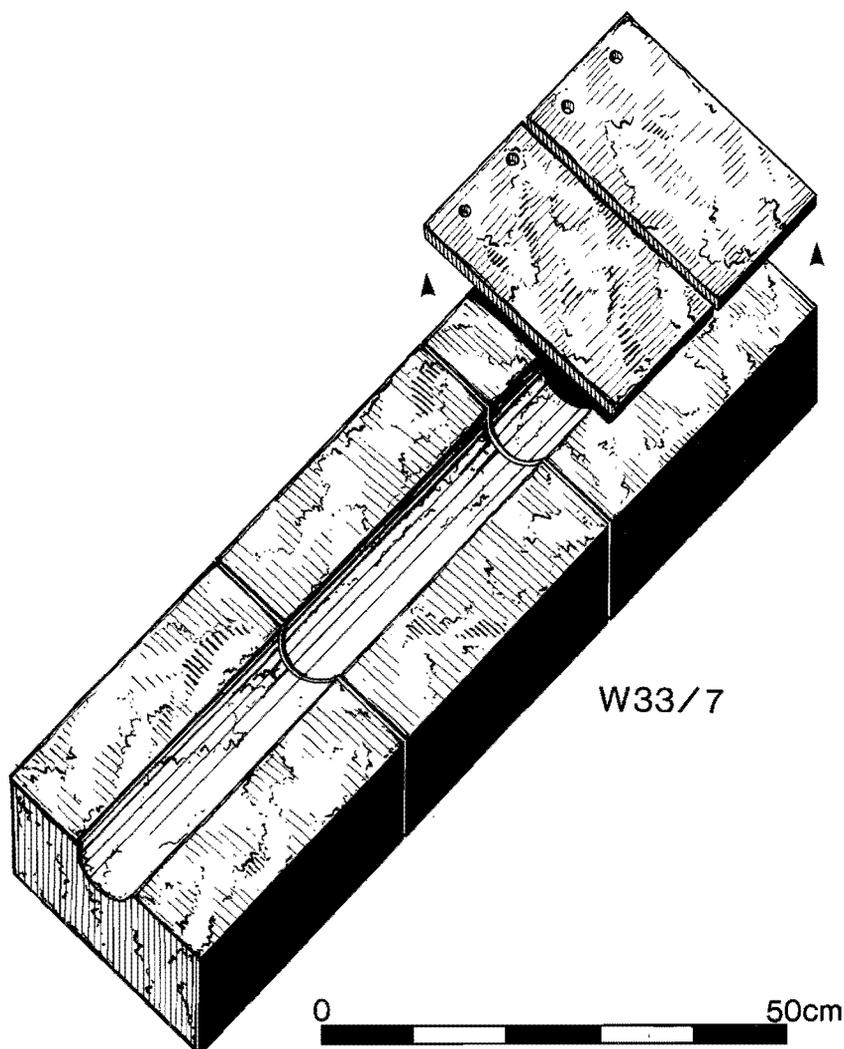


Fig. 20 Feature W33/7, chalk block drain channel with tile cover. A reconstruction from field notes and plans.

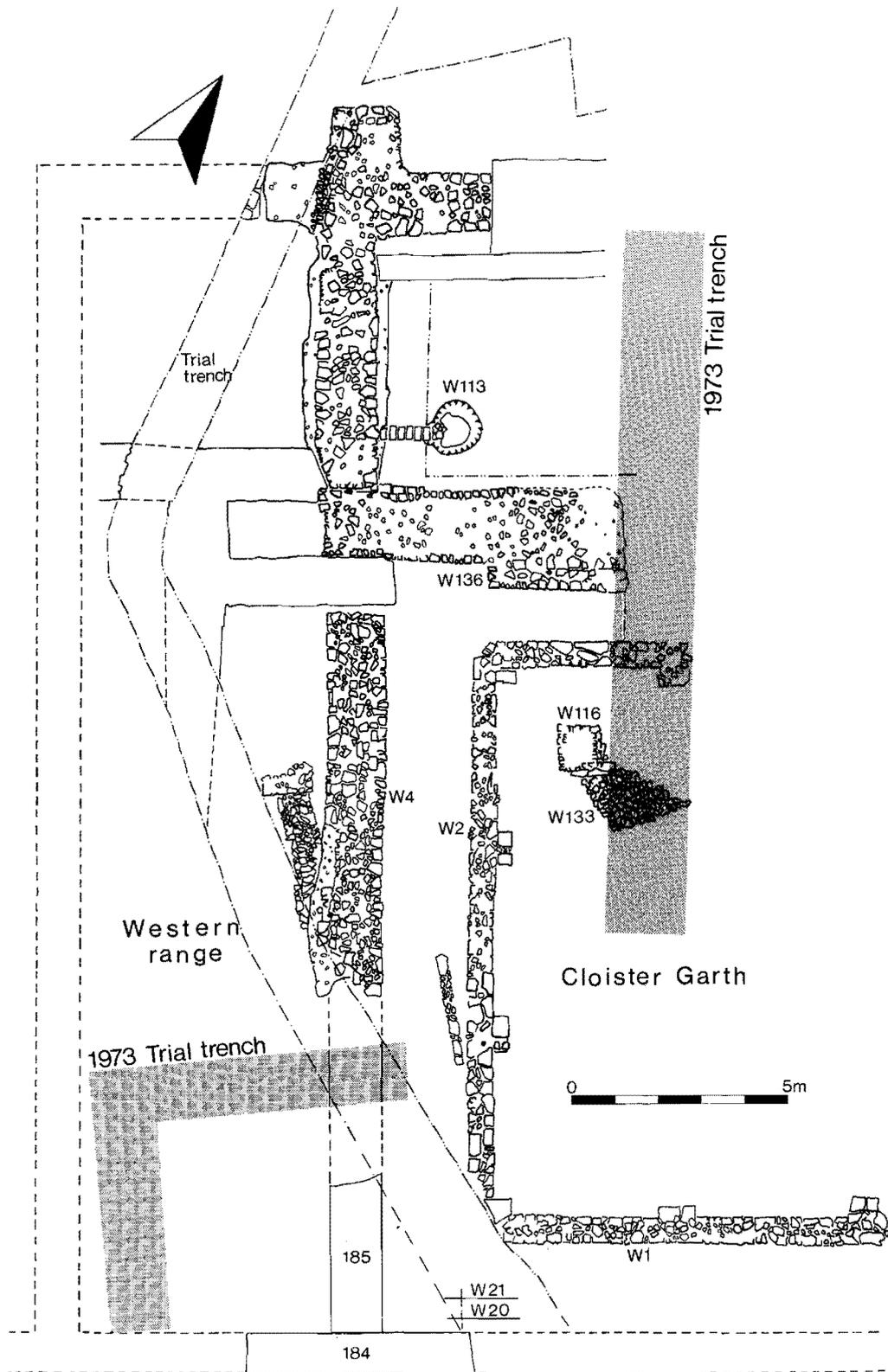


Fig. 21 The west range. All features excavated in 1974, except 184 and 185 which were excavated in 1978. See fig 19 for a key.

In the north-west corner of the cloister garth was the footing, feature W116, for the piscina at which the friars washed their hands before going into the refectory for their meals. At Newcastle-on-Tyne, as at the Ludgate priory, the piscina was in the south-west corner of the cloister, adjoining the door into the refectory. At Ludgate the piscina in the south-west corner of the cloister served a refectory on the upper storey of the west range. By analogy with these two sites, the piscina at Guildford may have served a refectory in the upper storey of the north range, or the ground floor of the west range. The ground floor of the north range, as has been shown, was occupied principally by the great kitchen, but the refectory could have been over it. This was the arrangement at the Canterbury Blackfriars, whose refectory range still stands. The

upper floor of the north range seems the most likely location for the refectory at Guildford, because it would be reasonably easy to keep food hot if it only had to be taken upstairs from the kitchen, but less easy if it had to be taken to the west range. The possible base for a flight of steps (20) in the north cloister walk is of interest in this connection. At Cardiff priory the refectory was also in the north range (Clapham 1927, 96).

### The West Range

ch 2: 4.1 It was possible to excavate only part of the west range as its back wall, like the west end of the church, was beyond the limit of excavation and under the pavement of Onslow Street.

fig 21 The whole of the western cloister alley was excavated, and the main east wall (W4) of the range. Because of the regularity of the claustral complex it can reasonably be assumed that the width of the range would have been approximately the same as that of the other two. No partition walls were found but it is hard to believe that the ground floor consisted of one huge apartment, so it must be presumed that there were timber partitions. It has already been suggested that either the little kitchen or bakehouse mentioned in the suppression inventory could have formed the northernmost apartment. The function of the other rooms can only be guessed at: guest hall (as at Newcastle – Harbottle 1978), infirmary and library are only some of the possibilities (cf Hinnebusch 1951, 180–200). The lack of solid partition walls could indicate that when this range was built the friars were very short of funds. It should be noted, however,

ch 6:1.2 that documentary sources suggest that more 17th century building here than over the northern ranges could have destroyed evidence for such divisions. At the southern end of the range an entrance into it from the south cloister alley was found, with tile impressions. There was also evidence of a doorway into the nave at this point. One feature of the claustral arrangement that deserves particular mention is that the alleys were probably pentices, rather than being undershot as they were in many Dominican houses.

table 1

ch 6:1.4 M51 M22

### 2.3 GENERAL OBSERVATIONS

The setting and appearance of the Friary have already been discussed from the documentary viewpoint. In terms of setting the archaeological evidence has not advanced knowledge greatly, but there is now much greater certainty and far more detail in our understanding of its appearance. The model gives one view of this but during and since its construction views have changed as to what the archaeological evidence implies about the superstructure, so that it must be taken as a broad impression only.

It remains only to move from local to national considerations. It has been observed on a number of occasions that the mendicant friars in England have left a common architectural legacy (eg Martin 1937, 13). For the Dominican order that legacy was exhaustively surveyed by Hinnebusch (1951). Since that time much detail has been added, without fundamentally altering the general view, by excavations at no less than 13 Blackfriar houses (excluding Guildford): Beverley, Boston, Carlisle, Chelmsford, Chester, Chichester, Gloucester, Newcastle-on-Tyne, Norwich, Oxford, Pontefract, Thetford and Worcester (see the annual summaries of work in *Medieval Archaeology* and also Drury 1973, Lambrick & Woods 1976, and Rackham *et al* 1978). The Guildford Friary is, nevertheless, one of the most complete ground plans of a Dominican house, and it seems worthwhile to consider how it relates in terms of size and organisation to the others.

In 1275 Guildford was probably a well established town, as it had a population of c 750 in 1086 (Lloyd 1962) and had presumably grown since, and this explains both why the evangelical Dominicans were attracted to the town and why their settlement lay outside the town ditch. The site they chose was, however, still close to Guildford and had the further advantage of occupying a well drained west-facing slope with access both to the river and meadow land. By the 16th century it is possible that smell caused by the build-up of the backlands of the town may have diminished these advantages, but any problem was evidently not too serious since the site was nevertheless chosen by James Murray, later the Earl of Annandale, for his new mansion, in the early 17th century. Evidently the order of the General Chapter in 1273 that the suitability of new sites should be checked by competent friars had not gone unheeded (Hinnebusch 1951, 67).

ch 6:1.4 The precinct of the Guildford friary was about 10 acres in extent. Elsewhere it is often difficult to establish the area enclosed, but it may average 5 or 6 acres (Hinnebusch 1951, 70). The small size must usually have been dictated by the built-up nature of towns in the 13th century; certainly the only substantially larger mendicant sites, such as Llanfaes (Anglesey) with 30 acres, are rural (Martin 1937, 9). Where, as at Guildford, the site lay outside the urban area the extra space was evidently welcomed and used for orchards, gardens and meadows (Hinnebusch 1951, 206 and Girling 1981). Lands at Woking, Worplesdon and Stoke, totalling in excess of 35 acres, were owned by the friars at the dissolution (Palmer 1887, 19–20), though before 1475 owning lands away from the precinct was forbidden.

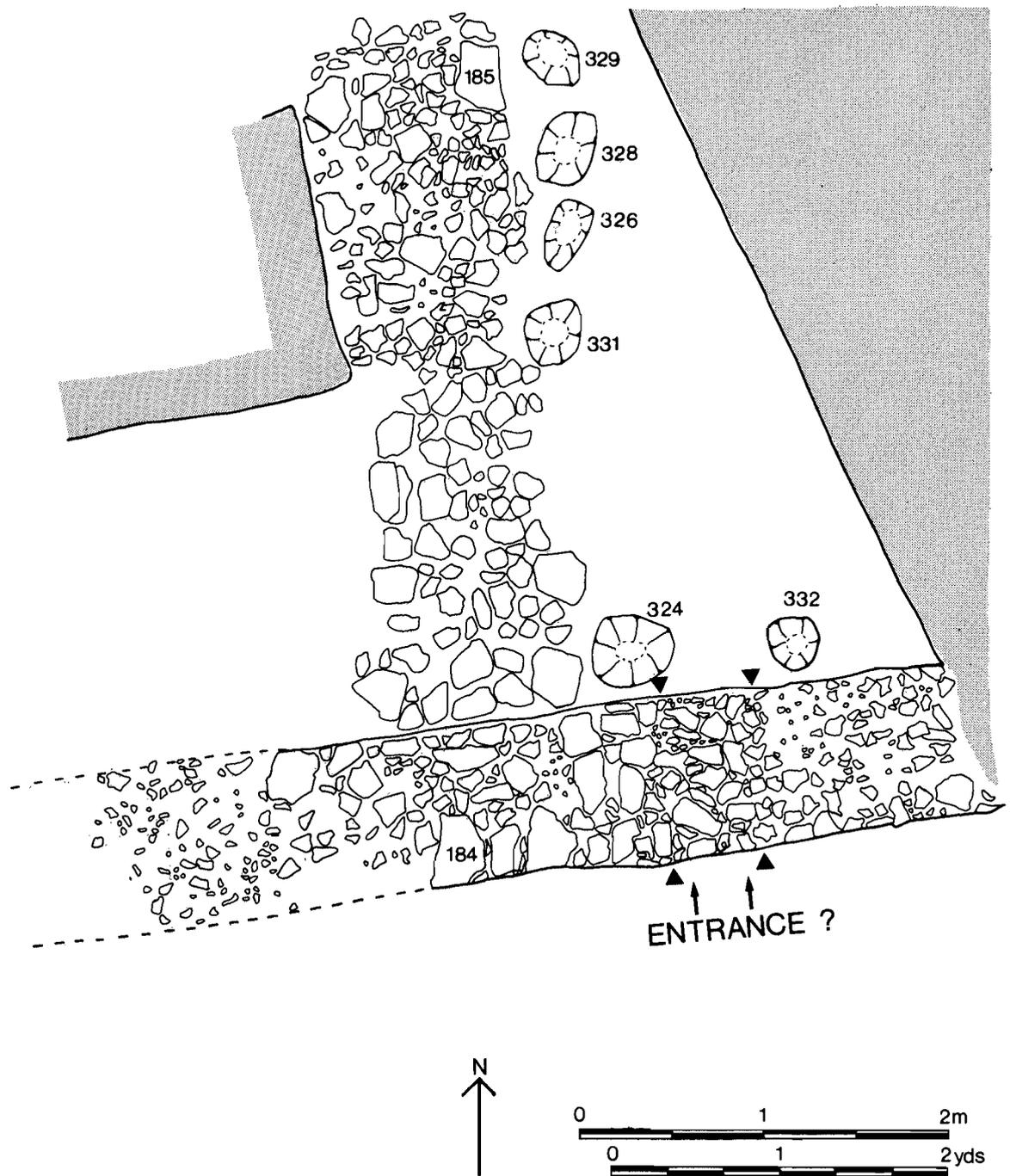


Fig. 22 The constructional phase in the area of the north wall, 184, of the nave and south cloister walk. Fig 23 shows the flooring layers which sealed some of the post holes and part of the north-south wall, 185. The shaded area indicates later disturbance.

Within the precinct excavation has revealed the main conventual buildings. There is no evidence for the second, lesser, cloister frequently found and it seems unlikely that one existed since all known examples are directly attached to the main cloister complex (eg Cardiff, Clapham ch 6:1.3 & 1927, fig 3). The King's Lodging was very probably a detached building but where it stood is unknown, unless it is related to the more northerly of the two entrances to the precinct marked fig 24 & pl 3 on Norden's 1607 map. This may have been a relatively unusual feature, though detached buildings, probably guest houses, are known at Brecon and Canterbury (Hinnebusch 1951, figs 10 and 20). The only other atypical feature at Guildford is the nave with an aisle on one side only. Brecon again provides a parallel for this arrangement, though there it is a north aisle; Clapham (1927,92) suggests that a similar arrangement may have obtained at Bangor priory though, if so, the cloister must have been adjacent to the choir not, as more usually, the nave of the church. The Greyfriars house at Gloucester also has a single north aisle (Martin 1937, figs 5 and 6, pl 9). The arrangement of the cloister to the north of the church at Guildford is clearly a departure from the monastic tradition, but entirely predictable for the Dominicans given their

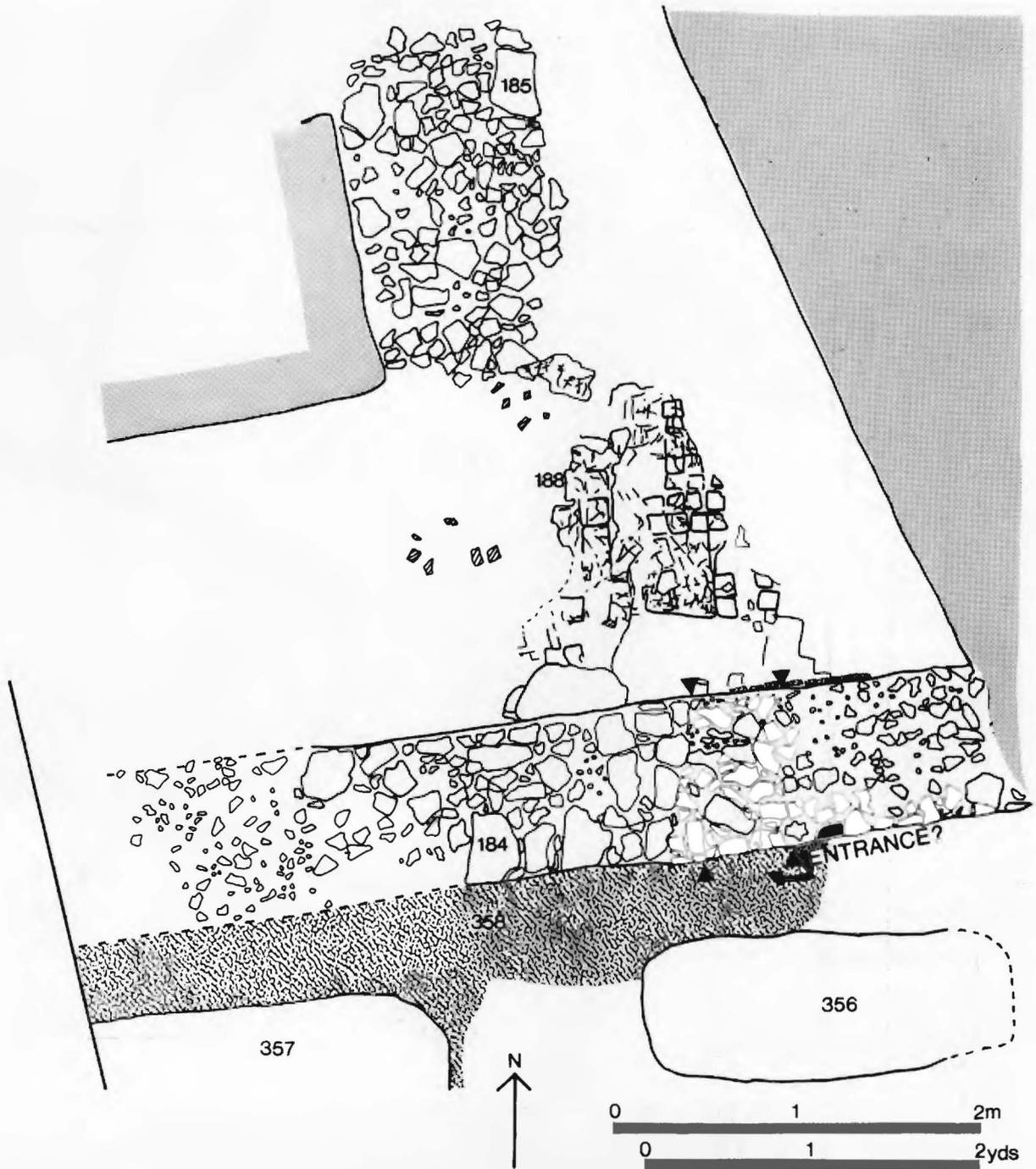


Fig. 23 The developed phase in the area of the north wall, 184, of the nave and south cloister walk. The shaded area indicates later disturbance. 358 is a layer of small chalk fragments.

fig 24 desire to maintain the quiet of the cloister, and the position of the Friary north of the town (cf Cardiff priory, Clapham 1927, fig 3).

Indeed, the overwhelming impression made by the ground plan of the Friary is of a typical site in the English mendicant tradition. An aisleless, square-ended choir is separated from an aisled nave by the walking place with tower above (cf Hinnebusch 1951, 140 and the plans of Franciscan churches in Martin 1937, opp 22); the cloister abuts the nave with its eastern alley leading into the walking place; and the east range contains the dormitory on the first floor and the chapter house midway and projecting from it. The very neatness of the arrangement requires explanation. The oddities of shape and organisation in many other plans are due to constrictions of their sites (Hinnebusch 1951, 132-3) and/or establishment in the early period before the building tradition was fully developed and/or an initial lack of finance. This explains why the late 13th and early 14th centuries saw a flurry of rebuilding in the friaries (Hinnebusch 1951, 137 and Martin 1937, 11-12). But evidently Guildford did not suffer from these problems since it was a late foundation with royal patrons on a site with relatively minor topographical restraints.

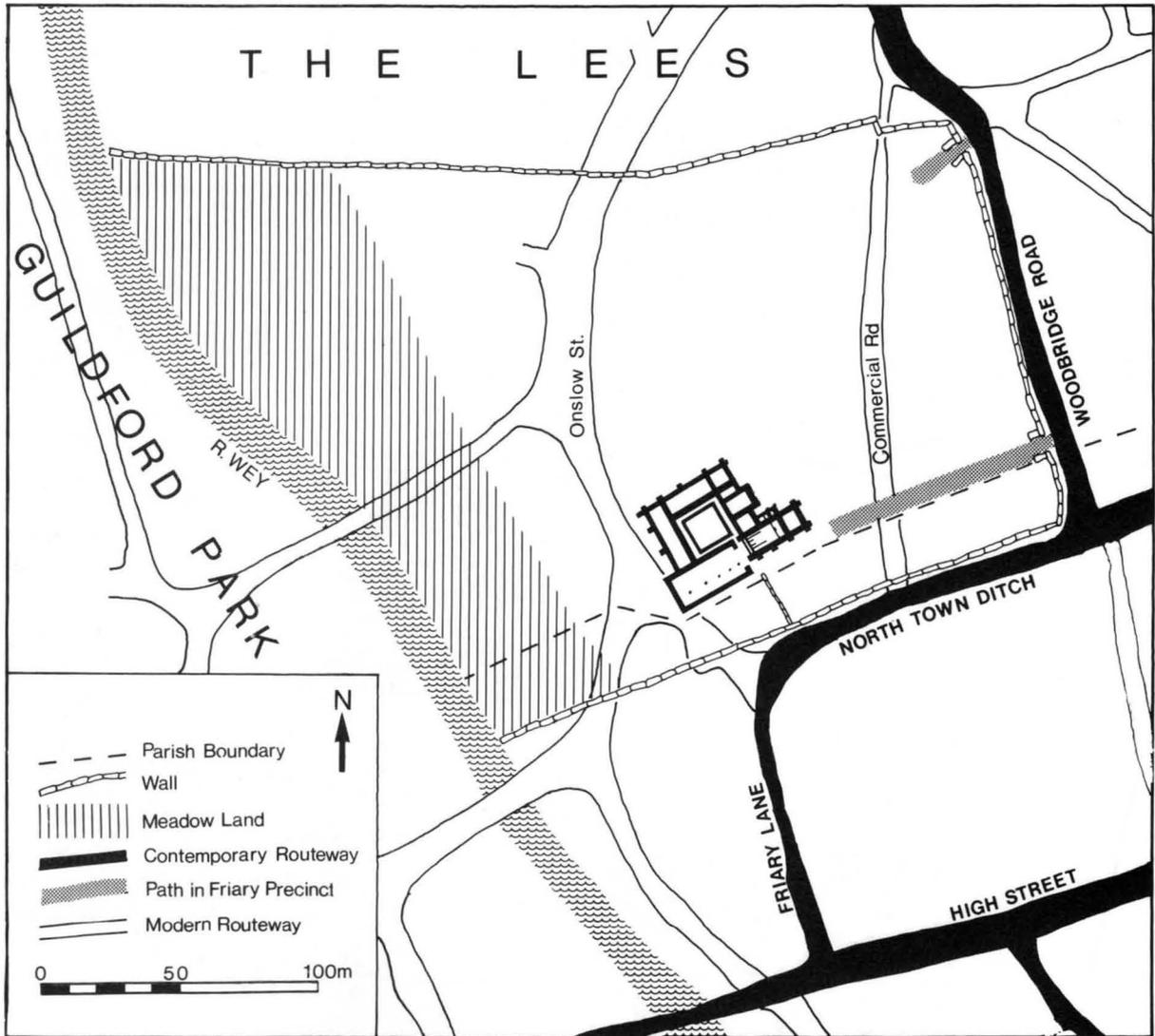


Fig. 24 Reconstruction plan of the Friary and its surrounds. The plan is compiled from various sources, the principal ones being the archaeological evidence for the buildings and Norden's map (pl 3) for the surrounds (see especially ch 6:1.3 and ch 7:2).



Plate 11 Reconstruction of the Dominican Friary (made by D Dodd for the Archaeological Section, Planning Department, Surrey County Council, and now displayed in Guildford Museum). This is a view looking south, with the east and north ranges in the foreground.

TABLE 2: DIMENSIONS OF SOME DOMINICAN PRIORIES AND GUILDFORD PARISH CHURCHES<sup>1,2</sup>

	Bangor <sup>3</sup>	Brecon	Guildford Parish Churches																					
			Bristol	Canterbury	Cardiff <sup>4</sup>	Gloucester	London	Newcastle-on-Tyne	Guildford <sup>5</sup>	Saint Mary <sup>6</sup>	Saint Nicolas	Holy Trinity <sup>7</sup>												
Number of Friars	40	–	106	36	30	33	76	30	17	–	–	–	–	–	–	–	–	–	–	–	–	–		
Total length of church	–	–	49.5	163	55.5	182	45.5	150	53.5	176	30.0	99	64.5	212	–	–	47.5	156	31.0	102	23.0	75	30.5	100
Width of chancel	8.0	26	7.5	25	7.5	25	9.0	30	8.5	28	8.0	26	8.5	28	7.5	24	7.0	23	5.0	17	–	–	–	–
Width of nave	12.0	40	12.5	41	20.0	66	9.0	30	19.0	63	8.0	26	18.5	61	–	–	12.0	39	17.0	55	17.0	55	17.0	55
Width of cloister	19.0	62	21.5	71	26.0	85	25.0	82	25.5	84	24.5	80	33.5	110	27.0	88	18.5	61	–	–	–	–	–	–
	m	ft	m	ft	m	ft	m	ft	m	ft	m	ft	m	ft	m	ft	m	ft	m	ft	m	ft	m	ft

- NOTES
- 1 The dimensions chosen are those which are readily available from published plans. For all the friaries except Newcastle-on-Tyne (Habbottle 1978, 162, where the metric scale is incorrect) appendix VI of Hinnebusch 1951 gives the sources.
  - 2 Dimensions are given to the nearest foot or 0.5m. All dimensions are exclusive of delimiting walls and because of discrepancies in the basis of measurement are, wherever possible, obtained by measurement of the published plan, not taken from figures given by the various authors. Chancel measurements exclude aisles or side chapels, but nave measurements include them. The cloister measurements are east-west and include the alleys.
  - 3 The width of the nave is based on the assumption of a single aisle (see ch 7:2.3).
  - 4 After 1404, fire reduced the length of the nave and the total length was then 42m (138 ft; Clapham 1927, 95).
  - 5 The length of the church is given on the assumption that it projected one bay beyond the west range (see ch 7:2.2). The later addition of the choir (fig 6) made the length 53.5m (176 ft).
  - 6 See VCH, 3, 564. These are the 13th century dimensions.
  - 7 The medieval churches do not survive, and the figures given are very approximate and based on Richardson's *Ichnography* of 1738.

It must however be added that while the plan is typical, the priory is clearly at the bottom end of the scale in terms of size. Every site where dimensions are available normally exceeds Guildford in size of church and cloister, as table 2 indicates. This is presumably related to the fact that in numbers it is one of the smallest Dominican houses, and it is therefore a pity that no dimensions are available for the other seven houses with less than 25 brethren. The correlation is clearly not an easy one though, since Bangor, possibly the next smallest of the priories whose size is known, has well over twice the number of friars.

Finally we may note that if Guildford was a small friary, it nevertheless easily exceeded the parish churches of the town in size. The contrast between the long, slender Dominican church and the shorter, squarer churches of St Mary, Holy Trinity and St Nicolas must have been very marked.

### 3 The Burials by Rob Poulton

#### 3.1 DISTRIBUTION, DATES AND MODE OF BURIAL

ch 3:3.2 79 contexts were identified as sites of inhumation burials though one or two of those in the  
table 3 cemetery area may not have been *in situ*. The minimum number of persons represented by the  
fig 38 bones recovered was 113. A number of factors determined the distribution pattern of the remains  
ch 2: 1 recovered. Firstly, limitation of time meant that the 1974 excavations concentrated on recovering  
structural remains and, therefore, only a small number (seven) of burials were excavated. In  
particular the chapter house and cloister alleys are likely to have had many burials of priors and  
friars. In contrast during the 1978 excavations a deliberate attempt was made to recover all  
surviving burials from the nave and cemetery areas. Secondly, survival within these areas was  
varied. In the nave, most burials (64%) survived intact though subsequent burial (23%) and tomb  
robbers (13%; see below) had damaged some. Cemetery area A, to the west of the early 17th  
ch 3: 1 & century wall, 132, was very badly damaged as a result of the levelling of the ground for gardens  
fig 15 3:4, pls 12– at that period and its subsequent cultivation. Pit 161, on the extreme south of the excavated site,  
fig 26, ch was used for reburial of the larger, less easily crushed bones disturbed in levelling, and contained  
14, fig 2 parts of at least 21 interments. 19th and early 20th century building work had caused no  
disturbance of the burials in the nave, had some effect in cemetery area A but was clearly most

TABLE 3: PERCENTAGES AND TOTALS OF CHARACTERISTICS OF BURIALS

Element		Nave		Cemetery A		Cemetery B		Overall	
		Total	%	Total	%	Total	%	Total	%
VISIBLE GRAVE CUT	Yes	31	100	19 <sup>1</sup>	56	4	44	54	73
	No	0	0	15	44	5	56	20	27
	Not Applicable	0	0	0	0	0	0	0	0
DISTURBANCE <sup>1</sup>	Later Burial	7	23	2	6	3	33	12	16
	Robbed	4	13	0	0	0	0	4	5
	Mansion	0	0	25 <sup>4</sup>	74	0	0	25	34
	Modern	0	0	16	47	7	78	23	31
	None	20	64	0	0	0	0	20	27
	Not Applicable	0	0	0	0	0	0	0	0
POSITION <sup>2</sup> OF ARMS	A	4	13(17)	3	9(10)	3	33(50)	10	14(17)
	B	12	39(50)	9	26(31)	3	33(50)	24	32(40)
	C	5	16(21)	6	18(21)	0	0(0)	11	15(19)
	D	3	10(12)	11	32(38)	0	0(0)	14	19(24)
	Not Applicable	7	22	5	15	3	33	15	20
COFFIN <sup>3</sup>	Wood	13	42(54)	9	26(31)	2	22(33)	24	32(40)
	Lead	1	3(4)	0	0(0)	0	0(0)	1	1(2)
	None	10	32(42)	20	59(69)	4	44(66)	34	46(58)
	Not Applicable	7	23	5	15	3	33	15	20

1. Disturbance by more than one agency occurred in a number of cases so that the percentages may add up to more than 100.
2. Percentages in brackets were calculated after excluding those contexts where the concept was 'Not Applicable'.
3. Total includes 5 for the group of burials with a single grave cut, 288.
4. Includes 166 which was missing almost all the left ribs, but with no obvious sign of the cause.

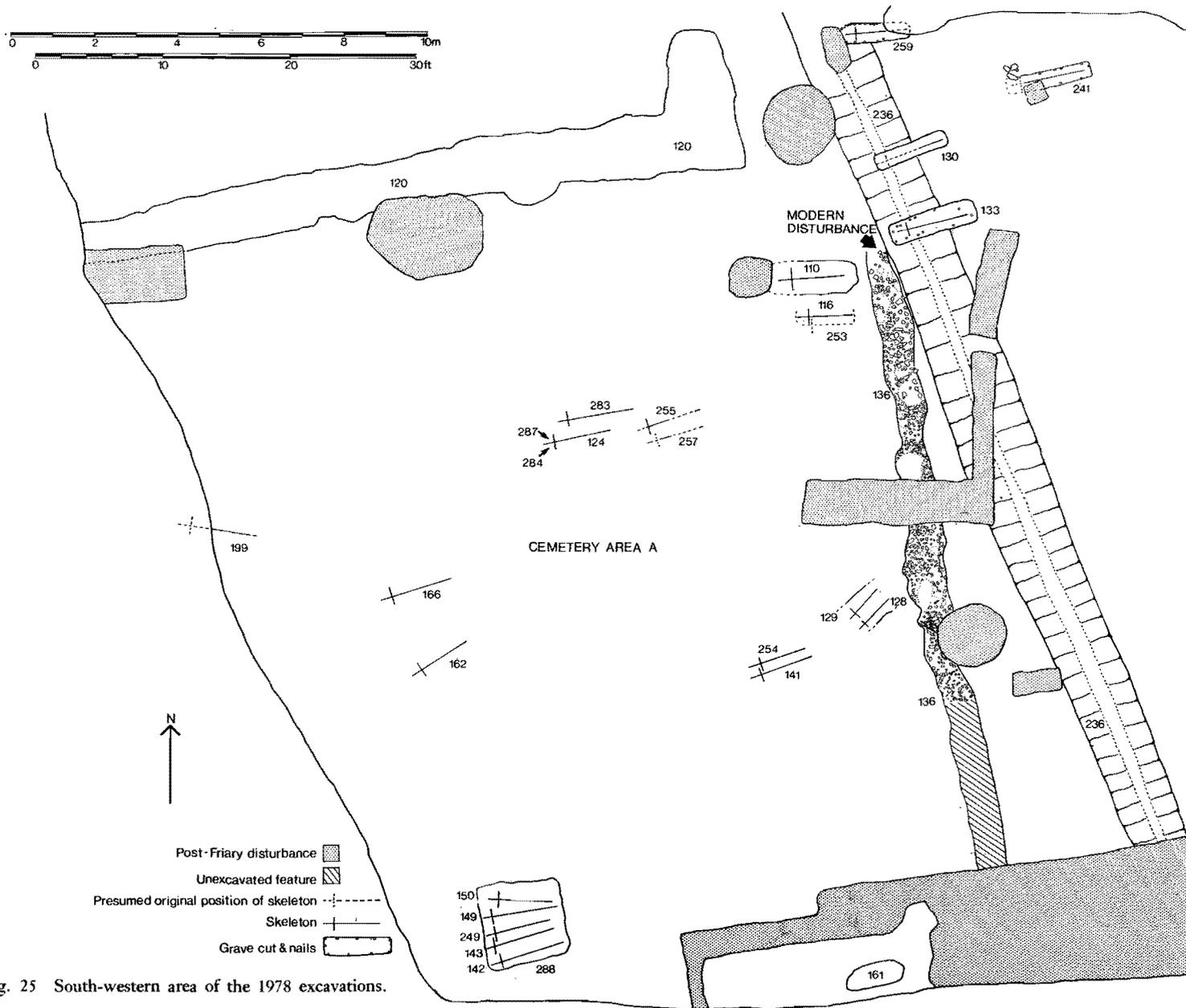


Fig. 25 South-western area of the 1978 excavations.

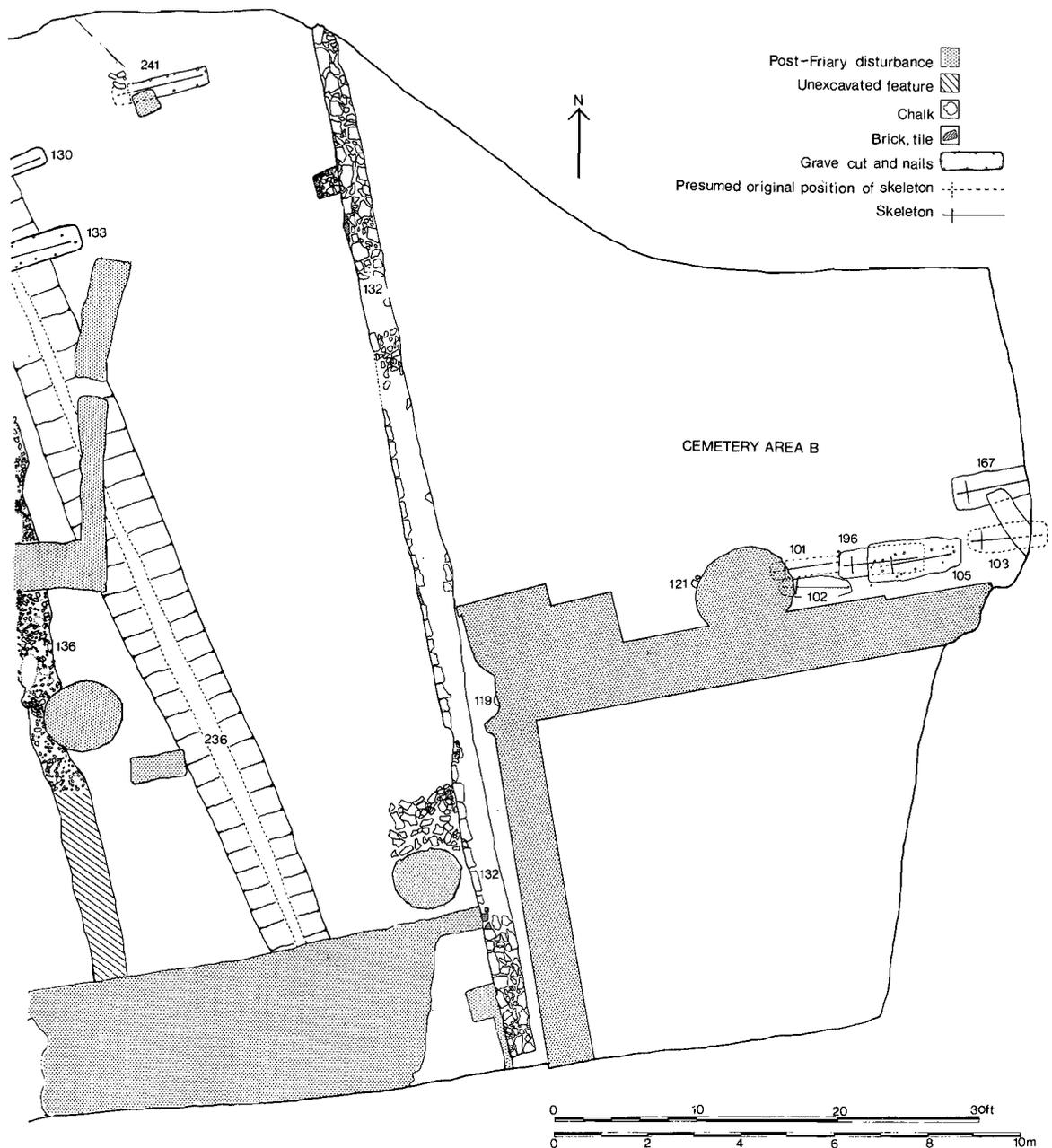


Fig. 26 South-eastern area of the 1978 excavations.

ch 1:3 damaging in cemetery area B. This must be due to the topographical developments already outlined. It follows that a lack of burials in any part of the cemetery does not indicate they were originally absent, particularly in what may have been the zone of greatest destruction in the 17th century, the area immediately west of 132; and also in the area east of 132 where modern levelling  
 figs 25 & 26 may have done most damage.  
 The effect of these disturbances is to vitiate any possibility of establishing a horizontal stratigraphy in the cemetery areas. Nor is this possible in the nave, though there the intercutting  
 tables 7-15 of graves gives some clue to chronological sequence. Grave goods are almost completely absent except for occasional bronze fittings to items of dress and a bronze finger ring (a second ring, embellished with a heart, fleur-de-lis and the initials RC, was unstratified but may, nevertheless, have belonged to a friar or even a prior since the symbols are appropriate to the Dominicans and an early 16th century date is likely). For some graves, the presence of inlaid floor tiles in the grave-fills gives *termini post quos*. However, taken as a whole, the chronological indicators are too weak and too few to establish any satisfactory sequence and the burials are best treated simply as



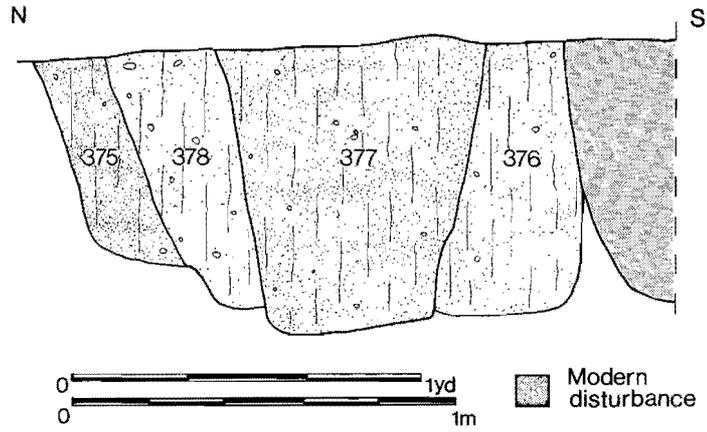


Fig. 28 Sections through standard graves.

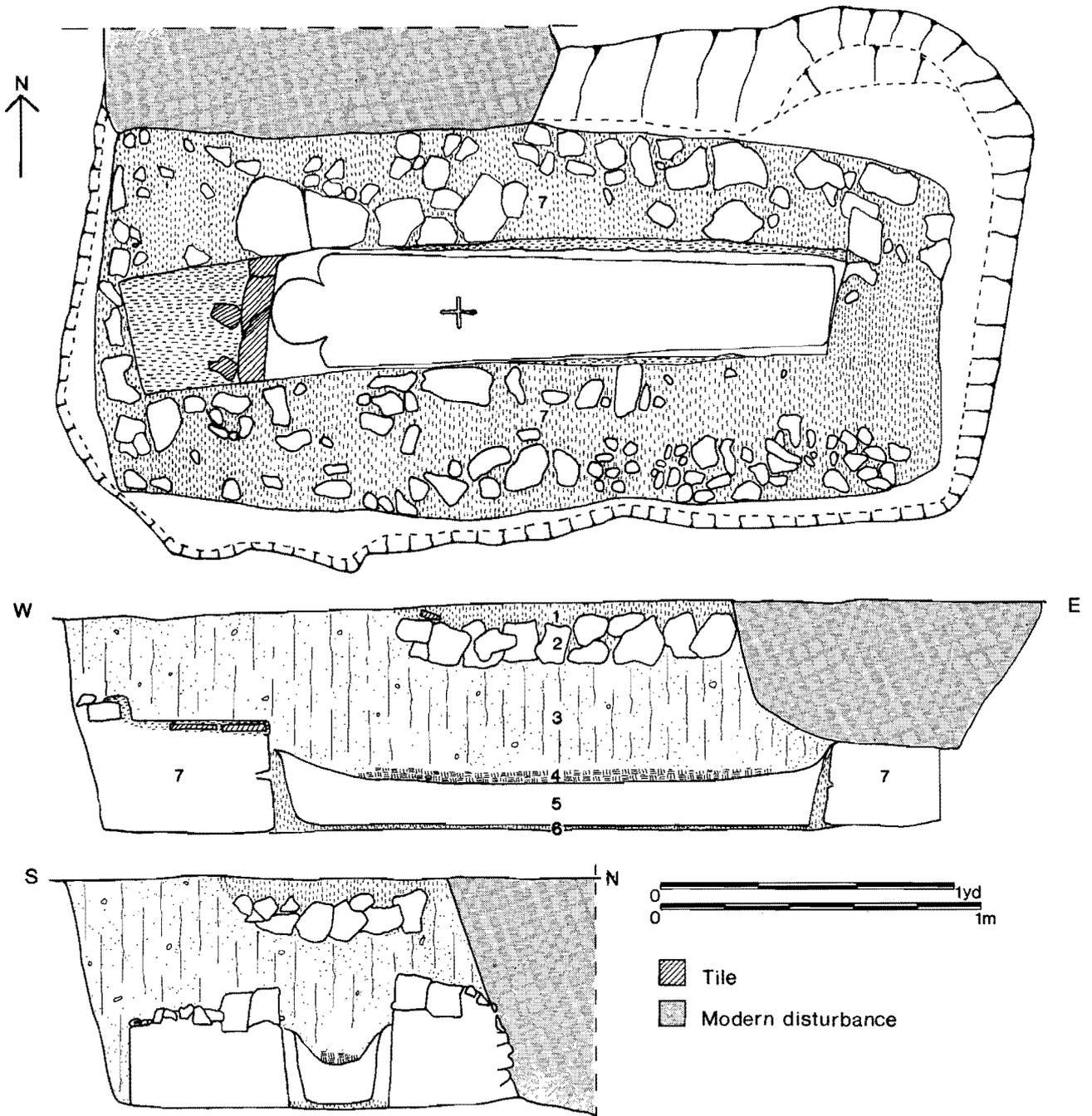


Fig. 29 Plan and sections of grave 172. Key to layers numbered in section:  
 1 Mortar flooring  
 2 Small chalk blocks packed with crushed chalk.  
 3 Orange sand with occasional stone  
 4 Charcoal  
 5 Lead coffin  
 6 Mortar  
 7 Chalk block tomb

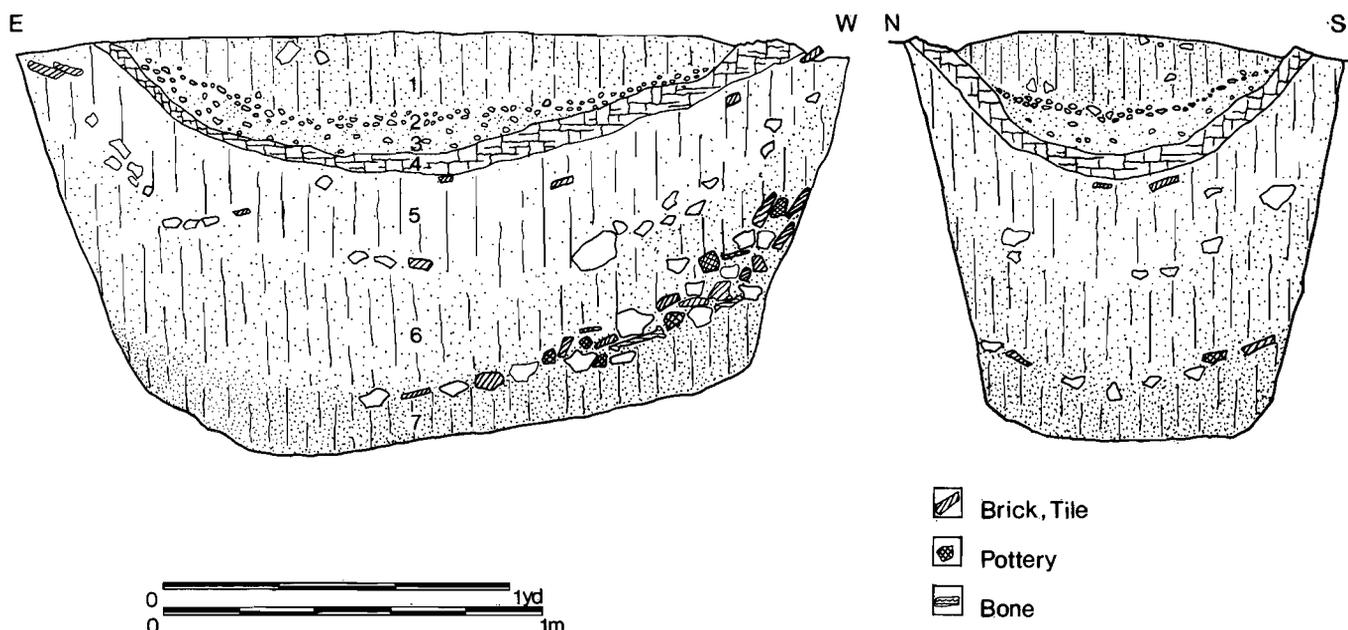


Fig. 30 Sections through grave 174. Key to layers:

- |                                     |   |
|-------------------------------------|---|
| 1 Light sandy silt                  | 5 Light brown sandy silt containing tile and human bone |
| 2 Gravel mixed with dark-brown silt | 6 As 5 but darker with more tile, pottery and bone      |
| 3 Clean orange sand and gravel      | 7 As 6 but darker and without tile, pottery or bone     |
| 4 Crushed chalk                     |   |

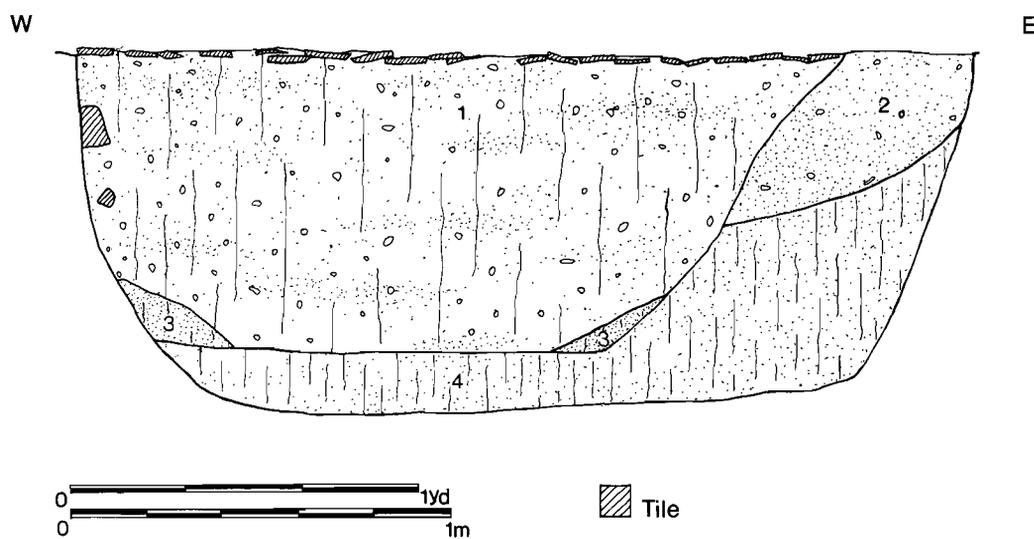


Fig. 31 Section through grave 214. Key to layers:

- |  |
|--|
| 1 Demolition debris (including tile, mortar, brick and human bone) |
| 2 Similar to 1, but with much less demolition debris               |
| 3 Yellow sand  |
| 4 Sandy silt surrounding a skeleton, S214                          |

belonging to the period 1275 to 1538, which means that one must ignore the possibility that, for example, variations in the position of the arms or the presence of a coffin result from changes in fashion over time.

The standard form of burial can now be described. Interments were typically east-facing, single and supine in graves dug to an average depth of 0.75 m below floor level in the nave and, though the evidence was destroyed, perhaps to a similar depth in the cemetery. Where the evidence survived, the head was normally facing straight upwards and where it tilted to north or south, this was as likely to represent post-mortem change as to have been the original position (cf tables 3 & Shoesmith 1980, 51). Three distinct positions for the arms were noted; hands crossed over the chest (A), over the pelvis (B) or with arms laid by the side (C). The original presence of wooden coffins, long since decayed, could be deduced from a soil stain and/or iron nails surrounding the body. In all cases where a soil stain was present, nails were also found. Elsewhere (Shoesmith & 28

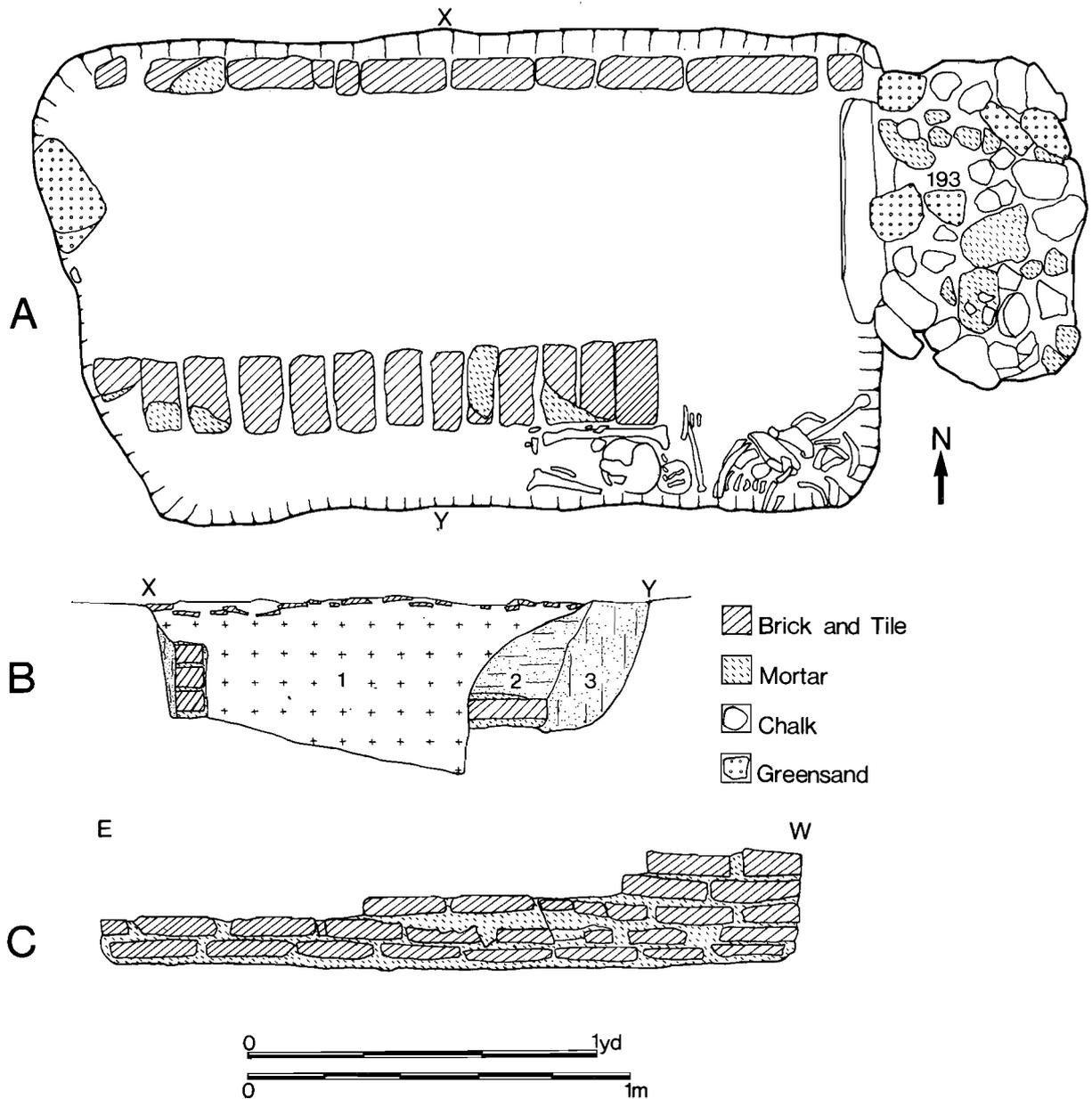


Fig. 32 Plan and section of grave 282. Key to layers numbered in section:  
 1 Demolition debris (including brick, roof and floor tiles, and mortar) in a dark sandy silt matrix.  
 2 Dark brown sand with some brick rubble  
 3 Yellow-brown sand

1980, 30 with ref) evidence for wooden coffins constructed without the use of iron nails has been noted, but this seems unlikely at Guildford. The form of the coffin is apparently similar in all cases, consisting of a rectangular box, whose length was normally adjusted to that of its occupant; whose width, for an adult, averages 42cm, but is generally slightly greater at the head than the feet; and whose height (judging from 305, 334 and 356) is of the order of 25cm. In two cases, 334 and 366, evidence for wooden braces to strengthen the joints was found at the corners of the base. Firm evidence for a lid to the coffin survived only in grave 334, but it is clearly implied by the subsidence in grave 356, and by the number of nails recovered from levels above the grave bottom. It is probable, therefore, that in all these cases, a true coffin, not an open box, is implied. It is interesting to compare the consistently good condition of skeletons so buried at Guildford with the tendency observed by Shoesmith (1980, 49 and ref) for skeletons in 'well-built, air-tight coffins . . . to disintegrate to a white powder [due to] autolysis . . . between the bones and the body acids causing the former to dissolve.' Plainly, therefore, either the Guildford coffins were poorly built and not air-tight or the explanation of the phenomenon noted by Shoesmith is more complex. Certainly at least two of the Guildford coffins, 334 and 359, were too large for their occupants by about 20cm, which may suggest the coffins were 'ready-made',

fig 27,  
 groups B,  
 C & D  
 fig 15

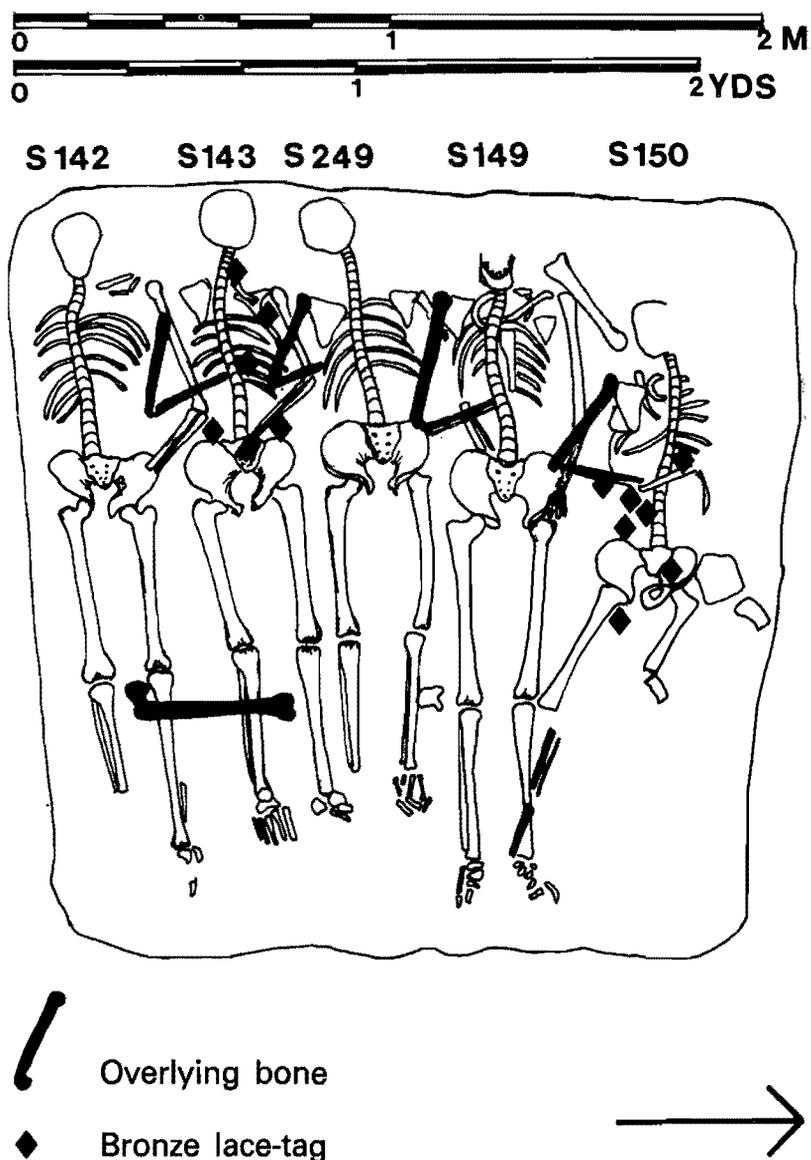


Fig. 33 Multiple burial in cemetery, area A (context 288).

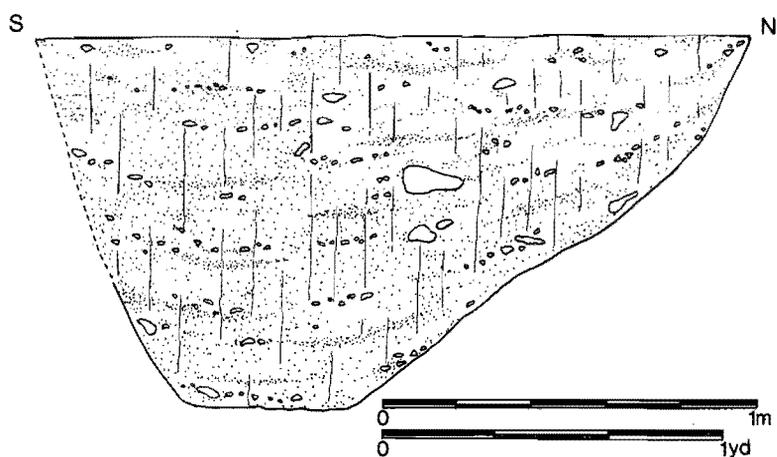


Fig. 34 Section through grave 354. The fill is a grey-brown silt heavily flecked with mortar, containing many chalk fragments and some human bone.

but there is no reason to suppose they were of poor construction and, in view of the likelihood that burial in the nave was the prerogative of the well-to-do, further research is clearly required to elucidate the factors affecting the condition and survival of buried remains. A number of graves do not fit into the general pattern described above and are discussed below.

- M62-4  
fig 29  
pl 17  
pl 18  
ch 4:7.1
- 172** This grave contained a tomb made from neatly cut chalk blocks, bonded with mortar. These were well finished, especially on the inside of the tomb. At the west end a small area was finished with tiles at a level slightly lower than the rest. The tomb was exactly made to contain a lead coffin. This coffin had a green painted border and cross. An inscription 'Margareta Daubeny' was incised into the lead. The skeleton was that of a young woman, *c* 20 years old, wrapped in a good quality shroud, of which a number of small pieces survived. A few fragments of other bones, probably foetal, were also recovered.
- The major problem with this burial is its date. The inscription would seem to be late medieval (within a range of 1450 to 1520, though just possibly earlier – pers comm J Blair), but the best parallels for the form of the coffin are rather earlier, in the late 14th century. Documentary research does not help, except to say that the only Daubenys known in the area at this time were originally a west country family; nor is this surprising if, as the evidence suggests, she died young and in childbirth and could well, therefore, have been a first wife (pers comm S Corke).
- M64-6  
fig 30
- 174** This feature was wider and more irregularly shaped than standard graves and did not contain an articulated body. Scattered within the fill was roofing tile, chalk fragments and most of an adult male skeleton.
- M66-7  
fig 31
- 214** This feature was again large and unusual in shape for a grave. At its lowest level it did contain an articulated body but the upper fills contained large quantities of demolition debris (roofing tile, mortar, chalk fragments) as well as most of a non-articulated skeleton. The fill also contained a number of bricks and brick fragments which perhaps suggest the former presence of a brick tomb, as found in 282, below.
- M67-9  
pls 19 & 20  
fig 32
- 282** This feature consisted of a brick lined tomb, which was filled with demolition debris. No articulated body was found within the tomb, but just outside was a quantity of human bone which comprised nearly all of a single skeleton: It seems likely that 174, 214 and 282 all show the results of tomb robbing, most probably for their lead coffins after the dissolution. All these features contain demolition debris and it seems likely that both the tomb robbing and the destruction of the church cannot have taken place long after the dissolution.
- M78  
fig 33  
pl 21
- 288** This was a single grave, containing 5 skeletons. There was no clear evidence to explain this unusual occurrence but it may be noted, firstly, that it seems probable that the bodies were all buried at one time (they are closely, but regularly arranged, with no soil accumulation separating superimposed limbs); secondly, that examination of the bones gave no indication of cause of death; and, thirdly, that these skeletons were generally gracile compared to the robust character of all other skeletal material from the site, which raises the possibility that they were derived from a different population or social class. This possibility is strengthened by the presence of bronze lace tags associated with S143 and S150 which suggest that both were buried wearing doublets, perhaps of the period *c* 1400 to 1450 (Cunnington & Cunnington 1952, 98). No other burial on the site had evidence for such garments.
- M169-71  
fig 48
- 282** This feature consisted of a brick lined tomb, which was filled with demolition debris. No articulated body was found within the tomb, but just outside was a quantity of human bone which comprised nearly all of a single skeleton: It seems likely that 174, 214 and 282 all show the results of tomb robbing, most probably for their lead coffins after the dissolution. All these features contain demolition debris and it seems likely that both the tomb robbing and the destruction of the church cannot have taken place long after the dissolution.
- M69  
fig 34
- 354** This is superficially similar to 174, 214 and 282 in its shape and the lack of an articulated body. However, the fact that there is neither a disturbed body nor demolition rubbish in the fill suggests the possibility that the body was removed for reburial while the friary was in existence or immediately after the suppression order, rather than the tomb being robbed. This happened to the body of Gerard Danet, originally buried at the Ludgate Blackfriars, but now in Tiltey Church, Essex (Palmer 1891, 79).

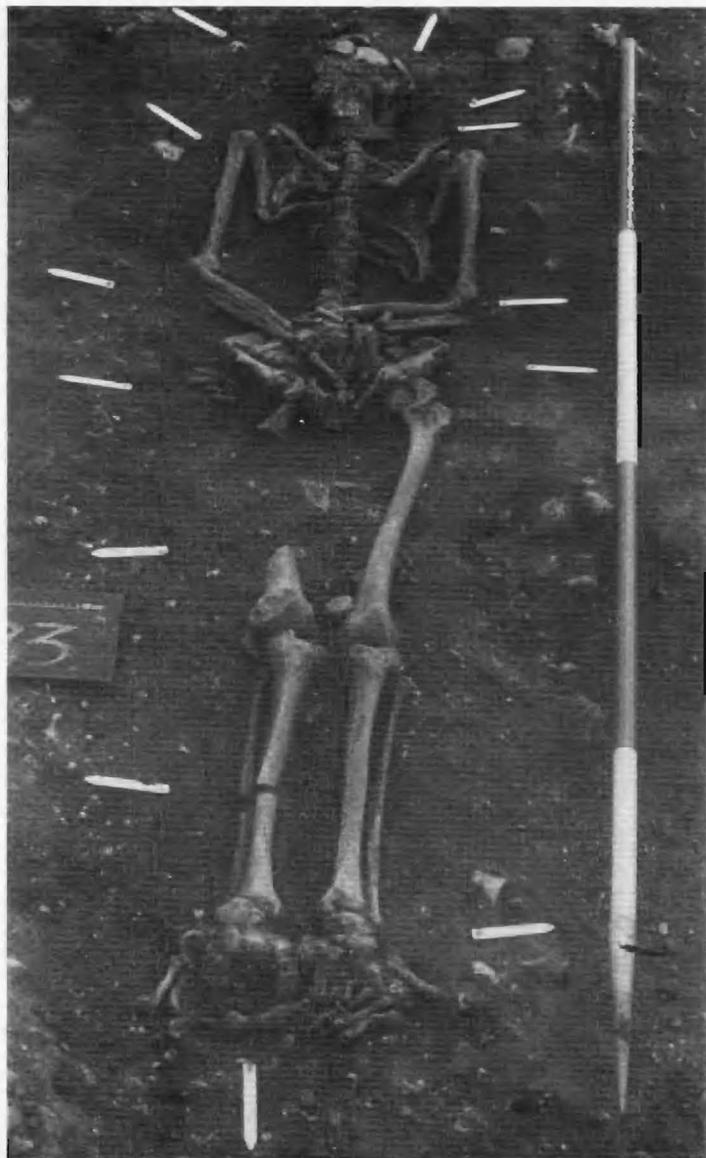


Plate 12 Skeleton in the cemetery (context 133). The blunt ends of the white tags indicate the position of coffin nails.



Plate 13 Skeleton 102, cut by a modern brick soakaway and with its head re-deposited between its legs.



Plate 14 Skeletons in cemetery, area A. Note the heavy disturbance as a result of later gardening. In the foreground are S255 and S257, apparently buried in the same grave.



Plate 15 A burial in the nave of the church (context 362)



Plate 16 Child buried in a wooden coffin (context 339)

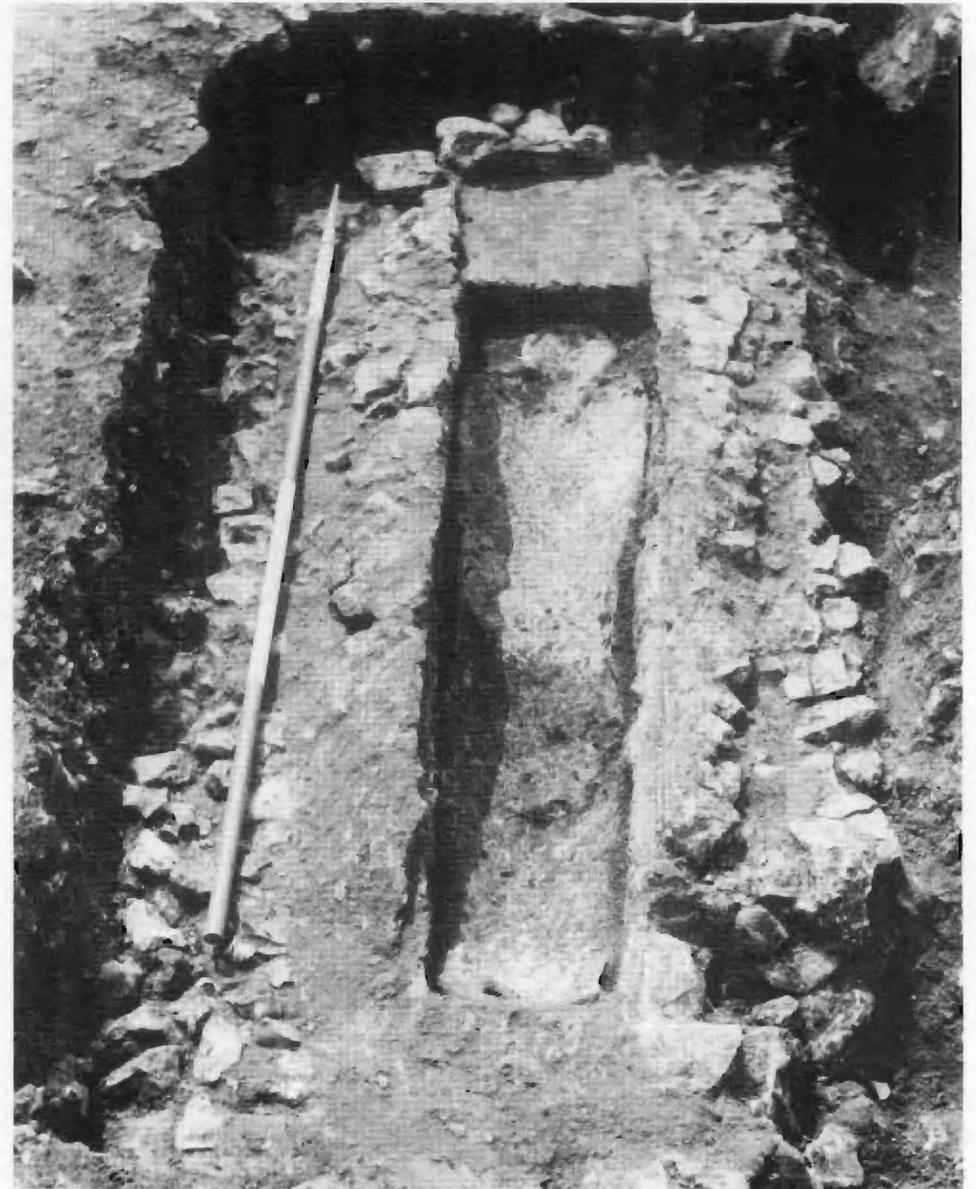


Plate 17 Lead coffin enclosed in a tomb constructed of dressed chalk blocks with mortar (context 172)



Plate 18 Inscription 'Margareta Daubeny' on lead coffin (172)

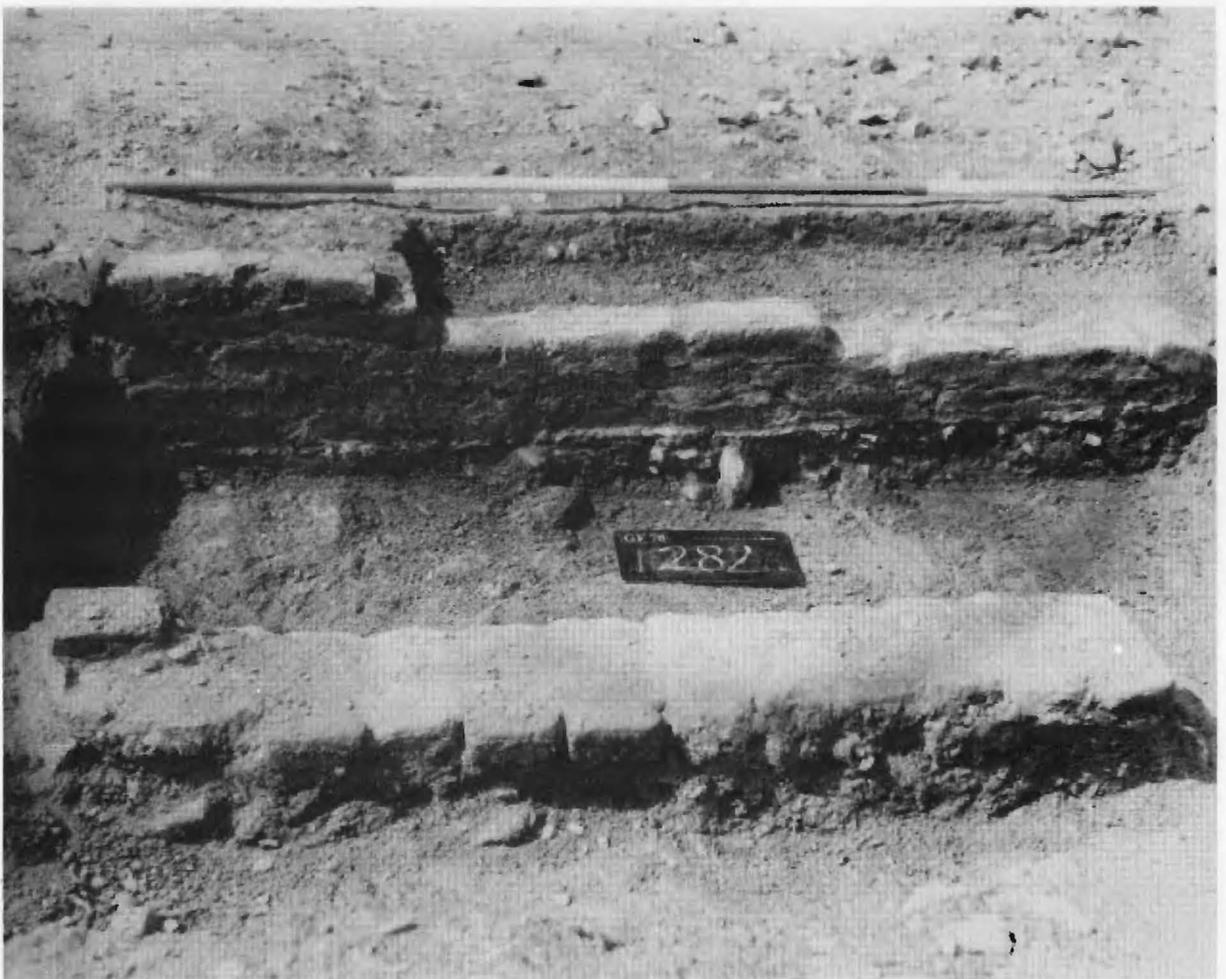


Plate 19 Brick lined tomb (context 282)



Plate 20 Partially articulated skeleton outside brick tomb (context 282)



Plate 21 Five skeletons buried in the same grave (context 288).

## 3.2 THE HUMAN REMAINS by Janet Henderson

A large sample of inhumed bones was presented for examination from the Guildford friary site in Surrey. The material came from three designated areas of the site: The nave of the church, cemetery area A and cemetery area B. Disturbance of earlier graves was common, but in most instances where the bodies of more than one individual had become confused it was possible to sort them out.

Preservation of material varied from virtually complete skeletons to very poorly preserved remains, sometimes with as little as one bone present, but in view of burial conditions, in particular in the cemetery, preservation was generally good. Recovery of the skeletal remains from the cemetery and nave of the church was nearly 100%. Nevertheless, it must be emphasised that the material could be regarded only as a sample of the population that might have used the Friary and that would, in itself, only have been a sample of the total population of Guildford and the surrounding area. Therefore it was assumed throughout to constitute, in demographic terms, a 'sample of a sample of a sample'.

An estimate of the minimum number of individuals present indicated that the sample size was 113 (42 in the cemetery, 41 in the nave of the church and 30 residual). Residual material refers to all those samples listed as either residual or not in a grave context (nos 159, 204, 230, 258, 296, 312 and 161). This estimate included all the evidence for different individuals, however it did not include the material listed as from the fill of ditch 236.

The object of this report was not only to add to an understanding of the demography of medieval British populations but also to examine possible evidence for differences (social or otherwise) between the human remains in the three areas of the cemetery. For the detailed study as well as basic demographic information (age, sex and stature), data on cranial and post-cranial metrical and morphological observations were collected. Unfortunately the sample was too small for statistical analysis to be undertaken, nevertheless it was found worthwhile to compare the material from the three areas in general terms.

3.2.1. *Demography*

ch 4:2 Specific results and techniques employed in the assessment of each skeleton are listed in the  
ch 4:7 catalogue of individual burials. A discussion of the methods used for estimation of age, sex and stature is included in the full report.

## ch 4:2.1 Age

The results for age at death are shown in fig 35 and table 4. The sample from Guildford Friary included 25 individuals of less than 25 years of age (ie sub-adult).

TABLE 4 RESULTS FOR AGES OF INDIVIDUALS AT GUILDFORD FRIARY

<i>Age (in years)</i>	<i>No of individuals</i>
0-5	3
5-10	0
10-15	7
15-20	2
20-25	12
25-30	12
30-35	6
35-40	4
40-45	1
45-50	9
50-55	1
55+	5
Juvenile	1
Young Adult	7
Adult	37
No data available	6
Total:	113

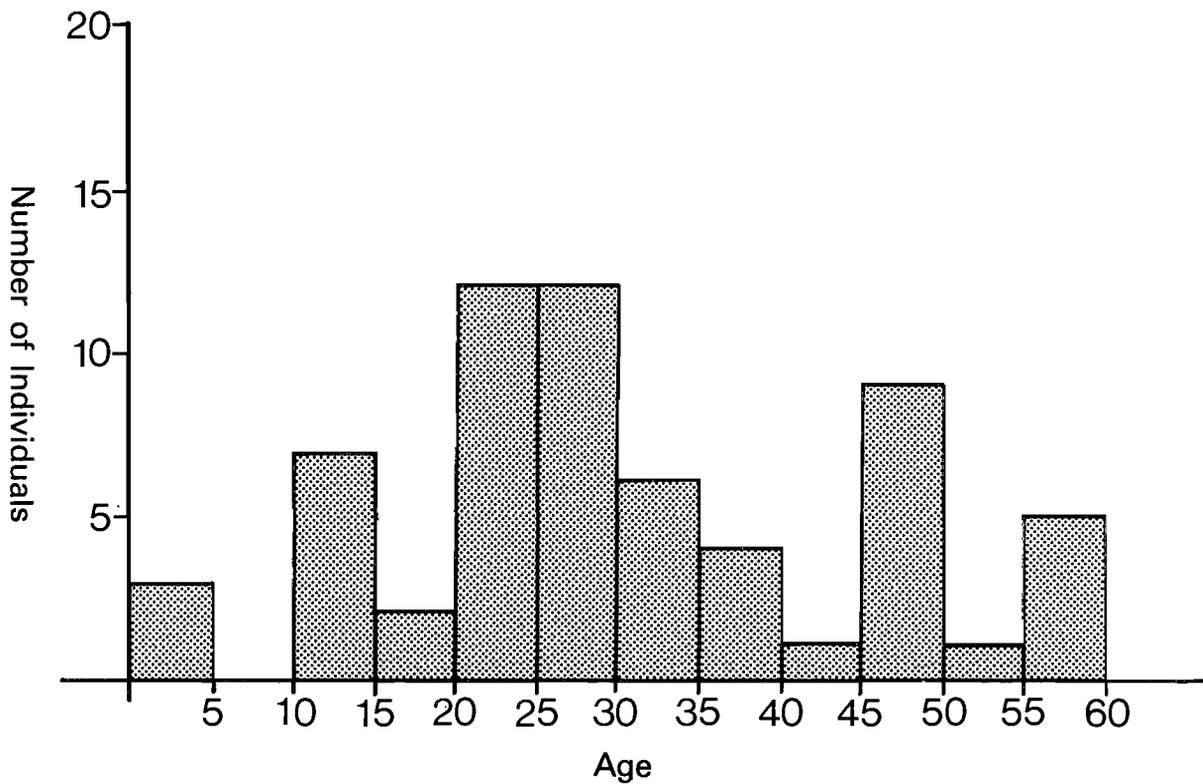


Fig. 35 Distribution by age of individuals from Guildford friary. Only those aged over 5 years included.

There were a very few bones from S172 which probably represented the remains of a foetus or stillbirth not included in the above. There was also a fragment of infant mandible from Pit 161. The other two individuals from the 0–5 year range were juveniles rather than infants (ie older than 6 months).

The absence of any individuals in the 5–10 year period and the fact that there were only two from 15–20 years was probably in part a function of the ageing methods employed and the size of the sample (particularly in the latter group). The 5–10 year gap may also reflect the fact that survival of infancy often leads to survival until adolescence. However, since it was not possible to establish the cause of death of any of the individuals in the sub-adult group, the size of the sample must preclude any conclusions with regard to the age distribution. Results for older individuals showed that there was a fairly even spread over the age period 20–55 + years. However in the 10 year period 20–30 years, some 24 individuals were grouped by comparison with 26 in the 20 year period of 30–55 (if the 20 year period 10–30 years was used then the ratio was 33:26). The size of the sample precluded any statement to the effect that mortality was high in young adulthood, particularly as such a high proportion of the sample could be aged only as ‘young adult’ or even less conclusively as ‘adult’. Nevertheless, a similar sort of pattern was found at the Dominican priory in Chelmsford (Bayley 1975, sample size 138) and even at Stonar, Sandwich, Kent (Bayley & Eley 1975, sample size 147) the number of individuals in the 10–30 year period was roughly equal to those over 30 years. At all three sites, Guildford friary, Chelmsford priory and Stonar, the picture presented was similar: that of a fairly high mortality rate in juveniles and young adults but also a fair number of individuals surviving to 45/50 years or more. In view of the differing characters of the sites (Guildford and Chelmsford were Dominican friaries probably with samples of both friars and lay populations, whereas Stonar might be considered as representing a secular, urban population only), it was interesting to note that there were very few burials in the 0–10 year period at Guildford (3) and Chelmsford (7) but more at Stonar (60 – 26 of which could be classed as ‘infants’). The small size of the samples and lack of other comparative sites made it impossible to draw any conclusions from this, especially as the Stonar sample only included a small part of the expected whole.

#### ch 4:2.2 Sex

Fig 36 and table 5 show the results and proportions for sexing at Guildford friary. The category of ‘no data available’ includes all juveniles and sub-adults for whom sexing was not attempted, as well as those for whom sufficient evidence was absent.

The majority of individuals (40%) were sexed either by means of the pelvis, skull and femoral

fig 38

head diameter or the pelvis and femoral head diameter alone. The use of more than one parameter for sexing makes some allowance for sexual dimorphism in the population sample and acts as a check, in particular in this group where the skull was found to give rather ambiguous results: fortunately there was only one individual (214) for whom it was the only evidence available. Visual examination showed that otherwise sexual dimorphism in this sample was fairly well marked and only a few individuals (eg S259) were found difficult to sex. Distribution by sex showed that a high proportion of the population was male, and there were actually only ten certain females present in a sample of 113 individuals. It was also interesting to note that only two of the females came from outside the nave of the church, and one of those was from grave 288 (256). There was a possible female from Pit 161 as well.

Comparison with the findings at Chelmsford and Stonar showed a much higher percentage of females at both of those sites although it is still lower than would be expected (Chelmsford 36%, Stonar 34%). In a random population sample a ratio closer to 50:50 would be the predicted norm. It has been shown elsewhere (Weiss 1972) that in some cases the apparently greater number of males has been caused by a bias towards sexing as male. However the Guildford friary sample, as mentioned above, was found to exhibit a marked degree of sexual dimorphism and it is suggested that the relative proportion of males:females reflects the character of the sample itself, particularly in view of the scattered distribution of the material. The greater emphasis on female presence in the nave of the church (7 females: 28 males, tentatives included) may have been a result of a sample bias or social practice in the cemetery as a whole.

Owing to the small sample of females present and the probable sample bias the fact that none of the females had an age assessment greater than 35 years has to be regarded as insignificant. Certainly it is possible that the mortality rate for young females was higher than that for young males but, on the evidence available, it was impossible to make any conclusive statement.

TABLE 5 RESULTS FOR SEXING OF INDIVIDUALS AT GUILDFORD FRIARY

<i>Sex</i>	<i>No of Individuals</i>	<i>% of Total (to nearest whole figure)</i>
Male	53	47
Probably Male	16	14
Female	10	9
Probably Female	1	1
No Data Available (includes juveniles)	33	29
Total:	113	100

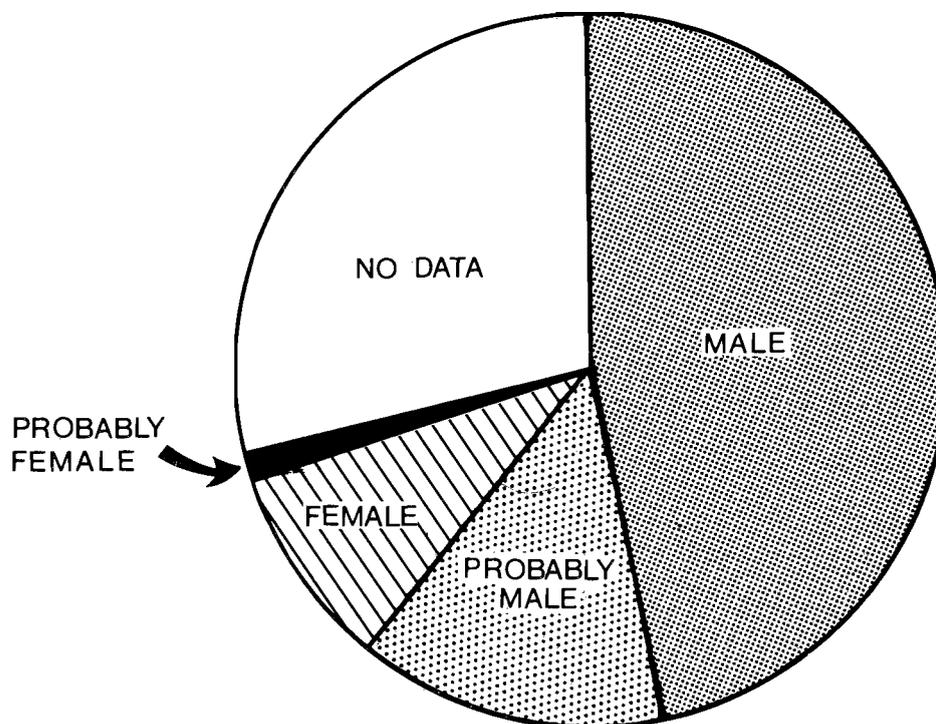


Fig. 36 Distribution by sex of individuals from Guildford friary.

ch 4:2.3 Stature

The distribution of stature by sex is illustrated in fig 37. Note that of the total population sample only 56 (52%) could actually be given stature estimates. However, a high proportion of those (54%) were assessed by means of the femur and tibia and only five (8.75%) had to be calculated by maximum lengths of the upper, as opposed to lower extremity. Thus a fairly high degree of consistency of method in those assessed was obtained. The range of heights was from a minimum of 157 cm (*c* 5 ft 2 ins) for 159 (a female) to a maximum of 181 cm (*c* 5ft 11ins) for S133 (a male). Fig 37 shows the range of heights for this population sample. In view of the small number actually measured for height (see above) the distribution could not be considered as conclusive but even so it emphasised both the greater number of males present at Guildford friary and the probable distribution of height ratios by sex. Thus the males appeared to be taller, the females shorter with only a small amount of overlap between the two. Modal height (the mode of a range is defined as the most commonly occurring value [ie the most fashionable], the mean is the sum of all the values in the set divided by the total number of items) for the males was 170cm (*c* 5ft 7ins) and for the females was 158cm (*c* 5ft 2 ins). Mean height for males was 173 cm and for females was 161cm. As can be seen on fig 37 although there was a fair range of heights obtained from the Friary material, the majority of individuals were grouped at or close to the modal values.

Comparison with the findings at Chelmsford and Stonar showed similar results. At Chelmsford the minimum height was 149 cm (*c* 4ft 11ins) for HB100 (a female) and the maximum was 181 cm (*c* 5ft 11ins) for HB102 (a male). Modal values were 150-154cm for females and 165-169cm for males (ie slightly shorter than Guildford but note that as at Guildford more

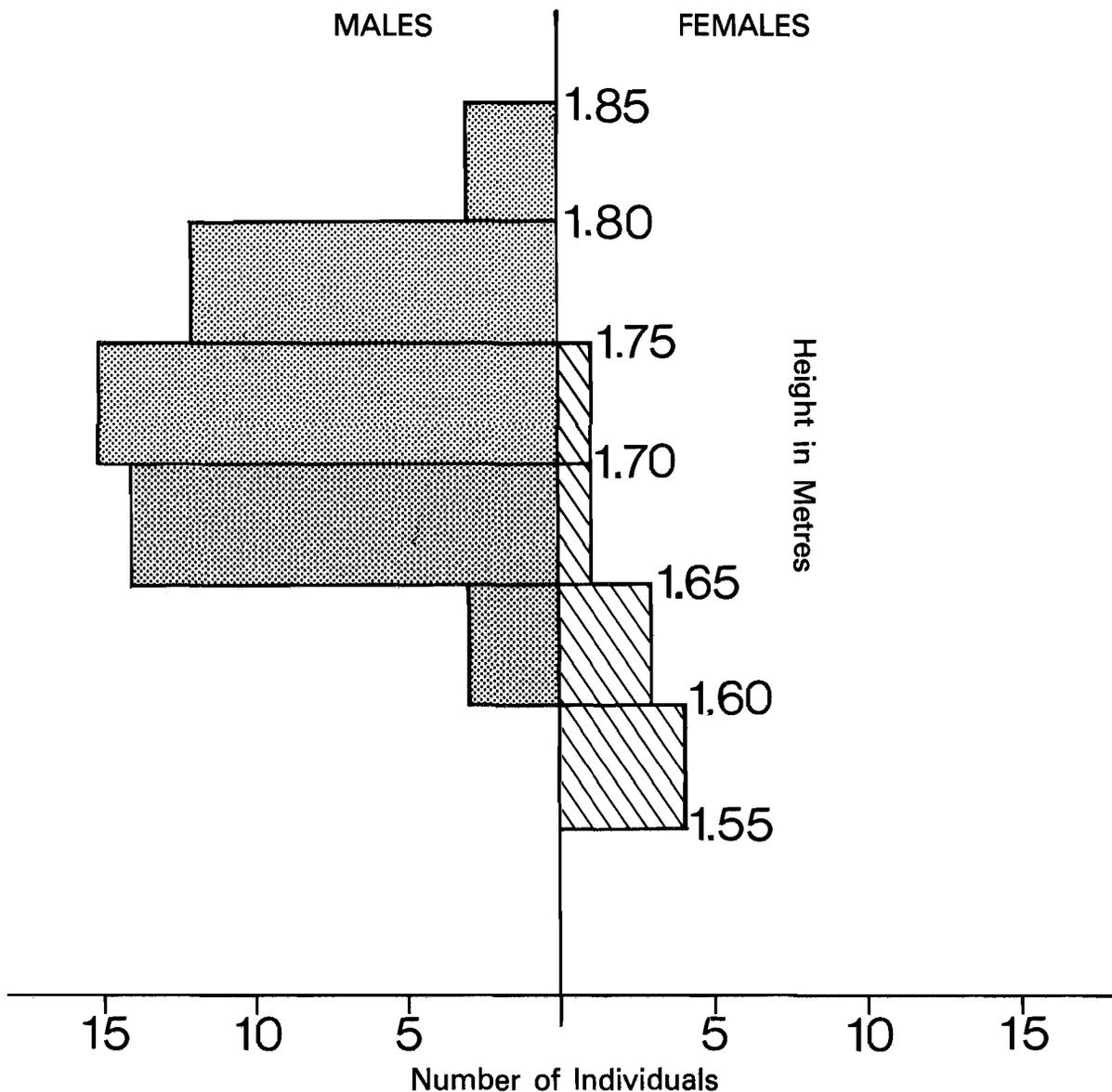


Fig. 37 Distribution of stature by sex of individuals from Guildford friary.

individuals were grouped above the mode than below it). At Stonar the maximum height was 183cm (c 6ft) for burial 6 (a male) and minimum height was 147 cm (c 4ft 10 ins) for burial 52 (a female). The modal values were 175-179cm for males and 155-160cm for females. However, although the modes at Stonar were slightly higher than at Chelmsford or Guildford the majority of males were grouped below that level; for the females the mode seemed to approximate very closely to the mean value.

The overlap between the sexes was similar at Chelmsford to Guildford: ie it was slight and there was a fair margin of disparity between males and females whereas at Stonar the overlap was much greater: nearly half of the males were in the same range as three-quarters of the females (ie all grouped between 155-170cm).

None of the samples was large enough for any significant conclusions to be deduced but it was of interest to note that similar height ranges and frequencies were to be found at all three sites, further that as regards height sexual dimorphism was marked both at Guildford and Chelmsford. Note that the dimorphism remarked at these two sites was not a function of sexing on the size of the bones (hence longer bones = male, shorter = female) since in most cases sexing was possible on the pelvis, skull and femoral head diameter.

### 3.2.2 *The Dentition*

ch 4:3 Of all parts of the human anatomy, the teeth are usually among those which remain best preserved and survive for the longest period: they are often, therefore, the only pieces of information available and even where they are not, frequently they constitute the best evidence with regard to the general health, status and environment of the individual to whom they belonged. For these reasons, the teeth at the Guildford friary burials were recorded in a fair amount of detail.

First an inventory was made of those teeth present or absent. Distinction was made between permanent, mixed and deciduous dentitions, then teeth were recorded for: post-mortem loss, ante-mortem loss with the socket still present, ante-mortem loss with complete resorption of the socket, tooth present but socket missing, tooth not yet erupted, tooth probably erupting (difficult to establish when the gingival margins are no longer present), tooth erupting but not fully occluded and no data available.

A record was then made of dental wear, caries, abscesses, occlusion, rotation or crowding, tooth absence, supernumerary teeth and cusps (Carabelli's cusps and paramolar cusps), cusp pattern, periodontal disease, enamel hypoplasia, calculus deposits, any odontomes, tumours or other anomalies. These features yield information not only on health and diet but also may be of note in comparing genetic relationships within and between populations. From the dental evidence available there were few conclusions that might be reached but one or two aspects of the results (notably genetic affinities and diet) did merit consideration.

ch 4: Genetic Affinities

3.11.1 The problem of trying to evaluate genetic affinities within and between any population samples is that the actual genetic causation of certain dental traits is unclear and the degree to which environment plays a part in their occurrence is unquantified. Therefore any statements with regard to the possibility of inherited traits, (a) being present, (b) demonstrating relationships in a sample cannot be accepted as conclusive or final. Nevertheless it seems that many of these traits do have a high genetic component and at Guildford friary it was decided to examine their distribution to see if any patterns emerged. Rotation/crowding, when it occurred, was present in the anterior teeth only with no apparent correlation with any evidence for crowding or impaction of posterior teeth and, therefore, it was postulated that there was a probable genetic basis for its occurrence; further, its presence in the south-west area of the nave was noted. Closer analysis of these points shows that in the nave of the church crowding on anterior teeth was present in the following individuals: S340, S321, S333, 337A/B, 337B/A, S334, S362 (slight only) and S356. There was no crowding present in 297B, S214, 282, 339, 205A, 305B, S172, S366, S364, S376, or S359. No data were available for any of the other burials in the nave of the church. With the exception of S362 and S356, all of the individuals with crowding came from the south-west corner and were adjacent burials. No conclusion could be reached on the basis of this evidence alone but it could be considered with other information. Data from the cemetery were insufficient for analysis to be justified. Absence of teeth was only noted in two cases in the nave of the church, 282 and S305. It is of some interest that these were adjacent burials. There were insufficient data available for discussion of occlusion or supernumerary cusps or teeth, both of which traits do have a genetic component.

ch 4: Diet

3.11.2 Turning to evidence for diet, this may be obtained from the following features: dental wear, caries and/or abscesses, periodontal disease and enamel hypoplasia. It was only possible on the data available to consider the results in general terms.

## ch 4: 3.1 a Dental wear

Dental wear at Guildford friary was present from slight to severe degree, as would be expected in a population sample with this age distribution. The main point of interest was that when compared to the chart based on Anglo-Saxon skulls by Miles (1963), wear seemed to be more severe at an earlier age in that sample suggesting a lower rate of wear at Guildford friary. It was tentatively suggested that this might have been in part the result of less abrasion of the teeth, ie less hard material in food, presumably as a result of a softer diet and better methods of food preparation. The asymmetry of wear (greater in incisors and molars) may also in part have been indicative of a softer diet, the wear of the incisors in particular possibly suggested a relatively high meat content.

## ch 4:3.2 b Caries and/or Abscesses

The frequency and the position of caries on the teeth were of interest. Occlusal caries were uncommon, as found elsewhere in medieval populations by Moore & Corbett (1971 and 1973) and they suggested that this might be linked, a) to periodontal disease at the necks of the teeth causing caries in those areas, and b) the general absence of sucrose (cane sugar) from the diet (sugar was available at this period but not in quantity until the 17th century). This evidence therefore possibly suggested a diet relatively low in sugar and other similar caries – predispositive foods, (note that this makes no allowance for an inherited susceptibility to caries).

## ch 4: 3.7 c Periodontal Disease

The precise aetiology of periodontal disease is unknown but it is fairly well established that there are a number of factors involved, including soft diet and poor dental hygiene. The severity of periodontal infection at Guildford friary (28 out of 40 individuals scored as severe) suggested both a fairly soft diet and poor dental hygiene.

## ch 4: 3.8 d Enamel Hypoplasia

This feature does not provide evidence for adult individuals since it only affects teeth during the active period of enamel matrix formation but it was suggested that the preponderance of enamel hypoplasia at 3–4 years in the Guildford friary sample indicated dietary deficiency or disease in childhood rather than maternal nutritional imbalance or some such factor. This is further substantiated by the evidence, in American children, for decline in incidence of enamel hypoplasia with improving environmental conditions (El-Najjar, Desanti & Ozbek 1978). Evidence for diet was limited at Guildford friary but it does seem to have indicated a relatively soft diet (possibly involving more meat and better preparation of food than at earlier periods) but with poor dental hygiene. The only evidence for inadequacy of diet (deficiency malnutrition) in the dentition came from the incidence of enamel hypoplasia outlined above.

3.2.3 *Population Variability*

ch 4:4 It was one of the aims of this report to study the material from Guildford friary in an attempt to establish what similarities or differences could be found between the burials from areas A and B of the cemetery and the nave of the church. For this purpose the material was examined for metric and non-metric traits of the skeleton.

The value of using metric traits for analysis is that they provide objective statements concerning continuous variables (eg cranial size and shape). This is of itself a disadvantage since it is an attempt to express in discontinuous, two-dimensional terms, features of the skeleton which are neither. This fact tends to become obscured in describing metric traits. However it is felt that this method is justified since it enables comparison within and between populations of normal skeletal variability.

Non-metric traits of the skeleton are generally of two categories: discontinuous, expressed as present or absent (eg accessory infraorbital foramina) and continuous, scored by degree (eg gonial eversion, mandibular torus). These are all assessed subjectively but whilst scoring for the former is relatively simple and less open to observer error, the latter is the reverse (Corruccini 1974). However the advantage of non-metric traits is that to some extent more is known about the mode of their inheritance and genetic/environmental influences upon their expression. Many non-metric traits seem to have a strong genetic link (eg mandibular tori and wormian bones have been found in juveniles and infants) which cannot be stated of metric traits. Nevertheless it is extremely difficult to reach conclusions concerning the genotype from phenotypic observations. Therefore, for the Guildford friary sample both metric and non-metric observations of the skeleton were employed in an attempt to analyse population relationships within the site but allowance was made for possible observer error and the inconsistencies of the methods involved. Clearly any conclusions could only be tentative and the lack of precise knowledge with regard to possible genetic and environmental influences should be noted.

Although a fair number of metric and non-metric features of the skeleton were recorded for the site it was one of the unfortunate features of the sample that the actual amount of data available

for individual variables was small. This applied particularly to the cemetery where preservation of material was not as good as in the nave of the church. This small size of the samples must be emphasised in any examination of the data. However, a number of broad observations could be made. First the data showed that there was a remarkable degree of homogeneity throughout the site. This was particularly illustrated by the results for the post-cranial metrics in the cemetery and the nave of the church. The post-cranial metrics constituted the only data for the cemetery but in the nave results for cranial metrics showed that the middle ranges for the cranial index were randomly distributed and this applied also to the morphological form of the supra-orbital region. These findings do not imply that there were no differences to be observed (obviously, since no two individuals are alike), but rather reflect the origins of this population sample and similarity in results is therefore all that would have been expected for the site as a whole. More detailed analysis showed some slight evidence for grouping in the nave of the church (for the most part there were insufficient data available for any analysis of the cemetery). Thus, in the nave of the church, it could be shown that the metric extremes of cranial shape were confined as follows: dolichocephaly to the north-west corner and hyperbrachycephaly at the south-west end. Morphologically on the skulls there was some evidence for grouping in four traits; metopism, frontal foramina, wormian bones and bridging of the mylohyoid groove of the mandible. These also apparently separated the north and south ends of the church and, possibly, the east, but note the limited nature of the evidence.

Post-cranial metrics showed some evidence for grouping in one feature only. The suprascapular area of the scapula was found to be deeply notched on individuals mainly from the north-west corner of the nave (with the exception of 282 and S333), S196, S104 and S105 from area B of the cemetery were also found either to have deep notches or foramina present which might have suggested some biological affinity between them. The results for metric and non-metric observations were clearly restricted in terms of analysis for population variability, particularly in comparison of the cemetery and the nave of the church. Nevertheless, there were certain conclusions which could be reached: the samples (cemetery and nave) most probably came from one population sample overall, which is what might be expected of the data. However, there was some limited evidence for grouping hence genetic relationships between individuals, largely confined to the nave of the church which, in the absence of further osteological data, could not be taken as conclusive.

### 3.2.4 *Pathology*

ch 4:5 'Pathology' in the sense employed at Guildford friary was defined as covering the general health of the population sample. Thus evidence for trauma and injury, fractures, stress, deformity, degenerative joint disease and human interference (medicine) were all considered. It should be emphasised that in all cases diagnosis could only be tentative. This is largely the product of the evidence which in the absence of soft tissue is, of necessity, incomplete.

#### ch 4: 5.1.1 Fractures

There were no fractured bones present in any of the individuals examined from Guildford friary (with the exception of a possible hairline fracture of a rib on S110). This was unusual since in a population sample of 113, some healed fractures might well have been expected. Possibly fractures were conspicuous by their absence and therefore this finding reflected the status of the whole sample. Comparison with the material from Chelmsford and Stonar showed that although some healed fractures were found at both of these sites, these were not numerous.

#### ch 4: 5.1.2 Injury and Trauma

There were seven cases of individual injury or trauma present in the sample, none of them of great severity. Five of these were confined to single bones in the lower extremity and in the remaining two, in one a rib was affected and in the other a lumbar vertebra. In none of those individuals was it possible to establish the cause of the pathology on the evidence available other than to describe the lesion and to suggest that the localised nature of the condition most probably was the result of injury or trauma.

#### ch 4: 5.1.3 Stress

A number of tibiae showed some evidence for thickening of the shaft and alteration to the bony structure. In nearly all the cases listed, there was no apparent pathology and radiographs showed no obvious injury or infection. On some individuals the increased bone thickness was confined to the cortex, in some to the sub-periodical layer and in some to both. None of these showed evidence for associated pathology elsewhere in the skeleton which might have suggested the presence of a particular disease. There was no evidence for any fracture or injury on any of these individuals. It was suggested that the cause of the increase in bone thickness might have represented a bony response to repeated trauma or stress. There was no evidence to indicate that this condition caused any debilitating illness or was itself disabling and therefore in a strict sense

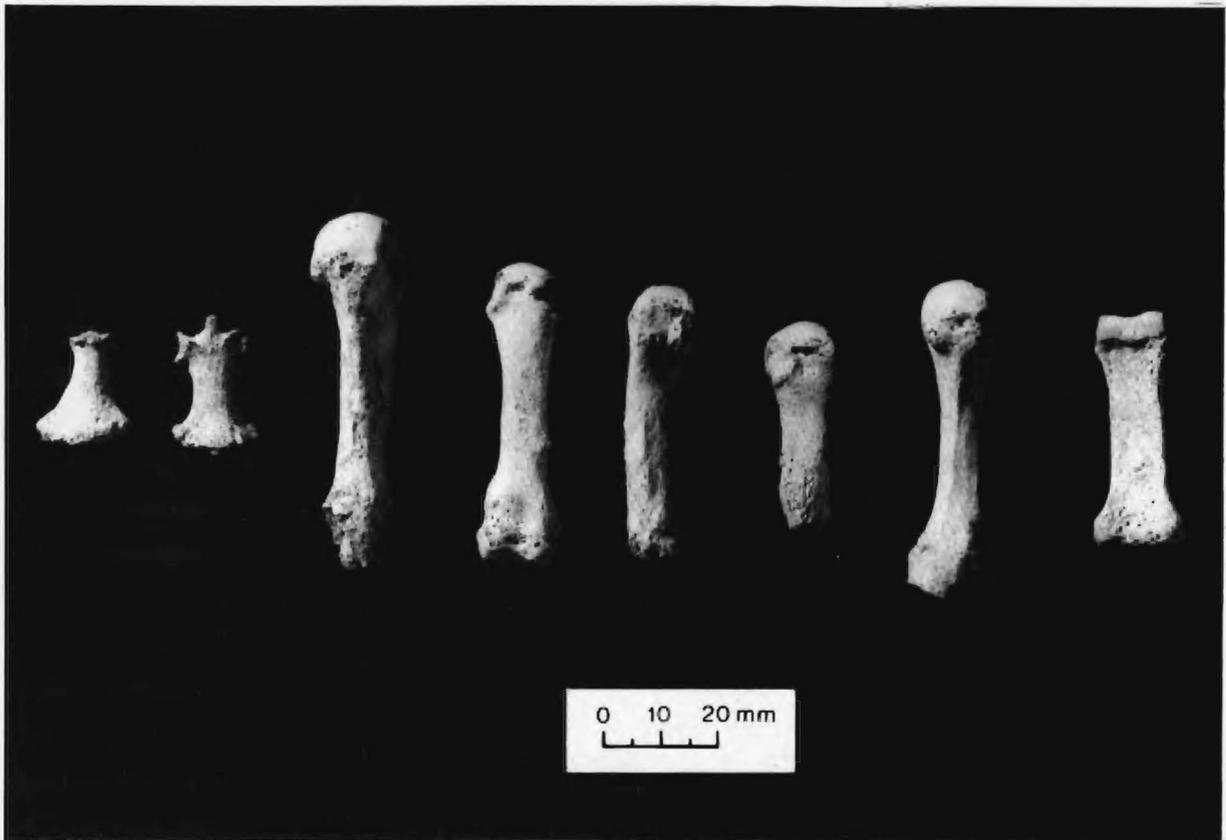


Plate 22 S110 – Hands. Note in particular the 'tufting' of the two terminal phalanges (extreme left), and the relatively normal appearance of the other bones.



Plate 23 S110 – Left tibia and fibula.



Plate 24 S110 - Right foot.

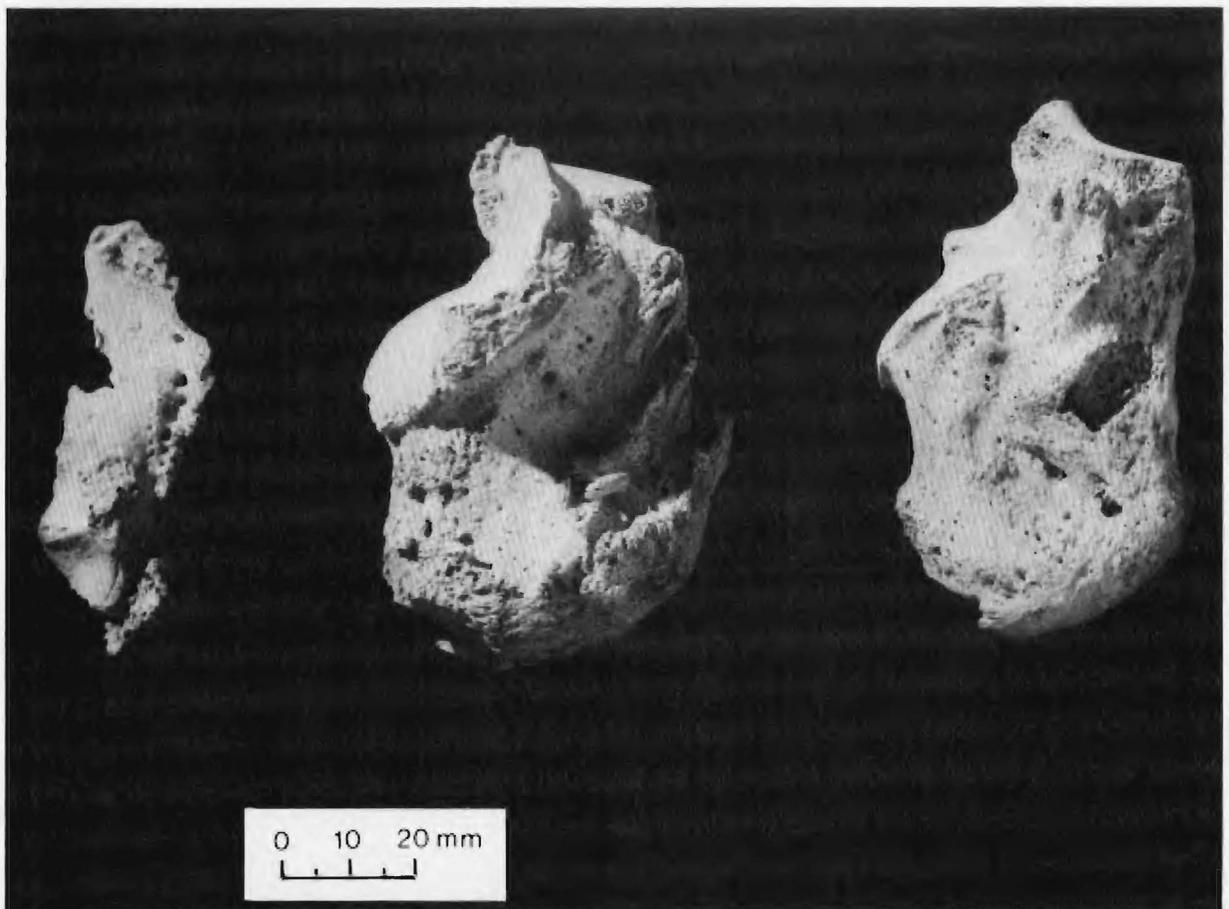


Plate 25 S110 - Calcanei and 5th left metatarsal. Compare 5th metatarsal to view on pl 45(M) (appears as extreme left bone). Note also in tarsal bones the absence of pathological changes on the articular surfaces.

it should not be regarded as pathology as such but as a physiological response to environmental (including social) conditions.

#### ch 4: 5.1.4 Hallux Valgus

Some individuals exhibited a fairly mild form of hallux valgus with a marginally increased severity in those from the nave of the church. In the apparent absence of marked osteoarthritic changes (which might have reflected the age of those involved), and the general lack of severity of the condition, it was suggested that it represented a physiological response to stress possibly as a result of the type of footwear worn.

#### ch 4: 5.2 Degenerative Joint Disease

Observations were made for the presence of osteoarthritis: subdivided into osteoarthritis in the joints of the limbs and chest and the spine. Incidence by anatomy and area of the site is shown in table 30. The sample was too small for analysis of any age or sex correlation of incidence but it was apparent that the occurrence of osteoarthritis in the joints of the limbs and chest was virtually nil below the age of 30 years in males and symptoms were only slight up to 40 years. The most commonly affected areas were the hip, knee and elbow. The total sample of females amounted only to three individuals. It was noticeable in the females that the incidence of arthritis was at a younger age than in the males (two were aged 20–25 years and one was a young adult). This difference may, of course, have been the result of a sample bias since so few individuals were available for analysis but it was also the case that in the females osteoarthritis was confined to the lower spine and pelvis which might well have been correlated with stress in pregnancy and childbirth which also might have accounted for the disparity in age incidence between males and females.

The overall incidence of degenerative joint disease at Guildford friary illustrated a number of points: the condition increased with age being largely absent in those under 30 years, there was no apparent difference in distribution between the cemetery and nave areas and the most affected part was the lower thoracic and lumbar region of the spine. It was suggested that most probably a combination of factors was causative, including stress, in particular on the spine as a weight-bearing area, and age. The small size of the sample examined must be emphasised since it was of a size relative to the total sample as to be wholly misleading. Thus, for example, the observed mildness of the condition might not have been true of the population nor even of the whole sample and absence in younger individuals may merely have been the result of those in whom it was present in youth having survived to a greater age. In addition to the above, three individuals demonstrated possible evidence for vertebral hyperostosis. In none of these were the vertebrae sufficiently complete for a specific diagnosis to be made.

#### ch 4: 5.3 Disease Presence

S110 came from cemetery area A; bone preservation was generally poor and only approximately two-thirds of the skeleton was present. Certain diagnosis was impossible but it is tentatively suggested that this individual represented a case of leprosy. Bone changes were present in the terminal phalanges of the hands, the metatarso-phalangeal joints of the feet, the tibiae and fibulae and the pelvic region. The changes observed were all bilateral. It is suggested that in the pelvic region the cause was most probably a secondary infection. The humerus, clavicle and scapula were not affected. The affections were similar to those described for lepromatous leprosy by Møller Christiansen (1961) and Manson-Bahr (1966). However, it must be emphasised that in the absence of the skull (hence *facies leprosa*) the diagnosis of leprosy could not be accepted as final.

#### ch 4: 5.3.1

There were a number of isolated bones with pathological changes suggestive of disease or infection but in none of them was there sufficient evidence for a diagnosis to be made. These are all listed in the full version of the report. On S172 and S363, there was some indication of pathology in the pelvic region. This was particularly interesting on S172 where some broken bones had been very tentatively identified as foetal. The whole of the pelvis and lumbar vertebrae were in a very fragmentary state, especially when compared to the rest of the skeleton. However, there was evidence for a lesion in the sacro-iliac articulation of the left innominate bone, to which area it was restricted. Possibly this individual had had an infection associated with a pregnancy but, on the evidence available, it was not possible to be conclusive. A similar lesion was found on S363. In conclusion it may be stated that the evidence for pathology from Guildford friary was very limited in scope. This is nearly always the case where the only evidence is the human skeletal remains since many illnesses, diseases, infections, etc affect the soft tissue only. However, there was some evidence for health of the sample available from the evidence for stress and trauma and it may be suggested that fractures were significantly absent.

### 3.3 CONCLUSIONS by Rob Poulton

A number of factors have been identified which make general statements about the burials difficult. Only the nave and cemetery areas were explored fully for burials and, in those areas,

subsequent damage and destruction was very uneven. This, in turn, has meant that no chronology of burials could be established and, though a minimum of 113 persons were represented by the bones, the sample was insufficient for detailed statistical analysis. Nevertheless, it does seem possible to offer some overall interpretation, particularly as the historical evidence provides a clear setting for the archaeological discoveries.

Three main questions may be asked. Firstly, what factors determine the site of any one burial? Sexual differentiation, reflecting religious status, is obviously likely within the friary precincts. Thus the few bodies discovered in the cloister alleys were males and almost certainly friars, as would have been the many others buried in similar positions, or within the chapter house but not excavated due to lack of time. Outside the church walls and to the east of 136 (the cemetery wall) all the burials were of adults and, wherever sexing has been possible, of males. To the west of 136 there were, admittedly, only two certain females. The evidence is perhaps just sufficient to allow the suggestion that the cemetery wall marks the boundary between a secular burial ground on one side and friars' graves on the other. A friars' cemetery outside the cloisters is clearly quite likely given that 150 of them (including lay brothers) are named in the Obituary Kalendar (Purvis 1934) even if some of these (eg Gilbert, Bishop of Bangor) died elsewhere. The number is clearly of the right magnitude for a community which existed for 250 years and averaged 17 friars in its earlier years.

fig 38

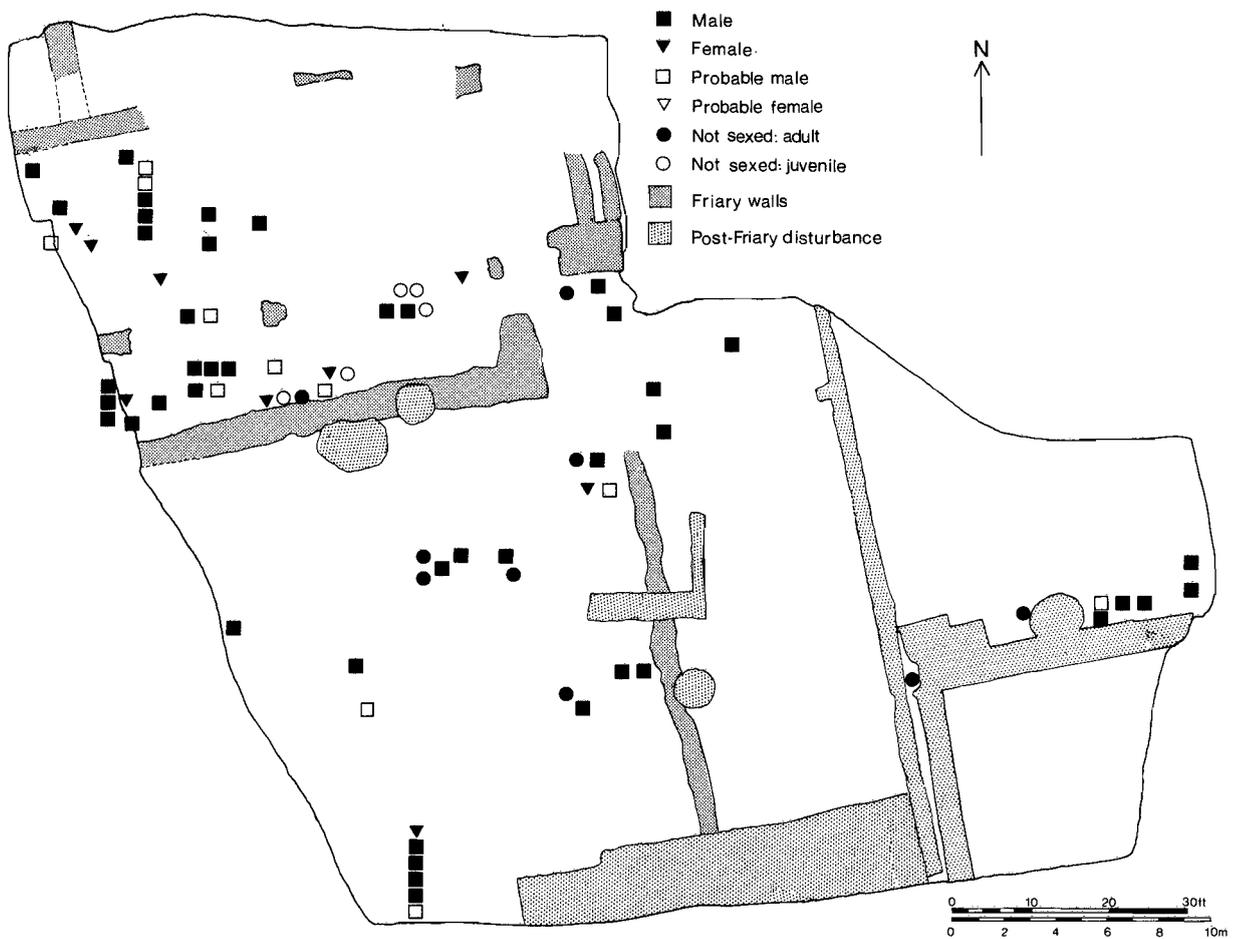


Fig. 38 A plan of the location by sex of burials.

Female burials were found both in the western cemetery area and in the nave. In both areas, though, they form a surprisingly low proportion of the total burials. In the nave, at least, this must be a true reflection of its original composition; one which is the more difficult to explain in view of the rather different picture presented by the Obituary Kalendar. According to this, excluding the friars and priors, the obits of some 35 females and 57 males were commemorated, though many of these were presumably buried elsewhere.

Interment within the conventual church is likely to have been more desirable than burial in the cemetery. There is a strong supposition that this was the prerogative of the richer and more influential members of society as the names in the Obituary Kalendar suggest. The archaeological evidence goes some way to support this view. The more elaborate burials are all found within the nave of the church. Wooden coffins are more common there also – only 32% (42%) have no coffin

table 3

compared to 59% (69%) in area A of the cemetery. No significant differences in the skeletal material could be discerned, however.

In the nave of the church factors other than religious status and wealth help influence the detailed pattern of burial. Certain areas are favoured, especially the south aisle and the north-western corner. It was obviously desirable that the area of the altar at the east end and at least the front of the preaching nave should be kept free from burials; conversely, the south aisle would have allowed the possibility of more imposing memorials and tombs and even, perhaps, family or other private chapels. Certainly the skeletal evidence provides a strong suggestion of family groupings particularly at the west end of the south aisle.

Finally, with regard to the siting of burials, the discovery of a possible leprous skeleton (110) in the cemetery raises some problems. If the diagnosis is correct, then the disease was well advanced and likely to have been readily identified at the time. Given both the general horror with which leprosy was regarded in the medieval period and the presence of a leper hospital in Guildford (Knowles & Hadcock 1953, 208 and 275) interment in the friars' graveyard seems remarkable. Perhaps family and/or religious piety in this case overcame social and legal constraints.

The second question is, what factors determine the mode of burial? In this case interpretation is even more difficult without a chronological sequence, though some general points may be made. It has already been suggested that there is a correlation between wealth or social status and the use of wooden coffins, and that is more certain in the use of tombs, rather than simple graves.

Both the definite examples, 172 and 282 are in the nave, and both were female interments. Apart from the group burial, 288, which must remain inexplicable, the position of the arms is the only other variant of note. The detached group of burials in cemetery area B all have their arms in position A or B, whereas C is quite common elsewhere. This might indicate that C was not considered suitable for religious; since 241, east of the projected line of the churchyard wall had arms in position C, it (and probably 130 and 133) may lie outside the friars' cemetery, possibly separated from it by a bank at right angles to 136, which has been suggested earlier.

The final problem is the hardest to resolve. From how large an area and what social class(es) was the buried population drawn? The only evidence for catchment area is the Obituary Kalendar and a number of wills where the place of origin of benefactors of the Priory is stated or can be deduced. Many of the people so named were not buried at the Friary but mention of several people from both Burpham and Guildford Park makes it clear that some came from outside the parishes of Guildford. The dead are not likely, however, to have been brought from much further afield than this for burial and the great majority of those interred are probably of local origin. Reasons have already been suggested for believing at least those buried in the nave to

fig 25

figs 29 & 32

pls 17 & 19

fig 33

ch 7:3.1

figs 15 & 26

ch 1:3

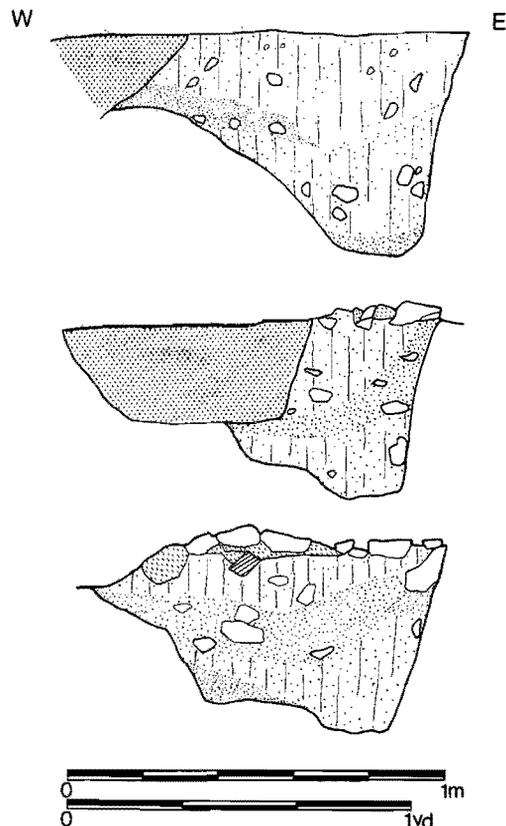


Fig. 39 Sections through a robber trench, 136, probably on the line of the churchyard wall. The fill, though variable, is of sand mixed with chalk fragments and mortar.

have been wealthier than most; the people in the cemetery were less distinguished, but given the friars' need for alms to support themselves, the poorest sections of society are not likely to be represented at all. The biased character of the sample is suggested by both the absence of fractured bones and, more importantly, the very small number of infants. Many studies have shown the very high rates of infant mortality to be expected prior to modern medical advances. To take a local example, recent examination of the registers for Holy Trinity parish in the period 1570 to 1590 indicates that children under five are about 50% of all burials (Bignall 1983), though the disparity may be mitigated by the poorer recovery rate of infant bones. Finally, it should be emphasised that the skeletal evidence suggests that, taken as a whole, the sample is a homogeneous one. The most reasonable conclusion is that as a population sample it misses out the highest (who would not in general choose a small friary like Guildford as their burial place) and the lowest levels and is weighted towards the wealthier people.

#### 4 Post Friary (1538–c1818)

ch 2:1 In both 1974 and 1978 excavation was primarily directed towards understanding the remains of  
 ch 3:1 the Dominican friary; later levels were not systematically explored and hence the evidence is especially fragmentary and difficult to interpret. In compensation, the documentary information  
 ch 6:1.4 becomes much fuller than previously. This has been discussed in detail above and it is only necessary here to attempt to relate the meagre scraps of knowledge recovered by excavation to the historic background.

ch7:3.1 The church was evidently demolished soon after the dissolution. There is no record of a sale of materials, such as frequently took place at suppressed religious houses (see eg Walcott 1871), but  
 fig 15 there is evidence that these were collected with some thoroughness. This is suggested by the  
 M54 discovery of holes for scaffolding posts used in dismantling the fabric of the church; the very limited amounts of roofing tile, with almost no complete examples recovered in the area of the church; the finding of a number of areas of mortar with paving tile impressions, but very few complete paving tiles other than in graves; and by the rarity of window lead and glass. We do not  
 M32, 37– know if the tomb robbing discussed above was official or not, though it was apparently quite  
 8, 40, 53 complete paving tiles other than in graves; and by the rarity of window lead and glass. We do not  
 figs 11 & know if the tomb robbing discussed above was official or not, though it was apparently quite  
 12 common in the suppressed religious houses (for example in the chapter house of Merton priory –  
 pl 15 S MacCracken, pers comm: compare also Dickinson 1961, 133–4).

ch 5:4.2.2 The remaining conventual buildings seem to have endured until 1606, though archaeology is  
 ch 6:2.1.12 silent as to that. The 'little wall that doth enclose the churchyard' which Sir George More was  
 fig 25 given permission to pull down in 1606 is probably marked by a robber trench, feature 136, aligned with the friary buildings.

Two buildings were erected in the early 17th century and this presumably involved the dismantling of the rest of the cloistral buildings. A number of walls relating to these phases of the site's history were uncovered, though it is unfortunately not possible to distinguish them. Since the first building was probably confined to the area of the largely unexcavated west range of the Friary, most of the walls revealed are likely to relate to the second structure, usually called the Earl of Annandale's mansion. The plan suggests that his house partially re-used the foundations of north, west and east ranges of conventual buildings. One interesting detail did emerge. This  
 figs 18, 19 & 21 was the re-use of 13th century tiles in the east wing of the mansion. These had presumably  
 ch 6:1.3 & survived *in situ* possibly in the chapter house, until the Earl's house was built.  
 ch 7:2

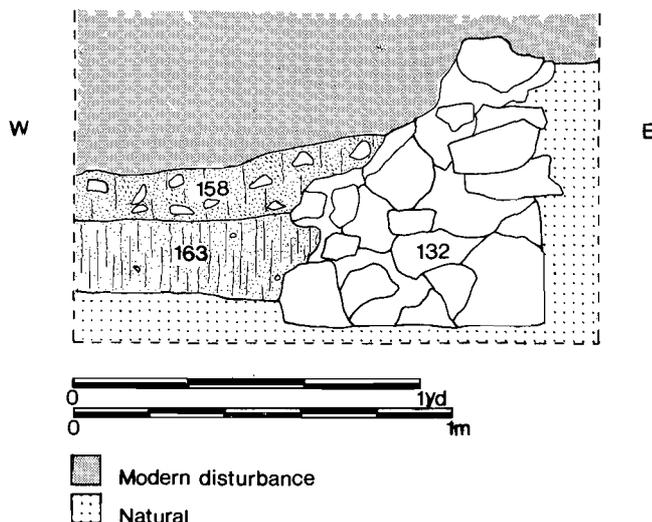


Fig. 40 Section through Mansion boundary wall, 132. The wall is of cut chalk blocks against which layers 158 and 163 have accumulated. The natural sand was clearly much higher to the east than to the west.

fig 25 In front of the mansion the area of the former church and cemetery was used for gardens and some details of this emerged. A boundary wall, 132, separated the site into two levels which were probably terraced when it was constructed. In the lower western area garden soil up to 20cm thick lay over the remains of the nave and churchyard. It seems possible since so few burials survived in the cemetery that there may even have been a deliberate attempt to clear it; at all events some of the larger (principally skull and leg) bones were collected and reburied in pit 161. M78 Presumably the other, lighter, bones were simply crushed into the ground.

ch 3:4 Archaeologically there is little more to say. In 1818 the mansion was pulled down and it must have been then that the pits 204 and 306 were excavated and filled respectively with moulded chalk blocks and drainpipes. A site which had been of such importance and, in all probability, elegance in Guildford for over half a millennium could scarcely be dismissed on a more prosaic note. fig 15