

COLCHESTER ARCHAEOLOGICAL REPORT 9:

**Excavations of Roman and later cemeteries, churches
and monastic sites in Colchester, 1971-88**

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COLCHESTER ARCHAEOLOGICAL REPORT 9:

Excavations of Roman and later
cemeteries, churches and monastic sites
in Colchester, 1971-88

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But most of all, the greatest debt is undoubtedly due to Nina Crummy whose mammoth chapter on Butt Road rightly overshadows everything else in this book. The report on the Butt Road site had to be produced under great pressure when time and resources were in short supply and there were very considerable practical problems to overcome. The result looks deceptively straightforward but, even under normal circumstances, compiling a report such as this is more difficult than it appears and needs far more work than most readers might imagine.

Philip Crummy

1: INTRODUCTION

by Philip Crummy

Introduction

In Roman times, people were much less disciplined about the disposal of bodies than we are today. Although at Roman Colchester there were areas which were clearly used solely as cemeteries, there seem to have been many bodies buried on land which was not primarily for burial or even which subsequently reverted to some other use. Bodies of the more wealthy were buried alongside the main street into town so that their fine tombs and tombstones could be ostentatious reminders of the dead to the living, whereas gruesome decapitated remains of the least-regarded members of society were displayed outside the Balkerne Gate (CAR 3, 97-8). Even the practice of burying the dead beyond the town walls was not always followed. Babies which had died at birth or a few weeks afterwards could be buried almost anywhere (but presumably within the parents' property) and odd burials appear within the walled area of the later town. Moreover, as the excavation at Butt Road well shows, even burial areas themselves can have a complicated multi-phase, multi-use development, with one phase overlying and subordinating earlier phases. All this makes for problems in distinguishing and defining cemeteries and demands care in how cemeteries are categorised and labelled.

There is no comprehensive published study of the cemeteries of Roman Colchester, the nearest to this being M R Hull's account in his *Roman Colchester* (pp 250-9). But this is only sketchy and now, with the benefit of new information, his division of large tracts of land into a small number of so-called cemeteries can be seen to be too simple an approach.

This book provides reports on all the excavations in Colchester between 1971 and 1985 which involved the examination of burial areas of the Roman and later periods. Also included for obvious reasons are those excavations of this period which were concerned with churches (Roman and later) and monastic sites. As it happens, in every case, the latter work involved the excavation of human remains. Easily the most significant excavation concerned the Roman burials and church at Butt Road (Chapters 2 to 4) and as a result the account of this project dominates this book. Other reports relate to the excavation of parts of Roman burial areas at Maldon Road (Chapter 6) and in the grounds of the former St John's Abbey (Chapter 5). Two of Colchester's monastic sites received attention: St John's Abbey (Chapter 5) and Crouched Friars (Chapter 7). Work at the former was concerned with the area north of the site of the main monastic buildings

where a small church of 11th-century or earlier date was discovered. The church had been demolished c 1095 when its site was used as a lay burial ground. Also examined was part of the precinct wall and the parish church of St Giles, which was built within the monastic precinct. The position and character of the physical remains of the Crouched Friars has always been mysterious and in this respect, little has changed despite the recent work. However the latter does allow us to speculate about this problem and to provide a basis for future work should opportunities for excavation arise in suitable areas. To round off the book, a summary is provided in Chapter 8 of the cemeteries of Roman Colchester which is based on M R Hull's 'Inventory of Graves'. The latter is a substantial piece of work which unfortunately was never completed and thus never published.

Background to the larger excavations

[Figs 1.1-1.2]

In 1971, work began in Colchester on the construction of the southern section of the inner relief road. This was to be built about 150 m south of the walled area of the town, between two newly-constructed roundabouts, one at St Botolph's Corner and the other at the northern end of Maldon Road. Ideally much more archaeological work should have been done along the route of the new road but the large-scale project at Lion Walk (CAR 3, 31-92) was about to begin and funds for that year (£12,500) were already very inadequate. For most of the length of the new road, ground disturbance was to be negligible apart for services. The most substantial earth-moving was to be at either end. At St Botolph's, the new roundabout required the complete destruction of part of the precinct wall of St John's Abbey and the removal of soil behind it to a depth of several metres. Limited trial excavations were undertaken in the abbey grounds in 1971 (StJa 71) and an excavation was mounted when the church was uncovered at the southern boundary of the affected area (IRB 1972). At the west end of the route for the new road, a new link road between Crouch Street and the west side of the new roundabout necessitated the lowering of the ground level in this area by up to about 1.0 m. The area concerned lies in the presumed area of the site of the house of the Crouched Friars and therefore a small excavation was undertaken before building works began (Maldon Road 1971). No traces were recognised of the monastery but burials and a building were found, all of Roman date.

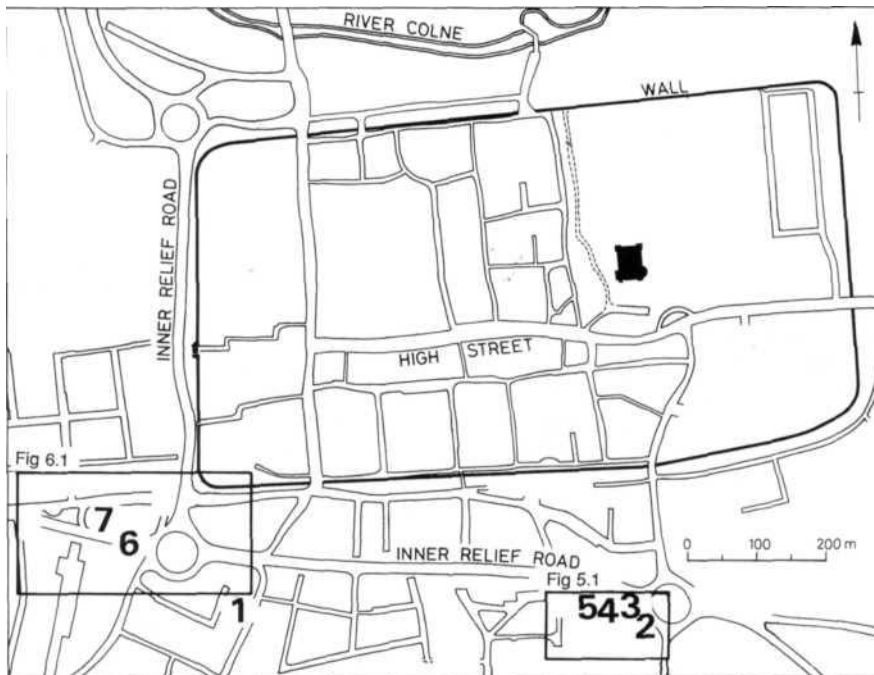


Fig 1.1. The locations of the sites described in this book.

1... Butt Road 1976-9 & 1988 (BUC),
 2... St John's Abbey Grounds 1972 (IRB),
 3... St John's Abbey Grounds 1972 (StJA 72),
 4... cemetery of St Giles's Church 1973-4 (StJA 74),
 5... former St Giles's Church (STG 75),
 6... Maldon Road 1971 (MRC), 7... No 42 Crouch Street (33.88).

The construction of the road triggered secondary development along its newly-formed frontages. The most important of the many new buildings was the police station where, prior to its construction, a major archaeological excavation (Butt Road) was conducted since burials and a building, all of Roman date, were known to exist from previous records and excavations.

The other site covered in this volume, namely No 42 Crouch Street, is adjacent to the site of the 1971 Maldon Road excavation and was where a modern office block was replaced by a similar building.

This volume is concerned mainly with the structural and other remains in the ground. Most of the loose finds are being published according to type of find. Thus there are monographs devoted to the following topics: Roman small finds (CAR 2), coins (CAR 4), post-Roman small finds (CAR 5), post-Roman pottery (CAR 7), glass (CAR 8), Roman pottery (CAR 10), and animal bone (CAR 12).

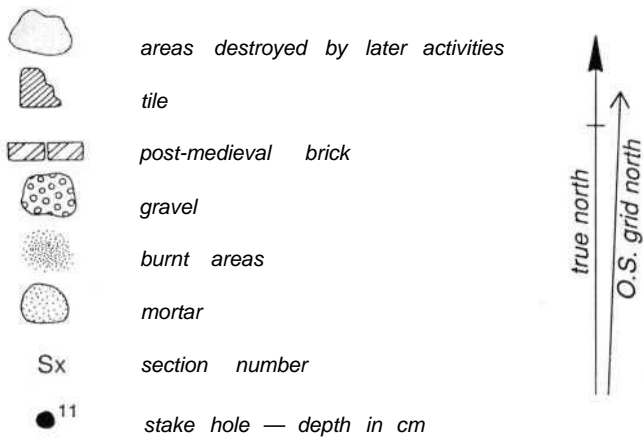
A series of computerised databases has been compiled in which the following categories of find are classified and quantified: Roman pottery, post-Roman pottery, small finds, Roman glass, animal bone, and coins. Another has been created for the site contexts. These databases are important not just for the data they contain on the finds but because they provide the principal statement of the dating evidence on which all the interpretations in the CAR volumes depend. Since the amount of information involved makes orthodox publication of this material unrealistic, it is hoped instead to publish a further volume in the CAR series which will include a printed index to the databases so that they can be consulted in the Colchester Museums in their computerised forms.

A more integrated approach to the study, interpretation, and publication of the finds and the structures would have been preferred but the scale of the task has meant that there had to be some sacrifice of objectives so that a publication programme could be devised which was achievable with the resources available.

The recording system used on the excavations is as follows. Each site is identified by a three-letter code apart from the most recent of the excavations, namely No 42 Crouch Street, which is referred to by a Colchester Museums accessions number. In some circumstances the three-letter code can be followed by the date of the excavation. Every group of finds was allocated a find number which is unique to the context concerned. Each feature was given a feature number (indicated by the prefix 'F') and from 1973 a similar system was applied to layers (as indicated by the prefix 'L'). Hence as an example, 'MRC 101 F62' indicates find number 101 from Feature 62 at Maldon Road. Being a large site, Butt Road was divided up into eight sub-sites each referred to by a single letter and each recorded with its own set of find, feature, and layer numbers. In addition a single system of grave numbers was imposed on the whole site. These variations are explained further on page 7. Small find numbers are indicated by 'SF'.

The conventions for the plans and sections (Fig 1.2) are the same as those used in CAR 3 and 6. The sections are interpretative rather than descriptive for the reasons discussed in CAR 6, p 5. As a rule, features and graves mentioned in the text appear on at least one of the published plans. This is not usually the case for layers.

All dates are AD unless stated otherwise.



St John's Abbey Grounds (IRB 72; Fig 1.1, no 2)

1	pre-Roman	prehistoric pits
2	3rd and 4th centuries	Roman burials and other
3a	11th century	church
3b	c1095	demolition
3c	1133	dumped soil
4a	c 12th century	rubble-lined graves
4b	c 12th\13th centuries	unlined graves
5	c 13th - 19th centuries	pits
6	modern	

St Giles's Church (STG 75; Fig 1.1, no 5)

pre 1	Roman to 1133/71
Phase 1	1133/71 - 14th century
Phase 2	14th - 16th centuries
Phase 3	16th century -1648
Phase 4	1648 - 1819
Phase 5	1819 - 1907
Phase 6	1907 - 1975

Fig 1.2 Plan conventions.

The site archives and finds, including all the bone material, are stored in the Colchester Museums.

The dated phasing systems for the sites in this report where they are used are as follows.

Butt Road (BUC; Fig 1.1, no 1)

Period 1, Phase 1	1st - ?3rd century
" , " 2	?3rd century - c 270/300/20
" , " 3	c 270-300/20 - 320/40
Period 2	c 320/40 - 400+

Maldon Road (MRC 71; Fig 1.1, no 6)

Building 160	Flavian - early 2nd century
Roman graves	3rd/4th centuries
modern	c 19th/20th centuries - 1974

No 42 Crouch Street (33.88; Fig 1.1, no 7)

Roman burials	c 2nd - 4th centuries?
Building 181	medieval to c 16th century
Post-Roman burials	?late medieval to early 16th century
Post-medieval and modern	

2: EXCAVATIONS AT BUTT ROAD 1976-79, 1986, AND 1988

by Nina Crummy and Carl Crossan*

with contributions by H E M Cool & J Price, C J Going, and S Pinter-Bellows

Acknowledgements

The major phases of the excavation, between 1976 and 1979, were directed by Carl Crossan, supervised by Stephen Crummy and Hugh Waterhouse, and planned by Howard Brooks and David Gurney. The final phase (Sites J and K, Graves 696-741) was directed by Donald Shimmin with Robin Ellis as site assistant and Toni Powell as planner.

We are very grateful to all the specialists involved in work on the Butt Road report. Philip Crummy has written the section on the cemetery church (Chapter 3) and this work is supplemented by contributions from Dorothy Watts (Chapter 4: an assessment of the evidence for Christianity) and John Davies (coins), to both of whom we, too, are grateful for their advice and opinions. Summary descriptions of the glass vessels deposited as grave goods have been provided by Hilary Cool and Jenny Price, and Rosemary Luff has made available details of aspects of her work on Colchester's faunal remains. Chris Going deserves particular thanks for his report, undertaken at short notice and delivered with great speed, on the ceramic grave goods.

The report on the human bone excavated in 1976-9 was undertaken initially by Dr Calvin Wells (pathology) and Dr Raoul Perrot (physical anthropology), then, following the former's death, responsibility for the pathology passed to Dr David Birkett. Stephanie Pinter-Bellows reported on the skeletal material from the 1986 phase of the excavation, and, on Dr Birkett's death, prepared a short summary of his results for the earlier phase from his notes. To her we are particularly grateful for her 'salvage operation', and we thank Dr Perrot, whose report is not expected to be completed for some time, for his work so far, and wish him well in its completion.

The Roman small finds have been published in *CAR 2*, the coins in *CAR 4*, and the post-Roman small finds in *CAR 5*. Additional coins and Roman small finds from the 1986 excavation and the laying-out of the church are summarised in this volume. The post-Roman pottery will be dealt with in *CAR 7*, the glass in *CAR 8*, the Roman pottery in *CAR 10*, and the animal bones in *CAR 12*.

* Preliminary phasing of the site was done by Carl Crossan, who also did much post-excavation work, in particular on the main site and individual grave plans, on the archive, and in liaising with specialists. Detailed phasing and dating of the cemeteries was done by Nina Crummy, who also prepared the inventory and wrote the report.

We are grateful to all the Trust's staff and voluntary workers who have been involved in the preparation of this report. On-site photography was by Jerry Lockett and Alison Colchester, and off-site photography by the latter, who also prepared the prints for publication; the plans were drawn by Bob Moves, Terry Cook and Jane Cowgill; Mark Wildon and Simon Garrod undertook a study of coffin construction; Eleanor Clarke assisted with the preparation of the inventory; and Joy Hind, Maureen Jones, Robert Jones, and, in particular, Ernest Black undertook many time-consuming tasks essential to the completion of the report. The advice of the latter on many aspects of the site has also been invaluable and much appreciated.

The text has been read by Dorothy Watts and Ernest Black, and we would like to thank them very much for their comments and advice. We are especially grateful to Philip Crummy for all the support he gave throughout the production of this report.

Summary

There was no identifiable pre-Roman use of the site. The Roman occupation is divided into two periods, and the first period into three phases, dated as follows:

Period 1	Phase 1: 1st century - ?3rd century
	Phase 2: ?3rd century - c 270-300/20
	Phase 3: c 270-300/20 - 320/40
Period 2:	320/40 - 400+.

Post-Roman activity was limited until the 19th century.

Period 1 covers almost all of the first three centuries of the Roman occupation, from the mid 1st century through to the establishment of the late Roman east-west oriented cemetery early in the 4th century.

The first observed activity on the site (Period 1 Phase 1) was the extraction of sand and gravel for use in construction work. The area was then (Period 1 Phase 2) divided up into fairly loosely-defined plots, evidenced by ditches, cremations and uncoffined inhumations. Some pits and a timber-framed well also belong to this phase. Scatters of iron-working debris and pottery sherds point to industries nearby operating in Phase 2, though the excavated area was probably used for agricultural or horticultural purposes. In the final phase of Period 1 most of the site was set aside for a more formally-established pagan inhumation cemetery, the coffined graves aligned north-south, with clearly-defined boundaries and family plots (Period 1 Phase 3). One of the Phase 2 plots, possibly more,

survived into Phase 3. A small bone-working industry on the surviving plot probably belonged to Period 1 Phase 3.

In Period 2 the formal cemetery continued, but with east-west aligned burials. The change of alignment appears to mark the adoption of a Christian burial rite and to have been triggered by the construction of a presumed church on the edge of the cemetery (Chapter 3, pp 165-7; Chapter 4, pp 192-202). Initially dated 320/40, the date of the church may be refined to c 330 (pp 180-2), but the broader range is used throughout this chapter.

At first the Christian cemetery was kept within the same boundaries as that of Period 1 Phase 3, but by 350-60 the whole area revealed by excavation, apart from the extreme southern end, was used for burials. Plot B, which originated in Period 1 Phase 2 and continued in use throughout Period 1 Phase 3, thus appears also to have survived for a short time in Period 2.

A wide range of coffin types was present, such as timber (the majority), timber with lead inner coffins, timber in timber vaults, tile, and log. Some coffins were marked in the grave fill, some graves were marked on the surface. There were some contemporary double burials, stacked burials, and multiple but not contemporary burials. At least two family plots noted in Period 1 Phase 3 continued in use, and several others could also be distinguished using a wide range of identifying characteristics.

Though some early and some late Period 2 burials contained deposits, none were placed in the overwhelming majority of graves. Dating evidence for interments is thus extremely scarce. The church appears to have continued in use after 400, but it is difficult to argue the case for any burials being as late as the 390s or the early 5th century. However, the cemetery extended beyond the limits of the excavation, except probably at the south end, and an examination of Wire's records in relation to existing property boundaries and the distribution of known burials suggests it may have covered the area shown in Figure 2.1. The absence of very late 4th- or 5th-century burials in the excavated area need not therefore indicate the terminal date for the cemetery, as later inhumations could have existed beyond the site, and may even have been concentrated in a plot added to the cemetery late in Period 2.

INTRODUCTION

The site

[Figs 1.1 & 2.1]

The Butt Road site lies opposite the south-west corner of the walled area of the Roman town, some 250 m from the main south-west gate and separated from it

until the post-medieval period by the small valley of the Chiswell Brook (Fig 1.1).

The layout of the Roman roads in the area is not known for certain. The road from Head Gate is thought to have swung slightly westward outside the gate (Benfield & Garrod 1992, fig 7), but still probably passed the site some distance to the east. The main western approach road swung north to enter through the Balkerne Gate, but a spur may have continued east to link up with the road from Head Gate, and then on towards the river Colne, passing somewhat to the south of the site on its way. It is possible that a small ditch, AF136, located on the extreme southern boundary of the site, is a road ditch. Certainly most of the features on the site reflect this ditch's alignment, but in the absence of any accompanying road surface its identification cannot be confirmed. The precise location of the Roman roads and any tracks subsidiary to them almost certainly exerted some influence on the plots and boundaries identified at Butt Road, so that any future discoveries regarding the road layout may help to clarify these rather obscure aspects of the site.

Earlier excavations and the extent of the 4th-century cemetery

[Fig 2.1]

The cemetery at Butt Road was first recorded in the 1840s by William Wire, an amateur archaeologist, when a large area, south and west of the present site, was being destroyed during the digging of a sand pit. He examined more than 200 burials, noting both cremations and inhumations, many of the latter being buried in wooden coffins, accompanied by jewellery, vessels, or other artefacts. He also noted two lead coffins, a tile tomb, a tomb constructed after the manner of the town walls' (probably a mausoleum), a 'circular cist full of urns', and a kiln (Fig 2.1; Wire MSS; Hull 1958, 256-7). Of major importance in Wire's recording is a sketch of a masonry building in the north-west corner of the site. This building survived the Victorian mineral extraction to be examined in a limited fashion by Rex Hull of the Colchester and Essex Museum in 1935 (*ibid*, 245-8). He established that the building lay not far from the stream of the Chiswell Brook, was of Roman origin, and had an apse at its east end. A timber-lined 'pit' excavated by Hull is of particular importance and is fully discussed elsewhere in this volume (pp 175-7). In 1965 the site of the building was again excavated in advance of the laying-out of a car park in the area. This work was undertaken by Miss B R K Dunnett (now Mrs Niblett), then Director of Colchester Excavation Committee (now Colchester Archaeological Trust Ltd). She concluded that the building was likely to have had a religious function, and suggested an Antonine date at the earliest for its construction, while recognising that the majority of the finds indicated occupation from the 3rd and throughout the 4th century, possibly even continuing into the 5th (Dunnett 1971, 78-84).

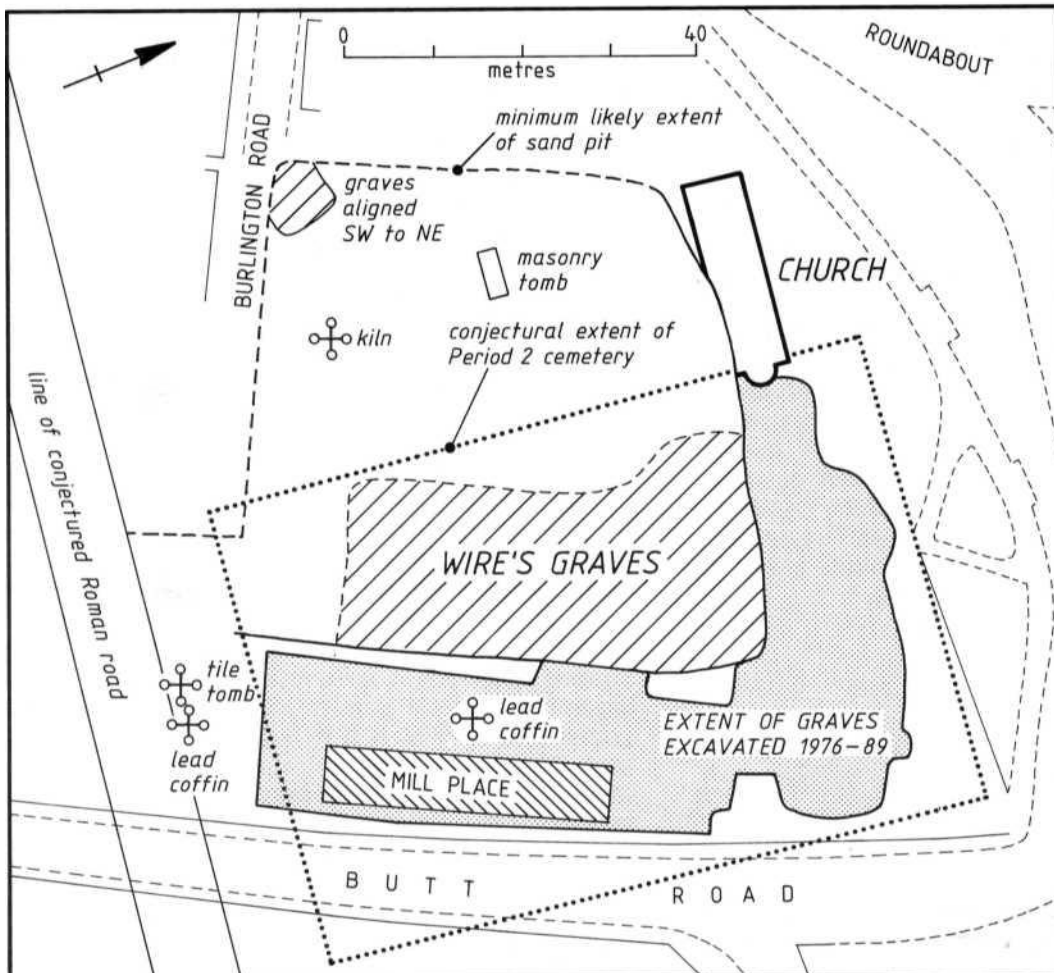
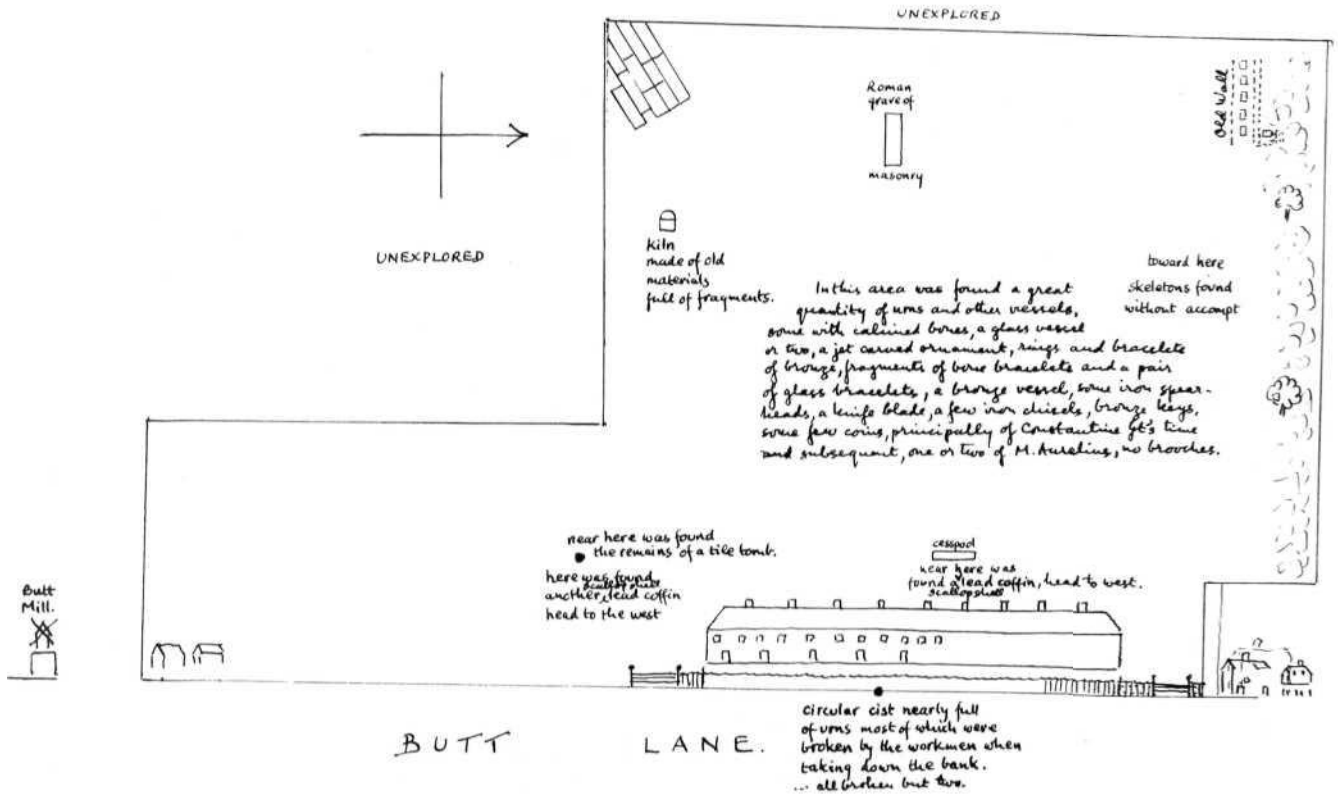


Fig 2.1 Wire's plan of discoveries at Butt Road in 1845, and the likely extent of the 4th-century cemetery. [Pages 5 & 7]

Though Wire's sketch (Fig 2.1) is not to scale, fixed points are provided by Mill Place and the masonry building, and so it provides key information as to the likely extent of the 4th-century cemetery, and thus gives some idea as to what proportion of it was covered by the Butt Road site. The southern boundary of the cemetery on the sketch coincides with that revealed by excavation (pp 28, 55), past records suggest that burials did not extend much beyond the eastern edge of the excavated area (see Fig 8.4, p 262), and the Chiswell Brook almost certainly provides the northern boundary, only just beyond the limits of the site. A western boundary is hinted at on the sketch; burials were set near the east end of the building, but none were noted near or beyond the west end. It thus seems likely that the east end lay within the cemetery, the west outside, so that the building could be entered without going into the cemetery. The area of the cemetery as indicated by these presumed boundaries is about twice that of the excavated area (Fig 2.1). The total of 669 4th-century burials (p 56) can thus be doubled to give an estimated cemetery population of between 1,300 and 1,400 people.

The development

In the 1970s, Essex County Council proposed the building of a new police station which would cover most of what remained of the Butt Road cemetery. A large excavation was accordingly mounted between 1976 and 1979 to record as much as possible of the cemetery before its destruction, and to define the exact position of the Roman building on the ground so that it could survive the subsequent building works intact. The construction of the police station was postponed until 1988 and, shortly before the work started, archaeological excavation was completed by the examination of small parts, not previously available, of both the cemetery and the Roman building, by now identified as a cemetery church.

Recording methods

The three-letter site code is BUC, and the museum accession number for the finds is 1986.66. The site was excavated as eight lettered areas, A, B, C, D, E, H, J, and K. The last refers only to two burials observed as part of a watching brief. The customary method of site recording followed in Colchester makes use of three consecutive runs of numbers, for individual contexts, layers and features. To keep these runs of manageable size, new series were commenced for each lettered area of the site.

Graves were initially recorded as features (on both A and B), but, after the considerable density of burials over the site was appreciated, a series of grave numbers was instituted and maintained for all graves irrespective of area. This series was also applied

retrospectively, removing graves earlier classed as features from the A and B feature series.

Appendices 1 and 2 (the grave inventory)

Plans for individual graves can be found, with a short description, in the microfiche supplement (Appendix 2, pp 304-971). This inventory is supplemented in the printed text by Appendix 1 (pp 276-88), in which information on the graves is presented in tabular form under the headings excavation, period, alignment, head (position), skeletal material, sex, age, burial type, coffin type, and grave goods.

The human skeletons

by *Stephanie Pinter-Bellows*

The preservation of human skeletal material ranged from good to very poor. Few of these skeletons are well preserved, a condition which can be partly explained by the fact that the burials were in sand. There was a good deal of root damage and the outer table of bone was exfoliating on many skeletons. Frustratingly, few of the markers for aging and sexing were intact. As trace element analysis was intended (originally), the bones were simply brushed to clean them and no preservative was applied. Radiographical analysis was carried out on pathological specimens by David Birkett. The skeletal analyses were carried out by Calvin Wells, David Birkett, Raul Perrot, and myself.

The demographic characteristics of each skeleton were established following the criteria and procedures presented in Bass (1971), Flander (1978), Phenice (1969), Stewart (1979), and the experience of Wells and Birkett. Priority for gender determination was given to innominate morphology. Cranium morphology was also used, and, whenever possible, supplemented by univariate measurements of the femur and humerus head, the glenoid fossa of the scapula, and other robusticity characteristics.

Variations in preservation, along with good demographic methodology, necessitated a range of age determination techniques. Subadult age was determined through dental development (Brothwell 1972; Logan and Kronfeld as presented in Downer 1975) and epiphyseal union (Krogman 1962; Brothwell 1972). Adult age was evaluated using the recommendations of the Workshop of European Anthropologists (1980) and auricular surface metamorphosis (Lovejoy *et al* 1985). A range of possible ages was first established, using all indicators applicable, and then a final best estimate of age was determined by the smallest range of agreement among the indicators.

The regularity of adult osteological maturation processes is under debate at the moment, as is the

accuracy to which adult skeletal age can be estimated. Large age intervals were used for the adults in this report in an attempt to prevent over- and under-aging of different segments of the adult sample. The adults have been separated into three groups: young (20-29.9), middle-aged (30-49.9), and old (50+). As children's maturation is considered to be a more regular process than that of adults, the subadults have been divided into more age categories: birth-0.9, 1-1.9, 2-4.9, 5-9.9, 10-14.9, 15-19.9. Two other categories are also present for aging in the tables: adult age unknown, and individual age unknown.

The formulae for stature used individual bone lengths (Trotter 1970). However, it should be noted that the limb proportions for this population could differ from the modern Americans of north European ancestry used as a reference population, so the formulae are not necessarily appropriate.

The pathological abnormalities have been grouped by the cause of disease and the osteologically observed pathological features. The abnormalities are first classified as congenital or acquired, and the class of acquired abnormalities is then further divided into traumatic, infective, degenerative, neoplastic, metabolic, and miscellaneous conditions. Pathological conditions were evaluated through gross anatomical observation and radiographic examination. Criteria for probable diagnosis stemmed from Steinbock (1976), and Ortner and Putschar (1981), and the experience of Wells and Birkett. Dental pathology included carious lesions, alveolar resorption, abscesses, and linear enamel hypoplasia. Ante-mortem tooth loss, carious lesions, and abscesses were charted. A summary of this inventory can be seen in Appendix 3 in the microfiche supplement to this volume.

Before a discussion of the skeletons can take place it is necessary to consider whether the excavated skeletons can be thought to reflect accurately the mortality conditions which prevailed generally during Butt Road Periods 1 and 2. Ubelaker (1974, 5), Willigan and Lynch (1982, 45), and Buikstra and Mielke (1985, 365) list criteria which need to be met. These include: a) a determination of the length of time the sample represents; b) the size of the living population and a constant death rate during the time interval represented by the cemetery; c) that ages at death and sex can be accurately determined; and d) a knowledge of the completeness of the sample (taking into consideration the totality of the excavation, biases in who was buried there, and preservation of the skeletal material).

The dating of the different periods and phases at Butt Road is relatively precise and sufficiently narrow that the demographic structure should not much vary. Within the age categories which have been defined there is more danger of the adults being inaccurately aged than the subadults, and, with the techniques used, there is more danger of under-aging than of over-aging the adults. The percentage of the cemetery excavated and the biases as to who was buried there

have been discussed elsewhere (pp 7, 27, 51-2, 61-3). While there is little evidence, it is assumed that the young, the old, and those with conditions leading to the cortex of the bone thinning are in the most danger of having their bones disintegrate.

Summary of main conclusions

The sample of Colchester's Roman population from the Butt Road cemetery show this to be a fairly healthy community. While the low proportion of subadults means that the demographic picture should be considered only a rough impression, for the adults it shows a normal age distribution for an urban agricultural population. The adult skeletons are of medium height with mean male and female statures being very close to those of other Roman populations in Britain. This similarity of stature shows that the subadults experienced no more overall stress during development than the subadults from other sites. Another indicator may show they had even less stress during development. Only a small percentage of individuals from Butt Road had the two metabolic lesions cribra orbitalia and enamel hypoplasia compared to several other sites. This may indicate that the young children from Roman Colchester were better nourished. Overall for both sexes throughout the adult years the percentage of caries is relatively low. This low average implies that the diet for these individuals was not high in sugar and carbohydrates. Also the lack of rickets and osteomalacia and the rarity of tuberculosis can all be linked with an adequate and relatively healthy diet.

There is not a high number of osseous pathologies. Traumatic injuries are low and no injuries were found which were made by sharp, blade-like instruments. The pattern of spinal involvement of osteoarthritis and vertebral osteophytosis in a high proportion of the skeletons probably indicates the life-long physical work to which the population was subject.

Clusters of some of the non-metric and congenital variants on the skeletons show some correlation with groupings of presumed family graves deduced from stratigraphic and similar considerations. Within some of these groupings were the individuals observed to have cribra orbitalia and/or enamel hypoplasia. There may have been something different in diet or lifestyle within these families'. However, the individuals with these lesions did not suffer in overall development as far as adult stature can demonstrate. •

Stratigraphy

Vertical stratigraphy on the site was effectively restricted to relationships between intercutting features. The natural is sand with seams of gravel, and above this a layer of topsoil steadily built up over the centuries, so that all features both cut and were sealed by topsoil, and were filled with topsoil mixed with

natural, the proportions largely determined by the depth of the feature. In some areas post-medieval and modern terracing had removed the Roman ground surface, and shallow graves and features may also have been destroyed. Finds in the surviving topsoil layers were scarce and provided little dating evidence, though occasional concentrations of material pointed to parts of the site, or areas close to it, being used for specific activities.

Burial alignments

The difficulties in determining a precise alignment for burials have been summarised in a discussion on the orientation of graves and corpses in the Bath Gate cemetery, Cirencester, Gloucestershire, in Viner and Leech 1982, 76. Viner and Leech described skeletons with the skull to the north as 'north-south', to the south as 'south-north', and thus similarly for 'east-west' and 'west-east'. At Butt Road the alignment of the grave pit and the position of the body within the pit are treated as completely different aspects of burial practice. Thus a Period 1 grave at Butt Road may be described in the inventory as 'north-south, head to south', 'north-south' being used to describe a grave pit with a long axis within 45° of compass north.

The alignment of the pit is considered to have been dictated by factors unlikely to affect the position of the body. For example, topographical features within the cemetery, especially adjacent grave mounds, will have brought influence to bear upon the digging of the pit, but are unlikely to have affected at which end of the pit the head is placed. Factors influencing the latter are likely to include family custom or current practice, or even just chance. Even if there is a genuine intention to position a body with the head at one end of the grave, the use of a coffin with no external means of distinguishing at which end the head lies may defeat that intention.

The long axis of the skeleton may differ by many degrees from the long axis of the pit, and here again the factors influencing the axis of the body will not be the same as those which influenced the digging of the pit. This is made doubly clear when it is seen that the alignment and shape of the pit are of prime importance in determining the range of variation permissible in the alignment of the long axis of the body. If the pit is narrow the body will be forced to share a very similarly-aligned long axis. If the pit is wide the body's long axis may not share the same alignment, but will still only be able to differ by an amount dictated by its own, or its coffin's, length relative to the pit's width. In practice, the opportunity to place a body at a very different alignment to that of the grave seems rarely (and never in a Period 1 grave) to have been taken, though differences of a few degrees are common.

For the purposes of general discussion then, alignment is taken in this report to be the alignment of the grave pit, not of the body within the pit.

PERIOD 1

phase 1

[Figs 2.2-2.3]

The earliest features were probably two large pits, AF169 and BF159, dug for the extraction of sand and gravel (Figs 2.2-2.3). AF169 was roughly pear-shaped, extending for some 5.6 m from the southern boundary of the site northwards, and at its widest point measuring about 6.5 m across. Its northern edge was removed by the ditch AF152. In the centre it was about 1.25 m deep. BF159 lay about 5 m to the north of AF169, and was subrectangular in shape, approximately 9.6 m long, and tapering from 4.2 to 2.8 m wide. It was fairly shallow, being typically 0.8 m deep.

The bottom surface of each feature was irregular, and both appeared to have been open for some time, probably being exploited for sand and gravel on a number of occasions, rather than just once. They backfilled gradually, possibly being filled with material excavated from adjacent features, though topsoil may also have built up within them while they were left open. Possible sources of backfill material lie close to both pits, the Period 1 ditches AF136, AF152 and BF167/BF165, and the well BF119. AF169 may already have been filled in when AF152 was cut, and BF159 had been backfilled by the time the site was being used for Period 1 Phase 3, though it may have been used for the dumping of excavated grave pit material during Period 1 Phase 2. Finds from the fill of AF169 consisted of a very few fragments of animal bone, Roman glass, and Roman pottery, and from BF159 came a coin of Nero (64-8), some animal bone, a piece of forging slag (probably of Phase 2 origin, p 25), and a small amount of Roman pottery, almost certainly all redeposited residual material.

The destination of the sand and gravel quarried from AF169 and BF159 is uncertain. Throughout Period 1 enormous quantities of both sand and gravel would have been required for construction work in the Roman town, on the town wall and streets, and in the suburbs and the extramural network of roads. The material obtained from these two pits may have been extracted for use within the immediate vicinity, possibly for a road, but the coin of Nero, despite probably being residual in its context, points to activity on the Butt Road site at a time when demand for sand and gravel would have been high — the rebuilding of the *colonia* after its destruction by Boudica in AD 60/1, and the construction of the town wall (CAR 6, 30, 63).

A ditch, AF136, located on the southern boundary of the site close to the pit AF169, may be a road ditch, and may originate in this phase. Its upper levels were removed by Victorian terracing, and it could not be related to any other Roman feature.



Fig 2.3 Butt Road Period 1 Phase 1. 1:333. [Page 9]

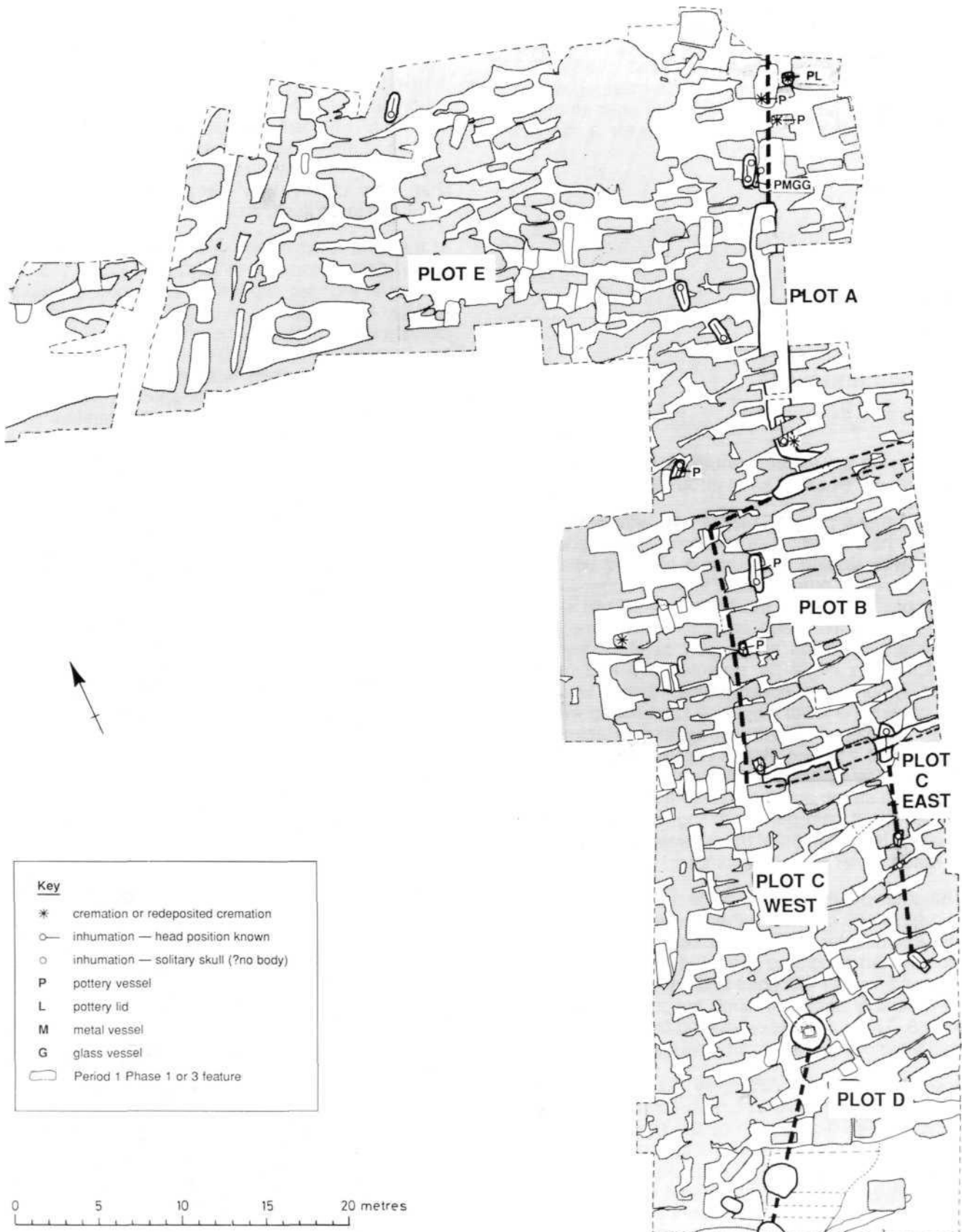


Fig 2.4 Butt Road Period 1 Phase 2. 1:333. [Pages 9 & 12-28]

This first phase at Butt Road is remarkably similar to the first phase of West Tenter Street, London, also an extramural cemetery site, where the activity consisted of a gravel pit dug by the side of a road in the second half of the 1st century (Whytehead 1986, 35). A parallel can also be drawn with Cirencester, where a possible clay pit predating 145-280 was among the first features on a site later used for a cemetery (Leech and McWhirr 1982, 56-7).

PERIOD 1

Phase 2

The pits and well

[Figs 2.2, 2.4-2.5]

Two pits on the extreme southern part of the site cut the Period 1 Phase 1 sand pit AF169 (Figs 2.2, 2.4).

One of these pits, AF148/AF168, was a very large circular hole nearly 2 m in diameter and about 3 m deep, with sloping sides and a rounded bottom: the lower part was numbered AF168, the upper AF148. A layer of dark soil on the bottom of AF168 suggests that it may have been open for some time, though there are no signs of the soft sandy sides having collapsed as might be expected if it had been left open. A number of horizontal dark bands were noted throughout the lower fill, a clay loam mixed with sand, which contained only one fragment of animal bone and part of a pottery flagon dated to the 2nd century or later. The upper part of the pit (AF148) was less regular in shape and the fill was a loamy sand typical of the site. It held pottery dating from the 2nd to 3rd century. Near the top of the pit was an articulated dog skeleton (CAR 12, forthcoming).

The other pit, AF171, lay some 1.6 m to the south of AF148/AF168 on the southern boundary of the site. It too was circular, with an excavated depth of 0.6 m. Modern terracing had removed much of the upper Roman levels at this point and the pit may have been considerably deeper, though not as deep as AF148/AF168. The only finds recovered from the fill, again a loamy sand, were a few articulated animal vertebrae.

A small rubbish pit, AF96, lay a little to the west of AF148/AF168 and AF171. Subrectangular in shape, approximately 1.2 m long by 0.8 m wide, and 0.7 m deep, it contained fragments of animal bone (including dog), Roman tile, and pottery dated from the 1st to the 3rd century. One other rubbish pit ascribed to Period 1, CF53, lay on the eastern boundary of the site more or less on a line projected from the eastern ends of the ditches CF58 and CF59. It had been almost destroyed by Period 2 graves and consequently has not been added to the Period 1 composite plan. These two pits cannot be directly related to phased features,

but have here been assigned to Phase 2.

Nearly 7 m to the north of AF148/AF168 and close to the Phase 1 sand pit BF159 was a very deep circular steep-sided pit, BF119, 2.25 m in diameter at the top. At the bottom of the pit, at a depth of 2 m, was a rectangular timber-lined shaft. This was excavated to a depth of 1 m, and augured for a further 1 m with no change in the fill being apparent (Fig 2.5). No further excavation was attempted for safety reasons. The shaft was clearly very deep, and had apparently collapsed in on itself, creating the pit.

At the level at which the timber lining was first noted (24.84 OD), it formed, in horizontal cross-section, a rectangle, with the two longer sides bowed outwards slightly. Projections at two of the corners probably indicate the maximum dimensions of the lining before the collapse of the shaft, ie 0.75 m square. Lower down, the wood stain was more fragmentary and bowed inwards. Three circular spots of wood staining lay in a row immediately outside the western wall of the lining and may represent external battens used in the construction of the shaft. Iron nails lay inside the same wall in positions approximately similar to at least two of the battens.

Several timber-lined wells have been found in Colchester, five at Sheepen, and three on the Middleborough site. Four of the Sheepen wells were sufficiently well preserved to be accurately measured, one was 30 in square (0.76 m), another 3 ft square (0.91 m), and two 2 ft square (0.6 m). None shows a method of construction employing the use of external battens. Two were made of shoulder-jointed planks, a third had internal corner posts retaining horizontally laid planking, and the fourth combined both techniques (Hawkes & Hull 1947, 126-8). One of the Middleborough wells was 1 m square, with butt-joints. It had an external post at one corner, possibly a repair (CAR 3, 182, fig 170).

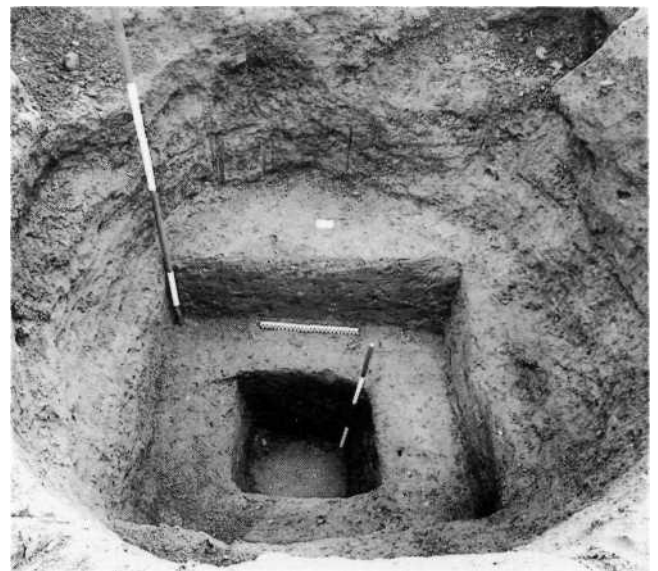


Fig 2.5 Well, BF119, Period 1 Phase 2. The outer square is artificial, dug to enhance access to the well shaft.

All these wells lie in the valley of the river Colne, not far above the water table, which is generally found close to the 50 ft (15.24 m) contour. The Middleborough well was probably only about 1.2 m deep (*ibid*), and the Sheepen wells 4 ft 6 in (1.3 m), 8 ft (2.4 m), 8 ft 6 in (2.6 m), and over 5 ft (1.5 m) (Hawkes & Hull 1947, 61, 107, 128). No Roman wells have been found inside the walled Roman town as it was provided with a piped water supply which entered the town from the west (CAR 3, 26-8).

The level of the water table at Butt Road is not known, but if it is the same as the rest of the town centre, then the well would have had to be about 11 to 12 m deep. It is, however, possible that water may have been available above this height. The valley of the Chiswell Brook lay between the site and the walled area of the town, and excavations in the 1960s a short distance north of the cemetery church encountered river silt from about 16 feet (4.9 m) below the modern ground level (Dunnett 1971, 84, note 3). This probably lay at about 25.3 m OD, placing the top of the river silt at about 20.4 m OD. If water were available at this height in the Roman period, the Butt Road well may only have needed to be about 6.5 m deep.

That BF119 is a well, dug to provide water for people living and/or working in the area, appears to be a reasonable assumption. When it was dug is less certain, but the pit formed when it collapsed must have been backfilled before the Phase 3 north-south burials on the site, as it was cut by G125. The well itself could thus be contemporary with the adjacent Phase 1 sand and gravel pits, or with Phase 2. The only finds within the fill of the timber lining come from the very top and probably derive from sinkage of the pit fill into the shaft during settlement. They consist of a small quantity of 2nd- to 3rd-century pottery and some animal bone, material identical to that found scattered throughout the fill of the pit.

There is no evidence to support the identification of BF119 as a shaft or well for the deposit of votive offerings. The dearth of finds within the material filling the timber lining, though it was not bottomed, together with the very ordinary rubbish contained within the pit formed by the well's collapse, makes such an identification unlikely (compare with Ross 1967, 24-33, and Wait 1985, 51-69).

The Period 1 Phase 2 ditches, plots and related burials

[Table 2.1; Rgs 2.2, 2.4]

In the eastern part of the site were fourteen uncoffined inhumations, one probably uncoffined inhumation, and five cremations (Table 2.1). Three of the cremations were deposited in pottery vessels and lay close together in the north-east corner (Figs 2.2, 2.4). Only one was *in situ*, but another had been redeposited in a Period 1 Phase 3 north-south grave and its original

location was thus defined reasonably accurately, and the third was identified as a cremation on the basis of a fragment of a pottery vessel within an east-west grave which also contained in its fill many pieces of burnt bone. A cremation (CF44) not associated with a vessel lay just south of these three, and traces of another with a few pottery sherds were in an east-west grave (G452) some distance to the south-west.

These uncoffined inhumations and cremations are strung out, usually widely-spaced, in a band which can, in places, be subdivided into shorter lines, or small groups. The inhumations G152, G159, G197, and G447 form one short line; G312, G297, and G305 another; G324, G597, G604 may be grouped together; and G693, and G694 together with the group of three cremations are concentrated in a small area. The inhumation G371 and the cremation CF44 can probably be associated with the last group, though they are some distance away. Isolated well to the west of the other inhumations is G634, and west of the other cremations is that residual in the fill of G452.

The shorter lines or concentrations of graves, and their relationships to some of the Phase 2 ditches, can be perceived as indicators of individual plots, with the burials placed on or near boundaries, which may have in reality been at times quite loosely-defined. No post- or stake holes for fences were noted on the site, but there may have been other surface features such as hedges, their lines emphasised, possibly even extended, by the ditches.

Plot A

A ditch, CF58/CF49/CF50/HF31, appears to mark a boundary in the north-east corner of the site. It runs north-south, getting both narrower and shallower to the south, and, as CF58, makes an almost right-angled bend to the east. The uncoffined inhumation G371 and the cremation CF44 were cut into the ditch fill near this bend. The inhumation appears to have been deliberately centred within the ditch, and deliberately near the bend, so that, though the ditch may have filled up sufficiently to accommodate the insertion of a grave, the upper edges were probably still clearly defined.

After the bend, CF58 continued eastwards for about 1.5 m, becoming increasingly narrower. Further east it had been destroyed by a mass of Period 2 graves, but three possible interpretations of its eastern development can be put forward. It may have simply terminated not far from the point where it was last picked up on site; it may have continued eastwards beyond the limit of the site (a severely damaged pit CF53 noted on the eastern boundary may have been part of a ditch); or it may have joined the adjacent east-west ditch CF59.

At its northern end (as HF31), the ditch appeared to terminate just south of the uncoffined Phase 2

Grave	Burial type	Sex	Age	Head	Body	Arm/hand		Coffin/ container	Grave markers	Grave goods	Plot
						L	R				
G152	inhumation	M	adult	S	supine	ai	a	none	none	-	C
G159	inhumation	I	adolescent	S	?supine	-	-	-	none	-	C
G197	inhumation	?	adult	N	left side (?crouched)	-	-	none	none	-	C
G297	inhumation	M	young	N	supine	a	a	none	none	base of pottery flagon	B
G305	inhumation	M	young	S	on right side	-	-	none	none	base of pottery jar	B
G312	inhumation	-	12-13 yrs	S	crouched	-	-	none	none	-	B
G324	inhumation	?	middle-aged	N	supine	a	a	none	none	pottery flagon	E
G371	inhumation	?	middle-aged	S	supine	d	c	none	none	none	A
G447	inhumation	?	middle-aged	N	supine	a	a	none	none	-	C
in G452	cremation	?	?	-	-	-	-	none	-	-	west of B
G597	inhumation	F	middle-aged	S	supine, twisted	-	d	none	none	none	E
G604	inhumation	M	middle-aged	N	supine	d	b	none	none	none	E
G634	inhumation	?	young	S	supine	ai	b	none	none	none	west of E
G650	cremation	I	child	-	-	-	-	lidded jar tiles, stone	none	none	A
G662	cremation	?M	adult	-	-	-	-	jar	-	none	A
in G678	cremation	-	-	-	-	-	-	jar	-	none	A
G693	inhumation	F	adult	N	?supine	-	-	none	none	pewter dish, pottery cup, glass bowl and flask	A
G694	inhumation a)	?	adult	S	supine	?a	e	none	none	none	?A
	inhumation b)	-	adult	N	-	-	-	none	none	none	?A
CF44	cremation	?	?	-	-	-	-	-	-	-	A

TOTALS

	No	%
Cremations	5	25
Inhumations	15	75
Head to N	7	47 (of 15)
Head to S	8	53 (of 15)
With grave goods	4	20

Table 2.1. Summary catalogue of Period 1 Phase 2 burials. F... female; I... indeterminate; L... Left; M... male; ?M... probable male; A... north; R... Right; S... south; ?... uncertain; a... arm and hand by side; ai... arm by side, hand on pelvis/upper thigh; b... hand on pubis; c... forearm at right angles to upper arm; d... arm across chest with hand near chin or shoulder; e... hand behind head. [Pages 15-25]

inhumation G693. Any direct relationship between this grave and the ditch is impossible to establish, as the area was later filled by Period 1 Phase 3 and Period 2 graves. The western edge of HF31 was traced as far as the south side of G552 (Period 2), but its eastern edge was not found beyond G685 (Period 2). It was not picked up north of G647 (Period 2), nor did it appear to bend to either the east or the west. A Period 1 Phase 3 inhumation, G679, was cut into HF31 near its northern end.

For most of its north-south length CF58/CF49/HF31 was on average 1.5 m wide, flat-bottomed, with fairly steep sides, in places nearly 1 m deep. A narrow round-bottomed gully, CF50, extended for part of the way along its eastern edge, with both ditch and gully becoming increasingly shallow to the south, so that the ditch (here CF58) was only 0.25 m deep. Finds from within it include animal bone, painted wall plaster, a fragment of an early Roman shale tray (CAR 2, fig 74, 2023), and late 1st- to mid/late 3rd-century pottery.

In view of the return to the east of CF58/CF59/HF31, it seems likely that it served to define the western and southern limits of a plot (A), the southern limit of which was further defined by a second ditch, CF59.

The latter ran east-west and terminated on the west at a point level with the western edge of CF58, which implies that the two ditches were contemporary. CF59 was narrower than CF58/CF49/ HF31, being at its widest 1.2 m, but was similarly flat-bottomed. Initially it was about 0.5 m deep, but two successively shallower recuts are detectable, the first about 0.3 m deep, the second only 0.2 m deep. It contained animal bone, some redeposited human bone, and pottery ranging in date from the 1st to 3rd/4th century. The recutting of CF59 and the presence in its fill of redeposited human bone and 3rd-/4th-century pottery suggest that it survived the end of Phase 2.

Plot A can thus be seen as located in the extreme north-eastern part of the site, defined by the north-south ditch CF58/CF49/HF31 and the east-west ditch CF59. Phase 2 burials which can be associated with the boundaries of the plot are the inhumation G371 and the cremation CF44 in the south-west corner, and to the north the inhumations G693 and possibly G694, the cremations G650, G662, and the unnumbered cremation in the fill of G678, the latter all clustered to the north of G693. Grave 650 is the only cremation *in situ*, but G662 must have lain about 1.5 m to the south, and the unnumbered cremation only about 0.25 to 0.3 m to the west or south-west.

Plot B

Immediately adjacent to and south of Plot A, a second plot, B, is clearly defined, its northern limit marked by the ditch CF59, its southern by the ditch CF35/61, and its western by three inhumations, G312, G297, and G305. These burials show the western boundary of Plot B to have been on a line comparable to that of the Period 1 Phase 3 ditch BF165/CF32, part of the eastern boundary of the Phase 3 cemetery.

The southern boundary ditch CF35/61 was on average 1 m wide, with a slightly rounded bottom, and varied in depth from about 0.6 to 0.9 m. Only three sherds of pottery were recovered from the fill, the latest dating to the 2nd century or later. The ditch ran from the eastern limit of the excavated area to the western boundary of Plot B as indicated by the line of three inhumations, one of which, G312, can be seen as set in the extreme south-west corner of Plot B, just as G371 lay in the extreme south-west corner of Plot A. The position of G312 so very close to the edge of CF35/61 suggests either that the grave was dug after the ditch, or that it was so well-marked that the ditch-diggers could avoid it.

Other plots

Plots A and B are reasonably well-defined, but a pattern of boundaries is less easily established on the rest of the site.

The existence of a third plot, C, to the south of Plot B is indicated by a row of four inhumations, G152, G159, G197 and G447, but it is impossible to say whether the row represents a western or an eastern boundary. Indeed, the row may define two plots, one to the west (C west) and the other to the east (C east). This latter suggestion is supported by evidence from Phase 3 (p 30).

The most northerly burial in the row, G447, is the only Phase 2 inhumation which definitely predates a Phase 2 ditch. It was cut by the Plot B southern boundary ditch CF35/CF61, which removed the bones of the upper legs and pelvic area of the skeleton. This implies either that the ditch was deliberately cut across the inhumation, or, more likely, that the location of G447 was unknown at the time CF35/61 was dug. (This may in turn suggest that Plot(s) C had ceased to be in use when Plot B was delineated.)

The very regular line formed by the three pits, AF171, AF148/AF168, and BF119, may suggest that they are contemporary and that they define a plot, D, established after the backfilling of the sand and gravel pits. The disposal of dead domestic animals in at least two of these pits may thus parallel a dog grave placed by a boundary fence on the Balkerne

Lane site, Colchester (CAR 3, 138). It should, however, be acknowledged that as the two more southerly pits lie outside the area of the Period 1 Phase 3 cemetery, they may belong to this later phase, representing a property beyond the southern boundary of the cemetery, defined by the ditch AF152.

Ditch AF152 has no direct relationship with any Period 1 feature apart from the Phase 1 sand pit, AF169, which it cuts, and so it may, like CF59, have originated in Phase 2. If it did, it would have served to mark the southern boundary of both Plot C west and Plot C east, and would have placed pit BF119 within the former, and pits AF148/AF168, AF171, and AF96 in Plot D on the extreme edge of the excavated area.

The possible road ditch, AF136, also running east-west, lay a short distance to the south of AF152. Approximately 1 m of the Roman levels had been removed in this area by Victorian terracing, and no relationships between AF136 and any other Roman feature were established. It is thus effectively unphased. Philip Crummy has suggested that it may be the ditch of a road linking the main western approach road to Colchester with the possible Roman dock area at the Hythe (see p 263 and Fig 8.2). This hypothesis is unproven, but if it were correct, then AF136 would provide not only the southern boundary of Plot D, but also the line on which all the other ditches on the site are based.

Four uncoffined inhumations (G324, G597, G604, G634) and the possible cremation residual in Period 2 G452 remain to be related to possible plots in Period 1 Phase 2. The first three inhumations lie a short distance to the west of Plot A's western boundary ditch, which suggests that they belong to a further plot, E, sharing that boundary. Grave 634 lies on its own some 22 m west of Plot A, in an area severely damaged by modern terracing. It may be the sole indicator of the western limit of Plot E. The cremation is to the west of Plot B's western boundary, and may belong to a plot flanking Plot E.

The Period 1 Phase 2 graves**Relationships**

[Figs 2.2, 2.4]

With one possible exception, there is no direct stratigraphical relationship between Period 1 Phase 2 graves. The exception is a possible relationship between the inhumations G693 and G694. Grave 694 may have cut G693. If it did, the intercutting would have been very slight, with no disturbance noted to either grave goods or body. This may imply that the location of G693 was visible on the surface and that

G694 was deliberately placed next to it. The same would be true if G694 were the earlier grave.

Another possibility exists. Grave 694 lies very close to, and parallel with, the Period 1 Phase 3 G687, which may suggest a more deliberate positioning than that apparent between G693 and G694, the alignments of which are dissimilar (though precise similarity of alignments does not appear to be sought between adjacent graves in Phase 2 (p 19)). Thus, G694 may belong not to Phase 2, but to Phase 3, and may be linked to uncoffined 'pit' burials attributed to Period 2 (pp 55,105-10).

There are three instances of relationships between Phase 2 and Phase 3 burials. First, the Phase 3 inhumation G678 contained within its fill the base of a grey ware jar and fragments of burnt bone. These have been interpreted as deriving from an unnumbered Phase 2 cremation on the boundary of Plot A, all *in situ* traces of which were destroyed by the later burial.

The second and third instances are of particular importance in establishing the time elapsing between Phases 2 and 3.

The Phase 2 inhumation G324, which lies to the west of the southern boundary of Plot A, was cut by a Phase 3 burial, G327. The alignments of the two graves differed markedly, and the right lower leg and foot of G324 were removed by G327 as it cut diagonally across the bottom corner of the grave. The foot of G324 was recovered, articulated, from the fill of G327. This implies that a fairly short time elapsed between the interment of G324 and the cutting of G327, time enough for the flesh, perhaps, to decay, but not the skin and tendons. A period estimated by months, rather than years, is almost certainly involved.

A longer period is suggested by the relationship between the Phase 2 inhumation G693 and the Phase 3 inhumation G687. Grave 693 was severely damaged by the cutting of G687, and was therefore probably undetectable on the ground surface when the latter was dug. The grave goods accompanying G693 suggest that it dates to the late 3rd or very early 4th century (pp 27-8), and so the relationship between the two graves is crucial in dating the two later phases of Period 1.

Burial rite

[Table 2.1]

Twenty burials belong to Period 1 Phase 2, five cremations (25 per cent), and fifteen inhumations (75 per cent). There is insufficient evidence to indicate if the two rites were in use at the same period, or if the cremations predate the inhumations. The possibility that cremation was reserved for a different age group

is negated by the aging of one cremated individual as an adult (G662) and another as a child (G650).

The human skeletons

by Stephanie Pinter-Bellows

[Appendix 3, microfiche pp 972-88]

Age and Sex

[Table 2.2]

There are notes for 16 skeletons from Period 1 Phase 2. Sex and age determination is presented in Table 2.2. Of the sixteen, four were diagnosed as male or probable male, two as female or probable female, seven were not sexed at this time because of the poor condition of the bones, and three were subadults and so could not have the sex determined. No infants or young children were found, nor was any foetal bone detected with the adult females. Of the thirteen adults, middle-aged individuals make up the largest proportion.

A small quantity (17 gm) of infant bone was recovered during processing of the faunal remains from the fill of G371, the middle-aged adult burial in the corner of Plot A's western boundary ditch. It is possible that these bones are not residual, but represent all that remains of a shallow grave cut into the fill of G371, not detected on excavation. The infant bone cannot be assigned to any period or phase, but, on balance, is felt to be more likely to belong to Period 2 than to Period 1, as no other infant inhumations have been identified in Period 1 Phase 2 or Phase 3.

Age	Unknown sex	Males	Females	Total
birth-0.9	0	0	0	0
1-1.9	0	0	0	0
2-4.9	0	0	0	0
5-9.9	1	0	0-	1
10-14.9	1	0	0	1
15-19.9	1	0	0	1
young adults (20-29.9)	1	2	0	3
middle-aged adults (30-49.9)	3	1	1	5
old adults (50+)	0	0	0	0
adults age unknown	3	1(2)	1	6
individuals age unknown	2	0	0	0
Totals	12	4(5)	2	19

Table 2.2. Demography of Period 1 Phase 2 graves. Figures in brackets are those produced when a probable male is included.

Stature

Stature could be calculated for three males (1.51, 1.605, 1.75 m) and one female (1.58 m). Two of the males have statures below the mean established for Period 2 (p 64), and one above. The female stature is above the mean for Period 2 (*ibid*).

Metric analysis

[Table 2.3]

Of the thirteen adults, three individuals, one male and two females, have had their measurements recorded. A distribution of indices made from some of the measurements is seen in Table 2.3.

Non-metrical analysis

[Table 2.4; Fig 2.6]

Three of the adult burials, two males and one female, were examined for non-metrical variants. None were recorded on the female. The distribution of fifteen traits is shown in Table 2.4, and two noted on the male skulls have been plotted on Fig 2.6.

Pathology

There are no congenital pathologies from Period 1 Phase 2. There are two pathologies of traumatic origin. One unsexed adult of middle-age (G371) has several healed fractures of left ribs. One young adult male (G305) has Schmorl's nodes of the lumbar vertebrae.

There are several pathologies which fall under the infection category. An unsexed middle-aged adult (G447) has periostitis on the left fibula. Turning to dental disease, only three males (no females) had part of the maxillae and mandibles surviving. If these maxillae and mandibles had contained complete normal dentitions, 96 tooth positions should have been identifiable, but, owing to post-mortem damage only 71 (74 per cent) were available for study. Only two teeth were lost ante-mortem, both mandibular first molars, a very common position for tooth loss. There was one abscess, at a maxillary first molar. There were six caries, this gives a high percentage of caries per teeth at 8.45 per cent, but an average of two caries per individual, which is only slightly higher than that for the Period 2 cemetery (p 79).

Signs of degenerative disease were found in three individuals, all found in the spine. There are two cases of osteophytes: a young adult male (G305) with osteophytes on the lumbar vertebrae, and an unsexed adult (G371) with osteophytes on the cervical,

Class	Range	Males	Females
Cephalic index			
hyperdolichocephalic	x-69.9	0	1
dolichocephalic	70-74.9	1	0
mesocephalic	75-79.9	0	1
brachycephalic	80-84.9	0	0
hyperbrachycephalic	85-x	0	0
Height-length index			
chamaecranic	x-69.9	0	0
dolichocranic	70-74.9	1	1
mesocranic	75-x	0	0
Height-breadth index			
tapeinocranic	X-91.9	0	1
metriocranic	92-97.9	0	0
acrocranic	98-x	1	0
Upper facial index			
hypereuryene	x-44.9	0	0
euryene	45-49.9	0	0
mesene	50-54.9	1	0
leptene	55-59.9	0	0
hyperleptene	60-x	0	0
Nasal index			
leptorrhine	X-47.9	1	0
mesorrhine	48-52.9	0	1
platyrrhine	53-x	0	0
Orbital index			
chamaechonchic	X-75.9	0	0
mesochonchic	76-84.9	1	0
hypsichonchic	85-x	0	0

Table 2.3. Metric distributions, Period 1 Phase 2 graves.

Variants	Males		Combined	
	no	+	no	+
metopism	2	1	3	1
bregma bone	2	0	3	0
coronal wormian	2	0	3	0
sagittal wormian	2	0	3	0
lambdoid wormian	2	1	3	1
asterionic ossicle	2	0	3	0
epipteric ossicle	2	0	3	0
inca bone	2	0	3	0
supra-orbital notch	1	0	2	0
double supra-orbital foramen	2	1	3	1
supra-orbital grooves	2	0	2	0
double hypoglossal canal	2	0	3	0
atlas bridge	2	0	3	0
septal aperture of humerus	2	0	3	0
femoral third trochanter	2	0	3	0

Table 2.4. Frequency of non-metrical variants, Period 1 Phase 2 graves.

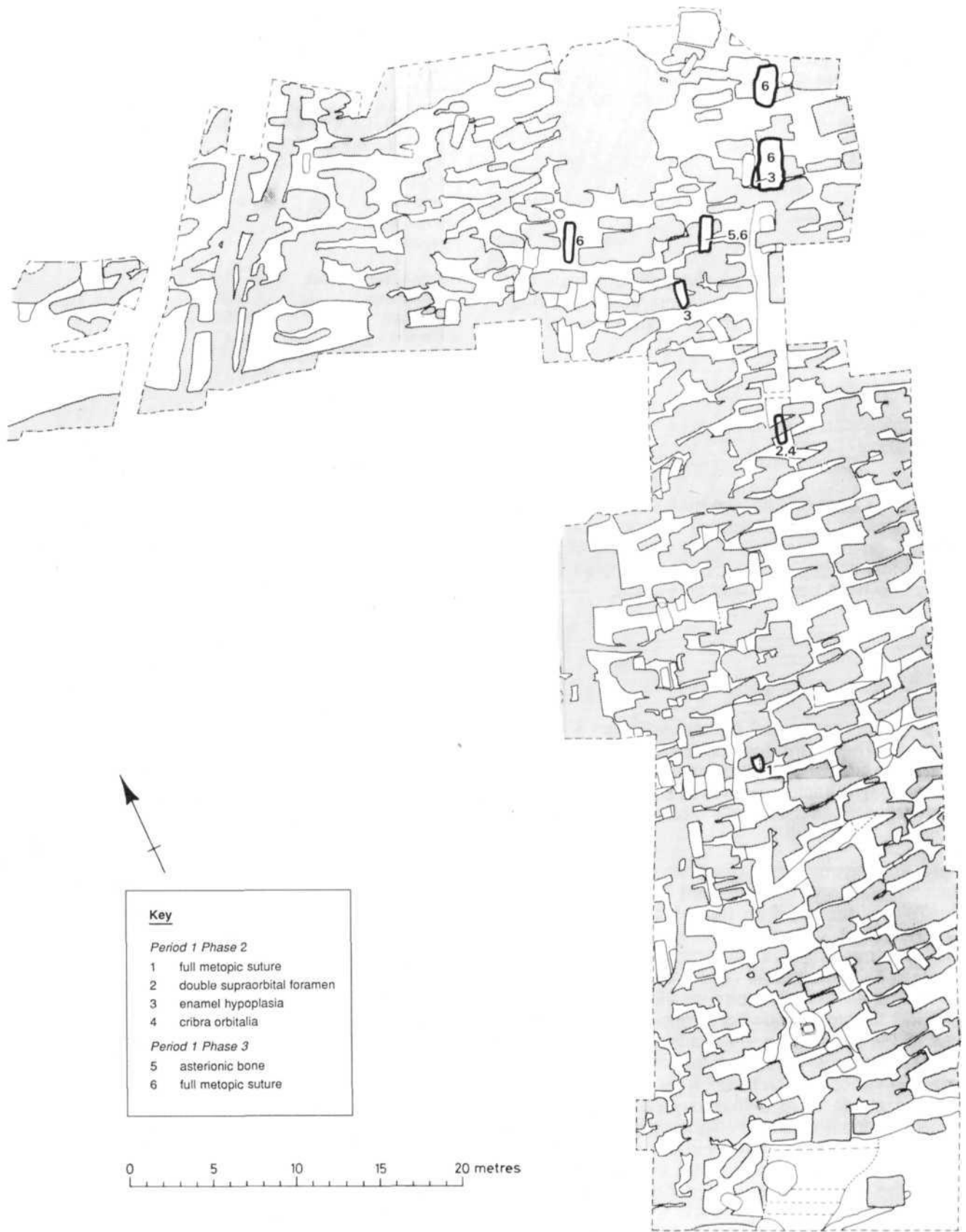


Fig 2.6 Graves with non-metrical skull variants. Period 1 Phases 2 and 3. 1:333. [Pages 17 & 33]

thoracic, and lumbar vertebrae. There were two cases of osteoarthritis: a young adult male (G305) with osteoarthritis of the thoracic and lumbar vertebrae, and an unsexed adult (G447) with osteoarthritis of the cervical, thoracic, and lumbar vertebrae, and ankylosis of some of the cervical and thoracic vertebrae.

There are three individuals with signs of metabolic disease. A female adult (G693) and a middle-aged male (G604) have enamel hypoplasia. An unsexed middle-aged adult (G371) has cribra orbitalia. •

Inhumation alignments

[Fig 2.2]

The alignments of the fourteen Period 1 Phase 2 inhumations (one contains two individuals) vary considerably within the range permissible by the general description of north-south, for example, the northern end of G324 is placed several degrees to the east, while that of G597 is placed several degrees to the west. Even within the more close-set rows of graves identified above, the alignments can vary, compare for example G152 and the adjacent G159.

Grave markers

[fig 2.7]

Only the *in situ* cremation, G650, appeared to have been marked on the surface. Above its lid, probably on the Roman ground surface, lay a capping of Roman tile fragments and a piece of worked Purbeck marble (Fig 2.7a).

Grave shape

[Fig 2.7]

In the *in situ* cremation, G650, the vessel appeared to have been placed in a roughly circular feature with vertical sides and a flat bottom and the spaces around it filled with fragments of septaria, greensand and Roman tile (Fig 2.7a).

Few of the inhumation graves were intact, but most of those that were comparatively undamaged appear to have been quite regular rectangles in plan, eg G324, G371. Grave 305 (Fig 2.7b) has parallel ends and rounded corners, but tapers slightly along its length. Less regular shapes are evidenced by G447, the ends of which are rounded and asymmetrical, and G604 (Fig 2.7e), where the eastern side curves in towards the western with the result that the grave cannot really be described as having a southern end at all.

The paucity of intact ends and sides to these graves makes any generalisation as to shape open to question, but initial observation tempts the suggestion that the ends of these uncoffined inhumations are more likely than coffined ones to be rounded, and asymmetrical graves such as G447 and G604 are also more likely to occur where a rectangular coffin does not have to be accommodated in the grave pit.

The profiles of the graves varied considerably. Some were a simple shallow dished scoop, eg G604 (0.2 m deep, 0.63 m across the top, 0.45 m across the bottom), while in contrast G297 was a narrow pit with straight sides and a slightly rounded bottom (0.95 m deep, 0.3 m wide across the bottom). In the majority the width decreased towards the bottom of the pit, with most measuring approximately 0.45 m across at the bottom, eg G312.

Corpse position

[Table 2.1; Figs 2.4, 2.7]

In Period 1 Phase 2 burials no preference can be detected between laying the body with head to the north (47 per cent), or with head to the south (53 per cent) (Table 2.1; Fig 2.4).

Three of the skeletons did not lie supine, six clearly lay supine and extended, two were probably supine, and three were supine but not neatly disposed (Table 2.1).

Of the three non-supine burials, one body had been placed in a crouched position, one on its left side, and one on its right side. In the crouched burial, G312 (child, 12-13 years), the northern (foot) end of which was missing, the body lay on its right side, with the arms probably wrapped around the torso (Fig 2.7d). Nearly all of G197 (adult, sex uncertain) had been destroyed, but the positions of the lower right leg and foot and some left foot bones (all that remained) suggest that the body lay on its left side, with the left leg bent more than the right. This may have been a second crouched burial. In G305 (young adult male) the skeleton lay stretched out on its right side, the legs turned rather less to the right than the upper part of the body (Fig 2.7b).

The three less formally-disposed supine burials are G604, G597, and G694. The corpse in G604 (middle-aged male) lay cramped within the irregularly-shaped grave pit, achieving a supine and extended position with difficulty (Fig 2.7e). The toes were under a slight overhang in the pit wall, the shoulders were hunched, and the skull rested on the right shoulder. The right hand lay on the pubis, and the left arm was bent so that the hand lay near the chin, possibly on the left cheek.

The skeleton of G597 (middle-aged female) lay supine with the upper body turned to the left, the right arm

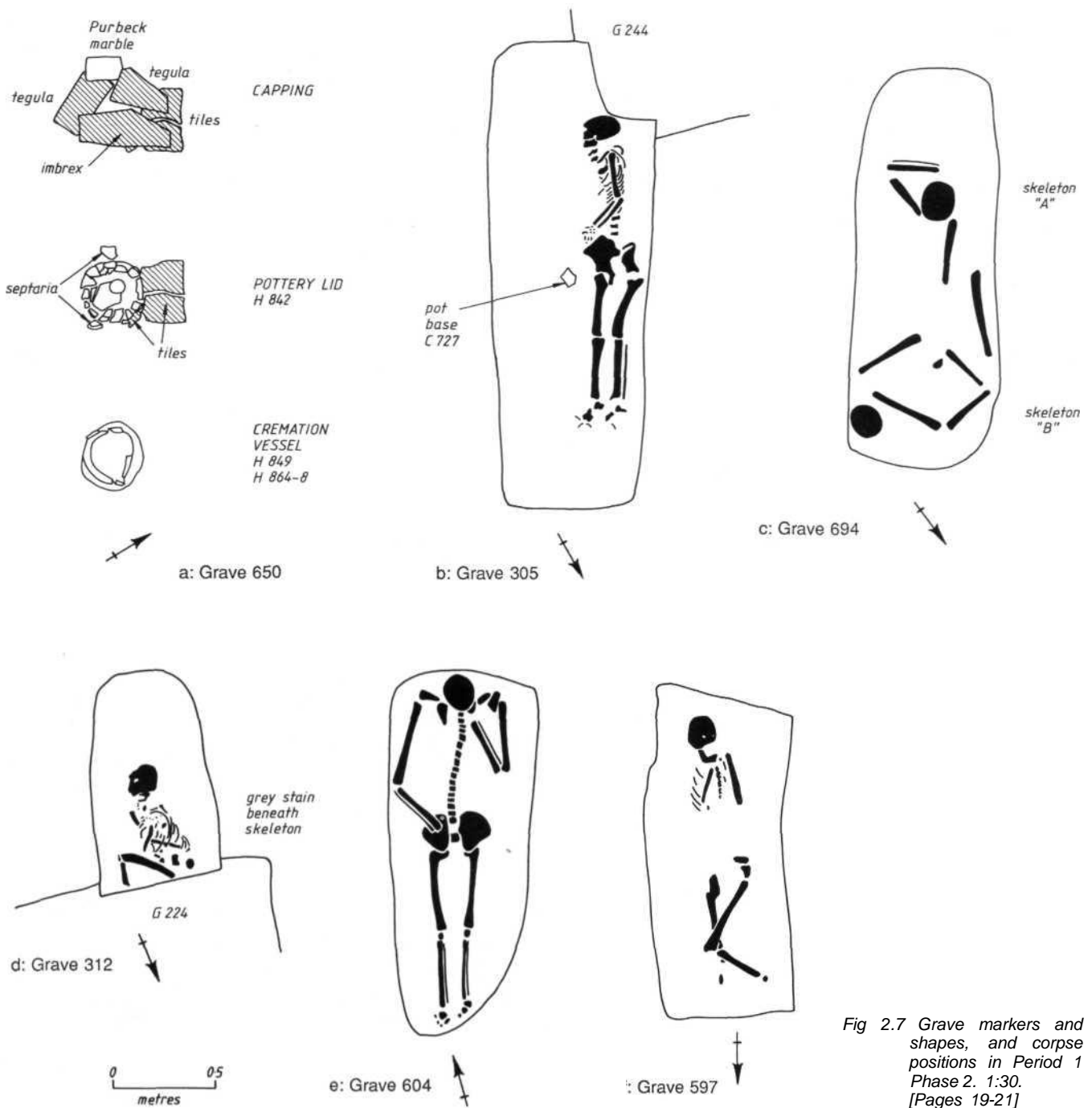


Fig 2.7 Grave markers and shapes, and corpse positions in Period 1 Phase 2. 1:30. [Pages 19-21]

bent with the hand near the chin or left shoulder, and the lower body to the right, the left leg bent over the right (Fig 2.7f).

Grave 694 (Fig 2.7c) contained one complete corpse (G694a; adult, sex uncertain) and a second skull (G694b; adult, sex unknown). The latter was possibly redeposited, but did not derive from the adjacent G693, which may have been cut by G694, and it is felt by the excavator almost certainly to be all that remains of a second corpse. Many of the bones of G694a were represented only by 'casts' in the soil. The body appeared to have lain supine, the right hand beneath the head, the right knee bent to the right, the

left leg bent to the left with the knee upwards.

The corpses in G597 and G694, especially the latter, appear to have been deposited with little or no formality, which is paralleled by the two pit burials on the southern edge of the site attributed to the Period 2 cemetery, G51 and G41/43 (pp 105-10). A second point of similarity may be drawn between G694 and G41/43 in that both contained more than one corpse. The Period 2 feature held the skeletons of two middle-aged males and the skull of an adolescent, again probably all that survives of another corpse.

The possibility was considered that the skulls in G694

and G41/43 were ritual deposits, but there is no evidence to support such a theory. The poor condition of the other bones in both features favours the idea that the skulls are all that remain of otherwise completely-decayed skeletons which were not detected by the excavators because of the informality of the disposal of the corpses.

In three of the six supine and extended burials the arms lay straight by the sides (Table 2.1); in one, G152 (adult male), both arms were straight by the sides but the left hand lay on the upper thigh; and in one, G634 (young adult, sex unknown), the left arm was straight by the side with the hand on the upper thigh, and the right arm lay straight but with the hand on the pubis. In G371 (middle-aged adult, sex uncertain) the right forearm lay across the stomach with the right hand near the left elbow, and the left forearm lay across the chest with the hand near the right shoulder. This latter grave is also one of the few where the skull position on excavation is probably that in which it was placed at the time of burial, in this case facing to the left.

Grave goods

[Figs 2.7-2.8]

Household vessels only were associated with Period 1 Phase 2 burials, four ceramic vessels from three cremations, and four ceramic, one pewter, and two glass vessels from four inhumations. This lack of diversity in burial deposit is in marked contrast to the range of objects, many of them personal rather than household items, associated with Period 1 Phase 3 and Period 2 graves. A degree of wealth is suggested by the four vessels in G693 (glass, pewter, *terra sigillata*).

Of the four vessels from cremations not one was intact on excavation (Fig 2.8a-c), and two, both found in the fill of later graves, were incomplete. Only the base of the vessel in the fill of Period 1 Phase 3 G678 was recovered, and only about half of the vessel containing G662 (in the fill of Period 2 G661), which had been split vertically, remained (Fig 2.8c).

Two of the ceramic vessels were incomplete on deposition. In G305 (young adult male) only the base of a coarse grey ware jar was recovered, lying to the right of the pelvis (Figs 2.7b). No other feature cuts G305 in the area of the vessel. Three alternatives for the presence of this vessel fragment must thus be considered, of which the third is the most likely. First, the fragment is residual in the grave. This is unlikely, as G305 cuts no earlier grave or other feature, and no other find, ceramic or otherwise, was contained within the fill, mainly redeposited natural sand. Second, the vessel was accidentally or deliberately broken at the time of burial and only part deposited. Third, the vessel had been broken some while before the time of burial

and this fragment deliberately selected for deposition, either because it had a particular ritual significance, or simply as a cheap form of 'tokenism'.

In G297 (young adult male) again only the base of a vessel, a coarse unslipped white-ware flagon/jar, was recovered, but in this case the grave was cut close to the vessel and a sherd from the fill of the cutting Period 2 grave, G294, fits onto the sherds remaining in G297. The vessel is, however, still incomplete, so it too was probably deposited as a fragment, or, less likely, yet more sherds must have been detached from it by G294 and subsequently redisturbed and redeposited some distance from both G297 and G294.

Deposition of incomplete vessels is paralleled, for example, in London, at West Tenter Street (Pierpoint 1986, 74, 78). One interpretation of these incomplete vessels is that broken jar and flagon bases were reused as bowls (*ibid*, 74), another, that the vessel was deliberately, ritually, broken before deposition (Salway 1982, 705). At Butt Road, it seems more likely that already broken vessels were deliberately selected for deposition, whether or not they had been reused, and this selection may be paralleled by the deposition of a much spalled and repaired bowl in the grave of a middle-aged male (skeleton 288) at Trentholme Drive, York (Wenham 1968, 50). The deposition of incomplete or ritually damaged vessels is further discussed by Chris Going (below).

The two other pottery vessels in inhumations were complete (Fig 2.8d-e), and it is probably significant that both graves (G324, G693) in which these vessels were deposited belong to the later part of Phase 2.

The misleading character of dating evidence from grave furniture is fully highlighted by the cup from G693, which was associated with a glass bowl of common mid to late 3rd-century form, a glass flask dated to the late 3rd to 4th century, and a pewter dish, also probably dating to the late 3rd to 4th century. The problem of the dates of the ceramic vessels is also discussed by Chris Going (below).

a) Pottery vessels by CJ Going

[Table 2.5; Figs 2.8-2.9]

In general the following brief descriptions and those for pottery vessels deposited in Period 1 Phase 3 and Period 2 graves have been made from a physical examination of the pots, but where this has not proved possible they have been made from drawings and photographs. The CAM typology established by M R Hull (Hawkes & Hull 1947, 168-286, pis 20-85; Hull 1958, 279-92) has been referred to, as it represents to date the fullest published account of Colchester's pottery assemblage. In Table 2.5 the site area code and finds context number(s) are listed, as well as any

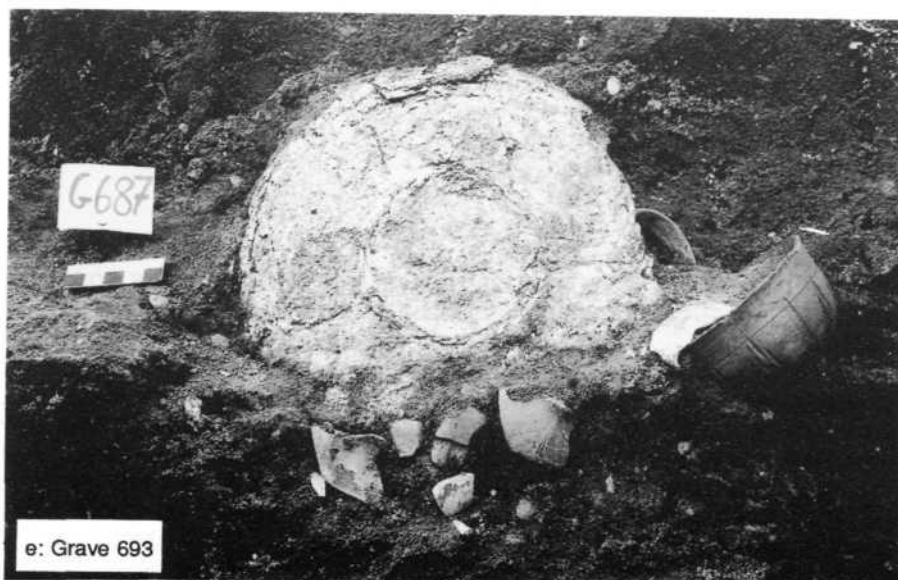


Fig 2.8 Pottery, pewter, and glass vessels from Period 1 Phase 2 graves. [Pages 21-5]

pottery vessel number (P) allocated. Also, cross-reference to *CAR 10* (forthcoming) has been made by adding (where possible) the fabric and form code as used in that volume.

- Grave 650,** cremation Figs 2.8a, 2.9a. BUC H842 G650. Oval-bodied coarse grey ware jar with rolled rim, offset shoulder with two stabbed zones below. The surface is left rough apart from bands of crude burnishing on the lower and mid body.
- Figs 2.8b, 2.9b. BUC H842 G650. Coarse reduced ware lid. Undecorated, with a bifid rim. Date range Hadrianic-Antonine, or later. For a discussion of lids, see Hull 1963, 176.
- Grave 662,** cremation Figs 2.8c, 2.9c. BUC H917 G662. Coarse reduced ware. Oval-bodied jar with rolled rim, concave neck with a slightly offset shoulder decorated with stabbing. The upper part is burnished in zones. Not typologically diagnostic, but probably of 2nd-century date.
- Unnumbered cremation redeposited in **G678** Fig 2.9d. BUC H966 G678. Base of a large ?high-shouldered jar with an everted rim (the top is missing). The lower walls are burnished and the mid body is decorated with vertical line burnish. Date probably 2nd century.
- Grave 297,** inhumation Fig 2.9e. BUC C717 G297. Lower half of a globular-bodied flagon in Colchester buff ware. The precise form of the vessel is not known as the top is missing, but it was probably a ring-necked vessel similar to that in G324 (below). Date Antonine, or later.
- Grave 305,** inhumation Fig 2.9f. BUC C727 G305. Coarse grey ware jar base. Lower body only. Undecorated.
- Grave 324,** inhumation Figs 2.8d, 2.9g. BUC C912 G324. Ring-neck flagon in Colchester buff ware, similar to that in G297 (above). The splayed rim is characteristic of the later versions of the type: possibly Antonine or slightly later.
- Grave 693,** inhumation Figs 2.8e, 2.9h. BUC H1037 G693. East Gaulish *terra sigillata* palm cup with incised (cut-glass) decoration (Drag form 41). Complete, but with a perforation on the lower body. Date 2nd century.

All the vessels containing cremations are jars, one only was lidded. Of the four inhumations two

contained fragmentary vessels (G297, flagon; G305, jar) and two complete vessels (G324, flagon; G693, cup). Only G693 contained a 'service' — vessels for both eating and drinking, the cup was accompanied by a pewter dish (p 24), a glass flask, and a glass bowl (p 25).

The fill of numerous graves in both Periods 1 and 2 contained pottery sherds. The presence of residual pottery in other types of feature occasions little surprise, but the significance of pot sherds in graves is more problematical, for they may be inextricably bound up with the burial ritual itself. Pottery sherds have long been known to confer good luck, a tradition known as far back as the medieval period, and almost certainly long before. Perhaps fulfilling a similar function are broken vessels, two examples of which have been noted above. Certainly the vessels in G297 and G305 were buried in an incomplete condition (p 21). If they were not buried for fortune's sake, then they were possibly a reminder of the brevity of life. Pottery vessels can be seen as analogues of the human form (as we can see with face and head pots). One vessel (G693) may bear the sign of 'killing', deliberate piercing, an older animist ritual (Going 1988, with references), which also appears on a vessel deposited in the Period 1 Phase 3 G678 (p 47).

The cremation vessels, though diagnostic in terms neither of typology nor of restricted chronological range, may be placed comfortably within the early part of Period 1 Phase 2 (p 27).

However, some of the vessels deposited in inhumations in this phase introduce major problems associated with ceramic (and hence context) dating, and pottery availability, which, as far as I am aware, have not been adequately covered elsewhere.

If the pottery in these inhumations is contemporary (or nearly so) with the digging of the graves, then a shift to inhumation burials had already occurred by the Antonine period, for G324 (and probably G297) contains a ring-necked flagon unlikely to be much

Grave	Sex	Age	Find no(s)	Pot no	Fabric code	Form no	Description
<i>Cremation vessels</i>							
G650	I	child	H842	-	GX	-	jar
			H842/898	-	GX	-	lid
G662	?M	adult	H917	P763	GX	165	jar
in G678	?	old	H966	P791	KX	147	jar
<i>Vessels deposited with inhumations</i>							
G297	M	young	C717	P790	DJ	-	flagon base
G305	M	young	C727	-	GX	-	jar base
G324	?	middle-aged	C912	P779	DJ	96	ring-necked flagon
G693	F	adult	H1037	P764	BA	Drag 41	palm cup

Table 2.5. Pottery vessels from Period 1 Phase 2 burials.

BA... *terra sigillata*; DJ... buff/white ware; Drag... Dragendorff; F... female; GX... coarse grey ware; I... indeterminate; KX... black-burnished-type ware; M... male; ?M... probable male; ?... uncertain. [Pages 21-4]

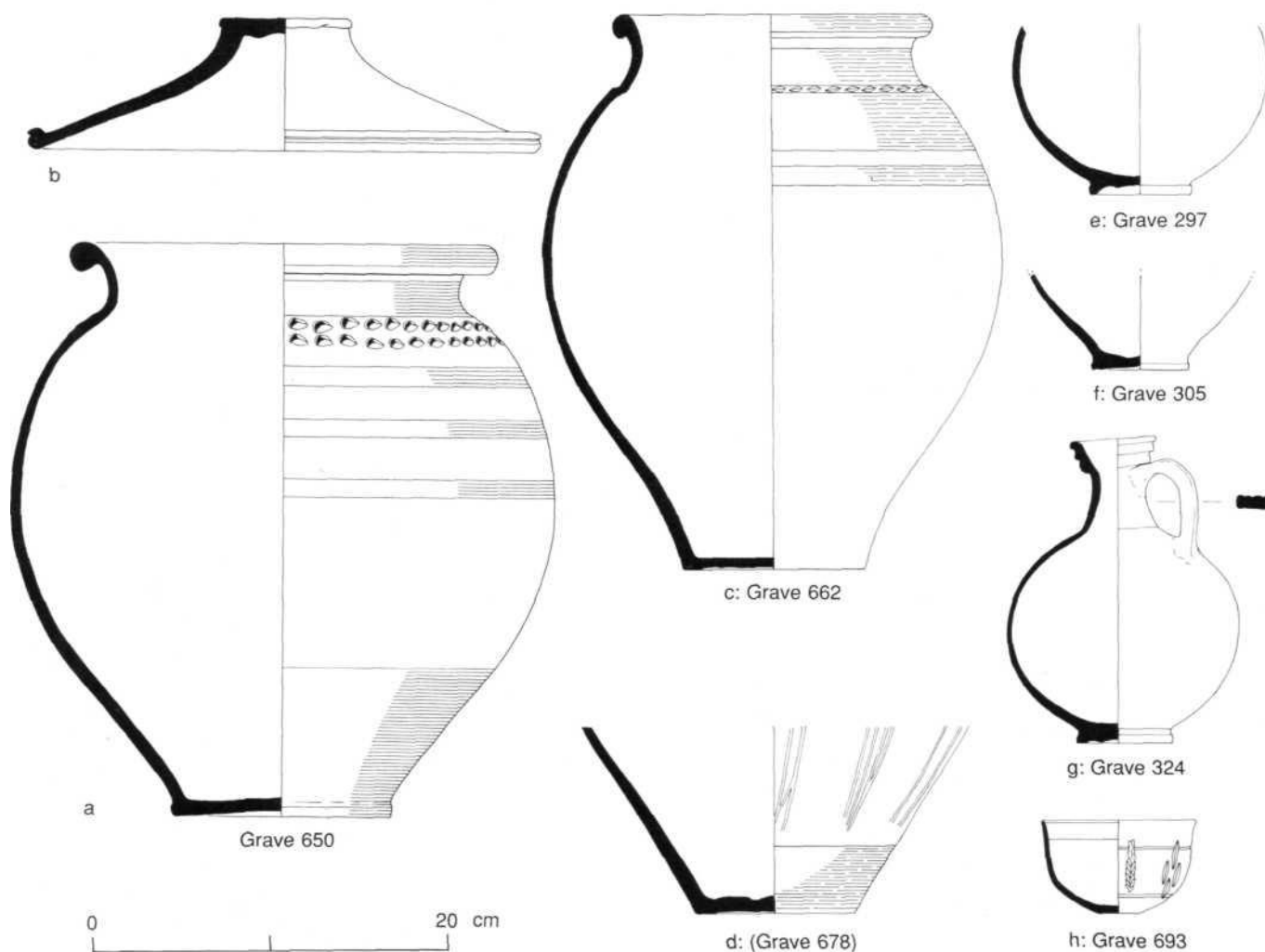


Fig 2.9 Pottery vessels from Period 1 Phase 2 graves. 1:4. [Pages 21-4]

later in date than the Antonine era. On stratigraphic grounds G324 appears to belong late in Period 1 Phase 2 (p 16), and if this is so, then the flagon might be 100 years or more earlier than the burial.

The same problem of chronological dislocation arises with vessels deposited in Period 1 Phase 3 and Period 2 graves, and will be discussed more fully in Period 1 Phase 3. •

b) Pewter vessel

[Fig 2.8e]

The only metal vessel deposited in a grave is a pewter dish found in G693 with the glass bowl and flask and *terra sigillata* cup described above. It lay on edge, slightly tilted so that the underside was uppermost. Though it fragmented on lifting and cannot be

reconstructed, the photograph taken of the grave group *in situ* shows it to be a low circular dish between 210 and 220 mm in diameter, probably closer to the latter, with a footing about 90 mm in diameter. The rim appears to have been thickened in some way, possibly either beaded, rolled or simply turned down. The form of the vessel walls is uncertain. They may be straight, or very slightly curved.

The Romano-British pewter industry appears to have flourished between c 250-410, though some pewter objects can be dated to before this period (Beagrie 1989, 175-6). Grave 693 at Butt Road was severely cut by a Period 1 Phase 3 burial, and is therefore likely to predate that grave by several years. The pewter dish is on balance more likely to be contemporary with the accompanying glass vessels in the grave than an heirloom piece, and a date range from the late 3rd to the early 4th century seems to be appropriate.

c) Glass vessels

[Fig 2.8e]

Hilary Cool and Jenny Price have provided the following interim report on the two vessels from G693:

Grave 693 CAR 8, vessel no 617, BUC H1039-41, SF BUC 1708. Colourless cup, in approximately 280 fragments. Colourless hemispherical cups with fire-rounded rims were probably the most common drinking vessels of the mid to late 3rd century in Roman Britain. There is no evidence that they continued in use into the 4th century. The variant with pinched-up decoration is more frequently recognised than the plain variant, probably because fragments from the former are more diagnostic. This vessel is the only example of the plain variant identified at Colchester, whereas the decorated form is known from several other excavations in the town. A similar cup to no 617 was found at the cemetery dated to 220/30 to 270/80 at Brougham, Cumbria (Cool 1990).

CAR 8, vessel no 1188, BUC H1039. Green-tinged colourless flask, in 62 fragments. This indented flask decorated with abraded bands is a very uncommon form and, apart from a similar flask which was found in a late Roman grave at Vermand, France (Eck 1891, pi VII), and a fragmentary example from Balkerne Lane, Colchester, found in a 4th-century context (CAR 6, vessel no 1189), no 1188 appears to be unparalleled. It has affinities with flasks of Isings (1957) Form 114b which have been found in early 4th-century graves in the Rhineland (Busch and Binsfeld 1971, 134, abb 5.4). From these parallels it is likely that the flask was in use during the later 3rd and 4th centuries. The date proposed for G693 (pp 27-8) suggests that it belongs to the first half of that period. •

The use of the site in Period 1 Phase 2

No industrial activity appears to have occurred on the excavated area, though the site finds suggest both metal-working and pottery manufacture were carried out in the immediate vicinity, and the latter is attested by 19th-century archaeological observation.

Small quantities of furnace lining and forging slag from iron working derived from the pit (BF119) above the collapsed timber-lined well, from the Plot A boundary ditch CF58/CF49/CF50/HF31, and from the adjacent Plot A/B ditch CF59. Though only small quantities of this material was found in Phase 2, when the iron-working debris in Period 1 Phase 3, Period 2, and post-Roman contexts (chiefly grave fill in the first two cases) is also considered, it can all be seen to lie on the eastern side of the site, with none recovered west of a line running from the Period 1 features G604 in the north to pit AF96 in the south. There are two small concentrations, the first centred on CF59 and CF58/CF49/CF50/HF31, and the second around the southern end of BF159 and north of AF152.

Metal-working debris is commonly found in small amounts on both intra- and extramural sites in Colchester, without any structural evidence necessarily being recovered from which the material could have originated, and without any clear pattern emerging from its distribution. However, at Butt Road, the eastern distribution of the debris, with concentrations on the borders of and within the plots identified above, suggests that iron-working was carried out within Period 1 Phase 2 not far outside the eastern limit of the excavated area.

Scattered over the northern and western part of the site were many sherds (rims only were identified) of a distinctive bell-shaped grey-ware jar, CAM 306 (Hull 1958, fig 121). As with the metal-working debris, these sherds derived largely from Period 2 grave fill, features and topsoil, and post-Roman contexts, but were, significantly, also found in some quantity in the northern part of the Period 1 Phase 2 ditch CF58/CF49/CF50/HF31 (4 rim sherds), and the grave fill of the Period 1 Phase 3 G687 (2 rim sherds), G522 (3 rim sherds), and G533 (1 rim sherd). None was found due east of the line of HF31, and only three came from contexts south of the southern end of G597: one (D55) was unstratified from the western edge of the excavated area, one (A11 L1) from modern demolition debris and topsoil, and one from Period 2 grave fill (G419) on the centre of the eastern edge of the site.

This paucity on the southern part of the site is matched on the extreme west, with sherds of the jar present in the fill of the Period 2 graves G705, G726, G728, G729, and G737, but absent from graves in the area of the Period 2 cemetery church. Only one example was found in the extreme west, in the 5th-century demolition debris (EL16) of the church. The concentration of sherds within an area lying west of the western boundary of Plot A and east of the site later occupied by the cemetery church, supports the tentative identification of Plot E (p 15).

The jar appears to belong to the 3rd century (Going 1987, 119-20), a date supported by its occurrence in some quantity (11 out of 31 identifiable grey-ware forms; Roman pottery archive) on the Middleborough site which was abandoned c 300, and by its absence from well-dated 4th-century deposits such as that in the cellar of Building 154 on the Cups Hotel site in Insula 19, which was associated with a dispersed coin hoard with a closing date of c 350 (CAR 4, 74; CAR 6, 333). The 3rd-century attribution is further supported at Butt Road by the four sherds of the jar in the ditch CF58/CF49/CF50/HF31, which was filled in before the cutting of the Period 1 Phase 3 grave G679, and by the residual character of the sherd from the demolition debris of the cemetery church, enhanced by four 3rd-century coins from the same layer, two of Victorinus (268-70), and two of Tetricus I (270-4) (CAR 4, 82).

The most likely source for the scatter of CAM 306 sherds is a kiln somewhere in the immediate area, a

possibility supported by the identification of at least one waster from the site (H896 G656: Period 2 grave fill). In the 19th century Wire recorded a kiln some distance to the south (Fig 2.1; p 5; Wire MSS; Hull 1958, 256-7). Though Wire's kiln is probably too far away to be the source, its presence may indicate the existence of other, closer, kilns.

Despite the probability that iron-working and pottery-manufacture were carried out just beyond the excavated area, the use of the site itself remains to be determined. During Period 1 Phase 1 sand was extracted from a small area of the site. The remainder may have lain vacant as waste land, or may have been exploited for a purpose of which no trace was left, eg as pasture for tethered or constantly-tended beasts. In Phase 2 the division of the site into plots, however loosely-defined the boundaries in some cases, precludes waste land. The absence of pits on all the plots apart from D suggests that there were no houses in the immediate area, and it may be that some of the plots represent large open areas around small workshops, as indicated by the ceramic and metal-working debris. However, given the absence on the excavated area of even one specific feature associated with an industry, an agricultural use of the site should be considered, either as pasture or for cultivation.

A 'rural' use of land so close to the Roman town is not surprising. That the suburbs were not always intensively built-up was demonstrated at Balkerne Lane, immediately outside the town wall on the west, where at least one plot was used for agricultural purposes from c 125/150-c 275 (CAR 3, 138-141). Even inside the town, land use was not restricted to building development, for at Culver Street substantial areas abutting the town wall were under agricultural or horticultural use from c 60/1 to at least the end of the 4th century (CAR 6, 33).

Richard Reece, in his analysis of the pattern of coin loss from Butt Road, suggested that the site should be called 'non-urban' (CAR 4, 22). Dividing sites into 'urban' and 'rural' gives a very restricted picture of land use, and takes no account of a town's need for agricultural or horticultural areas, whether intra- or extramural, but it is interesting to note that for at least part of the Roman period the site was indeed probably used for purposes which could be considered 'rural'.

The practice of placing human burials on or near agricultural plot boundaries is paralleled by a truly rural site, Lynch Farm, near Peterborough, Cambridgeshire, where a courtyard and paddock belonging to a late Roman farmstead were excavated. The courtyard was surrounded by a ditch, and contained just within its south-eastern corner four north-south aligned inhumations. Another north-south burial lay close to the north-south ditch dividing the courtyard and the paddock, and was cut by a recut of the ditch. The paddock was also enclosed by a ditch, and contained no archaeological features apart from many graves, all inhumations apart from one

cremation, and most aligned east-west and set in rows in the south-west corner (Jones 1975, 97-9). The excavator considered that other cremations were originally present, but had been ploughed away (*ibid*, 133) and that farm and cemetery were contemporary, with those working the farm buried within the cemetery (*ibid*, 136). A similar situation probably pertained at Butt Road, but whether or not each plot belonged to a different owner, or if they were part of a larger property or properties is uncertain.

The low number of young children and absence of infants may be accounted for by a number of reasons. For example, a different burial rite may have been practised for this age group, ie cremation. The *in situ* cremation G650 is of a child aged between 5 and 9.9, and need not necessarily predate the inhumations of older individuals, so that, as possibly happened at Lynch Farm, there may originally have been many other child cremations which were totally destroyed by later features on the site, or which lay just beyond the limits of the excavation. Alternatively, shallow child inhumations may have been destroyed by later activity, and again a different burial area may have been set aside for this age group (as at the villa at Hambledon, Buckinghamshire, and Barton Court Farm, Gloucestershire (Allason-Jones 1989, 42-3)). Finally, there is considerable evidence from other excavations in Colchester and elsewhere for the inhumation of a neonate in or immediately adjacent to its parents' house (CAR 3, 26, Appendix 1; CAR 6, 59, 61, 77, 79, 80, 82, 88, 130, 136, Appendix 5; Salway 1982, 695-6).

Examination of the faunal remains at Butt Road did produce small quantities of human infant bone from some Period 1 contexts: 8 gm from CL6, topsoil predating the Period 2 cemetery, but not necessarily belonging to Period 1 Phase 2; 1 gm from the ?roadside ditch AF136 (which may not have its origins in Phase 2); but most notably 17 gms from the fill of G371, the burial in the north-south boundary ditch of Plot A. This bone may have been residual in the fill of the ditch when G371 was dug, and so may pre-date Period 1 Phase 2, but there is a strong possibility that these fragments, residual or not, do date to Phase 2, and so represent a disturbed or damaged infant burial either set into G371 or destroyed by it.

The grave furniture in Period 1 Phase 2 burials, compared to that recovered from Phase 3 burials, is sparse. No other deposits accompanied the *in situ* cremation (G650), and only four inhumations contained accessory vessels. Two young adult males (G297, G305) were each buried with only part of a vessel, and a complete flagon was deposited with one middle-aged individual (G324; sex uncertain). Only one inhumation, that of an adult female (G693), was accompanied by multiple, and perhaps intrinsically valuable, grave goods, namely a service consisting of a pewter dish, ferra *sigillata* cup, glass flask and bowl.

Grave goods are not necessarily good indicators of social status or wealth, particularly as religious belief

and both family and community custom, at the very least, must also have influenced any decision on whether or not to furnish a grave, and if so, with what (Clarke 1979, 191). Though the grave goods in G693 suggest that this particular female had either sufficiently high status or wealth, whether personal or associated, to be buried with both an heirloom vessel (the pottery cup) and probably recently-acquired vessels (the dish and flask, and possibly the glass cup), it would be unwise to extrapolate from either the absence of deposits or the quality of deposits in other inhumations that they were lower in status than G693. Indeed, if the vessels were filled with food and drink when placed in the grave, their contents may have equalled them in importance.

The formality of the position in which an uncoffined body is placed in the grave, and, by association, the size and shape of the grave dug to accommodate the corpse, are perhaps better indicators of status than are grave accessories, and it may thus be asserted that several Phase 2 burials (eg G597, G604, G694) appear to have been carried out with less 'respect' than others.

To summarise, the burials in Period 1 Phase 2 appear to be related to agricultural plot boundaries, and may represent individuals directly associated with those plots. Both cremation and inhumation were practised, the former possibly reserved for young children, the latter for older children and adults. The apparent absence of elderly adults may be genuine, and may indicate a low life expectancy among the sector of the contemporary adult population engaged in agricultural work. The lack of formality shown in the deposition of some of the corpses, coupled to a paucity of grave accessories, may indicate the low social status and/or material wealth of many individuals in that sector, and may also indicate a change of ritual over time. The latter notion is supported by the likelihood that the unusually well-endowed inhumation G693 and the only other inhumation to contain a complete ceramic vessel may be the latest burials in the phase.

In a slightly wider context, Period 1 Phase 2 at Butt Road can thus be seen as a time when extramural land close to the walled town was roughly subdivided into plots used for a variety of activities, both industrial and agricultural, and when the people working on those plots were also buried there.

The date of Period 1 Phase 2

[Table 2.6]

There is little evidence to enable the date of commencement of Phase 2 to be set at all closely. It could be as early as the end of the 1st century, or as late as the 3rd. The plots may have been in use sometime before the earliest burial, or *vice versa*. The placing of G371 in the Plot A ditch CF58/CF49/CF50/

HF31 suggests the former, the cutting of G447 by the Plot B ditch CF35/61 the latter.

Though the difficulty in proving contemporaneity between the features indicates that there is no reason to suppose all the plot boundaries were marked out at the same time, the close relationships noted between several of the graves and the ditches imply a certain degree of overlap. Thus the ditches, and maybe to some extent the graves, can be seen as representative of the occasional formalising of boundaries previously agreed by common consent to within a metre or so.

The small number of burials ascribed to Phase 2 and the high proportion of inhumations within that number suggest that a later rather than an earlier date may be appropriate for the phase, and this is supported by the presence of both cremation and inhumation burials on only one plot.

The earliest dated burial at Lynch Farm, Peterborough, Cambridgeshire, the only cremation on the site, was attributed with a late 2nd or early 3rd century date (Jones 1975, 100). At Poundbury, Dorchester, Dorset, where the late Roman cemetery had its origins in burials associated with two 3rd-century courtyard houses, the burials related to one house were both cremations and inhumations (Green 1977, 50).

The period of gradual change from cremation to inhumation is set from about the mid 2nd century to no later than the mid 3rd century (Toynbee 1971, 40). The pottery vessels from the three Butt Road cremations indicate a date in the 2nd or early part of the 3rd century. They can thus be given an approximate date of c 200, which can be taken to apply not only to the use of the site for burials but also to the establishment of the plots.

The four ceramic vessels placed with Phase 2 inhumations are not useful aids to dating. It is the non-ceramic vessels accompanying the cup in G693 which give the likely closing date of Phase 2. These

Grave	Deposits	Date
G297	pot 2nd century +	
G305	pot Roman	
G324	pot 2nd century +	late 3rd century (stratigraphy)
G371	-	mid/late 3rd century (stratigraphy)
G650	pot 2nd century	
G662	pot 2nd century	
in G678	pot 2nd century	
G693	pot 2nd century, glass	270-300/20 (includes stratigraphy)
	mid-late 3rd century/late 3rd-4th century, pewter post-250	

Table 2.6. Summary of dating evidence from Period 1 Phase 2 graves. [Pages 27-8]

were a glass bowl of mid to late 3rd-century form, an unusual indented glass flask, which probably dates to the late 3rd or early 4th century, and a pewter dish which almost certainly dates to later than *c* 250. On balance, a date of no earlier than *c* 270 can be reasonably put forward for G693, and one closer to *c* 300 should be preferred.

Grave 693 was severely damaged by the cutting of a Period 1 Phase 3 inhumation, and was therefore probably undetectable on the ground surface when the latter, G687, was dug. Grave 687 is a plaster burial and therefore is probably later than *c* 300. It pre-dates east-west graves of the Period 2 cemetery and is therefore earlier than *c* 320/40 (p 159). The relationship between the two graves is of Clarke's Class a (1979, 119-20), and thus a period of 20 years or more is likely to have elapsed between them. So, if G687 dates at the earliest to *c* 300 and at the latest to 320/40, then G693 must date at the latest to 300/20.

The main period of activity on the site during Period 1 Phase 2 thus almost certainly belongs to the 3rd century, and may possibly be concentrated within its last two-thirds. Its closing date can be set by the date assigned to G693, *c* 270-300/20.

Period 1:

Phase 3

[Figs 2.2, 2.10]

In this phase a formal cemetery with north-south aligned inhumations was established on most of the site, its boundaries marked in part by ditches. The area designated Plot B in Phase 2 was not taken over as part of the cemetery, but may have been subdivided into two smaller plots. The southern extremity of the site, part of Plot D, also lay outside the cemetery, and Plots A and C East may also have survived, though there is little evidence to confirm this.

The boundary ditches

[Figs 2.2, 2.10]

The east-west ditch, CF59, which marked the boundary between the Period 1 Phase 2 plots, A and B, appeared to survive into Phase 3. Two recuts to the ditch have been commented on (p 14) and, together

with what little ceramic dating evidence there is, have been taken to indicate that the feature survived into Phase 3.

The influence of the line of CF59 may also be detected in the position of the northern end of another ditch, BF165/CF32, which was dug along the line of the western boundary of Plot B. This ditch cut both CF35/61, the southern boundary ditch of Plot B which appeared to have been completely filled in before it was cut, and the Plot B inhumations G312 and G297. At its northern end, as CF32, it was quite shallow, and was not detected north of the Period 2 graves G295 and G270. Though the ground for some distance north of these two graves was considerably disturbed by both densely-packed Period 2 graves and modern features, the ditch is perhaps unlikely to have continued much further north, if at all. The most northerly point at which CF32 was recorded coincides with a line projected westwards by CF59, and thus probably marks the north-western corner of Plot B.

At its southern end, as BF165, the ditch reached a maximum depth of 0.95 m and a width of 1.85 m. It made an acute (approximately 60 degree) turn to the east, to continue as BF167. Though at the corner the two stretches of ditch are at the same level, BF167 was consistently narrower (maximum 1.04 m) and shallower (0.65 m) than BF165, and its edges were much straighter. It was not recorded east of the Period 2 graves G167, G183 and G184, but its line is matched quite closely by a shallow gully, CF60 (width 1.2 m, depth 0.25 m), which approaches it from the north, and which cuts, as did BF165, the Phase 2 ditch CF35/61. CF60 also cut the upper fill of the Phase 2 inhumation G447, which pre-dated CF35/61. Though CF60 and BF167 have markedly different cross-sections, their similarity of line suggest that they are likely to have been contemporary parts of one boundary. The gap between them, if genuine, may have been filled by some other form of boundary such as a hedge or fence, or may have been a southern point of access into Plot B.

Very few finds were recovered from BF167/BF165/CF32, and what little pottery there was dated to the mid 2nd or early 3rd century. Though slightly more material derived from CF60, the pottery again was of 2nd- or 3rd-century date.

The southern limit of the cemetery was demarcated by the east-west ditch AF152 (maximum width 1.6 m, depth 0.75 m), which stretched across the width of the site from the eastern edge of the excavation to within 3.6 m of the general line of the western edge. Most of the area west of AF152 was filled by Period 2 graves and modern features, but it was not located in a small patch of cemetery topsoil on a direct line between it and the edge of the site. It appears therefore to have terminated somewhere in the area of the Period 2 graves G12 and G19. AF152 may have originated in Period 1 Phase 2, but it is clearly related horizontally to the Phase 3 graves in the area, a group of which (Group A, see below) respect it as a boundary.

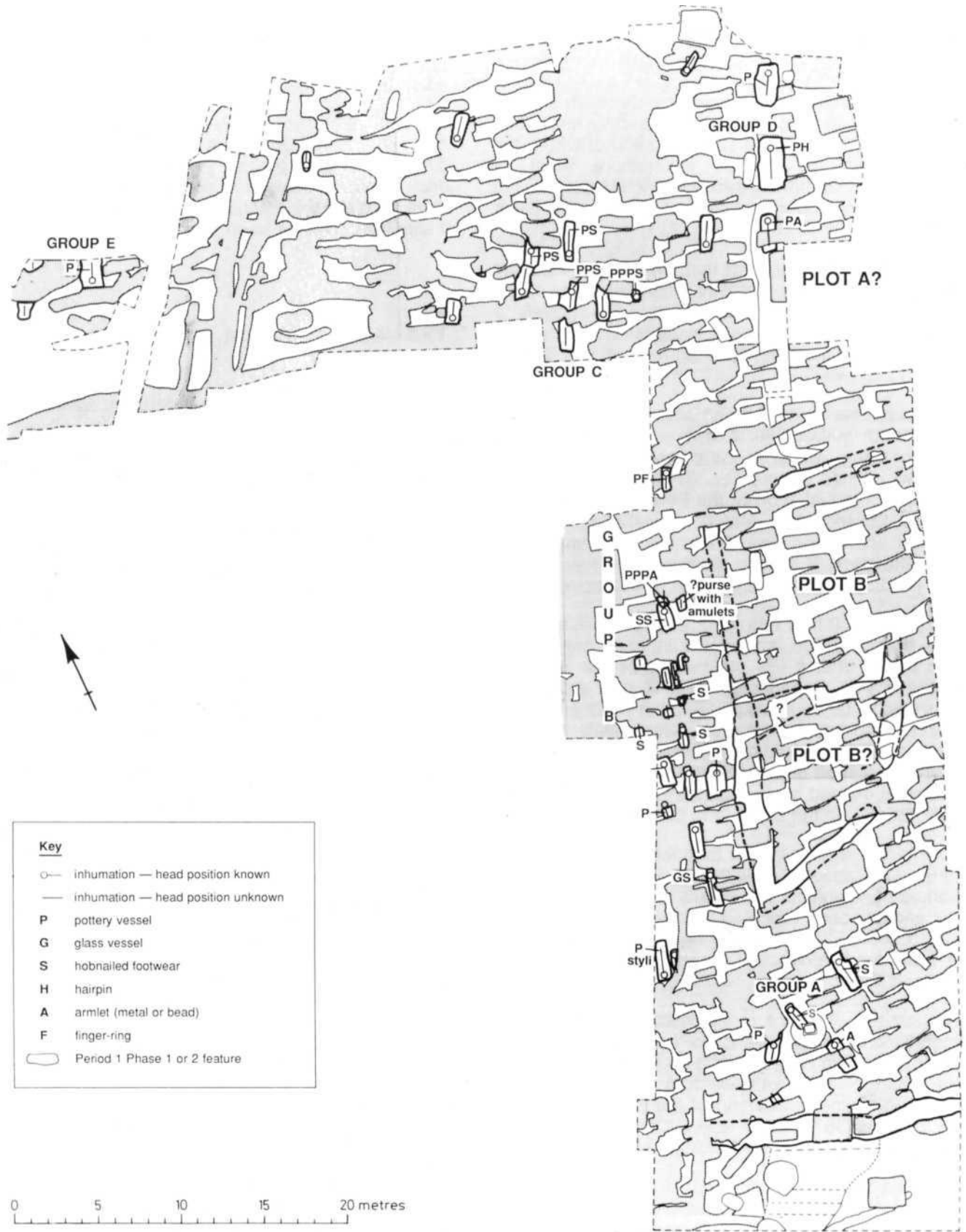


Fig 2.10 Butt Road Period 1 Phase 3. 1:333. [Pages 28-55]

The survival of plots into Period 1 Phase 3

[Figs 2.2, 2.10]

The very marked corner made by the ditch BF167/BF165/CF32, a second corner apparently formed by the line of CF59 and the supposed end of CF32, the concentration of coffined inhumations west of BF165/CF32, and the absence of such burials east of it, leave no room for doubt but that Plot B survived into Phase 3.

The line of BF167 suggests that, on the establishment of the cemetery, the plot was extended to the south beyond its old boundary of CF35/61. Alternatively, a short length of a shallow east-west gully, CF62 (width 1.2 m, depth 0.25 m), may show that Plot B was divided into two.

CF62 appears to have been contemporary with the north-south gully CF60. It was cut from the latter's western edge, and both the cross-section and fill of the two ditches are similar. CF62 was not located west of a line just short of the Period 2 graves G306 and G313, though a feature revealed only in the eastern end of the Period 2 grave G286 may have been the ditch. If it were, then it would have joined with BF165 a short distance west of that point.

The gully CF60 may represent a feature within Plot B, or a boundary line, and, if the latter, it may be no coincidence that it lies on the line of the Period 1 Phase 2 Plot C boundary. Plot B may thus have extended as far south as BF167, with CF62 and CF60 representing internal features. Alternatively, CF62, if joined to BF165, would have pushed Plot B's southern boundary a short distance to the north, and created a small plot defined by itself on the north, BF165 on the west, BF167 on the south, and CF60 on the east.

No Phase 3 features other than the gullies CF60 and CF62 were associated with Plot B, but a scatter of worked bone objects and offcuts was found within the plot and has been allocated to this phase. The scatter was concentrated within the northern part of Plot B, and may lend credence to the suggestion that the plot was split in two.

The survival of Plot A is impossible to confirm. It is suggested by the survival of the boundary ditch CF59 shared with Plot B, and by the apparent survival of at least part of the plot's western boundary line as indicated by the positioning of the Phase 3 coffined inhumations G679, G687, and G678 (Group D, p 34). No Phase 3 features were located within Plot A.

The area between AF152 and BF167 contained five coffined inhumations, one of which, G125, cut the pit above the Period 1 Phase 2 timber-lined well, BF119. These graves are part of the Phase 3 cemetery. How far to the east the cemetery extended is unknown. No coffined inhumations were found on or east of the supposed boundary line between the Phase 2 Plot C

West and Plot C East. However, the southern boundary represented by AF152 continues eastwards beyond it. Plot C East may thus have survived into Phase 3, but its survival, like that of Plot A, must remain hypothetical in the absence of any concrete evidence to support it.

South of AF152 a small part of the ill-defined Plot D may have remained in use, or, if the more southerly ditch AF136 does predate Period 2 and is a roadside ditch as suspected, then so little of the plot would have survived the establishment of the cemetery that it was likely to have been abandoned.

The use of Plot B in Period 1 Phase 3

A group of 49 offcuts and blundered or waste pieces from bone-working was concentrated in an area on Plot B south of CF59. Only two pieces lay further afield, one in a Period 2 pit AF160 (Fig 2.46) near the southern edge of the site, and one just north of CF59.

The group has been fully illustrated in *CAR 2* (figs 186-96), and discussed in Crummy 1981. It was assigned an early 4th-century date on the basis of its association with a coin of Maximianus (AD 303-5; *RIC6*: London 26b), and this date still holds good. However, the site interpretation put forward in both previous publications suggested that the Period 1 cemetery was no longer in use when the bone-working took place, and this opinion has now been revised.

There is a very slight possibility that Period 1 Phase 2 continued beyond the likely date of deposition of the coin, and this would place the bone-working industry at an earlier date than the establishment of the formal Period 1 cemetery, though contemporary with the use of the plots for uncoffined burials. However, a date later, though not much later, than c 310 is probably likely for the group, which would place it within Period 1 Phase 3, and thus contemporary with the formal Period 1 cemetery, and this later date is supported by the survival of Plot B into Phase 3.

The cemetery

[Table 2.7]

The cemetery defined by the boundaries outlined above appears to have contained very few graves for its total area. Only 44 inhumations, all aligned north-south, were excavated. Though most had been cut into by Period 2 interments and other later features, many were sufficiently well-preserved to show that all had been buried in wooden coffins, and just over half (55 per cent) had been accompanied by

Grave	Sex	Age	Head	Body	Arm/hand		Container	Grave goods	Group
					L	R			
G48	?	adolescent	-	-	-	-	n t coffin	-	A
G52	M	adult	N	supine	-	-	?t coffin	-	B
G70	M	17-18 yrs	S	probably supine	-	-	n t coffin	inside coffin: 2 styli; outside coffin pottery dish	B
G89	?	adult	N	probably supine	-	-	n t coffin	none	B
G95	I	child	N	-	-	-	n t coffin	outside coffin: pottery jar	B
G99	I	child	N	supine	-	-	n t coffin	outside coffin: pottery beaker	B
G100	?M	adult	N	probably supine	-	-	n t coffin	inside coffin: pair of shoes; outside coffin glass bowl	B
G119	M	middle-aged	N	supine	?a	b	n t coffin	-	B
G125	?	adult	N	supine	?a	?a	n t coffin	inside coffin: pair of shoes	A
G126	?F	middle-aged	N	probably supine	d	-	n t coffin	inside coffin on left wrist: metal armlet	A
G170	M	adult	N	supine	?a	-	t coffin	inside coffin: pottery jar	A
G177	F	adult	N	probably supine	-	-	n t coffin	inside coffin laid on lower legs: pair of shoes	A
G223	?	adult	N	supine	ai	b	n t coffin	outside coffin: pottery jar	B
G273	-	(child)	N	-	-	-	n t coffin	inside coffin: pair of shoes	B
G274	-	-	?N	-	-	-	n t coffin	inside coffin: pair of shoes	B
G275	-	-	-	-	-	-	n t coffin	-	B
G276	?	(child)	N	-	-	-	t coffin	-	B
G277	-	(child)	N	-	-	-	n t coffin	inside coffin: two pairs of shoes	B
G278	-	-	-	-	-	-	n t coffin	inside coffin: ?purse with amulets	B
G282	-	(child)	S	-	-	-	n t coffin	-	B
G290	-	-	-	-	-	-	n t coffin	-	B
G291	(F)	-	-	-	-	-	n t coffin	outside coffin: bead armlet, pottery bowls	B
G327	?	old	N	supine	-	-	n t coffin	inside coffin on finger: metal ring; outside coffin: pottery jar	B
G456	-	-	-	-	-	-	n t coffin	-	B
G458	-	-	-	-	-	-	?n t coffin	inside ?coffin: pair of shoes	B
G485	1	2-3 yrs	S	supine	ai	a	n t coffin	-	C
G522	-	(adult)	-	-	-	-	n t coffin	-	c
G533	?	?	N	probably supine	-	-	n t coffin	inside coffin on feet: pair of shoes; outside coffin: pottery jar and dish	c
G540	-	-	-	-	-	-	t coffin	-	c
G541	-	older child	S	supine	c	b	n t coffin	-	c
G554	?	adult	N	supine	-	-	n t coffin	inside coffin on feet; pair of shoes, pottery jar	c
G555	-	older child	S	supine	-	-	n t coffin	outside coffin: pair of shoes, pottery jar	c
G573	M	middle-aged	S	supine	a	a	n t coffin	-	D
G601	1	middle-aged	s	supine	b	a	n t coffin	inside coffin: pair of shoes, pottery jar; outside coffin: pottery jar and beaker	C
G605	1	adult	s	-	-	-	n t coffin	-	c
G619	-	-	-	-	-	-	t coffin	-	E
G624	?	18-20 yrs	s	supine	-	-	n t coffin	outside coffin: pottery jar	E
G633	-	-	-	-	-	-	t coffin	-	E
G651	-	adult	s	supine	-	ai	n t coffin	-	-
G678	?	old	N	supine	b	b	n t coffin	outside coffin: pottery jar	D
G679	(F)	adult	N	-	-	-	n t coffin	inside coffin ?on left arm: metal armlet; outside coffin: pottery beaker	D
G686	1	3-4 yrs	S	supine	-	-	n t coffin	none	0
G687	F	young	N	supine	-	-	n t coffin	inside coffin on skull: bone hairpin; outside coffin: pottery bowl/jar	D
G700	?	adult	S	-	-	-	?n t coffin	-	-
Totals					No	%			
Inhumations					44	-			
Head to N					21	48			
Head to S					12	27			
Head position unknown					11	25			
With grave goods					24	55			
Without grave goods					2	4			
Grave goods unknown					18	41			

Table 2.7. Summary catalogue of Period 1 Phase 3 inhumations. F... female; ?F... probable female; (F)... sex inferred from grave goods; I... indeterminate; L... left; M... male; ?M... probable male; N... north; R... right; S... south; ?... uncertain; Arm/hand positions: L... Left; R... Right; a... arm and hand by side; ai... arm by side, hand on pelvis/upper thigh; b... hand on pubis; c... forearm at right angles to upper arm; d... arm bent outwards with hand near chin or shoulder; n... nailed: timber; eg (child)... age inferred from grave/coffin size. [Pages 30-54]

grave goods. (It should be stressed that this figure is a minimum. In only 4 per cent of graves were deposits definitely absent.) Closely-associated graves tended to contain very similar grave deposits and to have the head of the corpse placed at the same end of the pit (north or south).

The low number of burials and overall consistency of burial characteristics are taken to indicate a cemetery operating over a fairly short period of time and with a formally-established approach to burial. The similarities between closely-associated graves seem to indicate the division of at least part of the land within the cemetery into family burial plots.

Relationships

[Fig 2.2]

Relationships between Phase 3 and Phase 2 burials have been examined above (p 16). In brief: a large part of G693 was destroyed by G687; only the base of the cremation vessel destroyed by G678 was found in the fill of the later inhumation; and part of one leg of G324 was removed by G327.

Only two vertical relationships were established within Phase 3 and in each case the damage caused to the earlier interment by the later was much less severe than that caused by Phase 3 burials to those of Phase 2, being restricted to the grave and leaving both coffin and corpse untouched. In the first instance, the upper fill at the northern end of G277 was cut by G291, leaving the nailed timber coffin undamaged. In the second, the southern end of G554 was removed by G541, again leaving the nailed timber coffin intact.

However, there is considerable evidence for horizontal relationships between Phase 3 graves, with many graves appearing to respect their immediate neighbours, being placed in rows side by side, or end

to end, eg G275, G282, G276, and G679, G687, G678. These relationships and their implications are discussed more fully on pp 34 and 51-4.

Most of the Period 1 Phase 3 graves were cut by Period 2 graves, with the degree of damage ranging from slight cutting of the grave fill to almost complete destruction (G605). Three graves (G52, G70, G619) appeared to have escaped damage during Period 2 but were cut by modern features, and two graves (G555, G700) apparently survived completely untouched. The latter two were, however, in an area affected by post-Roman terracing, which may have removed later, shallower, graves.

There is little or no evidence, such as surface markers or above-ground features such as paths, to provide a possible explanation as to why some Period 1 Phase 3 graves escaped damage by later features. Probably chance was the only reason, for if a range of damage is evident among surviving graves, then it should not be unexpected that some might remain completely untouched while at the opposite extreme others were totally destroyed.

The human skeletons

by *Stephanie Pinter-Bellows*

[Appendix 3, microfiche pp 972-88]

Age and Sex

[Table 2.8]

Most skeletons from Phase 3 graves were not well preserved, partly as a result of the destruction of the graves by later features, and partly through the natural process of decay. In fourteen graves little or no skeletal material was present at all. Only 23 skeletons had notes taken of their examination.

Age	Unknown sex	Males	Females	Total
birth-0.9	0	0	0	0
1-1.9	0	0	0	0
2-4.9	2 }	0	0	2 1
5-9.9	2 }(14)	0	0	2 }(14)
10-14.9	0 }	0	0	0 }
15-19.9	2	1	0	3
young adults (20-29.9)	0	0	1	1
middle-aged adults (30-49.9)	0 (2)	1	1	2 (4)
old adults (50+)	2	0	0	2
adults age unknown	5 (8)	3	1 (2)	9 (13)
individuals age unknown	2 (6)	0	0(1)	2 (7)
Totals	15 (34)	5	3(5)	23 (44)

Table 2.8. Demography of Period 1 Phase 3 cemetery. Figures in brackets are those produced by including a probable female, and females, unsexed adults and children identified by archaeological methods. [Pages 32-3]

Sex and age determination is presented in Table 2.8. Where grave and/or coffin size, grave goods, or earlier notes made by David Birkett for Carl Crossan can expand the numbers, the enhanced figure is given in brackets. Of the 23 skeletons, five were diagnosed as male or probable male, and three as female or probable female. Nina Crummy believes that this latter number can be increased to five by the inclusion of armlets in two unsexed graves (G291 and G679). Ten skeletons were not sexed because of the poor condition of the bones, and four were subadults and so could not have the sex determined. No infants were found, though there are some young children. The number of subadults can be increased to seventeen when Dr Birkett's early notes and the grave/coffin size are taken into account. Of the fifteen adults, those of unknown age make up the largest proportion.

The population sample from the Period 1 Phase 3 cemetery differs from that of Period 1 Phase 2 in the number of children represented. While infant burials were not identified from either, the burials of young children form a large part of the Phase 3 group. The Phase 3 cemetery represents a more complete cross-section of the population in terms of age.

Stature

Stature could be calculated for one male (1.61 m) and one female (1.59 m). The male has a stature below the mean for Period 2 (p 64), and the female has a stature above the mean for Period 2 (*ibid*).

Metrical analysis

[Table 2.9]

Two females out of the fourteen adult burials from the Period 1 Phase 2 cemetery had their measurements recorded. A distribution of indices made from these few measurements can be seen in Table 2.9.

Class	Range	Males	Females
Cephalic index			
hyperdolichocephalic	x-69.9	0	1
dolichocephalic	70-74.9	0	0
mesocephalic	75-79.9	0	0
brachycephalic	80-84.9	0	0
hyperbrachycephalic	85-x	0	1
Nasal Index			
leptorrhine	x-47.9	0	0
mesorrhine	48-52.9	0	1
platyrrhine	53-x	0	0

Table 2.9. Metrical distributions, Period 1 Phase 3 cemetery.

Non-metrical analysis

[Table 2.10; Fig 2.6]

Three of the adult burials, three males and two females, have had their non-metrical variants recorded. The distribution of fifteen traits is shown in Table 2.10. Two characteristics are plotted on Fig 2.6, and the possible significance of the plots is discussed on pp 51-4.

Variants	Females		Males		Combined	
	no	+	no	+	no	+
metopism	2	1	2	1	4	2
bregma bone	2	0	2	0	4	0
coronal wormian	2	0	2	0	4	0
sagittal wormian	2	0	2	0	4	0
lambdoid wormian	2	1	1	0	3	1
asterionic ossicle	2	0	1	0	3	0
epipteric ossicle	2	0	1	0	3	0
inca bone	2	0	1	0	3	0
supra-orbital notch	2	1	2	1	4	2
double supra-orbital foramen	2	0	2	0	4	0
supra-orbital grooves	2	1	2	1	4	2
double hypoglossal canal	1	0	1	0	2	0
atlas bridge	1	0	1	0	2	0
septal aperture of humerus	2	0	2	0	4	0
femoral third trochanter	1	0	3	1	4	1

Table 2.10. Frequency of non-metrical variants. Period 1 Phase 3 cemetery.

Pathology

There are no congenital pathologies from the Period 1 Phase 3 cemetery. There are several pathologies which fall under the infection category. A middle-aged adult female (G126) has periostitis of the right and left tibia and fibula. A young adult female (G687) has sinusitis of the left maxillary wall. In looking at dental disease, only one male and one female had part of the maxillae and mandibles surviving. If these had contained complete normal dentitions 64 tooth positions should be identifiable but owing to post-mortem damage only 58 (91 per cent) were available for study. Only one tooth was lost ante-mortem, a maxillary second molar. There was one abscess, at a maxillary first molar. There were two caries, both in the male.

Signs of degenerative disease were found in one individual. This male had no osteophytes, but did have osteoarthritis of the thoracic vertebrae and the ribs, shoulder, knee and foot. There was one miscellaneous pathology, a middle-aged adult female (G126) with a tiny osteochondritis dissecans pit on a first phalanx. There were no signs of metabolic disease. •

Alignments

[Table 2.7]

Five groups of graves, by and large sharing similar alignments and evenly spaced so that intercutting is rare, can be distinguished. These groups are:

- Group A** in the south-east: G48, G125, G126, G170, G177;
- Group B** all the graves in the south central area: G52, G70, G89, G95, G99, G100, G119, G223, G273, G274, G275, G276, G277, G278, G282, G290, G291, G327, G456, G458;
- Group C** in the north central area: G485, G522, G533, G540, G541, G554, G555, G601, G605;
- Group D** in the north-east: G573, G678, G679, G686, and G687;
- Group E** in the north-west: G619, G624, G633.

Two graves, G651 and G700, on the northern edge of the site cannot be allocated to a group, but, as the area was badly damaged by post-medieval terracing, they may be all that is left of a sixth group.

The integrity of these groups can be tested by an examination of burial characteristics and non-metrical variants of the skull, and is discussed further on pages 51-4.

Grave shape

[Fig 2.11]

Most graves were more or less rectangular: some had straight parallel sides and neatly squared-off corners (G100, Fig 2.11c), while others tapered along their length (G70, Fig 2.11a) and had slightly bowed or dished short sides and rounded corners (G679, Fig 2.11d).

The profiles of the graves varied considerably. A few were shallow dished scoops, eg G275 (child), G282 (child), and G290 (age unknown). Most were between 0.5 and 0.7 m deep, with very slightly sloping sides and an almost flat bottom. Grave 99 (child) was extremely deep, 1.57 m, with the east side sloping slightly, and the west side vertical near the top of the grave but sloping at the bottom. Many graves had one almost vertical side, usually the east, and one sloping side, usually the west.

In some graves the junctions of the bottom and the sides were rounded, in others almost right-angled. Grave 678 had a flat bottom and straight sides, with squared-off junctions between sides and bottom. At 1.2 m, it was deeper than average. Some graves had rounded bottoms and sloping sides (G125). The profile of G624 was very unusual, the bottom sloped upwards from east to west, the depth varying from

0.67 m on the east to 0.45 m on the west. The east side was straight and sloping, the west was convex.

While many graves were almost filled by their coffin (G100, Fig 2.11c), several others were wider and/or longer than might be considered necessary. In some of these cases the timber coffin lay close to one side/end of the grave, and a grave deposit lay close to the other side/end. Examples of this arrangement are G70 (Fig 2.11a), where the coffin was placed on the west side of the grave, and a BB2 dish/bowl in the south-east corner, and G99 (Fig 2.11b), where the coffin lay closer to the south end of the grave than to the north, and a Colchester colour-coated ware beaker was set inverted at the north end.

Coffins

In six graves timber staining from a coffin was located but no nails; in three of these graves (G276, G540, G619, G633) the absence of nails is matched by an absence of skeletal material and in one (G633) the grave was only excavated to the top of the coffin. Only in two graves (G170, G573) was the absence of nails paired with a well-preserved skeleton. These two graves may therefore indicate the use of an unnailed, presumably jointed or pegged, coffin.

Even where nails were present, collapse and distortion of the coffin meant that many were no longer *in situ*, and the quality of the original plotting varied considerably, making attempts at reconstruction difficult. Only in ten graves in Period 1 Phase 3 (G99, G125, G177, G223, G291, G485, G554, G555, G601, G686) was the evidence of the coffin's construction convincing, and in all ten the same method appeared to have been used. The head and foot boards were set between the side boards, and the base board ran the full length and width of the box so outlined. In one grave (G624), the position of some nails appeared to indicate that the side boards were set between the head and foot boards, but as only the head end survived, and had been distorted when the coffin collapsed, this interpretation is open to question.

The number of nails used to fix the boards together varied considerably from coffin to coffin, as did the length of the nail shafts, their diameter, and the size and shape of the head. However, on individual coffins the nails tended to be of a consistent size, suggesting that they were made in batches as necessary (cf Clarke 1979, 332).

Mineral-replaced wood preserved on some of the nails allowed the thickness of the coffin boards in two graves to be estimated, 37.5 mm in G223 and 47.4 mm in G277. The wood used was oak (identifications by Jacqui Watson, Ancient Monuments Laboratory, English Heritage, and Mark Wildon). Philip Crummy has estimated that a large empty coffin made

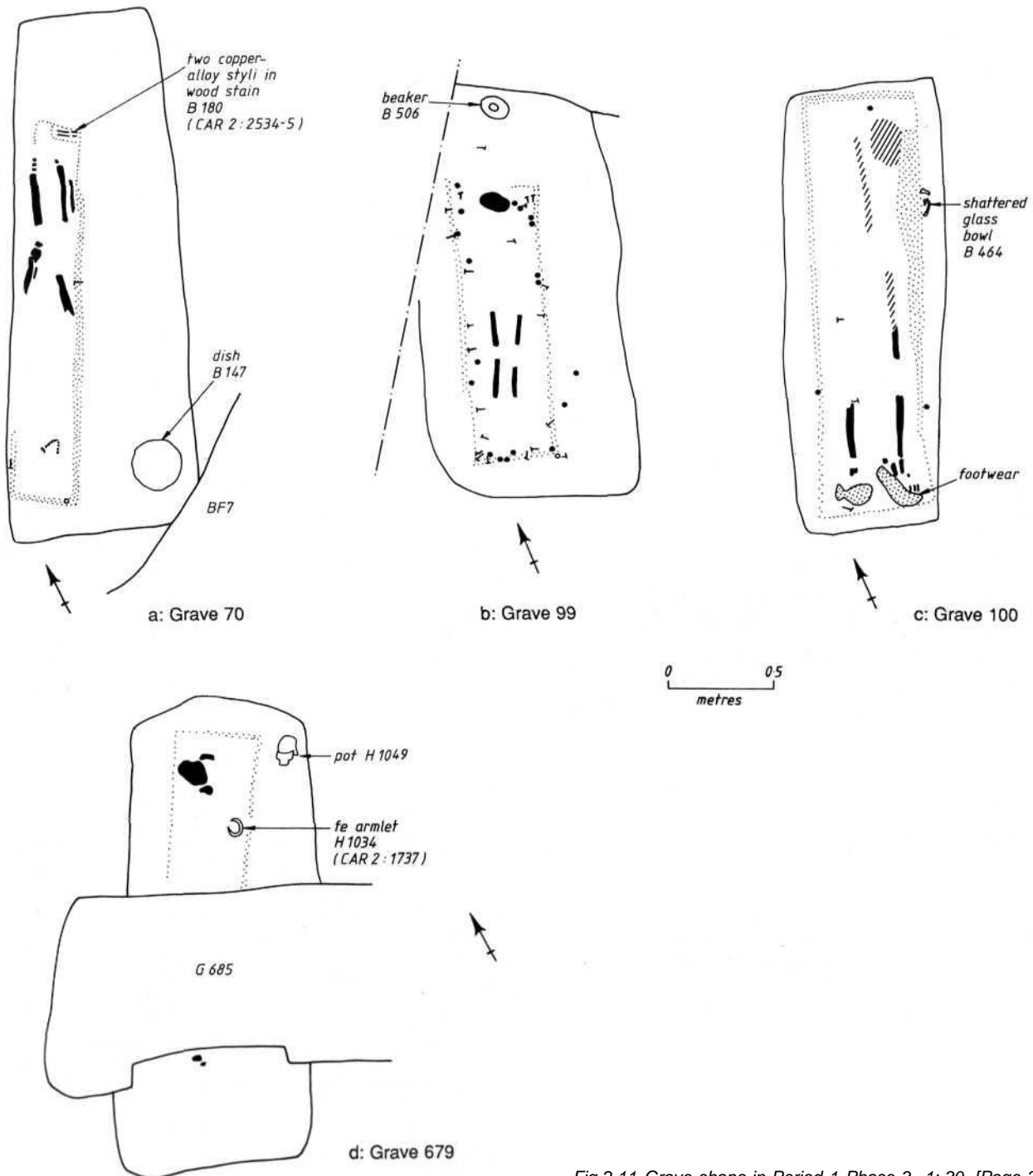


Fig 2.11 Grave shape in Period 1 Phase 3. 1: 30. [Page 34]

from boards about 45 mm thick could have weighed as much as 200 kg.

Lid nails were noted in G99, G555, G624, and possibly G291. The apparent absence of lid nails from some graves may not necessarily be due to either collapse of the coffin or later disturbance, nor need it necessarily imply the absence of a lid. Rather, there was no perceived need to fix a lid down securely. Given the likely weight of a coffin, it was probably placed empty in the grave and the corpse then laid within it, the lid only being placed on top after all the rites requiring

access to the inside of the coffin were complete. Access to the coffin in the grave was certainly true of the plaster burial G687 (see below), and may also be true of some burials where vessels were placed inside the coffin. There seems to have been no lid nails for the coffins of G554 and G601, and in the latter grave (perhaps both) a pottery vessel was placed inside the coffin, while in the four graves where lid nails, or possible lid nails, were identified (G99, G291, G555, G624), vessel(s) lay outside the coffin. Moreover, of eleven graves containing hobnailed footwear, in only one, G555, were the shoes placed outside the coffin,

and, of the five graves containing jewellery, in only one, G291, was it placed outside the coffin. In these cases nailing down the lid may have been an undertaker's error.

Plaster burial

[Fig 2.12]

In G687 (young adult female), the base of the nailed timber coffin was covered with a layer of lime plaster (identification by J Evans & M Card, in archive). No plaster was noted on the upper surface of the bones (Fig 2.12b).

Evans and Card considered that the lime in G687 had been added wet, ie as quicklime, which would have had the effect of accelerating the destruction of the flesh, while in the long term preserving the bones. This identification is supported by evidence, detailed below, from a pottery vessel in the grave.

Indeed, the most interesting aspect of this burial is suggested by the size of the grave pit and by the accompanying pottery vessel. The pit was both very wide (1.6 m) and very long (3.1 m) compared to the coffin (maximum 1.7 x 0.38 m), which was placed slightly to one side in the pit (Fig 2.12a). The vessel was a coarse grey ware bowl/jar, CAM 307, which lay on its side next to the coffin in the widest space between coffin and pit wall. It was coated internally with a thick layer of plaster, which on one side also spread over the rim (Fig 2.12b). The plaster appears to have been mixed to a slurry in the bowl and then poured into the coffin. The empty bowl was left in the grave, but perhaps should not be seen as a true grave deposit. At a mundane level, it could clearly not be used for domestic purposes again and so may simply have been abandoned, but, more likely, it was perceived as associated irrevocably with the burial, and thus the grave was the only suitable place for it. The size of the grave suggests that the mixing of the plaster and its application to the coffin occurred in the grave. The body would have either been removed from the coffin to allow the plaster to be spread on the base, or was not placed within it at all until after the substance was applied.

Plaster burials have been discussed by, among others, Green (1977), Watts (1991, *passim*), and Whytehead (1986, 54-8). Though many are of 4th-century date and identified as Christian, others are earlier. Twelve quicklime burials were recorded at Dunstable, Bedfordshire, and several other plaster burials are recorded from pagan cemeteries in Britain (Watts 1991, 60). Green, discussing burials where the plaster was gypsum, believed that it was applied with the intention of preserving the flesh. This was clearly not the case with the quicklime applied to G687.

Whytehead has suggested two reasons for covering a body only partially with lime plaster: either the

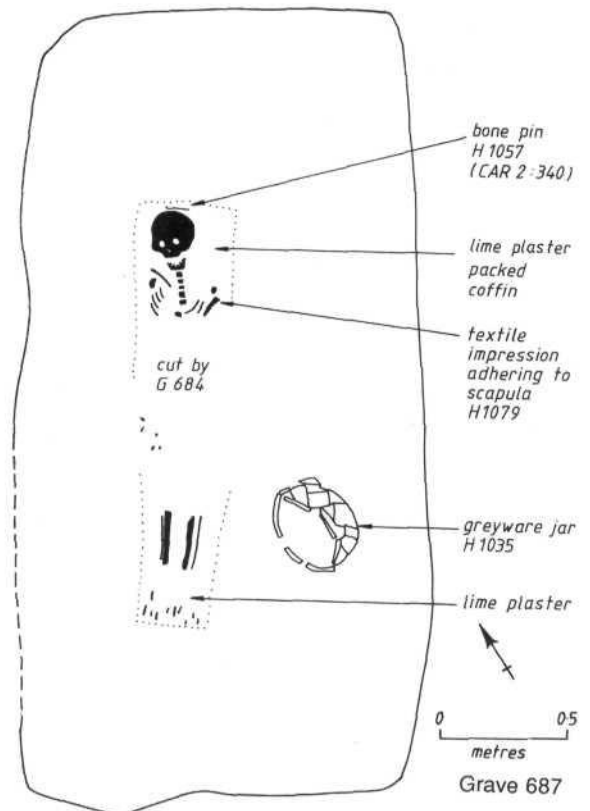


Fig 2.12 Grave 687, Period 1 Phase 3. See also Figs 2.14c, 2.18b. Plan 1:30. [Pages 36-7]

substance was symbolic of a shroud and thus the amount used was not important, or the coverage of specific areas of the body could be related to what was considered to have been the cause of death. The discovery of an impression of textile in the plaster in G687 seems to refute the first of these suggestions, as do remains and impressions of textile in a Period 2 gypsum burial at Butt Road (G295; p 126). Wild holds that textiles found in graves were used to wrap the corpse (CAR 2, 148; p 129), and Green cites North African graves where the body was first clothed in a shroud and then placed on a bed of plaster inside a stone coffin (a rite remarkably similar to what seems to have happened in G687). A symbolic shroud would therefore be superfluous if a physical shroud were already present. The second suggestion is also unlikely to be applicable in the case of G687, as the whole body lay on plaster, not plaster on part of the body.

Corpse position

[Table 2.7; Figs 2.13-2.14]

In all but ten graves either sufficient skeletal material survived to indicate at which end of the grave the head had been laid, or the locations of grave goods allowed a reasonable assumption as to head position to be made. In 21 graves (48 per cent) the body lay with the head to the north, and in 12 graves (27 per cent) the body lay with the head to the south. The

percentage difference between the two head positions is exceeded by the percentage of graves where the head position is unknown (25 per cent). It would therefore be unwise to suggest that the more favoured position was head to the north, especially since a number of other factors may well have some bearing on the head position.

Some group and geographical trends can be perceived between graves with different head positions. In the southern and north-eastern areas of the site, graves with head to the north clearly predominate: four out of five in Group A, twelve out of twenty in Group B, and three out of five of Group D. That is, 63 per cent, which can be set against 13 per cent with head to the south and 23 per cent with head position unknown. In the rest of the northern area head to the south predominates: five out of nine in Group C, and three of the remaining five. That is, 57 per cent, as opposed to 14 per cent with head to the north and 29 per cent with head position unknown. Moreover, within the northern area it can be noted that of eight graves on the western side five have head to the south, while the head position of the remaining three is unknown.

These geographical trends can lead to assumptions about the head position in those graves where a lack of other evidence does not permit it to be identified. It could be argued, for example, that G48 in Group A and G278, G290, G291, G456 and G458 in Group B would have been laid head to north, and that G619 and G633 in west are more likely to have been laid with the head to the south.

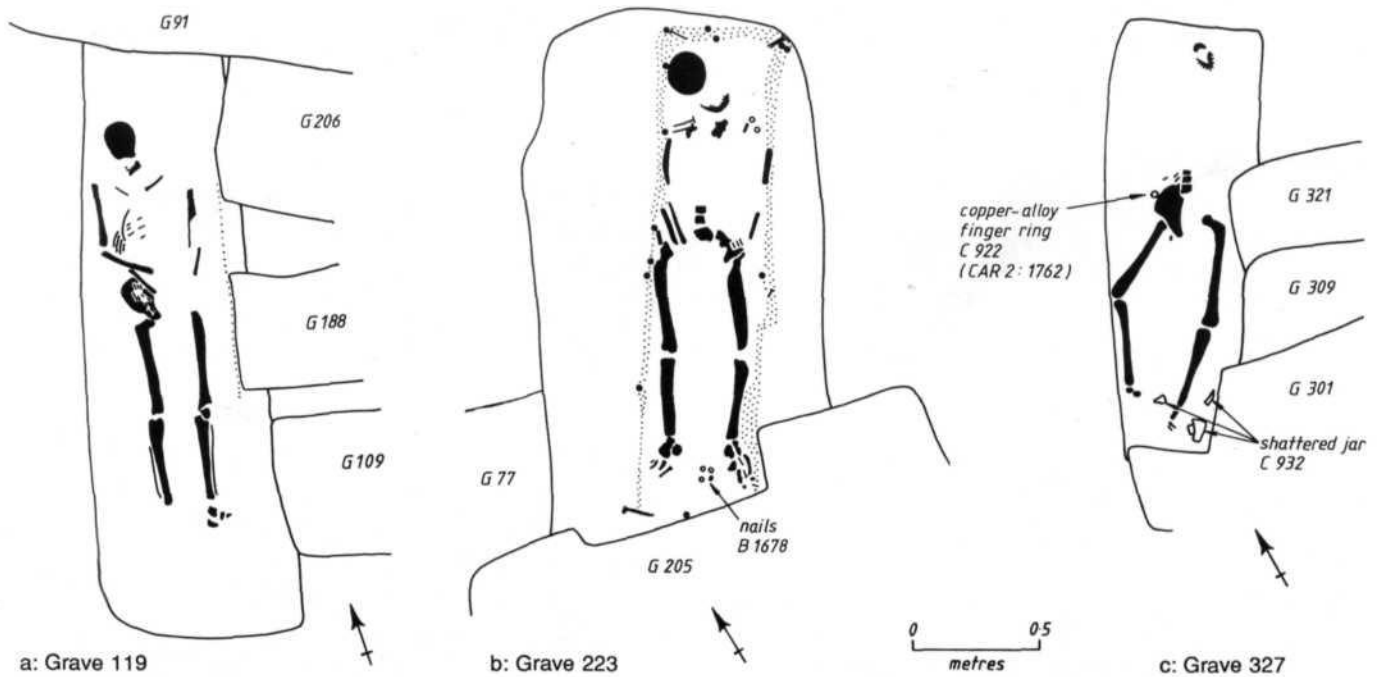


Fig 2.13 Corpse positions in Period 1 Phase 3 graves. 1:30. [Pages 37-9]

The body position could not be securely determined in 20 graves (45 per cent). In 19 graves (42 per cent) the body lay supine, and in a further six (13 per cent) the body may have lain supine. There is no positive evidence for non-supine burials.

In most of the well-preserved supine burials the corpse appears to have been formally laid out, ie in an

extended position. The position of the skull could have altered after burial as a result of many factors, such as decay of the corpse, decay of a shroud (if used), or collapse of the coffin, but in general the favoured position for the head on deposition appears to have been 'full face'. In most cases where the bones remain, the legs appear to have been straight (G119, Fig 2.13a), though the right leg of G327 was slightly



Fig 2.14 Jewellery in Period 1 Phase 3 graves. [Pages 39-41]

flexed (Fig 2.13c). The positions of the arms could only be determined in a few cases. Most appeared to be straight by the sides, with the hands either also by the sides, or on the hip/upper thigh or pubis (G119, Fig 2.13a, G223, Fig 2.13b). In G541 the left forearm was bent across the waist, and in G126 (Fig 2.14a) the left arm was bent, elbow outwards, with the hand near the chin or shoulder.

Corpse wrapping

Preserved in the plaster close to the scapula of the young adult female in G687 was an impression of woven textile. This impression was not included in the report on the textile fragments from east-west graves at Butt Road by John Peter Wild in *CAR 2*, 147-8. Only a photograph of the impression survives, unfortunately with no scale, thus the number of threads per 10 mm cannot be given. The textile shown is a closely-woven plain-weave, with finer threads in one system than in the other.

Wild has put forward the hypothesis that textiles from the Period 2 Butt Road graves, and also at York, North Yorkshire and Poundbury, Dorset, were used to wrap corpses and grave goods, and do not represent the remains of clothing, except in secondary use (*ibid*). This hypothesis may also be extended to the textile from G687, which has thus not been classified as dress and included among the grave goods, but treated as an entirely separate facet of burial practice.

Grave goods

[Tables 2.7, 2.11]

Grave goods were recovered from 24 graves (55 per cent) and were positively absent from only two graves (4 per cent). In eighteen cases (41 per cent) the grave was partly destroyed by later interments or other features so that the absence of grave goods on excavation cannot be taken to mean that grave goods had never been present. This is especially true if the head or foot of the grave were missing, as many grave goods appear to have been deposited in these positions.

When the age of the skeleton is linked to the practice of depositing grave goods little variation can be seen from the general total given above. Twelve out of 20 adult graves contained grave goods (60 per cent), one contained none (5 per cent), and seven (35 per cent) were too damaged to tell. Ten out of seventeen juvenile graves contained grave goods (59 per cent), one contained none (6 per cent), and six (35 per cent) were so damaged that the presence or absence of deposits could not be determined. In the remaining two graves with deposits the age could not be estimated.

Household vessels were the most common deposit, with 21 (20 ceramic, one glass) placed in sixteen graves, ie 67 per cent of those containing grave goods, and 36 per cent of the total from the Phase 2 cemetery. Vessels were placed in male and female graves and with all age groups. Hobnailed footwear was deposited in eleven graves (46 and 25 per cent respectively), again with no distinction as to sex or age. Five graves (four female, one of uncertain sex) contained pieces of jewellery (21 and 11 per cent respectively), while in one a ?purse holding items of amuletic significance was deposited, and in one two *styli*.

There is some pattern to combinations of deposits. Five of the eleven graves in which footwear was deposited also contained a vessel or vessels, as did four of the five graves in which jewellery had been deposited, and the grave containing the *styli*. On the other hand, jewellery was not deposited with footwear. This appears to imply that while vessels accompanied both male and female burials, jewellery only accompanied females, and hobnailed footwear males, in which case the adult female in G177 (footwear only) was wrongly sexed. However, the deposition of vessels was common and the deposition of jewellery comparatively unusual, so that a combination of a vessel and any another deposit was more likely to occur than a combination of jewellery and any other deposit. No clear distinction as to age and sex can be determined for graves containing footwear in this cemetery (pp 41-2), nor in the later Period 2 cemetery (pp 145-6).

Personal adornment or dress

a) Armlets

[Figs 2.11, 2.14]

Two metal armlets were found associated with skeletons, one in G126 (Fig 2.14a), and one in G679 (Figs 2.11d, 2.14b). Though the skeletal material in neither grave was well-preserved, it seems likely that in each case the armlet was worn by the corpse at the time of interment.

A plain penannular oval-section copper-alloy armlet (*CAR 2*, fig 42, 1644) appears to have been on the left wrist of the skeleton in G126 (middle-aged ?female; Group A). The left arm seemed to be bent, with the elbow sticking out and the left hand near the chin or shoulder. The armlet lay beyond the arm bone shafts close to the remains of the skull, a position which suggests that it was on the wrist or had fallen forward over the hand at the time of burial (Fig 2.14a). The armlet was the only object deposited in the grave.

A plain iron armlet of ?circular section (*ibid*, fig 48, 1737) was found in G679 (adult, sex uncertain; Group C) in a position compatible with its having been on the upper left arm (Fig 2.14b), though given the absence of arm bones this interpretation can only be regarded

as very tentative. Outside the coffin of this grave lay a rouletted beaker of Nene Valley colour-coated ware (P 47).

An armlet of glass and jet beads was deposited outside the coffin of G291 beneath two pottery bowls. No skeletal material survived in G291, and the northern end of the grave was destroyed by later features. The armlet is composed of sixteen beads: a jet standard cylinder with faceted rectangular section (faceted cuboid; CAR 2, 932); thirteen long biconical beads of opaque dark blue glass (*ibid*, fig 36, 961, 962-73); also of opaque dark blue glass, a long cylinder bead of rectangular section (*ibid*, 1414); and a second long cylinder bead of rectangular section but of opaque mid blue glass with an opaque white paste marvered chevron with central red band (*ibid*, fig 36, 1415).

These armlets confirm the tentative pathological identification of G126 as female, and indicate that both G679 and G291 were female burials, though the likely age of the latter, juvenile or adult, is unknown.

b) Hairpin

[Figs 2.12, 2.14]

A bone hairpin of Type 3 (*ibid*, 340, head subtype A) was found touching the skull of the young adult female in G687 (Group C plaster burial). The pin lay in a position suggesting that it passed transversely through a bun or other gathering of hair at the top left side of the skull (Figs 2.12a, 2.14c). Pins of this type are considered to post-date AD 200 at Colchester.

c) Finger-ring

[Figs 2.13-2.14]

A copper-alloy finger-ring (*ibid*, fig 50, 1762) lay among the hand bones of G327 (elderly adult, sex uncertain) (Fig 2.14d). The bones were in a poor condition, with only a few surviving, but as the ring lay to the right of the pelvis it was probably on a finger of the right hand (Fig 2.13c). The ring is of substantial circular section (4.5 mm in diameter) and very corroded, with traces of cable decoration visible on its

Grave	Sex	Age	Personal adornment & dress			Household vessels	Writing equipment	Coins
			Jewellery	purse + amulets	footwear			
G70	M	17-18 years				X	XX	
G95	-	child				X		
G99	I	child				X		
G100	?M	adult			X?worn	X		
G125	?	adult			X			
G126	?F	middle-aged	Xworn					
G170	M	adult				X		
G177	F	adult			X			
G223	?	adult				X		
G273	-	(child)				X		
G274	-	-				X		
G277	-	(child)				XX		
G278	-	-		X				+++
G291	(F)	-	X			XXX		
G327	?	old	Xworn			X		
G458	-	-				X		
G533	?	?				Xworn	XX	
G554	?	adult				Xworn	X	
G555	-	older child				X	X	
G601	?	middle-aged				X	XXX	
G624	?	18-20 years				X		
G678	?	old				X		
G679	(F)	adult	X?worn			X		
G687	F	young adult	Xworn			X		
Totals:	items		5	1	12	21	2	3
	graves		5	1	11	16	1	1
	worn		2(3)	2(3)				

Table 2.11. Grave goods by function, Period 1 Phase 3. F... female; ?F... probable female; (F)... inferred from grave goods; I... indeterminate; M... male; ?M... probable male; X... one item; ?... uncertain; +... cross-referenced from jewellery; (child)... age inferred from grave/coffin size. [Page 39]

powdery surface. The decoration may have been incised into the metal, or may have been all that remained of a thin wire wrapped around the ring. The sherds of a grey ware jar, CAM 268, lay outside the coffin (p 44).

d) ?Purse with amulets

Inside the coffin of G278, sealed by the collapsed west wall against which it lay, was a ?purse of copper-alloy links containing several objects of amuletic significance. All could be suspended to form an armband or necklace, and so this deposit has been classed with objects of personal adornment. The links and objects were in a large lump of iron corrosion, sand and gravel (from an immediately adjacent nail), which proved an insuperable barrier to positive identification and careful extraction of the pieces during conservation. When X-radiography showed no objects other than links within the lump, work on it stopped.

Three types of link were identified, all with an external diameter of about 7 mm: thick (1.5 mm) penannular links, thin (1 mm) annular (stamped) links, and thin (1 mm) penannular links with flattened and pierced terminals fixed by a rivet (*ibid*, fig 57, 1850). The thick penannular links appear to be predominate. No patterns of interlinking can be distinguished, but at least one example can be seen of each type joined to each other type. This complex interlinking would seem to rule out interpretation of the pieces as a simple neck chain with suspended amulets, leaving as possible alternatives either an intricate chain necklace, or a purse. However, the lump containing the links and objects had not only area but also depth, so that the latter alternative seems most likely. The purse may have been lined with organic material, and the amulets inside it possibly strung on a thread, thong, or thin metal wire, long since completely decayed.

Seven objects were associated with the links. Two are well-worn pierced coins: a copy of an *as* of Claudius I, reverse Minerva advancing right, holding shield and raising spear, dated 43-64 (*CAR 4*, 31); and a *denarius* of Julia Maesa, reverse Pudicitia seated left holding sceptre, dated 218-25 (*ibid*, 82). A third coin, an *as* of Hadrian, dated 117-38, also very worn, was not pierced but mounted for suspension (*CAR 2*, fig 54, 1805; *CAR 4*, 82). The reverse shows the emperor, a spear at rest in his right hand, on a horse prancing right. The coin is enclosed in a frame of silver with a suspension loop soldered at the top of the vertical axis of the reverse type. The frame around the reverse is crenate and bears a decoration of incised lines, but around the obverse the frame is plain. It seems clear that the reverse of the coin was its significant feature, and the same may well be true of the other two coin reverses.

Two of the objects are of copper-alloy: a bell and a horned phallus (*CAR 2*, fig 54, 1811). The phallus is

quite small, only 17 mm long and 15.5 mm wide, with a stout pierced projection for suspension behind the lunular horns (*ibid*, fig 54, 1804).

The sixth object is an amber head, identified by Martin Henig as a product of Aquileia, and possibly an heirloom piece dating to the early Empire. It shows a male Ethiopian or pygmy, with possible apotropaic features, most notably the long, perhaps phallic, nose (Henig 1984, 244-6; *CAR 2*, fig 54, 1802).

The seventh object is a pierced ?dog's canine (*ibid*, fig 54, 1803). Two pierced teeth were found in Grave 450, dated c 390-410, in the Lankhills cemetery, Winchester, Hampshire, and were attributed with an Anglo-Saxon origin (Clarke 1979, 296-7). Clarke cites parallels from pagan Anglo-Saxon graves in England, and from a late 4th- to early 5th-century grave at Mayen, West Germany. The tooth from G278 is associated with objects of undoubted Roman manufacture, possibly both continental (the coins and the amber head) and insular (the frame round the coin of Hadrian and probably also the copper-alloy objects), is stratigraphically earlier than the late 4th century, and is from a grave with a pre-Christian alignment. It thus pushes the date of appearance of pierced canines in Romano-British cemetery contexts back to at least the early 4th century.

No skeletal material survived in G278 nor did the full length of the coffin. However, the latter's narrow width suggests that this was a child burial.

It is unfortunate that the skeleton from G278 did not survive. The collection of amuletic pendants deposited in the grave almost certainly represents an attempt to aid the child by harnessing the power of the gods to turn aside evil, not only on the journey to the underworld, but perhaps also during illness. Pathological evidence of long-term and/or fatal disease would have been a valuable support to any idea that the amulets in G278 were used during the child's lifetime. The group should be compared to three collections of beads and amuletic pendants in Period 2 child graves (pp 137-141).

e) Footwear

[Table 2.12; Figs 2.11, 2.15]

Twelve pairs of hobnailed shoes were deposited in eleven graves. The hobnails were very corroded and no leather survived in the sandy soil, but dark stains, from decayed mineral-impregnated leather, around the nails allowed the approximate shape of some of the shoe soles to be planned (*CAR 2*, fig 56).

Soil movement on the collapse of the coffin or shifting of the shoes within the coffin during deposition, coupled with unfavourable soil conditions, left a jumble of nails as the only trace of some shoes, while in some cases corpses had been buried wearing shoes, so that decay of the flesh and collapse of the foot bones left the nail pattern distorted.

Grave	Sex	Age	Head position		CAR 2 catalogue number
G100	?M	adult	N	one pair, ?worn (inside coffin by foot bones)	1831
G125	?	adult	N	one pair, inside coffin, S end	1832
G177	F	adult	N	one pair, inside coffin, one on each tibia	1834
G273	-	(child)	N	one pair, inside coffin, S end	1836
G274	-	-	?N	one pair, inside coffin, S end	1838
G277	-	(child)	N	two pairs, inside coffin, S end	1837
G458	-	-	-	one pair, ?inside coffin, ?S end	1841
G533	?	?	N	one pair, worn	1843
G554	?	adult	N	one pair, worn	1844
G555	-	older child	S	one pair, outside coffin, N end	1845
G601	?	middle-aged	S	one pair, inside coffin, W side, one by left knee, one by left foot	1847

Table 2.12. Location of footwear in Period 1 Phase 3 graves. F... female; ?M... probable male; N... north; S... south; W... west; (child)... age inferred from grave/coffin size; ?... uncertain. [Pages 41-2]

The type, or types, of footwear deposited is unknown. Of pairs of soles where the nail pattern could be plotted, all but one showed hobnails beneath both the back and the front of the foot. A line of nails circling the perimeter of the sole was common {CAR 2, fig 56, G177, G277 (one pair), G533, G554}, with other nails scattered either over the rest of the sole (G533), or concentrated at one end (G554), presumably the heel. The marked exception is one of the two pairs in G277, where only one half of the area of the sole, also presumably the heel, appears to have been set with nails (Fig 2.15d). Only the absence of hobnails, and thus no staining of the soil from mineral-impregnated leather, would appear to account for this shape.

In two, possibly three, graves (G533, Fig 2.15e; G554, Fig 2.15f; G100, Figs 2.11c, 2.15a) the shoes were worn at the time of burial, and this may also be true of G601, in which one shoe lay by the left foot (or on, or over; the bones did not survive). The other shoe in G601 was found by the left knee. It may have become disassociated from the right foot as a result of movement of the coffin during interment, or it may have been deliberately placed by the knee.

In the remaining graves where the position of the shoes relative to the corpse could be established, they lay at the foot end of the coffin. In G125 the shoes had been placed at right angles to the legs, possibly over the feet (Fig 2.15b), and in G273 they also lay at right angles to the long axis of the coffin, though as only skull fragments survived in this grave their position relative to the feet is unknown. In G177 one shoe was placed lengthwise on each tibia (Fig 2.15c). Two pairs were deposited next to each other at the foot end of the coffin in G277, the shoes of one pair being crossed, those of the other placed side by side (Fig 2.15d).

Only in G555 had the shoes been placed outside the coffin. The groups of hobnails were not well

preserved, but seemed nevertheless to indicate that the shoes lay at the foot end some 100 mm or more apart, and not parallel to each other.

Only parts of both G274 and G458 remained. The evidence from the latter is inconclusive, though one group of hobnails suggested that at least one shoe shared the same long axis as the grave/coffin/corpse. The southern end of the coffin of the former was located, and the shoes lay within this, side by side but slightly splayed as if on the feet. If this were so, then the head of the corpse in G274 would have been at the north, a position which would accord with that of other graves within the same group (p 37).

The skeletal evidence for age and sex is not very informative. Bones only remained in six of the graves, though the size of the coffins in four more of the graves permitted the age of the corpse to be estimated. Only two skeletons were sexed (G177, adult female; G100, adult ?male) and for only two was a fairly close estimate of age given (G601, middle-aged adult; G555, older child). Slight as this evidence is, it seems to point to no distinction as to age or sex in the deposition of footwear.

Household items

[Figs 2.15-18]

Pottery vessels were the most common objects deposited in Phase 3 graves, 20 being recovered, compared to only one of glass. Fifteen graves contained pots, usually only one being deposited, but two graves (G291, Fig 2.16d-e; G601, Fig 2.17b-c) each contained three vessels, and one grave (G533, Fig 2.161) contained two. Some were accompanied by another deposit (eg G70, Fig 2.16a, styli; G555, Fig 2.17a, footwear), but in six of the graves (G95; G99, Fig 2.16b; G170, Fig 2.16c); G223; G624, Fig 2.17d);

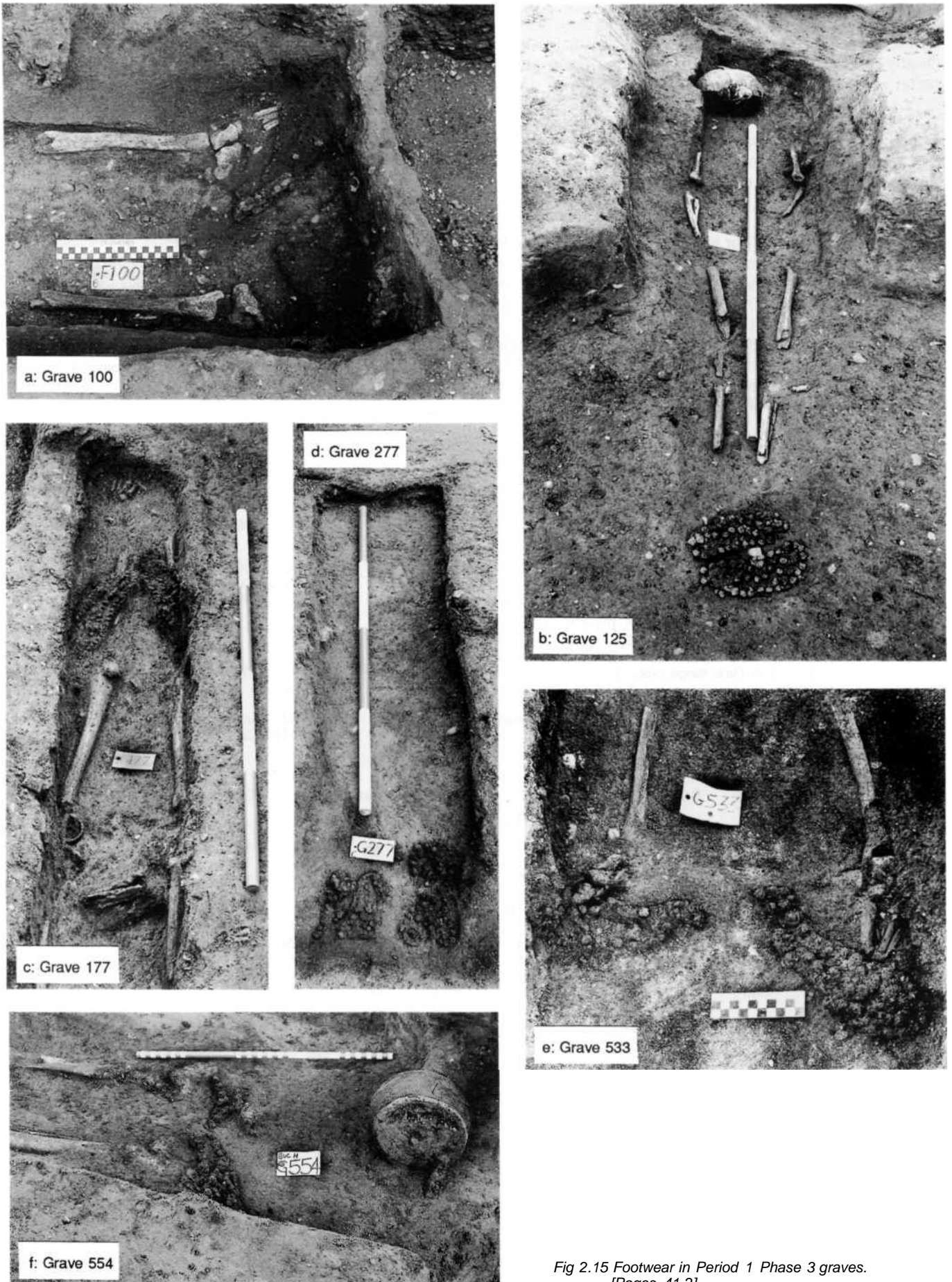


Fig 2.15 Footwear in Period 1 Phase 3 graves.
[Pages 41-2]

G678, Fig 2.17e) a single ceramic vessel was the only object deposited. The glass bowl was accompanied by footwear (G100, Fig 2.11c). The bowl/jar in G687 clearly held the plaster which coated the base of the coffin, and so cannot really be viewed as a grave deposit in the strict sense.

The skeletons accompanied by pottery vessels are on the whole not sufficiently well preserved to permit accurate ageing or sexing, and thus no clear pattern has emerged of any deliberate selection of vessel form to accompany a particular age/sex group. The incomplete grey ware ?jar in G95, a child burial, could perhaps be seen as a sign of selection, comparable to the two incomplete vessels in young adult male graves of Period 1 Phase 2 (G297, G305), though there is a possibility that it is residual. Though not affected by age and/or sex, deliberate selection seems evident in the deposition of a grey ware jar of form CAM 268 in four Group C graves (G533, Fig 2.16f; G554, Fig 2.15f; G555, Fig 2.17a; G601, Fig 2.17c) (p 53).

a) Pottery vessels
by CJ Going

[Table 2.13; Figs 2.15-19]

- Grave 70** Figs 2.16a, 2.19a. BUC B147. Black-burnished 2 ware shallow bead-rimmed dish (CAM 38) with basal chamfer, burnished overall but otherwise undecorated. Date range probably later Antonine to c 230/40.
- Grave 95** Fig 2.19b. BUC B428. Base of a reduced ware vessel, a ?jar. No decoration, no burnish.

- Grave 99** Figs 2.16b, 2.19c. BUC B506. Colchester colour-coated beaker (CAM 407A), with a post-firing graffito 'M' scratched on the exterior of the neck. Hull dates the form to the later 3rd to 4th centuries. A mid to later 3rd-century date is probably preferable here, although some were found in Colchester Kiln 25 (Hull 1963, 155, fig 89, 5), which was backfilled in the 4th century.
- Grave 170** Figs 2.16c, 2.19d. BUC B1064. Reduced ware globular jar/beaker (CAM 108) with stabbed decoration on the girth between horizontal grooves (see Hawkes & Hull 1947, pi 56). The body has a number of small cracks caused by faulty firing. The base of the vessel has been extensively filed with a serrated implement, possibly to eliminate, with some success, its awkward 'sit'. The interior of the shoulder has also been filed with the same implement. Date range Neronian-later Flavian, or perhaps shortly after.
- Grave 223** Fig 2.19e. BUC B1611. Black-burnished 1 ware cavetto-rimmed jar. Date range probably mid to later 3rd century or shortly after (Holbrook & Bidwell 1991, 95-6).
- Grave 291** Figs 2.16e, 2.19f. BUC C485. Grey ware bead-rimmed bowl, with slight basal chamfer. Undecorated save for an overall burnish. Not chronologically distinct, probably 3rd to 4th century.
- Figs 2.16d, 2.19g. BUC C27. Black-burnished 1 ware flange-rimmed bowl (Gillam 1970, fig 24, 228) with intersecting arc burnishing. Dated to post c 250.
- Figs 2.16e, 2.19h. BUC C484. East Gaulish *terra sigillata* bowl, Drag form 38. Stamped SECVNDINI (Secundianus V). Post-firing graffito on rim, I, II, III.
- Grave 327** Fig 2.19i. BUC C932. Coarse grey ware jar (CAM 268). Probably 3rd century in date, or slightly later.
- Grave 533** Figs 2.16f, 2.19j. BUC H440. Coarse grey ware jar, CAM 268, with a hooked, undercut, rim.
- Fig 2.16f. BUC H441/2. Reduced ware bead-rimmed dish, CAM 38.

Grave	Sex	Age	Find no(s)	Pot no	Fabric code	Form no	Description
G70	M	17-18	B147	P3064	GB	40	dish
G95	I	child	B428	-	GX	-	?jar base
G99	I	child	B506	P767	CZ	4	beaker
G170	M	adult	B1064	P772	GX	103	jar/beaker
G223	?	adult	B1611	P775	GA	121	jar
G291	(F)	-	C27	P769	GA	62	bowl
			C484	P765	BA	Drag 38	bowl
			C485	P770	GB	29	bowl
G327	?	old	C932	P776	GX	156	jar
G533	?	?	H440	P782	GX	156	jar
			H441/2	P3057/8	GB	40	dish
G554	?	adult	H498	P793	GX	156	jar
G555	-	older child	H496	P789	GX	156	jar
G601	?	middle-aged	H685	P784	GX	156	jar
			H686	P762	MQ	32	jar
			H687	P378	CZ	6b	beaker
G624	?	18-20	E931	P781	GX	173	miniature jar
G678	?	old	H974	P761	GA	121	jar
G679	(F)	adult	H1049	P766	EA	56	beaker
G687	F	young	H1035	P798	GX	44	bowl/jar

Table 2.13. Pottery vessels from the Period 1 Phase 3 cemetery. BA... *terra sigillata*; CZ... Colchester colour-coat; Drag... Dragendorff; EA... Nene Valley colour-coat; F... female; (F)... inferred from grave goods; GA... black-burnished 1 ware; GB... black-burnished 2 ware; GX... coarse grey ware; I... indeterminate; M... male; MQ... Oxford-type ware; ?... uncertain. [Pages 42-50]

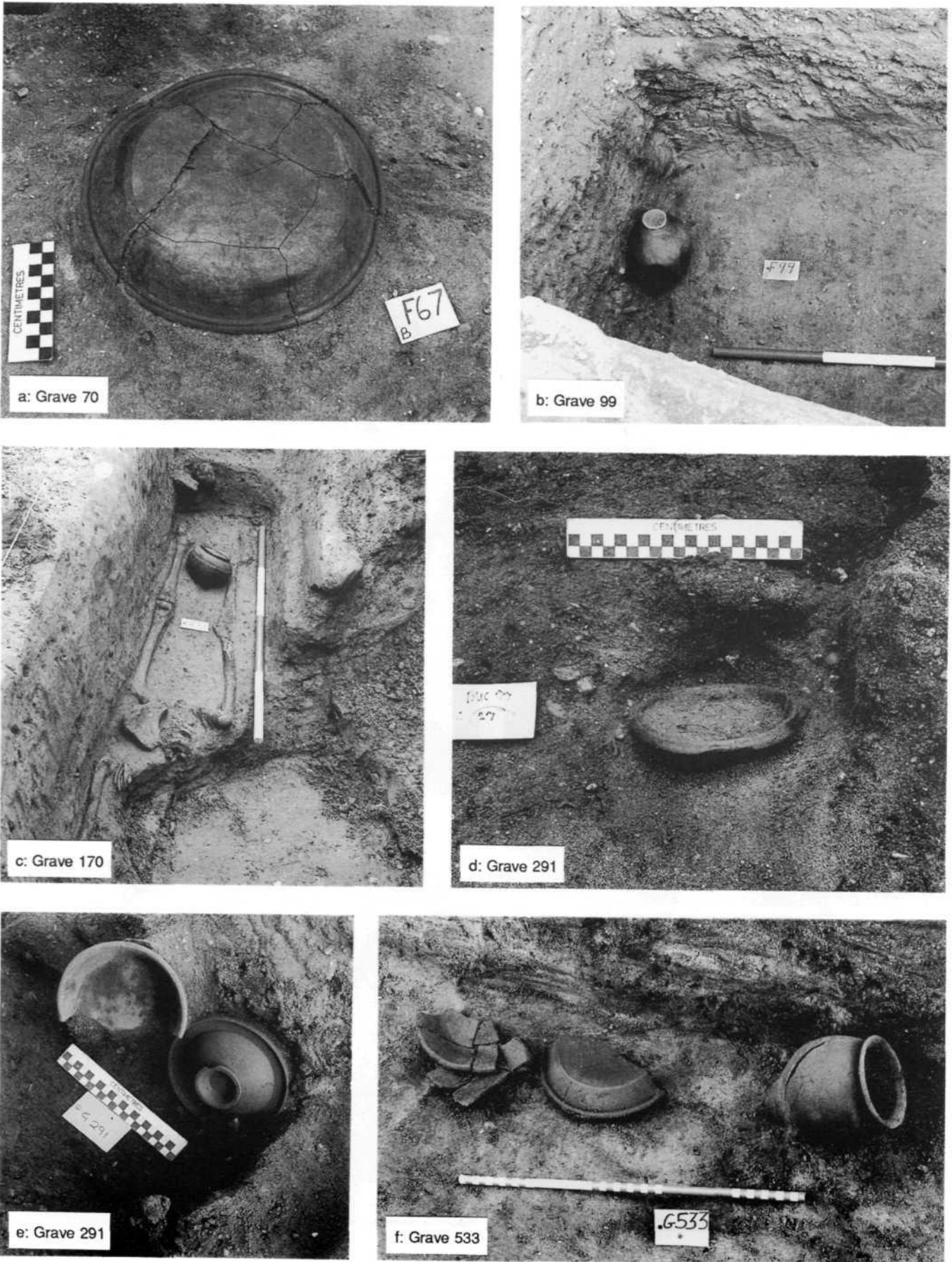


Fig 2.16. Pottery vessels in Period 1 Phase 3 graves. [Pages 42 S 44-50]

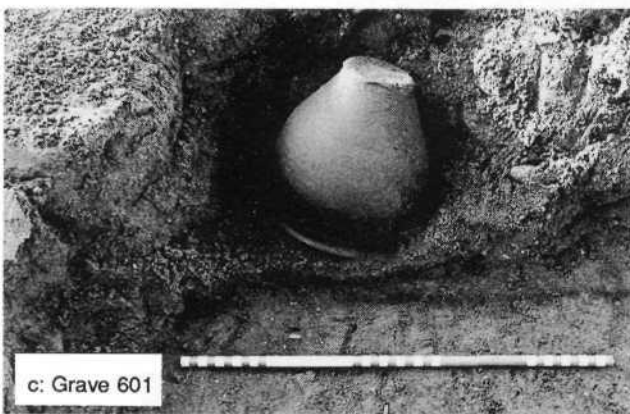
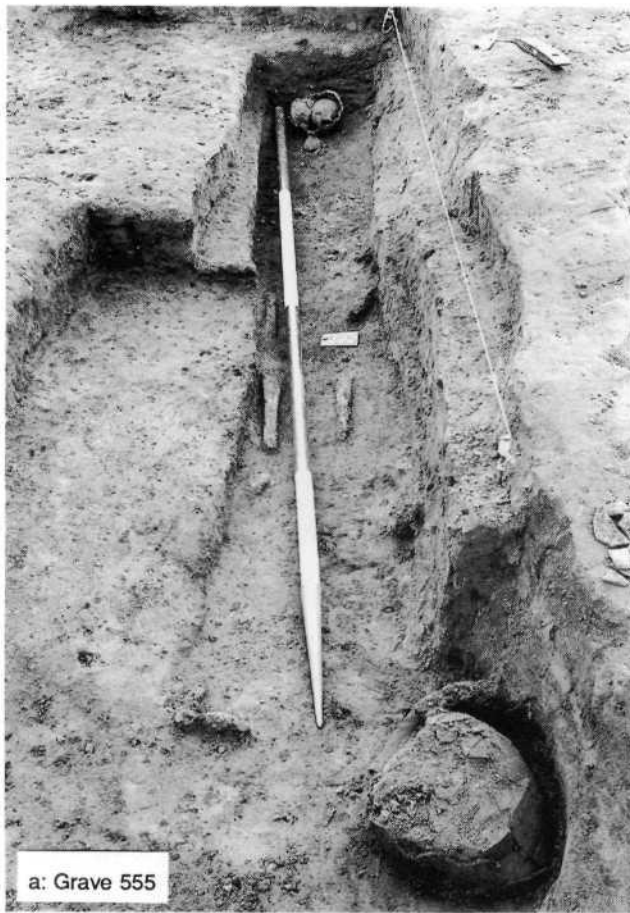


Fig 2.17 Pottery vessels in Period 1 Phase 3 graves. [Pages 42 & 44-50]



Fig 2.18 Pottery vessels in Period 1 Phase 3 graves. [Pages 42 & 44-50]

- Grave 554** Fig 2.15f. BUC H498. Coarse grey ware jar, CAM 268.
- Grave 555** Figs 2.16a, 2.19k. BUC H496. Local coarse grey ware jar, CAM 268.
- Grave 601** Figs 2.17c, 2.19i. BUC H685. Coarse grey ware jar, CAM 268, with a rounded rim. Date range probably later 3rd to early 4th century.
- Figs 2.17b, 2.19m. BUC H686. Narrow-necked jar in a ?painted Oxford fabric. The rim is slightly bifid. Date range probably 4th century.
- Figs 2.17b, 2.19n. BUC H687. Colchester colour-coated folded beaker: an example of comparatively uncommon CAM 402, dated by Hull to the 4th century.
- Grave 624** Figs 2.17d, 2.19o. BUC E931. Miniature CAM 268 jar in a local coarse grey ware, with rounded rim.
- Grave 678** Figs 2.17e, 2.19p. BUC H974. Black-burnished 1 ware everted-rimmed jar. The shape corresponds to Holbrook & Bidwell 1991, type 20.1. Date range probably early to mid 3rd century. The side of the vessel appears to have been perforated. This may have been post depositional damage, but it is possible that here we have evidence of the killing of vessels to be placed in a grave. If this is a Christian burial (p 59), it is an interesting example of syncretic practice.
- Grave 679** Figs 2.18a, 2.19q. BUC H1049. Pentice-moulded beaker in an olive drab colour-coat, cf Howe *et al* 1981, fig 5, nos 49-50. Date range probably later 3rd century (or later?).
- Grave 687** Figs 2.18b, 2.19r. BUC H1035. Globular bowl/jar (CAM 307), in a coarse sandy reduced ware with burnished zones on the body (for similar examples see Hull 1963, fig 6, 22-3). Probably of local manufacture. This vessel was placed on the bottom of the grave, having been used to cover the floor of the coffin with lime plaster.

Of these twenty vessels, four are colour-coated wares, either from the Colchester potteries, the Nene Valley, or the terra *sigillata* industry of East Gaul. Other sources represented include the Dorset black-burnished industries and the Oxfordshire kilns. The remaining pots are almost certainly of local manufacture.

The range of forms present is limited. Most of the vessels are jars (?G95, G223, G327, G533, G554, G555, G601 (x 2, one is 'carafe' form), G624 (miniature), G678), with dishes and/or bowls next most frequent (G70, G291 (x 3), G533), and beakers least common (G99, G170 (jar/beaker), G601, G679).

While some of these vessels are probably contemporary with the digging of the graves in which they were placed (eg G223, G678, G601), others exhibit the same chronological dislocation noted for vessels placed with inhumations in Period 1 Phase 2. Grave 70, for example, contains a bead-rimmed dish (CAM 38), which, while late in the typological sequence of the form, is hardly likely to be much later than the second quarter of the 3rd century and conceivably earlier. Another example of the same form is also present in G533, along with a long-lived and comparatively typologically undiagnostic CAM 268. It, too, cannot be less than 50, and perhaps as much as 80, years old. But perhaps the most markedly obvious example is the vessel in G170. This, a CAM 108 jar/beaker, is hardly likely to be later than the 1st century. It could have been 200 years old when placed in the grave.

Similar cases are provided in Period 2. A vault burial,

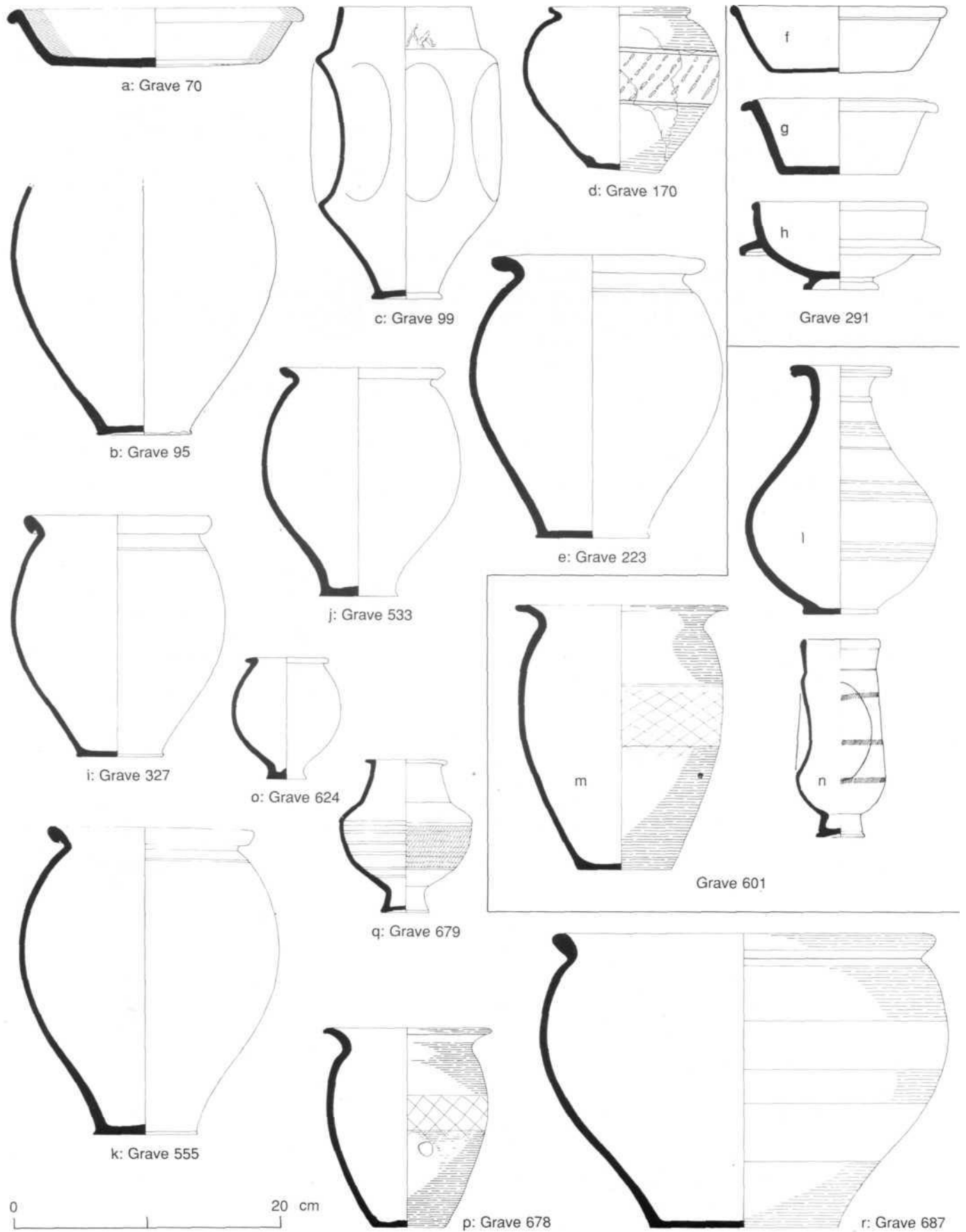


Fig 2.19 Pottery vessels from Period 1 Phase 3 graves. 1:4. [Pages 42 & 44-50]

G395/G396, contains a damaged Brockley Hill unguentarium, probably Antonine in date, and G452 contains a locally-made colour-coated bag-shaped beaker at least 100, or 150, years old when deposited.

Unless there has been some extraordinary problem with the phasing of the whole site, which seems unlikely, we must confront the problem of chronological dislocation head on. How did these vessels come to be buried when they were? Some were of substantial age, and some were positively antiques. Since pottery vessels seldom last long in general use, these ancient pots make it clear that the most obvious means of providing the dead with appropriate funerary offerings, that is, the withdrawal or purchase of vessels from 'life' assemblages, does not apply. The condition of the CAM 108 in G170, a second with **manufacturing** fractures, makes its intact survival above ground for some 20 decades a matter for amazement, and its unworn condition (easily detectable on the filed surfaces) a matter for suspicion.

So how did the relatives of the dead come to bury ancient pots, and how had the pots survived? The practice of providing the dead with funerary offerings of ceramics, while clearly an uncommon rite in Period 2 (p 133) and not universally followed in Period 1 Phase 3 (p 39), was nevertheless more a cultural than an economic activity. It was important symbolically to those who did it. These vessels were not placed in the burials by misers or the poor, neither of which accounts for their age. Whoever set out to obtain these ancient pots must have been able to expend considerable effort in the hunt. Such antiquities could not have been easy to obtain legitimately. There was, however, one possible source close by. Could they be the grave goods of earlier, by then destroyed, cremation burials, retrieved by the Butt Road grave-diggers in the course of their duties elsewhere and made available to mourners (with, one imagines, little reference to their origins)? Certainly this is the best explanation for the otherwise inexplicable survival of the fragile CAM 108.

But if pottery were available, why use old pots at some risk rather than seconds, or cheap coarse ware vessels? The emerging answer seems to be that at that time in the town pottery was not plentiful, and the mourners were experiencing increasing difficulties in obtaining contemporary pottery for use in burials. This conclusion is not as surprising, or as unlikely, as it might appear to be at first sight. I have suggested elsewhere (Going 1992,99-100) that by the end of the 3rd century there was a substantial diminution of ceramic manufacturing output. This was most marked in the east of the province, where the indigenous ceramic revival of the middle and later 3rd century was not as marked as elsewhere. By the end of the 3rd century pottery had become rare and, arguably, a significant fraction of the population may have been effectively aceramic.

This would have left many of those who wished to

provide their dead with pottery largely unable to do so. But if the desire was sufficiently strong, unscrupulous grave-diggers may have augmented their wages by clandestinely supplying old pots for inclusion in the graves, no questions asked.

The period of low ceramic supply identified above coincides with the later Period 1 Phase 2, Phase 3, and early Period 2 burials. Only some time into Period 2 was there a substantial revival of the pottery industries, in the middle decades of the 4th century. If, as is argued elsewhere, the east-west burials of Butt Road Period 2 are predominantly Christian, then we should not expect to see much evidence of this ceramic revival in the burials, and we do not. On the contrary, the proportion of burials with ceramic grave goods dwindles yet further (p 133). •

b) The location of pottery vessels

[Table 2.14; Figs 2.13, 2.15-17]

The position and arrangement of pottery vessels within the burials varied considerably. Some were deposited inverted (G70, Fig 2.16a), others upright (G170, Fig 2.16c). Inversion implies that the vessels were empty when placed in the grave, and so may have been only a token offering (Watts 1991, 191-2). Some were placed inside the coffin (G601, Fig 2.17b), others outside (G601, Fig 2.17c). The position of others is in doubt. A vessel found lying on its side may have been placed in the coffin or grave either upright or inverted and been displaced by subsequent movement of the coffin or by the operation of backfilling the grave. The upright jar/beaker in G170 is slightly tilted, and appears only to have been prevented from falling on to its side by the right tibia (Fig 2.16c). Thus the jars in G554 (Fig 2.15f), G555 (Fig 2.17a), and G678 (Figs 2.17e) may all originally have been upright.

Again, a vessel placed directly on the lid of a coffin will, on the collapse of the lid, drop to the level of the skeleton, so that on excavation it will be within the coffin fill and thus may appear to have been deposited inside the coffin. This is certainly true of the fragmented incomplete grey ware vessel in G95, which lay over the timber stain, and of two of the bowls placed in G291 (Fig 2.16e), which appear to have been placed upright on the eastern edge of the lid near the south-east corner, and to have slid sideways down into the coffin when the lid collapsed. On excavation they were found lying at an angle within the coffin fill. The Colchester colour-coat beaker in G601, which lay in fragments by the right knee (Fig 2.17c), and the coarse grey ware jar in G327, sherds of which lay between the lower legs of the skeleton and between the left foot and the coffin wall (Fig 2.13c), may both originally have been placed on the coffin lid.

Some of the intact vessels found inside a coffin may also originally have been placed on the lid: for example, the jar in G554 lay on its side at the

southern (foot) end of the coffin, with its base resting against the eastern side (Fig 2.15f). At the time of burial it may have been set either upright or inverted on the lid. However, where intact vessels are recorded set either in a corner of a coffin or neatly between the legs, they can with reasonable certainty be considered to have been placed there deliberately.

The location of vessels in Period 1 Phase 3 burials is summarised in Table 2.14. Where there is some doubt as to the original position the apparent one is given, but queried. It can be seen from the table that, of pottery vessels found on excavation inside the coffin, only the jar or beaker in G170, placed between the legs, and the carafe in G601, set in a corner of the coffin next to the skull, can confidently be said to have been within the coffin at the time of burial, and of vessels found on their sides, not one need have been deposited in that position.

The general custom therefore would appear to have been deposition outside the coffin, while there seems to be no pattern, except possibly within groups (Table 2.15), to the placing of a vessel upright or inverted, and at one end of the grave or the other.

c) Glass vessel

[Figs 2.11, 2.20]

A glass bowl was deposited in a Period 1 Phase 3 grave (Fig 2.20). It lay outside the east side of the coffin of G100 (adult ?male; Group B), about 0.5 m from the north (head) end (Fig 2.11c).

Hilary Cool and Jenny Price have provided the following note on the vessel:

G100 CAR 8, vessel no 693, BUC B464, SF BUC 278. Thirty-three fragments of a blue/green bowl, small parts of body missing. Blue/green bowls with out-turned fire-rounded rims and pushed-in tubular base rings are normally dated to the later 1st and



Fig 2.20 Glass vessel in G100, Period 1 Phase 3. [Pages 50-1]

Grave	Vessel relative to coffin	Location relative to corpse	Location	Position
G70	dish	outside	head end	inverted
G95	jar	outside	head end	scattered fragments (incomplete)
G99	beaker	outside	head end	inverted
G170	jar/beaker	inside	between legs	upright, slightly tilted
G223	jar	-	-	redeposited in backfill of G77
G291	bowl	outside on lid	north end (?head)	upright
	bowl	outside on lid	north end	upright
	bowl	outside	not plotted	upright
G327	jar	?inside	foot end	scattered fragments (complete)
G533	jar	outside	foot end	?on side
	dish	outside	foot end	inverted/upright
G554	jar	?inside	foot end	?on side
G555	jar	outside	foot end	?on side
G601	jar	inside	head end	upright
	beaker	?inside	foot end	?on side
	jar	outside	head end	inverted
G624	miniature jar	outside	head end	upright
G678	jar	outside	foot end	?on side
G679	beaker	outside	head end	upright
G687	bowl/jar	outside	foot end	upright

Table 2.14. Location and position of pottery vessels in Period 1 Phase 3 graves. [Pages 49-50]

2nd centuries (Isings 1957, Form 42). Similar bowls were in use during the later 3rd century, however, and no 693 belongs to these. As it is made of blue/green glass it is unlikely to be of 4th century date. This form is difficult to identify from fragments and consequently it is not known how common it was. Similar but not identical bowls have been found in a burial at Brougham, Cumbria, dated to c 250-270/80 (Cool 1990), and at Hauxton, Cambridgeshire, where two examples probably formed part of the grave goods associated with a late 2nd and 3rd century cemetery (Harden 1958, 12, nos 3-4, fig 7). •

d) *Styli*

[Fig 2.11]

Two copper-alloy *styli* were deposited inside the foot (north) end of the coffin of G70 (17- to 18-year-old male; Group B). They lay parallel to each other in the north-east corner of the coffin, in a patch of timber staining which may have been either part of the coffin floor, or all that remained of a wooden container or writing tablet (Fig 2.11a). Their neat positioning within the coffin need not necessarily imply the presence of a container, as deposits in several other graves were also neatly placed, eg the Oxford ware jar in G601 (Fig 2.17b), or the shoes in G125 (Fig 2.15b). The *styli* were accompanied in the grave by a black-burnished ware 2 bowl which lay inverted by the side of the head end of the coffin (Fig 2.16a).

The *styli* are an exactly similar pair, with a long waisted eraser, octagonal section to the main part of the shaft, and a plain stock with a central depression in place of a point (CAR 2, fig 107, 2534). No parallel in either iron or copper-alloy has yet been found for these instruments. It has been suggested (*ibid*, 104) that separate, and therefore interchangeable, points or nibs could be fixed onto the stock, and that thus the instruments may be both *styli* for inscribing in wax, or pens for writing or drawing with ink.

The burial groups

[Table 2.15]

The burial characteristics of each group defined above on the basis of horizontal stratigraphy (p 34) are summarised in Table 2.15. Some groups share similar characteristics, a fact which supports the idea that the cemetery was divided into family plots.

Group A was located in the south-eastern corner of the cemetery, and contained five graves of which one, G48, was almost completely destroyed by Period 2 graves and thus lacks any identifiable characteristics apart from the age of the skeleton and the presence of a nailed timber coffin. The five graves were not very close together, but four shared a very similar alignment, based on that of the boundary ditch BF167,

and the fifth, G170, has an alignment based on that of the closer ditch, AF152.

Grave goods had been deposited in the four reasonably well-preserved graves, in all of which the corpse had been laid with head to the north. In each case the grave deposit was placed inside the coffin, though the form of deposit varied: an armlet worn on the wrist of G126, shoes (not worn) in G125 and G177, and a ceramic jar in G170. All four burials were of adults (one male, two female, one unknown), and the surviving fragmentary bones in G48 were identified as belonging to an adolescent. No children were therefore present in this group.

Group B contained the largest number of burials (20) and was widespread. It is possible that some of the graves at both the northern and southern ends of the group should not really be counted as part of it, eg G52, G70, G327. All the graves were on a similar alignment to the boundary ditch BF165/CF32, and many were laid close together in well-managed ranks.

Taking the maximum number of burials in the group to be valid, in two (10 per cent) the body had been laid with head to the south, in twelve (60 per cent) with head to the north, and in 6 (30 per cent) the head position was unknown. The preferred position in this group, as with Group A, is therefore with head to the north.

Accessories were deposited in twelve Group B burials (60 per cent). As with Group A the nature of the deposit varied, with vessels predominating (in 58 per cent of graves containing a deposit), closely followed by shoes (42 per cent). A finger-ring was found on the finger of G327, a bead armlet was placed in G291, and in G278 lay a ?purse containing a group of amuletic pendants. The idiosyncratic nature of this latter deposit is matched by the inclusion in G70 of two copper-alloy *styli*. All the vessels in Group B graves were placed outside the coffin, while all the other grave goods were placed inside. The shoes in G100 may have been on the feet.

Unlike Group A, Group B included a large number (nine; 45 per cent) of child burials, four of which were in a tight cluster, G274, G275, G276, G282. For none of the juveniles can the age be given accurately, and seven are identified solely on the size of the coffin. However, where the coffin length is less than 1 m, it probably contained a child younger than 6 years old. Among the adolescents and adults four (maximum) males were identified from the skeletal material, but no females. However, G291 included a bead armlet among the grave goods, and can be identified as female with reasonable certainty.

The large number of juveniles in Group B may indicate that this was the burial plot of a large family, probably extended rather than nuclear, with a high child mortality rate. Unfortunately, in the absence of any detailed pathological evidence this idea cannot be supported. Alternatively, the area may have been a common one, used for individuals whose families did

Period 1 Phase 3: the burial groups

Grave	Sex	Age	Head	Grave goods	Grave	Sex	Age	Head	Grave goods
GROUP A					GROUP C				
G48	?	adolescent	-	-	G485	I	2-3 years	S	-
G125	?	adult	N	shoes in coffin	G522	-	(adult)	-	-
G126	?F	middle-aged	N	armlet on wrist	G533	?	?	N	shoes on feet, jar and dish outside coffin
G170	M	adult	N	jar in coffin	G540	-	-	-	-
G177	F	adult	N	shoes on legs	G541	-	older child	S	-
TOTALS					G554	?	adult	N	shoes on feet, jar outside coffin
Head position:		N	4 (80%)		G555	-	older child	S	shoes and jar outside coffin
		unknown	1 (20%)		G601	?	middle-aged	S	shoes and jar inside coffin, jar and beaker outside coffin
Grave goods:		present	4 (80%)	worn jewellery 25 %	G605	?	adult	S	-
				shoes 50%	TOTALS				
		unknown	1 (20%)	vessel 25%	Head position:		N	2 (22%)	
GROUP B							S	5 (56%)	
G52	M	adult	N	-			unknown	2 (22%)	
G70	M	17-18 years	S	styli in coffin, dish/bowl outside coffin	Grave goods:		present	4 (44%)	shoes 100%
G89	?	adult	N	none			unknown	5 (56%)	vessel(s) 100%
G95	I	child	N	jar outside coffin	GROUP D				
G99	I	child	N	beaker outside coffin	G573	M	middle-aged	S	-
G100	?M	adult	N	shoes ?on feet, bowl outside coffin	G678	?	old	N	jar outside coffin
G119	M	middle-aged	N	-	G679	(F)	adult	N	armlet ?on arm, beaker outside coffin
G223	?	adult	N	jar outside coffin	G686	I	3-4 yrs	S	none
G273	-	(child)	N	shoes in coffin	G687	F	young adult	N	hairpin on head, bowl/jar outside coffin used for mixing plaster
G274	-	-	?N	shoes in coffin	TOTALS				
G275	-	-	-	-	Head position:		N	3 (60%)	
G276	-	(child)	N	-			S	2 (40%)	
G277	-	(child)	N	two pair shoes in coffin	Grave goods:		present	3 (60%)	worn jewellery 67%
G278	-	-	-	?purse with amulets in coffin			absent	1 (20%)	vessel(s) 100%
G282	-	(child)	S	-			unknown	1 (20%)	
G290	-	-	-	-	TOTALS				
G291	(F)	-	-	bead armlet & bowls outside coffin	Head position:		N	12 (60%)	
G327	?	old	N	ring on finger, jar outside coffin			S	2 (10%)	
G456	-	-	-	-			unknown	6 (30%)	
G458	-	-	-	shoes in coffin	Grave goods:		present	12 (60%)	worn jewellery 8%
TOTALS							absent	1 (5%)	shoes 42%
Head position:		N	12 (60%)				unknown	7 (35%)	vessel(s) 58%
		S	2 (10%)						styli 8%
		unknown	6 (30%)						amulets 8%
Grave goods:		present	12 (60%)		Table 2.15. Burial characteristics of Groups A-D in the Period 1 Phase 3 cemetery.				
					F... female; ?F... probable female; (F)... inferred from grave goods; I... indeterminate; M... male; ?M... probable male; N... north; S... south; eg (child)... age inferred from grave/coffin size; ?... uncertain. [Pages 51-4]				
					not own plots, which may account for the wide, yet comparatively concentrated, spread of graves.				
					Group C, particularly four of the graves at the centre, provides good evidence for a consistency of grave deposit within a group, almost certainly a family unit. The group lay in the centre of the northern part of the site, and six graves formed its hub (G522, G533, G541, G554, G555, and G601). There were three outliers (G485, G540, and G605), all of which were badly damaged by Period 2 graves, the latter two being almost totally destroyed, though the presence of a coffin was identified in all three. Grave 540 yielded no additional evidence of burial characteristic, and from G485 and G605 only the age and head position of the respective individuals could be gleaned.				

The six central graves lay in a close-set group. The grave pits (but not the coffins) of the two most westerly, G541 and G554, intersected slightly, the foot end of G541 (head to south) cutting the foot end of G554 (head to north). The bodies were thus effectively facing each other, which may be significant. No grave goods were recovered from G541 (older child), but a grey ware cooking pot (CAM 268) lay in G554, probably originally placed on the coffin lid, and the body (adult, sex uncertain) had been buried wearing a pair of shoes.

Just to the east of this pair and more or less parallel to them lay a row of three graves, G522, G533, G555. Only the remains of a nailed timber coffin were recovered from the most southerly grave, G522, but its (incomplete) length of 1.92 m indicated an adult burial. No grave goods were found, but the northern end of the grave was destroyed by Period 2 graves, and they need not necessarily have been absent. The individual buried in the most northerly grave, G555, was an older child, laid with head to the south. Outside the coffin at the north end lay a pair of shoes and a grey ware cooking pot (CAM 268). In the central grave of the row, G533, the body had been laid with head to the north (thus facing away from G555). Very little skeletal material remained, but the length of the coffin, just under 1.5 m, suggests that this, too, may have been an older child burial. The corpse had been interred wearing shoes, and two vessels had been placed outside the coffin, on the east side close to the south (foot end). The vessels were a grey ware cooking pot (CAM 268), and a BB2 dish.

Side by side with G533, to the east, was G601, the sixth grave of the central group. This contained the remains of an middle-aged adult (sex uncertain), laid head to the south, with a pair of shoes within the coffin, one possibly on a foot. Three vessels had been deposited in the grave. Set upright next to the head was a narrow-necked jar of painted Oxford ware. Outside the head end of the coffin, on the side opposite the Oxford-ware jar, was a grey ware cooking pot (CAM 268). A beaker of Colchester colour-coated ware, which had probably originally been set on the coffin lid, was found broken near the right knee.

Thus, in four out of five well-preserved graves in this group a pair of shoes and a CAM 268 cooking pot had been placed with the dead: a remarkably consistent choice of deposit.

Three of the six central graves were of adults (none sexed), and three were of older children. Of the three outliers one, G485, contained the remains of a 2-3 year old child, and one, G605, those of an adult. The choice of head position within the group is less consistent than that of grave deposit, with two of the central six having head to the north, and three with head to the south. Two of the outliers also lay with head to the south, which may thus have been the preferred position, but it is more likely that the choice was random.

Group D was composed definitely of three, and possibly of five, graves. The three (G678, G679, G687) lay in a straight row, head to toe (all head to north), and are clearly related. The other two were some distance away, G573 west of G679 and on the same alignment, G686 west of G678 but at an angle to it. In both these graves the head was to the south.

The alignment of the row of three graves and of G573 is clearly influenced by the line of Plot A's western boundary as indicated in Phase 2 by the ditch CF58/CF59/CF50/HF31. In fact the row lies directly on that line, for its southernmost grave, G679, is set in the centre of HF31 near the ditch's northern end. This implies that though the ditch contained a considerable amount of fill when the grave was dug, both its line and its sides were still distinctly visible, just as was the case with the Phase 2 grave G371 at the ditch's southern end. The differing alignment of G686 suggests that a topographical feature beyond the limits of the excavation had influenced its position, comparable to the way the two southern boundary ditches with differing alignments, AF152 and BF167, influenced the alignments of graves in Group A.

No grave deposit was present in G686, and none was recovered from the more disturbed G573, but all the burials in the row of three contained a ceramic vessel, in each case deposited outside the coffin. In addition, an armlet was (probably) on the left arm of the corpse in G679, and a bone hairpin lay close to the skull of G687. This last was a plaster burial, the plaster having been mixed in a wide-mouthed jar (CAM 307), which lay by the side of the coffin.

All the individuals buried in the row were adults. Neither G678 nor G679 could be sexed, and no close estimate of age could be made for the latter, but G678 was elderly. The central plaster burial, G687, was that of a young adult female. A 3- to 4-year-old child lay in G686, and a middle-aged male in G573.

Both G678 and G687 showed the same non-metrical variant, full metopic suture, of the skull, and this trait was shared by G573. Such traits may be indicative of family relationships (p 65), and are perhaps more likely to be so when a relationship can be hypothesised using other criteria (eg stratigraphic association, similarity of grave deposit).

The three graves in the row are clearly a valid group, all on the same alignment with head to the north, all with a ceramic vessel outside the coffin, and two with a piece of simple jewellery worn at burial. It is doubtful, however, if G573 and G686 should be included in Group D. Neither has head to the north, one is on a very different alignment, no grave deposit was recovered from either, and both lie some distance from the row of three. The likelihood that G573 should be included is, however, increased by the skull's exhibiting the same non-metrical variant as do G678 and G687.

In Group E two of the graves (G619, G624) were severely damaged by both Period 2 graves and post-

medieval terracing, and the third (G633) was so deep that it was only excavated as far as the top of the coffin. Proximity and similar alignment are therefore the only reasons for assuming that they form a group. Only for one grave, G624, can any details be given. The skeleton, a young adult, lay with head to the south, and a small grey ware cooking pot, a miniature CAM 268, lay outside the coffin.

The evidence for family plots can be summarised thus:

Group A: head to north, single grave deposit of varying type, all graves but one share a similar alignment, no intercutting, well but not far apart, no children;

Group B: head to north common but not exclusive, deposits common but not exclusive, shared alignment, some close together in close-set rows, one example of intercutting but grave pit only, many young children as well as adults;

Group C (excluding outliers): no preferred head position, all graves from which deposits were recovered contained footwear and a CAM 268 cooking pot, shared alignment, close together in well-spaced rows, one example of intercutting but grave pit only, adults and older children;

Group D (row of three only): head to north, all contain minimum deposit of ceramic vessel, shared alignment, in one well-spaced row, no intercutting, all adults;

Group E: well but not far apart, similar alignment.

Group A is a valid group set well apart from its nearest neighbours. Group B is less clearly defined, and may be a common area. The six graves at the centre of Group C form a valid group as evidenced by alignment and a distinctive preference in grave deposits. The row of three graves in Group D are also a valid group, probably on a small plot. The integrity of Group E cannot be proven within Period 1 Phase 3, but close examination of the relationships between these graves and those of Period 2 in the same area suggests that this is a genuine group, and one which appears to occupy the same plot for some time in Period 2 (pp 57-8).

The date of Period 1 Phase 3

[Table 2.161

Clarke (1979, 119-20) has argued that about 20 years is the time it takes for the site of a grave, unmarked by anything other than a mound, to be forgotten and/or obscured, basing his premise on both evidence from the Lankhills late Roman cemetery, Winchester, Hampshire, and the experience of a modern undertaker. At Butt Road the small number of Phase 3 burials overall and the lack of serious damage caused to any of them by the digging of others belonging to the same phase (Clarke's Class b, *ibid*) suggest that Period 1 Phase 3 lasted for less than 20 years.

Grave	Group	Deposits	Date
G52	B		3rd-4th century pot in fill
G70	B	styli, pot 2nd-3rd century	3rd century +
G95	B	pot undated	-
G99	B	pot late 3rd-4th century	late 3rd-4th century
G100	B	shoes, glass bowl mid-late 3rd century	late 3rd century
G119	B	-	3rd-4th century pot in fill
G126	A	armlet ?4th century	?4th century
C170	A	pot 1st century	-
G277	B	two pairs shoes	very late 3rd-early 4th century (stratigraphy)
G278	B	?purse with amulets	?4th century
G282	B	none	3rd-4th pot in fill
G291	B	bead armlet ?4th century, pots 3rd-4th century	?4th century
G327	B	ring, pot 3rd century +	late 3rd-4th century (stratigraphy)
G533	C	shoes, pot 3rd-4th century	3rd-4th century
G541	C	-	late 3rd-4th century (stratigraphy)
G554	C	shoes, pot 3rd-4th century	3rd-4th century
G555	C	shoes, pot 3rd-4th century	3rd-4th century
G601	C	shoes, pots 4th century (one = early 4th)	300-325/30
G624	E	pot early 4th century	300-325/30
G678	D	pot probably early to mid 3rd century	-
G679	D	armlet ?4th century, pot late 3rd century +	?4th century
G687	D	hairpin post 200, pot plaster burial ?4th century	early 4th century (includes stratigraphy)

Table 2.16. Summary of dating evidence from Period 1 Phase 3 graves. [Pages 54-5]

The Phase 2 inhumation, G693, has been dated to c 270- 300/20 (p 28), and the Phase 3 plaster burial, G687, which cuts it, is thus unlikely to be much earlier than c 300/20.

A date within the 4th century for Phase 3 is suggested by evidence from several graves other than G687, and, most importantly, all five of the burial groups, A-E, contain at least one grave of likely 4th-century date (Table 2.16). The collection of amuletic pendants in G278 (Group B) includes a canine tooth, a type of amulet usually found in late 4th- or 5th-century or Anglo-Saxon graves. Plaster burials such as G687 (Group D) are often, though by no means exclusively, 4th-century in date (Watts 1991, 60). Pottery vessels in G99 (Group B), G601 (Group C), and G624 (Group E) are likely to belong in the 4th century (the CAM 268 pots in G601 and G624 have a rounded rim variant of the form which can be dated to the first third of the 4th century). Bead armlets such as that from G291 (Group B) are more usually found accompanying 4th-century inhumations, as are iron armlets like that from G126 (Group A).

If the change from north-south to east-west aligned graves coincided with the construction of the cemetery church, put at 320/40 on the coin evidence (if not c 330, pp 180-2), and if Clarke's 20-year hypothesis is correct, then Phase 3 should be dated 300/20-320/40, with the maximum date range combination (300-40) being most unlikely.

Implicit in this dating is the idea that the change from north-south to east-west burials was not a gradual shift, with burials on either alignment possible over a prolonged period, but a sudden switch, encouraged, enforced even, by those in control of cemetery management. This idea will be discussed further under Period 2 (p 59).

PERIOD 2

The cemetery boundaries and the survival of Plot B

[Figs 2.2, 2.10, 2.21]

The southern boundary delineated in Period 1 Phase 3 by the ditch AF152 (Fig 2.2) was replaced in Period 2 by one which partly followed the line of its predecessor and partly that of the adjacent roadside ditch AF136 (and so also of the postulated road). The Period 2 graves at the extreme southern end of the site form a line parallel to AF136. On the east end of the line the graves also lie parallel and very close to the northern edge of the earlier boundary ditch AF152,

but, where AF152 swung slightly northwards, the Period 2 graves continue in the original alignment (Figs 2.2, 2.21). Though the line of the earlier ditch is thus partially preserved, it appears to have been filled in by this time, so that some graves cut into it, and on the west side of the site some lay beyond it.

When in Period 2 the new boundary was marked out is uncertain. However, the graves on the east side of the site appear to respect the edges of AF152, so it may still have been visible on the Roman ground surface well on into Period 2. As no features other than graves were found along the boundary, the form it took is also uncertain. Possibilities include a shallow ditch, a hedge, or a fence. This part of the site was badly damaged by Victorian terracing and many Roman features have almost certainly been lost. However, that the boundary is genuine is supported by the positive line formed by the surviving graves.

Two burials, G41/43 and G51, did lie beyond the southern boundary (Fig 2.21), distinguished from those within the cemetery not only by their position in what was effectively waste or 'no-man's' land, but also by the positioning of the bodies within them (pp 105-10). Both are rough pits, the former containing three bodies, the latter one. Grave 51 is immediately adjacent to AF136, but G41/43 lies right on the southern edge of AF152 (Fig 2.2), which supports the possibility that the ditch survived into Period 2. However, as at that point the new boundary followed the line of the old, this need not necessarily have been the case.

The survival of Plot B (Fig 2.10) into Period 2 is suggested by the horizontal and vertical stratigraphy of at least five graves along the line of CF59, the plot's northern boundary ditch in Period 1 Phases 2 and 3, and also by a concentration of graves along the line of Plot B's western boundary ditch in Phase 3, BF165/CF32.

Three graves, G299, G298 and G369, lay head to foot in a row which corresponds roughly to the line of CF59 projected westwards towards CF32 (Figs 2.2, 2.10, 2.21). The three lie on and to the south of the projected position of CF59 rather than to its north, and thus are on the boundary of or within Plot B, preserving its general form. The most westerly burial, G299, cut CF32, but, as the ditch had been very shallow at that point, it may well have filled up completely by the end of Phase 3. Two other graves reinforce the line of three. Grave 390 lay parallel and close to the northern edge of G369 and possibly cut CF59, while G433 lay immediately to the east of G390, and cut both CF59 and the Period 1 Phase 2 ditch CF58 (Figs 2.2, 2.21).

Though placed close together in two rows none of the five graves are vertically related. However, all five are demonstrably early in Period 2, each being cut by later graves but not themselves cutting any Period 2 feature. Grave 299 is the first in a sequence of three (possibly four) graves; Grave 298 first in at least one sequence of two; G369 first in two sequences of two;

G390 first in one sequence of three and two of four; and G433 first of many sequences, the two longest containing six burials. All but G299 are stratigraphically related to a large complex of burials, including two timber vaults, clustered in the area of the eastern end of CF59. (The sequential development of the complex is outlined in Figs 2.64-5, where it can be seen that other graves may also be early (p 115).)

The five graves appear to be a group similar to those identified in Period 1 Phase 3, dating to within the first half, if not the first third, of the 4th century. The group's validity and date are fully discussed elsewhere on this page, but can be taken here as established. It certainly preserves the line, if not the exact position, of the northern boundary of Plot B in much the same way as the line of the cemetery's southern boundary in Period 1 Phase 3 is preserved, but not precisely, in Period 2.

The evidence for the survival of Plot B's western boundary is less easily defined. It can be seen in Figs 2.10 and 2.21 that a large number of graves cluster west of the line of the plot's western boundary ditch BF165/CF32, ie a row from G188 on the south to G218 on the north, a more westerly row from G67 on the south to G235 on the north, with a particularly intense concentration at the northern end of both rows.

Unfortunately, 19th-century activity in this area not only destroyed often substantial parts of many graves, but also made determining the remaining relationships difficult, so that it has not been possible to establish a sequential development for this complex as was the case on Plot B's northern boundary.

It is, however, clear that very few of the graves in the easterly row cut the ditch, and, of those that do, none need be dated to early in Period 2. Moreover, there are also very few graves dug into the fill of BF165 from the east, nor indeed into BF165'S southern return, BF167, which suggests that these ditches were still open for the early part of Period 2. As they were deeper than any of the others this is perhaps not surprising, but had Plot B been taken into the cemetery at the beginning of Period 2, then it is probable that the old boundaries would have been removed, though they may, of course, have survived in one form or another as family plot boundaries.

Despite the paucity of dating evidence for individual graves, it is noticeable that none of the graves within the area of what was Plot B need be earlier than 350-60, a date provided by six coins deposited in an isolated grave, G431 (p 156).

Thus, the general picture taken from the layout of the Period 2 graves along the lines of Plot B's boundaries, supported by the limited dating evidence, is that the plot's form in Period 1 Phase 3 continued to exert an influence on the layout of the Period 2 cemetery. This leads to the conclusion that for a few years at least Plot B survived into Period 2.

The cemetery

In Period 2, as in Period 1 Phase 3, only inhumations were recovered. A total of 669 burials were identified, in most of which the corpse had been enclosed in a timber coffin. There were some uncoffined graves, and some unusual coffin 'substitutes' (eg tiles, tree trunks), as well as more elaborate burials where a timber coffin enclosed an inner one of lead or was placed within a timber vault. Only a few of the graves contained grave goods, but a wide range of items was deposited, some of the pieces being very idiosyncratic.

No summary table of the graves within the cemetery is given here, as it would comprise all the table in Appendix 1 but for the 62 Period 1 burials.

Some possible family groups could be distinguished, two of which were linked to groups defined in Period 1 Phase 3. Of the rest, some can be reasonably well-established by virtue of their stratigraphy and burial characteristics, while others must remain as tentative identifications.

Continuity of burial plots

[Figs 2.10, 2.21-2.23]

The five graves dug along the line of the ditch CF59 (p 55) form a group similar to those noted in Period 1 Phase 3. It has already been shown that they are horizontally but not vertically related, and that they are early in Period 2.

Three of the graves, G298, G299 and G390, contained a CAM 268 grey ware jar or cooking pot, and hobnailed footwear was also placed in G298, on the coffin lid. The east end of G369 was destroyed, and both the east end and south side of G433 were damaged by later burials, so they too may have held deposits. The skeleton in G369 was that of a young adult female, while the other four are all burials of adults of uncertain sex.

The group is remarkably similar to Group C in Period 1 Phase 3 (Fig 2.10; Table 2.15; pp 52-3): shared alignment, close together in neat rows, adults, CAM 268 pots and, in one case, footwear. The three graves in which the CAM 268s are deposited are likely to be not dissimilar in date to Period 1 Phase 3 graves containing the same type of pot, ie Period 1 Phase 3 is dated to 300/20-320/40, so the three Period 2 graves should be dated 320/40(-45). The positioning of the graves along the line of CF59 also has a parallel in Period 1 Phase 3, this time to Group D, in which three graves were laid in a row along the line of the filled-in Period 1 Phase 2 ditch HF31 (Fig 2.10).

These graves thus not only share many characteristics with graves from the earlier cemetery, but also a

similar date, the main difference between them and Group C being only alignment, east-west rather than north-south.

The identification of Group C burials in Period 2 suggests that the other Period 1 Phase 3 burial groups may also have continued to use the cemetery in Period 2. Like Group C they may have changed plot with the change in grave alignment, or they may have preferred to stay on the same plot. Unfortunately, none of them showed as consistent a choice of deposit as Group C, so the chances of locating Group A and D burials, for example, if the plot were changed are remote. If the same plot were used, continuity would be demonstrated by the later burials respecting the earlier. However, the number of Period 2 burials shows that the cemetery remained in use for many years, and so the locations of the Period 1 Phase 3 graves, and of those belonging early in Period 2, would eventually be forgotten, leaving them liable to be cut into by later grave-diggers. This possibility is all the more likely as in most cases it appears that individual graves were marked only by a mound (pp 93-9).

There is little evidence available to support the possibility of Groups A or D either remaining in the same area or changing plot. Some Period 2 graves seem to respect the edges of the earlier burials, many others do not. For example, of the probable early Period 2 graves in the area of Group D's G687, G668 is set closely to it at right angles, but G682 and G683 cut right across it.

Some Group B burials have escaped all but superficial damage from Period 2 graves, but others are very badly damaged, and, given the concentration of both Period 1 Phase 3 and Period 2 graves in that area and the length of time over which east-west burials were dug, this was probably inevitable. However, a fairly certain indication that Group B continued into Period 2 lies in the fact that in both periods the burials in that area were comparatively numerous and densely packed. The possible reasons for their concentration in Period 1 Phase 3 pertain equally in Period 3, ie that this was the site of a plot for a large extended family, or for common use.

In Period 1 Phase 3 Group E was composed of only three graves and there was little or no evidence to prove its validity. However, when the relationships are examined between these three graves and those of Period 2 in the same area (Figs 2.22-3), there is considerable support from the stratigraphy to suggest that Group E is a genuine group which continued to use the same plot after the change of grave alignment. A summary of those relationships reveals that very little damage to Period 1 Phase 3 burials was caused by those early in Period 2, or to early Period 2 burials by later ones.

G624 (N-S): grave pit, but not coffin, cut on the west side by G626 (E-W) and either slightly cut or narrowly avoided on the north end by G621 (E-W); east side narrowly avoided by G618 (E-W).

G619 (N-S): damaged by later terracing, but projecting the lines of the edges suggests its east side/north end was either narrowly avoided or slightly cut by G626 (E-W).

G633 (N-S): grave pit, but not coffin, cut on the south end by G626 (E-W).

G621 (E-W): either slightly cuts or narrowly avoids G624 (N-S); grave pit, but not coffin, cut on west end by G606 (E-W); foot board of coffin and east end of grave removed by G613 (E-W); damage to east end slightly extended by G607 (E-W).

G618 (E-W): grave pit, but not coffin, cut on south side by east end of G613 (E-W); overlain, and grave pit cut, but coffin not disturbed, by G617 (E-W).

G613 (E-W): removed foot board and east end of G621 (E-W); centre removed by G607 (E-W); east end cuts south side of grave pit, but not coffin, of G618 (E-W).

G607 (E-W): removed central area of G613 (E-W) and extended slightly into east end of G621.

G617 (E-W): overlies and cuts grave pit of G618 (E-W), but does not cut into coffin.

G603 (E-W): isolated; west end not far from south side of G606 (E-W).

The close but undamaging relationships between east-west and north-south graves suggest that nearly all these burials form a valid group which spans both periods. Clearly, though some cutting of grave pits has been caused by placing so many graves so close together, only G607 has removed part of the body of an earlier burial, and only it and G613 have damaged an earlier coffin (Fig 2.22). Grave 607 is likely to be fairly late in date, while G613 need not be early, for several years must have elapsed between the interment of G621 and that of G613, as the timber of the earlier coffin was soft enough to be removed.

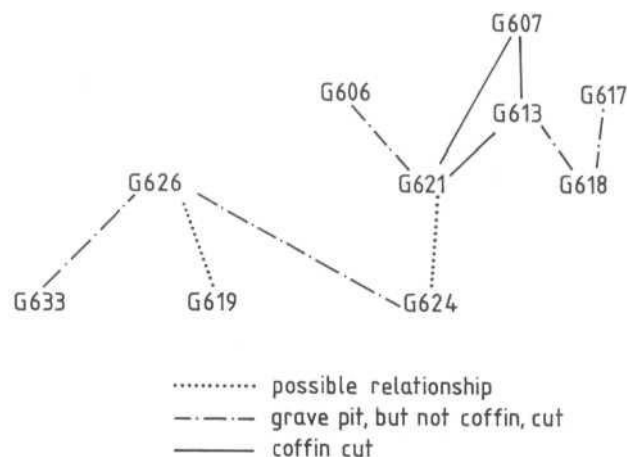


Fig 2.22 Schematic representation of relationships between Period 1 Phase 3 and Period 2 graves near the cemetery church. [Pages 57-8]

Of major importance in demonstrating that Group E survived into Period 2 is the obvious recognition by the grave-diggers that placing G613 on a standard E-W alignment would result in the cutting of earlier graves and that shifting the alignment of the new grave away from that of its predecessors would minimise the potential damage.

Grave 613 is the only Period 2 grave whose axis lies on a line set north-east to south-west (ie on the defined border between the two alignments), with the head of the corpse placed at the south-west end (Fig 2.23). The possibility has been considered that the two graves it cuts, G618 and G621, may be east-west oriented graves in the north-south cemetery, but this is unlikely, especially as the latter probably cuts the Period 1 Phase 3 G624 dated to c 300-330 (p 55).

The west end of G621 lay less than 6 m from the original east wall of the cemetery church (less than 4 m from the apse), and G613 cuts through the foot of

the earlier grave with its head end approximately 7 m from the east wall (5 m from the apse). Graves 607, 613 and 621 are notable for demonstrating a variety of alignments within the range permissible for a general east-west description, ie, NE-SW (G613), ENE-WSW (G621), and E-W (G607), but while the two latter alignments are shared by other graves both in that area of the cemetery and further off, that of G613 is unique.

However, when taken in conjunction with the grave relationships listed above, the impression given is not that G613 is a north-south aligned grave, but that it was intentionally confined within a small area. One explanation for such a confinement is a very close family relationship between G613 and G621, another that the former was squeezed in on the very edge of a small family plot, another that a location close to the east end of the church was considered desirable. Indeed, there is no reason while all three factors could not have pertained.

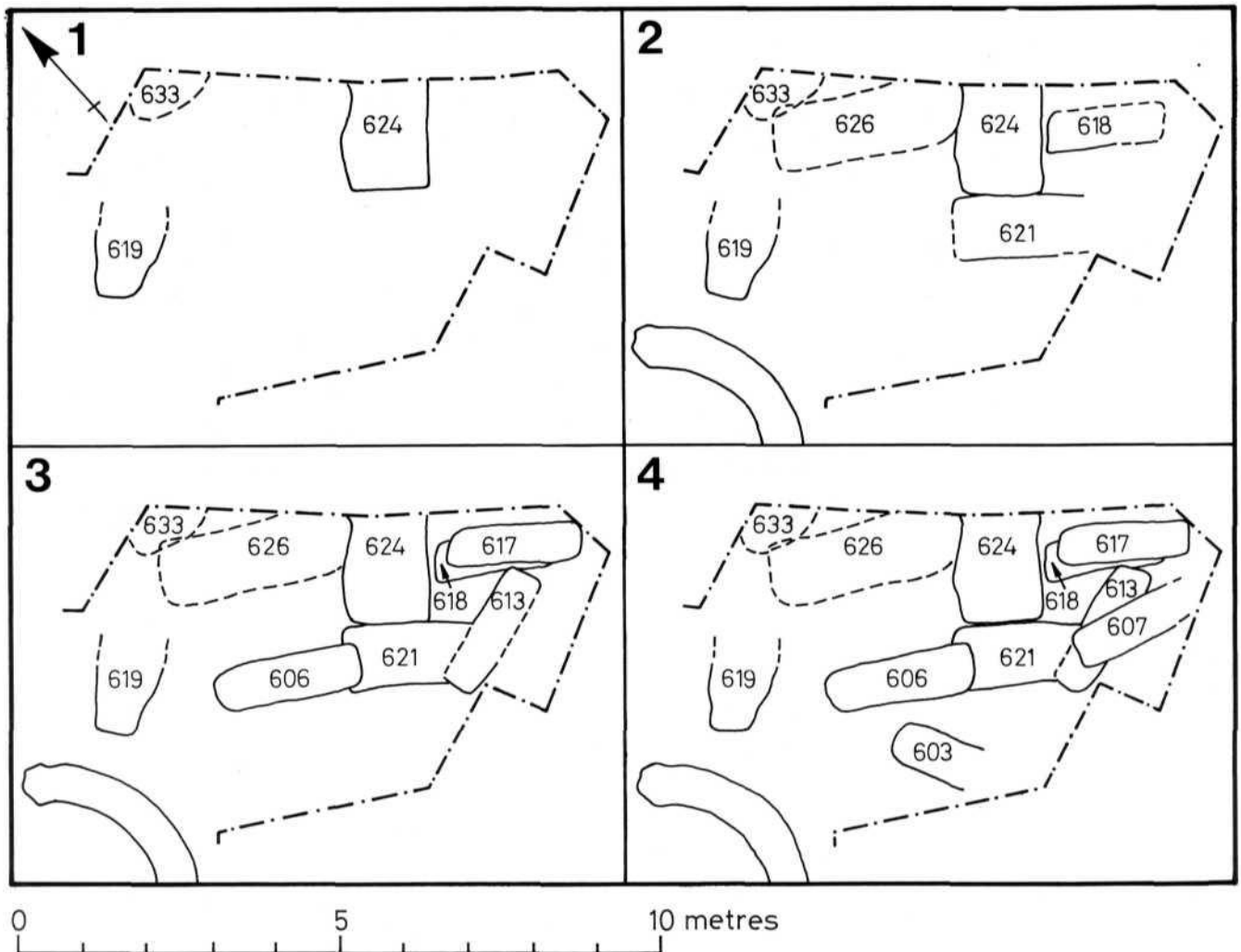


Fig 2.23 Sequential plan of Period 1 Phase 3 and Period 2 graves near the cemetery church. 1:108. [Pages 57-8]

The change in grave alignment from north-south to east-west, and the Christian contribution

The construction of the east-west oriented cemetery church on the west side of the site could have provided the impetus for a change of grave alignment over the whole cemetery. One of the north-south graves in Period 1 Phase 3 Group D has been noted as being possibly, though by no means certainly, that of a member of a Christian family (plaster burial G687, p 36), and it is tempting to postulate that all the graves belonging to that group may also have been of Christians.

By extension, it would be possible to speculate that at least some of the other burials in the north-south cemetery were of Christians, or, perhaps more likely (Watts 1991, 64), that the whole early cemetery was reserved for Christian families (as was the case in some Italian cities by the 270s (Morris 1982, 237)), and to suggest that the cemetery was owned by the Christian community. Unfortunately, it is very difficult to find evidence in support of these last two ideas, particularly given the very pagan nature of the amulets deposited in G278 (p 41).

However, that there was in the town early in the 4th century a large and influential Christian community is evidenced by the construction of the church within the cemetery, and the east-west alignment of the new building appears to embody the Christian burial practice of laying the corpse supine with head to the west (pp 193-4). Early churches were not necessarily placed on this alignment, but the Butt Road building and its associated burials clearly were.

A change from a north-south to an east-west alignment in the Butt Road cemetery would have meant that only with very careful management could any new burials in a family plot have avoided cutting into existing north-south graves. Judging by the care with which north-south burials avoided each other (p 32), such a change was clearly not desirable.

Both Group C and Group E from Period 1 Phase 3 have been recognised in Period 2, and they demonstrate two different reactions to the change in alignment and the problem of avoiding earlier interments. Group C acquired a new, previously vacant, plot only about fifteen metres away from its original one. Group E, however, was in possession of a plot close to the east end of the church and chose to remain in that, no doubt, highly desirable position. The extreme care then necessary in the digging of new graves being more than repaid by their closeness to the church.

The compliance with which both groups changed to the new alignment seems to show that either they wished to conform or they had no choice in the matter. Either way, it seems clear that by c 320/40 Christianity was the dominant influence over those burying their dead in the cemetery.

The change of alignment was so rapidly implemented that Group C moved its plot without disrupting its idiosyncratic rites of deposition. A slower, less organised, change from a north-south to an east-west alignment in such a large cemetery is likely to have resulted in a number of instances of north-south burials cutting east-west ones, and of burials being aligned somewhere between the two norms. The first situation was not noted at all, and the second only once (G613), close to the cemetery church, where it appears to have been the result of Group E's careful avoidance of earlier burials in its plot (p 58).

Relationships

[Table 2.17]

The relationships between some Period 2 burials and features of Period 1 Phase 3 have been described above (pp 55-6), and it has also been noted (p 32) that few Period 1 graves escaped at least some damage during Period 2.

The same is also true within Period 2, for very few graves are not either cut by, or themselves cut, other east-west burials. As it was often the grave pit rather than the burial itself that was damaged, for some graves, especially in the areas affected by post-Roman activity, precise interrelationships could not be defined, but many graves could be placed in one of four categories, primary (ie not cutting another Period 2 grave but cut by at least one), mid-range (both cutting and cut by), final (cutting but not cut by), or isolated (not cutting and not cut by). Primary graves need not necessarily be early in Period 2 nor final graves late, though this may be true where a long sequence can be established. Dividing the burials in this way has been useful in defining patterns of grave good deposition and date, dates of individual graves within sequences, and possible shifts of grave alignment within the cemetery.

Complicated relationships between graves and even corpses are apparent in Period 2 (Table 2.17), such as two bodies in one coffin, two coffins in one grave pit, two coffins in a timber vault, a grave pit originally for a single coffin enlarged to accommodate three, and stacked burials. Relationships are also apparent where graves not dug at the same time but with shared characteristics other than similarity of grave deposit show deliberate siting of the later next to the earlier (eg p 102), and in possible clustering of graves around a focal burial (pp 114-18). Details of relationships are discussed in the following sections where appropriate.

It should be stressed that the absence of similar relationships in Period 1 Phase 3 and their appearance and diversity in Period 2 cannot be attributed to anything other than the short time-span and small number of graves of the former compared to the latter.

Period 2: relationships

Grave	Sex	Age	Description
G34 G42	F F	middle-aged middle-aged	stacked burial, coffin of G34 set directly above that of G42
G41/G43	M M ?	middle-aged middle-aged adolescent	uncoffined corpses buried in pit outside cemetery boundary (see pp 105-106)
G110 G117 G127	M M -	middle-aged middle-aged (infant)	stacked burial, coffin of G110 set directly on top of G117 when latter still solid; coffins of G117 and G127 both marked by tiles (see Table 2.41)
G191 G203	F ?	old adult	G203 set in centre of floor of timber vault BF163, G191 0.2-0.25 m above G203 and set diagonally across vault, both burials coffined
G246 G252	M ?	adult (adult)	stacked burial, coffin of G246 set above G272, earlier coffin probably already collapsed (for G272 see also possible coffin marker, Table 2.41)
G248 G252	? ?	adult (adult)	?stacked burial, coffin of G248 above that of G252, but area very crowded and stack not fully convincing (for G248 see also possible coffin markers, Table 2.41)
G355 G356	- I	(child) 2 years	stacked burial, coffin of G355 directly over that of G356, which was 0.3-0.4 m lower
G358 G366	F M	young middle-aged	coffin of G366 set in single-sized timber vault, that of G358 laid directly over vault (for G358 see also coffin markers, Table 2.41)
G357 G370 G382 G386	M M I F	middle-aged young 18 months-2 years young adult	all four burials stacked by the side of vault G366; G386 first, then G382, then G370, G357 last
G387 G388	- -	(newborn) newborn	graves end to end, possibly deposited at much the same time
G395 G396	M F	middle-aged middle-aged	set side by side in timber vault CF55, each in timber coffin containing lime plaster, both possibly deposited at same time, pottery vessel between coffins
G417 G424	F M	young middle-aged	stacked burial, coffin of G417 set above that of G424, only 0.15 m between them
G562 G570	F M	middle-aged 15-16 years	in the same grave pit, but not deposited at the same time
G622 G623	M F	middle-aged middle-aged	two coffins deposited at the same time side by side in one grave pit
G639 G643	M M	young old	?stacked burial, coffin of G639 set above that of G643, but skull of earlier burial probably removed when later dug
G645 G646	I F	3-4 years middle-aged	both corpses in one timber coffin, head of child resting on left hand of female
G663 G667 G674	? I ?	old 17-18 years old	G674 a single grave pit enlarged on burial of G667 to triple size to accommodate later (final) insertion of G663 (see also grave markers, Table 2.40)
G677 G680	I M	11-12 years middle-aged	set side by side in timber vault HF60, each in timber coffin, both possibly deposited at same time
G683 G684	? M	adult old	stacked burial, coffin of G683 set above that of G684

Table 2.17. Summary of notable related Period 2 burials. F... female; I... indeterminate; M... male; ?... uncertain. [Pages 59 93-118]

Population

[Tables 2.18-19]

On the whole, the skeletal material from the 669 individual interments in Period 2 did not survive well. In 11 per cent of graves there was no skeletal material at all, though in some their position was marked by a black stain in the soil. In a few graves, mainly those exposed in section, the bones were not lifted, in others the bones were removed by vandals or lost, and in others only a few teeth, fragments of skull, or badly decayed shafts of long bones remained, not always sufficient to allow an estimate of sex and, more importantly, age to be made. Together these account for a further 7 per cent of the burials. (Information from Appendix 1.)

In at least fifteen graves some or all of the bones were covered by a black deposit or appeared to be stained black (Table 2.18). In only one of the fifteen were the bones described as in good condition, and the black deposit/staining is seen as a product of decaying organic matter, related to the staining of the soil which in some graves was all that remained of the skeleton.

It is clear that a description of the population of the Period 2 cemetery if presented solely from the age and sex lists prepared by Dr Birkett and Stephanie Pinter-Bellows will be considerably restricted (if not distorted) by the missing 18 per cent. However, the lists can be enhanced by additional information as to sex from the grave goods, and as to age from the dimensions of the coffin and/or grave, and the dimensions and/or positions of the stains in the soil. Distinguishing between adult and child burials is particularly important, and the number of child burials in Period 2 has been notably increased in this way.

Table 2.19 shows that finally in only 46 interments (7 per cent) could neither age nor sex be established. This figure would have been much greater had the additional information not been available. For example, 59 additional child graves were noted. Thus, of 175 child burials, 116 (66 per cent) were identified from skeletal remains compared to 59 (34 per cent) mainly from the size of the coffin or grave.

However, it should be pointed out that not only is stature deceptive, some individual adults being perhaps extremely small, but there is also the possibility of children being buried in an adult-sized coffin or grave, as appeared to be the case in G287. This was identified from the teeth (all that remained of the skeleton) as the burial of a 2- to 3-year-old child, but at 1.6 m long and nearly 0.6 m wide the coffin is oversized for a 3-year-old and adequate for many adults. While accepting that the age attributed to the teeth could be suspect, G287 illustrates the danger inherent in taking coffin/grave size as indicative of age.

It is likely that many shallow graves were destroyed not only by post-cemetery activity on the site, but also, especially if they were small as well, by later,

larger, graves. During the examination of the faunal remains from Butt Road small quantities of human infant bone were noted in six Period 2 graves: 32 gm from G47 (middle-aged female); 2 gm from G181 (adult, sex uncertain); 2 gm from G347 (4-year-old child); 4 gm from G372 (middle-aged male); 2 gm from timber vault CF55 (G395, middle-aged male; G396 middle-aged female); and 8 gm from G500 (young adult, sex uncertain). The infant bone from G181 probably originated from the Period 2 child burial G228, the east end of which it destroyed, and a feature as large as CF55 may well have destroyed earlier infant burials. In the other four cases the bone is unlikely to be derived quite so directly from an earlier grave. It may still be residual if topsoil surrounding a grave were used as backfill in addition to the original spoil, and where only a few grams were recorded this may well be the case, but it is important to note that G47, G372, and G500 are Period 2 primary graves which do not cut any Period 1 feature. Grave 47 contained the largest amount of infant bone, 32 gm, and the possibility should be considered that this material represents an infant burial set into the adult female grave, disturbed by later activity on the site and thus not recognised as a formal interment during excavation.

No foetal bone was detected associated with an adult female skeleton, which is surprising given the number of female burials, but its absence may be a result of its fragility and the soil conditions.

The overall view of the cemetery's population is that it represents the full range of the ages, from peri- and neonatal infants to the elderly, and is equally split between the sexes.

It is important to stress that only in Period 2 is there definite evidence that still- or newborn infants were buried in the same cemetery as the rest of the family. Only four still- or newborn infants were noted as such by Dr Birkett (Table 2.19; G283, G362, G388, G392), but this is almost certainly only the barest minimum. For example, of similar size to these four or indeed smaller are G254, a very tiny infant buried in a coffin formed of two *tegulae*, and G199 and G394, each buried in a timber coffin. Grave 387, closely associated with G388, probably also contained a still- or newborn baby. The addition of these four graves doubles the number given by Dr Birkett.

From demographic studies of non-industrial populations which have a similar curve for the rest of the population to that given below by Stephanie Pinter-Bellows, we could assume a high infant mortality rate for Butt Road Period 2, and consequently expect a great many more infant burials than those noted in Table 2.19. While such a rate must remain unproven here, clearly the practice of burying very young infants under the eaves or elsewhere within the curtilage of private houses (p 26) continued in most Christian families in 4th-century Colchester.

Grave	Deposit/stain	Bones	Condition
G119	deposit	skull & upper post-cranial bones	poor
G236	deposit	humeri & skull*	fragments only
G244	stain	leg long bones	poor
G245	deposit	leg & foot bones	very poor
G247	stain	skull, spine, ribs, right arm, & pelvis	poor
G308	stain	left radius & ulna	poor
G499	stain	bones between knees & thoracic vertebrae	fair
G505	stain	right tibia & fibula	good
G535	stain	skull	poor
G542	stain	right leg bones	fair
G547	stain	skull & right leg long bones*	very poor
G549	stain	all surviving bones*	poor
G556	stain	all surviving bones except skull	fair
G608	stain	skull & bones on left side	poor
G740	stain	many surviving bones	poor

Table 2.18. Graves in which bones were covered by a black deposit or stained black, Period 2 cemetery. "... all surviving bones affected. [Page 61]

adult male	old	18	164(25%)
	middle-aged	87	
	young	29	
	age uncertain	30	
adult female	old	13	138(21%)
	middle-aged	53	
	young	34	
	age uncertain	38	
adult sex uncertain	old	9	448(67%)
	middle-aged	11	
	young	15	
	age uncertain	111	
juvenile	neonate	4	175(26%)
	adolescent male	1	
	adolescent female	4	
	pre-adolescent female!	12	
	all others	154	
age and sex uncertain			46(7%)
Total		669	

The human skeletons
by Stephanie Pinter-Bellows
[Appendix 3, microfiche pp 972-88]

Sex and age
[Tables 2.20-2.21; Fig 2.24]

Of the 669 individual interments from Period 2, 575 skeletons or partial skeletons were examined. Sex determination is presented in Table 2.20. Of the 575, 170 were diagnosed as male or probable male, 140 as female or probable female, 157 were not sexed because of the poor condition of the bones, and 108 were subadults and could not have their sex determined. The male/female ratio is 1:1.21. This gender ratio is above the expected ratio of 1:1, but not statistically different (chi square) from a normal biological population. This can be contrasted with the sex ratios of other Romano-British population samples which have often been found to be more heavily weighted in favour of males. The burials from Cirencester, another Roman town, demonstrated a masculine gender imbalance of 2.23 (Wells 1982, 135), and the Trentholme Drive cemetery for the Roman military establishment at York had an imbalance of 4 (Warwick 1968, 163). However, the Poundbury camp cemetery which served both Roman town and the surrounding countryside has slightly more females than males (Molleson 1991).

Age determination is also presented in Table 2.20. It should be noted that 36 per cent of the adults could not be aged. If these individuals could be included the frequencies in the adult aged categories might

Table 2.19. Population of Period 2 cemetery. Based on preliminary pathological identifications, grave goods, and grave/coffin size. [Page 61]

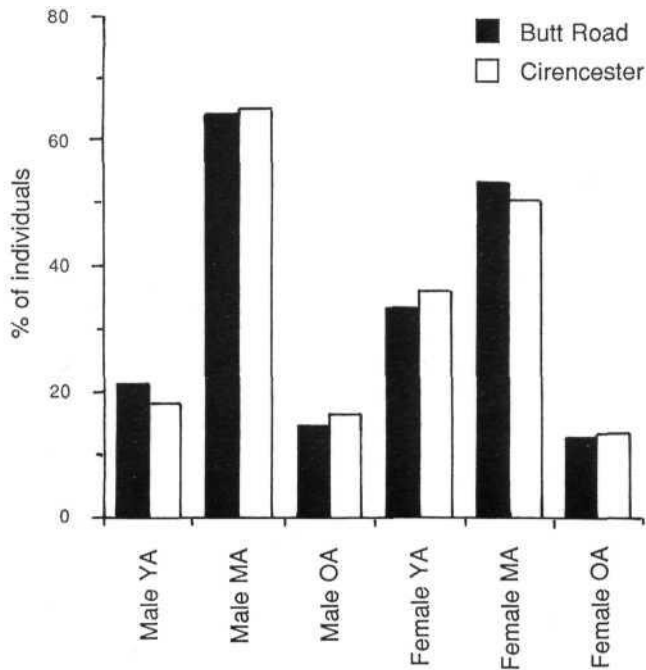


Fig 2.24 Comparison of age distribution between Period 2 and Cirencester.

Age	Unknown sex	Males	Females	Total
birth-0.9	6	-	-	6
1-1.9	13	-	-	13
2-4.9	27	-	-	27
5-9.9	33	-	-	33
10-14.9	27	-	-	27
15-19.9	8	3	4	15
young adults (20-29.9)	13	29	34	76
middle-aged adults (30-49.9)	11	88	54	153
old adults (50+)	10	20	13	43
adults age unknown	87	30	35	152
individuals age unknown	30	-	-	30
Totals	265	170	140	575

Table 2.20. Demography of Period 2 cemetery. [Pages 62-3]

Age	Dx	dx	lx	
birth-0.9	6	0.0152	1.0000	0.0152
1-1.9	13	0.0331	0.9848	0.0336
2-4.9	27	0.0687	0.9517	0.0722
5-9.9	33	0.0840	0.8830	0.0951
10-14.9	27	0.0687	0.7990	0.0860
15-19.9	15	0.0382	0.7303	0.0523
young adults (20-29.9)	76	0.1934	0.6921	0.2794
middle-agt>d adults (30-49.9)	153	0.3893	0.4987	0.7806
old adults (50+)	43	0.1094	0.1094	1.0000

Table 2.21. Mortality schedule, Period 2 cemetery, Butt Road.

change. The adult age distribution shows the greatest percentage of aged adults dying in the middle-aged category, which is a fairly normal distribution. More females than males died as young adults. This is common in early urban societies where females succumb to stresses related to childbearing. The adult age distribution for the Period 2 cemetery has been compared to that of the Cirencester Romano-British burials from south of the Fosse Way (adapted from Wells 1982, 136) in Fig 2.24. The percentages of males and females in the age intervals are nearly identical for the two sites. Poundbury has a larger percentage of young adults dying than middle-aged or old adults. It has been suggested that this may have been brought about by immigration of young adults who would not have been acclimatised to the diseases of the town (Molleson 1991).

The Period 2 skeletons show adult bias with an under-representation of subadults. The dearth of childhood mortality cannot just be explained by competent child-rearing or an above average health environment. Instead, for several reasons (p 61, and see below), the lack of subadult skeletons is more likely to be a combination of factors, including interment of subadults (especially infants) away from adults, and the fact that subadult bones can be more vulnerable to post-inhumation deterioration and destruction than those of adults. There were 31 per cent more 'child' inhumations recorded than subadult skeletons examined (subadult is loosely defined here as foetal to 19.9 years of age).

The Period 2 subadult sample is not likely to be representative of the Romano-British population of Colchester because two criteria are present which are not found in virtually any representative population sample, developed or undeveloped (Weiss 1973, 46). These can be seen in the mortality schedule, Table 2.21. First, late subadult mortality should be significantly lower than infant mortality. Populations are unlikely to exist in which the infant mortality is lower than $q(15)$ (the probability of dying between 15 and 19). The age interval of 15-19 is usually a period of low mortality. In the Period 2 sample, there is a lower $q(0)$ (the probability of dying between 0 and 0.9), 0.0152, than $q(15)$, 0.0523. Second, children aged 10-14 should be the healthiest segment of a population; with populations usually having strictly decreasing juvenile mortality and strictly increasing adult mortality. Any demographic sample in which the pairing at the juvenile-late subadult junction results in $q(10)$ being greater than $q(15)$ is judged unlikely to be a representative sample of a population. In Period 2 this occurs, with a larger $q(10)$, (0.0860), than $q(15)$, 0.0523. Weiss (*ibid*, 49) also has a second, more rule-of-thumb, test: a minimum of 30 per cent of the skeletons should be under 15 years of age. Not even with the 'child' inhumations for which no bones were present added in is this 30 per cent minimum reached. Therefore, demographic statistics such as life expectancy were not calculated, and the demographic picture of the population structure of Period 2 should be considered only a very rough impression.

Stature

[Table 2.22; Fig 2.25]

Growth and stature have been shown to be important factors in evaluating overall stress in a population (Hummert & Van Gerven 1983). Chronic stress during development can affect adult stature. Of the 272 adult burials examined from Period 2, 144 (59.2 per cent; 85 males and 62 females) had long bones from which statures could be calculated. Table 2.22 shows the means and ranges for both sexes from Butt Road Period 2, along with the adult stature for some comparative sites. From this it will be seen that the Butt Road Period 2 skeletons were of medium height with a range of 0.3 to 0.35 m. They also have more overlap of heights between males and females and a slightly wider range of heights compared to the other samples. However, the mean statures for the male and female skeletons from Butt Road Period 2 are average for the statures known of other early groups, and are very close to the means for the Cirencester, Trentholme Drive, and Hampshire Roman skeletons. The similarity of the statures of the adults shows that subadults from Colchester experienced no more overall stress during development than the subadults from these other sites.

The distribution of statures from Butt Road Period 2 can be seen in Fig 2.25. The height distribution histograms for both sexes are much more irregular than is usual, and could possibly be viewed as multiphasic. Such a view could, in turn, possibly be interpreted as evidence of different population groups within the cemetery. However, it is far more likely that the multiphasic results are due merely to unavoidable technical error in the variety of long bones used to calculate the stature due to the poor condition of the skeletons.

Metrical analysis

[Tables 2.23-2.24]

Of the 272 adult burials examined from Period 2, 151 (55.5 per cent; 89 males and 62 females) had measurements which could be recorded. The measurements were taken by Raoul Perrot. A distribution of indices made from some of the measurements is seen in Table 2.23. The indices and skeletal measurements employed are as defined by Olivier (1960), Morel (1962), and Perrot (1985). One of these measurements differs from those defined by Brothwell (1972) and Vallois (1965). The orbital breadth uses as its medial landmark a point midway along the maxillary and frontal suture instead of dacryon. Therefore, the orbital index, while included to complete the shape of the skull, should only be compared with sites whose skeletons were measured using the same landmark.

The metric indices for Butt Road Period 2 are compared with those from Cirencester (Wells 1982, 138-9) in Table 2.24. T-tests show that none of the differences in the distributions of the indices between the skeletons of the two sites are significant. All the means of the indices are quite similar, though the Butt Road skeletons have a wider range for each index.

Non-metrical analysis

[Table 2.25; Figs 2.26-2.32]

Non-metrical skeletal variants are features that are usually recorded as being present or absent. Many non-metrical skeletal variants can arise from either a predominantly genetic or environmental source. At present no specific human non-metrical trait has

Sex	No	Mean	Range
Period 2 Butt Road			
female	59	1.5626 m (5' 2")	1.415 m (4' 7")-1.71 m (5' 7")
male	85	1.6758 m (5' 6 1/2")	1.545 m (5' 1")-1.9 m (6' 3")
Cirencester (Wells 1982, 140)			
female	44	1.579 m (5' 2")	1.475 m (4' 10")-1.698 m (5' 6 3/4")
male	107	1.691 m (5' 6 1/2")	1.598 m (5' 3")-1.817m (5' 11 1/2")
Trentholme Drive, York (Warwick 1968, 149)			
female	52	1.53 m (ST)	1.44 m (4' 8")-1.68 m (5' 6")
male	231	1.71m (5'7")	1.59 m (5' 3")- 1.8 m (6')
Hampshire Roman cemeteries (Arnold 1984, 137)			
female	-	1.566 m (5' 2")	
male	-	1.711 m (5' 7")	

Table 2.22. Stature, means and ranges of Period 2 cemetery and comparative data from other Roman cemeteries.

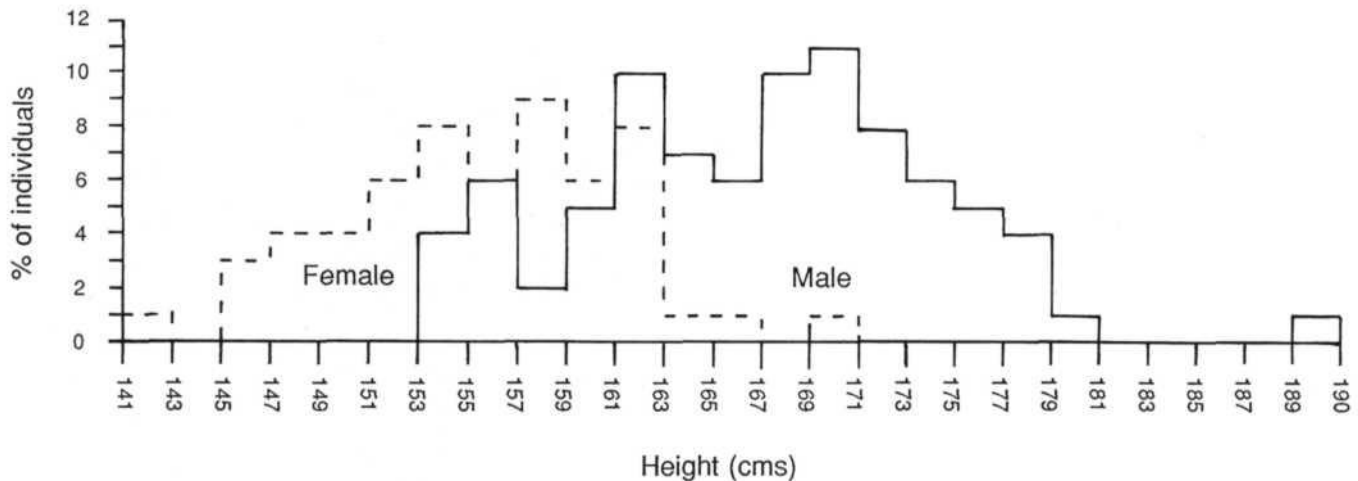


Fig 2.25 Distribution of stature for Period 2. [Page 64]

convincingly demonstrated major gene effects, though they have been demonstrated in experimental animals (Saunders 1989, 104). Their ability to prove inter- or intra-population relationships is still experimental.

The traits involved are chiefly those of the skull, and although few crania remained intact, 251 were present in various states of fragmentation in which at least some of the traits could be noted. The skeletal variants were recorded not as an overall frequency, but rather as a proportion of the possible cases. The variants found in Table 2.25 are those which have been well defined, produce relatively low intra-observer error, and in most cases are believed to be relatively resistant to environmental stress. There is, however, some question as to whether biomechanical stress can affect the production of cranial sutures and supernumerary bones (Bennett 1965; El-Najar & Dawson 1977). Several studies have detected an association between certain traits and sexual dimorphism. Traits characterised by an excess of ossification, eg atlas bridging, and a third trochanter of the femur have a higher male incidence, whereas females display more traits characterised by incomplete ossification, eg a septal aperture of the humerus (Saunders 1989, 100). Table 2.25 shows the frequency of fifteen non-metrical traits for the Butt Road Period 2 skeletons, together with the rates from Cirencester (Wells 1982, 142). The rates for Butt Road are shown for males, females, and the two sexes combined plus the unsexed adults. In comparing Butt Road and Cirencester, the rates are not significantly different (chi square = 7.95, d.f. 14, $p > .5$).

Non-metrical variants which were present in roughly 10 per cent or less of the observable sample were used to examine the possibility of tracing family relationships. Skeletons manifesting some variants tend to cluster into groupings which can be hypothesised to be family groupings by other methods

(p 93). These variants are double supraorbital foramen (Figs 2.26a, 2.27), metopic suture (Figs 2.26b, 2.28), coronal suture bone (Figs 2.26b, 2.29), epipteric bone (Fig 2.30), asterionic bone (Fig 2.30), and inca bone (Figs 2.26c, 2.31). Also plotted were congenital abnormalities, further discussed below, many of which tend to run in families. Skeletons showing lumbarisation of the first sacral segment, spina bifida occulta, and a peg third molar also tend to cluster into likely family groupings (Figs 2.31-2.32), though evidence hints that nutritional deficiencies may be involved in spina bifida occulta. In several cases individuals have been observed with a combination of cranial sutures and supernumerary bones present (eg G722, Fig 2.26b). Some believe that the likelihood of a family relationship is greater when there is a combination of traits (White 1988, 34).

Congenital pathologies

[Table 2.26; Fig 2.33]

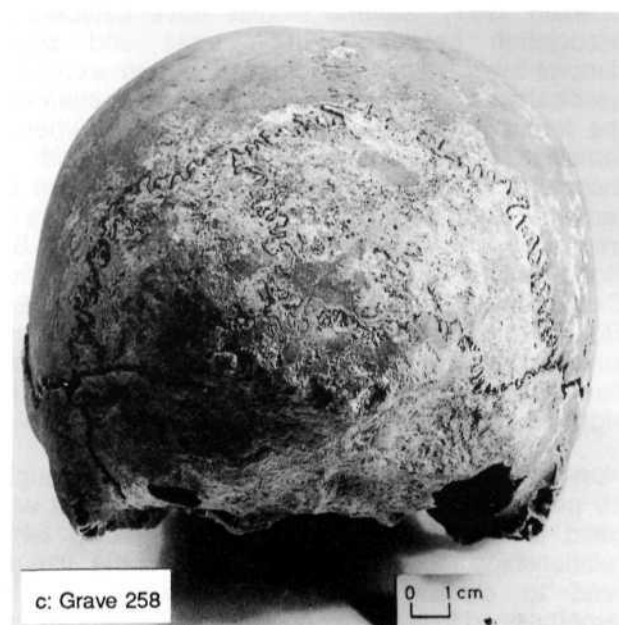
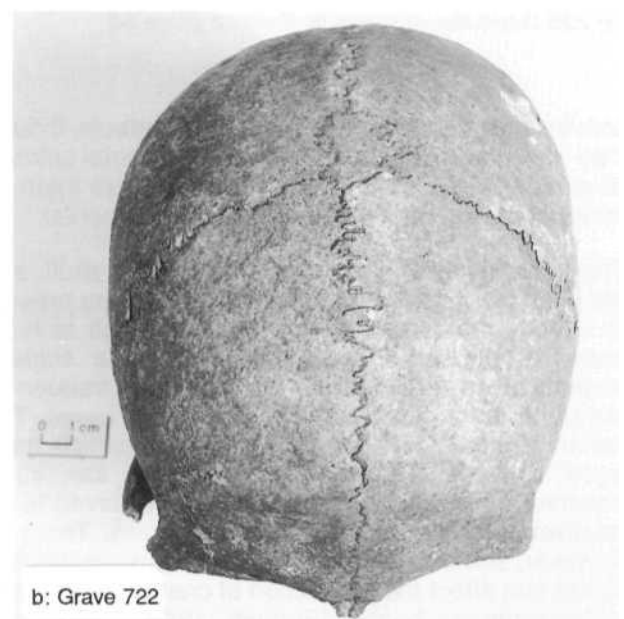
Congenital abnormalities are those which are present at birth. They range from minor anomalies which may never be noticed by the individual affected to fatal abnormalities. Several minor anomalies of skeletal development were found affecting the vertebral column. Two middle-aged males (G131 and G121a) were found to have accessory articular facets on the ilium and between the fifth lumbar and sacrum respectively. A middle-aged female (G34) had a twelfth thoracic which was lumbarised and the last lumbar fused to the first sacral segment. Two adult males, one young (G353) and one middle-aged (G379), showed lumbarisation of the first sacral segment. One subadult (G631) has partial fusion of the spinal portions of the second and third cervical vertebrae.

Class	Range	Males		Females	
		no	%	no	%
Cephalic index					
hyperdolichocephalic	x-69.9	12	13.5	5	8.8
dolichocephalic	70-74.9	35	39.3	15	26.3
mesocephalic	75-79.9	26	29.2	27	47.4
brachycephalic	80-84.9	11	12.4	9	15.8
hyperbrachycephalic	85-x	5	5.6	1	1.7
Height-length index					
chamaecranic	x-69.9	13	28.3	12	33.3
dolichocranic	70-74.9	30	65.2	21	58.3
mesocranic	75-x	3	6.5	3	8.3
Height-breadth index					
tapeinocranic	x-91.9	12	26.1	20	55.6
metriocranic	92-97.9	23	50.0	13	36.1
acrocranic	98-x	11	23.9	3	8.3
Upper facial index					
hypereuryene	x-44.9	0	-	0	-
euryene	45-49.9	2	5.0	2	5.6
mesene	50-54.9	16	40.0	11	30.6
leptene	55-59.9	19	47.5	17	47.2
hyperleptene	60-x	3	7.5	6	16.7
Nasal index					
leptorrhine	x-47.9	41	77.4	26	61.9
mesorrhine	48-52.9	10	18.9	13	31.0
platyrrhine	53-x	2	3.8	3	7.1
Orbital index (see p 64)					
chamaeconchic	x-75.9	19	35.2	16	36.4
mesoconchic	76-84.9	30	55.6	18	40.9
hypsiconchic	85-x	5	9.3	10	22.7

Table 2.23. Metrical distributions, Period 2 cemetery. [Page 64]

Spina bifida occulta is a failure in the bony spinal canal of the vertebrae; in this form it presents no significant symptoms. The defect is commonly found in one or more segments of the sacrum, but may occur on other vertebrae. It has been found on average in 2.7 per cent of early British skeletons (Brothwell & Powers 1968, 197). The incidence of spina bifida occulta in Butt Road Period 2 skeletons is 2.2 per cent and can be seen in Table 2.26. Two young adult females (G286, G398), one middle-aged female (G623), and two middle-aged males (G372, G426) have spina bifida occulta of the first sacral segment. A young adult male (G496) has spina bifida occulta of the first and second sacral segments (Fig 2.33a). In one adult male (G410), the spina bifida occulta is seen in the first five sacral segments (Fig 2.33b).

Right: Fig 2.26 Non-metrical variants of the skull, Period 2. a... double supraorbital foramen, G349; b... metopic suture and coronal suture bone, G722; c... bipartite inca bone, G258. [Pages 64-5]



Sex	No	Mean	Range	Majority type
Cephalic index				
<i>Period 2 Butt Road</i>				
female	57	75.94	54.59-85.63	mesocephalic (47.4 %)
male	89	75.18	61.35-89.56	dolichocephalic (52.8 %)
<i>Cirencester</i>				
female	18	76.57	70.8-83.8	mesocephalic (55.6 %)
male	40	73.60	69.6-82.4	dolichocephalic (47.5 %)
Height-length index				
<i>Period 2 Butt Road</i>				
female	36	70.68	61.08-76.65	orthocranic (58.3 %)
male	46	71.05	57.89-78.21	orthocranic (65.2 %)
<i>Cirencester</i>				
female	17	69.29	65.7-74.7	chamaecranic (52.9 %)
male	32	70.52	64.3-77.4	orthocranic (46.9 %)
Height-breadth index				
<i>Period 2 Butt Road</i>				
female	36	90.97	77.93-102.36	tapeinocranic (55.6 %)
male	46	94.78	72.79-118.40	metriocranic (50.0 %)
<i>Cirencester</i>				
female	19	89.75	81.3-98.0	tapeinocranic (63.1 %)
male	32	93.49	82.6-103.7	tapeinocranic (46.9 %)
Nasal index				
<i>Period 2 Butt Road</i>				
female	42	46.04	34.55-59.34	leptorrhine (52.4 %)
male	53	44.96	45.99-67.59	leptorrhine (69.8 %)
<i>Cirencester</i>				
female	8	47.85	42.1-53.0	mesorrhine (50.0 %)
male	22	46.06	38.7-52.1	leptorrhine (54.5 %)

Table 2.24. Metric indices, means, ranges, and majority types in the Period 2 cemetery and comparable data from Cirencester (Wells 1982, 138-9). [Page 64]

Variants	Period 2 Butt Road			Cirencester			Combined			Combined		
	no	female	%	no	Male	%	no	+	%	no	+	%
metopism	93	5	5.4	123	12	9.7	241	19	8.6	194	16	8.2
bregma bone	83	0	-	112	1	0.9	219	1	0.5	150	2	1.3
coronal wormian	81	0	-	102	7	6.9	203	7	3.5	227	13	5.6
sagittal wormian	78	1	1.3	107	2	1.9	206	3	1.5	131	10	7.6
lambdoid wormian	76	21	27.6	109	46	42.2	206	69	33.5	239	149	62.3
asterionic ossicle	79	3	3.8	94	5	5.3	193	8	4.1	92	8	8.7
epipteric ossicle	75	3	4.0	92	5	5.4	187	8	4.3	171	10	5.8
inca bone	82	4	4.9	112	4	3.6	215	9	4.2	158	10	6.3
supra-orbital notch	82	33	40.2	112	47	42.0	216	82	38.0	301	176	58.5
double supra-orbital foramen	88	5	5.7	107	18	16.8	218	23	10.6	288	44	15.3
supra-orbital grooves	76	17	22.4	100	31	31.0	199	48	24.1	252	102	40.5
double hypoglossal canal	88	18	20.5	92	22	23.9	189	41	21.7	230	35	15.2
atlas bridge	57	5	8.8	75	8	10.7	153	13	8.5	225	32	14.2
septal aperture of humerus	66	4	6.1	87	0	-	173	6	3.5	264	23	4.5
femoral third trochanter	71	4	5.6	92	4	4.4	182	8	4.4	240	21	8.7

Table 2.25. Frequency of non-metrical variants, Period 2 cemetery, with comparative data from Cirencester (Wells 1982, 142). Figures in the 'Combined' column include unsexed individuals. [Pages 64-5]

Vertebral level	No of cases	
	Males	Females
S1	2	3
S1 +S2	1	0
S1 -S5	1	0

Table 2.26. Incidence of spina bifida. Period 2 cemetery. [Page 66]

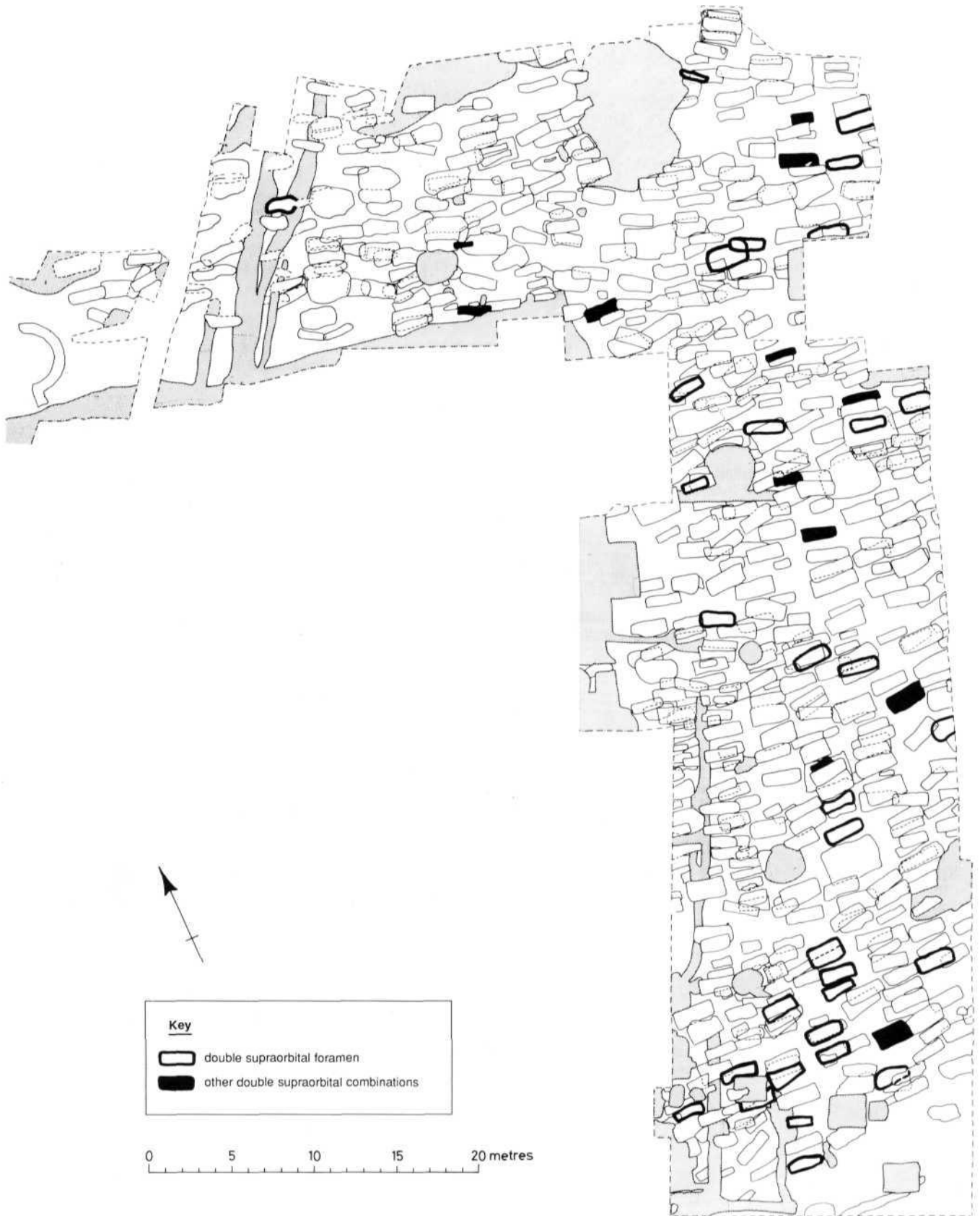


Fig 2.27 Graves with skulls showing a double supraorbital foramen or other double supraorbital combinations, Period 2. 1:333. [Pages 64-5]

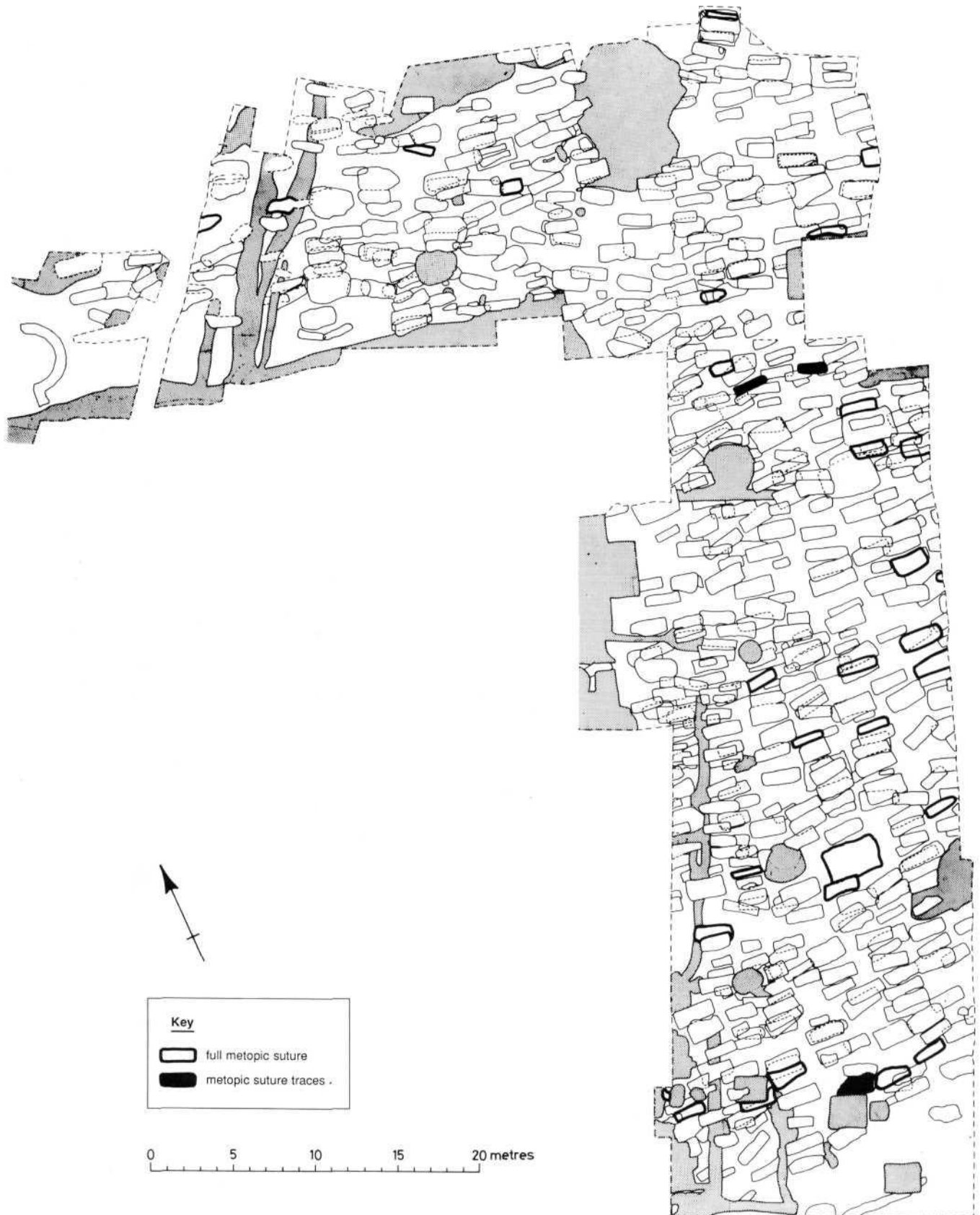


Fig 2.28 Graves with skulls with a full or partial metopic suture, Period 2. 1:333. [Pages 64-5]

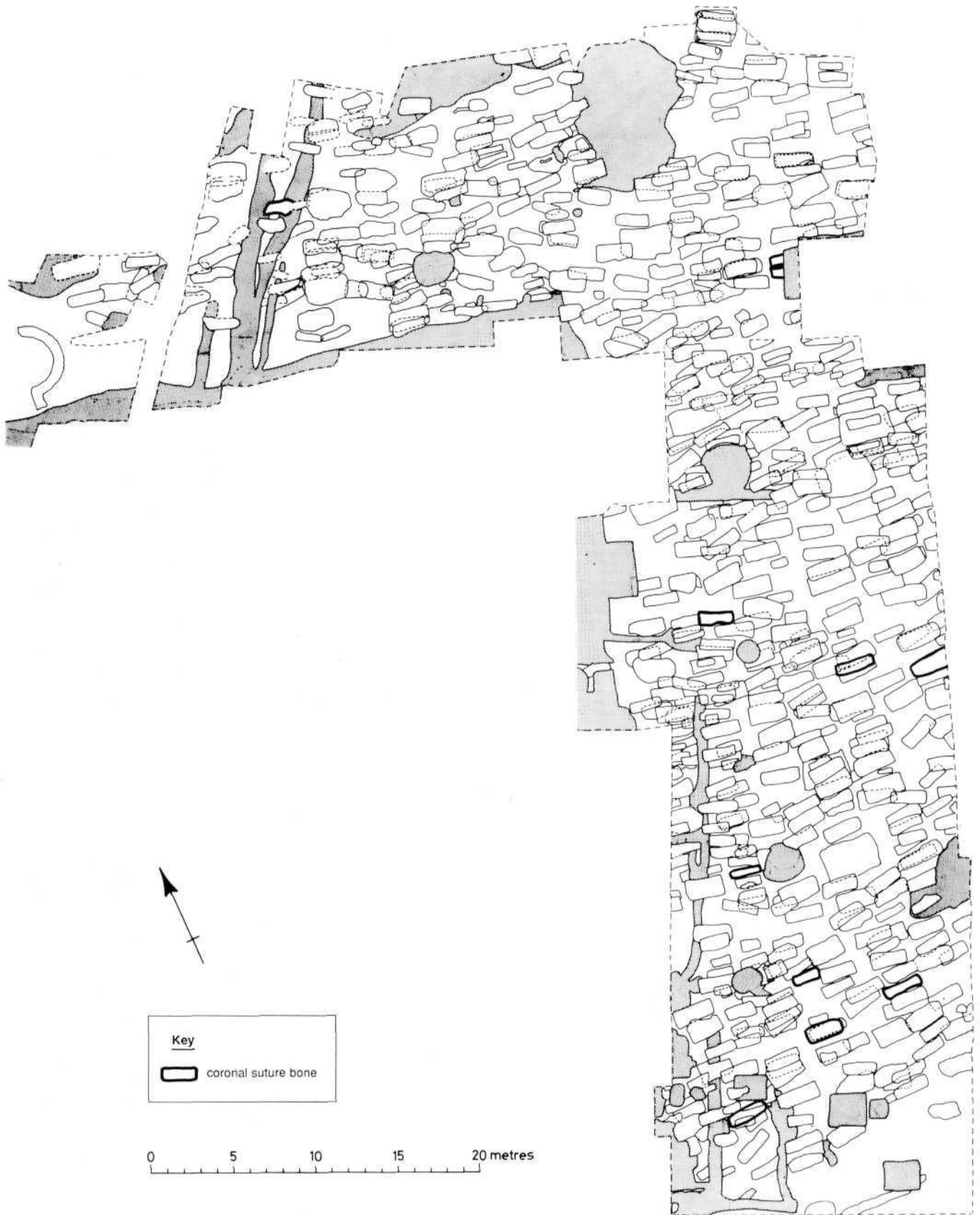


Fig 2.29 Graves with skulls with a coronal suture bone, Period 2. 1:333. [Pages 64-5]

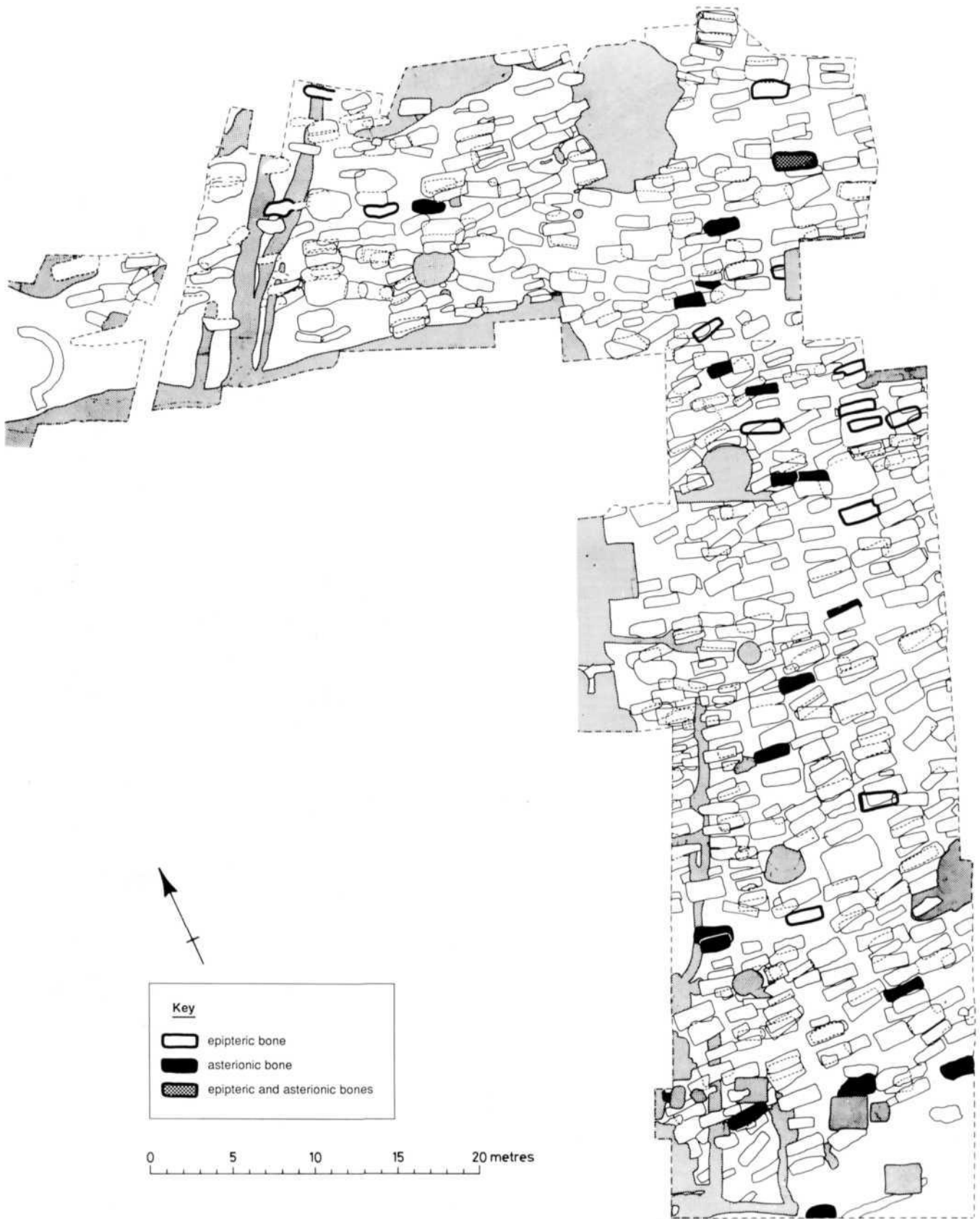


Fig 2.30 Graves with skulls with an epipteric bone, an asterionic bone, or both, Period 2. 1:333. [Pages 64-5]

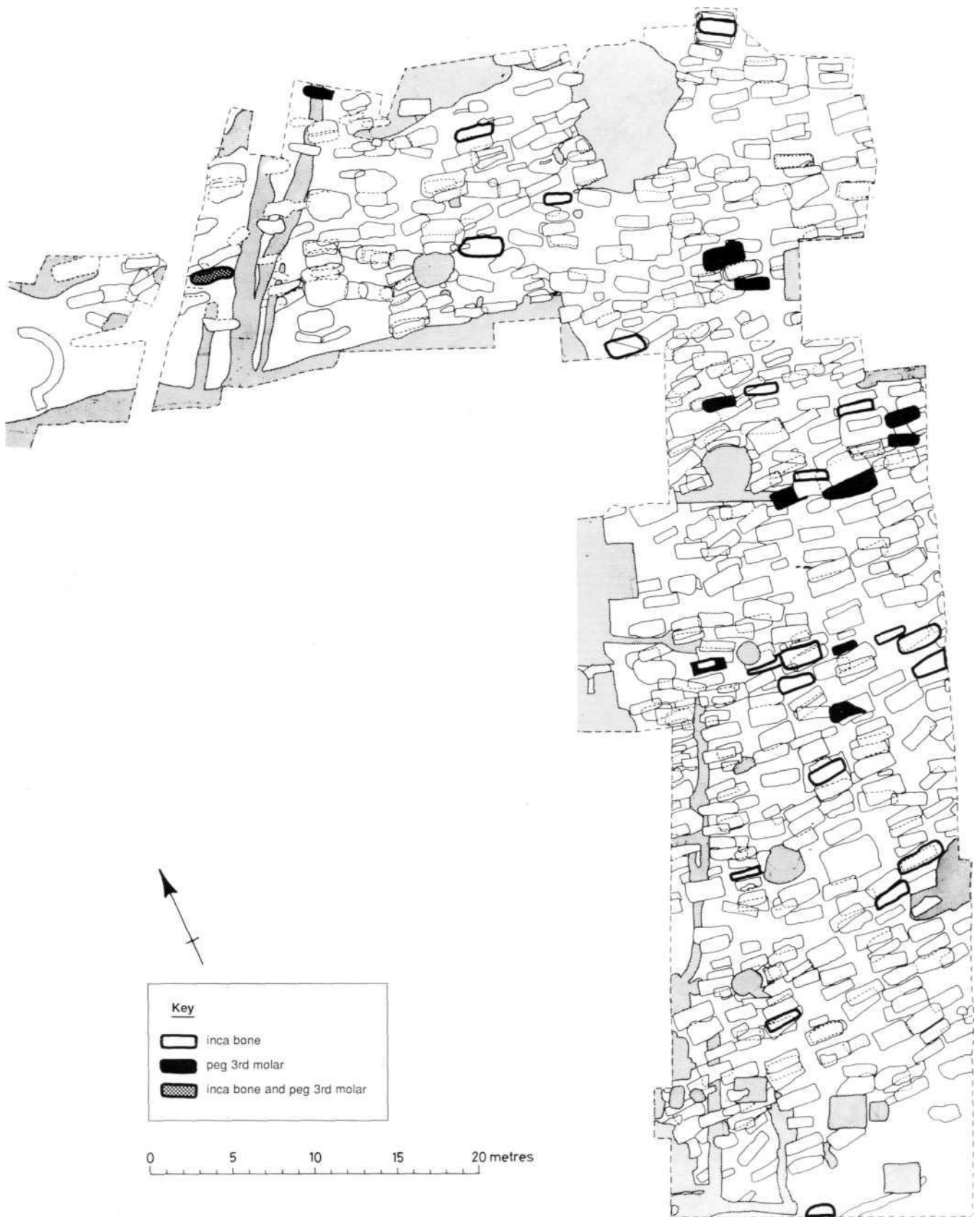


Fig 2.31 Graves with skulls with an inca bone, a peg 3rd molar, or both, Period 2. 1:333. [Pages 64-5]

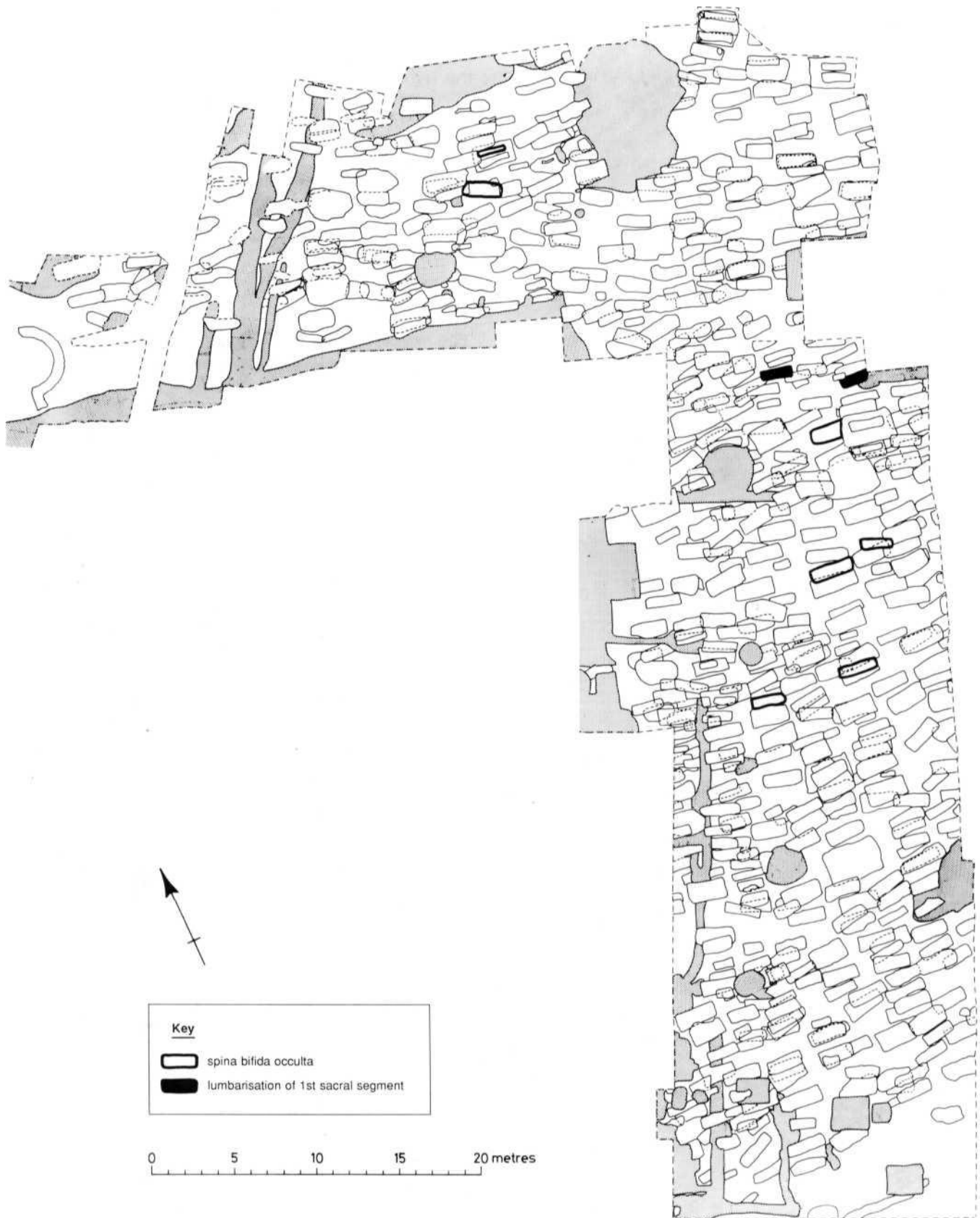


Fig 2.32 Graves in which some vertebrae have spina bifida occulta or where there is lumbarisation of the first sacral segment. Period 2. 1:333. [Pages 65-6]

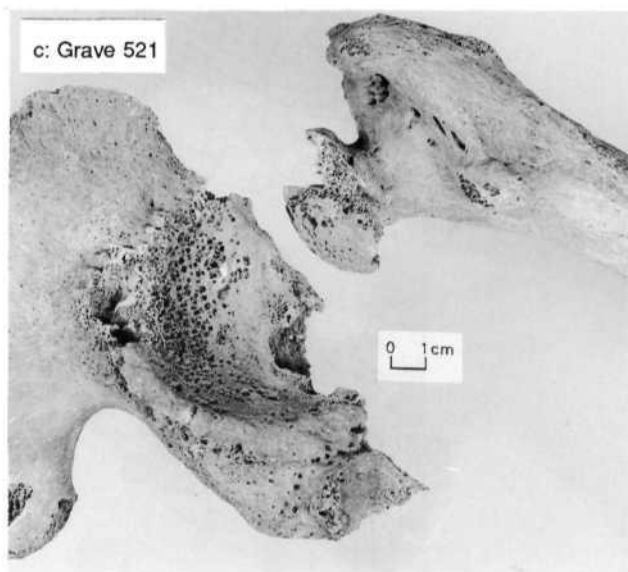
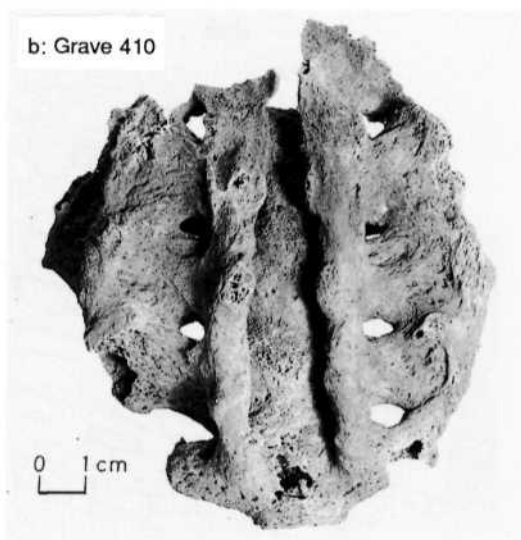
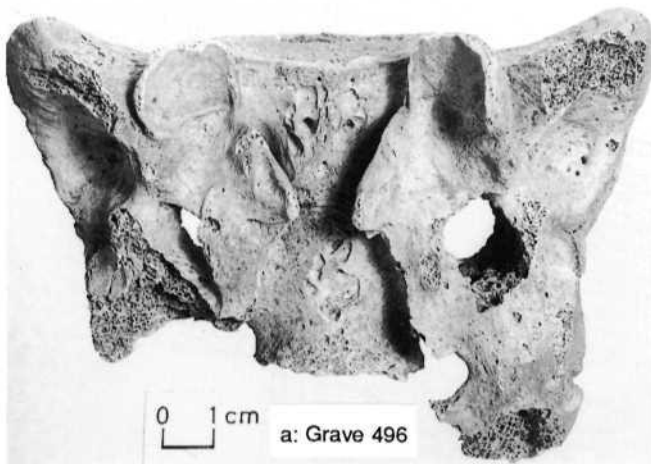


Fig 2.33 Congenital abnormalities, Period 2. a... spina bifida occulta, midline defect in first two sacral segments, G496; b... spina bifida occulta, midline defect in all five sacral segments, G410; c... acetabular dysplasia of right hip joint, G521. [Pages 65-6 & 74]

There was only one instance in which a congenital abnormality would have presented significant symptoms to the individual. An old adult male (G521) possessed unilateral (right side) congenital acetabular dysplasia. This abnormality resulted in a tendency of the right hip joint to dislocate and develop degenerative arthrosis. The hip socket is shallow and the upper end of the femur is flat, with a grossly irregular edge due to arthritis (Fig 2.33c). This man would have had a pronounced limp and would have been unable to do heavy manual work involving walking. He would also have been in constant pain.

Acquired pathologies

The majority of the pathological abnormalities found in the Period 2 skeletal sample were acquired at some time during the postnatal life of the individuals.

Trauma

[Tables 2.27-2.28; Fig 2.34]

Trauma may affect soft tissue, bone, or both. For trauma to the bone, fractures, there is direct evidence (see below). However, the majority of injuries are sustained by the soft tissues. Evidence for these injuries is indirect and depends on the severity of the damage to the soft tissues adjacent to the bone. Either muscle tears or blunt injuries to an area where the bone is close to the surface can result in a haematoma. If this haematoma becomes calcified or ossifies, it will lead to an irregular swelling (an exostosis) on or just under the bone surface. Another pathology thought perhaps to originate from stress to soft tissue, in this case the intervertebral discs, is Schmorl's node. While its aetiology is not completely understood, it is believed that if the disc located between the vertebrae is subject to too much strain it may rupture. The bubble of escaped material then presses against the body of the adjacent vertebra, which gradually yields to the pressure, allowing a small cavity to be formed in its body.

All appendicular soft tissue injuries noted are to be found on male skeletons. They are all on bones in the leg and foot. In the Cirencester sample (Wells 1982, 173-5), 87 per cent of the exostoses were found in males. The distribution of the exostoses is in Table 2.27. There is one exostosis on a femur (right) just lateral to the linea aspera in an old adult male (G206). This resulted from a tear to the adductor longus muscle attachment. A middle-aged male (G65b) has a small exostosis on the right tibia, probably a reaction to a small penetrating wound or ulcer which lightly involved the bone but was soon repaired. An old adult male (G643) has a small exostosis involving the distal right tibia and fibula from a tear of the interosseus ligament attachment. A right navicular and a left navicular of two middle-aged males (G41a, G143)

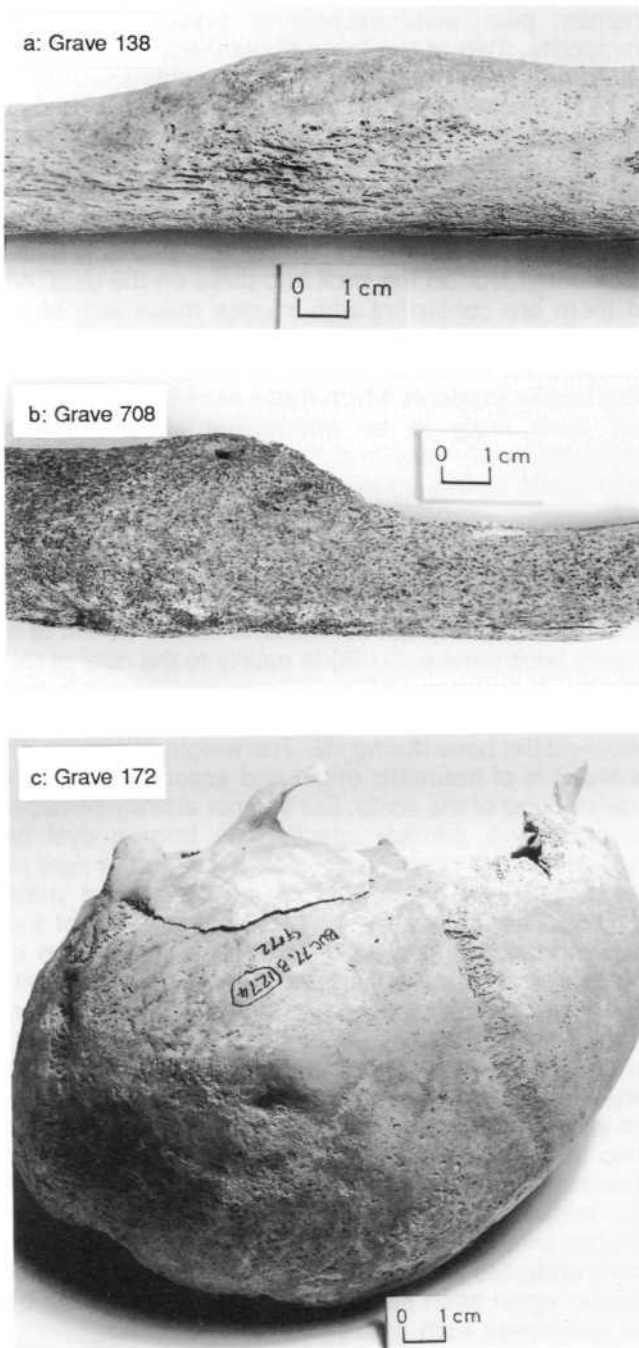


Fig 2.34 Evidence of trauma, Period 2. a... lesion on right tibia, G138; b... healed fractured right tibia, G708; c... probable depressed fracture of left parietal, G172. [Pages 74-5]

Site of exostosis	No of cases
femur	1
tibia	4
fibula	2
navicular	3

Table 2.27. Distribution of exostoses in males, Period 2 cemetery. [Pages 74-5]

Site	No of cases		
	males	females	?sex
<i>Accidental fractures</i>			
VT	1	0	0
L5, spondylosis	0	1	0
rib	1	1	0
clavicle	0	0	1
acetabulum	1	0	0
humerus	0	0	1
radius	4	2	0
ulna	0	2	0
tibia	4	1	1
fibula	3	0	0
<i>Non-accidental fractures</i>			
frontal	1	1	0
parietal	0	1	0
occipital	0	1	0
ulna	1	2	0

Table 2.28. Distribution of fractures, Period 2 cemetery. [Pages 75-7]

have small exostoses from a tear of tendon or capsule caused by wrenching the foot in one way or another.

One adult male (G138) has received several injuries. There is a severe, widespread, craggy exostosis on the distal fifth of the left tibia, presumably from a tear of the interosseus ligament attachment, with the left fibula also slightly affected; and a small exostosis from a torn ligament on the proximo-dorsal aspect of the right navicular. This male also has an obtrusive lesion in the mid-shaft of the right tibia. It is a fusiform thickening about 70 mm long, chiefly involving the subcutaneous surface. It is suspected to be an ossified haematoma and is flanked by deep periostitic grooving along approximately 110 mm of the posterior half of the medial surface of the middle third of the bone (Fig 2.34a).

More males than females were recorded as having Schmorl's nodes. This is seen to be the case in many populations, with males putting more stress on their spines. Two females (2.74 per cent of females with observable vertebrae) had Schmorl's nodes. One was located on a thoracic vertebra, one on a lumbar. Nine males (9.78 per cent of males with observable vertebrae) had Schmorl's nodes: one on a cervical vertebra, six on thoracic vertebrae, and five on lumbar vertebrae (some individuals had more than one node).

Bone fractures may be either accidental or non-accidental. The criteria used by Manchester (1983, 58) is used to make these distinctions. The joint distribution of fractures, both accidental and non-accidental, for the two sexes is shown in Table 2.28. Eighty-one per cent of the fractures appear to be from accidental causes. Starting with the axial accidental fractures, one old adult male (G227) and one young adult female (G288) have old well-healed fractured

ribs, quite probably due to direct force, as in falling onto the chest. The male also had the first two thoracic vertebrae broken, and they have fused, with the ligaments ankylosing. There is another vertebral fracture of a more specialised nature. A middle-aged female (G47) has spondylolysis of the fifth lumbar. In spondylolysis, it seems there may be a genetic propensity for a weakness between the arch and the centre of the vertebra, and, due to the stresses and strains of daily life, these vertebrae may fracture in early adulthood. In most instances the defect does not create symptoms. There is one healed clavicle fracture in an unsexed adult (G651). These fractures are usually due to falling on the point of the shoulder. A middle-aged male (G30) has a healed fracture of the supero-posterior quadrant of the left acetabulum. It has broken off about 30 mm of the rim of the socket in a flange 8 mm thick. It has united firmly with only a very small amount of displacement. Fractures of the acetabulum often occur from falls from a great height. There is also one middle-aged male (G39) with a well-healed nasal fracture.

It is in the appendicular skeleton that most of the accidental bone fractures occur. In this sample, there are an equal number of fractures in the bones of the arms and legs. There are six radii and two ulnae with fractures. Three of the radial fractures are what are termed Colles' fractures. These are close to the wrist joint and due to a fall onto the outstretched arm. Two of the Colles' fractures, from a middle-aged female (G158) and male (G285), from the right and left arm respectively, healed well with negligible displacement, but the third, on the right arm of a young adult male (G20), healed quite badly into a 'spoon' shape. Of the other three radial fractures, one is a well-healed fracture of the left arm from a middle-aged male (G249), one is a fracture of the left arm from a middle-aged female (G399) with some displacement, and the third is an oblique fracture of the left arm, with override, from an adult male (G563). Both ulna fractures are from the right arms of young adult females (G244, G513), and both healed relatively well.

There are six fractured tibiae and three fibulae. Two of the tibial fractures are well-healed, one is a distal fracture from the right leg of a middle-aged female (G511), the other is an unsided mid-shaft fracture from an adult of undetermined sex (G461). Three of the tibiae (all right) are firmly healed with little angulation, but show override with various degrees of shortening. These individuals would have limped when walking. Two were middle-aged males (G306, G622) with a shortening of 10 mm and 20 mm respectively, and the third was an old adult male (G18) with a shortening of 15 mm. The last fractured tibia belonged to a middle-aged male (G708). This was a right, mid-shaft, compound fracture (the skin broke during the fracture). It healed with an override of 45 mm and, because of the break in the skin, a bacterial infection caused an extensive lesion of osteomyelitis to develop (Fig 2.34b). The presence of a sinus shows that pus was discharging from the deep abscess cavity, and this male undoubtedly suffered

intense pain with associated fever and some immobility. Two of the three fibula fractures are mid-shaft, one from the left fibula of a middle-aged male (G214), the other from the right fibula of an old adult male (G584). The third fracture is found in the proximal fourth of a left fibula from an adult male (G137).

There are seven injuries which are probably non-accidental: four on the skull and three on the ulna. All of them are consistent with injuries made with blunt instruments, none were made by sharp, blade-like, instruments. All these injuries show signs of healing. The hostile incidents which these skeletons represent are most likely to be internecine strife and the arguments of day-to-day life, though foreign aggression cannot be ruled out.

Almost all skull injuries represent intentional blows, though some may occur by falling against a blunt object or from falling objects. There are two depressions on frontal bones. One on the frontal of a young adult female (G178) is mainly to the right of the midline. It measures 18 by 12 mm and its rough and pitted floor suggests that some infective osteitis attacked the bone during life. The weight of probability is that it is of traumatic origin and associated with an open wound of the scalp. But it is not entirely possible to exclude a primary infection as from a cyst or carbuncle. The other depression is just to the right of the midline on the frontal of a middle-aged male (G395). The impact shows on the inner table of the skull and is well-healed. This shallow depression is probably a depressed fracture from a blunt instrument. There is one middle-aged female (G172) with a shallow, almost circular, dent about 9 mm in diameter, in the middle of the left parietal (Fig 2.34c). It is probably a depressed fracture caused by a blow from an instrument such as a small hammer head. There is also a middle-aged female (G23) with a circular depression, about 13 mm in diameter, to the right of the midline on the occiput just above the superior nuchal line. A barely detectable bulge of the inner table underlies the lesion. This has the appearance of having again been caused by trauma from a blow by an instrument such as a small hammer head.

The three non-accidental fractures on the ulna are all parry fractures. This type of fracture is on the middle third of the shaft, and is commonly sustained in defence against an aggressive blow. All three were to the left ulna. Two, belonging to an adolescent female (G40) and a middle-aged male (G148), are well-healed. The third, belonging to a middle-aged female (G384), has healed with slight angulation.

Injuries in general are usually noted to be more common in the male, and the sex difference in non-accidental injury more so (Manchester 1983, 59). The accidental injuries from the Butt Road sample follow this with only 26 per cent of the accidental fractures being from females, and, if exostosis is added in, 23.3 per cent. However, the sex difference in the non-accidental injuries is almost the reverse,

with only 28.6 per cent being from males. At present there is no explanation for this reversal.

Infection

[Tables 2.29-2.36; Fig 2.35]

The majority of infections affect the soft tissues of the body, and many, from influenza and measles to meningitis and pneumonia, run their course too rapidly for the infective process to spread to the bones. Bone lesions are, therefore, going to represent the chronic infections, which are more likely to involve bacteria than a virus, viral infections being resolved more rapidly.

Non-specific infections are made up of those lesions, inflammatory in nature, for which the pathogenic agent is unknown. In skeletal material, these lesions are often divided by the parts of bone they affect. Lesions which are superficial and appear to involve only the fibrous covering of the bone (the periosteum) are termed periostitis. Lesions which involve the compact bone and medullary cavity are termed osteomyelitis.

Periostitis is recognised as a deposition of irregular new bone upon the outer surface of a bone. It is usually thin and localised in area, but can be thicker and cover a bone more extensively. Other reports have found the tibia to be the most frequent site for periostitic lesions (Brothwell 1961, 338; Manchester 1984, 28), and this study finds the same.

There are three individuals with circumscribed areas of periostitis located on the middle third of the tibia: a middle-aged male (G60) and an adult female (G114 with slight cases on their left tibia, and a middle-aged male (G143) with a severe case on the right tibia involving also the compact bone (Fig 2.35a). There are three individuals with periostitis covering most of the bone shaft: an adult male (G171) with the left tibia shaft covered, a middle-aged male (G128) with a slight case on the left tibia and fibula shafts, and an old adult male (G17) with most of the left and right tibia shafts covered. There is also one adult male (G713) with a small area of healed periostitis mid-shaft on the left radius.

It is quite possible that the tibial periostitic lesions, in the absence of general pathology, resulted from repeated and minor trauma to the lower legs. The middle third of the tibia is the most likely area to be affected by such an injury. Repeated injury to the area might have resulted in the lesions joining and covering more of the bone. However, more than one aetiology could have accounted for the cases represented here. Nine per cent of individuals with tibiae and fibulae present from the Period 2 sample had lower leg periostitic lesions, and almost all were male (Manchester 1984, 28). The same pattern was seen in the Cirencester sample, where it was projected to occur in 10-12 per cent of adult tibiae and fibulae.

However, here there was little difference between the sexes (Wells 1982, 182-3).

One young adult male (G35) has periostitis involving all the skeleton except the skull, carpals, tarsals, and a few ribs (Fig 2.35b-c). It involves not only the periosteum but also the compact bone, though it has stopped short of being a case of osteomyelitis. The periostitic bone is made up of woven bone which indicates that it was probably laid down shortly before death. In all probability this individual's illness was likely to have been relatively short, not lasting more than a few months, and resulting in death. While the lesions could be due to a widespread blood-borne infection such as staphylococcus, the bones are quite solid and heavy. An X-ray shows trabecular thickening, marginal obscurity, and dense sclerotic changes. The X-ray seems to rule out severe anaemia or myeloid leukaemia, but it would seem that there has been some metabolic or other systemic disease in progress, perhaps a type of marrow dysplasia?

In osteomyelitis, the pathological process is one of bone destruction and pus formation, and simultaneous bone repair involving the deeper layers of the bone. Four cases of osteomyelitis were found in the Period 2 skeletal sample. One middle-aged male (G708) has already been discussed as his osteomyelitis was associated with a compound fracture of the right tibia. There is an unsexed adult (G294a) with a discrete cavitating lesion of the bone cortex in the left tibia. Although an infective agent is likely, the lesion is not typical. The third is also an unusual lesion located in the right femur of an adult male (G88). The greater trochanter has been hollowed out by two cavities, having sinus entrances anteriorly and posteriorly. The lining of the cavities is almost smooth and the lesion seems to have been well-healed and quiescent before death. The fourth case is in the left humerus of a child 12-13 years old (G595). The infection in this case entered the growth plates, eventually destroying the cells in the growth plate, leading to an early termination of growth in that bone. Because of this termination of growth, the diaphysis of the left humerus is 60 mm shorter than the right diaphysis where growth has continued. The diameters of the diaphyses are not that different (Table 2.29). The infection seems to have stayed localised to the left humerus, as the left and right radius and ulna are the same length.

Measurement	Left (mm)	Right (mm)
Maximum length	173	233
Maximum midshaft diameter	16	17
Minimum midshaft diameter	12	13

Table 2.29. Metric comparisons of the left (pathological) and right (normal) humeri of G595, Period 2.

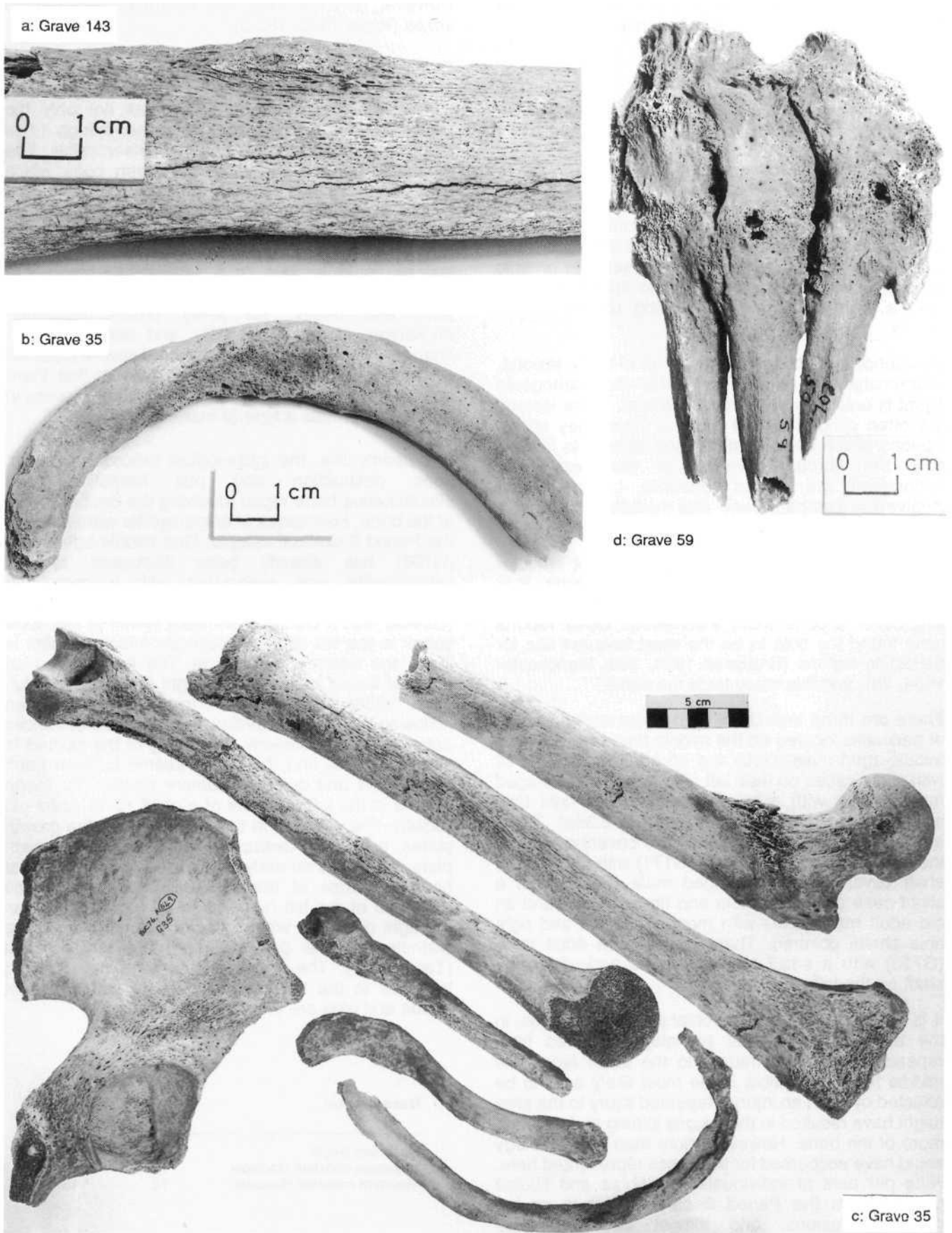


Fig 2.35 Evidence of infection, Period 2. a... periostitis of right tibia, G143; b-c... periostitis of several bones, G35; d... gross deformity of left foot bones, G59. [Pages 77-9]

Ten cases of maxillary sinusitis have been noted. This infection is caused when a maxillary dental abscess perforates the maxillary sinus wall, leading to inflammatory changes. There were mild cases in three middle-aged males (G21, G50, G173), two middle-aged females (G4, G172), one old adult male (G18), and one adult female (G141). There were severe cases in a young adult female (G63), a middle-aged female (G120), and a middle-aged male (G14).

There is one skeleton from the Period 2 sample where infective lesions may have come from bacterial organisms which can be identified. One middle-aged male (G59) has a gross deformity of the left foot. The talus and calcaneus are severely arthrotic with irregularity of their articulating surfaces. The navicular, first, second and third cuneiforms, and first, second and third metatarsals are ankylosed into a single block (Fig 2.35d). All these bones have irregular and deformed surfaces and structure. The cuboid and fourth and fifth metatarsals are ankylosed into another block. This pathology was almost certainly due to a severe infection of the foot. Osteomyelitis has been discounted as there are no fistulae or sinuses entering any of these bones. It was most probably a severe osteitis and septic arthritis. It is possible that the septic arthritis may have been caused by the tuberculosis bacillus. However, as tuberculosis affects the ankle and foot in less than 10 per cent of all cases (Steinbock 1976, 177), this diagnosis must remain tentative and a non-specific infection not be ruled out.

No cases of treponemal or leprosy infection have been found.

Oral disease in the form of dental caries, dental abscess, periodontal disease, and related ante-mortem tooth loss, is a part of the findings in all skeletal assemblages. In the adults recovered from Period 2, parts of 68 male maxillae and 80 male mandibles, and parts of 68 female maxillae and 67 female mandibles survive. The tables for ante-mortem tooth loss, caries, and dental abscesses (Tables 2.30-35) divide the male and female skeletons into young, middle-aged, and old adults, with the figures for adults of all ages not only including the aforementioned but also adult skeletons with teeth who could not be more precisely aged. The maxillae and mandibles come from 85 males of all ages, including 21 young adults, 41 middle-aged adults, and sixteen old adults, and from 74 females of all ages, including 25 young adults, 30 middle-aged adults, and seven old adults. If these maxillae and mandibles had contained complete normal dentitions, 4,528 tooth positions would have been identifiable, but owing to post-mortem damage only 3,665 (80.9 per cent) were available for study.

Tables 2.30 and 2.31 show the frequency of ante-mortem loss from each tooth position. Fifty-seven per cent of the individuals with surviving mandibles and maxillae show evidence of tooth loss. The number of teeth lost gets larger as the age of the individuals rises. Males have a greater number of teeth lost (13 per cent) than females (8 per cent) overall. The age

intervals follow the overall pattern except for the young adults. Overall for both sexes throughout the adult years the percentage of tooth loss is 10.7 per cent. This is slightly higher than the 8.5 per cent found in the Cirencester skeletons (Wells 1982, 147).

Caries are formed when sugars in the presence of harmless bacteria ferment and the resultant plaque has a pH low enough to demineralise enamel, cement, and dentine. The caries may be merely opaque spots in the enamel, or large cavities. Tables 2.32 and 2.33 show the frequency of caries for each adult *in situ* tooth. Forty-one per cent of the individuals with surviving mandibles and maxillae show evidence of caries. The overall percentage of caries was similar for males and females (3.8 and 3.9 per cent respectively). However, there was a different pattern. In females the number of caries increases along with the age of the individuals. In males the old adults have the lowest percentage of caries of the different age categories. The different pattern between the males and females may relate to either the small size of the old adult jaw samples, or to the amounts of tooth loss experienced — the males may have lost more of the teeth which had caries in them.

Overall for both sexes throughout the adult years the percentage of caries is 3.9 per cent. This is lower than the 5.1 per cent found in the Cirencester skeletons (Wells 1982, 148) and the 4.5 per cent at Trentholme Drive, York (Cooke & Rowbotham 1968, 206), but quite similar to the 3.3 per cent of teeth with caries found during the Roman period in Hungary (84 skulls studied; Toth 1970). Both the Colchester and Cirencester samples had almost no difference in overall male and female caries rates, but in the Trentholme Drive sample a slight difference of 5.2 per cent for females and 4.3 per cent for males was found (Cooke & Rowbotham 1968, 207).

In the overall percentages of caries for both males and females, there is a higher percentage of caries in the maxillary teeth than in the mandibular, though this varies in the different adult age intervals. The Cirencester skeletons also have a higher percentage of caries in the maxillary teeth (Wells 1982, 148). This is of interest, as a common finding in other skeletal series is a high mandibular caries frequency relative to the maxilla (Manchester 1984, 33). The caries frequency of individual maxillary and mandibular teeth show the premier site for the development of dental caries is in the molar teeth, with the first molar the most frequent for both males and females.

Another way to express the number of caries is the average number per individual. For both adult males and females there was an average of 1.9 caries per individual. This average is lower than that experienced by developed countries today (Heloe & Haugejorden 1981, 296). A clear association exists between sugars and carbohydrates and high caries rates. The low average of caries in the Colchester skeletons implies that the diet for these individuals was not high in these carbohydrates.

Period 2: the human skeletons

Tooth	8	7	6	5	4	3	2	1	1	2	3	4	5	6	7	8	Total
<i>Young adult males (total with ante-mortem tooth loss: 1.4 %)</i>																	
Maxilla																	
examples present	12	19	19	18	19	19	18	14	17	15	17	18	19	19	19	13	275
ante-mortem loss	0	2	1	1	0	0	0	0	0	0	0	0	0	1	1	0	6
%	0	10.5	5.3	5.5	0	0	0	0	0	0	0	0	0	5.3	5.3	0	22
Mandible																	
examples present	18	19	20	19	19	17	18	16	14	16	18	20	20	20	20	19	293
ante-mortem loss	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2
%	0	0	0	0	0	0	0	0	0	0	0	0	0	10.0	0	0	0.7
<i>Middle-aged adult males (total with ante-mortem tooth loss: 14.6 %)</i>																	
Maxilla																	
examples present	20	28	32	29	30	28	22	23	22	26	28	30	30	32	29	20	429
ante-mortem loss	6	7	8	6	4	1	3	3	2	1	0	3	6	10	9	4	73
%	30.0	25.0	25.0	20.7	13.3	3.6	13.6	13.0	9.1	3.8	0	10.0	20.0	31.2	31.0	20.0	17.0
Mandible																	
examples present	24	32	35	34	30	32	30	25	26	32	34	34	34	33	33	29	497
ante-mortem loss	3	4	10	4	1	1	1	4	4	2	1	1	6	12	7	3	64
%	12.5	12.5	28.6	11.8	3.3	3.1	3.3	16.0	15.4	6.2	2.9	2.9	17.6	36.4	21.2	10.3	12.9
<i>Old adult males (total with ante-mortem tooth loss: 41.5 %)</i>																	
Maxilla																	
examples present	4	9	9	8	9	6	8	5	5	5	7	6	8	8	8	5	110
ante-mortem loss	4	4	6	4	4	0	1	1	1	0	1	1	2	4	5	3	63
%	100.0	44.4	66.7	50.0	44.0	0	12.5	20.0	20.0	0	14.3	16.7	25.0	50.0	62.5	60.0	57.3
Mandible																	
examples present	13	13	15	13	14	14	10	8	7	7	8	11	12	12	12	8	177
ante-mortem loss	5	7	8	5	3	0	0	1	2	0	0	2	5	6	6	6	56
%	38.5	53.8	53.3	28.5	21.4	0	0	12.5	28.6	0	0	18.2	41.7	50.0	50.0	75.0	31.6
<i>Adult males of all ages (total with ante-mortem tooth loss: 13.0 %)</i>																	
Maxilla																	
examples present	41	62	67	62	65	60	54	48	51	53	60	62	64	68	63	44	923
ante-mortem loss	10	13	17	11	9	1	4	4	3	1	12	4	8	16	15	7	124
%	24.4	21.0	25.4	17.7	13.8	1.7	7.4	8.3	5.9	1.9	20.0	6.4	12.5	23.5	23.8	15.9	13.4
Mandible																	
examples present	63	72	78	74	71	72	66	56	55	63	69	74	74	73	73	64	1097
ante-mortem loss	11	12	21	9	4	1	1	5	7	2	1	3	11	23	15	12	138
%	17.5	16.7	26.9	12.2	5.6	1.4	1.5	8.9	12.7	3.2	1.4	4.0	14.9	31.5	20.5	18.7	12.6

Table 2.30. Adult male ante-mortem tooth loss, Period 2 cemetery. The numbers in the main heading refer to tooth positions in order, starting with that of the left third molar. [Page 79]

Tooth	8	7	6	5	4	3	2	1	1	2	3	4	5	6	7	8	Total
<i>Young adult females (total with ante-mortem tooth loss: 1.7 %)</i>																	
Maxilla																	
examples present	14	20	20	19	20	18	15	13	13	15	20	20	23	23	22	16	291
ante-mortem loss	0	1	0	1	0	0	0	0	0	0	0	0	0	0	3	1	6
%	0	5.0	0	5.3	0	0	0	0	0	0	0	0	0	0	13.0	4.5	2.1
Mandible																	
examples present	15	20	20	18	19	18	19	19	17	24	19	19	20	21	20	11	299
ante-mortem loss	0	1	2	0	0	0	0	0	0	0	0	0	0	0	1	0	4
%	0	5.0	10.0	0	0	0	0	0	0	0	0	0	0	0	4.8	0	1.3
<i>Middle-aged adult females (total with ante-mortem tooth loss: 8.0 %)</i>																	
Maxilla																	
examples present	15	23	23	23	17	21	19	15	17	18	22	21	23	18	18	12	305
ante-mortem loss	3	5	5	1	1	1	0	0	0	0	1	1	1	2	3	2	26
%	20.0	21.7	21.7	4.3	5.9	4.8	0	0	0	0	4.5	4.8	4.3	11.1	16.7	16.7	8.5
Mandible																	
examples present	16	23	22	22	24	25	25	22	18	23	22	23	23	20	22	15	346
ante-mortem loss	3	5	4	0	0	0	1	1	1	1	0	1	1	4	3	1	26
%	18.7	21.7	18.2	0	0	0	4.0	4.5	5.5	4.3	0	4.3	4.3	20.0	13.6	6.7	7.5
<i>Old adult females (total with ante-mortem tooth loss: 31.7 %)</i>																	
Maxilla																	
examples present	4	7	7	7	7	5	6	4	5	6	5	7	6	6	6	5	93
ante-mortem loss	2	3	4	2	2	0	1	1	1	1	1	2	1	2	3	3	27
%	50.0	42.8	57.1	28.6	28.6	0	16.7	25.0	20.0	16.7	20.0	28.6	16.7	33.3	50.0	60.0	29.0
Mandible																	
examples present	4	6	5	6	5	6	6	5	5	6	5	5	5	7	7	6	89
ante-mortem loss	2	3	2	2	1	2	2	2	2	2	1	0	1	4	2	3	31
%	50.0	50.0	40.0	33.3	20.0	33.3	33.3	40.0	40.0	33.3	20.0	0	20.0	57.1	28.6	50.0	34.8
<i>Adult females of all ages (total with ante-mortem tooth loss: 8.0 %)</i>																	
Maxilla																	
examples present	40	59	57	57	54	51	47	37	42	48	54	56	59	56	53	37	807
ante-mortem loss	5	9	10	4	3	1	1	1	2	2	12	3	2	8	7	5	65
%	12.5	15.2	17.5	7.0	5.6	2.0	2.1	2.7	4.8	4.2	3.7	5.3	3.4	14.3	13.2	13.5	8.0
Mandible																	
examples present	40	59	57	56	57	51	57	52	46	55	53	54	54	54	55	38	844
ante-mortem loss	6	10	8	4	2	2	4	3	3	3	1	1	2	9	5	4	67
%	15.0	16.9	14.0	7.1	3.5	3.9	7.0	5.8	6.5	5.4	1.9	1.8	3.7	16.7	9.1	10.5	7.9

Table 2.31. Adult female ante-mortem tooth loss, Period 2 cemetery. The numbers in the main heading refer to tooth positions in order, starting with that of the left third molar. [Page 79]

Tooth	8	7	6	5	4	3	2	1	1	2	3	4	5	6	7	8	T	o	t	a	l
<i>Young adult males (total with caries: 3.4 %)</i>																					
Maxilla																					
examples present	12	17	18	17	19	19	18	14	17	15	17	18	19	18	18	13	269				
carious	0	1	0	2	0	0	0	0	0	0	0	0	0	0	0	4	2	9			
%	0	5.9	0	11.8	0	0	0	0	0	0	0	0	0	0	0	22.2	15.4	3.3			
Mandible																					
examples present	18	19	20	19	19	17	18	16	14	16	18	20	20	20	18	19	291				
carious	0	1	3	0	0	0	0	0	0	0	0	0	0	0	3	1	0	8			
%	0	5.3	15.0	0	0	0	0	0	0	0	0	0	0	0	15.0	5.6	0	2.7			
<i>Middle-aged adult males (total with caries: 4.4 %)</i>																					
Maxilla																					
examples present	14	21	24	23	26	27	19	20	20	25	28	27	24	22	20	16	356				
carious	2	1	3	2	0	0	1	0	1	0	1	2	1	2	1	1	18				
%	14.3	4.8	12.5	8	0	0	5.3	0	5.0	0	3.6	7.4	4.2	9.1	5.0	6.2	5.0				
Mandible																					
examples present	21	28	25	30	29	31	29	21	22	30	33	33	28	21	26	26	433				
carious	1	2	3	1	0	0	0	0	4	2	1	1	6	12	7	3	64				
%	4.8	7.1	12.0	3.3	0	0	0	0	18.2	6.7	3.0	3.0	21.4	57.1	26.9	11.5	14.8				
<i>Old adult males (total with caries: 1.8 %)</i>																					
Maxilla																					
examples present	0	5	3	4	5	6	7	4	4	5	6	5	6	4	3	2	47				
carious	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Mandible																					
examples present	8	6	7	8	11	14	10	7	5	7	8	9	7	6	6	2	121				
carious	0	1	0	0	0	0	1	0	0	0	0	0	0	1	0	0	3				
%	0	16.7	0	0	0	0	10.0	0	0	0	0	0	0	16.7	0	0	2.5				
<i>Adult males of all ages (total with caries: 3.8 %)</i>																					
Maxilla																					
examples present	31	49	50	51	56	59	50	44	48	52	48	58	56	52	48	37	799				
carious	2	3	4	4	0	0	1	0	1	0	1	4	2	3	6	3	124				
%	6.4	6.1	8.0	7.8	0	0	2.0	0	2.1	0	2.1	6.9	3.6	5.8	12.5	8.1	4.2				
Mandible																					
examples present	52	60	57	65	67	71	65	51	48	61	68	71	63	50	58	52	959				
carious	1	5	6	1	1	0	1	0	1	1	1	0	2	5	6	2	33				
%	1.9	8.0	10.5	1.5	1.5	0	1.5	0	2.1	1.6	1.5	0	3.2	10.0	10.3	3.8	3.4				

Table 2.32. Adult male caries, Period 2 cemetery. The numbers in the main heading refer to tooth positions in order, starting with that of the left third molar. [Page 79]

Tooth	8	7	6	5	4	3	2	1	1	2	3	4	5	6	7	8	Total
<i>Young adult females</i> (total with caries: 1.5 %)																	
Maxilla																	
examples present	14	19	20	18	20	18	15	13	13	15	20	20	23	20	21	16	285
carious	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	1	3
%	0	0	5.0	0	0	0	0	0	0	0	0	0	0	0	5.0	4.8	1.0
Mandible																	
examples present	15	19	18	18	19	18	19	19	17	24	19	19	20	20	20	11	295
carious	1	0	2	0	0	0	0	0	0	0	0	0	0	0	1	2	4
%	6.7	0	11.1	0	0	0	0	0	0	0	0	0	0	0	5.0	10.0	2.0
<i>Middle-aged adult females</i> (total with caries: 4.3 %)																	
Maxilla																	
examples present	12	18	18	22	16	20	19	15	17	18	21	20	22	16	15	10	279
carious	1	2	1	1	3	1	2	0	0	0	0	0	1	3	2	1	18
%	8.3	11.1	5.5	4.5	18.7	5.0	10.5	0	0	0	0	0	4.5	18.7	13.3	10.0	6.4
Mandible																	
examples present	13	18	18	22	24	25	24	21	17	22	22	22	22	16	19	14	320
carious	1	1	2	0	0	0	0	0	0	0	0	0	0	1	2	1	8
%	18.7	21.7	18.2	0	0	0	0	0	0	0	0	0	0	6.2	10.5	7.1	2.5
<i>Old adult females</i> (total with caries: 6.4 %)																	
Maxilla																	
examples present	2	4	3	5	5	5	5	3	4	5	4	5	5	4	3	2	66
carious	1	0	0	0	0	0	0	0	0	0	0	0	1	1	1	0	4
%	50.0	0	0	0	0	0	0	0	0	0	0	0	20.0	25.0	33.3	0	6.1
Mandible																	
examples present	2	3	3	4	4	4	4	3	3	4	4	5	4	3	5	3	58
carious	0	2	0	0	0	0	0	0	0	0	0	0	0	0	1	1	4
%	0	66.6	0	0	0	0	0	0	0	0	0	0	0	0	20.0	33.3	6.9
<i>Adult females of all ages</i> (total with caries: 3.9 %)																	
Maxilla																	
examples present	35	50	47	53	51	50	46	36	40	46	42	53	57	48	46	32	742
carious	3	5	5	1	3	2	3	0	0	1	1	0	2	5	4	1	36
%	14.6	10.0	10.6	1.9	5.9	4.0	6.5	0	0	2.2	1.9	0	3.5	10.4	8.7	3.1	4.8
Mandible																	
examples present	34	49	49	52	55	49	53	49	43	52	52	53	52	45	50	34	777
carious	2	4	6	0	1	0	0	1	0	0	0	0	1	2	5	2	24
%	5.9	8.2	12.2	0	1.8	0	0	2.0	0	0	0	0	1.9	4.4	10.0	5.9	3.1

Table 2.33. Adult female caries, Period 2 cemetery. The numbers in the main heading refer to tooth positions in order, starting with that of the left third molar. [Page 79]

Period 2: the human skeletons

Tooth	8	7	6	5	4	3	2	1	1	2	3	4	5	6	7	8	Total	
<i>Young adult males</i> (total with dental abscesses: 0.3 %)																		
maxilla		0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
mandible		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<i>Middle-aged adult males</i> (total with dental abscesses: 0.9 %)																		
maxilla		0	1		1	0	0	0	0	0	0	2	0	1		1		1 7
mandible			0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0 2
<i>Old adult males</i> (total with dental abscesses: 1.7 %)																		
maxilla		0	0	0	0	0	0	0	0	0	0	0	0	1			0	0 1
mandible		0	0	1		1	0	0	1		1	0	0	0	0	0	0	0 4
<i>Adult males of all ages</i> (total with dental abscesses: 0.8 %)																		
maxilla		0	2	1	0	1	0	0	0	0	0	2	0	2	1		1	1 0
mandible		0	0	2	1	0	0	1		1	0	0	0	0	0	0	1	0 6

Table 2.34. Adult male dental abscesses, Period 2 cemetery. The numbers in the main heading refer to tooth positions in order, starting with that of the left third molar. [Page 85]

Tooth	8	7	6	5	4	3	2	1	1	2	3	4	5	6	7	8	Total	
<i>Young adult females</i> (total with dental abscesses: 0.3 %)																		
maxilla		0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2
mandible		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<i>Middle-aged adult females</i> (total with dental abscesses: 0.8 %)																		
maxilla		0	0	0	1	0	0	0	0	0	0	0	1		1		1	0 4
mandible			0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0 1
<i>Old adult females</i> (total with dental abscesses: 0.5 %)																		
maxilla			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
mandible		0	0	0	1		0	0	0	0	0	0	0	0	0	0	0	0 1
<i>Adult females of all ages</i> (total with dental abscesses: 0.5 %)																		
maxilla		0	0	2	1	0	0	0	0	0	0	0	1		1		1	0 6
mandible		0	0	0	1		0	0	0	0	0	0	0	2	0	0	0	0 3

Table 2.35. Adult female dental abscesses, Period 2 cemetery. The numbers in the main heading refer to tooth positions in order, starting with that of the left third molar. [Page 85]

	No of jaws
<i>Males</i>	
young adults	2
middle-aged adults	1
old adults	1
<i>Females</i>	
young adults	0
middle-aged adults	5
old adults	0

Table 2.36. Periodontal disease, Period 2 cemetery.

A dental abscess is a local circumscribed area of infection (osteomyelitis). It is usually the result of severe dental caries or advanced degrees of occlusal attrition. Tables 2.34 and 2.35 show the distribution of dental abscesses for each adult *in situ* tooth. Thirteen per cent of the individuals with surviving mandibles and maxillae show evidence of dental abscesses. The overall percentage of abscesses per tooth position is 0.7 per cent, with males having more abscesses (0.8 per cent) than females (0.5 per cent). For the males the frequency of abscesses increases with age. For the females the highest frequency is seen in the middle-aged adults, though this is probably an artefact of the small number of old adult female jaws.

Periodontal disease is perhaps the best skeletal indicator of general oral hygiene (Manchester 1984, 34). It involves inflammatory pitting of the alveolar margins and the progressive alveolar resorption resulting in exposure of tooth root. The number of jaws showing evidence of periodontal disease is nearly the same for males and females. The cases in the females are all found in the middle-aged adult interval, while in the males they are spread out throughout the age intervals. It may be meaningful that there are no young adult female cases, but the lack of old adult female cases is probably just related to the small number of jaws which survived.

Degenerative disease

[Table 2.37; Figs 2.36-2.39]

The common skeletal diseases of degeneration are vertebral osteophytosis and osteoarthritis of the synovial joints. Though these pathologies are to some extent related, both progressing with advancing age, their aetiology, pathogenesis, and effects, are different.

Vertebral osteophytosis is a lesion resulting from additional subperiosteal bone formation on the anterolateral aspects of the superior and inferior borders of the vertebral body due to degenerative changes within the intervertebral disc. It is a very common condition, appearing in some individuals as early as 30 years old and present in almost all persons over 60 (Steinbock 1976, 287). The lesion's

severity and progression has been related to obesity and work patterns (Manchester 1983, 35). For Period 2, the overall incidence of vertebral osteophytosis by adult age interval is shown in Table 2.37. Males have more osteophytes than females until old age. Males and females start almost equal as young adults, and then the percentage of males with osteophytes rises much more quickly than that of females in middle age. Figure 2.36 shows the percentage of osteophytes present in male and female cervical, thoracic, and lumbar vertebrae.

Osteoarthritis, or degenerative joint disease, is an ubiquitous accompaniment of advancing age (Fig 2.37a-b). The disease may also be a secondary phenomenon as a sequel to other pathological processes, for example long bone fractures or vertebral body fractures. There are three cases where the osteoarthritis may be secondary to fractures (G138, G158, G227). The rest of the osteoarthritis encountered is primary.

Fifty-six per cent of individuals with joints which could be observed (121 of 215) showed signs of osteoarthritis. There is a slight sex differential in incidence: 46.07 per cent of the female skeletons exhibit osteoarthrotic changes (41 of 89) compared to 60.83 per cent of the male skeletons (73 of 120). Figure 2.38 shows the relative joint incidence of osteoarthritis in males and females in the Colchester skeletons. The male frequencies exceed the female in all joints. Multiple joint involvement is more common in males than females. Of appendicular joints, the hips (females 7 of 76, males 19 of 111) and wrists (females 4 of 49, males 18 of 78) are the most commonly-involved joints in both sexes. But the skeletal sites most frequently involved in osteoarthrotic change are the spinal facet joints (females 28 of 72, males 47 of 92) (Fig 2.37c). Figure 2.39 shows the frequency of osteoarthrotic changes in the individual spinal segments. Once again, the osteoarthrotic change is more frequent in the male. In males the lumbar region is the most common site (33 of 55), followed by the thoracic (27 of 54); in females the pattern is reversed (thoracic 18 of 37, lumbar 8 of 35). In males the majority suffered from osteoarthritis in both the lumbar and thoracic regions, whereas in females the thoracic region only was affected.

The pattern of spinal involvement of osteoarthritis is similar to the pattern of vertebral osteophytosis. Both diseases are age-related and both diseases may have mechanical stress in their aetiology. Their presence in a high proportion of the Colchester skeletons probably indicates the life-long physical work to which at least part of the population was subject.

Neoplastic disease

[Fig 2.40]

Neoplasma or new growth may be classified as malignant or benign. Malignant neoplasms of bone

Period 2: the human skeletons

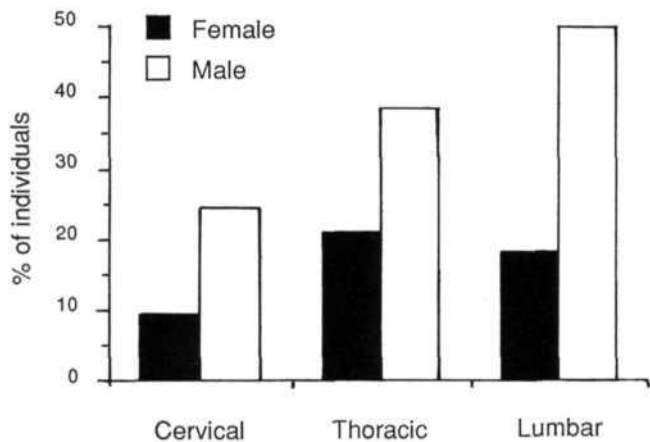


Fig 2.36 Distribution of osteophytes in male and female vertebrae, Period 2. [Page 85]

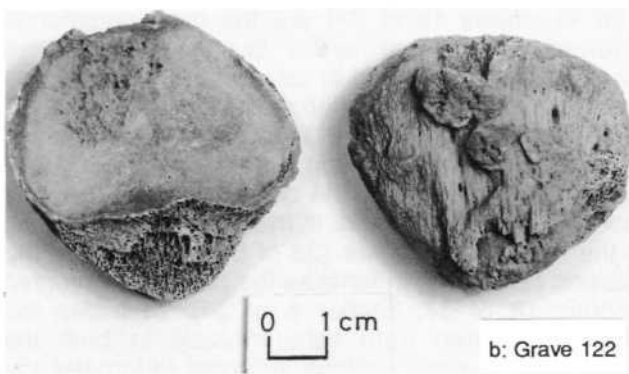


Fig 2.37 Evidence of osteoarthrosis, Period 2. a... femur, G91; b... patellae, G122; c... spinal facet joints, G38. [Page 85]

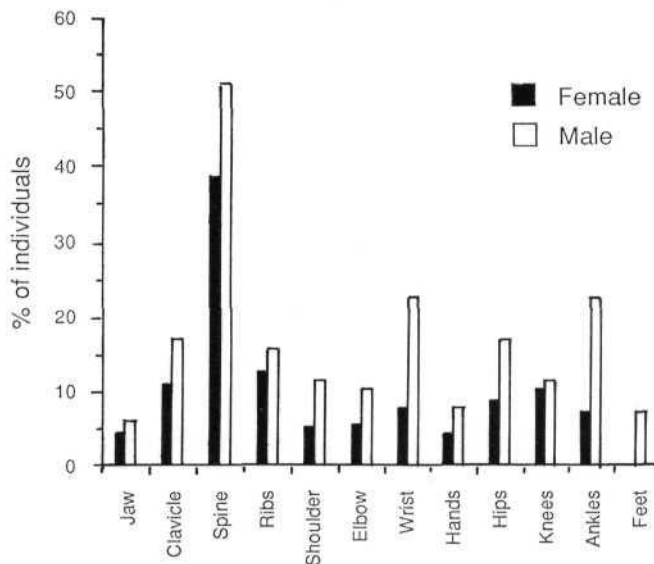


Fig 2.38 Distribution of osteoarthrosis in males and females, Period 2. [Page 85]

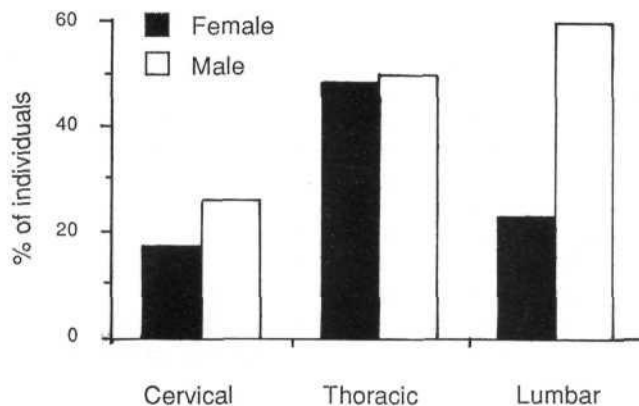


Fig 2.39 Distribution of osteoarthrotic changes in individual spinal segments, Period 2. [Page 85]

	Males	Females
	%	%
young adults	10.71	10.34
middle-aged adults	42.31	10.81
old adults	66.67	77.78

Table 2.37. Adults with vertebral osteoarthrosis (expressed as percentages), Period 2 cemetery. [Page 85]

consist of primary sarcomas and secondary deposits of cancer from primary soft tissue sites elsewhere. No cases of malignant neoplasms have been found in this sample.

Five skeletons have benign neoplasms. These osteoma are bone cells in a circumscribed area, normally in the periosteum, which grow more than the surrounding tissue. The cells eventually mature and the osteoma is not progressive. They are small hemispherical hard projections which are usually about the size of a pea, but can vary in size. They are usually symptomless and are not considered to be of clinical significance. An adult female (G707; Fig 2.40a) and an old adult male (G318) each have one benign osteoma on their frontal, and a middle-aged male (G184) has three. A middle-aged female (G499) has one located mid-shaft on the left tibia. More unusual is the frontal of a middle-aged male (G133). On the interior surface there are 8 or 10 thickened areas of bone (Fig 2.40b). They appear to be simple diffuse osteomatous thickenings. Between these areas the internal surface of the frontal is slightly rough and lightly striated.

Autoimmune disease

In autoimmune diseases an individual develops antibodies to his own tissues. The resultant reaction produces a set of pathological responses. There is the possibility that one middle-aged male (G91) has the autoimmune disease ankylosing spondylitis or perhaps diffuse idiopathic skeletal hyperostosis (DISH). There is extensive lateral ankylosing hyperostosis of at least twelve vertebrae and a grossly craggy new bone growth on both ischial tuberosities.

The individual would have had a very immobile spine and could not have been very active physically.

Metabolic disease

[Table 2.38; Figs 2.41-2.43]

Metabolic diseases are a loose category consisting of dietary and hormonal abnormalities of deficiency or excess. They can be skeletal manifestations of chronic problems, such as cribra orbitalia, or acute problems, such as enamel hypoplasia.

Cribra orbitalia is an increase of the diploic bone in the orbital roofs resulting in an increase in the thickness of the orbital plate and sieve-like lesions or pits appearing in the thin cortical bone layer of the orbital roofs (Fig 2.41a). It is usually presented as a response to chronic anaemia (Stuart-Macadam 1985), especially when found in conjunction with the aetiologically-related porotic hyperostosis. In the individuals from Colchester, the associated anaemia is likely to be iron deficiency in childhood, probably caused by malnutrition and infections. An iron inadequacy can also be exacerbated by high lead intake. Cribra orbitalia is considered to be due to anaemia in young childhood, and not to develop in response to anaemia in adulthood (Stuart-Macadam 1985, 396). In samples where only cribra orbitalia is found there is an idea that it may be related to eye infections (Ortner pers comm).

Cribra orbitalia was observed in 26 individuals (9.9 per cent of individuals with observable orbits) from Period 2: six adult females, six adult males, eleven subadults, and three unsexed individuals. No case of porotic hyperostosis was observed. Cribra orbitalia was noted in 17.7 per cent of the Cirencester skeletal sample,

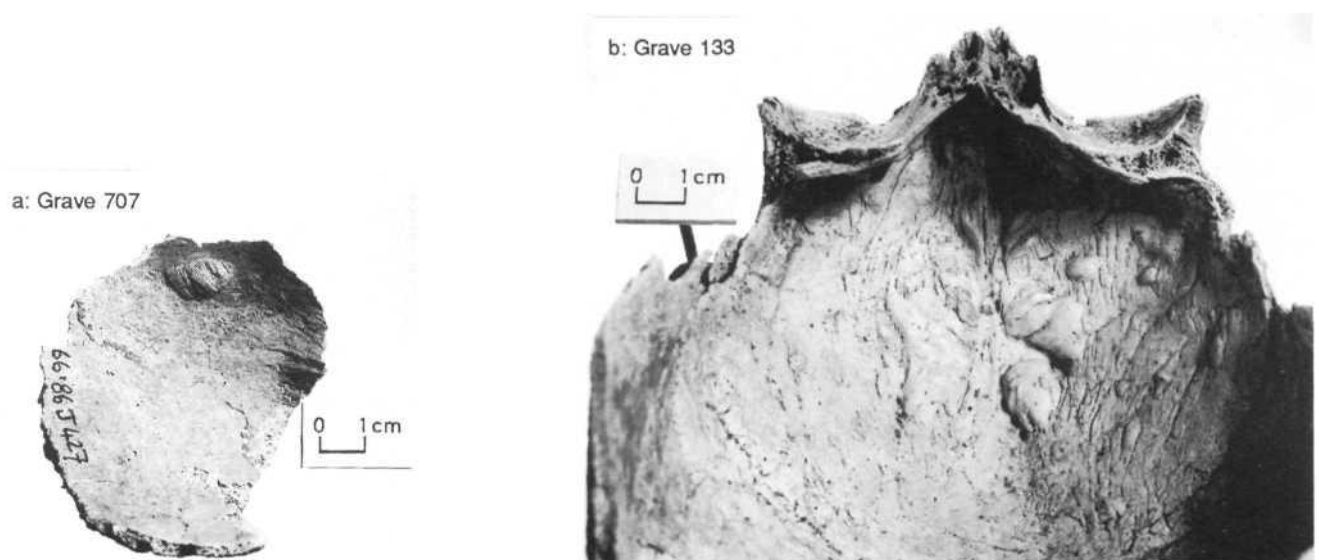


Fig 2.40 Benign neoplasms on frontal bones, Period 2. a... interior, G707; b... interior, G133. [Pages 85 & 87]

Age at formation	Males %	Females %	Subadults %
0-0.5	-	-	50
0.5-1.0	17	-	50
1.0-1.5	17	-	-
1.5-2.0	-	20	-
2.0-2.5	33	40	-
2.5-3.0	17	20	-
3.0-3.5	-	20	-
3.5-4.0	-	-	-
4.0-4.5	-	-	-
4.5-5.0	17	-	-
5.0-5.5	-	-	-
5.5-6.0	-	-	-

Table 2.38. Distribution of linear enamel hypoplasia (expressed as percentages) in a subsample, Period 2 cemetery. [Pages 87-91]

where it was more common in males and where no porotic hyperostosis was observed (Wells 1982, 186). At the Romano-British Poundbury Camp there was a larger percentage of cribra orbitalia (27 per cent), equally distributed between the sexes, with porotic hyperostosis also present (Stuart-Macadam 1985, 393).

Enamel hypoplasia is an area with a deficiency of enamel of a developmental origin in a tooth. The area

affected is usually a band or a line of pitting (Fig 2.41 b-c). It occurs during severe stress and therefore has a non-specific aetiology. It is associated with general systemic disorder and nutritional deficiency. As there are also forms of enamel hypoplasia which are hereditary or occur through trauma to the tooth, in this study a significant episode of normal development interruption was considered when at least two teeth of different classes were affected. Sixty-four individuals were observed to have this pathology (27.2 per cent of individuals with teeth present): 25 males, 24 females, thirteen subadults, and two unsexed individuals. The Poundbury Camp skeletal sample has a larger percentage of individuals (38.5 per cent) with this lesion (Stuart-Macadam 1985, 323).

A portion of these individuals had the placement of the enamel lesions measured following the method of Goodman *et al* (1980, 519-21) to determine age at formation. In many cases, multiple episodes of developmental stress were indicated for the same individual. In order to investigate probable times of developmental susceptibility, the percentage distribution of occurrence at various times was calculated for both sexes and is shown in Table 2.38. In this sample, males appear to be at risk earlier and for a longer period of time. While the age of susceptibility is interesting, it must be remembered that only a subsample was studied.

Individuals observed to have cribra orbitalia and/or enamel hypoplasia were not found scattered throughout the Period 2 cemetery, but tended to

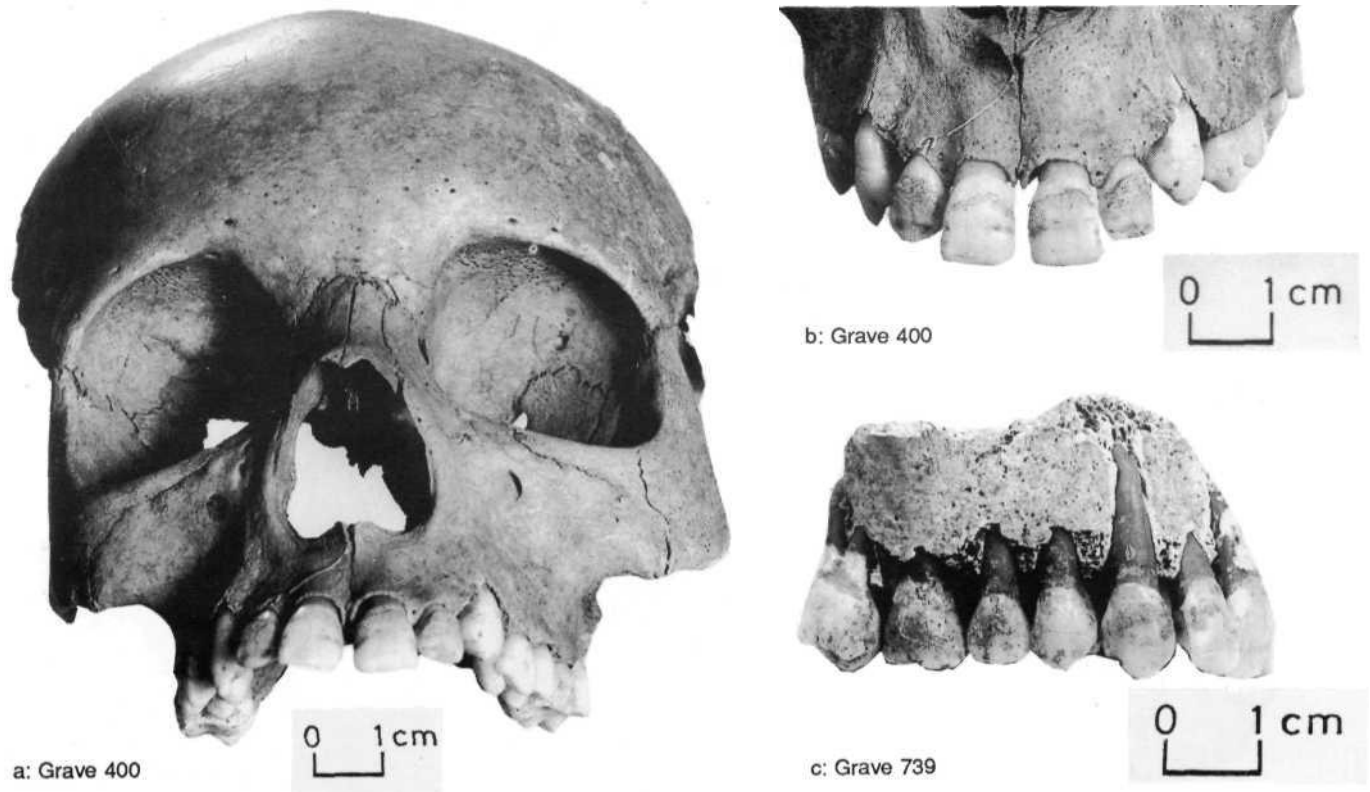


Fig 2.41 Metabolic diseases, Period 2. a... cribra orbitalia and enamel hypoplasia (showing as lines of deficient enamel), G400; b... close-up of enamel hypoplasia, G400; c... lines of enamel hypoplasia, G739. [Pages 87-91]

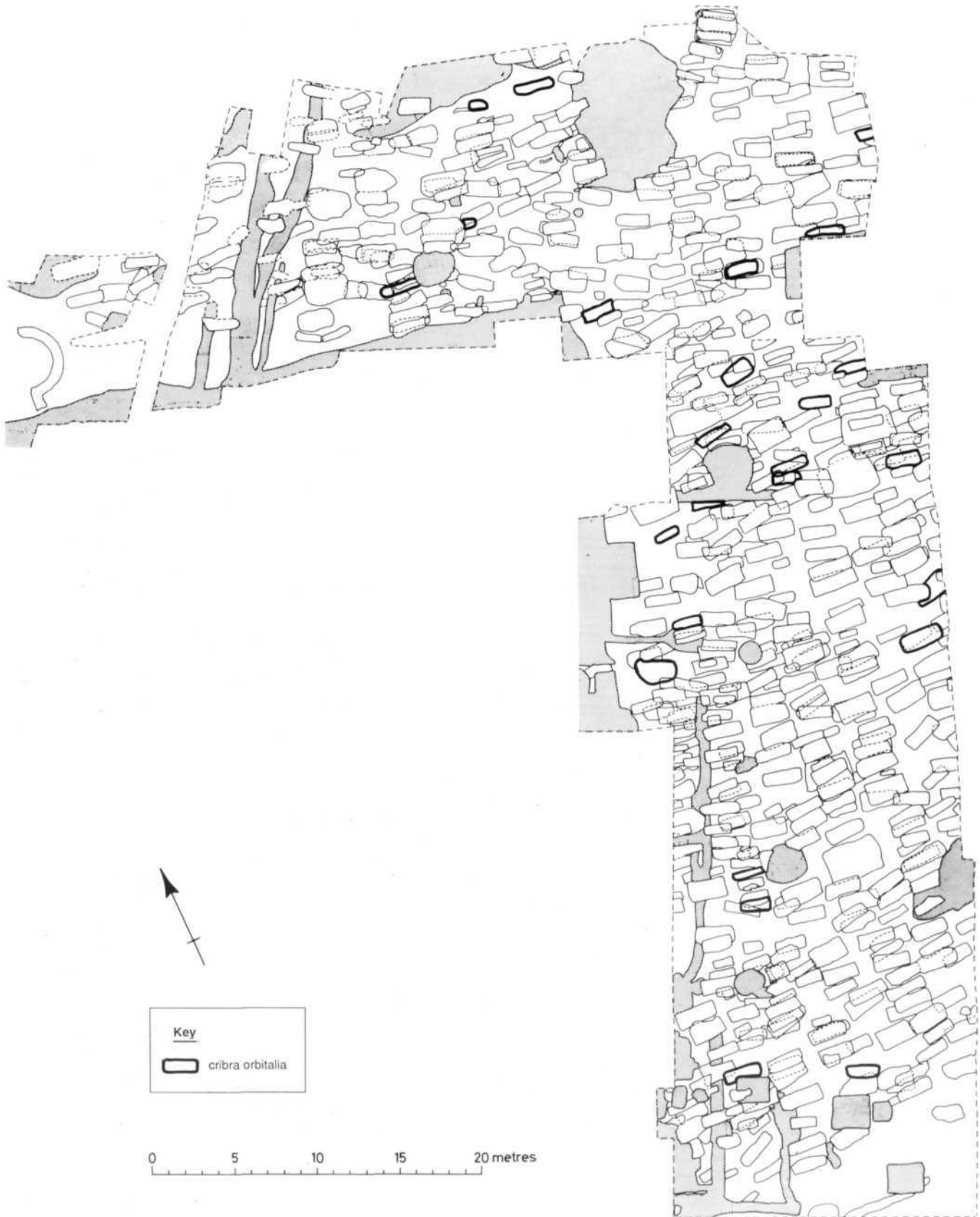


Fig 2.42 Graves of individuals with *cribra orbitalia*. Period 2. 1:330. [Pages 87-8 & 91]

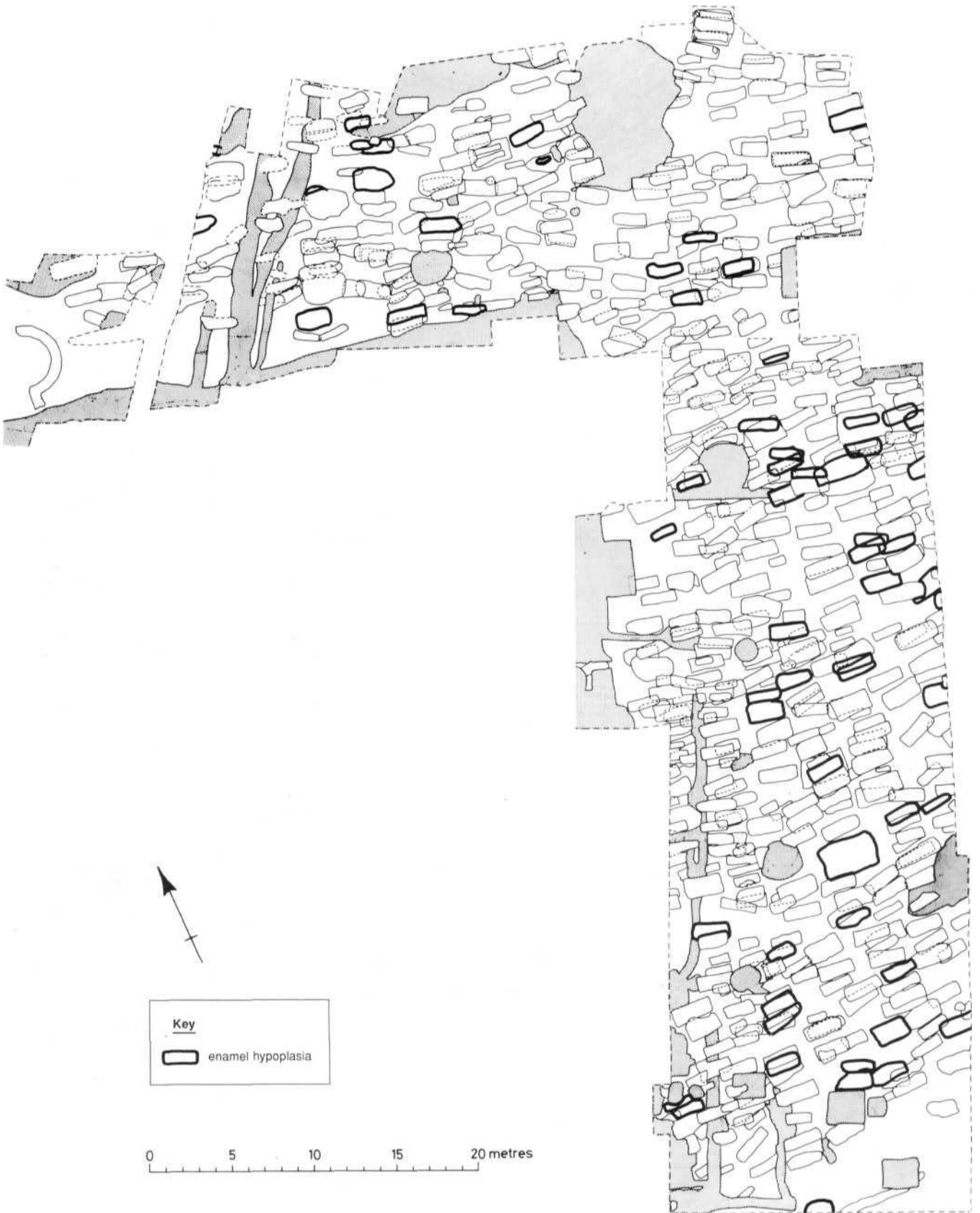


Fig 2.43 Graves of individuals exhibiting enamel hypoplasia, Period 2. 1:330. [Pages 87-8 & 91]

clump within hypothesised family groupings (Figs 2.42-2.43). There may have been something different in diet or lifestyle which could account for this distribution. However, the individuals with these lesions did not suffer in overall development as far as adult stature can demonstrate. The stature of those adult individuals with the lesions, and the clusters with which these individuals are associated, do not differ significantly from individuals without the lesions.

The small percentage of individuals from Period 2 at Butt Road with these two metabolic lesions may indicate that the young children from late Roman Colchester were better nourished than those from other Romano-British sites. The lower rate of caries, the lack of rickets and osteomalacia, and the rarity of tuberculosis from this site, can also be linked with an adequate and relatively healthful diet.

Miscellaneous conditions

[Table 2.39; Fig 2.44]

One middle-aged adult female (G164) has a much-damaged and defective skull, but it is obviously extremely small and suggests the possibility of microcephaly. Unfortunately, all measurements have been approximated, so this condition in this individual must remain speculative. If this diagnosis were correct, this individual would have had mental retardation and would have needed the support of the community.

A middle-aged male (G50) has an external occipital protuberance which has developed to an unusual size (Fig 2.44a). There is nothing on the rest of the skeleton to explain the enlarged neck muscles which most probably accompanied this 'occipital hook'. A young adult male (G266) has a small fissure in the inferior surface portions of four lumbar vertebrae. All the fissures are 2 mm deep. This pathology would probably have been without clinical significance. There is also an unsexed adult (G495) with calvarium bones which are very thick.

There are 26 cases of osteochondritis dissecans. This lesion appears as an irregular shallow pit (Fig 2.44b). It seems to be an area of avascular necrosis of the articular cartilage and subchondral bone in diarthrodial joints. Although the aetiology is not completely understood, it seems probable that trauma plays at least a contributory role. Apart from a little discomfort, there are no significant symptoms. In male skeletons sixteen lesions were noted, in females ten. In this series the ankle was the commonest joint to be affected for both sexes. The joint distribution of the lesions for both sexes is shown in Table 2.39.

An unsexed middle-aged adult (G487) has a metatarsal fused to a cuneiform, and a middle-aged female (G34) has a middle and distal foot phalanx fused together. In neither is it possible to determine the cause, though trauma, perhaps with a hair-line fracture involving the joint, is possible.

Site	No of cases	
	males	females
VC3 superior intervertebral facets		1
acetabulum	2	1
femoral head	1	-
femoral condyle	2	-
tibia inferior	3	2
talus	5	3
calcaneus	1	1
navicular	2	2

Table 2.39. Distribution of osteochondritis dissecans, Period 2 cemetery.

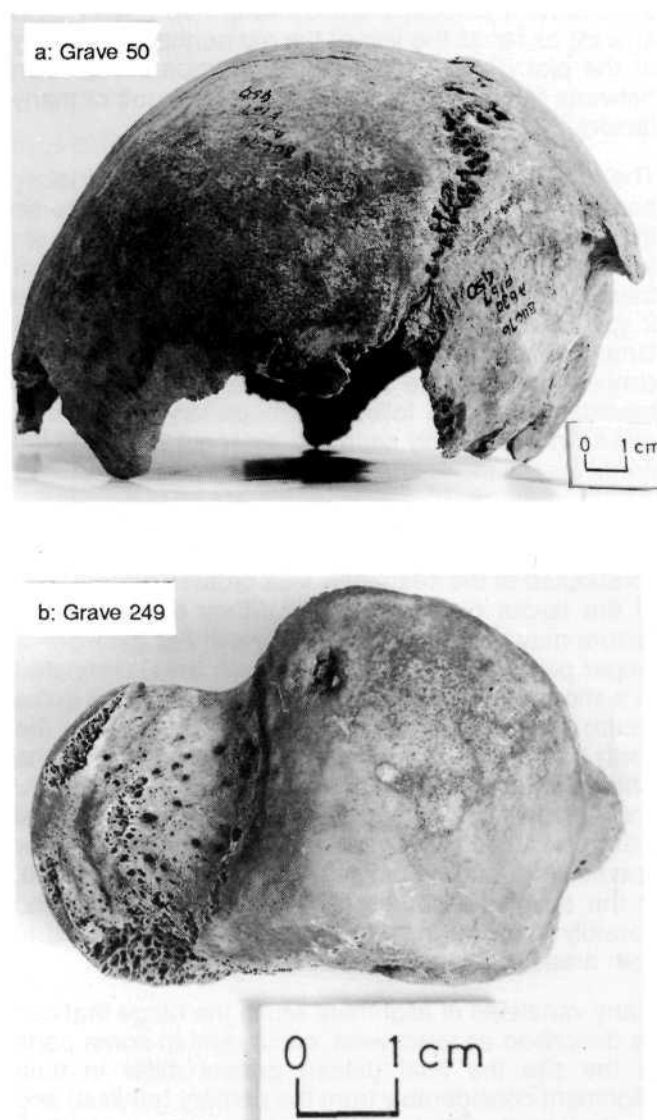


Fig 2.44 Miscellaneous pathological conditions, Period 2. a... occipital hook, G50; b... osteochondritis dissecans of right talus, G249. [Pages 91-2]

There is a middle-aged male (G121a) with gross osteoarthritis of the tarsals and metatarsals, with fusion of the talus and calcaneus, fusion of the navicular and all three cunifurms, fusion of the third, fourth, and fifth metatarsals, and of the first metatarsal and its proximal phalange. There is gross lipping around all intertarsal joints. There is no sign of a fracture or inflammation in the area. •

Alignments

[Figs 2.10, 2.21, 2.23, 2.27-2.32, 2.42- 2.43]

In the northern area of the site there is some tendency for adjacent graves to share an alignment, but even so they appear to be less well-ordered than in the southern area, where long rows of burials stretch from the southern boundary across what had been Plot B at least as far as the line of the old northern boundary of the plot (Figs 2.10, 2.21). This apparent division between the two areas is probably the result of many factors.

The old lines of the Period 1 Phase 3 cemetery boundaries clearly exerted considerable influence on the alignment of Period 2 burials, and this is of major importance in arguing the case for the survival of these boundaries for at least the early years of Period 2 (pp 55-6). For example, apart from the Period 2 Group C burials (pp 56-7), many of the graves concentrated on the cemetery side of the northern boundary of Plot B follow that boundary's alignment, and its influence only seems to peter out 9-10 m to the north.

The fact that there were no boundary ditches in the northern area of the site has almost certainly contributed to the seemingly less ordered appearance of the layout of graves there. Many other possible factors may also have been involved. For example, a longer period of use for the northern area, compared to a shorter one for at least the old site of Plot B in the south; the general topography of each area, in the north a marked slope down towards the valley of the Chiswell Brook, and a gentle gradient in the south; and, even more specifically, the topographical feature(s) taken as a guide to alignment when new graves were dug, ie possibly the church in the north, in the south the southern boundary and ?road and possibly even an eastern boundary and road, and in both areas visible earlier burials.

Many variations of alignment within the range that can be described as 'east-west' occur, and in some parts of the site the final (latest) graves differ in their alignment considerably from the primary (earliest) and even mid-range graves in the same area, suggesting that the positions of the earlier burials were no longer detectable and thus could exert no influence on the positions of the later. This was probably the case for G607 in the area of Group E's plot (Fig 2.23; pp 57-8)

and for other nearby final graves which share its alignment, G698, G704, and possibly G724 and G732 (Fig 2.21). In a complex centred around the timber vaults CF55 and G366, the final graves G341 and G350, together with G350's direct associate G361 and possibly G346 on the eastern side of the complex, share an alignment markedly different to that of not only the primary and mid-range graves in the complex, but also some of the other final graves. The difference in alignment may indicate a time-gap between the two sets of final graves (p 117).

The importance of similarity of alignment in determining possible direct family relationships between graves has been clearly shown in Period 1 for burials in both Phase 2 and Phase 3, and in Period 2 for Group C burials. Where a similarity of alignment can be reinforced by a shared burial characteristic, the likelihood of relationship is greatly increased. However, *differences* in alignment can also enhance the possibility of relationship as demonstrated for Group E in Period 2 (pp 57-8), and clearly considerable caution should be taken in the interpretation of this type of evidence.

In Period 2 several groups of graves, often small, occasionally only pairs, can be distinguished in this way, the validity of some being more readily acceptable than of others:

Group C, in the north central area: as well as G298, G299, G369, G390, and G433, identified above (pp 56-7) as Group C; G295 and G320 may be linked by their deposits to the group, though their alignments are slightly different; and a lead coffin found during the digging of a sand-pit in the 19th-century may also be linked, through association with G295, to the group;

Group E, in the north-west: as well as G603, G606, G613, G617, G618, G621, and G626, identified above (Fig 2.22) as Group E, G730 may be linked by its alignment and deposits to the group;

Group F, in the south-east: G1, G15, G16, G69, linked by deposits and alignment;

Group G, in the south-east: G58, G94, G101, G115, linked by deposits and alignment;

Group H, in the south-east: G132, G171, G174, G180, linked by deposits and alignment;

Group I, in the south-east: G110, G117, G127, linked by markers, a stack, and alignment;

Group J, in the south-east: G140, G141, linked by markers and alignment;

Group K, in the south-east: G61, G75, G109, G188, and possibly G219, linked by deposits, markers, and alignment;

Group L, in the south central area: G254, G695, and their associate G258, linked by coffin type, markers, and alignment;

Group M, in the south central area: G439, G404,

G444, and possibly G258 (see previous group) and G431, linked by deposits and alignment;

Group **N**, in the south central area: G226, G253, G272, and its associate G246, linked by markers and alignment;

Group **O**, in the vault complex in the south central area: G341, G350, G361, and possibly G354 and G358, linked by markers and alignment;

Group **P**, in the vault complex in the south central area, G387 and G388, linked by alignment and possibly age;

Group **Q**, in the south central area: G434, G446, and possibly G211, G299 (see Group C above), G536, and G603, linked by coffin construction and alignment.

When the graves of individuals exhibiting non-metrical traits of the skull and some congenital abnormalities are plotted (Figs 2.27-32), they too, tend to form clusters, usually with similar alignments. One of the most obvious is Group **R** near the centre of the eastern boundary. It consists of three individuals with an inca bone, G417, G419, G440 (Figs 2.21, 2.31), the graves all close together and easily assumed to be a family on stratigraphic grounds (close together without intercutting, similar alignment, two final and one isolated). In the southern area is a concentration of skulls with a double supraorbital foramen (Fig 2.27). This group includes both individuals in G121, two graves with the pits set so closely and neatly together that the sequence of intercutting could not be established, and the adjacent and similarly-aligned G157 and G158. Other graves were in the immediate vicinity, suggesting an extended family plot, which would include Groups F and I, and one member of each group does exhibit the trait (G16 and G110 respectively).

When graves of individuals noted to have suffered the two metabolic diseases *cribra orbitalia* and enamel hypoplasia were plotted, they too tended to cluster into what may be family groupings, usually with similar alignments (Figs 2.42-2.43). (The tendency to cluster is less marked for *cribra orbitalia*.) For example, ten individuals in the vault complex (pp 114-18) showed signs of enamel hypoplasia, in primary, mid-range and final graves.

The lettered groups are discussed where appropriate below, and summaries of possible family groupings and plots can be found on pp 156-8 and in Tables 2.63-2.65.

Grave surface markers

[Table 2.40; Figs 2.45-2.50]

Twelve individual graves and at least one multiple

burial appear to have been marked on the surface by something more substantial than a mound (Table 2.40; Figs 2.45-2.49). Timber posts appear to have been used to mark G61, G226, G592, and G663/G667/G674, while stones and tile fragments were used in the remaining nine cases (eg G75, G109, G354, Fig 2.47).

For one grave (G722) the identification of a patch of building debris as a surface marker is tentative, while for four graves (G254, G364, G617, G695; Fig 2.48) it cannot be established whether or not the markers extended above ground level, they may instead be coffin markers.

The effectiveness of marking a grave site is demonstrated by the fact that seven of the individual graves remained uncut by later burials (six are last in a sequence, one is isolated), and the multiple burial (itself a sequence of three) was also uncut. Accurate relationships could not be established for two of the remaining graves, but at least one, G254, is also likely to be the last in a sequence. Two mid-range burials, G75 and G354, were only slightly cut by a later grave, their outline and contents remaining effectively undamaged. A third mid-range burial, G592, was a timber vault containing a nailed timber coffin. Though a later burial was cut into one corner of the vault pit, neither coffin nor vault was damaged.

Thus marking a grave seems to have been quite effective in preventing damage by later burials. However, it is also possible that many primary and mid-range graves had originally been marked on the surface but with the passage of time the marker(s) had ceased to be recognised and had been removed by later burials, or, that marking graves was more commonly practised in the later part of Period 2.

Where building rubble was used for marking graves there must surely have been a very strong chance that its purpose would be lost, but even a timber post could be ignored, as may have been the case for the vault burial G592 (Fig 2.49a). The two corners (north-west, north-east) of the vault pit which survive later damage appear to have been marked by upright timbers set into the fill above the vault proper, and at least one more would have been necessary for the accurate location of the pit. The south-west corner had been dug away by a Period 2 grave, G572, and the south-east corner destroyed by a post-Roman feature. Had a post existed at the former, it must either have decayed and fallen over, thus ceasing to be effective, or been removed to allow the grave to be dug. Alternatively, if only three corners were marked, the third may have been the south-east, in which case G572 may be a satellite burial of G592. Both are the graves of elderly adults of uncertain sex, and so, if a pair, may be interpreted as either a married couple, or siblings.

Three timber posts seem to have been used to mark the multiple burial G663/G667/G674, which shows the use of marking not to ward off potential damage, but to facilitate the location of a grave pit for the insertion



Fig 2.45 Graves with surface markers or coffin/corpses markers, Period 2. 1:330. [Pages 93-102]

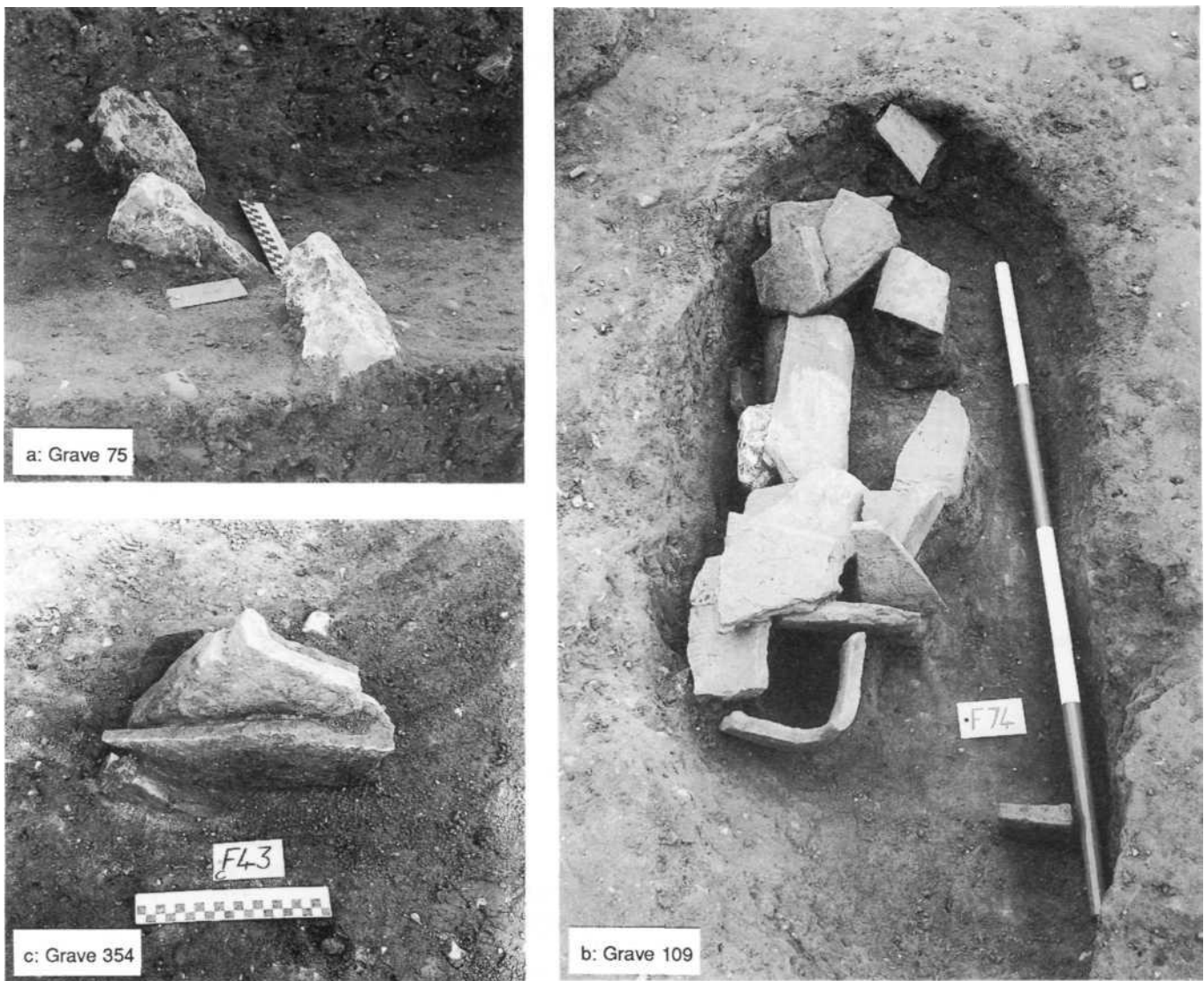


Fig 2.47 Possible surface grave markers, Period 2. [Pages 93-9]

of a later burial. The first grave of the three to be dug, G674, had a pit of single size (Fig 2.49b). Its position must have been marked, for it was accurately located and enlarged not only on the south side to accommodate G667, but also on the north side. The enlarged pit was clearly marked by timber posts at three corners, the holes for which were dug into its floor. There was no evidence for a post having been placed in the fourth corner (Fig 2.49c). The layer of fill covering both G674 and G667 was later cut into by the hole dug to allow G663 to be inserted. The third and final grave pit was extremely narrow, only just wide enough to take the coffin, and did not extend beyond the pit edge defined when G667 was buried (Fig 2.49d).

This is not the only example of a pit being dug large enough to accommodate not just the burial for which it was required, but one to be expected some time in the future. Only 5 m south-east of G663/G667/G674 lay two burials in one grave pit, G562 and G570. The

latter (15- to 16-year old male) was interred first, set on the north side of a large pit (Fig 2.50a), then G562 (middle-aged female) was dug through the pit fill to be placed on the south side (Fig 2.50b). There was no evidence that G570 had been marked on the surface by anything other than a mound.

A third example may be G121, which consisted of two adjacent graves of middle-aged males (Fig 2.50c). They are unlikely to have been deposited at the same time, for the bottom of the northernmost, G121a, was about 0.25 m above that of the southernmost, G121b, but there was no evidence to indicate which was the primary, which the secondary, interment. A small spread of tile and charcoal fragments, BF148, was noted on the Roman ground surface above G121b (Fig 2.46), but seems unlikely to have been a grave marker.

As G121a and b may have been either father and son or brothers, and G562 and G570 mother and son, so

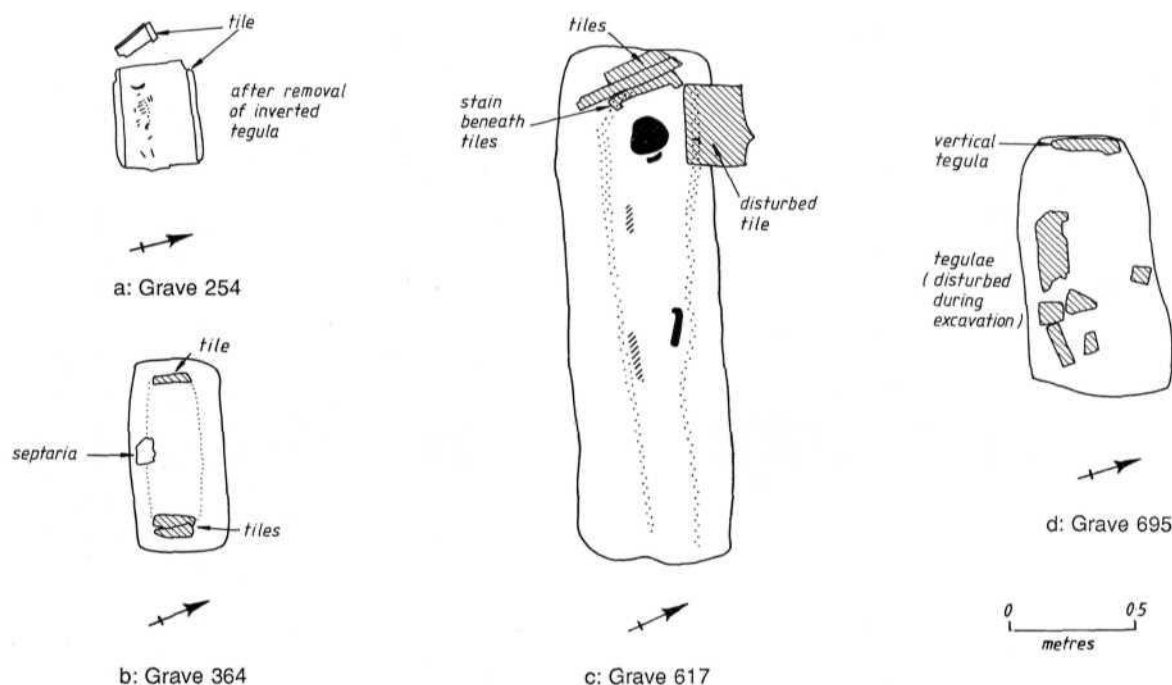


Fig 2.48 Tile-marked graves or coffins, Period 2. 1:30. [Pages 93-6]

Grave	Sex	Age	Position in stratigraphic sequence	Description of marker(s)
G61	F	young	final	?timber post or plank upright in SW corner of grave, lower end on grave bottom, at least 1.2 m high
G75	M	middle-aged	mid-range	three stones (BF48) at Roman ground level, laid in a line coinciding with N side of the grave
G109	I	4-5 years	isolated	group of tile fragments (BF74) at Roman ground level, laid at S side of grave overlapping grave pit (see also Table 2.41)
G219	M	middle-aged	-	<i>imbrex</i> set almost vertically in cemetery topsoil above W end of grave
G226	?	adult	final	post-pit (CF13) at E end of grave, probably for timber marker post, but may post-date grave (see also Table 2.41)
G254	-	infant	-	tile fragment set vertically at W end of tile coffin, may not have extended above ground
G354	?	middle-aged	mid-range	group of tile fragments (CF43) set on edge above centre of grave, more or less at Roman ground level
G364	-	(infant)	final	tile fragment set on edge at each end of coffin, piece of <i>septaria</i> set against middle of S side, may not have extended above ground (see also Table 2.41)
G592	?	old	mid-range	timber vault, posthole cut into upper vault pit fill in NW and NE corners (other corners destroyed), probably for timber marker posts
G617	-	(adult)	final	tile fragments set vertically over W end of coffin, may not have extended above ground level
G663	?	old	final	G674 a single grave pit enlarged on burial of G667 to triple size and postholes, probably for timber marker posts, cut in NW, SW and SE corners; G663 buried last, within area defined by posts
G667	I	17-18 years	mid-range	
G674	?	old	primary	
G695	-	(small child)	final	tile fragment set vertically at W end of ?tile coffin, may not have extended above ground
G722	?	middle-aged	final	tile and <i>septaria</i> fragments in upper grave fill at W end (not planned), possibly a surface feature (CF43 for G354)

Table 2.40. Summary of grave markers in Period 2 cemetery. F... female; I... indeterminate; M... male; eg (infant)... age inferred from grave/coffin size; ?... uncertain. [Pages 93-9]

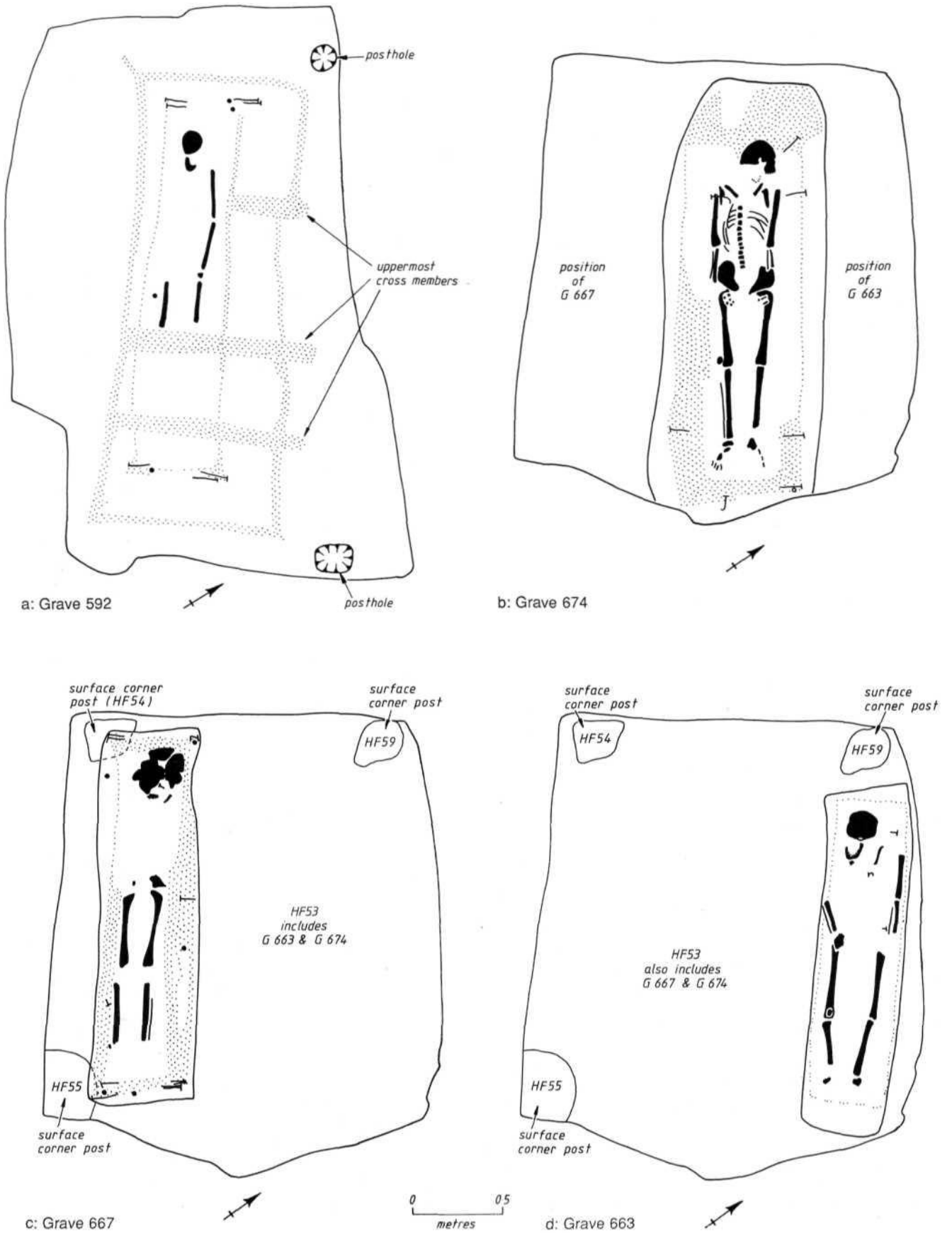


Fig 2.49 Graves marked with above-ground timber posts. Period 2. a... vault burial, G592 (see also Fig 2.62g-h); b-d... G674, G667, G663 (multiple burial). 1:30. [Pages 93-9]

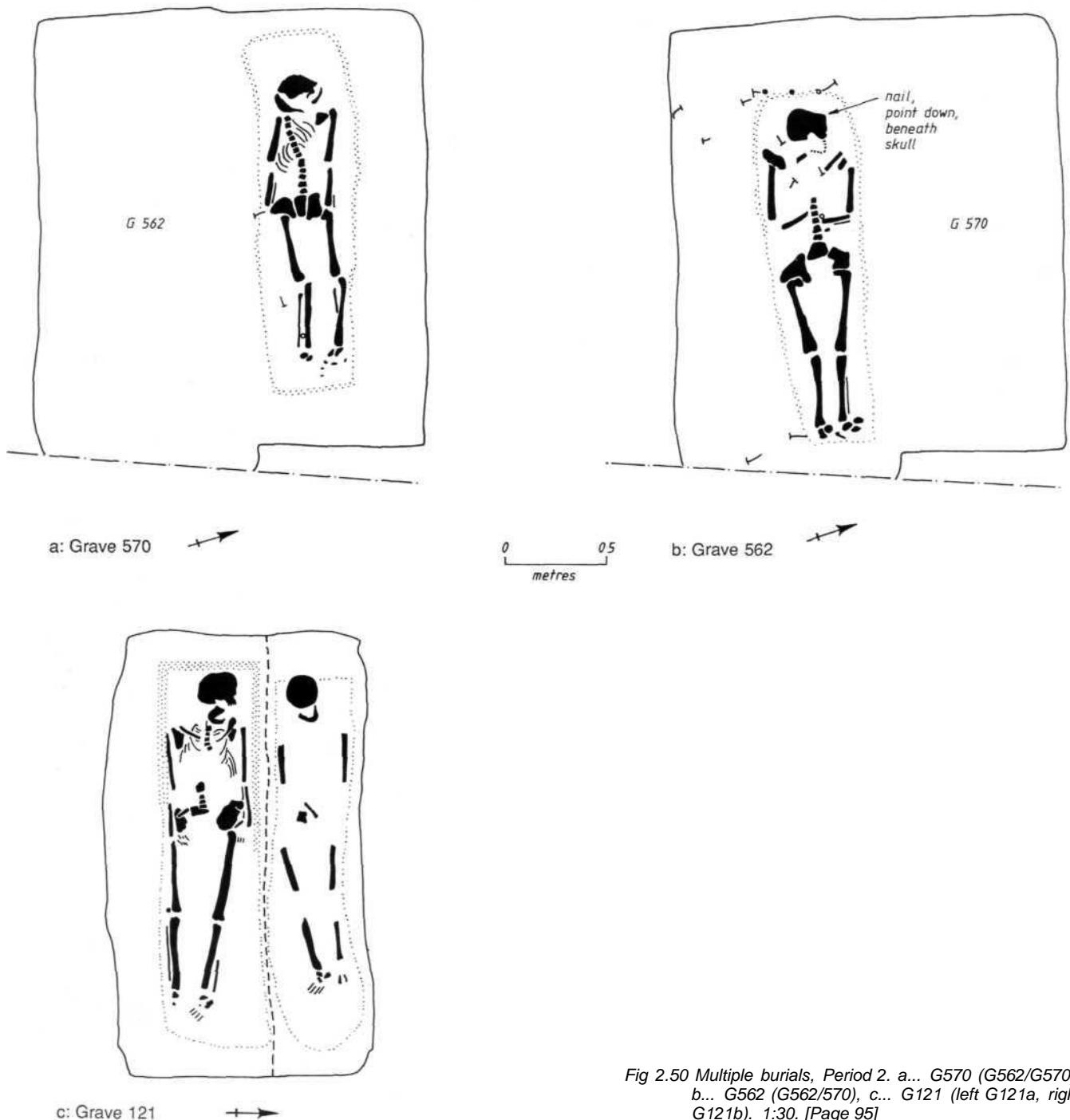


Fig 2.50 Multiple burials, Period 2. a... G570 (G562/G570), b... G562 (G562/570), c... G121 (left G121a, right G121b). 1:30. [Page 95]

G663/G667/G674 undoubtedly form a family group, but the precise relationship between the individuals is uncertain. It is also impossible to tell how long a period of time elapsed between the digging of G674 and G667 and then G667 and G663. The identification of the skeletons as of two elderly individuals (G674, G663) and one adolescent (G667) tempts the suggestion that this may be father, mother, and child, though grandparents and grandchild must also be a possibility. Assuming the former to be the case the following sequence of events must have occurred. One parent died first, the child next not long after (the coffin of G674 must have been intact when the pit was enlarged), and the second parent then prepared

his/her own grave site in advance, anticipating only a short time to pass before it was needed. The lack of damage or obvious subsidence to G674 caused by the insertion of G663 so close to it suggests that the first coffin was still intact when the third was deposited.

Why should large pits be dug for future burials and then backfilled so that part has to be dug out again? The sandy soil at Butt Road is easy to dig, so ground-breaking cannot have been the reason. If a family owned a plot it should have been a simple matter to ensure that close relatives were buried in adjacent graves. However, if there was no family plot, then an

alternative way of 'booking' the location of a grave could have been to dig a double- or triple-sized pit and mound up the backfill to mark the spot. If mounds were respected, as they appear to have been, then for as long as one was maintained and clearly visible another grave was unlikely to be dug through it.

?Mausoleum

[Figs 2.21, 2.46, 2.51]

Near the southern boundary of the site, in an area much damaged by the sinking of a Victorian soakaway (BF57) and its associated drains, patches of tile fragments and unmortared stones, mainly septaria, were noted (BF56 (Fig 2.51), BF65, BF66). These may be insubstantial foundations. The two latter patches were very small, but BF56 covered a much greater area and appeared to form a return. Projecting from the inner and outer edges of BF56 and the inner edges of BF65 and BF66, it is possible to postulate a rectangular structure measuring externally about 5.7 by 4.8 m, internally 4.2 by 3.3 m, with foundations 0.75 m wide (Fig 2.46).

Unmortared rubble foundations are sometimes found in Roman Colchester (CAR 3, 20), but are usually more substantial than these features at Butt Road, the rudimentary nature of which suggests only a light surface structure.

Scattered throughout the rubble of BF56 were a number of bones (Fig 2.46) identified by Rosemary Luff as ox and human (faunal remains archive). The latter must be residual, and therefore the ox bones may also not be directly associated with the laying of the ?foundation. The presence among them of many non-meat-bearing metapodials might be considered indicative of butchery in the area. It is also interesting to note that metatarsals are favoured for bone-working (Crummy 1981, 282-3), though as BF56 not only post-dates the bone-working on Plot B but is also some distance from it, any link proposed between the two



Fig 2.51 Unmortared rubble foundation BF56, Period 2.
[Pages 99-100]

can only be regarded as tenuous.

Many graves were cut and/or sealed by BF56 and BF66, and, if these features really were part of the foundations for a structure, many other graves would also have been affected (Figs 2.21, 2.46). Indeed, no respect at all would appear to have been accorded to existing burials. Such disregard of graves is not a usual characteristic of the cemetery, and can be paralleled on such a scale in only one other feature, a large medieval oven (HF27) constructed from fragments of tile in the northern part of the site (Fig 2.46, p 163).

If Roman, the ?foundations must date to late in Period 2. BF56 cut and sealed G58, the final grave in a sequence of three, which contained two beakers (or miniature jars) of Oxfordshire red-painted ware, dated to no earlier than 360/75. It also sealed each grave in another sequence of three (G107, G93, G92), and, if a genuine foundation, in its proposed extended form would have sealed G101, the final grave in at least one sequence of four (G112, G103, G102, G101) (Fig 2.21). Grave 101 contained a pair of leather belts each with a copper-alloy buckle and strap-tag with repoussé-decorated attachment plate, and can probably be dated to c 370-90. The presumed southern ?foundation would have completely sealed the grave, suggesting a time span between them of about 20 years. The postulated northern ?foundation may have sealed G82, a burial last in a sequence of three and aligned very differently to any other grave in this area of the cemetery. Such a deviation would generally be taken to indicate a grave dating to very late in Period 2 (p 92).

Three graves enclosed by the ?foundations need not predate them, and so may be seen as deliberately sited within the single cell that they form: G106, the isolated grave of an infant or small child; G111, a 5- to 6-year-old child burial, last in a sequence of three; and G114, an adult ?female burial, last in a sequence of four. A fourth grave, G118, may also belong within the cell, but its east end was badly damaged by G114, and its west end was destroyed by the Victorian soakaway. The damage inflicted by G114 suggests that G118 was no longer visible on the ground when the later grave was dug, and so, if G114 and the ?foundations are directly associated, then G118 is as likely to predate the latter as the former.

If G106, G111 and G114 are accepted as deliberately sited within the area enclosed by the ?foundations, then the single-celled structure may be seen as a mausoleum, containing the graves of two children and an adult relative, perhaps their mother. The lack of destruction debris in the area suggests the building was of timber construction above the rubble foundations, which would allow it to be linked to the possible structures raised over G663/G667/G674 and the vault G592 (pp 93-5). A timber frame must have been supported by a timber ground-plate set over the rubble, for no postholes were located.

There is, however, no reason to suppose that G114

and G111 are any later than any other final graves in the area, the alignment of which they share, including most notably the adjacent late 4th-century grave containing the belts, G101. Moreover, G106 is aligned with a nearby primary grave, G129, which is first in the sequence terminating with G114.

The alignment of the ?foundations, though similar to that of many of the surrounding graves, was as likely to have been influenced by surrounding topographical features as they were. They are very close to the southern boundary of the cemetery, and to the ?road-side ditch AF136, and thus to a possible east-west road (p 55). All these features probably outlived the use of the area for burials, and thus may have continued to exert some influence well into the 5th century or later. The ?foundations may therefore post-date the cemetery.

Though an interpretation of the patches of rubble as all that remained of a foundation for a mausoleum is attractive, there is little to support it, and it must remain as very tentative.

Grave shape

[Figs 2.21, 2.52]

The general shape and range of variation described for Period 1 Phase 3 graves also covers those of Period 2, ie more or less rectangular in plan but differing considerably in depth and profile. In contrast, the two uncoffined burials (G41/43, G51) which lay outside the southern boundary of the cemetery were roughly-dug pits (Fig 2.21), in which the bodies appeared to have been dumped (pp 105-10).

A few other graves also appear to be irregular in plan (Fig 2.21), but many of them were shallow surface features, their upper fill and edges removed by post-Roman terracing or trenching (eg most of the graves just to the east of the church and many others in the northern part of the site).

In five graves there were signs that the edges had collapsed while the pit was open. In G56 the north side had collapsed after (or when) the coffin was lowered into the grave (Fig 2.52a). In G76 the upper part of the north side was irregular and very wide (Fig 2.21), possibly as a result of the edge collapsing during the interment or backfilling. In G266 the upper part of the south side was also irregular and enlarged (Fig 2.21), the result of the grave pit collapsing before the coffin was inserted, as there was 0.2 m of fill between the bottom of the grave and the base of the coffin. The south side of G328 appears to have collapsed while it was being dug (Fig 2.52b), but in this case the resulting fill material was removed from the grave. All the edges of G492 are ragged, especially on the north side (Fig 2.52c), and 0.37 m of fill lay beneath the coffin.

Coffin/corpse markers

[Table 2.41; Figs 2.21, 2.45, 2.53-2.55]

In up to 22 graves pieces of stone and tile were placed in the grave in such a way as to indicate that they were used to mark the position of the coffin or the corpse (Table 2.41; Fig 2.45). As with grave markers, the intention in some cases must have been either to prevent future disturbance of the coffin/corpse, or to

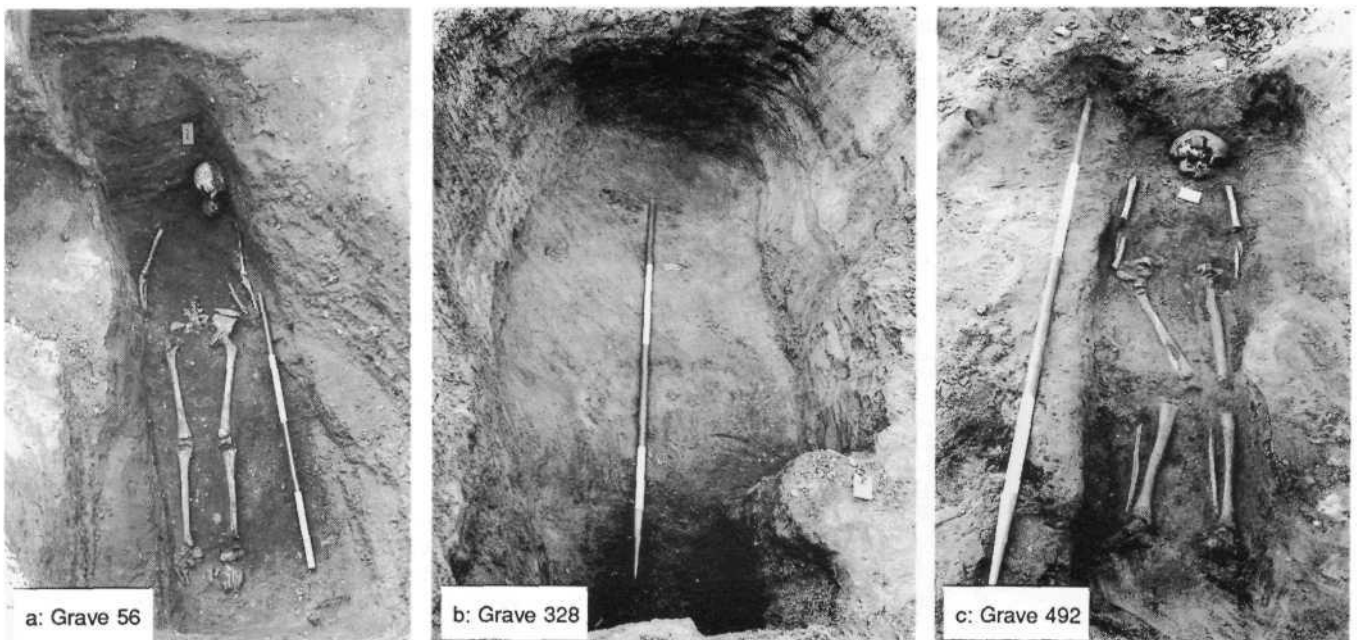


Fig 2.52 Graves with collapsed edges, Period 2. [Page 100]

Grave	Sex	Age	Position in stratigraphic sequence	Coffin type	Description of marker(s)
G109	I	4-5 years	isolated	timber	large block of stone resting against leg bones on bottom of grave at N side, probably originally on coffin lid, possibly even set vertically (see also Table 2.40)
G117	M	middle-aged	primary	timber	two tile fragments set on edge between coffin and S side of grave pit near SW corner (see adjacent G127, and Table 2.17)
G127	-	(infant)	primary	timber	several tile fragments set on edge between coffin and W end of grave (see adjacent G117)
G140	M	adult	primary	timber	one tile fragment set on edge at W end of grave (see adjacent G141)
G141	F	adult	primary	timber	<i>tegula</i> set on edge outside coffin at both W and E end, and two tile fragments set on edge, side by side, on S side of coffin close to E end (see adjacent G140)
G143	M	middle-aged	final	timber	pieces of greensand and one tile fragment lying in row from pelvis to knee (E end not excavated) on N side of grave about 0.08 m above grave bottom, probably level with coffin lid
G148	M	middle-aged	final	timber	pieces of greensand and septaria and fragments of tile lying in row from mid-tibia to just beyond foot on N side of grave about 0.15-0.3 m above grave bottom, piece of greensand set at SW corner of coffin and small piece of septaria near NW corner, all probably level with coffin lid
G226		adult	final	timber	tile fragment on pelvis, probably originally on coffin lid (see also Table 2.40)
G248	?	adult	mid-range	timber	tile fragment on edge against inner edge of coffin stain on N side near lower legs, and tile fragment lying horizontally on coffin bottom just E of skull, both possibly originally on lid, both possibly residual (see also Table 2.17)
G253	M	middle-aged	-	timber	three tile fragments at W end, one overlapping edge of coffin lid, probably all originally on lid, possibly residual
G272	7	adult	mid-range	timber	tile fragment on edge against inner edge of coffin stain at E end, probably originally on lid, possibly residual (see also Table 2.17)
G341	M	middle-aged	final	none	two tile fragments set on edge, side by side, at W end of grave, two more on edge, face to face, at E end, and one on edge near centre of S side (see also Table 2.42)
G350	M	middle-aged	final	timber	piece of limestone in SE corner of grave, 0.2-0.3 m above grave bottom, probably level with coffin lid, and two pieces septaria on grave bottom on N side of coffin, set to divide coffin length into three almost equal sections (see adjacent G361)
G358	F	young	final	timber	piece of greensand close to SE and SW corners of coffin, at lid height (see also Table 2.17)
G361	M	middle-aged	mid-range	log	piece of stone close to NW, NE, and SE corners of coffin, at lid height (see adjacent G350, and tree-trunk coffins, pp 122-3)
G364	-	(infant)	final	timber	tile fragment set on edge at each end of coffin, piece of septaria set against middle of S side, possibly extended above ground (see also Table 2.40)
G409	7	adult	-	timber	large fragment of <i>imbrex</i> slanting down into E end of coffin, probably originally set on coffin lid (?vertically)
G428	M	middle-aged	final	timber	piece of limestone close to NW, SW, and SE corners of coffin, at lid height
G445	F	young		timber	three horizontal tile fragments in SW corner of coffin, on bones, and fourth between legs touching right knee, probably all originally on coffin lid, possibly residual
G610	I	13-14 years	primary	timber	piece of septaria and <i>tegula</i> fragment outside coffin at E end, on grave bottom, probably residual
G612	-	(adult)	final	?none	<i>tegula</i> fragment set on edge at W end (see also Table 2.42)
G629	?	adult	isolated	none	corpse set at an angle in grave with two pieces of greensand at NE and SE corners and one piece at SW corner (see also Table 2.42)

Table 2.41. Summary of coffin/corpse markers in Period 2 cemetery F... female; I... indeterminate; M... male; eg (infant)... age inferred from grave/coffin size; ?... uncertain. [Pages 100-102]

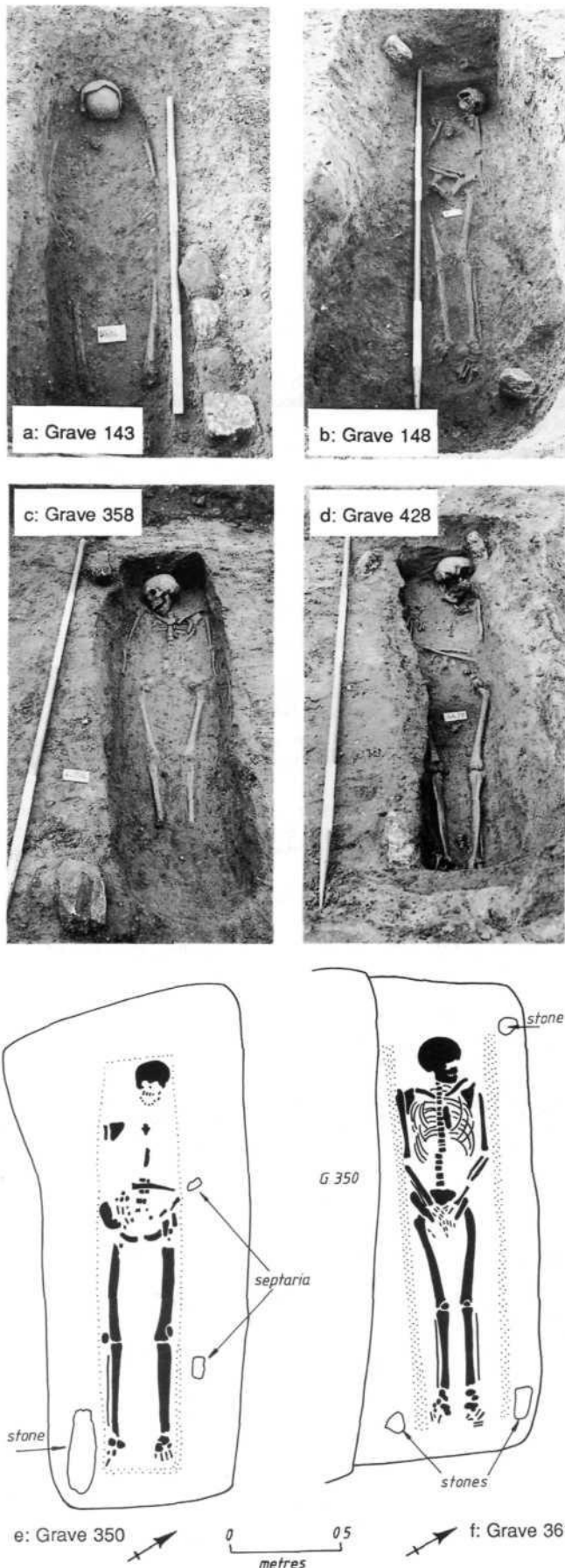


Fig 2.53 Coffins marked in the grave fill level with the lid, Period 2. Plans 1:30. [Pages 100-2]

facilitate its location for the insertion nearby of a related burial.

In six graves (G143, G148, G350, G358, G361, G428) stones and tile were set in the backfill of the pit level with the coffin lid (Fig 2.53). Two of these graves (G350, G361) are immediately adjacent (Fig 2.53e-f), and one (Fig 2.53c) is the uppermost of two stacked burials (p 104). All three are part of a complex of graves set around two vaults in the centre of the southern area of the site (pp 114-18).

In a further six graves (G226, G248, G253, G272, G409, G445) fragments of tile appeared to have been placed on the lid of the coffin (Fig 2.54b-g), as did a large block of stone in G109 (Fig 2.54a), but whether or not these pieces were used as markers, or were just fragments residual in the backfill, is uncertain. There was little residual tile on the site as a whole, and even less stone, and large pieces like the block in G109 and the large imbrex fragment in G409 (Fig 2.54f) seem most likely to have been markers, while the single smaller tile fragments in G226 (Fig 2.54b) and G272 (Fig 2.54e) were probably residual. However, G272 was the lower of two stacked burials, so it may well have been marked in some way. Grave 248 (Fig 2.54c) was also a stacked burial, in this case the uppermost, but the two tile fragments recovered from within its coffin are likely to be residual.

In the remaining ten graves (G117, G127, G140, G141, G341, G364, G610, G612, G629) fragments of stone or tile were placed around the coffin or corpse on the grave bottom (Fig 2.55). These pieces too may be residual, placed around the edge of the pit floor to keep it level for the coffin, as sometimes happened with bones from disturbed graves (eg in G25, Appendix 2). However, in all but one grave, G610 (Fig 2.55i), all or some of the pieces were placed at, or very near, the west end, and where tile or stone was set at both ends and the centre of one side of the coffin (Fig 2.55d, Fig 2.55h) or uncoffined corpse (Fig 2.55e), or at the four corners of the corpse (Fig 2.55f), there can be no doubt but that these locations were deliberately chosen.

There were two pairs among the ten marked graves: G117 lay next to G127, and G140 next to G141, demonstrating a uniformity of burial practice within each pair and thus a strong likelihood of direct relationship. Grave 117 was also the lower of two stacked burials (see below).

Grave markers were noted mainly from burials which were last in a sequence, and coffin or corpse markers are also predominantly from final graves (nine out of 22). However, five of the graves are primary (Table 2.41), four of them being the two pairs mentioned above, and both pairs are in the extreme southern area (Fig 2.21), within the cemetery boundaries laid out in Period 1 Phase 3, and so possibly early in Period 2. The practice of marking the coffin or corpse thus seems to have been carried out spasmodically throughout Period 2.

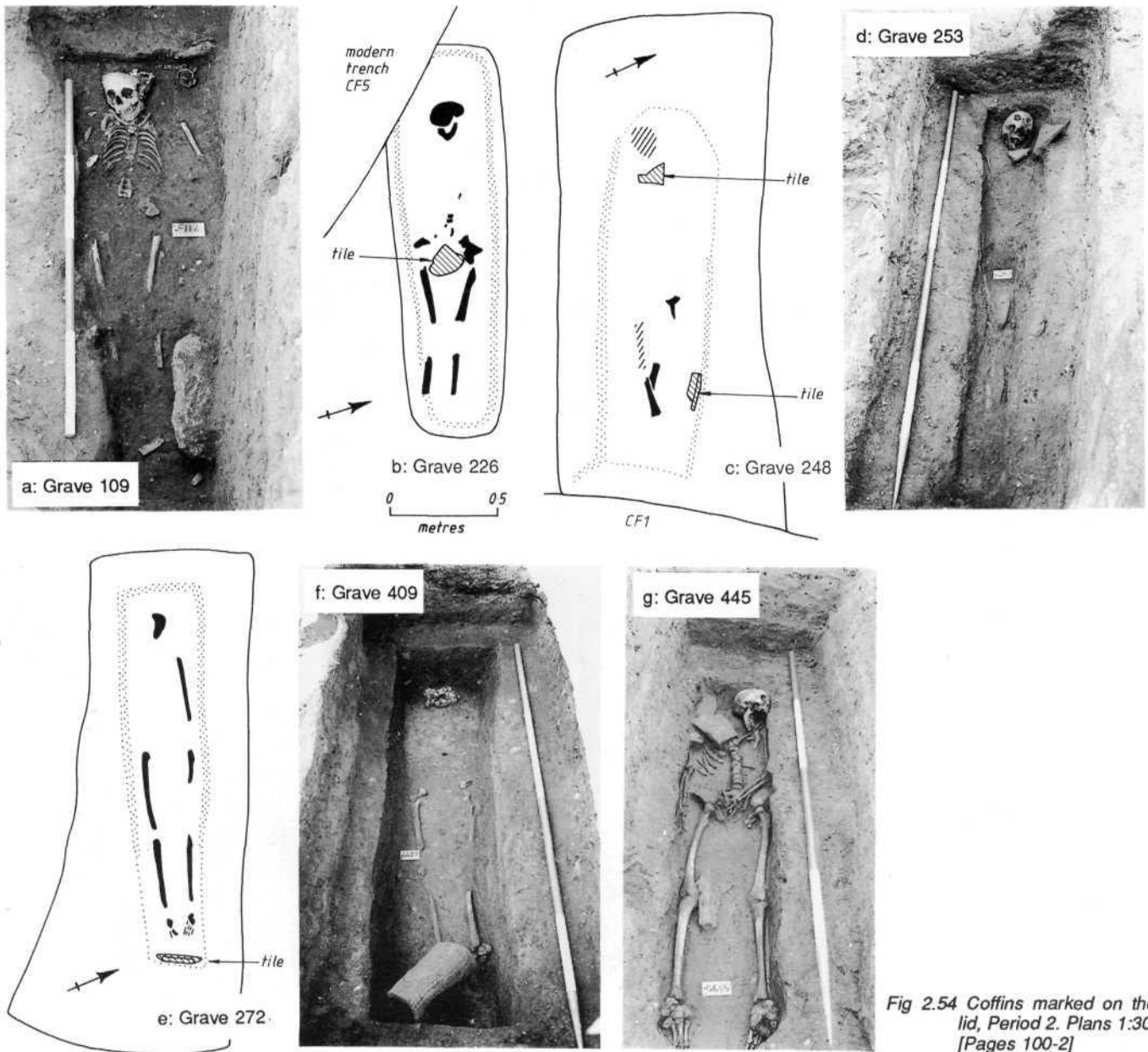


Fig 2.54 Coffins marked on the lid, Period 2. Plans 1:30. [Pages 100-2]

Stacked burials

[Table 2.17; Figs 2.21, 2.56]

Though most of the graves in the Period 2 cemetery either cut or were cut by others, in the main they were not set one directly above another, so that where such a 'stack' was found, the chances of its being deliberate appear to be reasonably high. Watts (1991, 55), cites an example from Dunstable, Bedfordshire, where pathological evidence gives credence to the likelihood of a stacked pair being related. However, given the concentration of burials at Butt Road, accidental stacks might be expected as much as variations in grave accessories or corpse position, and some of those noted may not be deliberate.

A maximum of ten stacks were identified (Table 2.17),

nine of them containing two burials, one possibly four. Three stacks may be accidental, as may be part of the stack of four.

A convincing stack is provided by G110/G117, both coffined burials of middle-aged males. Fragments of tile were set on edge near the south-west corner of G117, but unless they projected above the coffin lid they cannot be seen as markers put there to assist the location of the coffin for the later, upper, burial (p 102). This, G110, was clearly placed on the lower coffin when it was still solid, for the subsequent decay and collapse of the timber caused the entire post-cranial skeleton of G110 to sink, apparently fully articulated, into the coffin cavity of G117 (Fig 2.56).

Other convincing stacks are G34/G42, G417/G424, G355/G356, G683/G684, and G246/G272, though in the last example the lower coffin, G272, appears to

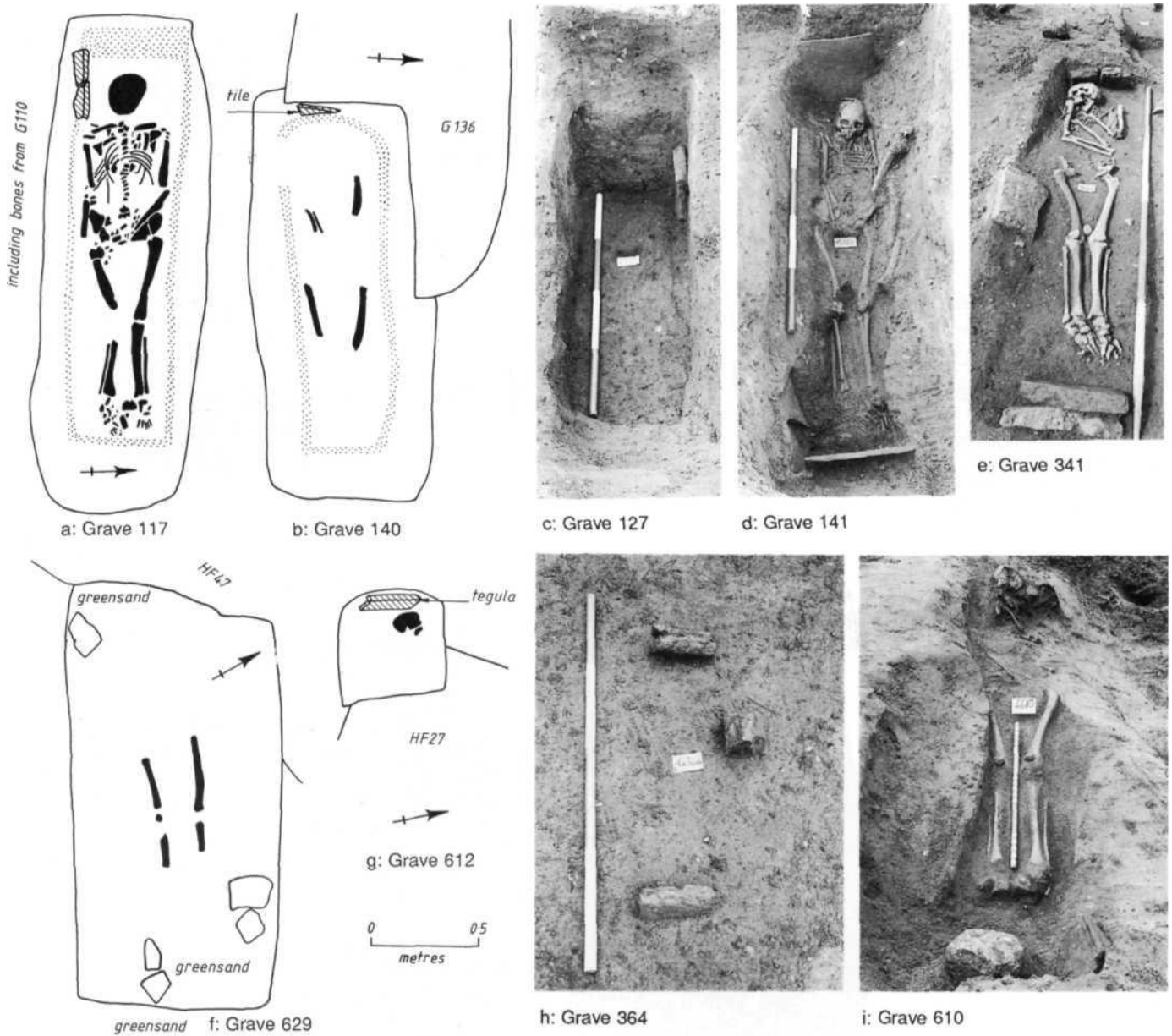
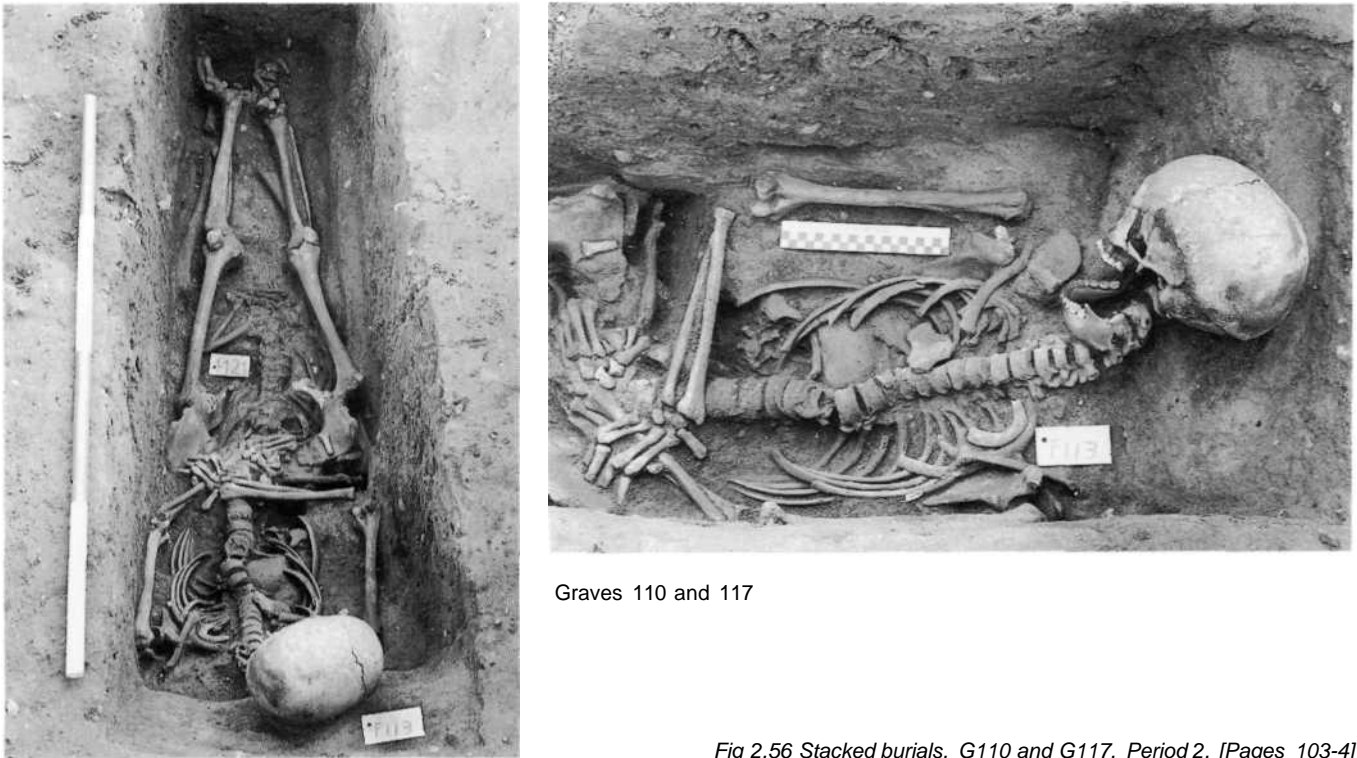


Fig 2.55 Coffins and corpses marked on the bottom of the grave. Period 2. Plans 1:30. [Pages 100-2]

have collapsed before the upper was set above it.

Less convincing pairs are G248/G252, placed in a very crowded area with many obscured relationships between graves; G639/G643, the skull of the latter probably having been removed when G639 was dug and hence a deliberate stack is unlikely; and G358/G366, a marked coffined grave set above a single timber vault. Interpretation of this possible pair is very difficult, for though the upper grave is aligned neatly with the vault, it is placed not centrally but to one side. This could be seen either as deliberately leaving space for a further burial above the vault, which may be supported by the coffin of G358 being marked at lid level, or as a reflection of the precise location of the vault becoming obscured with time, or as indicative of no real intent to associate G358 with G366.

The relationship between G358 and G366 is discussed below (p 117) in connection with the complex of graves associated with G366 and the adjacent vault CF55, as is the possible stack of four, G386/G382/G370/G357. Briefly, G386 is a young adult female burial closely associated with the graves of four young children, of which one, G382, is set into its fill. Grave 370, a young adult male, lies above the two, and may be associated with them. Set over G370 was G357, which again may imply a deliberate stacking of related burials. The concentration of burials in this area may have resulted in graves being less rather than more clearly defined and thus made the accidental setting of grave above grave more likely. A direct relationship between G386 and G382 can probably be accepted, but it is more difficult to see the two uppermost burials as part of a long stack.



Graves 110 and 117

Fig 2.56 Stacked burials, G110 and G117, Period 2. [Pages 103-4]

Other associated burials

[Table 2.17; Figs 2.21, 2.57]

Multiple burials deposited in sequence in one grave pit (G663/G667/G674, G562/G570) have been mentioned above with reference to graves marked on the surface (pp 93-9). Two timber vaults each containing two coffins which appeared to have been deposited at the same time (G395/G396, G677/G680) are described more fully in the section on vaults (pp 111-18), as are two burials which may have been deposited in sequence in a vault (G191/G203), and a pair of graves possibly for still- or newborn twins (G387/G388). An important group of three corpses in one grave pit is discussed in the section following on uncoffined graves (pp 105-11). The remaining formal coffined double burials are described here.

Graves 622 and 623 provide an example of a double burial where two coffins were placed in a grave pit at the same time. The corpses were those of a middle-aged male and female and thus are likely to have been husband and wife (Fig 2.57a). This is a parallel to the vault burial CF55 (G395/G396) which also probably contained a married couple buried at the same time.

Another double burial is that of G645 and G646, though here one coffin was used for two corpses, a middle-aged female and a 3- to 4-year old child. The child had been placed with its head resting on the left hand of the female, undoubtedly its mother (Fig 2.57b).

Formal burials with two corpses deposited at the

same time appear to imply that a disaster must have occurred for two members of one family to die at the same time. Disease is perhaps most likely to have been responsible, but accidental death (eg in a house fire) should not be forgotten.

Uncoffined graves

[Table 2.42; Figs 2.21, 2.55, 2.58-2.60]

Though evidence for some sort of coffin was lacking from 63 graves, for only five could it be established that a coffin had definitely never been present (Table 2.42). One grave appeared never to have been used, one skeleton may have been redeposited, 34 graves were either only partially excavated or largely destroyed by later activity, most notably where the original grave pit had only been shallow, and for all these graves the presence or absence of a coffin was completely conjectural. A further 22 graves were also partly destroyed, the evidence for their never having contained a coffin being slightly less conjectural than for the previous group, but still by no means convincing.

Two of the uncoffined graves, G41/43 and G51, lay beyond the southern boundary of the cemetery (Figs 2.21, 2.58). Grave 41/43, a very irregularly-shaped pit, contained three individuals, two middle-aged males and an adolescent (Fig 2.59c). The uppermost corpse (G41, middle-aged male) had been deposited prone with its head to the east (Fig 2.59a). Only the skull

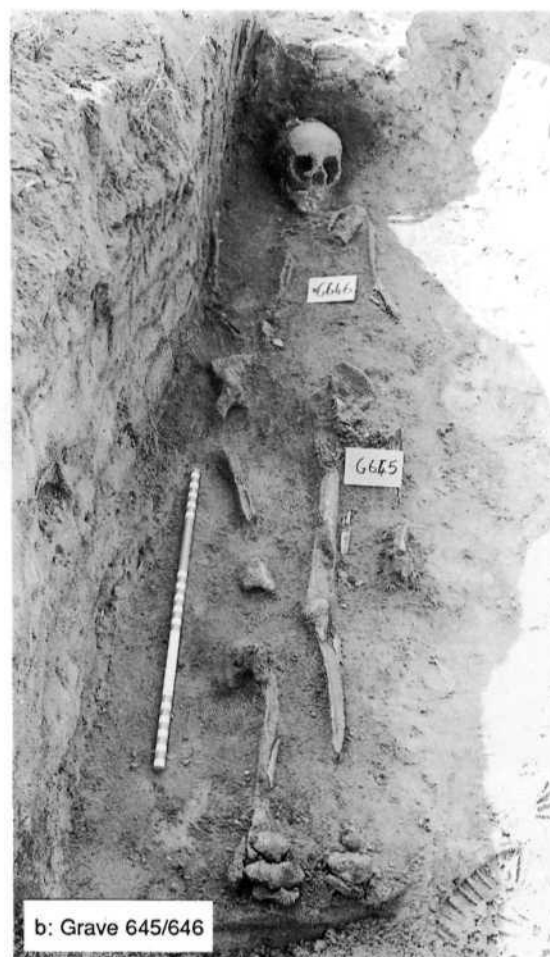
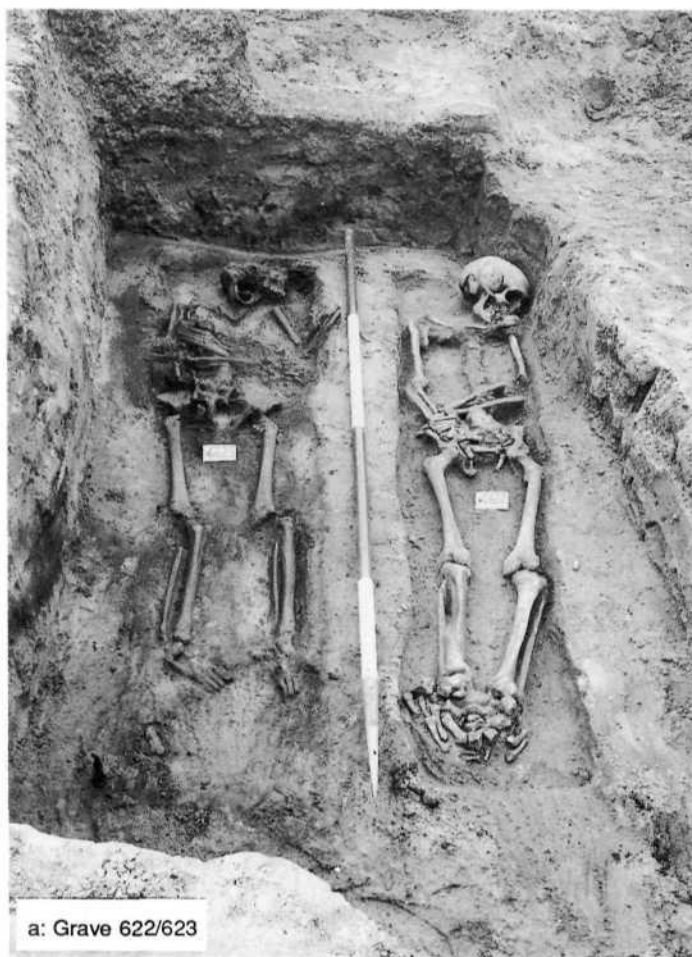


Fig 2.57 Contemporary double burials, Period 2. See also Fig 2.59 (G41/G43), Fig 2.61 (G395/G396), Fig 2.62f (G677/G680). [Page 105]

remained of the adolescent, the rest of the bones probably having decayed completely (p 21). Its position, close to, but at a slightly lower level than, the knees of G41 suggests that it lay with head to the west. The second middle-aged male (G43) was on much the same level as the adolescent, and lay prone with head to the west (Fig 2.59b). The two were probably placed in the grave side by side.

There was no evidence from the pit to support the idea that G43 and the adolescent had been in individual adjacent burials, with G41 cut through both. The disposition of both middle-aged males distinguishes them from every other burial in the later cemetery, and reinforces their direct association. Both lay prone. The shoulders of the lower (G43) were uneven, the right slumped, the left raised to the level of the chin. The arms lay by the sides, the hands on or near the pelvis/thighs, but with the elbows turned outwards and slightly raised. The left lower leg crossed over the right, and both were bent to the right (Fig 2.59b). The uppermost (G41) lay with the whole body turned to the right, the torso only slightly, the lower legs and feet much more so. As with G43 the arms were twisted and the elbows raised above the rest of the skeleton. The left lower leg lay on top of the right, the ankles close together (Fig 2.59a). One tibia

showed signs of gnawing. A copper-alloy ring, a plain band, was on the left index finger (p 143).

The positions of the arms, especially the elbows, of both these skeletons suggest that the wrists of the corpses may have been bound when they were deposited in the pit. The positions of the lower legs may indicate that the ankles, too, were bound, particularly in the case of G41. The gnawing on one tibia of the latter points to exposure of the body. If all these possibilities are indeed fact, then G41/43 is likely to have been the burial of malefactors deliberately set outside the formal cemetery.

Grave 51 was the burial of a middle-aged female, laid with head to the east. The eastern edge of the grave pit was quite straight, but the northern side was rounded and had sloping sides. The southern side lay outside the limit of the excavation. The bottom of the pit sloped up to the east, so that, though the body had been laid supine, the head had slumped down towards the left shoulder (Fig 2.60b). Though G51 is an unusual burial in Period 2, the grave shape and disposition of the body would not be out of place in Period 1 Phase 2, and the possibility should be considered that the grave might belong to the earlier period. The upper levels in the area were destroyed

Grave	Sex	Age	Body position	Position in stratigraphic sequence	Comment
G6	F	adult	probably supine	final	largely destroyed
G26	M	adult	probably supine	primary	largely destroyed
G41/43	a) M	middle-aged	prone and contorted	isolated	no coffin, outside main cemetery
	b) M	middle-aged	prone and contorted		
	c) ?	adolescent	skull only, near but below knees of G41		
G46	-	(adult)	-	primary	largely destroyed
G50	M	middle-aged	supine, body nearly fills width of grave	isolated	no coffin
G51	F	middle-aged	supine	isolated	no coffin, outside main cemetery
G62	?	adolescent	-	isolated	largely destroyed, photographic record suggests coffin
G71	-	-	-	final	only east end excavated
G80	?F	adult	-	primary	largely destroyed
G81	?	max 17 years	supine	primary	largely destroyed
G83	?	adult	-	mid-range	probably no coffin
G85	I	8-10 years	-	?	only partially excavated
G104	-	-	-	isolated	almost completely destroyed
G11S	-	-	-	mid-range	largely destroyed
G144	-	-	-	final	only partially excavated
G149	-	-	-	primary	probably never used
G153	-	(adult)	-	final	only extreme west end excavated
G163	-	(adult)	supine	primary	only partially excavated
G209	-	(child)	-	final	very shallow, probably no coffin
G289	-	-	-	primary	?grave, probably no coffin
G317	?	adult	supine	final	shallow
G341	M	middle-aged	supine	final	no coffin, body marked by tiles
G383	-	(child?)	-	?	probably no coffin
G390	?	adult	supine	primary	largely destroyed
G432	i	2-3 years	-	primary	only extreme east end excavated
G433	-	adult	-	primary	upper fill very disturbed
G465	-	-	-	primary	largely destroyed
G471	I	18 months	-	mid-range	disturbed grave
G473	-	(infant)	-	primary	probably no coffin
G476	-	(small child)	-	isolated	shallow, probably no coffin
G480	-	(infant)	-	?	shallow, probably no coffin
G489	-	adult	supine	mid-range	probably no coffin
G490	F	adult	probably supine	final	probably no coffin
G507	-	(adult?)	-	final	largely destroyed
G508	-	(adult?)	-	primary	largely destroyed
G516	-	-	-	final	very shallow
G517	-	infant	-	final	no discernible grave cut, probably no coffin
G526	-	-	-	final	only west end excavated
G528	?	adolescent	supine	isolated	probably no coffin
G530	F	adolescent	supine	final	probably no coffin
G531	F	old	supine	final	probably no coffin
G537	?	adult	-	primary	probably no coffin
G538	?	?	-	final	largely destroyed
G544	?	adult	-	primary	largely destroyed, very shallow
G546	-	-	-	mid-range	shallow, probably no coffin
G563	M	adult	supine	primary	largely destroyed, shallow, some nails in fill
G576	?	adult	-	final	largely destroyed, shallow
G577	?	adult	-	mid-range	largely destroyed, probably no coffin
G581	?	? (adult)	-	final	shallow, probably no coffin
G612	-	-	-	final	largely destroyed, west end marked by upright tile fragment, probably no coffin
G629	?	adult	-	isolated	no coffin, body marked by stones
G630	?	adult	-	mid-range	only partially excavated, vandalised
G637	I	older child	-	primary	partly destroyed
G656	M	middle-aged	supine	?final	some nails found but not in situ
G668	?	young	-	primary	probably no coffin
G669	?	?	supine	final	probably no coffin
G681	i	4-5 years	supine	final	no discernible grave cut, probably no coffin
G685	?	young adult	supine	mid-range	probably no coffin
G688	?	adult	-	?primary	not fully excavated
G713	M	adult	supine	isolated	largely destroyed
G715	I	11-13 years	supine	?final	no discernible grave cut, possibly redeposited bones
G732	-	-	-	?final	largely destroyed
G740	M	adult	-	?	watching brief
Totals	No coffin		5		
	Probably no coffin		22		
	Absence of coffin not certain		34		
	Not a grave/grave not used		2		

Table 2.42. Graves in which no coffin of any kind was located, Period 2 cemetery.. F... female; ?F... probable female; I.. M... male; eg (adult)... inferred from grave size; ?... uncertain. [Pages 105-111]



Fig 2.58 Graves with distinctive characteristics, Period 2. 1:333. [Pages 105-128]

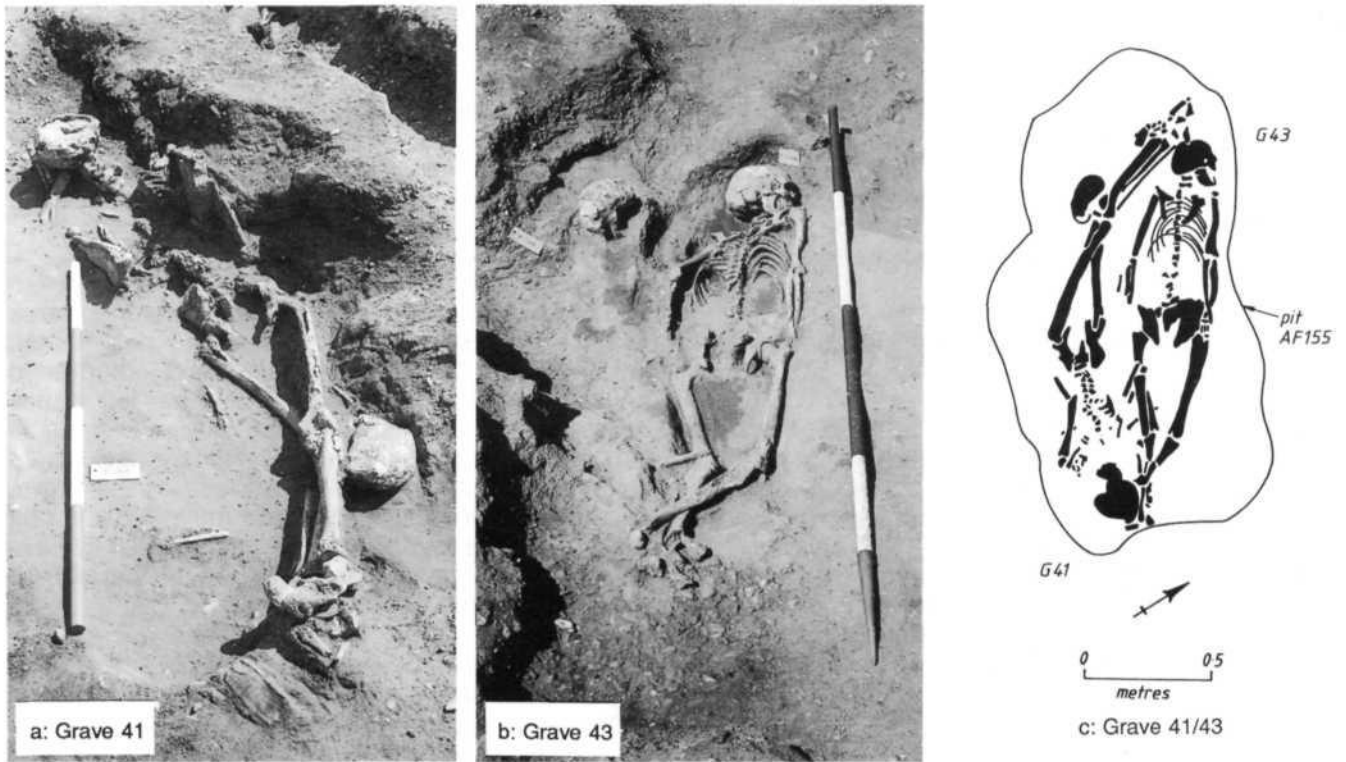


Fig 2.59 Uncoffined pit burial G41/G43, outside the Period 2 cemetery. [Pages 105-11]

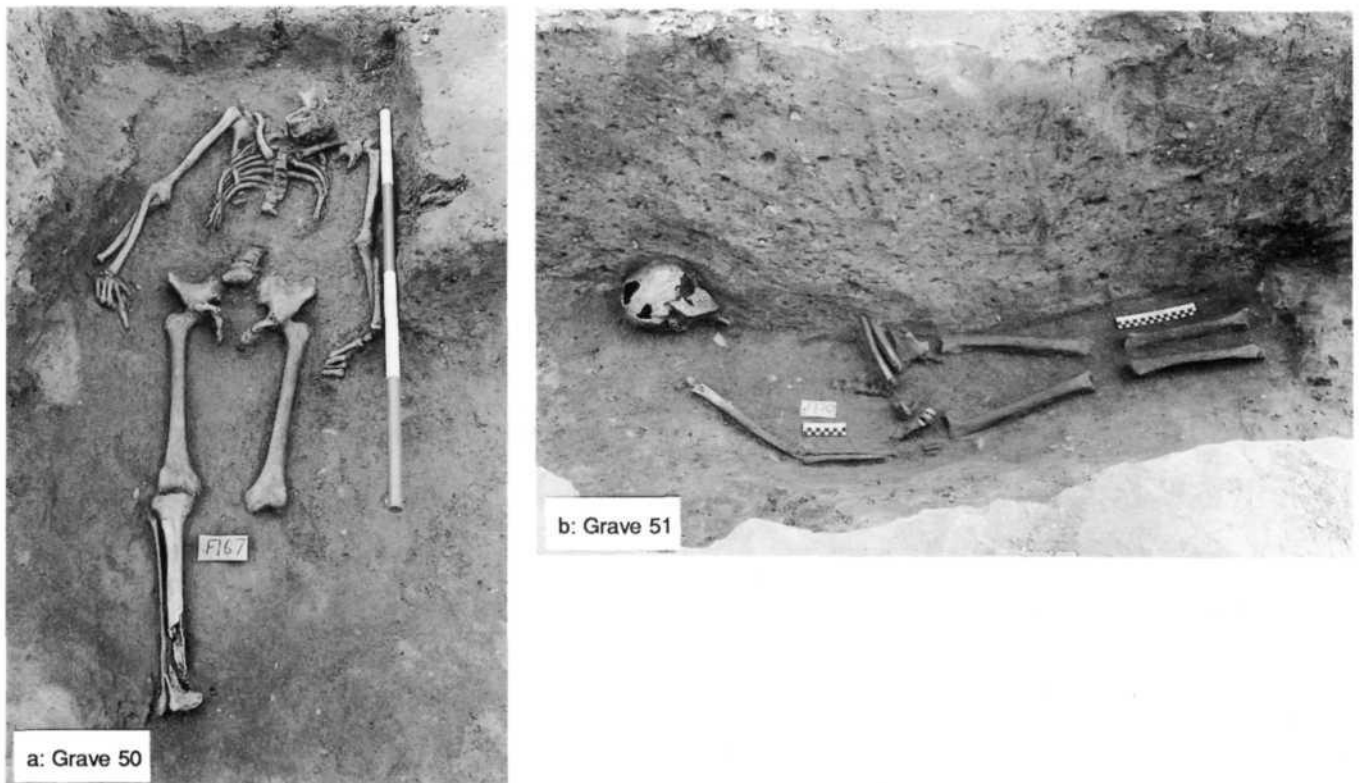


Fig 2.60 Uncoffined burials, Period 2. a... G50, inside the cemetery; b... G51, outside the cemetery. Plan 1:30. [Pages 105-11]

containers such as a nailed timber coffin within a timber vault or a lead coffin inside one of nailed timber. An economic factor is most likely to have influenced the choice of container, or lack of one, but it is possible that where the standard timber coffin is absent the grave may be late in date.

Timber vaults

[Table 2.43; Figs 2.2, 2.10, 2.21, 2.49, 2.58, 2.61-2.62]

Six timber vaults (or boxes) were noted (Fig 2.58), three of them containing two coffins, the other three one coffin (Table 2.43).

Two of the vaults lay very close together along the line of Plot B's northern boundary, close to the eastern edge of the site (Figs 2.21, 2.58). One of them was a double burial, CF55, containing the coffins of a middle-aged male and female, probably husband and wife; the other, G366, was a single burial of a middle-aged male. They were surrounded by other graves and can be interpreted as either together the focal point of one large family plot, or individually that of two families (pp 114-18).

Two more of the vaults may also be related: one a probable, but not certain, double burial, BF163, the other a single, G225. The pair lay south of CF55 and G366, with BF163 cutting the Period 1 Phase 3 cemetery boundary ditch, BF167, and G225 lying within Plot B's southern section (Figs 2.2, 2.10). They were both set on a similar alignment and in a row which was well-defined north of BF163, less so to the south (Figs 2.21, 2.58).

The other two vaults lay in the northern part of the site. The double burial HF60 in the extreme north-east corner, an apparently isolated feature, and the single burial G592 further to the west (Figs 2.21, 2.58). Though HF60 is the only vault which does not seem to have had a stratigraphic relationship with another burial, both G592 and BF163 were also in relatively open areas. The former had only two possible satellite burials, G572 (p 93) and G594, and the latter one, G178, though the adjacent earlier burial, G208, was only slightly cut by the vault pit and could be associated with it.

The relationships between G225 and two of its neighbours are not clear. Grave 228, at the south-eastern corner of the vault pit, may be an earlier unrelated burial, while G263 on its northern side appears to have only slightly cut the pit if later than it, or been only slightly cut if earlier, and thus could well be a satellite. Three interrelated graves lay over G225: G216 on the south, G217 on the north, and G215 in the centre and cutting the other two. The apparent lack of respect shown by any of these graves to G225 suggests that they post-date its influence and so are not related to it, though

subsidence in the vault affected both G215 and G217, indicating that its timbers had not fully decayed and collapsed before their interment. The four burials may therefore be related.

The area immediately west of G225 contained only one burial, G204, a scarcity probably due to Plot B's late incorporation into the Period 2 cemetery and also to the presence at that point of part of the widest and deepest stretch of the Period 1 Phase 3 ditch BF165, possibly still a deterrent to grave-digging even after Plot B was taken over. Grave 204 may thus be considerably later than G225.

If the proximity and similarity of alignment of vaults BF163 and G225 does reflect a family relationship between the two, then the plot on which they were contained would have been large, and it must have been established in the middle years of the 4th century, for it would have straddled Plot B's southern boundary and thus must have either been coincidental with or later than the boundary's ceasing to be at all effective.

None of the vaults can be positively dated to the very early years of Period 2, though the possibility must remain that the isolated HF60 may be early. Though G225 may be a primary burial, the critical relationships allowing this to be positively established being uncertain, its position within the area of Plot B places it well into Period 2. The inclusion of a small pottery vessel in CF55, the third burial in a sequence of six at the longest, suggests a possible date of c 340-50 for this vault. Grave 366 is fifth in the same sequence of six (though the intervening relationships are not very damaging), and so must post-date CF55 by at least a few years. Equally, none of the vaults is the last in a sequence, all but HF60 being cut by at least one later grave. They thus appear to represent a fairly short-lived style of burial, which probably flourished around the mid 4th century.

In the two double vaults CF55 and HF60 the coffins had been placed side by side (Figs 2.61 c-d, 2.62f). This may indicate that they were both deposited at the same time, but if the vaults were lidded then this need not necessarily have been the case. No upper cross beams or a lid were noted for HF60, and though both were present in CF55 there was no sign of a secondary cut above them. However, re-excavation of the feature for a secondary burial would have been extensive to gain full access to the vault, and the fill might in consequence have consisted almost entirely of indistinguishable redeposited primary material.

The vault CF55 was broad but shallow. The uppermost timber stains were not greatly distorted, suggesting that the lid had not been significantly higher than the lids of the coffins (Fig 2.61 a-b). The frame was generally well-defined, with upper and lower cross-beams represented by wood stains up to 90 mm thick and 150-200 mm wide. The precise method of its assembly was not clear. None of the nails found within the vault came from key points of its structure, and all probably belonged to the two coffins.

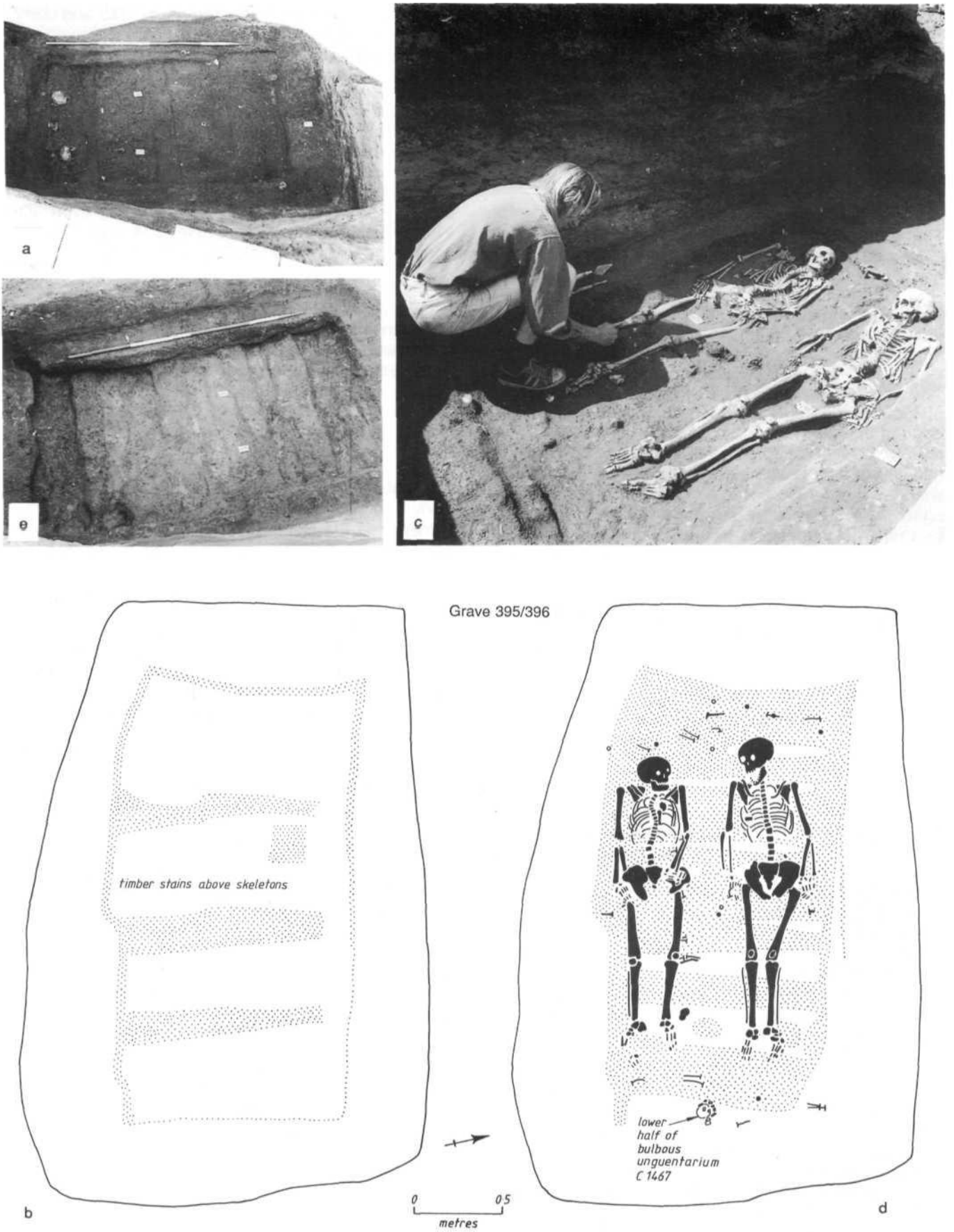


Fig 2.61 Vault burial CF55 (G395/G396), Period 2. a-b... timber staining above the skeletons; c-d... the skeletons in situ; e... timber staining on the vault floor. Plans 1:30. [Pages 111-18]

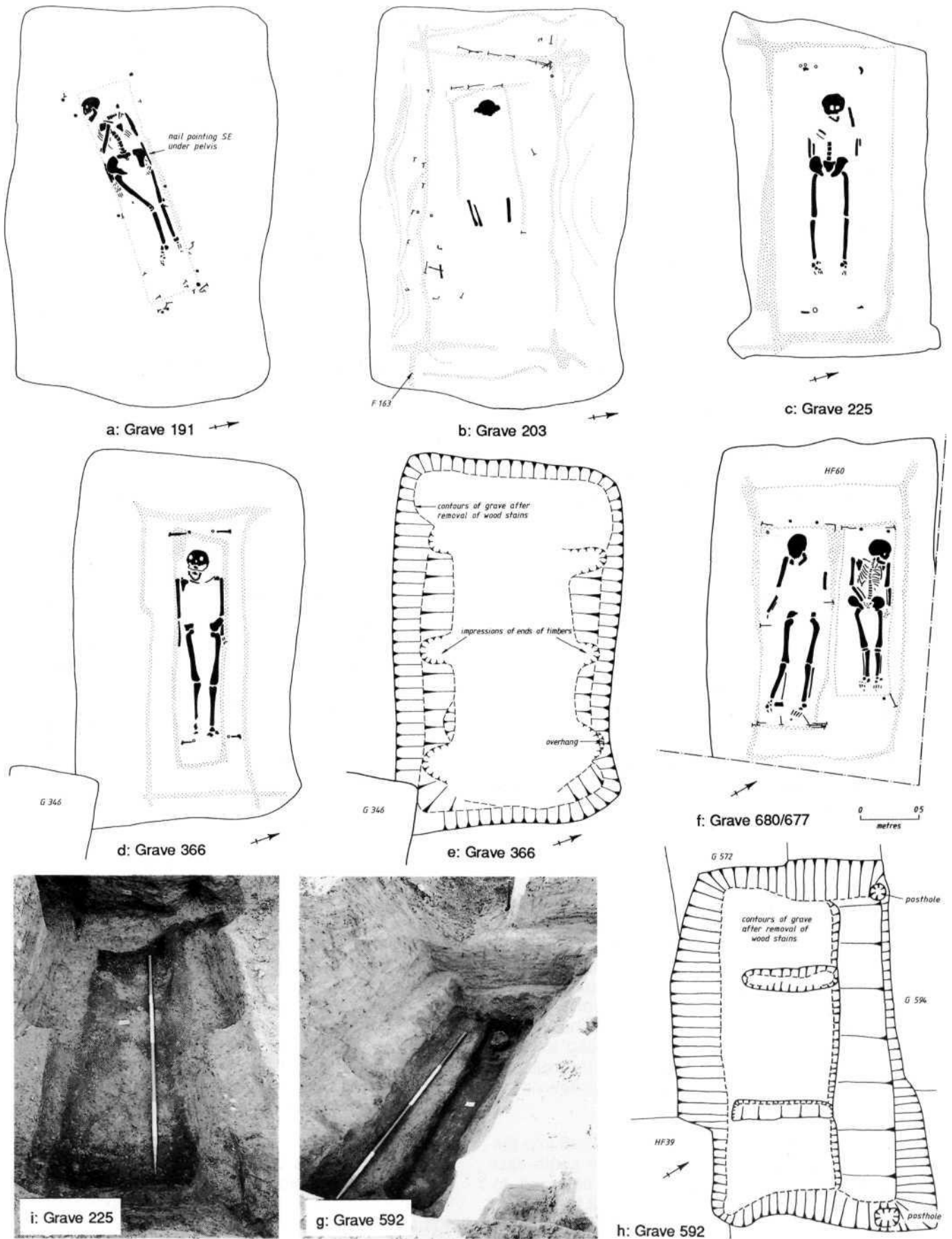


Fig 2.62 Vault burials, Period 2. a... BF163 (G191, 20-25 cm above G203); b... BF163 (G203); c & i... G225; d-e... G366; f... HF60 (G677(right)/G680(left)); g-h... G592 (see also Fig 2.49a). 1:45. Plans 1:45. [Pages 111-18]

If any of the planks had been fixed together then either wooden pegs or unnailed joints must have been used, or, and probably most likely, no joints at all.

The following method of manufacture is suggested: a row of cross-beams was placed across the width of the grave and thin timber planks were laid on them to form a raised floor (Fig 2.61 e); a low wall of thicker planks was placed around the floor, wedged against the sides of the grave pit (Fig 2.61 e, left); and finally a second row of cross-beams was balanced on the wall planks to support a lid (Fig 2.61a). Whether the planks of the walls were laid horizontally or vertically, or a mixture of both, is uncertain, but the excavators consider that the timbers used were not trimmed to provide a good finish, but were what was available at the time.

A similar method of construction was apparently used in the adjacent G366. The north-east corner of the pit was enlarged to accommodate the extended end of one wall plank, and a row of three small depressions, with timber traces in their fill, cut into the north and south sides of the pit almost certainly indicates the position of cross-beams to support the vault floor (Fig 2.62e). The possible use of an overlapping (slotted) joint at one corner of the walls is suggested by the pattern of staining in the north-east corner of G366 (Fig 2.62d).

In HF60 there was no evidence of either floor or lid cross-beams, but the walls appear to have been like those of CF55 and G366 (Fig 2.62f), and the same was true of BF163. In the latter the extent of the inward movement apparent in the walls indicates that a large cavity had been left, and it can be assumed that the vault was lidded, though no lid stain was found. It appears to have been about 0.4 m deep. Though nails were found, they did not form a recognisable pattern, while the wood stains at the corners of the box suggest overlapping joints (Fig 2.62b).

Given that no lid stain was located in BF163, it is impossible to be sure that G191 was indeed a secondary burial within the vault. The coffin was set diagonally across BF163 (Fig 2.62a), and the stain of its floor lay below the uppermost level of the stain representing the vault walls. There does appear to have been some subsidence in the vault after the interment of G191, as the skull was slightly higher than the rest of the skeleton, and the bones in the region of the right shoulder were displaced towards the spine, but whether this resulted from the collapse of the lid of the vault, the lid of G203's coffin, or the floor of G191's coffin, is unknown.

The wedging of the wall planks of vault G225 into the sides of the pit are well illustrated in the south-east corner, which appears to have been enlarged to accommodate an overlong plank (Figs 2.62c, i). As with BF163 and HF60 there was no evidence of cross-beams to support either floor or lid, nor was any stain from a lid discernible, though one remained to indicate the presence of a timber floor.

The vault G592 was of similar construction to CF55 and G366, with cross-beams to support a floor and a lid, but differed in two important respects. First, upright timber posts marked the position above ground of two (probably originally at least three) of the pit corners (p 93, Figs 2.49a, 2.62g), and second, both long sides of the grave pit appeared to form steps on which the ends of the upper cross-beams rested (Figs 2.62g-h). This method of construction is somewhat similar to that of the step-graves in the Lankhills cemetery, Winchester, Hampshire.

In the Lankhills graves an initially large pit was reduced in size about half-way down to provide a step or shelf all round, timber cross-beams were then set across its width and covered with wooden planks to form a lidded chamber (Clarke 1979, fig 11).

Given the very different character of the ground at Lankhills and Butt Road, the former chalk, the latter sand, it may be that in each cemetery the grave-diggers provided a similar style of burial adapted to suit the local soil. No timber walls would be necessary at Lankhills, but equally steps would be very unreliable in the sand of Butt Road. However, the single step in the north wall of G592 may simply have been dug to accommodate overlong cross-beams, similar to the extended excavation of the south-east corner of G225, and may be another indication of the use of whatever timber was to hand in the construction of the vaults. Vaults made from unnailed planks were also noted in a late Roman cemetery at Kelvedon, Essex (Rodwell 1988, 37-41).

The complex of graves centred around the timber vaults CF55 and G366

[Table 2.44; Figs 2.10, 2.21, 2.63-2.65]

The concentration of graves around the line of Plot B's northern boundary (Figs 2.10, 2.21, 2.63) has been taken elsewhere as an indication of the survival of the plot into the early part of Period 2 (pp 55-7), and five graves along that boundary have been shown to belong to a family group, Group C, first identified in Period 1 Phase 3. The complex is further distinguished by containing two close-set timber vaults (CF55 and G366, pp 111-14), and, as the interrelationships between the vaults and the surrounding graves were well-defined, it is possible to put forward reconstructions of the sequential development of the complex and to postulate family groupings.

Fig 2.64 illustrates one possible development of the complex. It was produced 'backwards' by removing the latest graves in stages from the composite plan of the area, but not removing primary graves once they were isolated. Grave 362, for example, is part of a sequence of three, so it shows as isolated on Sections 1, 2, 3, and 4. It may be one of the first graves to be

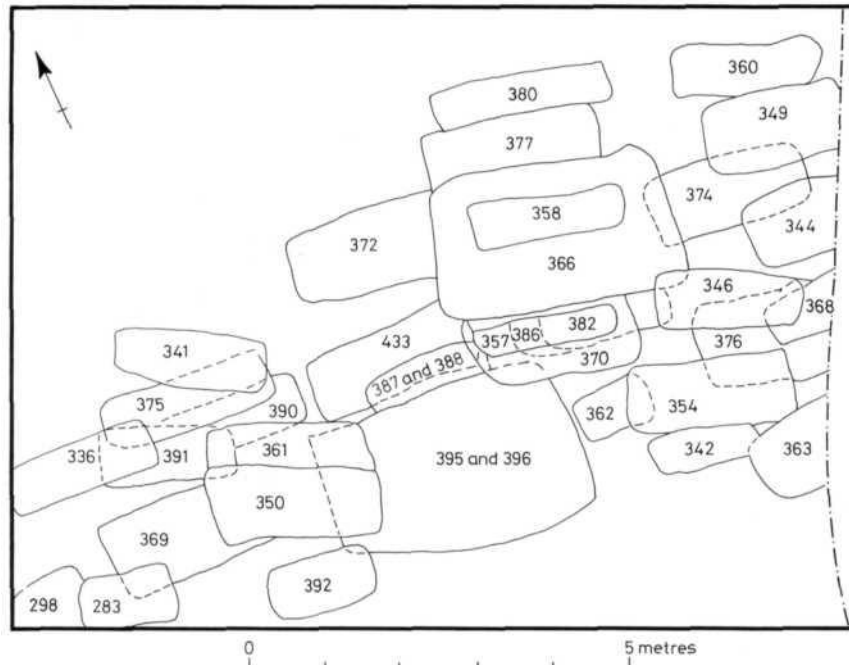


Fig 2.63 The vault complex, Period 2. 1.100. [Pages 114-18]

dug in that area, or it may be considerably later. Grave 433, on the other hand, is part of a sequence of six, so it only shows as isolated on Section 1 and almost certainly dates to the early years of Period 2. The relationships between the graves are schematically presented in Fig 2.65. Graves shown at the same level need not have been dug around the same time, any more than graves introduced in the same section in Fig 2.64. Age and sex identifications are summarised in Table 2.44. The reconstruction put forward here is at best tentative.

Of the twelve graves showing in Section 1 of Fig 2.64, two (G298, G390) have been placed in Group C by virtue of their grave goods and two more (G369, G433) by virtue of their position relative to the first two. These four then can all be considered to belong early in Period 2. There is no reason to suppose that any of the other eight also belong to Group C, and they may all be later than the four that do, for none is cut by another grave until Section 3. The regular spacing of G363, G376, and G374 suggests that they may be related, and G360 may also belong with them. A close relationship may also be inferred between the grave of a newborn infant (G362) and that of a young adult female (G386) beside which it lay.

In Fig 2.64 Section 2 the newborn infant burial (G388) and the associated G387 (from the size of the coffin also certain to be an infant burial) may be related to G433, into which they were cut, or to G386, which lay end to end with them. In view of the practice demonstrated in Period 1 Phase 3, and again in the Period 2 Group C burials, of setting related graves end to end as much as side to side, the latter may be more likely, with the location of G433 perhaps having

ceased to be recognised by the time G387 and G388 were dug. Also possibly related to G386 may be the grave set above it, a Section 3 burial (G382) of a small child, aged 18 months to 2 years. The five graves (G362, G382, G386, G387, G388) may thus be seen as those of a young mother with four of her children. The immediately adjacent pair, G387 and G388, identified as Group P (p 93) may represent the burial of newborn (?stillborn) twins, buried either at the same time or within a very short time of each other. The accuracy with which the graves were aligned suggests no great space of time, if any, between the two interments.

The earlier of the two vault burials, CF55 (G395 and G396), appears in Fig 2.64 Section 3. Though there is a possibility that it may have completely removed any very early Period 2 grave lying to the south of G433, it appears to have respected its closest neighbours, just clipping the southern side of G387/G388, and avoiding cutting G362, G382 and G386. They are therefore likely to have been visible still on the Roman ground surface, to be not much earlier than the vault, and to have exerted some influence over its location. The middle-aged pair buried in the vault, almost certainly a husband and wife, may thus have been related to G386 and her supposed infants.

Three graves make their appearance in Fig 2.64 Section 4: G370, set over G382 and G386, G377, cut into G380, and G391, which cut into G390 on a quite different alignment and destroyed the west end of the earlier grave. That G390 had ceased to be recognised on the surface or even respected when met with in the ground is apparent, which could indicate either a considerable lapse of time between the digging of the

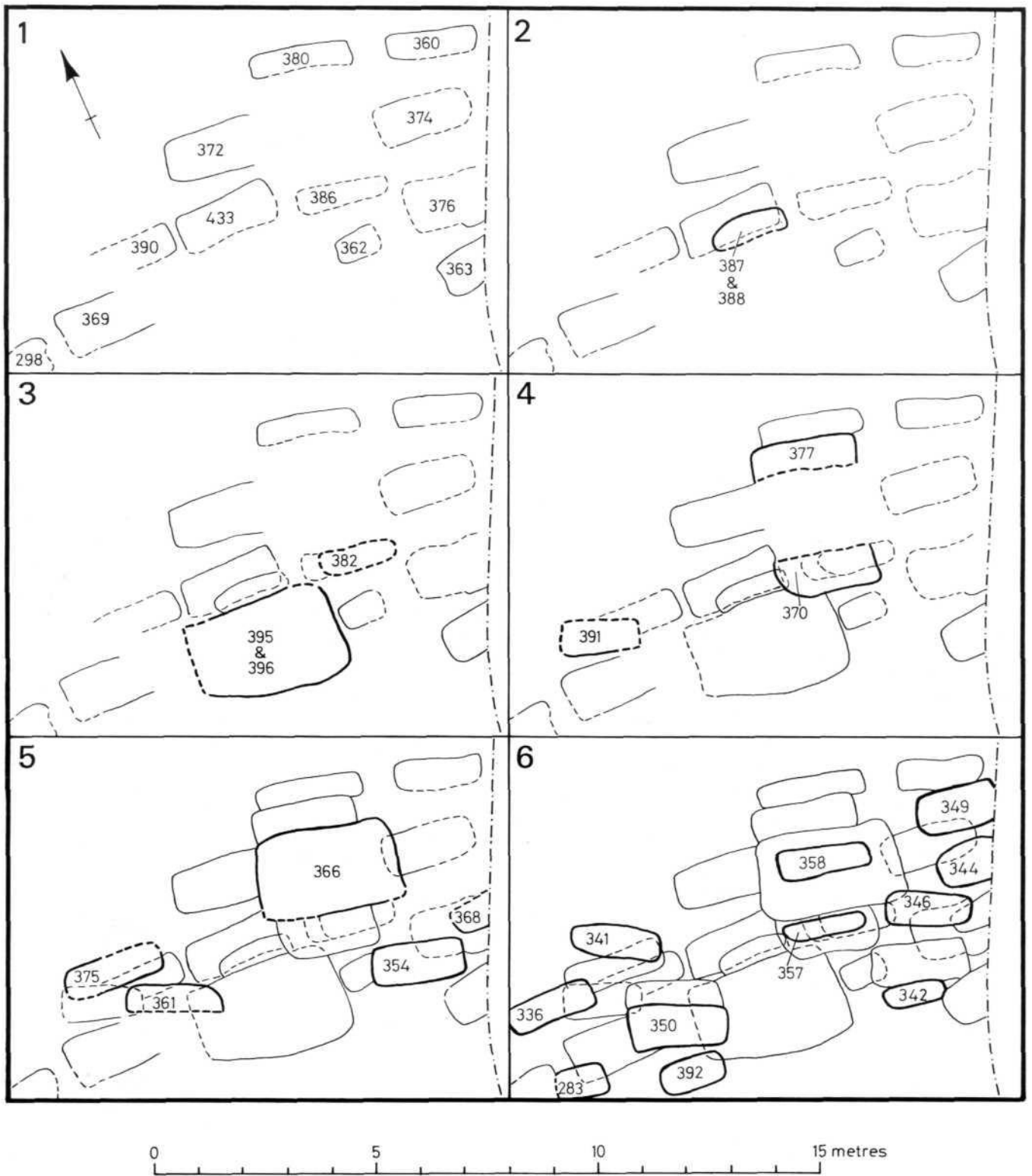


Fig 2.64 Sequential plan of the vault complex, Period 2. 1:130. [Pages 114-18]

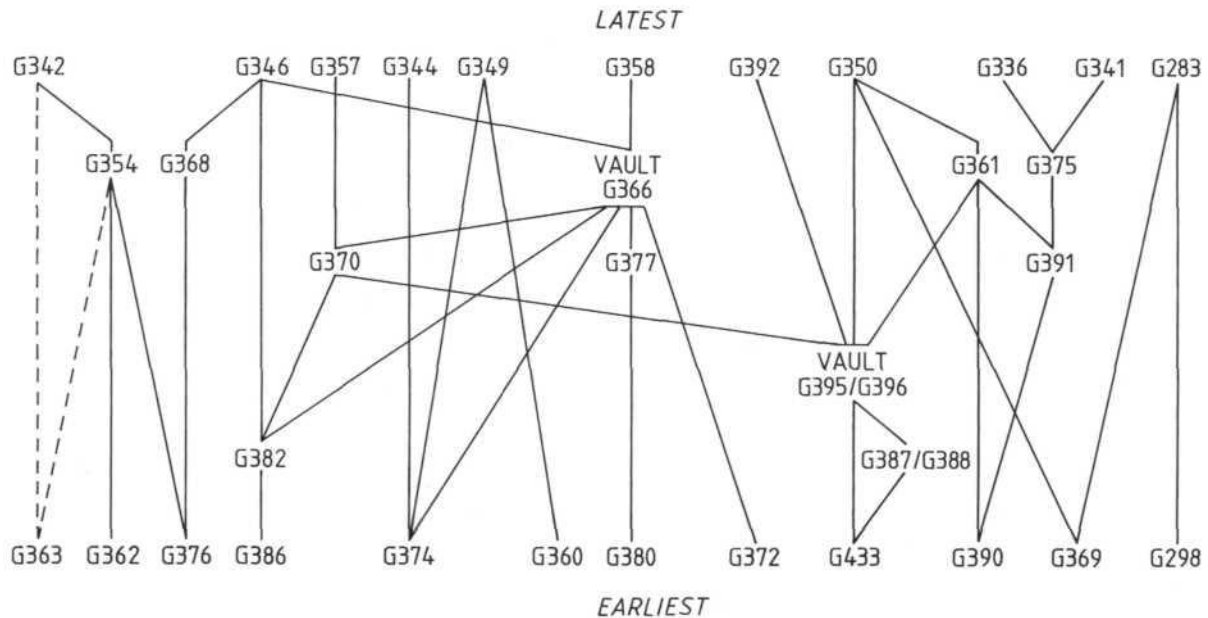


Fig 2.65 Schematic representation of grave relationships in the vault complex, Period 2. [Pages 114-18]

two graves, or even a change of ownership of the burial plot.

There may be a case for arguing a relationship between G370 (young adult male) and the young female and child over which it lay, but it is also possible that G370 and G377 (young adult female) may have been a pair, for they were set on a similar alignment and may have originally been side by side. The later vault G366, a Fig 2.64 Section 5 burial, was dug between the two, cutting the northern edge of G370 and the southern edge of G377.

Though G366, like the earlier vault CF55, may have completely destroyed an earlier burial, it appears to have been squeezed in between its neighbours without inflicting much damage on them. Thus it may not post-date CF55 by many years, for only G370 links the two stratigraphically. Grave 370 just cuts the upper fill of the north-east corner of CF55, and G366 cuts the northern edge of the grave pit of G370.

Also in Fig 2.64 Section 5 are G354, G368, G375, and G361. No clear relationships exist between the first three of these and any other burial, though it is interesting that G375, cut into G391, was on the same alignment as the earlier graves in the area. A very definite relationship existed between G361 and the Fig 2.64 Section 6 G350. The two were set precisely side by side, the northern edge of the later pit just cutting the southern edge of the earlier, and the top of each coffin was marked (p 102).

In Fig 2.64 Section 6 belong all the final graves, those which were not cut by any other burial. Hence some which are last in a short sequence may belong to a much earlier phase in the development of the complex. For example, G283 (neonate), the second in

a sequence of two), may be related to G369 (young adult female) or G298 (adult, sex uncertain) both of which it cut, or to G285 (male, age uncertain) which lay adjacent to it on the south (Fig 2.21), or to G392 (neonate), just over 1 m to the east and last in a sequence of four.

The two Section 6 graves on the eastern boundary of the site (G344, G349) may belong together, and to them may also be added G368 from Section 5. The three were set in a well-spaced row over, but slightly further to the east than, the Section 1 row of G363, G376, G374, and ?G360. All are second in a sequence, G344 and G349 being last in sequences of two and G368 second in a sequence of three. The two rows of three may all belong to one distinct group, as G344 and G349 are set as much between as over the graves in the earlier row and caused no damage to the bodies, and though G368 was cut into G376 again the body was undamaged.

Grave 346 cut G368 in Section 6 and was on a quite different alignment to the row, though not far off that of the adjacent Section 5 G354 and its associated Section 6 burial G342. The markedly different alignment of G346 and some of the other final graves in the complex may indicate that they are later than the final graves which align more closely with the mid-range and primary burials.

Set over the vault G366 was G358, which may imply a direct relationship between the two, and set over G370 in the stack between both vaults was G357, which again may imply a direct relationship between this grave and the underlying three. Alternatively, G357 and G358 may be more directly related to each other rather than to the underlying burials.

Grave	Sex	Age
<i>Section 1</i>		
G298	f	adult
G360	F	middle-aged
G362	I	neonate
G363	F	middle-aged
G369	F	young
G372	M	middle-aged
G374	M	young
G376	I	13-14 years
G380	M	middle-aged
G386	F	young
G390	I	adult
G433	?	adult
<i>Section 2</i>		
G387	-	(infant)
G388	I	neonate
<i>Section 3</i>		
G382	I	18 months-2 years
G395	M	middle-aged) vault
G396	F	middle-aged) burial
<i>Section 4</i>		
G370	M	young
G377	F	young
G391	I	7 years
<i>Section 5</i>		
G354	?	middle-aged
G361	M	middle-aged
G366	M	middle-aged - vault burial
G368	-	(child?)
G375	M	middle-aged
<i>Section 6</i>		
G283	I	neonate
G336	M	young
G341	M	middle-aged
G342	I	7 years
G344	M	middle-aged
G346	F	young
G349	M	middle-aged
G350	M	middle-aged
G357	M	middle-aged
G358	F	young
G392	I	neonate

Table 2.44. Summary of age and sex identifications for graves in the vault complex, listed in the earliest section in which they might appear, Period 2. F... female; I... indeterminate; M... male; eg (infant)... inferred from grave/coffin size; ?... uncertain. [Pages 114-18]

The permutations of relationships suggested by both horizontal and vertical stratigraphy in this large group of graves obviously far exceed those suggested here, and the group itself has been restricted to burials directly associated with the two vaults or linked to them by graves with direct association.

Whether or not this area of the cemetery was used by one family throughout Period 2 or changed hands cannot be established, nor can any boundaries between plots be identified. The intense concentration of burials around and between the two vaults argues for prolonged use there at least, and the fact that most of the graves of newborn infants identified from the

cemetery are located within the complex suggests family practice.

The burial of neo- or perinatal infants on the parents' property in Roman Colchester is well attested from the 1st century to at least the 3rd (CAR 3, microfiche supplement, Appendix 1; CAR 6, microfiche supplement, Appendix 5), and the absence of such burials in the town in the 4th century is probably more apparent than real. Many 4th-century occupation levels were disturbed or destroyed by post-Roman activity, reducing the possibility of retrieving such small burials intact, but one of the Culver Street neonates derives from Period 6 (late Roman) topsoil (*ibid*) and so may date to the 4th century.

It is, however, striking that all the burials identified by Dr Birkett as neonates were from timber coffins in graves in the vault complex, while of the two other infants almost certainly of this age, one (G254; p 124) is closely associated with another grave of similar size and probably of similar type (tile coffin), and therefore possibly of similar age, which may also indicate a family connection between the two. The disposal of the corpses of very young infants in the 4th century appears to have been a choice between continuing a previous tradition of burial on the parents' property or taking advantage of the new opportunity to bury them formally in a cemetery. The concentration of such graves in the vault complex indicates the choice of one family.

Corpse position

[Figs 2.53, 2.55, 2.58-2.59, 2.66]

All but three Period 2 corpses had been placed in the grave with the head to the west (Fig 2.58). Two of the three had been buried in pits outside the southern boundary of the cemetery, apparently deliberately excluded from it (G41, G51; pp 105-10), the third was a young infant, G503, in a primary grave in the north-western part of the site, datable by its grave goods to the very earliest years of Period 2. The early date may account for the head position, the importance of the west perhaps not being fully appreciated and the less rigorous attitude apparent in distinguishing between north and south in the Period 1 Phase 3 cemetery still pertaining, but there remains the possibility that this is a deliberate position, chosen by a family not committed to Christian ritual.

Apart from the adults in the pit burial G41/43 (Fig 2.59; pp 105-6), and an infant in a tile coffin (G254) which lay on its right side (p 124), all the corpses were supine and the majority formally disposed with legs extended and the arms either by the side or resting on the pubis or hips. The naturally bent arm and leg positions of a young baby were clearly preserved in G283, a neonatal infant burial, one foot of which rested on the other (Fig 2.66a).

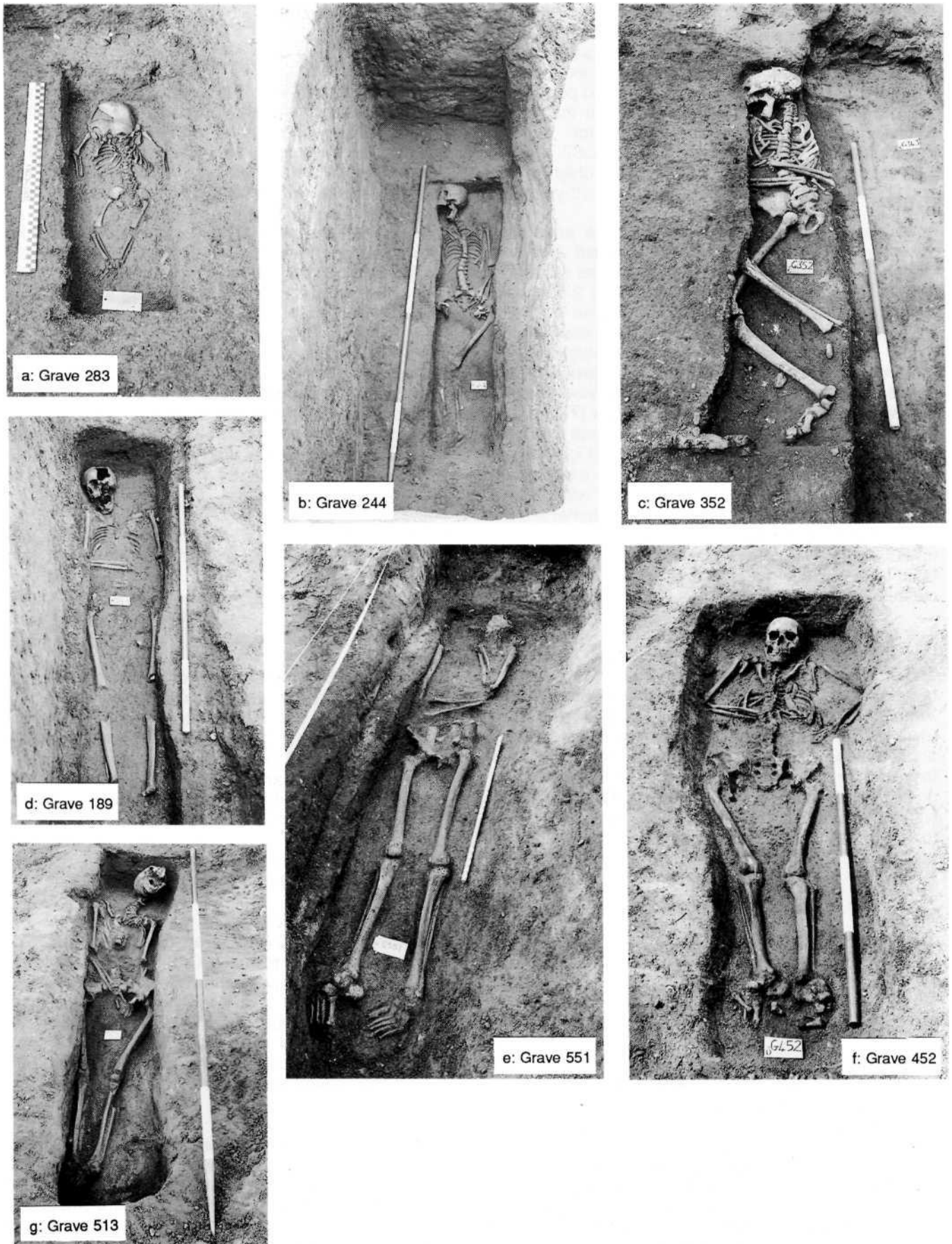


Fig 2.66 Positions of corpses in Period 2 graves. [Pages 118-20]

The legs of a few skeletons were swung somewhat to one side and very slightly bent (eg G244, Fig 2.66b), a position undoubtedly caused by placing the corpse in too small a coffin, a more extreme example of which can be seen in the almost crouched position of G352 (Fig 2.66c). This is clear evidence that some coffins, at least, were not made for specific individuals, and is further supported by G287, a coffin 1.62 m long used for a 2- to 3-year-old child (p 61), and G523, a 1.96 m long coffin used for a 12-year-old.

In at least six coffins the position of the arms was distinctive. In G189 (elderly male) the left arm was straight but the right forearm lay across the waist (Fig 2.66d); in G341 (middle-aged male, Fig 2.55c) and G551 (adult, sex uncertain, Fig 2.66e) the left hand was on the right shoulder, the right hand near the left elbow or hip; in G428 (middle-aged male) the left forearm lay across the body, the hand probably just above the right elbow, and the right arm was doubled over with the hand near the right shoulder (Fig 2.53d); in G452 (young adult female) both elbows are bent outwards and the shoulders are raised (Fig 2.66f), a position which might be reached by an unshrouded body carried in a coffin if the head end were tipped downwards; and in G513 (young adult female) the left hand and forearm lay beneath the body, the hand under the pelvis (Fig 2.66g). The position of the latter's shoulders suggests that the hands were clasped between the legs.

The first four positions share in common the more or less horizontal crossing of the body by one forearm, and in three cases the touching of a shoulder by the remaining hand. This position also occurs in the Period 1 Phase 2 burial G371 (middle-aged adult, sex uncertain; p 21). Three of these five graves are of adult males, and that no positively female burial is included in the group may indicate that the arm position is a significant ritual factor associated only with males, though the total number is far too small for this suggestion to be anything other than extremely tentative.

Coffins

Most east-west graves contained evidence for a nailed timber coffin, with timber staining but no nails being present in some graves. Two graves contained a nailed timber coffin with an inner coffin of lead, one well-made, lidded and decorated, the other a plain and roughly folded sheet. In three graves a hollowed-out section of a tree trunk served as a coffin, and *tegulae* were used to form a coffin in some infant burials. One individual may have been laid on a plank. A few burials, both confined and unconfined, used tiles to cover all or part of the body, not just as simple markers.

a) Nailed timber coffins

[Figs 2.21, 2.67]

For Period 2, as in the Period 1 Phase 3 cemetery, only a few (approximately 50) nailed timber coffins could be fully reconstructed from the evidence of the nail positions. Most proved to be of the same type as those from the earlier graves, ie the head and foot boards were set within the side boards and the base board ran the full length and width of the box. In graves where the nail evidence was inadequate for full reconstruction, there was no reason to suppose that a similar method had not been used. However, at least one other method of construction was evident in six graves.

The mineral-preserved wood from the reconstructed coffins, and from a random sample from over one hundred of the others, proved to be oak (*quercus* sp) in all but one case. (Identifications by Jacqui Watson, Ancient Monuments Laboratory, English Heritage). The thickness of the oak timbers varied from 33.6 mm (G128) to a very thick 64.4 mm (G412), but most averaged about 44 mm.

The coffin noted as not made from oak is that in G434 (young adult female), a grave in the cemetery extension into Plot B (Fig 2.21). The wood was identified as probably willow (*salix* sp) or poplar (*populus* sp). The timber thickness was also exceptional in G434, averaging only 18 mm.

The coffin in G434 is also one of the six which varies from the standard in its method of construction. The position of the base nails, on their side pointing inwards, suggests that the base board was not the full length and width of the coffin, but was set in between the side and end boards (Fig 2.67c). It is possible that the nails were forced into this position by the collapse of the coffin sides, and indeed many base nails from other coffins were recovered lying on their side. However, in the latter cases upright base nails were also discovered, but none were upright in G434.

Another coffin which might have a base of this construction is G446 (middle-aged female; Fig 2.67d). This grave lies in a row with G434, only 1.5 m to the south, and on a similar alignment. Both graves appear to be primary (first in a sequence), and may have been dug within a very short time of each other. This close association of two graves exhibiting the same coffin base construction technique suggests that both coffins may have been made by the same workshop, if not the same hand.

The same technique appears to be present in four other graves: G211 (elderly male; Fig 2.67a), lying to the south and slightly west of G434 and G446; G299 (adult, sex uncertain; Fig 2.67b), several metres to their north; G536 (infant; Fig 2.67e), a primary grave in the central northern part of the cemetery; and G603 (child; Fig 2.67f), an isolated grave near the cemetery church.

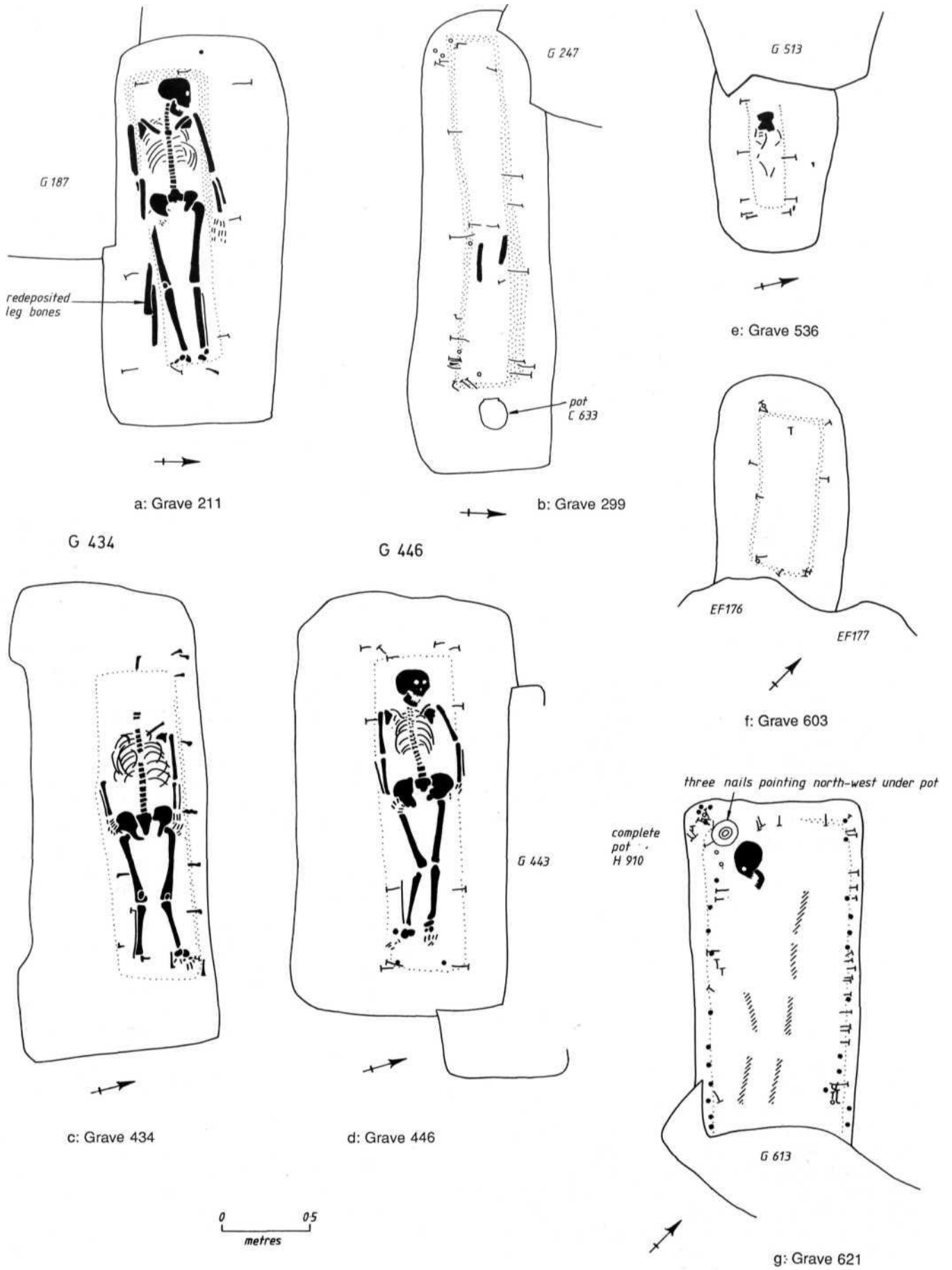


Fig 2.67 Nailed timber coffins, Period 2. 1:30. [Pages 120-2]

Not all these graves are likely to be contemporary with G434 and G446, which probably belong to the middle or later half of the 4th century after Plot B's incorporation into the cemetery (pp 55-6). Grave 299, a primary grave along the line of the northern boundary of Plot B (pp 55-6), predates them, and G536 is also almost certainly earlier, whilst G211, though also within the area of the cemetery extension, is third in two sequences of four graves and is thus likely to be later.

A noteworthy coffin, though of standard construction, was that in G621, (adult, sex uncertain), one of the Group E graves near the cemetery church (Fig 2.23). It was exceptionally wide, 0.8 m, and the base was fixed to the sides with a considerable number of nails, set at fairly regular intervals (Fig 2.67g). The east end was missing, but along the surviving 1.8 m of the north side a minimum of eighteen nails were recorded from the junction of base and side, with a similar number along the south side, and seven along the west end. The width of the coffin and the large number of base nails suggest that the individual buried within was obese.

Evidence for nailed coffin lids derived from several graves, most notably G60, G174, G184, G298, G445, G450, and G460. In a few cases the timber from the lid also survived as a thin layer of stained soil over the skeleton (eg G210, G269), and some of the black staining noted on surviving skeletal material (Table 2.18) or elsewhere in the grave may have been

caused by the association of timber residue with bone or other organic substances from the decayed or decaying corpse.

b) Tree trunk or log coffins

[Figs 2.21, 2.53, 2.58, 2.68]

In at least three graves (G186, G218, G361; Fig 2.21) a segment of a hollowed-out tree trunk was used as a coffin. Details of the shape of the ends (cut away or left solid) and height (the log viewed horizontally) are unknown. In G186 (elderly female, Fig 2.68a) and G218 (child, Fig 2.68b) less than half the diameter of the trunk appears to have been used, but more than half in G361 (middle-aged male, Fig 2.53f). In G186 black-stained soil over the left leg may indicate that the coffin was lidded, but whether the lid took the form of a flat piece of timber or the upper part of the trunk, hollowed-out or solid, is unknown.

Though all three graves are in the southern part of the site (Fig 2.58), they do not lie close to each other, and are unlikely to be of similar date. Grave 186 is first in a sequence of at least three graves, G218 last in a sequence of four, and G361 fourth in a sequence of five. (The latter, in the large complex associated with two timber vaults, is also distinguished by its markers and its close association with G350 (p 102).) The absence of a clear link based on sex, age, date, or

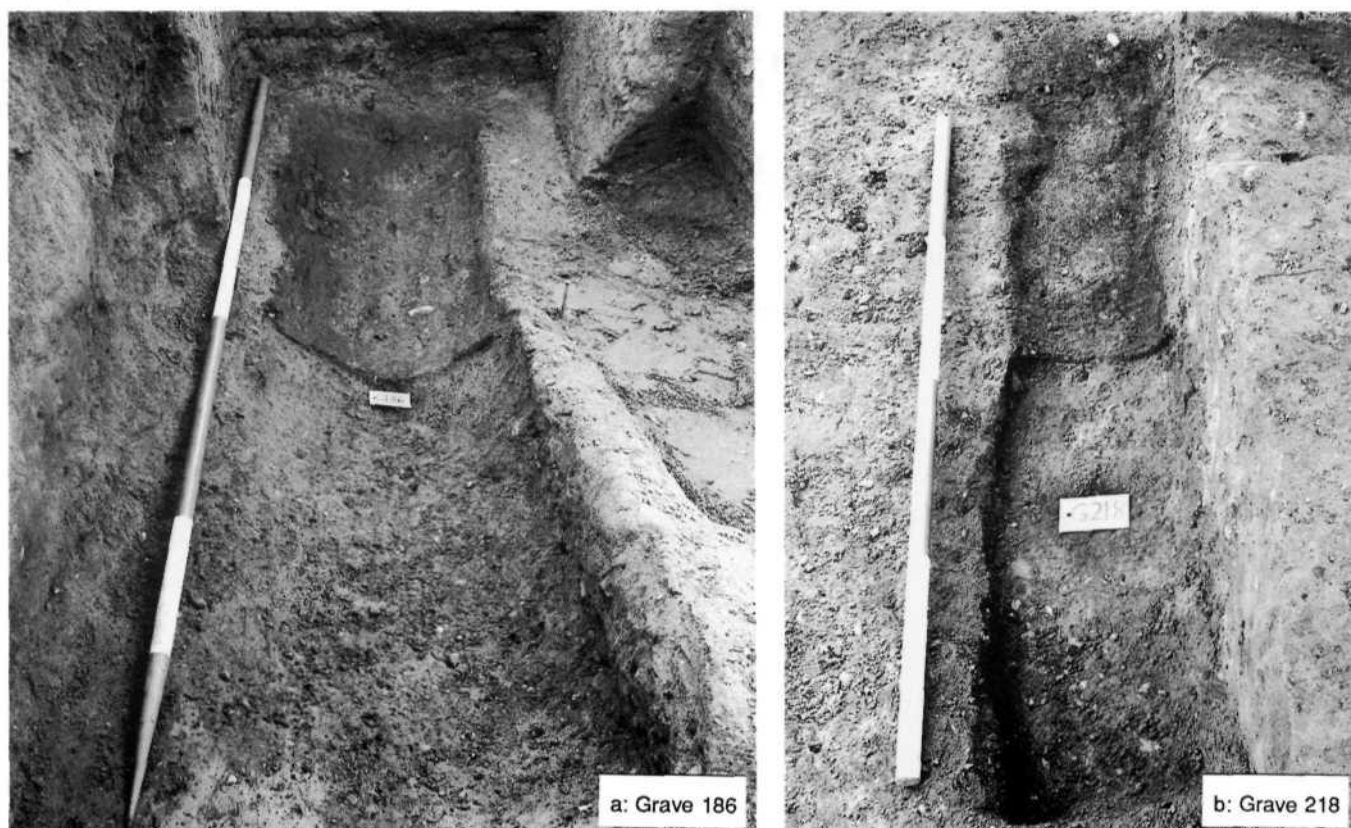


Fig 2.68 Partially-excavated tree trunk or log coffins, Period 2. [Pages 122-3]

family relationship between the graves containing log coffins suggests that the choice of this type of coffin may have been based on a quite unpredictable reason, such as opportunism.

c) ?Plank burial

[Fig 2.58]

In G384 (middle-aged female; Fig 2.58) timber staining was only noted beneath the skeleton. The body, which was in a neat supine extended position with both arms folded across the chest, may have lain on a plank. At Ashton, Northamptonshire, it is likely that almost all the burials were on plank biers (Watts 1991, 189; and pers comm).

d) Lead inner coffins

[Figs 2.21, 2.58, 2.69-71]

In G295 and G403 a nailed timber coffin contained an inner coffin of lead. Apart from the use of an inner coffin there are no parallels between the two burials.

In G295, the burial of a 2-year-old child, the lead coffin was well-made and had a close-fitting lid, and both lid and base were decorated (Fig 2.69). Inside, the body had been packed in gypsum (Fig 2.70b-c; p 126). The outer timber coffin fitted the lead one closely. The burial was furnished with a narrow-necked jar of coarse grey ware (p 149), and can be dated to early in Period 2 (Table 2.67). It lay just north of the north-western corner of Plot B, close to, but not parallel with, G298 and G299, which mark the boundary between the plot and the cemetery (Figs 2.21, 2.58; pp 55-6). The lack of a shared alignment with these two graves may indicate that G295 post-dates them slightly.

The coffin base had been made by pouring molten lead into a rectangular mould or bed of sand or clay, the corners trimmed off to define the sides and ends, and the resulting box shape folded up (Figs 2.69-70).

The line of the coffin bottom, which tapers from head to foot, was marked out by a slight half-round moulding, which was partly cut away when the corners of the original rectangular sheet were trimmed off. (A similar moulding was present on a lead coffin from Butt Road recovered during 19th-century quarrying on the site.) A bead-and-reel St Andrew's Cross with circles in the angles decorates both the head and foot end, and on the sides two similar crosses with circles flank a panel of S and reversed S motifs defined by thick marginal mouldings and internal bars. The circles in the angles of the crosses have an external diameter of 50 mm, but a pair of two smaller circles of 30 mm diameter is also present on the head end, and on one side between each cross

and the central panel.

The tapering lid is decorated with a zig-zag of bead-and-reel decoration giving five triangular bays. In each bay is set a hinged pecten shell surrounded by three (usually) circles of 50 mm diameter, one at each corner of the triangle. In two bays the circle at the apex lies over the base of the shell, and in one bay it has been left off. At each end of the zig-zag the right-angled area left available for decoration has been filled by a hinged pecten with a circle of 50 mm diameter on each side, the three motifs set in a row along the line of the bead-and-reel moulding.

All the lengths of bead-and-reel moulding on the coffin sides and ends were formed using a single bar-shaped die ten beads and eleven reels long, with distinctive characteristics which enabled each end (Fig 2.69, A and B) to be distinguished. The mouldings on the lid appeared to have been formed using a different bar, but of the same length. It is, however, possible that the same bar was used if the technique by which it was applied to the two parts of the coffin varied sufficiently to give dissimilar results. That this is possible can be seen in the differences between the pecten shells on the lid, where probably only one shell was used but the definition varied considerably, so much so that on one impression the hinge is completely missing.

The significance of the motifs used on decorated lead coffins has been discussed by Toynbee (1971, 276-7) and Toller (1977, 19-20), who dismisses any specifically Christian implication (but see p 192) for a possible Christian identification).

The design on the lid of the coffin in G295 is paralleled on the lid of a coffin discovered in the 19th-century sand pit at Butt Road, and also occurs in slightly different form on the sides of that coffin, where it lacks the circle at the apex and the pecten in the end triangles (ERO: Wire's Album; Fig 2.1 for find-spot). The same bead-and-reel stamp was used for both coffins, and thus both must have been made by the same workshop. The sand pit almost certainly lay in the disturbed area adjacent to G295, and so the two appear to form a family group (see Group C, p 92)..

The plain inner lead coffin in G403 (middle-aged female) was shaped in the same way as that in G295, being a rectangle of sheet lead with the corners cut out to define the ends and sides. The corpse had been placed in the centre of the sheet, the long sides folded over, and the head and foot projections pulled up and over as far as possible (Fig 2.71a). This obviated the need for a lid. There was no trace of any plaster packing inside the coffin, nor were there any accompanying grave goods (Fig 2.71b). Grave 403 was an isolated burial within the cemetery extension into Plot B, close to its northern boundary. It lay about 5 m from G295, and on a similar alignment, but to the south of Plot B's northern boundary, while G295 was to the north, and burials of Period 2 Group C lay between them (Figs 2.21, 2.58). The two graves are therefore unlikely to be directly associated.

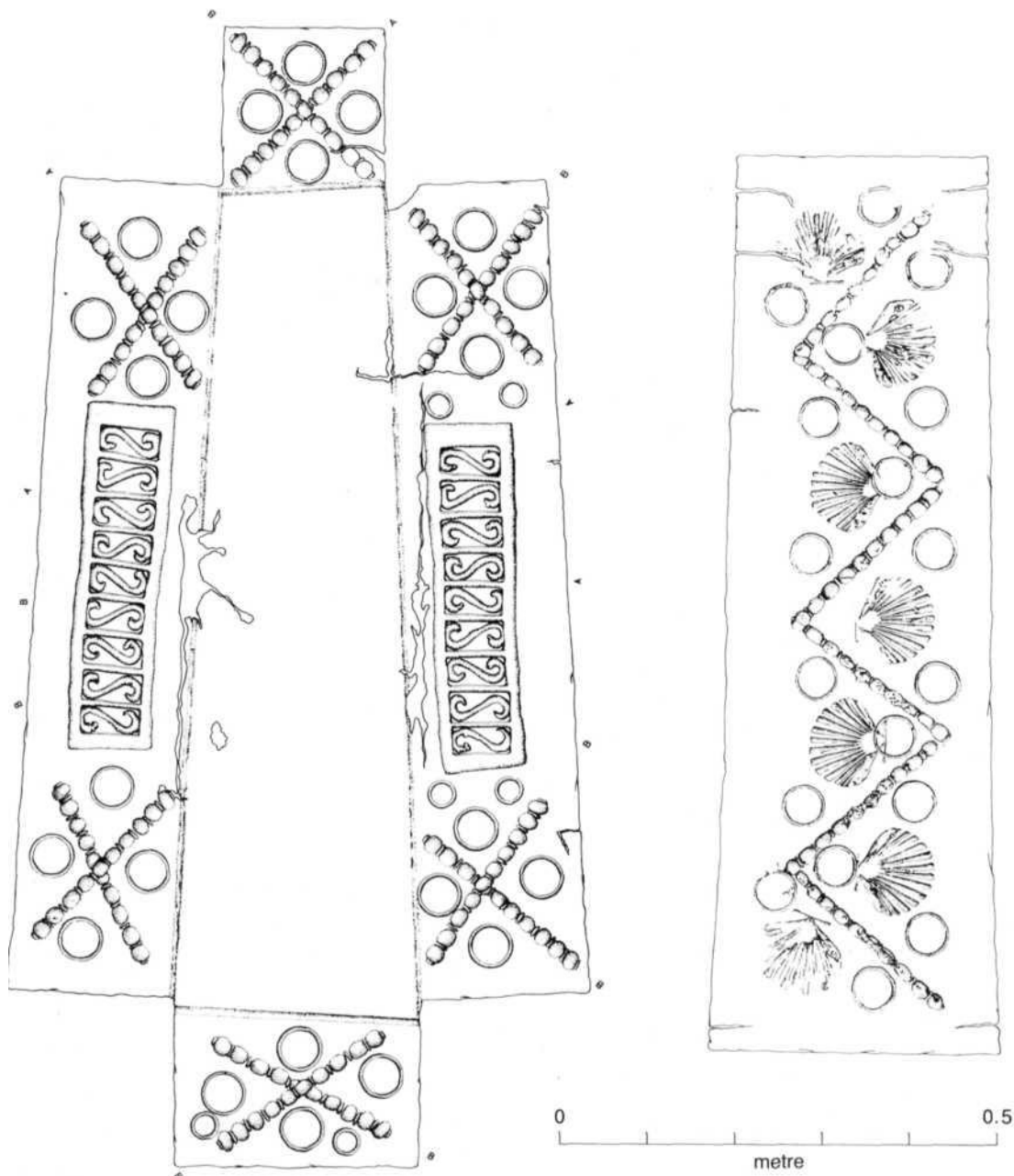


Fig 2.69 The design on the decorated lead inner coffin, G295, Period 2. 1:8. [Page 123]

e) Tile coffins

[Figs 2.21, 2.48, 2.58, 2.72]

In the burial of a very young infant, G254, a lidded 'coffin' had been formed by placing the corpse on a *tegula* and covering it with a second, inverted, *tegula*. The grave was marked by a fragment of another *tegula* set vertically at the head of the grave (Figs 2.48a, 2.72a-b).

Grave 254 lies at the north-west corner of G258, the burial of a male of uncertain age (Figs 2.20, 2.38). The precise relationship between the two graves is unknown, but G254 may cut, or overlie, G258. The south-west corner of G258 is cut by G695, which,

though disturbed by modern activity, is assumed from its size, a quantity of broken *tegula* fragments in the fill, and a *tegula* fragment set vertically at the west end, to be an infant burial similar to G254 (Fig 2.52a). Grave 258 and G695 belong in the last third of the 4th century (comb deposited in G258), and so, assuming both infants to have been buried within a short time of each other, G254 is probably also late in Period 2.

In G682 (young adult male), the skull rested on a large piece of *tegula* (Fig 2.52d) and was covered by a three-sided 'box' of *tegula* fragments. A similar box covered the feet. Wire noted a tile tomb during 19th-century quarrying at Butt Road, the tiles propped against each other in a ridge formation (Fig 2.1; Hull 1958, 256).

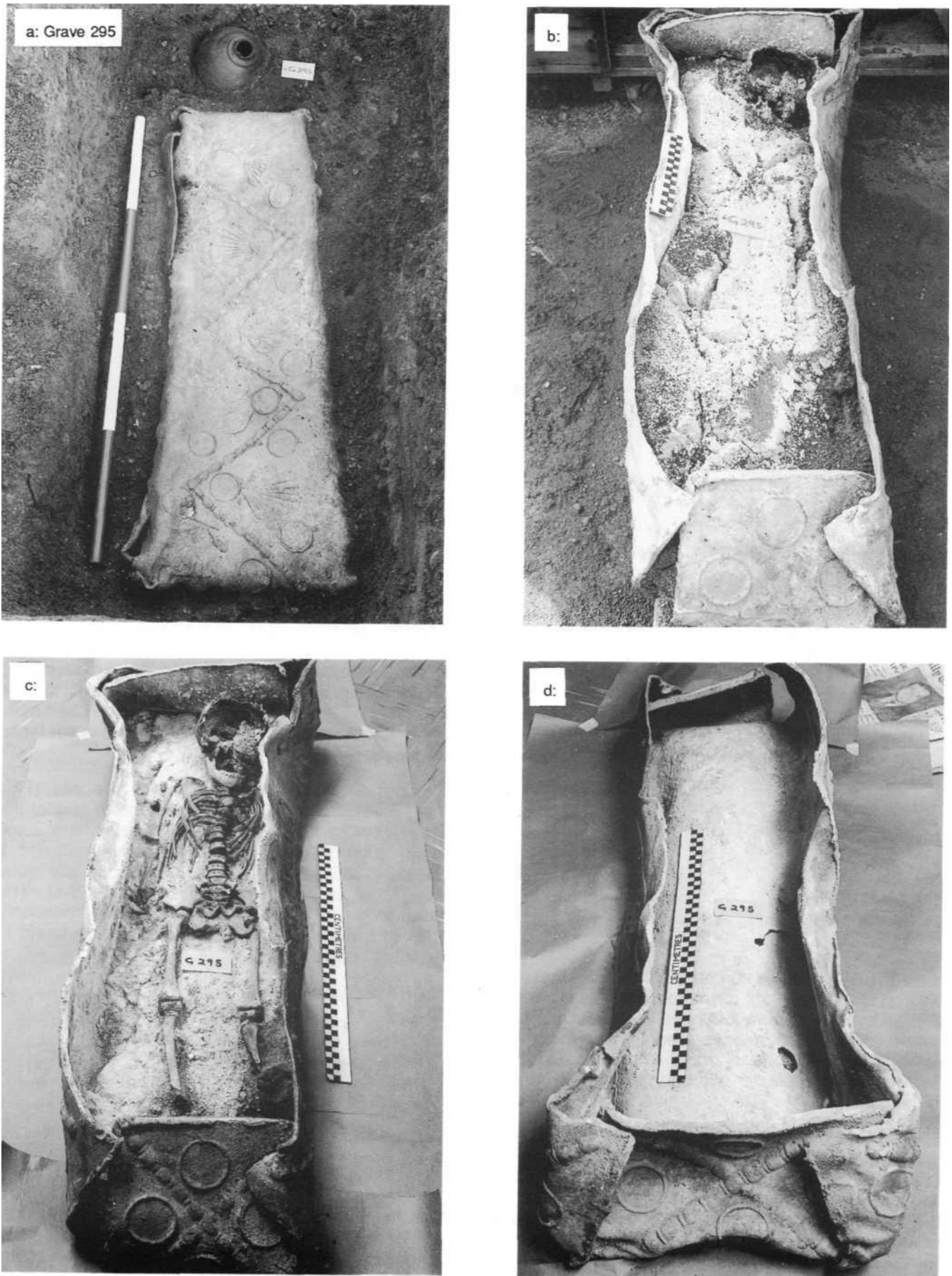


Fig 2.70 Decorated lead inner coffin, G295, Period 2. a... in situ with deposited pottery jug; b-d... internal excavation. [Page 123]



Fig 2.71 Plain lead inner coffin, G403, Period 2. [Page 123]

A box was also built in G550, about 4 m south of G682. In this case three *tegulae* had been balanced together to cover an area 0.5 m long within the east end of a timber coffin 1.2 m long and 0.4 m wide, (Fig 2.52e). The positioning of the tiles to form a box **along** rather across the coffin suggests that they were used to form an inner 'coffin' for a young infant buried in a timber coffin of a size more suited to a somewhat older child.

Plaster burials

[Tables 2.23, 2.45-2.46, Figs 2.38, 2.50b-c]

Seven E-W oriented burials contained traces of plaster, identified in six cases as lime plaster, and in one as gypsum (Table 2.23; five identifications by J Evans and M Card, archive report; and two by A-M Bojko, CM). For none of these samples could it be determined if the plaster had been applied wet or dry to the coffin.

Six of the seven burials share similar characteristics, one stands apart. Each of the six was an adult burial in a nailed timber coffin, with the body apparently only partially in contact with lime plaster. The seventh, G295, was a child burial in a lead coffin within one of nailed timber (p 123), and the body had been completely covered with gypsum (Fig 2.50b-c) in which were preserved remains and impressions of textile, almost certainly a shroud (p 129).

These differences are almost certainly significant, but whether anything less immediately obvious than wealth is involved is uncertain. Grave 295 displays, in its decorated inner lead coffin and the complete filling of the coffin with gypsum, a commitment to high monetary outlay, and gypsum would have been more costly to obtain than lime plaster since it is not found locally (Green pers comm).

The burials were scattered across the site (Figs 2.21, 2.58), from G737 near the western limit of the excavation to G182 in the central southern area. They range in date from fairly early in Period 2 (G295, G395/G396, Table 2.67) to possibly quite late (G182 in cemetery extension, pp 55-6). The ritual of using plaster was clearly not commonly practised, even in the possibly token form found in the adult burials.

Plaster burials in general are discussed more fully on pp 36-7.

Corpse and grave good wrapping

[Tables 2.46-2.47; Fig 2.55, 2.66]

Nine fragments or groups of fragments of textile from six Period 2 graves (Table 2.46) were catalogued and discussed by J P Wild in *CAR 2* (147-8). Most of the pieces were mineral-replaced, the textile having been preserved by contact between cloth and metalwork,



Fig 2.72 Tile coffins, Period 2. a... G695 (left), G254 (right); b... G254; c-d (left)... G682; e... G550. [Pages 124-6]

Period 2: corpse and grave good mapping

Grave	Sex	Age	Container	Position in stratigraphic sequence	Plaster	Location
G182	F	young	nailed timber coffin	'final	lime plaster	near rib cage and upper legs
G295	I	2 years *	nailed timber coffin with inner lead coffin	?primary	gypsum	coffin packed
G395	M	middle-aged	nailed timber coffin in vault CF55	mid-range	lime plaster	beneath ribs and left leg
G396	F	middle-aged	nailed timber coffin in vault CF55	mid-range	lime plaster	beneath ribs
G543	M	young adult	nailed timber coffin	primary	lime plaster	over bottom of coffin, on skull and upper body
G697	M	young	nailed timber coffin	isolated	lime plaster	beneath head and shoulders
G737	F	old	nailed timber coffin	?mid-range	lime plaster	over bottom of coffin, on right femur

Table 2.45. Period 2 plaster burials. F... female; I... indeterminate; M... male. [Page 126]

Grave	Sex	Age	Other grave goods	Position of textile	Thread	CAR 2 catalogue number(s)
G15	(F)	(infant/child)	glass vessel, armlets + coins (364-78)	on iron armlet (by right shoulder)	flax, spun	4297
G69	(F)	adult	box with armlets & necklaces	on grave goods (in box)	flax, spun	4298-9
G77	M	middle-aged	none	on right arm bone	silk, unspun	4300
G171	(F)	12-15 years	shoes, armlets, knife, finger-rings, ?necklace	on grave goods (by skull)	flax, spun	4301-2
G295	I	2 years	pottery jar	preserved in gypsum packing lead coffin	flax, spun	4303
G404	(F)	(child)	armlets, headband	on grave goods (by skull)	flax, spun	4304-5

Table 2.46. Identification and position of textile in Period 2 graves. (F)... inferred from grave goods; I... indeterminate; M... male; eg (child)... inferred from grave/coffin size. [Pages 126-9]

Grave	Sex	Age	Position of stain
G24	(F)	(child)	around pile of grave goods in NW corner of coffin
G101	(M)	9-11 years	with belt fittings by skull
G171	(F)	12-15 years	with grave goods (including knife) and textile by skull
G174	F	adult	with grave goods by skull
G378	(F)	12 years	with grave goods in NE corner of coffin
G404	(F)	(child)	with grave goods (including headband) and textile in W end of coffin
G503	(F)	young infant	with grave goods by left side
G609	(F)	(child)	with grave goods at E end of coffin

Table 2.47. Period 2 graves containing patches of stained soil associated with grave goods. F... female; eg (F)... inferred from grave goods; (child)... inferred from grave/coffin size. [Page 129]

usually iron, while gypsum preserved both textile and textile impressions in G295. No external agent appears to have assisted in the preservation of the fragment from G77, though it looks to have been partially carbonised. It may have been in contact with either a coffin nail or mineral-replaced wood from the coffin.

The G77 fragment is also unusual in that it is cloth woven from unspun cultivated silk thread, whereas all the other pieces are of spun flax thread, ie linen. A Chinese source for the silk yarn seems certain and not unique in the Roman world, nor is the piece the earliest example in western Europe. However, though the Chinese exported silk thread unspun, had the textile been woven in the west it would have been spun before use. Neither weft nor warp thread in this piece was spun, and Wild considers that this indicates a Chinese source for not only the yarn but also the cloth (*ibid.*, 1984, 298-9).

Whether or not the Chinese silk textile in G77 was clothing in secondary use as a shroud, or a length of unworked material used as a shroud is uncertain. The west end of the coffin of G77 was distorted, probably from soil pressure, and it is likely that the bones have also been moved. The leg bones are well apart and appear to have been disturbed, the right hand lies across the waist, the left possibly near the pubis. The shoulders certainly seem hunched, but this may be a result of the distortion of the coffin rather than a reliable indicator of the presence of a shroud.

Wild has put forward the hypothesis that the textiles in the Butt Road graves were used to wrap corpses and grave goods, and did not represent clothing, except in secondary use (*CAR 2*, 148). A shroud certainly seems to be the likely identification of the linen from the plaster burial G295 (pp 123, 126), and a shroud may also be inferred in some graves, despite the absence of textile, from the position of the skeleton. For example, in G341, an uncoffined burial of a middle-aged male marked by tiles, the body appears from its position to have been tightly wrapped in a shroud (Fig 2.55e; p 110).

Everyday clothing may, however, be inferred from graves such as G537, in which fifteen pieces of jewellery accompanied the corpse, hairpins on the skull, a necklace around the neck, armlets on the left wrist, and rings on the fingers of the left hand. A female adorned in this way would probably have been dressed in her best clothes, not a shroud. A shroud is also unlikely to have been present in, for example, G452 (young adult female), where the elbows stuck out from the sides (p 120). It may be that there was no prescribed method of cladding a corpse, shroud or ordinary clothing being equally acceptable. There is also a possibility that different economic or social groups were buried in different ways, some in everyday dress, others in shrouds (eg slave and free, children and adults, unmarried and married females).

The use of textiles to wrap or otherwise contain grave goods seems well supported by the evidence from Butt Road, despite the fact that only very small fragments of

cloth survived. Leather may also have been used.

Table 2.47 shows that in both G171 and G404 the piles of grave goods and associated textile lay within a patch of dark-stained soil. In G404 this stain may have been at least partly formed by the decayed leather of the headband (p 145), and in G171 possibly by a leather scabbard (p 155). In these two graves the chances of linen wrappings surviving may have been enhanced not only by their association with metal objects, but also by protection, at least initially, from the more robust leather. Similar stains indicate the outline of leather soles from hobnailed footwear (eg p 41), and in G101 the leather from a pair of belts with copper-alloy fittings was identifiable only by dark stains in the soil. In all these cases the presence of leather has been demonstrated by the migration into it of mineral salts from metal corrosion products and supported by the suitability of appropriate fittings or objects.

An interpretation of the remaining patches of stained soil associated with grave goods as representing decayed leather is possible. The evidence from G171 and G404 is that only where leather formed part of the grave goods was there a stain in the soil. Textile alone does not appear to leave a stain. The dark-stained patches from the remaining graves in Table 2.47 were therefore probably formed by decayed leather.

There is no evidence to determine whether linen and leather associated with grave goods was sewn into a pouch or bag or was simply an unworked strip. Allason-Jones (1989, 118) gives examples of both leather and linen, and in one case linen-lined leather, bags and purses. At Butt Road, given the absence of metal fittings, if a purse were present in any of these graves it probably took the form of a drawstring bag or folding pouch. A combination of containers is indicated in G69, where two grades of linen were recovered from inside the box which contained the grave goods. One was a fine plain-weave, the other medium-fine (*CAR 2*, 147). One fabric may have lined the box, the other may have been a bag or scarf wrapping the jewellery.

Grave goods

[Tables 2.48-2.50; Figs 2.21, 2.73]

From only 47 graves (48 interments, note G395/G396) in the Period 2 cemetery were grave goods recovered (7 per cent), with a further two graves each containing an item which may possibly be a deposit but cannot be unequivocally accepted as such (Table 2.48).

These are a coin of Antoninus Pius (reverse uncertain, 138-61) found between the femur and the north side of the coffin in G18 (elderly male), and a single jet short barrel bead (*CAR 2*, 636) next to the skull in G133 (middle-aged male). Coins of similar date to that in G18 can occur in hoards closed in the

late 3rd century, but this is a single piece in an uninformative position in the grave (compare with the group in G431, p 156), unpierced and so not obviously valued or revered (compare with G278 (p 41), G69, G503 (p 137), and G15, G406 (p 141)). The bead in G133 may be associated with a group of sixteen jet long cylinder beads (*ibid*, 1044-59) in the fill of G138, which cuts G133, but would be more acceptable as part of a dispersed armband if it were of similar form to the others and if the identification of the skeleton in G133 as male were uncertain. Both coin and bead are probably not deposits but residual in the fill collapsed into the coffin.

There are three other ambiguous items, each in a grave containing other accessories. In the fill of the coffin of G69 was a coin of Tetricus I (270-4), found near a box containing an armband on which was suspended a coin of Tetricus II (270-4). The close association of two Tetrican coins (not common as casually-lost site finds on Butt Road) may be taken to suggest that as one is a deposit, so may be the other. However, as all the rest of the grave deposits had been placed inside the box, it is probably most likely that the coin is residual. In G115 a silver hairpin lay on the skull, while a copper-alloy armband (CAR 2, 1614) was outside the east end of the coffin. Both are pieces of jewellery, but at the least a position for the armband inside the coffin might be expected if it is to be seen as a genuine deposit. A damaged jet hare figurine (CAR 2, 4277) was in the fill of G444 at the foot of the coffin with one end embedded in the wood stain. The coffin, that of a 4-year-old child, contained a pair of hobnailed shoes. Though the head and forelegs of the hare are missing, sufficient remains of the animal for it to be still usable as a plaything.

The most likely explanation for hare, armband, and coin is that all are residual, but there remains a distinct possibility that they may be grave goods, probably differing from the others only in the manner of their deposition. They may, for example, have been thrown into the partly-filled pit from the graveside.

If such a method of deliberate deposition is acknowledged as possible, then every find in at least the lower two-thirds of the fill of every grave becomes a potential deposit. Moreover, a different manner of deposition may require a different rationale. An offering thrown into a grave during its backfilling was perhaps unlikely to have belonged to the deceased, but rather may have been a personal item worn at or carried to the funeral by a mourner and committed to the grave as much on impulse as by design.

This idea will not be discussed further, but the five ambiguous items are included as possible deposits in Tables 2.48-2.49.

Some other grave goods appear anomalous and thus possibly residual when considered against the background of similar finds (eg the finger-ring in G439, the comb in G487). In these cases the objects have been listed as deposits in the appropriate tables, but are noted in the text as possibly residual.

At least 21 of the 47 graves containing deposits were child burials, 26 were adult burials (Table 2.49). No positive guess as to age can be offered for G320, though the deposition within it of three household vessels suggests that it is most likely to be an adult grave. Eight of the adults were identified as male, and six as female, though a further four could be positively identified as female by the inclusion of feminine jewellery among the deposits. Of the child burials, sixteen contained jewellery and were therefore probably females (though in one grave (G406) where amuletic jewellery was unaccompanied by other pieces the child may possibly have been male).

Objects of personal adornment form the largest group of grave accessories, with 139 pieces deposited in 22 graves (Table 2.50). They range from items which once acquired were possibly never removed, eg a copper-alloy finger-ring on the hand of a male (G41), to many objects of high quality used specifically for adornment, such as the seven hairpins, one necklace, four armbands and three finger-rings worn by an unsexed adult (G537, clearly female on this evidence). Worthy of especial note are fittings from a leather headband in G404, and the fact that no earrings were positively identified.

Most of the jewellery was placed in children's graves, with sixteen graves containing 97 items. The identified ages of the children ranged from a young infant (G503) to 12-15 years (G171). Jewellery associated with adult males was restricted to finger-rings (G41, G439), while the four adult females were buried with armbands, hairpins, finger-rings, necklaces and in one rare case, a brooch. No close age identification was given for any of them, but, given the high proportion of jewellery in child graves, two possibilities should be considered: first, that all four (G69, G174, G537, G647) were young and unmarried (G69 may be that of an older adolescent, it is described in Dr Birkett's original notes as '?adult'); and second, that jewellery, particularly in quantity, in female child and young adult graves represents a dowry. Allason-Jones (1989, 30-1) suggests that most Romano-British women married in their early to mid-twenties, which would make the presence of a dowry in an 'adult' grave quite acceptable.

The majority of items were unworn, in all only thirteen (possibly fourteen) pieces were worn by children, and only nineteen by adults. In G519 (7 years) and G69 (adult) the jewellery was deposited inside a box, but in most cases it was placed near the head, and seems often to have been wrapped or contained in textile or leather (p 129). This leads to the suggestion that wrapped-up deposits may have been covert (D Watts pers comm), especially as the cemetery has been identified as Christian.

Items of dress and personal toilet were not common deposits. Apart from pieces used to wrap grave goods, the few fragments of textile found in the graves are more likely to represent shrouds rather than clothing. An exception may be the silk in G77, and the



Fig 2.73 Graves with deposits, Period 2. 1:333. [Pages 129-56]

Grave	Sex	Age	Grave goods
G1	(F)	10 years	?two bone armlets (CAR 2, 1574), eleven metal armlets (<i>ibid</i> , 1590-3, 1610-11, 1628, 1640-1, 1653, 1693), bead necklace with copper-alloy clasp (<i>ibid</i> , 563-7, 629-33, 651-5, 903, 906-9, 911, 975-81, 1348, 1371-9, 1426, 1448-79, 1501-4, 1812)
G15	(F)	(infant/child)	metal armlet (<i>ibid</i> , 1738), bead & coin armlet (<i>ibid</i> , 559, 634-5, 960, 990, 1505, CAR 4, 82), glass jug (CAR 8, 1164)
G16	(F)	6 years	shale armlet (CAR 2, 1544), two metal armlets (<i>ibid</i> , 1642, 1657), bead armlet/necklace (<i>ibid</i> , 568-92, 656-93, 904-5, 958, 982-9)
G18	M	old	coin (CAR 4, 82), probably residual
G24	(F)	(child)	six metal armlets (CAR 2, 1612, 1643, 1688, 1698, 1702, 1708)
G41	M	middle-aged	metal finger-ring (CAR 2, 1749)
G58	I	4-6 years	two pottery beakers/miniature jars (Fig 2.86)
G69	(F)	adult	box (CAR 2, 2171-2213) containing two jet/shale armlets (CAR 2, 1545-6), five metal armlets (<i>ibid</i> , 1629 (+ coin CAR 4, 82), 1634, 1654-5, 1733); two(?) bead necklaces (<i>ibid</i> , 595-615, 806-900, 910, 951-5, 991-2, 1042-3, 1349-69, 1380-2, 1387-1413, 1418, 1482-95, 1507-9); coin (CAR 4, 82), probably residual
G94	-	(child)	bells on chain (CAR 2, 1809-1810)
G101	(M)	9-11 years	two leather belts with copper-alloy fittings (CAR 1, fig 15, 1-4; CAR2, 4248-51)
G109	(F)	4-5 years	bone armlet (CAR2, 1575), three metal armlets (<i>ibid</i> , 1613, 1675, 1734), antler comb (<i>ibid</i> , 1853)
G115	(F)	12-14 years	metal hairpin (<i>ibid</i> , 480); metal armlet (<i>ibid</i> , 1614), probably residual
G132	?F	middle-aged	glass bottle (CAR 8, 2257)
G133	M	middle-aged	bead (?from dispersed armlet; CAR 2, 636), probably residual
G171	(F)	12-15 years	two bone armlets (CAR 2, 1576-9), fifteen metal armlets (<i>ibid</i> , 1635, 1659-65, 1676-9, 1689, 1705, 1725), bead necklace (<i>ibid</i> , 637-46, 993-1038), two metal finger-rings (<i>ibid</i> , 1766, 1768), pair of shoes (<i>ibid</i> , 1833), iron knife (<i>ibid</i> , 2950)
G174	F	adult	metal hairpin (CAR 2, 481), shale armlet (<i>ibid</i> , 1547), metal armlet (<i>ibid</i> , 1646), bead necklace (<i>ibid</i> , 616, 694-710, 912-31), metal finger-ring (<i>ibid</i> , 1789), antler comb (<i>ibid</i> , 1854), glass jug (CAR 8, 2259)
G180	M	middle-aged	glass cup (CAR 8, 553), glass jug (<i>ibid</i> , 1160)
G188	M	adult	pair of shoes (CAR 2, 1835)
G258	M	(adult)	antler comb (CAR 2, 1855)
G295	I	2 years	pottery jar (Fig 2.86)
G298	?	adult	pair of shoes (CAR 2, 1839), pottery jar
G299	?	adult	pottery jar (Fig 2.86)
G320	-	-	pottery dish (Fig 2.86), two comminuted glass vessels of unknown form (p 152-4)
G342	(F)	7 years	metal hairpin (CAR 2, 512)
G377	F	young	antler comb (CAR 2, 1856)
G378	(F)	12 years	two shale armlets (CAR 2, 1548-9), five bone armlets (<i>ibid</i> , 1580-4), seven metal armlets (<i>ibid</i> , 1594-6, 1656, 1700-1, 1730)
G390	?	adult	pottery jar
G395	M	middle-aged)	pottery unguentarium (Fig 2.86)
G396	F	'middle-aged)	
G404	(F)	(child)	bone armlet (CAR 2, 1585), two metal armlets (<i>ibid</i> , 1597, 1630), headband (<i>ibid</i> , 1799-1801)
G406	(F)	(infant/child)	bead and pendant armlet/necklace (CAR 2, 547, 556-7, 558, 647-9, 956, 1419-20, 1447, 1806, CAR 4, 82)
G431	M	middle-aged	six coins (CAR 4, 82)
G439	M	young	metal finger-ring (CAR 2, 1765)
G444	I	4 years	pair of shoes (not catalogued, ?stolen); jet hare figurine fragment (CAR 2, 4277), probably residual
G452	F	young	pottery beaker (Fig 2.86)
G454	(F)	5 years	five metal armlets (CAR 2, 1636, 1647-9, 1718)
G487	?	middle-aged	antler comb (CAR 2, 1857)
G500	?	young	pair of shoes (CAR 2, 1846)
G503	(F)	young infant	five jet/shale armlets (CAR 2, 1550-3, 1568), bead and pendant armlet (<i>ibid</i> , 617-22, 1794, 1807, CAR 4, 82), two bead necklaces (1060-1345)
G519	(F)	7 years	two metal hairpins (CAR 2, 488-9), box (<i>ibid</i> , 2214-2222) containing shale armlet (<i>ibid</i> , 1567), six metal armlets (<i>ibid</i> , 1650, 1720-3, 1735), antler comb (<i>ibid</i> , 1858)
G537	(F)	adult	four glass hairpins (CAR 2, 461-4), three metal hairpins (<i>ibid</i> , 482-4), four metal armlets (<i>ibid</i> , 1598-9, 1719, 1731), bead necklace (<i>ibid</i> , 623-4, 711-20, 933-47, 1039-41, 1383-4, 1416-17, 1429-41), three metal finger-rings (<i>ibid</i> , 1752-3, 1790)
G609	(F)	(child)	metal armlet (CAR 2, 1692), bead armlet/necklace (<i>ibid</i> , 721-802, 948-9, 959, 1442-3, 1480-1)
G613	?	(adult)	one shoe? (?not lifted)
G620	7	adult	glass jug (CAR 8, 2261)
G621	7	adult	pottery jar (Fig 2.86)
G628	M	adult	iron key (CAR 2, 4149)
G638	(F)	13-14 years	two metal armlets (CAR 2, 1600, 1710)
G647	(F)	adult	metal brooch (CAR 2, 103), eight metal armlets (<i>ibid</i> , 1631, 1666-71, 1736), two metal finger-rings (<i>ibid</i> , 1791-2), antler comb (<i>ibid</i> , 1859)
G723	F	adult	pottery bowl (Fig 2.86), metal tube (p 155)
G730	F	adult	pair of shoes (?not lifted), pottery jar and beaker (Fig 2.86)

Table 2.48. Deposits in Period 2 graves. F... female; IF... probable female; eg (F)... inferred from grave goods; I... indeterminate; M... male; eg (child)... inferred from grave/coffin size; ?... uncertain. [Pages 129-56]

	middle-aged	Adults young	uncertain	over 12	Juveniles under 12	Age uncertain	Totals
male	J x 1 V x 2 M x 1	J x 1	S x 1 C x 1 key x 1				
<i>sub-totals</i>	4	1	3				8
female	V x 2	C x 1 V x 1	J x 2 J/C x 1 S/V x 1 J/C/V x 1 V/tube x 1	J x 3 J/S/knife x 1	J x 9 J/C x 2 JA/ x 1		
<i>sub-totals</i>	2	2	6	4	12		25
sex uncertain	C x 1	S x 1	S x 1 S/V x 1 V x 4		S x 1 V x 2 belts x 1 bells x 1	V x 1	
<i>sub-totals</i>	1	1	6		5	1	15
Totals	7	4	15	4	17	1	48

Table 2.49. Period 2, Butt Road, grave deposits by age, sex and function. Likely residual finds are not included. The single vessel from the double burial G395/G396 is given for both graves, once under middle-aged male, once under middle-aged female. C... comb, J... jewellery, M... coins, S... footwear, V... vessel(s). [Pages 129-56]

brooch in G647 is more likely to have fastened a garment than a shroud (p 135). A pair of leather belts, each with a copper-alloy buckle and belt-end, were folded and laid side by side in G101 (child), and hobnailed footwear was found in seven graves, only one pair being worn. Only seven antler combs were recovered, with no other pieces of toilet equipment being identified as grave goods, though a slightly-damaged toilet set in a Period 2 pit AF123 may be a disturbed grave deposit from G26 (CAR 2, 1943) and another from modern topsoil (CL4) may also originally have been a deposit (*ibid*, 1945).

The second largest group of deposits was formed by household vessels, with eight glass and thirteen pottery vessels found in sixteen graves (one ceramic vessel accompanied the double vault burial). Most of these were from adult graves, though three graves containing vessels were of young children (G15, G58, G295). Beakers are more numerous in Period 2 graves than in those of Period 1 Phase 3, though again jars, dishes and bowls outnumber drinking vessels.

Only one grave, G431, contained money as a direct deposit, though in a further four graves coins were pierced and used as amuletic pendants on jewellery. Unusual items placed in graves were an iron key (G628), an iron knife with a copper-alloy handle and chain (G171), two copper-alloy bells on a length of iron chain (G94), and a copper-alloy tube (G723).

The low number of graves containing accessories severely limits the evidence for both burial date and ritual deposit practice vital for interpretation of the development of the cemetery. However, a number of points can still be made.

First, Table 2.49 shows that there was clearly a preference for placing jewellery with child burials and household vessels with adults, though in neither case was the preference exclusive, nor was any exclusive depositional preference by age noted within types of jewellery, or with footwear, combs, or vessels (see discussions of types of grave goods below).

Second, though more adult than child burials were identified as accompanied by grave goods (26 as opposed to 21), child graves were far more likely to contain deposits. The cemetery population shown in Table 2.19 consists of at least 448 adult burials and 175 child burials. It can thus be inferred that a child was more likely to be buried with a deposit than an adult (12 per cent as opposed to 6 per cent). Furthermore, though no distinction can be detected among the adults for placing grave goods with males or females (especially as sex could not be identified for eight graves out of 26), there is a clear preference for deposition in the graves of female children (16 out of 21). This difference would still be apparent even if all the unsexed child graves were those of males. Again, there is a clear preference for deposition in the graves of children under 12 years of age (17 out of 21), making a female child under twelve the most likely

Period 2: grave goods

Grave	Sex	Age	Personal adornment & dress jewellery	amulets	belt	footwear	Comb	Household items vessel	box	Tool	Coins	Miscellaneous
G1	(F)	10 years	XXXXXXXXXXXXXXX	(+)								
G15	(F)	(infant/child)	XX	+				X			++	
G16	(F)	6 years	XXXX									
G18	M	old									(X)	
G24	(F)	(child)	XXXXXX									
G41	M	middle-aged	Xworn									
G58	I	4-6 years						XX				
G69	(F)	adult	XXXXXXXXXX	(+)					X		+(X)	
G94	(child)											bells on chain
G101	(M)	9-11 years			XX							
G109	(F)	4-5 years	XXXX				X					
G115	(F)	12-14 years	Xworn(X)									
G132	?F	middle-aged						X				
G133	M	middle-aged	(X)									
G171	(F)	12-15 years	XXXXXXXXXXXXXXXXXXXXX			X				X		
G174	F	adult	XXwornXXX				X	X				
G180	M	middle-aged						XX				
G188	M	adult				X						
G258	M	(adult)					X					
G295	I	2 years						X				
G298	?	adult				X		X				
G299	?	adult						X				
G320	-	-						XXX				
G342	(F)	7 years	Xworn									
G377	F	young					X					
G378	(F)	12 years	XXXXXXXXXXXXXXXXXX									
G390	?	adult						X				
G395	M	middle-aged)						X				
G396	F	middle-aged)										
G404	(F)	(child)	XXXX									
G406	(F)	(infant/child)	X	+							+	
G431	M	middle-aged									XXXXXX	
G439	M	young	X									
G444	I	4 years				X						(figurine)
G452	F	young						X				
G454	(F)	5 years	XXXXX									
G487	?	middle-aged					X					
G500	?	young				Xworn						
G503	(F)	young infant	XXXXXXXXwornX?worn	+							+	
G519	(F)	7 years	XXwornXXXXXXXX				X		X			
G537	(F)	adult	XXXXXXXXXXXXXXXXXworn									
G609	(F)	(child)	XX									
G613	?	(adult)				X						
G620	?	adult						X				
G621	?	adult						X				
G628	M	adult										key
G638	(F)	13-14 years	XXworn	(+)								
G647	(F)	adult	XwornXXXXXXXXXX				X					
G723	F	adult						X				tube
G730	F	adult				X		XX				
Totals:	items		139(141)		2	7	7	21	2	1	11 (13)	3(4)
	graves		22(23)		1	7	7	16	2	1	5 (6)	3(4)
	worn		32/3			1						

TaWe 2.50. Period 2, grave deposits by function. F... female, ?F... probable female, eg (F)... inferred from grave goods, I... indeterminate, M... male, X... one item, (X)... item probably residual, eg (child)... inferred from grave/coffin size, ?... uncertain, +... cross-referenced from jewellery, (+)... cross-referenced from jewellery but of uncertain identification. [Pages 129-56]

individual to be buried in a furnished grave in Period 2.

Third, and most important, at least two valid family groups can be identified from depositional practice. One is the series of graves (G132, G174, G180) containing one or more glass vessels near the south-eastern limit of the excavation (Fig 2.73), the other is the survival of Group C into the Period 2 cemetery (pp 56-7). (Other possible groups are

summarised on pp 92-3 and their validity examined on pp 156-8).

Not only does the survival of Group C into Period 2 illumine the changeover from north-south to east-west oriented burials, but, in combination with dating evidence from Period 2 graves containing jewellery, it also suggests that there were probably two phases in Period 2 when the deposition of grave goods was

more likely to occur. These points are discussed more fully elsewhere (eg pp 136-7, 141-2, 147, 151-3), but, briefly, graves dated to the early years of Period 2 containing deposits are more likely to be of adults than of children and to contain a ceramic vessel than any other deposit, while those which date to later in the 4th century and contain deposits are more likely to be of children and to contain jewellery.

Personal ornament and dress

a) Brooch

[Figs 2.21, 2.73-4]

A silver penannular brooch was found on the right shoulder of G647 (Fig 2.21), an adult sexed as female by the inclusion of armlets among the grave deposits (Figs 2.73, 2.74b). The position of the brooch (Fig 2.74a) may indicate that it was used to fasten a garment, possibly a scarf or shawl (Allason-Jones 1989, 100-112), but it may also have pinned the end of a shroud.

The brooch is of Fowler Type C (1960, 152), with the terminals coiled at right angles to the plane of the ring, which is segmented. Grave 647 can be dated to the late 4th century by a coin of Valens (367-75) in the backfill, and the importance of this date and its relevance to other late Type C brooches from Colchester has been discussed by Elizabeth Fowler in CAR 2, 18-19.

No other brooches were found as grave deposits at Butt Road, emphasising the paucity of these objects in the late Roman period.

b) Hairpins

[Table 2.51; Figs 2.21, 2.73, 2.75]

Eight metal and four glass hairpins were deposited as grave goods (Table 2.51). They derived from five graves, two of adults, and three of children, none of whom were infants. Three graves (G115, G174, G342) contained only one pin, one (G519) contained two, and one (G537) contained seven (Fig 2.73). All the pins were found on, beneath, or very near the skull, indicating that they were used in the coiffure of the corpse (Fig 2.75). Only G537 may date to early in Period 2, the other four graves belong in the later part of the 4th century (Table 2.67).

Many of these pins are of materials and/or head types not common as ordinary site finds in the 4th century. No hairpins of bone, the cheapest and commonest material used for these artefacts, were deposited, while five of the metal pins are wholly or partly of silver, compared to three of copper-alloy. This proportion of silver to the cheaper metal is very high. Of other metal pins from excavations in Colchester during the 1970s only three were silver compared to 37 of copper-alloy. Moreover, one of the three derived

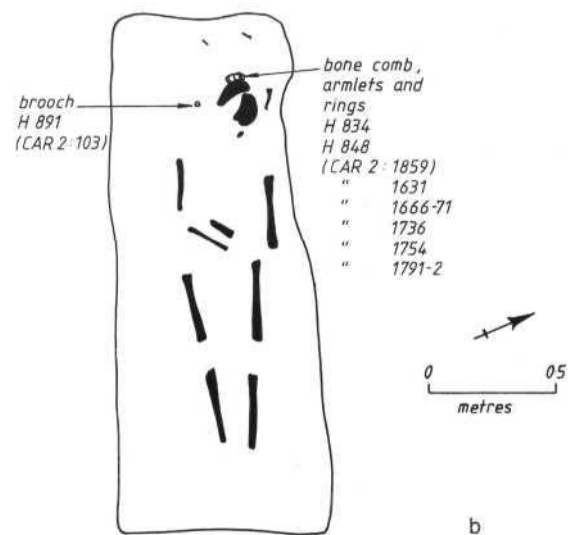


Fig 2.74 Penannular brooch in G647, Period 2. a... in situ; b... plan showing other grave goods. Plan 1:30. [Page 135]

from topsoil at Butt Road and may thus have been a disturbed grave deposit (CAR 2, 479).

Two of the metal pins deposited in graves have very unusual heads. That of the silver pin in G342 is a thin boss decorated with a repousse floret surrounded by beading and soldered to the shaft, while that of the copper-alloy pin from G537 consists of two hollow hemispheres: the two are held together by a ?lead-based solder which fills the hollow, and the lower piece is fitted onto the long shaft. Had the context of this latter pin not been secure it would have been considered to be post-medieval, for the head-type appears only to be paralleled by pins dated to the late 15th to 16th century (CAR 5, 7, 9 (Type 6)). As it is, a comparison with Roman composite studs and bosses should be drawn (CAR 2, fig 120, 3160, fig 124, 4045).

Four of the pins deposited in G537 are of glass (Fig

Grave	Sex	Age	Material	Head type	Position	CAR 2 catalogue number
G115	(F)	12-14 yrs	silver	3	on skull	480
G174	F	adult	silver	3	beneath skull	481
G342	(F)	7 yrs	silver	floret	on skull	512
G519	(F)	7 yrs	cu-al	4	on skull	488
			cu-al	4	"	489
G537	(F)	adult	glass	globular	by skull	461
			glass	globular	"	462
"			glass	globular	"	463
			glass	ring	"	464
			silver	3	"	483
			silver/?gilt cu-al	3	"	482
			cu-al	3 composite	"	484

Table 2.51. Hairpins from Period 2 graves, cu-al..copper-alloy; F..female; (F)..inferred from grave goods. [Pages 135-6]

2.75e). Three are of the same type, with a globular head and a twisted shaft, while the twisted shaft of the fourth separates to form a ring-shaped head. Glass pins are not common as site finds at Colchester, only a shaft fragment of one other pin is catalogued in CAR 2 (465).

The marked preference for hairpins used for funerary wear to be of glass and metal rather than bone, and of silver rather than copper-alloy, contrasted with those selected for daily wear as indicated by ordinary site-finds, supports the idea that jewellery in young female graves represents a 'dowry' (p 130). Alternatively, it may suggest that many of the more expensive grave goods, especially those deposited in children's graves, were bought specifically for dressing the hair of the corpse, rather than chosen from existing collections of jewellery. Pins made from these more expensive materials *do* occur on domestically- occupied sites, however, and their rarity can in part be accounted for by the same argument used to account for the paucity of silver and gold coins as site-finds, that is, a coin of precious metal with a 'real' as well as a 'declared' value, will be searched for if lost (Reece 1987, 27, 71). If broken rather than lost, a silver hairpin might be repaired, reworked, or simply sold to a silversmith. Even broken it retains the value of the silver; it is certainly not likely to be thrown out with the household rubbish.

c) Armlets

[Tables 2.52-2.53; Figs 2.21, 2.73, 2.75-2.77]

Armlets form the largest group of items deposited in Period 2 graves. In all 104 were recovered from only seventeen graves, with the minimum number deposited one, and the maximum seventeen (Tables 2.52-2.53).

Thirteen of the seventeen burials accompanied by armlets were of children, ranging from a young infant (G503) to young adolescents (G171, G378, G638). Of the four adult burials (G69, G174, G537, G647) only one (G174) could be sexed by the skeletal material alone (Table 2.52).

Eight of the burials can be dated to the last third of the 4th century (G1, G15, G69, G109, G171, G174, G519, G647) and account for 60 of the 104 armlets found. Of the remaining nine graves most may also date to late in Period 2, and only two (G503, G537) are almost certainly early.

In two of the graves (Fig 2.77a-b) the armlets were in a box placed inside the coffin (p 148), though in most graves they were deposited (probably wrapped in textile or in a purse) inside the coffin in a pile near the skull (eg Fig 2.76b, g-h). Only in two cases were they placed near the feet (Figs 2.76e, 2.77g) rather than the head, and only those in G503 (Fig 2.76f), G537 (Fig 2.75e), and G638 (Fig 2.77e) were worn by the corpse at burial. That G503 and G537 are early graves suggests that G638 may also be early and that a difference in depositional style may exist between early and late graves.

All the armlets were of thin bangle form, and most (71 per cent) were of copper-alloy, followed by bone, shale, jet and iron, and threaded bead/pendant armlets (Table 2.53), though this last group may perhaps be augmented by other lengths of threaded beads and pendants which cannot be clearly identified as either armlets or necklaces.

Clarke (1979, 301) has suggested that the evidence from armlets from the Lankhills site, Winchester, Hampshire, may indicate that those of iron, bone, and shale were more common in the first half of the 4th century, and those of copper-alloy in the second half. However, at Lankhills, though armlets appeared to be deposited throughout the period of use of the cemetery, more accompanied graves dating to the second half of the century than the first, and at Butt Road the evidence appears to suggest that there was not necessarily a difference in date for materials, but rather that the practice of depositing armlets was more prevalent late in the 4th century.

Clarke's observation does appear superficially to be borne out for jet and shale armlets (treated here in Table 2.53 as a single group as the materials were identified only by eye and may not necessarily be

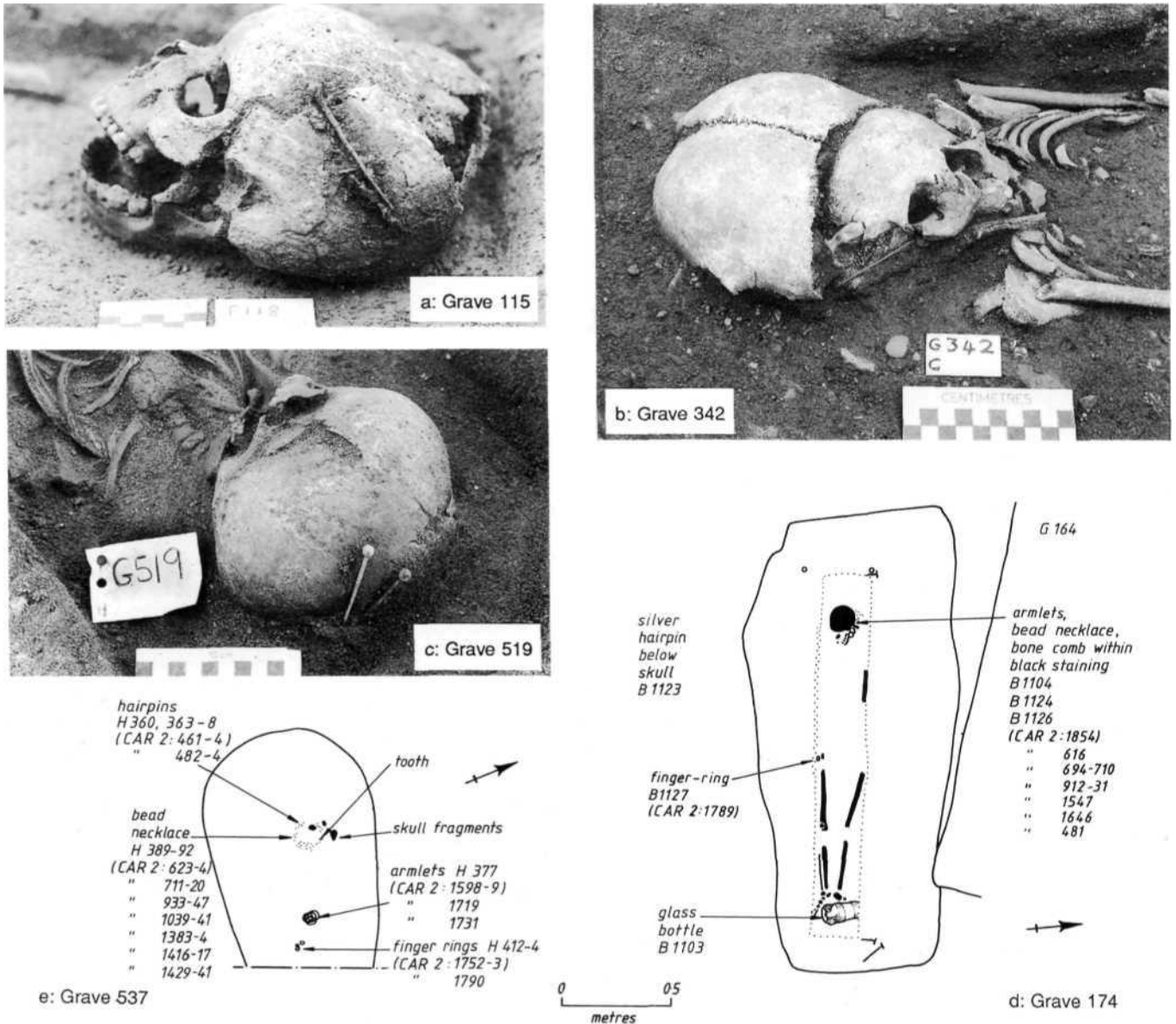


Fig 2.75 Hairpins in Period 2 graves. Plans 1:30. [Pages 135-6]

correct). No Period 1 Phase 3 grave contained an armlet of either jet or shale. Six Period 2 graves produced twelve armlets of these materials, but of the six only G503 (five armlets) is likely by its stratigraphy to belong to the early years of Period 2. (Grave 503 is of added interest in that it is the only coffined Period 2 grave in which the head of the corpse was placed to the east (p 118).) Thus, though more or less equal numbers of jet and shale armlets occurred in each half of the 4th century, only one grave can be assigned with confidence to the first half, while three belong to the last third (G69, G174, G519) and the remaining two also probably date to late in Period 2 (G16, G378). This again suggests that a more accurate view would be that bangles as a whole were more frequently deposited in the second half of the 4th century.

Some copper-alloy armlets and one of iron had objects suspended from them: in G15, a glass annular

bead on an iron armlet; in G1, a glass annular bead with marvered trail and a copper-alloy bell on a copper-alloy cable armlet; in G69 a coin of Tetricus II (270-4; antique in this context) on a copper-alloy cable armlet; and in G638 a short length of copper-alloy chain on a copper-alloy wire armlet. Two of these objects, the antique coin and the bell, are probably amuletic (see below and p 141), and so also may be the chain.

Bead/pendant armlets remain to be considered. One was deposited in the Period 1 Phase 3 inhumation G291, and one of the two from Period 2 is also early. This is from G503 (see above), and is formed of jet beads, a pierced copper-alloy plain disc, a pierced coin of Diadumenian (217-18), and an iron finger-ring (p 143). The antique coin links this collection of objects to the group of amulets in the Period 1 Phase 3 burial, G278. Whereas the jet and shale armlets in G503 were on the left arm of the corpse at burial, and

Period 2: grave goods (personal ornament and dress (armlets))

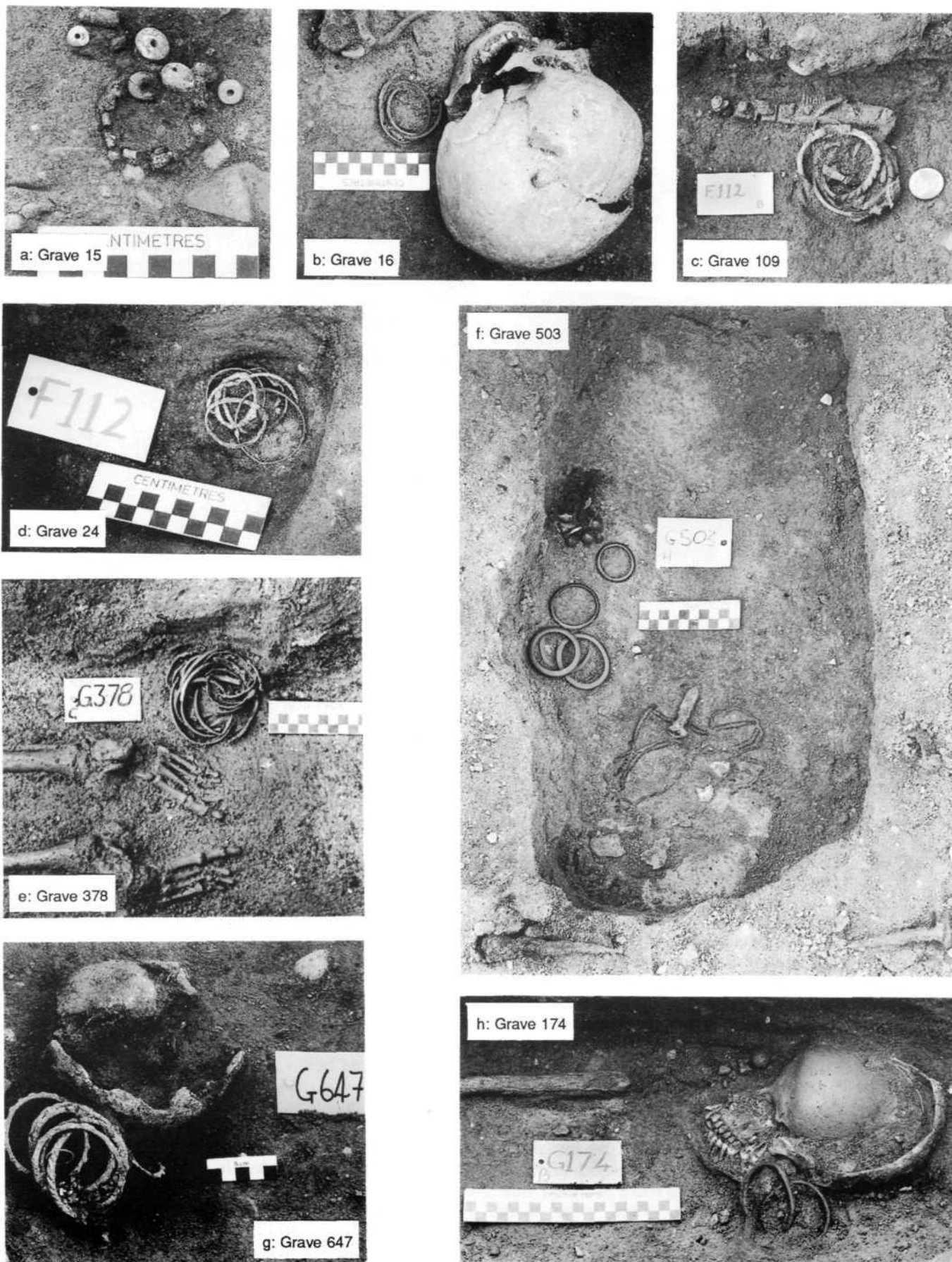


Fig 2.76 Armlets in Period 2 graves. [Pages 136-41]

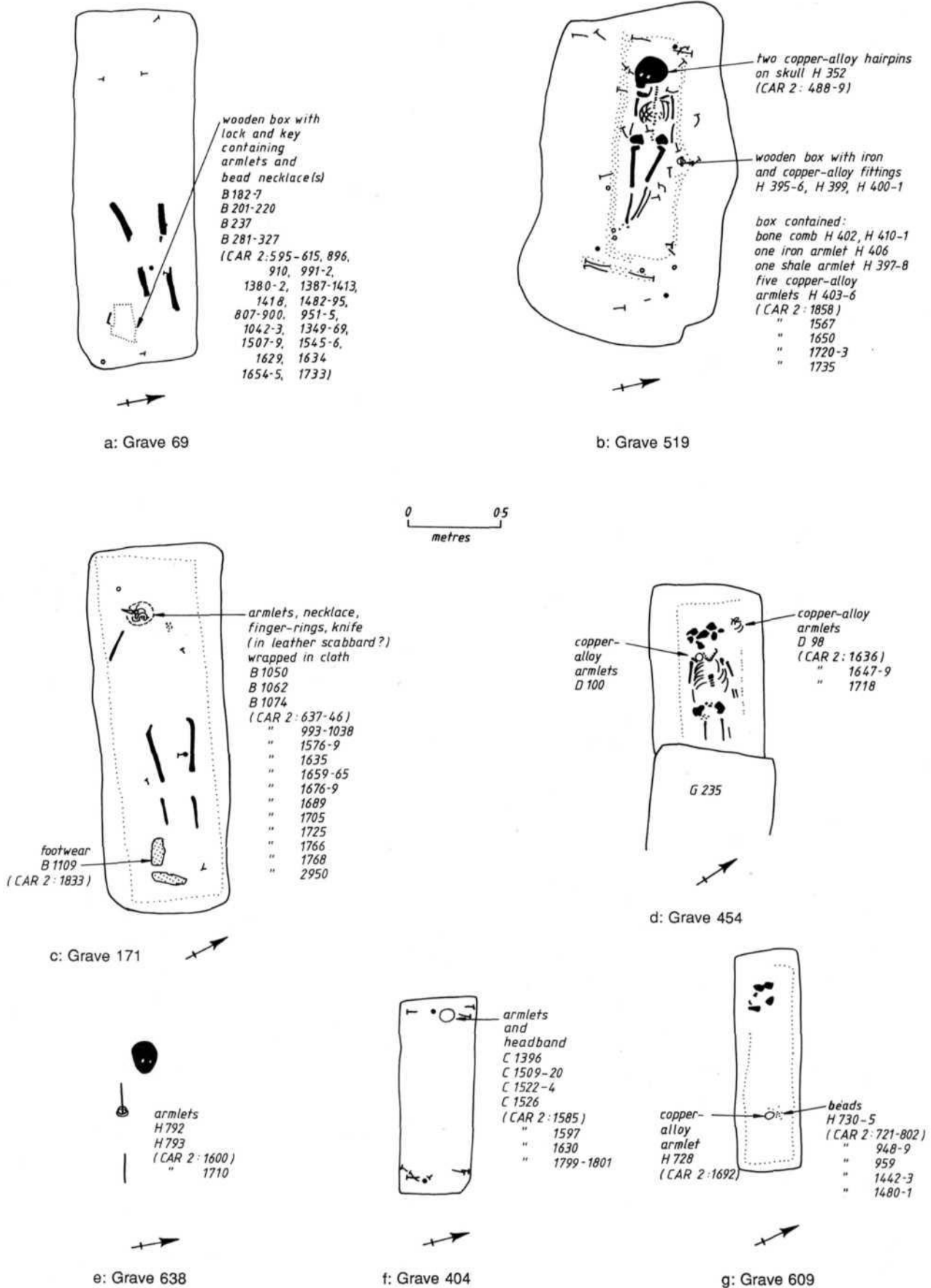


Fig 2.77 Armlets in Period 2 graves. 1:30. [Pages 136-41]

Period 2: grave goods (personal ornament and dress (armlets))

Grave	Sex	Age	Position	Description or other reference	CAR 2 catalogue number
G1	(F)	10 years	pile inside coffin, S side	bone, plain cu-al, wire cu-al, cable (bead & bell threaded on) cu-al, cable cu-al, plain cu-al, notched cu-al, diagonal grooves	1574 (?two) 1590-3 1610 (548, 1808) 1611, 1628 1640-1 1653 1693
G15	(F)	(infant/child)	inside coffin, ?by right shoulder	iron bound with cu-al (bead threaded on) beads & pierced coins: amber, oblate disc amber, short barrel glass (dk green), long ibiconical glass (dk Blue), long cylinder glass (black), exotic glass, crushed (two) cu-al coin, House of valentinian cu-al coin, House of Valentinian	1738 (555) 559 634-5 960 990 1505 CKas 275 CK as 317
G16	(F)	6 years	pile inside coffin, NW corner	shale, plain cu-al, plain cu-al, toothed	1544 1642 1657
G24	(F)	(child)	pile inside coffin, K1W corner	cu-al, cable cu-al, plain cu-al, transverse grooves cu-al, 'S' decoration cu-al, 'C' decoration cu-al, punched dots	1612 1643 1688 1698 1702 1708
G69	(F)	adult	inside coffin, SE corner, in box	jet, plain shale, plain cu-al, cable (coin threaded on; Tetricus II cu-al, cable cu-al, notched iron, plain	1545 1546 1629 RIC 272 1634 1654-5 1733
G109	(F)	4-5 years	pile inside coffin, NW corner	bone, plain cu-al, cable cu-al, transverse grooves iron, plain	1575 1613 1675 1734
G171	(F)	12-15 years	pile inside coffin, SW corner	bone, plain cu-al, cable cu-al, crenellated cu-al, transverse grooves cu-al, transverse grooves cu-al, wave-crest decoration cu-al, multiple motifs	1576-9 (two) 1635 1659-65 1676-9 1689 1705 1725
G174	F	adult	pile inside coffin, NW corner	shale, plain cu-al, plain	1547 1646
G378	(F)	12 years	pile inside coffin, NE corner	shale, plain bone, plain cu-al, wire cu-al, notched cu-al, 'S' decoration cu-al, multiple motifs	1548-9 1580-4 1594-6 1656 1700-1 1730
G404	(F)	(child)	pile inside coffin, W end	bone with gilt cu-al plating cu-al, wire cu-al, cable cu-al, cable cu-al, plain cu-al, bead-imitative	1585 1597 1630 1636 1647 1718
G454	(F)	5 years	pile inside coffin, NW corner	cu-al, plain cu-al, bead-imitative	1647 1718
G503	(F)	young infant	pile inside coffin, by right shoulder on left arm by left hand	cu-al, plain shale, plain jet, plain jet, octagonal beads, pendants & pierced coin: jet, short oblate iron finger-ring cu-al disc cu-al coin, Diadumenian	1648-9 1550 1551-3 1568 617-22 1794 1807 RIC 2.2
G519	(F)	7 years	inside coffin, N side, in box	shale, transverse grooves cu-al, plain cu-al, bead-imitative iron, plain cu-al, wire cu-al, bead-imitative cu-al, multiple motifs	1567 1650 1720-3 1735 1598-9 1719 1731
G609	(F)	(child)	inside coffin, near E end	cu-al, transverse grooves	1692
G638	(F)	13-14 years	on right arm	cu-al, wire (chain threaded on) cu-al, punched dots	1600 1710
G647	(F)	adult	inside coffin, W end	cu-al, cable cu-al, crenellated iron, plain	1631 1666-71 1736

Table 2.52. Armlets from Period 2 graves, cu-al.. copper-alloy; E.. east; F.. female; (F).. inferred from grave goods; N.. north; S.. south; W.. west; eg (child).. inferred from grave/coffin size. [Pages 136-41]

Grave	Jet	Shale	Bone	Cu-al	Iron	Bead/ pendant	Totals
G1			2	11			13
G15					1	1	2
G16		1		2			3
G24				6			6
G69	1	1		4	1		7
G109			1	2	1		4
G171			2	15			17
G174		1		1			2
G378		2	5	7			14
G404			1	2			3
G454				5			5
G503	4	1				1	6
G519		1		5	1		7
G537				4			4
G609				1			1
G638				2			2
G647				7	1		8
Totals	5	7	11	74	5	2	104

Table 2.53. Material of armlets in Period 2 graves, cu-al... copper-alloy. [Pages 136-41]

necklaces of jet beads were around the neck, the bead/pendant armlet lay by the left hip in a patch of stained soil (Fig 2.76f) and had probably been deposited in a leather purse or bag, providing a link between this collection of objects and those found deposited in Anglo-Saxon female graves (Brodrigg, Hands, and Walker 1973, 109; and see p 143).

The second bead/pendant armlet from Period 2 is from G15 (Fig 2.76a), and can be dated to later than 364 by two pierced coins, again probably used as amulets, of the House of Valentinian (364-78) set among the amber and glass beads. Though a conservative date of 364 or later has been put on G15, both the coins are very worn, and this, coupled with the antiquity of the coins on other Butt Road armlets, suggests that a date much later in the 4th-century would be more appropriate for both the armlet and thus the grave.

Both these Period 2 bead/pendant armlets were deposited in the graves of infants, and thus their amuletic character may be seen, as with the group of objects in G278, to be that of harnessing external agents to protect and assist a child. Whether this protection was required during the child's life or in the afterlife is not certain. If in life, then the objects may have been deemed to have failed, but were so personally associated with the child that they were buried with the corpse. In either case they represent a real belief in the power of amulets which appears irreconcilable with Christianity.

It is when the supposed Christian nature of the Period 2 cemetery is considered that the date of these two armlets becomes of extreme importance. One belongs to the very early years of the establishment of the cemetery and thus probably represents an expression of a long-established belief not yet superseded by a rigid adherence to the Christian religion. The other belongs late in the 4th century,

perhaps when religious tolerance as expressed by the rational paganism of Julian (360-3) would permit expressions of a less rigorously Christian way of life and death, in this case a belief in magic. Dorothy Watts has suggested that a less rigorously Christian way of life in the context of Butt Road could be taken to be a return to Celtic rather than Roman paganism.

d) Bead and pendant armlet/necklaces

[Table 2.54; Figs 2.21, 2.73, 2.77-78]

Two groups of beads and one of beads and pendants are of a length which makes their identification as either armlets or necklaces uncertain. The groups of beads are from G16 and G609 (Figs 2.21, 2.73, 2.77g), both child burials, and both possibly dating to late in Period 2 (see above). The former is composed entirely of glass beads, the latter of glass beads with one of jet and one of amber (Table 2.54).

The group of beads and pendants derives from G406, also a child burial. It is composed of glass, jet, and amber beads, a silver lunular pendant, and a pierced coin of Valens (Table 2.54; Fig 2.78). The lunula motif and coin (367-75) suggest that this armlet/necklace too may be seen as amuletic, belonging with the armlet from G15 to the late 4th century.



Fig 2.78 Amuletic armlet/necklace in G406, Period 2.

e) Necklaces

[Table 2.55; Figs 2.21, 2.73, 2.75-2.77]

Six graves contained bead necklaces (Figs 2.21, 2.73), two being present in G503, and possibly also in G69 (Table 2.55). Three graves (G69, G174, G537) were of adults, though at least one of the three (G69) may be of an older adolescent (p 130). One individual was identified from the pathology as female (G174), the other two are presumed to be female from the character of the grave goods. The other three graves (G1, G171, G503) were of children, all presumed to

Period 2: grave goods (personal ornament and dress (necklaces))

Grave	Sex	Age	Position	Description	CAR 2 catalogue number or other reference
G16	(F)	6 years	inside coffin, NW corner	beads: glass (blue), short oblate glass (green), short oblate glass (blue), short biconical glass (green), short biconical glass (yellow), short biconical gold-in-glass, standard barrel glass (green), long barrel glass (green), long cylinder	568-78 579-92 656-82 683-7 688-93 904-5 958 982-9
G406	(F)	(infant/child)	inside coffin, W end	beads, pendant, pierced coin: glass (blue), annular glass (yellow), annular amber, short barrel jet, standard plano-convex amber, long cylinder jet, long plano-convex silver lunular pendant cu-al coin, Valens	547, 556-7 558 647-9 956 1419-20 1447 1806 CK as 319
G609	(F)	(child)	inside coffin, near E end	beads: glass (blue), short biconical glass (purple), short biconical glass (green), short biconical glass (blue), standard cylinder jet, standard cylinder amber, long barrel glass (green), long cylinder glass (green), heart-shaped glass (purple), heart-shaped	721 722-3 724-802 948 949 959 1442-3 1480 1481

Table 2.54. Armlets or necklaces from Period 2 graves, cu-al.. copper-alloy; E.. east; (F). inferred as female from grave goods; N.. north; W.. west: eg (child).., inferred from grave/coffin size. [Page 141]

be female, one an adolescent (G171), and one a young infant (G503).

Grave 503 has already been identified as dating early in Period 2, and is the only burial furnished with bangles exclusively of jet and shale, all the others containing at least one of copper-alloy (Table 2.53). It is also distinguished among burials furnished with necklaces by being the only one where the necklaces were made up exclusively of jet beads, all the others containing some of glass. Its two necklaces are companion pieces, the beads of one being thin segmented cylinders, those of the other being thicker but otherwise similar. Both necklaces were round the neck of the corpse (Fig 2.76f). (There is a slight possibility that only one double-string necklace was present.)

The other grave which probably contained two necklaces was G69, where the grave goods had been deposited inside a box (Fig 2.77a). Two necklaces are postulated here because of the number of beads present, though again there may have been only one double-string necklace. The beads were allocated to either necklace 1 or necklace 2 purely arbitrarily for display purposes. If two really were present, one may have contained all the jet beads and the other all the rest, or the materials may all have been mixed together at random.

The other four necklaces, though primarily composed

of glass beads, all included beads of other materials: amber and possibly faience in G1; ?faience in G171; and copper-alloy in G174 and G537 (Table 2.55). Only the necklace in G1 had a metal clasp (CAR 2, fig 54, 1812).

Graves 503 and G537 can be dated to early in Period 2, and the other four graves to late in the period. Only in the two early graves had the necklaces been used to dress the corpse for burial (Figs 2.76f, 2.75e respectively), in the others they had been placed with other grave goods inside the coffin, in the box in G69 (Fig 2.77a), in a pile by the skull in the other three (G1; G171, Fig 2.77c; G174, Fig 2.76h).

f) Finger-rings

[Table 2.56; Figs 2.21, 2.73, 2.75-2.77, 2.79]

Together with skeletal sex and age, the characteristics of position and material of the eleven metal finger-rings recovered from seven Period 2 graves (Figs 2.21, 2.73) indicate three, possibly four, different attitudes to the use of finger-rings in life and their deposit at death.

The first use of finger-rings, as decoration, is indicated by the burial of adolescent or adult female corpses either wearing, or accompanied by, decorated finger-rings of copper alloy or white metal (Table 2.56; G171, Fig 2.77c; G174, Fig 2.75d; G537, Fig 2.75e; G647).

Grave	Sex	Age	Position	Description	CAR 2 catalogue number
G1	(F)	10 years	inside coffin, S side	glass (blue), short oblate glass (green), short oblate glass (blue), short barrel glass (green), short barrel glass (blue), short biconical amber, standard barrel glass (green), standard cylinder glass (blue), standard cylinder glass (green), long cylinder amber, long cylinder ?faience, long cylinder glass (blue), heart-shaped glass (blue), oval bead glass, exotic cu-al clasp	563-5 566-7 629-32 633 651-5 903 906-9 911 975-81, 1426 1348 1371-9 1448-78 1479 1501-4 1812
G69	(F)	adult	inside coffin, SE corner, in box	probably two necklaces: 1 glass (blue), short oblate jet, short oblate amber, short lenticular glass (green), standard cylinder glass (green), long cylinder jet, long cylinder glass (blue), long cylinder cu-al, long cylinder glass (blue), kidney-shaped 2 jet, short interlocking jet, standard plano-convex jet, long cylinder jet, exotic	595-613 614-15 806 910 991-2 1380-2 1387-1413 1418 1482-95 807-900 951-5 1042-3, 1349-69 1507-9
G171	(F)	12-15 years	inside coffin, SW corner	glass (green), short barrel ?faience, long cylinder	637-46 993-1038
G174	F	adult	inside coffin, NW corner	cu-al, short oblate glass (blue), short biconical glass (blue), standard cylinder cu-al, standard cylinder	616 694-710 912-23 924-31
G503	(F)	young infant	round neck round neck	1 jet, long cylinder 2 jet, long cylinder	1060-1182 1183-1345
G537	(F)	adult	round neck	glass (green), short oblate glass (blue), short oblate glass (blue), short biconical glass (blue), standard cylinder cu-al, long cylinder glass (green), long cylinder glass (green), long cylinder glass (green), long cylinder	623 624 711-20 933-47 1039-41, 1383-4 1416-17 1429-36 1437-41

Table 2.55. Necklaces from Period 2 graves, cu-al... copper-alloy; E... east; F... female; (F)... inferred from grave goods; N... north; S... south; W... west. [Pages 141-2]

These rings were almost certainly not worn constantly in life, but, as appears to have been the case with hairpins, represent items of jewellery with the added inflection of indicating personal or associated wealth. Three of these graves date to late in the 4th century (G171, G174, G647), and one to early in Period 2 (G537).

The second use is less easily defined, but is represented by the plain copper-alloy finger-ring worn on the left index finger of a male in the pit burial G41 (Fig 2.79a), paralleled by that worn by an unsexed elderly adult in the Period 1 Phase 3 inhumation G327 (Fig 2.14d). In both these cases the ring was almost certainly worn constantly, and appears to have very little intrinsic or artistic value. Its precise significance cannot be established, though likely possibilities include as a symbol of betrothal or of marriage. Grave

41 is a pit burial dug beyond the southern boundary of the cemetery (pp 105-6).

The third use is as an amulet, shown by the inclusion of an iron finger-ring on an armlet otherwise made up of jet beads, a pierced plain copper-alloy disc, and a pierced coin of Diadumenian (217-18). This armlet accompanied a young infant, G503, buried wearing two necklaces of jet beads and five armlets of both jet and shale (Fig 2.76f). Grave 503 dates to early in Period 2. The antique coin is clearly amuletic, and merely by association with it the finger-ring may be seen as an amulet. It can also be paralleled by iron rings of amuletic significance from Shakenoak Farm, Oxfordshire (Brodrigg, Hands and Walker 1973, fig 53, 339), themselves paralleled by deposits in Anglo-Saxon graves.

Grave	Sex	Age	Position	Description	CAR 2 catalogue number
G41	M	middle-aged	left index finger	cu-al, plain	1749
G171	(F)	12-15 yrs	inside coffin, SW corner, in pile with other deposits	cu-al, notched cu-al, crenellated	1766 1768
G174	F	adult	inside coffin, by pelvis, ?on finger of right hand	silver, crenellated	1789
G439	M	young	inside coffin, near lumbar vertebrae, probably deposited on chest	cu-al, notched	1765
G503	(F)	young infant	threaded on bead armlet placed inside coffin by left hand	iron, with setting	1794
G537	(F)	adult	inside coffin, ?on fingers of left hand	cu-al, plain	1752-3
G647	(F)	adult	inside coffin, W end, in pile with other deposits	white-metal, transverse grooves white-metal, with setting	1790 1791-2

Table 2.56. Finger-rings from Period 2 graves, cu-al... copper-alloy; F... female; (F)... inferred from grave goods; M... male; S... south; W... west. [Pages 142-5]

An unusual combination of factors sets the copper-alloy ring from G439 apart from the three previously identified uses. As with those in the first group it is decorated, but it was found in the grave of a young adult male. It cannot be paralleled by the ring in G41 for it could not have been on a finger but lay near the lumbar vertebrae (Fig 2.79b). This position is similar to that of a group of coins in the male burial G431 (p 156) and suggests that the ring was deliberately placed on either the chest of the corpse or the coffin lid at the time of burial. (Alternatively, it could have been residual in the fill thrown onto the coffin lid and thus fell down to the area of the spine with the decay of the lid and the corpse.)

In view of the age and sex of the corpse, a possible reason for the ring's deposition may be that it was a betrothal ring returned when the contract was broken by death. The form of the hoop suggests another possibility. Its terminals have been beaten flat and soldered together to produce a subrectangular plain bezel (CAR 2, fig 50, 1765), and though nothing appears to have been fixed to this join, it is crude and would have been best hidden by an attached setting such as was soldered to the rings from G647 (*ibid*, fig 52, 1791), or that from grave 336 at Lankhills, Winchester, Hampshire (Clarke 1979, fig 90, 354). It may have carried a seal which was removed from the hoop on its owner's death by another member of the



Fig 2.79 Finger-rings in Period 2 graves. See also Figs 2.74b, 2.75d-e, 2.77c. [Pages 142-5]

family who wished to have it placed in a new setting.

Whatever the reason for the inclusion of this ring in G439, it is clear that finger-rings were usually associated with older children or adults but, in a secondary role, may have been deposited with infants. When included in female burials the rings had a decorative function, but when in male burials a different, possibly more personal, aspect was likely.

g) Headband

[Figs 2.21, 2.73, 2.80]

Grave 404, identified as the burial of a small female child from the evidence of the coffin size and the presence of armlets (Figs 2.21, 2.73), contained small fragments of copper-alloy and glass (Fig 2.80; CAR 2, 1799-1801). Similar glass and metal pieces came from a leather headband in grave 323 (dated 350-70) in the Lankhills cemetery, Winchester, Hampshire and in a small number of continental graves (Clarke 1979, 317). The Lankhills headband was found across the brow of a 5- to 6-year-old child, and at least two of the continental graves were also of children.

The headband fittings in G404 lay with three armlets (Table 2.52) at the west end of the coffin in a patch of dark-stained soil which represented not only all that remained of the leather band but also linen used to wrap the pile of deposits (p 129).

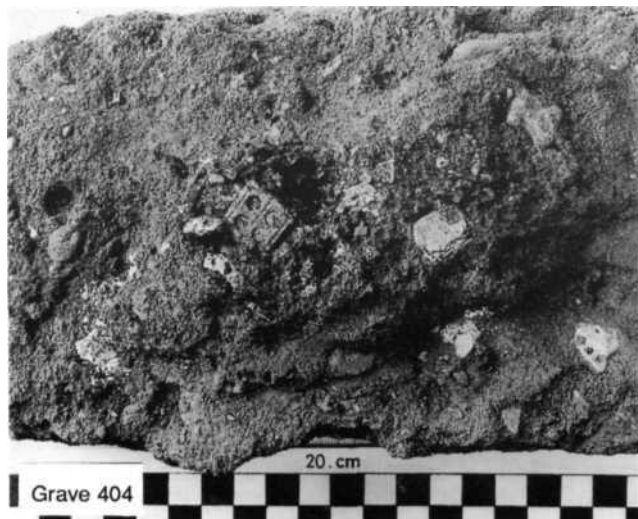


Fig 2.80 Fittings from a headband in G404, Period 2.
See also Fig 2.77f.

h) Belts and belt-fittings

[Figs 2.21, 2.73, 2.81]

One grave, G101 (Figs 2.21, 2.73), contained a pair of leather belts, folded and placed parallel to each other inside the coffin to the right of the head (Fig 2.81). The burial is that of a 9- to 11-year-old child.

Each belt had a copper-alloy D-shaped buckle and belt-plate fitted to one end, and a nail-cleaner-shaped strap-end and belt-plate at the other. The belt-plates are of folded, or 'double leaf' form, decorated with repoussé beading and bosses. The edges of the blades of the strap-ends are chip-carved. Though similar, the two sets of fittings are not exact pairs. One is wider and longer than the other, and the patterns of decoration on the belt-plates and strap-ends, and the precise form of the latter, vary (CAR 1, fig 15, 1-4).

Grave 106 at Lankhills contained a D-shaped buckle with repoussé-decorated belt-plate and a chip-carved 'nail-cleaner', almost certainly from the other end of the belt but missing its hinged plate (Clarke 1979, 272-3, 254-5, fig 72, 126, 127). Grave 106 is dated to 350-70/90, and a date at the end of this range would suit the stratigraphy of the Butt Road grave (Table 2.67).

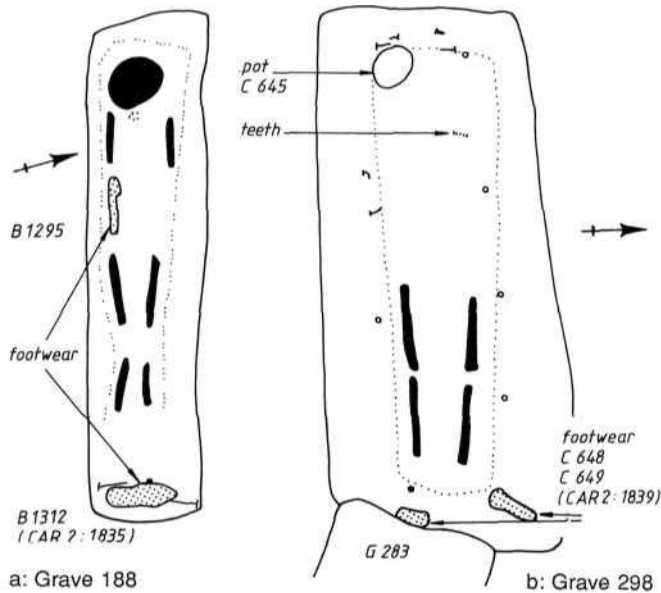


Fig 2.81 Copper-alloy fittings from two leather belts in G101, Period 2.

i) Footwear

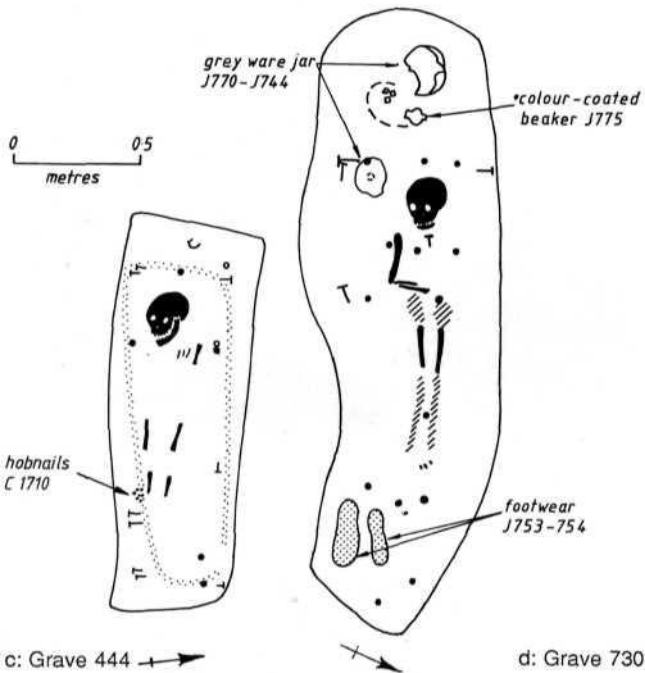
[Table 2.57; Figs 2.21, 2.73, 2.77, 2.82]

Seven graves contained hobnailed footwear (Figs 2.21, 2.73). In six graves a pair of shoes was present, but only one shoe was found in G613, the other presumably having been removed by a later grave (Table 2.57). In five cases the shoes were placed inside the coffin near the feet (Figs 2.77c, 2.82c-d), though in G500 they were worn at the time of burial (Fig 2.82e). In G188 they lay outside the coffin, one across the east end of the grave, the other near the middle of the south side, level with the right forearm (Fig 2.82a). The seventh pair, in G298, were placed in the foot end of the grave when it had been backfilled to the level of the lid (Fig 2.82b).



Two burials were of children, one an adolescent female (sex identified by deposited armlets and a necklace), and one 4 years old. No other grave goods were placed with the younger child. The remaining burials were of adults, four identified as such by the skeletal material and one, G613, by the apparent length of the coffin. Only two, a male in G188 and a female in G730, were sexed. The latter grave also contained two pottery vessels. No other grave goods were present in two of the unsexed adult graves (G500, G613), but in G298 a pottery jar was deposited.

The frequency of footwear as a deposit in Period 1 Phase 3 suggests that some, at least, of the Period 2 graves, may belong to the same pattern of ritual deposit and thus date to early in the period. This is almost certainly true of G298 and G730, and may also be of G500 and G613 (Table 2.67). However, the stratigraphy of G171, G188, and G444 indicates a later date for these graves, and there may have been a continuing, if infrequently practised, tendency to include footwear among grave deposits.



Toilet equipment

a) Combs

[Table 2.58; Figs 2.21, 2.73-2.77, 2.83]

Seven antler combs, all unfortunately poorly preserved, were deposited in Period 2 graves (Figs 2.21, 2.73) and an eighth, found in Period 2 grave fill (G685), may also originally have been a grave deposit (perhaps from G688, cut by G685).

All the combs are composite and double-sided, a type belonging principally to the last third of the 4th century (Galloway 1979, 247), and this date is reinforced by the comb from G647, deposited in a grave which contained a coin of Valens (367-75) in the fill. The comb from G109, with its rather narrower connecting-plate and carelessly-applied iron rivets, was seen by Dr Galloway as perhaps being rather later than the rest (CAR 2, 57).



From Table 2.58 it can be seen that the position of the comb in G487 is anomalous and this item may thus be residual in the fill of the grave rather than a genuine deposit. It lay beneath the right foot of a middle-aged unsexed skeleton, and was not accompanied by any other deposit (Fig 2.83d). Five of the other six combs, whether deposited alone or accompanied by jewellery, were placed by the skull (Figs 2.74b, 2.75d, 2.76c, 2.83a-c), while the sixth was in a box which had been placed by the left hip and which also contained jewellery (Fig 2.77b). However, it would be unwise to dismiss completely the comb in G487 as a possible grave deposit when in two graves at Lankhills, Winchester, Hampshire, a comb was placed near the feet, even though the corpses had been wearing personal ornaments at burial (Clarke 1979, 150).

Fig 2.82 Footwear in Period 2 graves. See also Fig 2.77c. Plans 1:30. [Pages 145-6]

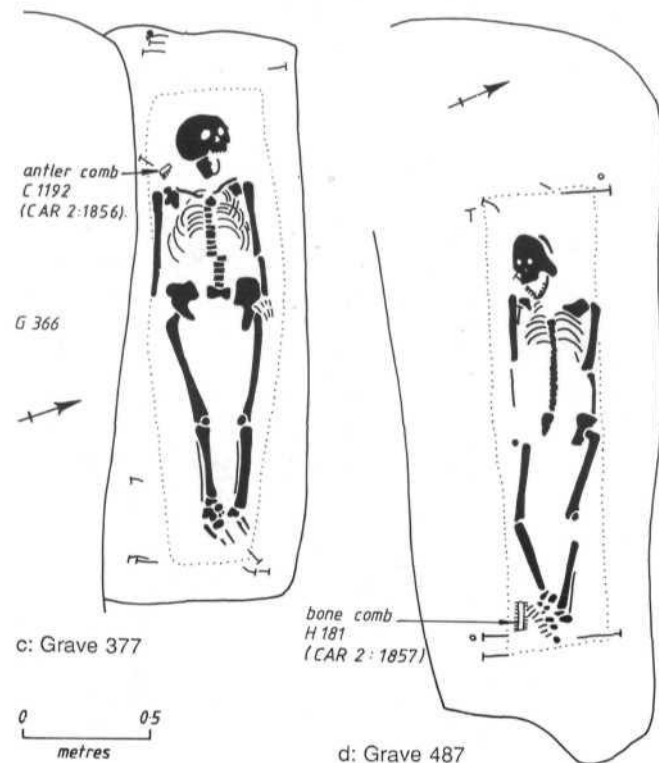


Fig 2.83 Combs in Period 2 graves. See also Figs 2.74b, 2.75d, 2.76c, 2.77b. Plans 1:30. [Pages 146-7]

Two of the Butt Road graves containing combs were burials of young children identified as female by the inclusion of jewellery among the deposits. Three more were of adult females (one young, the other sexed by accompanying jewellery), one of an adult male, and one of a middle-aged unsexed adult. On this evidence therefore combs were more likely to be recovered from female graves, but not exclusively so, and all age groups apart from the elderly and small infants were also represented. Though only one of the Butt Road skeletons found with a comb is male, this association is not unusual, eg graves 5 and 413 at Lankhills (*ibid*, 24, 84).

Household and other items

While in Period 1 Phase 3 pottery vessels were the objects most frequently used to furnish inhumations, in Period 2 they were far less common, only thirteen being deposited in eleven burials, as opposed to 139 items of jewellery deposited in 22 burials. Moreover, not only were ceramics less frequently deposited than jewellery in Period 2, but the ratio of pottery to glass vessels was also very different, 20:1 in Period 1 Phase 3, but 13:8 in Period 2. This decline in the use of ceramics as ritual deposits indicates a clear change in depositional practice, and suggests that a difference of date between graves with pots and those with jewellery, and possibly between graves with pots and those with glass vessels, may be detectable. As the deposition of ceramic vessels was more frequent in Period 1 Phase 3, then at least some Period 2 graves so furnished, especially those containing similar vessels, can probably be dated to within the first few years of the later period.

As in Period 1 Phase 3 the predominant form is the coarse grey ware jar or cooking pot CAM 268, which was deposited in three graves of unsexed adults (G298, G299, G390) and one female grave (G730). All the jars are full-sized, and that in G730 has the flattened rounded rim of examples dating to the first third of the 4th century (p 55). The form as a whole is unlikely to have survived much beyond c 325 (Going 1987, 25).

Most of the graves containing a pottery vessel, or vessels, were of adults, with only two, G295 and G58, definitely being of children, young in both cases. Three of the adult burials can be sexed as female (one young), but none as male, though the unguentarium was associated with both a male and a female (both middle-aged).

Vessels were not the only items of household equipment deposited. Grave 69 contained a hinged wooden box with external copper-alloy mounts, and G519 may also have contained a box, though its identification is less certain.

Period 2: grave goods (household items (boxes))

Grave	Sex	Age	Position	CAR 2 catalogue number
G171	(F)	12-15 years	one pair, inside coffin, in SE corner at right angles to each other	1833
G188	M	adult	one pair, outside coffin, one across E end, one near middle of S side	1835
G298	?	adult	one pair, outside coffin, level with lid, one in NE and one in SE corner	1839
G444	I	4 years	one pair, inside coffin, SE corner by right foot	- (?stolen)
G500	?	young	on feet, coffined burial	1846
G613	?	? (adult)	one shoe, inside coffin, near NE corner; other shoe probably on same side and so removed by G607	-
G730	F	adult	one pair, inside coffin, in SE corner	-

Table 2.57. Footwear in Period 2 graves. E... east; F... female; (F)... inferred from grave goods; /... indeterminate; M... male; N... north; S... south; (adult)... inferred from grave/coffin size; ?... uncertain. [Pages 145-6]

Grave	Sex	Age	Position	CAR 2 catalogue number
G109	(F)	4-5 yrs	inside coffin, NW corner, in pile with armlets	1853
G174	F	adult	inside coffin, NW corner, in pile with armlets and necklace	1854
G258	M	? (adult)	inside coffin, SW corner	1855
G377	F	young	inside coffin, SW corner	1856
G487	7	middle-aged	inside coffin, under right foot	1857
G519	(F)	7 yrs	inside coffin, middle N side, in box with armlets	1858
G647	(F)	adult	inside coffin, W end, with armlets and finger-rings	1859

Table 2.58. Combs from Period 2 graves. F... female; (F)... inferred from grave goods; M... male; N... north; S... south; W... west; (adult)... inferred from grave/coffin size; ?... uncertain. [Pages 146-7]

a) Boxes

[Figs 2.21, 2.73, 2.77, 2.84]

In G69 (Figs 2.21, 2.73) jewellery had been deposited in the grave in a wooden box with copper-alloy and iron fittings (CAR 2, fig 90), possibly lined with cloth (p 129). The box clearly had a hinged lid, lock, and decorative external fittings (*ibid*, fig 91; Fig 2.84), but cannot be fully reconstructed. The key was still in the lock.

There was probably also a box, containing armlets and a comb, in G519 (Figs 2.21, 2.73), its presence indicated by copper-alloy and iron fittings around the deposits (CAR 2, 2214-2222). The identification of these fittings as belonging to a box is rather tentative, but if they do derive from one its lid was not hinged, nor did it appear to be lockable.

The box in G69 was placed inside the coffin near the feet (Fig 2.77a), that in G519 inside the coffin near the left hip (Fig 2.77b). Grave 69 was the burial of an adult (or possibly an older adolescent, p 130), G519 that of a 7-year-old child. Both can be sexed as female on the evidence of the jewellery contained within the boxes.



Fig 2.84 Fittings from a wooden box in G69, Period 2.

b) Pottery vessels

by C J Going

[Table 2.59; Figs 2.21, 2.70, 2.73, 2.85-2.86]

Grave 58	Fig 2.85a, 2.86a. BUC B59. Small necked jar of Oxford ?red-painted ware.
	Fig 2.85a, 2.86b. BUC B60. Small necked jar of Oxford ?red-painted ware.
Grave 295	Fig 2.70a, 2.86c. BUC C519. Narrow-necked jar (CAM 281 type) in a coarse reduced ware. Probably locally-made. The rim is missing.
Grave 298	Fig 2.85b. BUC C645. Coarse reduced ware jar (CAM 268). (Stolen from site, but identified from photographs.)
Grave 299	Fig 2.85c, 2.86d. BUC C633. Coarse reduced ware jar (CAM 268) with hooked rim.
Grave 320	Fig 2.85h, 2.86e. BUC C911. Plain-rimmed dish, apparently black-burnished 1 ware (Gillam 1970, type 329).
Grave 390	Fig 2.85d. BUC C1273. Coarse reduced ware jar (CAM 268).
Grave 395/ Grave 396	Fig 2.85e, 2.86f. BUC C1467. Large unguentarium-like form, rare. The rim is missing. Possibly from Brockley Hill.
Grave 452	Fig 2.85f, 2.86g. BUC D87. Colchester colour-coated beaker, plain-rimmed, bag-shaped (CAM 392). Probably late Antonine or shortly after.
Grave 621	Fig 2.85g, 2.86h. BUC E910. Narrow-necked coarse reduced ware jar, a variant of CAM 281 (Hull 1963, fig 6.17). The form is reminiscent of the example in G295. Date range probably later 3rd to 4th century.
Grave 723	Fig 2.85i, 2.86l. BUC J560. Hadham ware imitation of flanged bowl, Dragendorff form 38. Date range probably later 3rd to 4th century.
Grave 730	Fig 2.86j. BUC J770/774. Coarse reduced ware jar (CAM 268) with rounded rim. Date range uncertain, but probably later 3rd to early 4th century.
	Fig 2.86k. BUC J775. Nene Valley colour-coated beaker, decorated with white paint. Date range later 3rd to 4th century.

Of these thirteen vessels, three are colour-coated wares, one each from Colchester, the Nene Valley, and Hadham. Also present is one example from the Dorset black-burnished industry, one from the Verulamium region, and two probably from the Oxfordshire kilns. The remaining pots are almost certainly of local manufacture.

Of the 669 interments at Butt Road during Period 2 only 11 (1.5 per cent) contained pottery vessels which could reasonably be regarded as grave goods. The proportion is substantially smaller than at 4th-century Lankhills, Winchester, Hampshire (about 20 percent), and is more closely comparable with data from the cemetery at Poundbury, Dorchester, Dorset (less than 5 per cent). It is clear from a comparison of the number of Period 1 Phase 3 graves containing pottery vessels that the practice of depositing ceramic goods in graves declined during the 4th century. The usual reason advanced is the jettisoning of the pagan rite of grave provision with the advance of Christianity, but the truth is as ever more complex, and has been explored in the discussion of the ceramic material deposited during Period 1 Phase 3 (pp 47, 49).

Examples in Period 2 of the chronological dislocation detected in both Period 1 Phase 2 and Phase 3 graves come from G395/G396 and G452. The Brockley Hill vessel shared by G395/G396 would appear to be of Antonine date, or not much later, while the locally-made bag-shaped beaker in G452 seems to be at least 100, possibly 150, years older than the grave it accompanies. None of the remaining ceramic vessels in Period 2 graves are particularly diagnostic chronologically, except for the Hadham ware bowl in G723, which may be as late as the early to mid 4th century. The ceramic revival of the middle decades of the 4th century (p 49) is scarcely represented save for the two ?Oxfordshire products in G58.

These beakers are also of some interest in that though both are of the same form and the same fabric, they are not an exactly-matched pair. One is

Grave	Sex	Age	Find no(s)	Pot no	Fabric code	Form no	Description
G58	I	4-6 years	B59	P783	MQ	59	beaker
			B60	P3345	MQ	59	beaker
G295	I	2 years	C519	P774	GX	199	jar
G298	?	adult	C645	-	GX	156	jar
G299	?	adult	C633	P777	GX	156	jar
G320	-	-	C911	P771	GA	11	dish
G390	?	adult	C1273	-	GX	156	jar
G395	M	middle-aged)	C1467	P786	FJ	220	unguentarium
G396	F	middle-aged)					
G452	F	young	D87	P788	CZ	2	beaker
G621	?	adult	E910	P778	GX	197	jar
G723	F	adult	J560	P4435	CH	404	bowl
G730	F	adult	J770/774	P4453	GX	156	jar
			J 775	P4454	EA	50	beaker

Table 2.59. Pottery vessels from the Period 2 cemetery. CH... Hadham ware; CZ... Colchester colour-coat; EA... Nene Valley colour-coat; F... female; FJ... Brockley Hill ware; GA... black-burnished 1 ware; GX... coarse grey ware; I... indeterminate; M... male; MQ... Oxford-type ware; ?... uncertain. [Pages 147 & 149-56]

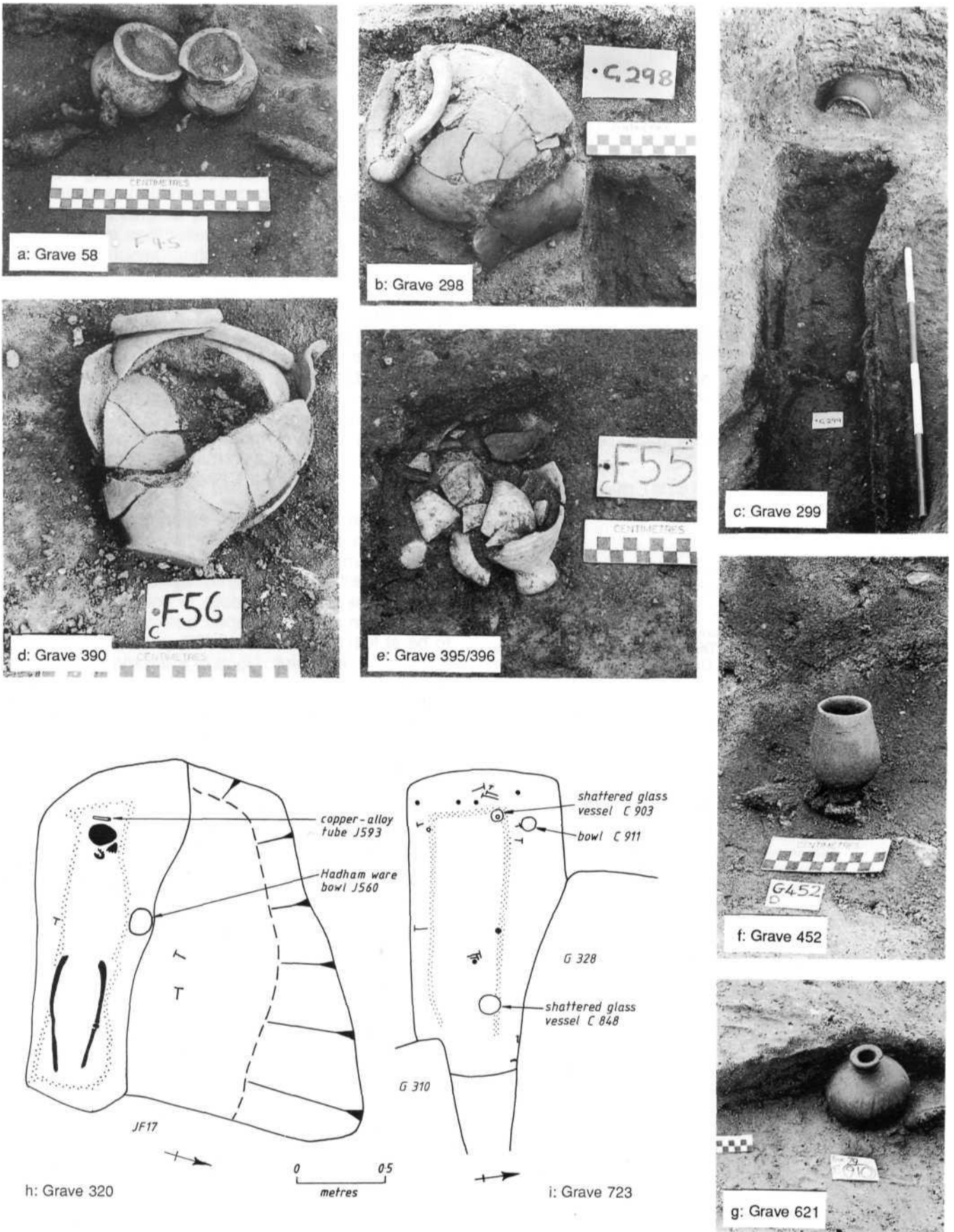


Fig 2.85 Pottery vessels in Period 2 graves. See also Figs 2.70a, 2.82b, d. Plans 1:30. [Pages 149-52]

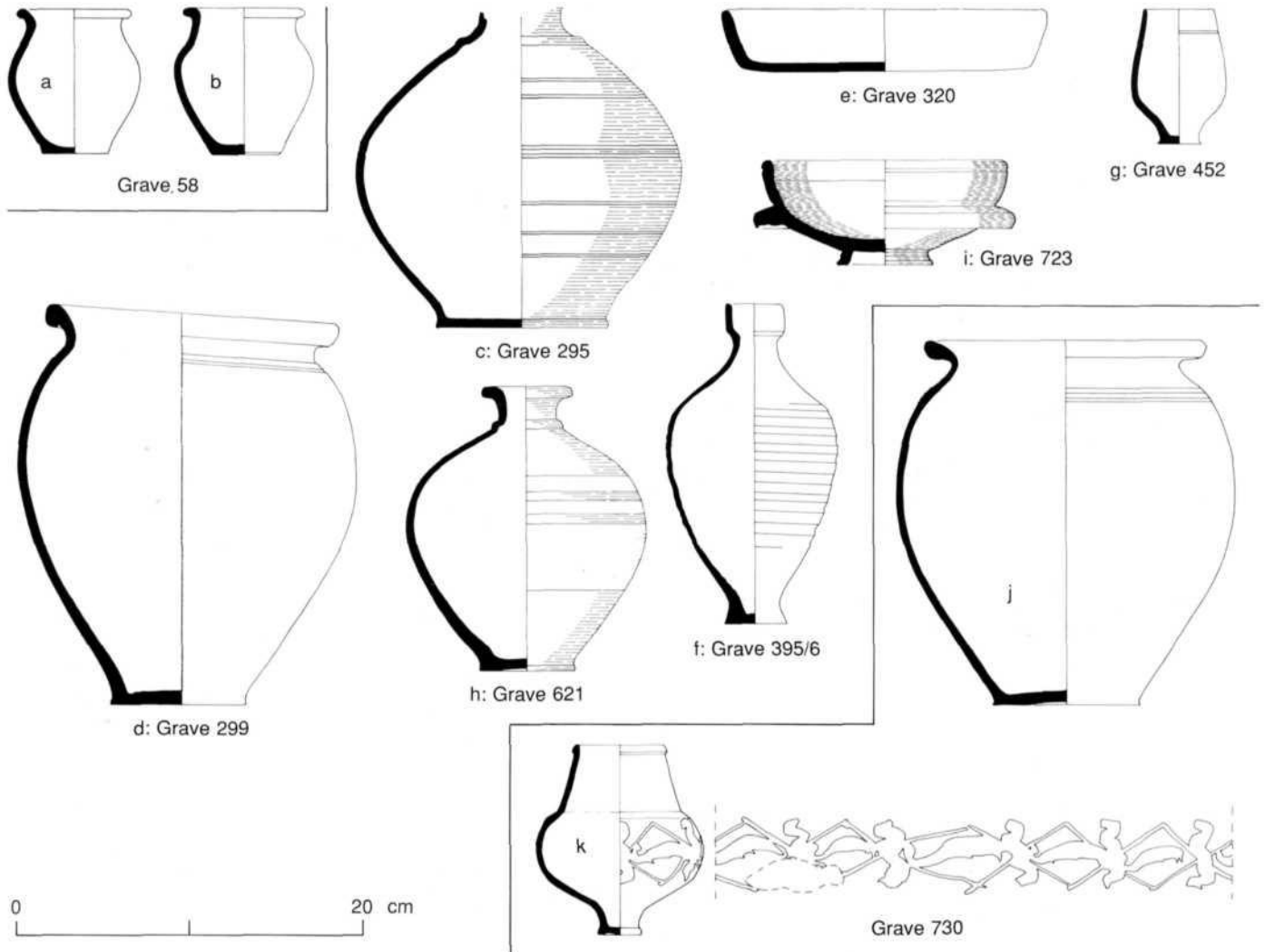


Fig 2.86 Pottery vessels from Period 2 graves. 1:4. [Pages 149-52]

spalled, probably through wear, while the other shows no sign of either wear or deliberate damage, and one is slightly taller than the other, the difference being found in a slightly less-accentuated shoulder and longer neck. As these vessels were deposited in a child's grave, it is possible that they should be regarded as miniature jars, rather than beakers. If so, they are the only examples in Period 2 of the deposition of miniature vessels in a grave. •

c) Pottery vessels: location within and dating of the graves

[Table 2.60]

Most of the pots, as with those in Period 1 Phase 3, were deposited upright, and most were on the bottom of the grave outside the coffin. Only one, in G299, was deposited level with the coffin lid, and only one, in G621, was placed inside the coffin (Table 2.60). There

appears to have been no clear preference for placing the vessels at either the head or the foot end of the grave.

A date early in Period 2 can be put forward for the four graves containing a CAM 268 jar. All four graves are primary graves in a sequence, and three (G298, G299, G390) are stratigraphically early and are considered to represent the survival of Period 1 Phase 3 Group C into Period 2 (pp 56-7). The fourth grave (G730) lay not far from the Period 1 Phase 3 Group E burial, G624, which had been furnished with a miniature example of CAM 268, and the vessels in both graves exhibited the rounded rim variation dated to the first third of the 4th century. Grave 730 may belong to Group E and almost certainly dates to early in Period 2.

Four more graves furnished with pottery vessels are stratigraphically early: G621 (Group E) and G295

(each contained a narrow-necked, narrow-mouthed grey ware jar), G320 (a black-burnished 1 ware dish and two glass vessels), and G395/G396 (a Brockley Hill unguentarium). However, though both G295 and G395/G396 are early, the latter certainly, and the former possibly, is later than some of its neighbours (pp115, 123).

Two graves (G452, G723) which contain a pottery vessel have no direct relationship within any other grave. Grave 452 may be early as it was furnished with a beaker of Colchester colour-coat, already old by the beginning of Period 2. Grave 723, on the other hand, contained a Hadham ware bowl which could have been produced by early Period 2, but which could also belong later in the period.

One grave, G58, can definitely be assigned a date late in Period 2. Not only is it stratigraphically late, the third grave in a sequence of three, but also the two Oxford-type ware painted beakers or miniature jars which it contained can be dated to no earlier than 360/75, and one had clearly seen some use. Grave 58, therefore, can be set apart from all the other graves containing a ceramic vessel or vessels, except possibly G723, by virtue of its later date, established both from stratigraphy and by direct dating of its deposits.

d) Glass vessels

[Tables 2.60-2.61; Figs 2.21, 2.73, 2.87]

Eight glass vessels were deposited in six graves, three of which lay close together in a row in the southern area of the site and probably form a family group linked by a uniformity of deposit (Group H, pp 92, 158; Figs 2.21, 2.73).

Only one of these vessels was definitely deposited with a child (G15), the others furnished adult burials, of which one was male (G180), one female (G174), and one probably female (G132) (Table 2.61). Only the bottle in G132 was deposited outside the coffin, all the other glass vessels lay inside. This contrasts with the location of the deposited pots, though, as with the pots, no preference for either the head or the foot end of the grave could be detected from the position of the glass vessels (Table 2.60).

The early or late pattern detected for many of the grave goods, notably armlets and pottery vessels, is repeated for glass vessels. One of the six graves can be dated to early in Period 2, and four, including the family group, to late in the period. The fifth may also be late.

Grave 320, which contained a black-burnished 1 ware dish in addition to two glass vessels, is stratigraphically early in Period 2, while G15 contained, suspended on an armlet, two coins dated to 364-75 and so must belong late in Period 2.

Also late are G132, G174, and G180. These three graves shared a similar alignment, and lay in a row near the southern boundary of the cemetery. Though none was part of a long sequence of burials, both G132 and the adjacent G180 cut at least two earlier

Grave	Location relative to coffin	Location relative to corpse	Position
<i>Pottery</i>			
G58	outside	head end	upright
	outside	head end	upright
G295	outside	foot end	?upright
G298	outside on lid	head end	on side
G299	outside	foot end	on side, in fill level with lid ?
G320	outside	head end	?
G390	-	by feet	scattered fragments
G395+396	outside, between coffins	foot end	on side
G452	outside	head end	upright
G621	inside	head end	upright
G723	outside	left side	upright
G730	outside	head end	inverted
	outside	head end	on side
<i>Glass</i>			
G15	inside	head end	fragments
G132	outside	head end	upright
G174	inside	foot end	?upright
G180	inside	foot end	?on side
	inside	foot end	fragments
G320	inside	head end	fragments
	inside	foot end	fragments
G620	inside	foot end	fragments

Table 2.60. The location of pottery and glass vessels in Period 2 graves. [Pages 149-52]

Grave	Sex	Age	Position	Description	CAR 8 catalogue number
G15	(F)	(infant/child)	inside coffin, W end	globular jug	1164
G132	?F	middle-aged	outside coffin, SW corner	cylindrical bottle	2257
G174	F	adult	inside coffin, NE corner, across left foot	barrel jug	2259
G180	M	middle-aged	inside coffin, SE corner	ovoid jug	1160
				hemispherical cup	553
G320	-	-	inside coffin, NW corner	shattered fragments	-
			inside coffin, NE corner	shattered fragments	-
G620	?	adult	inside coffin, SE corner	cylindrical vessel, ?barrel jug	2261

Table 2.61. Glass vessels in Period 2 graves,. E... east; F... female; ?F... probable female; (F)... inferred from grave goods; M... male; N... north; S... south; W... west; ?... uncertain. [Pages 152-4]

graves, and were not cut by any later burial. No clear relationships could be established for G174, but it is likely to have cut, rather than been cut by, neighbouring burials. Grave 174 contained an antler comb, which places the burial within the last third of the 4th century, and the glass jug in G180 is also likely to date to late in the 4th century. Thus G132, related by stratigraphy and depositional practice to G174 and G180, can also be assigned a date late in Period 2.

A date based on stratigraphy cannot be assigned to G620, an isolated grave, nor can the vessel deposited within it be closely dated.

Though the sample here is small, it does seem that graves containing glass vessels were both early and late in Period 2, and that the decline over the 4th century in the use of pots as grave goods is not paralleled but reversed by glass ware. This pattern is also detectable at Lankhills (Harden 1979, 209).

Hilary Cool and Jenny Price have provided the following catalogue of the vessels:

Grave 15 BUC A269 G15, CAR 8, no 1164. Jug, approximately 700 fragments, large parts of vessel missing. Green-tinged colourless glass. Small globular jugs with rod handles were in use during the late 4th century. They appear to be a development of Romano-British glass houses as they are rare in the other north-western provinces. They are generally not very common, but are relatively numerous at Colchester. There are three others amongst the unpublished collections of Colchester Museums, one of which (CM 235) is almost complete, suggesting that it may have come from a grave. They have also been found as grave goods at Lankhills cemetery, Winchester, Hants (Harden 1979, 217 (class VI), fig 27).

Grave 132 Fig 2.87a. BUC B1098 G132, SF BUC 393, CAR 8, no 2257. Bottle in sixteen fragments, small parts of rim, neck and shoulder missing. Pale greenish colourless glass. Funnel-mouthed cylindrical bottles, both with and without handles (Isings 1957, forms 102b, 126-7), came into use during the late 3rd century but are primarily a 4th-century form.

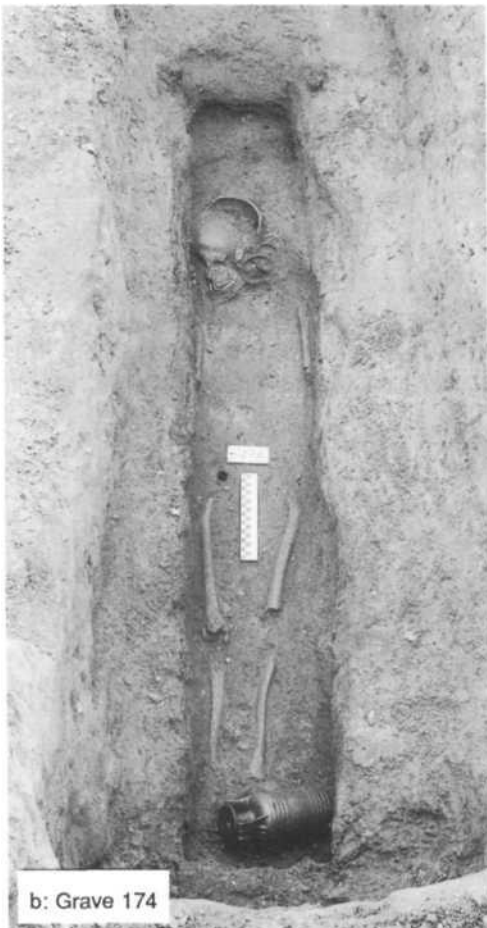


Fig 2.87 Glass vessels in Period 2 graves. See also Fig 2.754. [Pages 152-4]

These bottles are difficult to identify from fragments, but appear to be not uncommon in Roman Britain. Smaller bottles of this type without handles have been found in 4th-century graves at Gravel Hill, Cambridgeshire (Liversidge 1977, 16, pi 2), and York, North Yorkshire (Harden 1962, 140, figs 89.H13, 90.HG146.3-4). A bottle with two handles was found at the Lankhills cemetery but had probably been redeposited (Harden 1979, 219 no 549, fig 27).

Grave 174 Fig 2.87b. BUC B1103 G174, SF BUC 394, CARS, no 2259. Complete barrel jug. Pale green glass. Two-handled mould blown barrel jugs or Frontinus bottles (Isings 1957, form 128) are 4th-century vessels which were in use mainly during the middle and later part of the century. Fragments from barrel jugs are relatively common finds on Romano-British sites, but it is not generally possible to know whether they came from the two-handled form, like this one from Butt Road, or the one-handled form (*ibid*, form 89) which was also in use earlier. In Colchester fragments have been found at the Balkerne Lane and Lion Walk sites (CAR 8, nos 2260, 2262), and the lower body and base of a miniature pale blue/green barrel jug was found in the Union grounds, Colchester (CM 826.30). There is one other two-handled barrel jug from a grave in Britain, which was found at Bex Hill, Milton-next-Sittingbourne, Kent (Payne 1874, 168, fig 2; Thorpe 1935, pi lib).

Grave 180 Fig 2.87c. BUC B1180 G180, SF BUC 413, CARS, no 553. Cup in twelve fragments, three small pieces missing. Pale greenish colourless glass. Greenish colourless hemispherical cups with cracked-off rims came into use at the end of the 3rd century and were one of the two dominant drinking cups in use throughout the 4th century. They have been found at many sites in Colchester. Most hemispherical cups are decorated with abraded bands, and the combination of these and other decorative elements such as the arcaded trail on no 553 is much rarer. A cup with arcaded trails very similar to no 553 was found in a grave dated 330-50 at the Lankhills cemetery (Harden 1979, 211 no 385, fig 37), and examples without trails were found with 4th-century

inhumations elsewhere in that cemetery (*ibid*, 213 no 62, fig 27, (dated 350-70)) and at Glaston, Leicestershire (Webster 1950, 72 no 1, fig 1).

Fig 2.87c. BUC B1180 G180, SF BUC 414, CARS, no 1160. Complete jug. Pale greenish colourless glass. The funnel-mouthed jug with a thick trail below a fire-rounded rim edge and a pushed-in base ring is the commonest 4th-century jug form found in Roman Britain. The optic blown ribbing on no 1160 suggests that the vessel is likely to be of mid to late 4th-century date. Other examples of funnel-mouthed jugs from 4th-century Romano-British burials include ones from York (Harden 1962, 140 no H12, pi 67, fig 58), and the Lankhills cemetery (*id* 1979, 217 no 310, fig 27 (dated 390-410)). From the state of its preservation an earlier find from Colchester, which is very similar to no 1160 (Thorpe 1935, pi IVc), is also most likely to have come from a grave. A large part of a globular funnel-mouthed jug decorated with spiral trails was also found at Butt Road (CAR 8, no 1161), and is likely to represent a disturbed grave offering.

Grave 320 BUC C848 and C911 G320. This grave contained approximately 500 small fragments of colourless glass. The thickness and weathering of the fragments confirms the *in situ* evidence that two vessels of unknown form are represented. One of these (C911) was indented.

Grave 620 BUC H763 G620, SF BUC 1663, CAR 8, no 2261. Approximately 250 fragments of colourless glass. The fragments found in this grave come from the lower body and base of a cylindrical mould blown vessel with horizontal corrugations which cannot be reconstructed. It is most likely to be a Frontinus bottle (see G174 above). •

e) Key

[Figs 2.21, 2.73]

A large iron lift key (CAR 2, 4149) was laid on the chest of an adult male in G628 (Figs 2.21, 2.73). This grave was second in a sequence of two, but, as the

Grave	Sex	Age	Position	Identification	Date
G15	(F)	(infant/child)	inside coffin on bead armband	House of Valentinian, CK as 275 (pierced)	364-78
				House of Valentinian, CK as 317 (pierced)	364-78
G69	(F)	adult	inside coffin on cu-al armband in box	Tetricus II, RIC 272 (pierced)	270-4
G406	(F)	(infant/child)	inside coffin on bead armband/necklace	Valens, CK as 319 (pierced)	367-75
G431	M	middle-aged	inside coffin on chest	House of Constantian, CK copy as 25	350-60
				House of Constantian, CK copy as 25	350-60
				House of Constantian, CK copy as 25	350-60
				Magnentius, CK copy as 5	350-60
				Magnentius, CK copy as 8	350-60
				Magnentius, CK copy as 414	350-60
G503	(F)	young infant	inside coffin on bead armband	Diadumenian, RIC 212 (pierced)	217-18

Table 2.62. Coins in Period 2 graves. (F)... inferred as female from grave goods; M... male; (infant/child)... inferred from grave/coffin size. [Page 156]

area to the east was destroyed by a large modern pit complex, it may really have been part of a much longer sequence. Its date is therefore uncertain.

This type of key probably opened a door lock (Manning 1985, 90). Why it was deposited in the grave is not entirely clear. Black (1986, 222) notes keys in pre-Roman and Roman burials, most notably in 4th-century inhumations at Old Ford, London, and Kelvedon, Essex. The two graves at Kelvedon are both dated to later than 350 (Rodwell 1988, 73, fig 59, 79-80). In a non-Christian cemetery a key may indicate adherence to the cult of either Epona or Sabazios (Black 1986, 222), and in the case of the former may be an example of a return to Celtic paganism as suggested by Dorothy Watts in the context of deposited armlets (p 141). In a Christian cemetery a key may be symbolic of status in life, or of entry, or the hope of entry, into the Christian afterlife.

f) Knife

[Figs 2.21, 2.73, 2.77c]

An iron knife with a copper-alloy handle was among the objects deposited in G171 (12- to 15-year old, identified as female from jewellery among the grave goods). The deposition of a knife in a female grave is not unusual (Clarke 1979, 250-1). Grave 171 can be dated by its association with G132, G174 and G180 (p 158) to the last third of the 4th century.

The knife blade appears to have had a straight back and an edge which rose in a straight line to the tip, now missing. Textile is preserved on the blade, which may have been sheathed in a leather scabbard (p 129). The handle is moulded into bead-and-reel motifs, and its terminal is pierced. A copper-alloy penannular ring passes through the terminal and is threaded with a length of S-link chain which includes a hook-and-eye fastener, usually associated with necklaces, eg G1 (CAR 2, fig 54, 1812). The chain can be paralleled by one from Lankhills, Winchester, Hampshire, though there no object appeared to have been suspended from it and the type of fastener differs (*ibid*, 68-9, fig 87, 405).

g) Bells on chain

[Figs 2.21, 2.73]

In the coffin of G94 (child burial), at the west end and probably therefore near the skull), lay a short length of iron chain on which were suspended two copper-alloy bells. A bell was found among the amulets in the ?purse in the Period 1 Phase 3 G278, and another was attached to a copper-alloy armlet in G1. The chain in G94 may have formed an armlet or necklace, and could thus be seen as jewellery, possibly amuletic. If so, then G94 may be linked in Period 2 to G15, G406, and G503. Alternatively, it may have been a toy similar to a rattle, linking it to the *sistrum*, the

pagan Roman priestly instrument. In a child's grave it is impossible to distinguish between a toy and a musical instrument.

The date of G94 is uncertain, it is an isolated burial cut only by the ?Period 2 ?foundation BF56 (p 99) but appears to be in a row with G53, a grave which is first in a sequence of three, and/or G61, which is second in a sequence of two and was probably marked on the surface by a wooden post.

h) Tube

[Figs 2.21, 2.73, 2.85, 2.88]

A copper-alloy tube lay close to the top of the skull of G723 (adult female) (Figs 2.85i, 2.88). The tube was not touching the bone, but there is some possibility that it may have been inside a high-piled coiffure. However, of several strands of organic material preserved on the metal of the tube, none proved to be human hair.

The tube is made in two parts, one slotting into the other, and may have been used to contain a powder or liquid, no trace of which remained. Such contents might have been cosmetic or prophylactic, for example, and thus in the latter case might represent a pagan element in the grave, but it is also possible to give the tube a Christian connotation by supposing that it might have contained oil used to anoint the body before burial.

Grave 723, some 8 m east of the cemetery church, has no direct relationship with any other burial (Fig 2.21, 2.73) and cannot be dated closely on either stratigraphic grounds or from the bowl of Hadham ware also deposited within it (Fig 2.85i).



Fig 2.88 Copper-alloy tube in G723, Period 2.

i) Coins

[Table 2.62; Figs 2.21, 2.73, 2.89]

Only one burial, G431 (Figs 2.21, 2.73), contained coins directly deposited in the grave, though from four graves came a further five coins which had been pierced and used as jewellery, usually amuletic (Table 2.62). All the coins were of copper-alloy.

Six coins were deposited in G431, four lay on the left ribs, one on the right ribs, and one was beneath the ribs (Fig 2.89). The wide area over which the coins were scattered suggests that they were placed loose on the chest of the corpse, rather than contained in a purse or pouch, though this possibility should not be excluded. All six coins are good-sized copies of regular issues, three of the House of Constantine falling horseman reverse type, and three of Magnentius, of which one is a falling horseman reverse type and two are two Victories with shield reverse types. All six can be dated to 350-60.

At Lankhills, Winchester, Hampshire, the coin evidence suggested a sudden fashion in burial practice over the years 350-65 for the ritual deposition of a large number of coins, and G431 at Butt Road may be seen as part of this trend. However, at Lankhills the fashion appeared to continue into the following decades, while at Butt Road G431 is the only grave so furnished.

Unfortunately, G431 is an isolated grave and so cannot be dated stratigraphically. Two alternative dates may be offered for it, of which the more obvious is the more likely. It may belong late in Period 2, a date suggested by the fact that it was not cut by any later burials, or it belongs within or not long after the

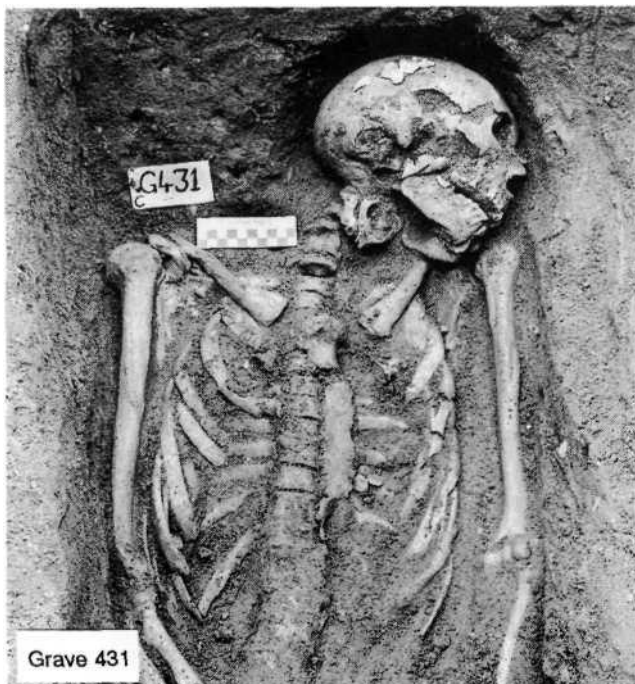


Fig 2.89 Coins on ribs of G431, Period 2.

date range of the coins. The latter is perhaps more likely, and, though this would appear to make G431 the only furnished grave which can be dated with reasonable certainty to 350-65, such a date would not be inconsistent with the unique character of the deposit.

The pierced coins and the dates of the graves within which they were deposited have been discussed under armlets (pp 137,141) and armlets/necklaces (p 141). They are summarised in Table 2.62.

The burial groups

[Table 2.63]

The characteristics of the possible family burial groups postulated on pp 92-3 are summarised in Table 2.63. Not included in the table are groups of graves associated by pathological evidence, apart from Group R (inca bone group), or graves with clear direct stratigraphical relationships only, that is, the multiple burials G41/G43, G121a-b, G191/G203, G395/G396, G622/G623, G645/G646, G663/G667/G674 and G677/G680, and the convincing stacked burials with no other associates G34/G42, G417/G424, and G683/G684 (Table 2.17). Possible stratigraphic family relationships for graves in the complex around the vaults CF55 and G366 (including Groups P and O) have been discussed on pp 114-18 and will not be repeated here. The survival of Groups C and E from Period 1 Phase 3 into Period 2 has been examined in detail on pp 56-7 and pp 57-8 respectively. Both groups as represented by the graves listed in Table 2.41 appear to be valid.

It should be stressed that in the groups in Table 2.63 only graves exhibiting specific characteristics are listed. 'Plain' adjacent graves are not included.

Group F, in the south-eastern part of the site, consists of four graves which contained deposited jewellery, primarily armlets. The graves were concentrated in an area measuring approximately 2.5 by 5 m, and at least two (G15, G69) were the final grave in a sequence. Grave 15 can be dated to late in Period 2 (p 141). The group is reasonably secure. It demonstrates a pattern of burying girl children and probably unmarried women (see p 130 for G69) with jewellery. Possibly also belonging to it is G24, a differently-aligned primary grave cut by G15.

Group G is less coherent but probably no less valid. It comprises four juvenile graves in an area of about 2 by 5 m not far to the north of Group F. At least two of the graves (G58, G101) can be dated to late in Period 2. Each was furnished, but idiosyncratically: two pottery beakers in G58, two copper-alloy bells on a length of iron chain in G94, two leather belts with copper-alloy fittings in G101, and a single silver hairpin (but see also p 130) in G115.

Grave	Sex	Age	Shared characteristics	Grave	Sex	Age	Shared characteristics
<i>Group C</i>				<i>Group K</i>			
G298	?	adult	pot jar outside coffin, aligned on Plot B boundary, primary grave	G61	F	young	grave marked on surface?, alignment, final grave
G299	?	adult	pot jar outside coffin, aligned on Plot B boundary, ?primary grave	G75	M	middle-aged	grave marked on surface, alignment, mid-range grave
G390	?	adult	pot jar, coffin not located, aligned on Plot B boundary, primary grave	G109	(F)	4-5 years	grave marked on surface, alignment, deposited jewellery, isolated grave
G369	F	young	aligned on Plot B boundary, primary grave	G188	M	adult	deposited footwear, alignment, adjacent to G109 & G219, mid-range or final grave
G433	?	adult	aligned on Plot B boundary, primary grave	G219	M	middle-aged	grave marked on surface, alignment, ?mid-range or final grave
<i>Group E</i>				<i>Group L</i>			
G603		(infant/child)	near church	G254		infant	?surface tile marker, shallow grave, tile coffin, alignment
G606		(adult)	near church, respects earlier grave	G695		(infant/child)	?surface tile marker, shallow grave, ?tile coffin, alignment
G613	?	(adult)	near church, respects earlier graves	G258	M	(adult)	alignment
G617	?	?	near church, respects earlier grave	<i>Group M</i>			
G618	?	adolescent	near church, respects earlier grave	G404	(F)	(child)	deposited jewellery, alignment
G621	?	adult	near church, respects earlier grave, pot jar inside coffin	G439	M	young	deposited jewellery, alignment
G626	?	adult	near church, respects earlier grave	G444	I	4 years	deposited footwear, alignment
G730	F	adult	pot jar outside coffin, primary grave on edge of group	G258	M	(adult)	deposited comb, alignment (see also Group L)
<i>Group F</i>				G431	M	middle-aged	deposited coins, alignment
G1	(F)	10 years	deposited jewellery, alignment, mid-range or final grave	<i>Group N</i>			
G15	(F)	(infant/child)	deposited jewellery, alignment, final grave	G226	?	adult	grave marked on surface?, alignment, ?final grave
G16	(F)	6 years	deposited jewellery, alignment, mid-range grave	G253	M	middle-aged	lid of coffin marked?, alignment, adjacent to G272 but relationship obscure
G69	(F)	adult	deposited jewellery, alignment, final grave	G272	?	adult	lid of coffin marked?, alignment, adjacent to G253 but relationship obscure
G24	(F)	(child)	deposited jewellery, primary grave	G246	M	adult	?stacked above G272, alignment, final grave
<i>Group G</i>				<i>Group Q</i>			
G58	I	4-6 years	deposited pot beakers, alignment, final grave	G211	M	old	coffin construction, mid-range grave
G94		(child)	deposited bells on chain, alignment, isolated grave	G434	F	young	coffin construction, ?primary grave
G101	(M)	9-11 years	deposited belts, alignment, final grave	G446	F	middle-aged	coffin construction, primary grave
G115	(F)	12-14 years	deposited hairpin, alignment, mid-range grave	G299	?	adult	coffin construction, ?primary grave (see also Group C)
<i>Group H</i>				G536	I	infant	coffin construction, ?primary grave
G132	?F	middle-aged	deposited glassware, alignment, mid-range or final grave	G603		(infant/child)	coffin construction, isolated grave (see also Group E)
G171	(F)	12-15 years	deposited jewellery, alignment, final grave	<i>Group R</i>			
G174	F	adult	deposited jewellery and glassware, alignment	G417	F	young	inca bone, alignment
G180	M	middle-aged	deposited glassware, alignment, mid-range or final grave	G419	?	middle-aged	inca bone, alignment
G440	F	middle-aged		G440	F	middle-aged	inca bone, alignment
<i>Group I</i>							
G110	M	middle-aged	stacked directly on coffin of G117				
G117	M	middle-aged	tile-marked coffin, alignment, primary grave				
G127		(infant)	tile-marked coffin, alignment, primary grave				
<i>Group J</i>							
G140	M	adult	tile-marked coffin, alignment, primary grave				
G141	F	adult	tile-marked coffin, alignment, primary grave				

Table 2.63. Characteristics of possible burial groups in the Period 2 cemetery. F... female; ?F... probable female; (F)... inferred from grave goods; 1... indeterminate; M... male; (M)... inferred from grave goods; eg (child)... inferred from grave/coffin size; ?... uncertain. [Pages 156-8]

Three of the graves in Group H, east of Groups F and G, contained a highly characteristic deposit of glass tableware (G132, G174, G180). Grave 174 also contained jewellery, which provides a link to the fourth member of the group, G171, the only non-adult grave in the group and the only one which was not accompanied by a glass vessel. Grave 171 (and perhaps G174) reflects the pattern shown by Group F of burying girl children with jewellery. The four graves lie in a row, and can be dated by an antler comb in G174 to the last third of the 4th century. They form a well-defined group.

Also well-defined is Group I, between Groups F and H. It is characterised by the marking of two of the coffins (the adjacent pair, G117 and G127) by tiles, and by the very clear stacking of the coffin of G110 directly on top of that of G117 before the latter had decayed (p 103).

A similar group is J, which consists of just two tile-marked coffins in primary graves close to Group H. The pair were adjacent, parallel but staggered.

The identification of Group K is tentative. To the immediate north of Group G, it centres on G109 and G219, two graves marked on the surface by tiles. Though isolated, G109 can be dated by an antler comb among the deposits to late in Period 2. Grave 219 was largely destroyed by a modern soakaway, and its relationships with neighbouring graves are obscure. Adjacent and parallel to G109 was G188, the east end of which butted onto the west end of G219. G188 was furnished, but cannot be easily dated. Graves 61 and 75 lay approximately 7 m apart, slightly west of G109 and to the south and north respectively. Grave 75 was marked on the surface by a line of stones, G61 may have been marked by a timber post.

Group L, near the centre of the southern part of the excavated area, consists of a pair of shallow infant graves which flanked the burial of an adult male. At least one of the pair contained a tile coffin, and both were probably marked on the surface by fragments of tile set upright at the west end of the grave. A link between the two appears likely. Whether G258 should be included is less certain. It was furnished with an antler comb and thus provides a date late in Period 2 for G695.

Grave 258 may also be linked to Group M, a row of at least three burials containing deposits just beyond its east end. These (G404, G439, G444) lay adjacent and parallel, and seem similar in depositional style to Group F in that two of the graves were of children and the third was of a young adult. If G258 can be seen as part of Group M, then so may G431. The latter lay slightly south and east of the row of three, and is notable for being the only grave containing a direct deposit of money.

Group N is ill-defined. It centres around a possible stack, G272 and G246 (pp 103-4). The lid of the lower coffin, G272, may have been marked by tile, as may the lid of the adjacent G253. Just west of these three

burials was a possible surface-marked grave, G226. This area of the site was much disturbed by modern activity, and relationships between the graves are obscure.

Group Q is also not convincing, postulating as it does a tenuous link through coffin construction rather than close horizontal stratigraphy, alignment, or the more personal aspects of burial such as deposits. Three of the graves (G211, G434, G446) are reasonably close together in the cemetery extension into Plot B, but the other three are scattered across the site. Grave 299 (Group C) belongs early in Period 2, and G536 and G603 may also predate the incorporation of Plot B.

Finally, Group R, near the centre of the eastern edge of the excavation, is well-defined. It consists of three graves, close together, on a similar alignment, but neatly spaced, in which the individuals shared in common a non-metrical variant of the skull, an inca bone.

Cemetery management

[Figs 2.21, 2.27-2.30, 2.43; Tables 2.64-2.65]

That there were family plots within the early Period 2 cemetery is apparent from the survival of the Period 1 Phase 3 Groups C and E in Period 2 (pp 56-8). However, whether or not the entire cemetery was divided into plots, their size, how clearly defined they were, and for how long each survived, is less easy to establish. Multiple burials, though evidence for family relationships (eg G645/G646, CF55, G663/G667/G674), do not necessarily indicate the existence of family plots throughout Period 2. Indeed, the interpretation of G663/G667/G674 suggests that in at least one case pressure for space initiated the 'booking' of a grave (pp 98-9).

That even some of the groups outlined in Table 2.63 are valid and date to late in the 4th century suggests that family plots were available and in use throughout Period 2. Vacant strips (ie pathways) between groups of graves might enable the identification of plots, but

Grave	Sex	Age
G404	(F)	(child)
G409	?	adult
G416	M	middle-aged
G426	M	middle-aged
G439	M	young
G441	M	middle-aged
G444	I	4 years

Table 2.64. Age and sex identifications in 'extended' Group M, Period 2. (F)... inferred as female from grave goods; I... indeterminate; M... male; (child)... inferred from grave/coffin size; ?uncertain. [Page 159]

there are few well-defined vacant patches in the cemetery, and most occur in areas damaged by post-Roman terracing, making the absence of graves impossible to guarantee.

The burials in the cemetery extension into Plot B are comparatively well-ordered, both rows and clusters of graves can be identified, and the area may offer an opportunity for the identification of plots and pathways (Fig 2.21).

For example, the three graves definitely in Group M lie in a row of seven graves which runs from G441 northwards to G416. If the 'primary' grave G445 is discounted, the row, 'extended' Group M, can be isolated from contact with any other grave. Possible paths run east, north, and south from the vacant strips around the group. The graves contained individuals of mixed age and sex (Table 2.64), though no adult female was identified.

This apparent lack of females could be accounted for if the four graves just north of the 'path' adjacent to G416 were to be included, however artificially, in Group M, rather than treated as a separate group. Three of the four, G403, G411 and G412, are of middle-aged females, the other, G410, is of an adult male.

The cluster of graves north-east of Group M is also worth examining. It is separated on the north by a narrow vacant strip from the vault burial CF55 and does not appear to be associated with the complex of graves around the vault. It runs west at least as far as G425, south at least as far as G405, and may include the three burials on the edge of the excavated area G389, G397, G406, though they are omitted from Table 2.65.

The range of age and sex of individuals in the cluster is strongly suggestive of a coherent family group, though here, in contrast to Group M, there is only one middle-aged male.

Grave	Sex	Age
G355	-	(child)
G356	I	2 years
G383	-	(child?)
G393	M	young
G394	I	tiny infant
G398	F	young
G399	F	middle-aged
G402	M	young
G405	M	middle-aged
G407	-	(infant/child)
G414	F	middle-aged
G423	?	young
G425	F	young
G432	I	2-3 years

Table 2.65. Age and sex identifications for a possible family group in the Period 2 cemetery. F... female; I... indeterminate; M... male; eg (child)... inferred from grave/coffin size; ?... uncertain.

The impression given not only by this cluster and Group M but by all the groups and the cemetery plan as a whole is of a mix of coherent units, some laid in short rows (typified by Group H), some in clusters (typified by Group F and the complex around the vaults CF55 and G366). The rows suggest that the areas of land available for family plots were small and quickly filled, a view supported by the multiple burial G663/G667/G674. On the other hand, the larger clusters suggest that a fair-sized family plot, once established, could continue in use for some time.

Given that most graves lacked any distinguishing characteristic, it is plainly difficult to identify extended groups. It may be that the short rows represent not small quickly-filled plots, but sub-groups within a large family area in which it was easy to lay graves out neatly with little intercutting. Thus, though the Period 1 Phase 3 Group A could not be picked up in Period 2, it may be that a substantial family plot survived in that part of the cemetery, so large that the graves dug within it over the years did not have to be concentrated to the same extent as those in, for example, the vault complex. Group H could then be seen in a wider context as just four members of an extended family whose graves stretched from the cemetery's southern boundary possibly as far north as the vault G203, and from close to or on the edge of the excavation at least as far west as G157. The likely existence of this large family plot may be seen as strengthened by the concentration in this area of individuals with enamel hypoplasia (Fig 2.43), and the non-metrical traits of a double supraorbital foramen (Fig 2.27), a full metopic suture (Fig 2.28), and some supernumerary bones (Fig 2.29-2.30). A combination of non-metrical traits can be taken to indicate a greater chance of family relationships (p 65).

The precise divisions of the cemetery and its management cannot, therefore, be readily explained, but there is sufficient evidence to state that family plots were in use, men and women were not segregated in death as they seem to have been at Lankhills (Clarke 1979, 126-7), and even very young children were not excluded from a formal burial.

The date of Period 2

[Figs 2.21, 2.23, 2.64-2.65; Tables 2.66-2.67]

The starting date for Period 2 is taken here to be 320/40, based on the coin evidence from the cemetery church, although it should be noted that John Davies feels that this could justifiably be refined to c 330 (pp 180-2). The date at which Plot B was incorporated into the cemetery is less easy to establish. The absence within it of ceramic deposits similar to those in Period 1 Phase 3 indicates that sufficient time had elapsed for these traditions to die out, while the length of its intercutting grave

sequences and the destructive nature of some of the interrelationships match that on many other parts of the site and show that it was in use for several decades.

Table 2.66 summarises the dating evidence available for the graves within the extension into Plot B. Scarce though it is, it suggests a date no earlier than c 350 for one grave (G431), and no earlier than c 365/7 for two others. One of the latter (G258) is the third grave in a sequence of four, but graves 1 and 2 in the sequence (G284, G288) are parallel and side by side, with only the pit edge of G284 cut. Only a short time need have elapsed before G288 was dug. Moreover, the skeletons of both these graves showed no sign of damage by G258, suggesting that it was dug deliberately short of their depth. The final burial of the four is of an infant (G695) set in a very shallow grave on the south-west corner of G258. The impression by all three later graves is not of casual digging on a supposedly empty plot, but of care taken to avoid damaging clearly visible earlier graves. No great length of time need therefore have passed between digging the first and last graves in the sequence.

While a date after c 360 for graves in the extension that are last or mid-range in a stratigraphic sequence is almost uniform, it is of particular interest that the two primary graves in Table 2.66 must also post-date c 360. The graves are adjacent and the fill of each contains late Roman shell-tempered ware which is likely to have reached Colchester sometime in the 360s/70s. A single grave cuts both (set between rather than into them), and the three lie in a fairly well-ordered part of the extension just north of Group M (p 158). In contrast to the adjacent vault complex (pp 114-18), there seems to have been little pressure on space in this area. This may be because the three graves represent a late encroachment onto a path or junction of paths, or because all graves in that area are late in date, as seems to be shown by Table 2.66.

There are very few damaging relationships between graves in the cemetery extension, those that do exist being found where the graves are most concentrated, for example, G407 and G432 near the eastern edge of the site. This lack of damage suggests that the land was not used for burials over a very long period, so that early burials could still be detected on the surface and avoided.

How long the cemetery as a whole continued in use is impossible to establish with any degree of certainty. If Plot B were taken over c 350, then a sequence of four graves where only the grave pit, not the coffin, were cut into (eg G284, G288, G258, G695) could have taken place over 40 years or less.

Table 2.67 summarises the very limited dating evidence available for graves in Period 2. Only 68 graves (10 per cent), plus a further 50 which post-date them, can be assigned either a date-range or a *terminus post quem*, and all are open to at least some degree of re-interpretation.

It seems apparent from Table 2.67 that where furnishings and burial characteristics suggest an early date for a grave, the stratigraphy agrees. It is also clear that burials datable to c 365 or later are, if in a long sequence, either the ultimate or penultimate grave (eg G15), or if primary, only in a short sequence (eg G1). (Exceptions are G391, and G685, both dated on residual finds. It is possible in both cases that the finds may have been intrusive in the upper fill, but stratigraphic reasons may also be found.)

As with the cemetery extension into Plot B, a number of graves can be dated to later than 360/70. It is important to remember that this date refers not specifically to deposits made in the 360s/70s, but to the final decades of the Roman period in general. Though very few graves can be dated as late as the 380s, many may be of that date, or decades later.

Grave	Position in stratigraphic sequence	Summary of deposits and/or residual finds	Date
G213	F: 2nd of 2	R: coin 330-45	R: 330 or later
G258	M: 3rd of 4	D: comb	D: 365 or later
G398	F: 5th of 5	R: coin 346/7-8, shell-tempered ware	R, S: 360/70 or later
G404	-	D: armlets, headband	C: 360 or later
G406	F: 2nd of 2	D: armlet/necklace + coin 367-75; R: coin 337-41	D: 367 or later
G410	F: 2nd of 2	R: shell-tempered ware	R: 360/70 or later
G411	P: 1st of 2	R: shell-tempered ware	R: 360/70 or later
G412	P: 1st of 2	R: shell-tempered ware	R: 360/70 or later
G426	F: 3rd of 3	R: shell-tempered ware	R: 360/70 or later
G431	I	D: coins 350-60	D: 350 or later

Table 2.66. Summary of dating evidence for graves in the cemetery extension into Plot B, Period 2, Butt Road. C... date derived from burial character

Grave	Position in stratigraphic sequence	Summary of deposits and/or residual finds (direct association only)	Date	Earlier graves	Later graves
G1	?P: ?1st of 2	D: armlets, necklace; R: coin 364-78	R: 364 or later		?G3
G15*	F: 3rd of 3	D: glass vessel, armlets + 2 coins 364-75	D: 364 or later	G12, G24*. G25, G40 G22	-
G16	M: 2nd of 3	D: armlets, armlet/necklace	C: 360 or later		G6
G24*	P: 1st of 3	D: armlets	C: 360 or later	-	G15*, G20, G25
G31	F: 3rd of 3	R: shell-tempered ware	R: 360/70 or later	G34*, G42*	-
G35	M: 3rd of 4	R: shell-tempered ware	R: 360/70 or later	G34*. G42*, G46	G33
G56	F: 2nd of 2	R: shell-tempered ware	R: 360/70 or later	G57	-
G58	F: 3rd of 3	D: pottery jars	D: 360 or later	G53, G60, G79	-
G65	F: 3rd of 3	R: shell-tempered ware	R: 360/70 or later	G90, G198, G200	-
G69	F: 4th of 4	D: box with necklaces, armlets + coin 270-4	C, S: 360 or later	G83, G98, G112*	-
G101	F: 4th of 4	D: belts	D, S: 370 or later	G93, G102, G103, G107, G112*	-
G109	I	D: armlets, comb	D: ?380 or later	-	-
G115*	M: 2nd of 3	D: hairpin	S: 348 or later	G121* G123	G114*
G121*	P: 1st of 3	R: coins 346/7-8, 348-50	R: 348 or later	-	G114*, G115*
G132	F: 2nd of 2	D: glass bottle	C: 360 or later	G131,	-
G158	-	R: coin 348-50	R: 348 or later	-	-
G168	F: 2nd of 2	R: shell-tempered ware	R: 360/70 or later	G186	-
G171	F: 2nd of 2	D: shoes, necklace, finger- rings, armlets, knife	C: 360 or later	G179	-
G174	-	D: glass bottle, hairpin, comb, necklace, armlets, finger-ring	D: 365 or later	-	-
G180	F: 2nd of 2	D: glass flagon & cup	C: 360 or later	G172, G173	-
G183	M: 2nd of 3	R: coin 367-75	R: 367 or later	G184	G167
G205	?P: ?1st of 2	R: coin 346/7-8	R: 346 or later	-	?G77
G213	F: 2nd of 2	R: coin 330-45	R: 330 or later	G224	-
G258	M: 3rd of 4	D: comb	D: 365 or later	G284, G288	G695
G295	P: 1st of 2	D: pottery jar	D: 320/40-30/45	-	G264, G270*
G298	P: 1st of 2	D: shoes, pottery jar	C D : 320/40-30/45	-	G283, ?G270*
G299	P: 1st of 3	D: pottery jar	C, D, S: 320/40- 30/45	-	G238, G247
G317	F: 4th of 4	R: coin 330-45	S: 360 or later	G320*, G325*. G328*. G335	-
G320	P: 1st of 5	D: pottery dish, glass vessels	C, D, S: 320/40- 30/45	-	G317*. G318, G323,
G342	F: 3rd of 3	D: hairpin	S: 350 or later	G325*, G328*. G337	-
G345	F: 2nd of 2	R: coin 364-7	R: 364 or later	G354, G362, G376	-
G375*	M: 3rd of 4	R: shell-tempered ware	R: 360/70 or later	G332, G351	-
G377	M: 2nd of 4	D: comb	D: 365 or later	G390*, G391*	G336*, G341*
G378	M: 2nd of 3	D: armlets	C: 360 or later	G372, G380	G346, G358*. G366*
G390*	P: 1st of 4	D: pottery jar	C, D, S: 320/40- 30/45	G379, G384	G364
G391*	M: 2nd of 4	R: shell-tempered ware	R: 360/70 or later	-	G336*. G341*, G350*, G361*. G375*, G391*
G395) G396)	M: 3rd of 6	D: pottery unguentarium	D, S: 320/40-30/50	G390*	G336*, G341*. G350* G36T, G375*
G398	F: 5th of 5	R: coin 346/7-8, shell- tempered ware	R, S: 360/70 or later	G387, G388, G433	G350*, G357, G358*, G361*. G366*, G370, G392
G404	-	D: armlets, headband	C: 360 or later	G402*. G414, later	-
G406	F: 2nd of 2	D: armlet/necklace + coin 367-75; R: coin 337-41	D: 367 or later	G402*	G423, G425, G432
G410*	F: 2nd of 2	R: shell-tempered ware	R: 360/70 or later	G411*. G412*	-
G411*	P: 1st of 2	R: shell-tempered ware	R: 360/70 or later	-	G410*
G412*	P: 1st of 2	R: shell-tempered ware	R: 360/70 or later	-	G410*
G426*	F: 3rd of 3	R: shell-tempered ware	R: 360/70 or later	G439*. G441, G445*	-
G431	I	D: coins 350-60	D: 350 or later	-	-
G452	I	D: pottery beaker	D: 320/40-30/45	-	-
G454	M: 3rd of 4	D: armlets	C, S: 360 or later	G266, G269, G455	G235
G466	M: 2nd of 3	R: coin 337-41	R: 337 or later	G482	G460
G487	F: 3rd of 3	D: comb; R: coin 334-5	D, S: 365 or later	G486, G496, G499, G505	-

Table 2.67 continued overleaf...

... continued from previous page

Grave	Position in stratigraphic sequence	Summary of deposits and/or residual finds (direct association only)	Date	Earlier graves	Later graves
G495 G500*	F: 3rd of 3 P: 1st of 3	R: coin 328-9 D: shoes	S: 350 or later C, S: 320/40-30/50	G611, G622, G623 -	- G517, G519*, G520*, G560 G467, G471, G489
G503	P: 1st of 4 217-18	D: necklace, armlets + coin C,	S: 320/40-30/50	-	-
G519*	F: 3rd of 3	D: hairpins, box with comb, D: armlets	365 or later	G500*, G520*, G610	-
G537	P: 1st of 2	D: hairpins, necklace, armlets, finger-rings	C, S: 320/40-30/50	-	G526
G539	M: 2nd of 3	R: coin 350-60	R: 350 or later	G547	G535
G572	F: 3rd of 3	R: coin 367-75	R: 367 or later	G592, G593	-
G596	I	R: shell-tempered ware	R: 360/70 or later	-	-
G609	I	D: armlet/necklace, armlet	C: 360 or later	-	-
G613*	M: 2nd of 3	D: shoe(s)	D, S: 330/50	G621*	G607*, G617*
G620	I	D: glass vessel	D: ?360 or later	-	-
G621*	P: 1st of 3	D: pottery jar	D, S: 320/40-30/45	-	G607*, G613*, G617*
G638	?F: ?2nd of 2	D: armlets	C, S: 360 or later	?G649	-
G647	F: 2nd of 2	D: brooch, comb, armlets, finger-rings; R: coin 367-75	D, R: 367 or later	G661, G676	-
G664	I	R: coin 321	R: 321 or later	-	-
G685	M: 2nd of 5	R: comb	R: 365 or later	G688	G552, G567, G658
G723	I	D: pottery bowl, tube	D: ?late C4th	-	-
G730	P: 1st of 4	D: shoes, pottery beaker & jar	C, D: 320/40-30/45	-	G703, G704, G705, G716, G720

Table 2.67. Dating evidence for Period 2 graves. C...date derived from burial characteristics; D... (date derived from) grave deposit(s); F... final grave in a sequence; I... isolated grave; M... grave within a sequence but not primary or ultimate; P... primary grave in a sequence; R... (date derived from) residual find(s) in grave fill; S... date derived from stratigraphy; *... grave referred to elsewhere in this table. [Pages 159-62]

For example, G15 could, on stratigraphic and finds evidence, be as late as 380. It is the last grave in a sequence of three, the earliest one of which probably dates to later than 360. It contains an armlet on which were suspended two worn coins of the House of Valentinian (364-75), giving a conservative *terminus post quem* of 364, but a possibly more realistic one of the mid 370s onwards.

Grave 109 may also belong in the very late 4th, or possibly even 5th, century, based on the style of the comb that accompanied the burial, though there are no well-dated parallels to allow this supposition to be confirmed.

Any grave post-dating one of the eight containing a deposited or residual comb is also likely to date to 380 or later. Five of the eight were not cut by any other burial, and G258 was cut by only one, but two (G377 and G685) were part of long sequences. Grave 377 is second in a sequence of four, with three graves post-dating it (G346, G358, G366; Fig 2.65). However, the relationships between these graves are not damaging, and no great length of time need have elapsed between them. Grave 685, in which the comb is residual, is the second of a sequence of five. It is

post-dated by G552, G567 and G658. As the comb is residual there is a strong possibility that it may date to well after c 365, but again no great length of time need have elapsed between the digging of G685 and of G552, the last in the sequence, as the graves are well spaced out and only the edges of the grave pits are damaged.

A number of final graves lie on very different alignments to those beneath them (eg Figs 2.21, G82; 2.23, G607; 2.64, G341), which suggests that the earlier burials were no longer detectable on the surface to influence the positioning of the later. These idiosyncratic alignments may therefore indicate a very late date. Formal uncoffined burials may also be very late (p 111), and many late graves may have been destroyed by post-Roman terracing. Moreover, only about half the cemetery has been examined (p 7), and it is possible that there may have been within the unexcavated part an area for burials dating to c 400.

The cemetery church appears to have continued in use up to 400 or later, and so, despite the paucity of substantial evidence to the contrary, there can be no real reason to suppose that the cemetery was not in use for the same length of time.

Post-Roman period

[Figs 2.46, 2.90]

Only a little post-Roman pottery was recovered from the site as a whole (including the area of the cemetery church), but what there is ranges in date from pre-conquest through to modern with all periods and principal fabrics represented. Other evidence of early occupation in the area comes from a spindlewhorl of probable Anglo-Saxon date (CAR 5, fig 34, 1927) found in a modern pit (EF148), but the earliest post-Roman coin was a contemporary forgery of a penny of Edward IV, lost c 1471-1500 (CAR 4, 67), from a post-medieval pit (EF175).

The principal post-Roman feature (though see the ?mausoleum (pp 99-100)) was a large circular oven, HF27, 2 m in diameter internally, found close to the northern boundary of the excavated area (Fig 2.46). It sealed several Period 2 graves and severely damaged at least one.

The foundation of the oven (HL30) was of daub and rubble, mainly broken tile, greensand, flint, and septaria, laid on a rectangular bed of clay measuring about 3.5 by 3 m. On the south and west the foundation was cut into the sandy topsoil, while on the downward-sloping north and east it was buttressed by a low wall of rubble to prevent slippage.

The lower part (HL26) of the oven wall was of daub reinforced in places with tile fragments and rubble. It was set on the foundation on the south and west but enclosed it on the north and east, a second measure clearly taken to prevent the foundation's sliding down the natural slope. On the south and west the upper



Fig 2.90 Medieval oven HF27.

part of the wall (HL18) was slightly offset in relation to HL26. This too was probably a result of the dual approach in constructing the oven, though it may suggest a rebuild at some stage. Although some of the tile fragments recovered from on top of the oven wall were probably part of the destruction debris which covered the feature, there were clear signs of at least two extensive tile courses in the wall.

The floor was of tile fragments laid flat (Fig 2.90), above which was evidence of at least three resurfacings, each being indicated by a layer of stones and one of clay, subsequently burnt. There was no evidence of heat intense enough to cause vitrification of either daub or tile, but some tiles were scorched black in places. Such a temperature is most likely to indicate that the oven was used for cooking rather than an industrial purpose.

All the tile fragments were of Roman date, unusual in a medieval oven. Others excavated in the town made use of peg-tiles, set on edge to form the floor, rather than laid flat (eg CAR 3, fig 178, F201; several more from the Angel Yard and Osborne Street sites, reports in preparation). The exclusive use of Roman tile in this oven was presumably due to the availability of large quantities of building rubble from the demolished cemetery church nearby. No definitive dating evidence was recovered from HF27 itself, but from the layer of charcoal at the mouth of the oven came a single sherd dated to the 13th or 14th century, and several other sherds of similar date derived from material above the oven. Further suggestion of a post-Roman date was provided by the use of the occasional piece of flint in the foundation.

Medieval ovens were usually close to the houses they served, but there is no trace of any building of that period at Butt Road. The closest known were some three hundred yards or more away, on the south side of Crouch Street. There is no clear evidence as to what use was made in the medieval period of the excavated area, but that there was some activity in Butt Road is clear from its name, which came from the archery practice butts sited somewhere along it (Morant 1748, I, 4).

The principal post-medieval features on the site were a number of pits, most dug for the extraction of sand, and, on the southern part of the site, several cultivation furrows. Morant's map of 1748 shows the area as under the plough, and the tithe map of 1845 (ERO D/CT 100) describes the land as 'garden ground', some of it being used for market gardening. Rows of terraced houses were constructed along Butt Road and the newly laid-out Denmark Street in the 19th century, and the service trenches, pits, and wall foundations associated with these buildings caused considerable damage to many Roman graves in parts of the site, as did the sand pits.

3. THE EXCAVATION OF THE ROMAN CHURCH AT BUTT ROAD

by Philip Crummy and Carl Crossan

Introduction

[Fig 2.1]

The Roman church was prominently placed and would have been visible from Head Gate. It stood on the brow of the small valley which runs east-west immediately outside the south side of the walled part of the Roman town. The church stood at the top of the southern side of the valley at the break of slope where the steep rise of the valley changes to a more gentle incline. Today the valley is dry and largely silted up with topsoil (the so-called dark earth). Whether the valley was dry in Roman times is unknown but without the accumulation of topsoil, the valley would have been much more marked than it is now.

The building stood at or just to the west of what was probably the north-west corner of the Butt Road cemetery (Fig 2.1) and was built in an area where, with perhaps one exception (EF203/7), there were no burials. No graves seem ever to have existed on the west side of the church, and the steepness of the slope on the north side makes it probable that none existed to the north. On the other hand at least one burial lay within one metre of the east end of the building and presumably more existed close to the south side but these were destroyed in the 19th century when the site was excavated for sand.

The remains of the church were poorly preserved. The north foundation had been robbed out and much of the south foundation had been removed as part of the sand pit. *The floors and related make-up layers had practically all been destroyed in the post-Roman period as a result of a combination of factors. Most important of these was erosion down the valley slope which had the effect of reducing the remains in such a way as to restore to a degree the original valley profile to what it had been before the building was constructed. Gardening in the 19th and 20th centuries must have taken its toll as did even more the attentions of various archaeologists over the years. Pit digging and in recent years tree-planting by the Borough Council caused a fair amount of damage as did the roots of the trees as they grew bigger. The building did not suffer full-scale demolition at the end of the Roman period but survived as a ruin. The remains suffered gradually erosion and piecemeal demolition until with the removal of the apse in the 1930s nothing remained above ground.*

When the proposal to build the new police station was first mooted, the Essex County Council agreed that the development should be designed in a such a way that the remains of the church would be preserved. However, because there was some uncertainty in fixing

the precise position of the church, it was necessary to undertake the excavations and locate the building on the ground. As a result the remains now lie neatly between the police station to the east and a new rear access road to the west.

A description of the Butt Road building and related features and an interpretation of its structural phases follow in this chapter where it is referred to throughout as a church; a discussion of its identification as such is in Chapter 4, especially pages 199-200.

Archaeological excavations and early records

[Figs 2.1 & 3 1-3.2]

The first-known record of the building occurs on a sketch by William Wire (Fig 2.1, p 6) where the remains of the south-west corner of the building are shown as an unannotated wall in the top right-hand corner. Wire seems to have unaware of its Roman origin. The standing remains were later plotted on the Museum's copy of the 1875-6 1:500 Ordnance Survey maps. The museum also possesses a drawing by M R Hull where he has copied the plan on the OS map and combined it with another similar plan by Poulter (Fig 3.1). Poulter served for many years as an assistant to Hull and was particularly concerned with the conservation and repair of objects. He seems never to have carried out any fieldwork and indeed to see his name on a manuscript such as this comes as a surprise. It is therefore possible that, despite the slight differences between the two versions of the plan, Poulter's was in reality a copy of the other. Although Hull does not state who was responsible for the plan on the OS map, it is clear from his manuscript that it could not have been by him and that possibly by the time he prepared the manuscript all but the apse (which he excavated) had been demolished. The entry on the OS map was presumably done by Mr H Goodyear, a former Borough Engineer, who seems to have been responsible for other entries dated to 1891 and 1913-4 (Hull 1958, 96 & 105-6).

The first recorded excavation was undertaken by M R Hull when in 1935 he examined the apse and a pit (EF186) nearby (Fig 3.2; Hull 1958, 245-8). However it is possible that the building had attracted the interest of earlier archaeologists because many of the modern trenches discovered during the recent phase of excavation have the appearance of archaeological trenches for which there appear to be no extant records. It used to be the practice of archaeologists to

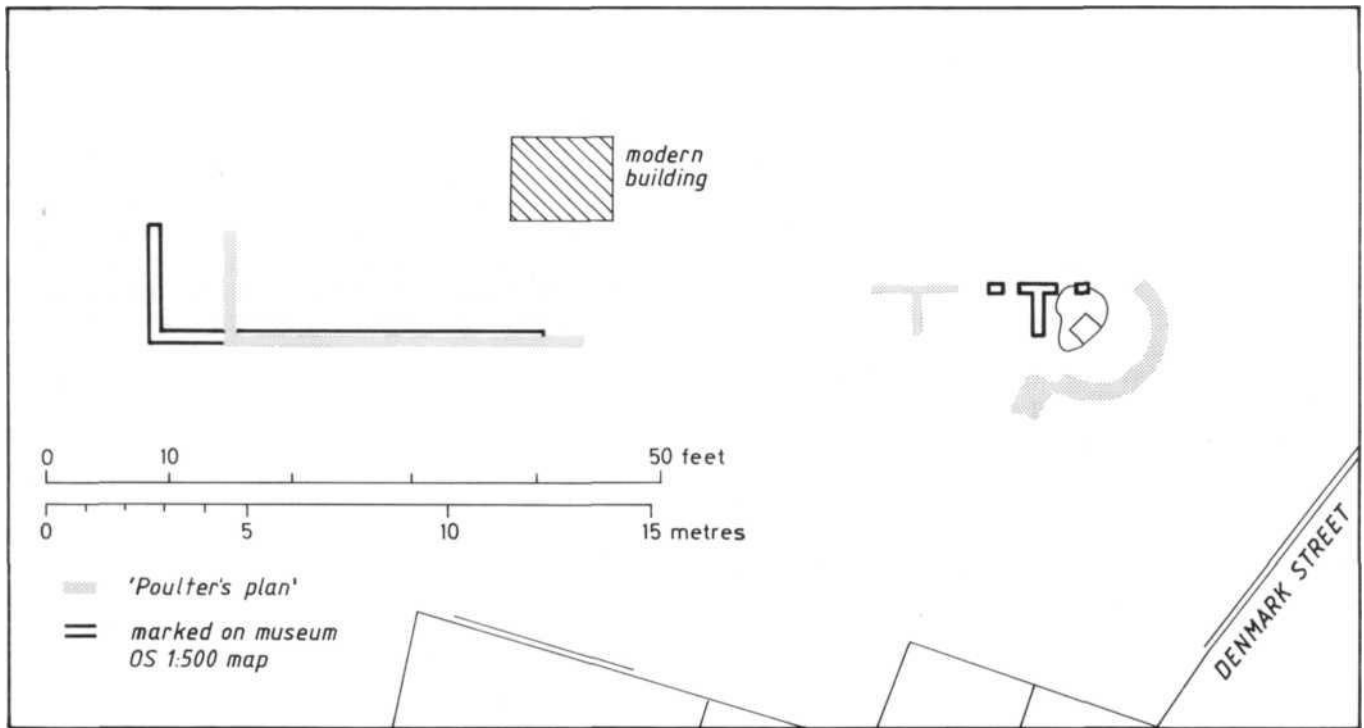


Fig 3.2 The apse during M R Hull's excavations in 1935. Viewed from the west. Loose stones have placed over the end and on the top. The large fragment of worked stone used to seal the pit EF186 is on end in the foreground. (Photograph, T C Gall, courtesy of Colchester Museums.) [Page 164]

follow walls and foundations by digging narrow trenches along both sides of them and trenches such as these certainly exist on either side of the west and south walls (EF4/8/135).

After Mr Hull, the next archaeologist to investigate the site was Miss B R K Dunnett (now Mrs Niblett) who used the technique common at the time (1965) of digging small square trenches (Dunnett 1971, 78-84).

The latest excavations were in three stages. The first two took place in 1978 and 1979 when all of the site was examined apart from a few areas occupied by semi-mature trees planted by the Borough Council. These were removed in 1988 when the third stage of the excavations took place as a preliminary to the Colchester Archaeological Trust consolidating the

The church (Building 139)

[Figs 3.3-3.8]

The external walls, roof, and floor

The outer walls were of stone (unlike many houses of the town which had daub walls; see CAR3, 22) which was probably plastered and painted inside. There were internal partitions or colonnades of timber, some of which incorporated wattle and daub. The roof of the building was of tile. No evidence was found of solid

floors of any kind, plain or tessellated — not even any loose tesserae. The floors which did survive point to plain sand or earth but the evidence is not strong either way and the post-Roman damage to the site has been so severe that conceivably all traces of a quality floor could have been lost. There were no fragments of window glass although any panes which did exist could have been removed for reuse elsewhere. The positions of the windows and doors are unknown although there are a few fragments of wall plaster from the site which look as if they derived from a doorway or a window-opening. The building probably incorporated some carved stone and veneer of Purbeck marble and Purbeck burr (p 186). It was constructed on a sloping site which was far from ideal. The presence of earlier dump deposits later caused subsidence of the west wall which may explain why parts of the building were rebuilt.

Only two sections of wall foundation now survive, plus a small fragment of the lowest course of the foundation of the north wall (Figs 3.4-3.5). The walls were of mortared greensand (presumably Kentish ragstone) and tile. They were made by pouring or shovelling mortar over each course of stone after it had been laid in place in the foundation trench. This resulted in many voids between the stones and caused the mortar to ooze out beyond the face of the foundation. The foundations were then topped off by at least one course of tile.

The most substantial section is the remains of the west wall and the western half of the south wall. This was of two phases, the west wall having been rebuilt in a different style with different-coloured mortar (Fig 3.5). The foundations of the south wall consisted of four courses of stone finished off with two courses of tile. Above the tile, the wall proper began with two courses of stone, the upper one being offset internally (Fig 3.5). That these courses were built above ground was indicated by the way the joints were fully filled with mortar and neatly pointed. Above these two courses was a single course of tile, above which was a course of stone offset externally. The two offsets being at different levels is odd but may be linked with the fact that the church was built on rising ground so that the ground-level outside the south wall of the church was probably slightly higher than that inside. The quoin was entirely of tile and had been rebuilt as part of the new south wall. The lowest course of the main part of the west wall was made of large blocks of stone which projected 0.15 m west of the rest of the foundation. The latter consisted of four courses of greensand. It was neatly coursed with well-filled joints suggesting that it had not been built by filling a trench with stone and mortar but had been raised as a free-standing structure in a trench which was sufficiently wide not only for the foundation but also to allow access for the workmen. The base of the wall proper was offset at the same level internally and externally and was formed of two courses of tile under three of stone (Fig 3.5). The north end of the surviving foundation had cracked and subsided northwards (Fig 3.4).

The other substantial fragment of foundation to

survive consisted of the apse and part of the east wall (Fig 3.4). The base of the foundation sloped downwards south to north. The base of the northernmost surviving point was 0.60 m lower than the base of the foundation of the quoin at the other end of the church reflecting the fact that the building had been erected on a site which sloped downwards slightly west to east as well as more markedly south to north. Although the apse (EF180) and adjacent straight foundation (EF227) were similar in appearance and structure, a butt joint between the two indicated that the building was originally rectangular in shape and that the apse was a later addition. Up to five courses of the foundation survived. These had been built in the usual way, ie as alternating layers of stone and mortar in the foundation trench.

The north wall had been robbed out within the last 100 years. A trench (EF110/112) on the south side of the west end of the robber trench EF20-4/183 may have been a construction trench of the sort needed to rebuild the west wall of the church and thus the presence of the trench may indicate that at least part of the north wall had similarly been rebuilt.

The north wall had been built on a layer of dumped soil (EL36/EL64/EL76) which had been placed on the valley side (Sxs 3.1 & 3.2; Figs 3.6-3.7). The foundations in this area did not fully penetrate this material to reach the underlying natural sand which meant that the building would have been liable to subside (which to judge by the west wall it indeed did do). The builders may well have been aware of the problem and tried to counter it by hammering wooden piles into the bottom of the foundation trenches. This is a technique which has been detected elsewhere in Colchester, most notably in Building 127 at Culver Street where no serious attempt was made to place the foundations directly on the natural sand (CAR 6, 114). Although no clearly defined holes for piles were detected at Butt Road as they have been elsewhere, there was a series of small depressions (EF216-21, Fig 3.3) at the base of the east end of the robber trench EF20-4/183 which may have been caused by piling. The evidence is not convincing but it is hard to suggest an alternative explanation for the depressions.

The dumped material (EL36/EL64/EL76) under the north wall contained a small amount of pottery of the mid 2nd - 3rd century. Although not closely dated, this material provides the most reliable available *terminus post quem* for the construction of the church.

The only traces of floor survived in the extreme south-west corner of the building where a thin layer of burnt soil (EL59) containing a coin of 337-41 overlay a thin layer of charcoal and burnt bone (EL60). The latter in turn overlay the natural sand and was reminiscent of the charcoal-rich fill of some small pits nearby on the other side of the west wall of the church (see under Building 140 below). It is thus possible that this material was not floor but that it predated the construction of the church and was contemporary with the early phase or phases of Building 140 if the latter predated the church (which seems unlikely).

Sealing these deposits and lying over much of the rest

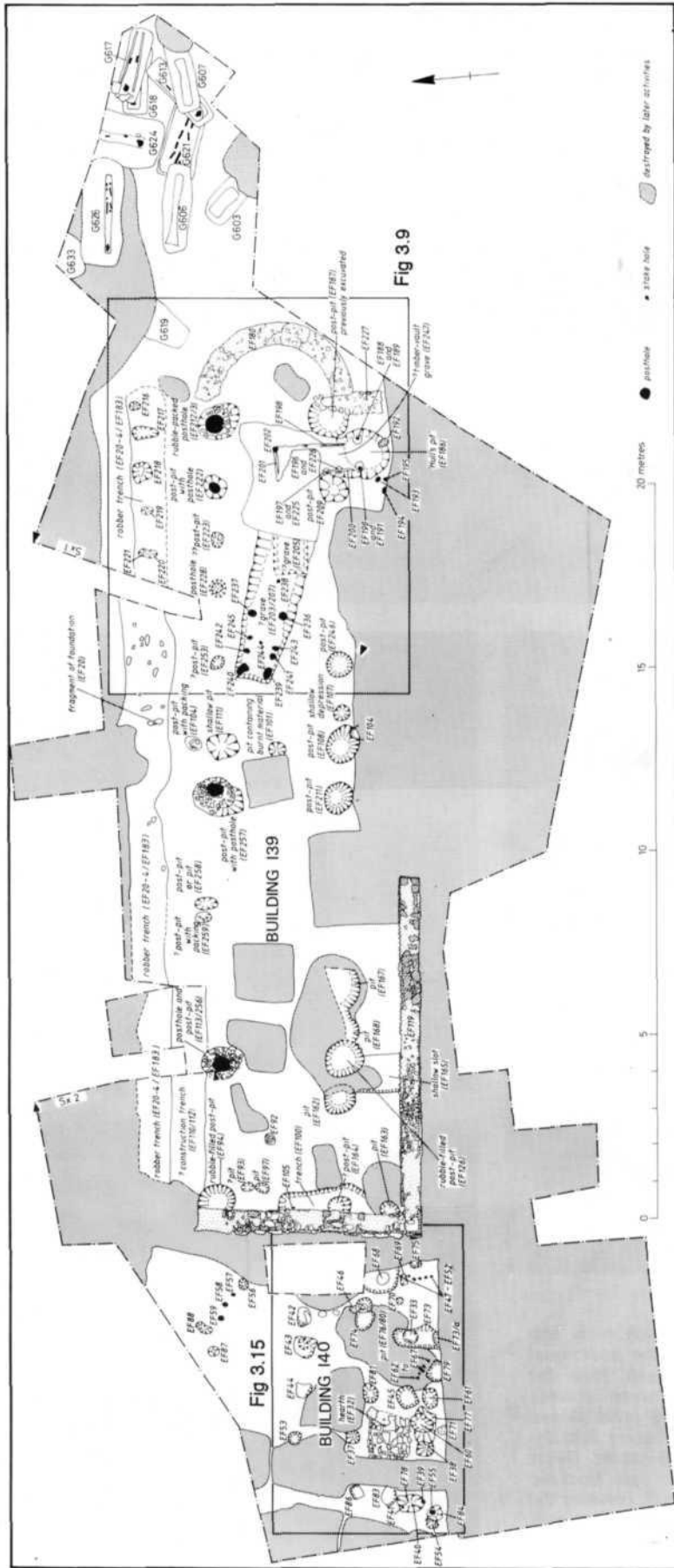


Fig 3.3 Plan of the Roman remains on Site E. 1:180.

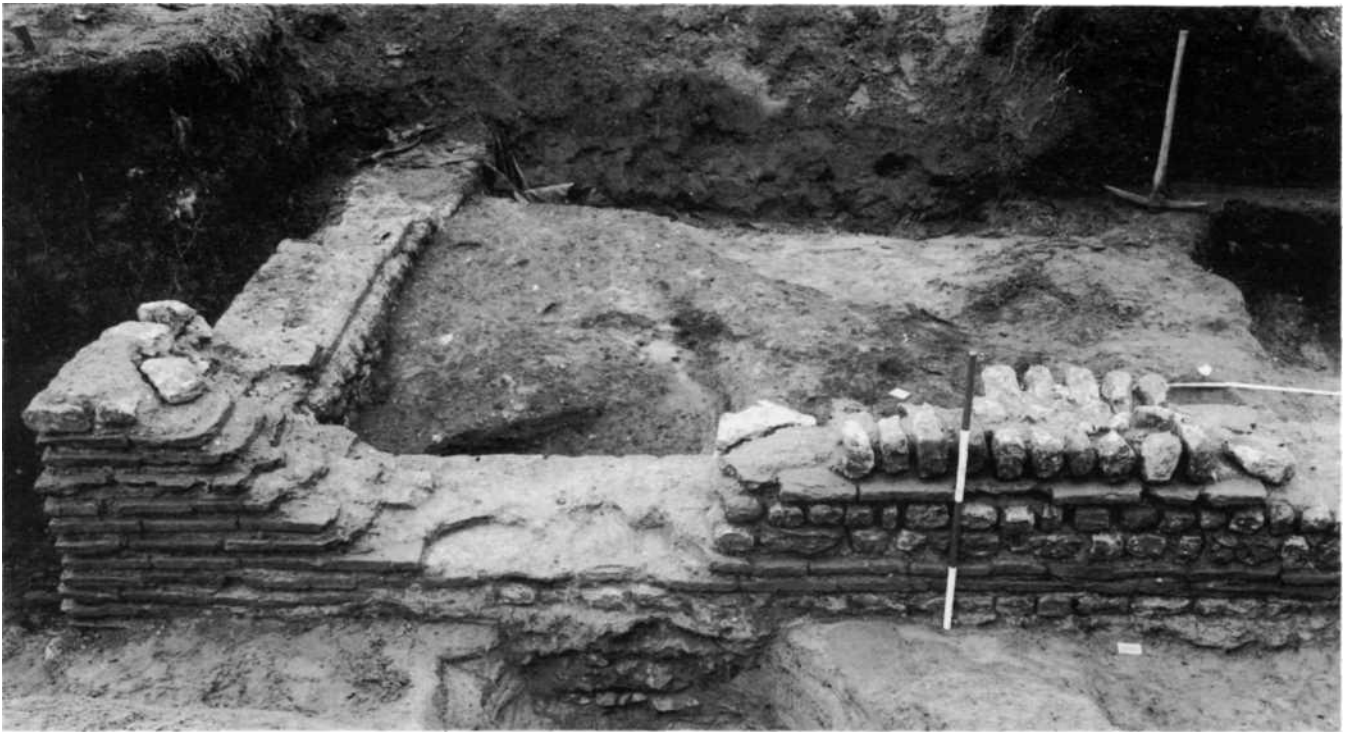


Fig 3.4 Various views of the church walls and foundations. Above left: the south-west corner seen from the south. Note the mortar squeezed out between courses below the original ground level. Above right: the rebuilt west wall seen from the east. Note the subsidence cracks. Below left: the south-west corner seen from the west. Note the severe crack between the original quoin and the rebuilt west wall. Below right: the apse seen from the south-west. [Page 166]

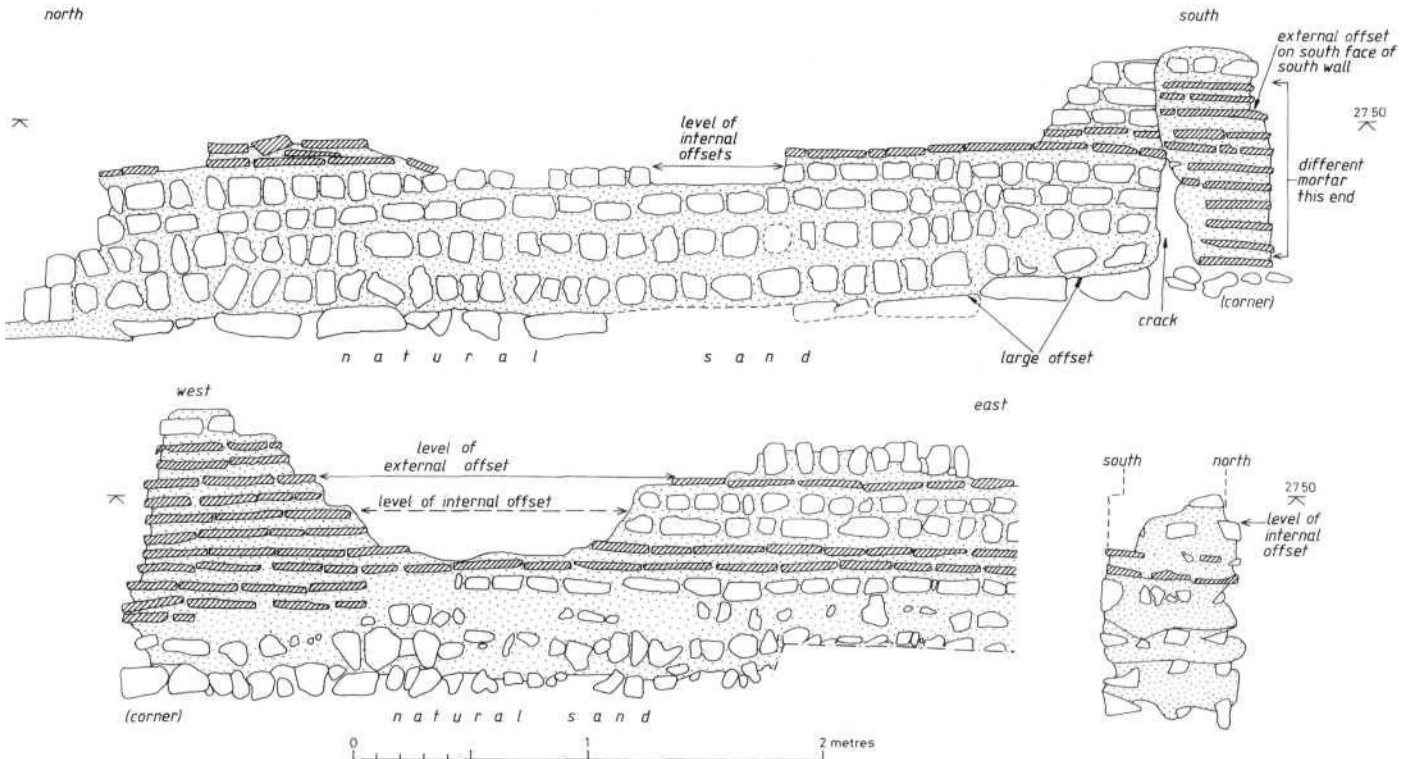


Fig 3.5 Part of the external faces of the west and south walls. 1:33. [Page 166]

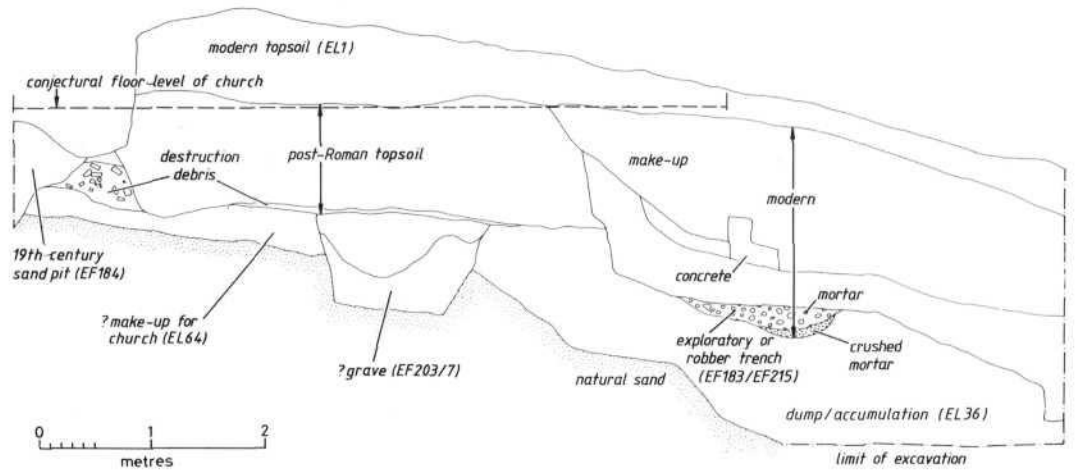


Fig 3.6 Section 3.1. [Page 166]

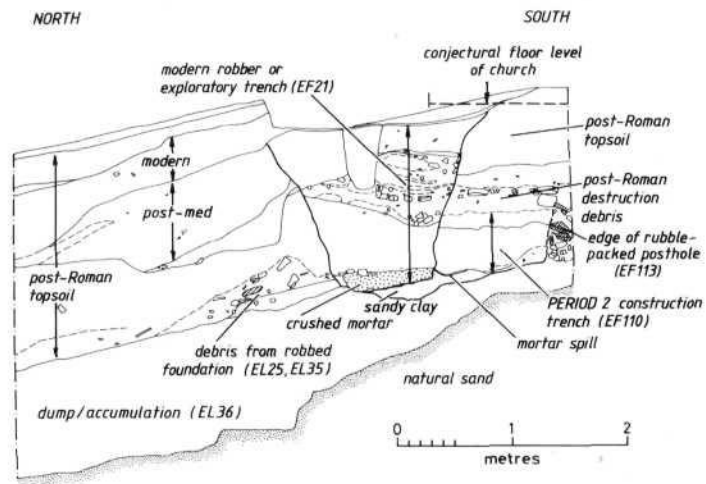


Fig 3.7 Section 3.2. 1:67. [Page 166]



Fig 3.8 Distribution of broken tile on Site E. 1:142. [Pages 166-71]

of the site was a layer of dark brown topsoil containing much tile and greensand which clearly derived from the building itself (Fig 3.8). A large proportion of the tile consisted of broken *tegulae* and *imbrices* indicating that the deposit originated when at least part of the building was roofed. Finds in this layer were of Roman date and included the bulk of the 500 or so coins recently excavated from the site (see pp 180-2). Also in this layer, as well in the soil filling the features associated with the church, was animal bone which probably derived from funerary feasts (see pp 178-80).

The large number of coins found during the recent excavations and earlier by M R Hull indicate that a major phase of coin loss equatable with the construction of the church started sometime between 320 and 340, if not c 330, and lasted until at least the end of the century (see pp 180-2).

The internal features

[Figs 3.9-3.11]

The post-pits inside the building can be divided into two groups. The most distinctive was a series of deep

pits in which the base of the posts were packed with rubble (Figs 3.3 & 3.9-3.10). Four such post-pits were found (EF113/256, EF257, EF126 & EF212/3). To these can be added another deep pit (EF211) only about ten per cent of which was stone, and a deep pit (EF187) which had been excavated by Mr Hull or Miss Dunnett. The group of six make three pairs of matched post-pits. The packing in three of the pits was still *in situ* indicating that the bottoms of the posts were circular and about 0.6 m in diameter. It is hard to judge the height of the original ground-level but these pits were probably at least a metre deep (Fig 3.11). There were two other pits which contained a high proportion of rubble (EF94 & EF164). These formed a pair which lined up neatly with the three pairs. In all cases, the rubble consisted of tile and greensand. Some of it may have been demolition material in the backfill of the postholes after their removal. Where original packing could be recognised, all the stone was greensand. The two types of stone which are overwhelmingly the most common in Colchester are greensand and septaria, the latter probably being marginally the commonest. The fact that all the stones in the packing were greensand suggests that this material came from the church itself since the only stone in its walls appears to have been

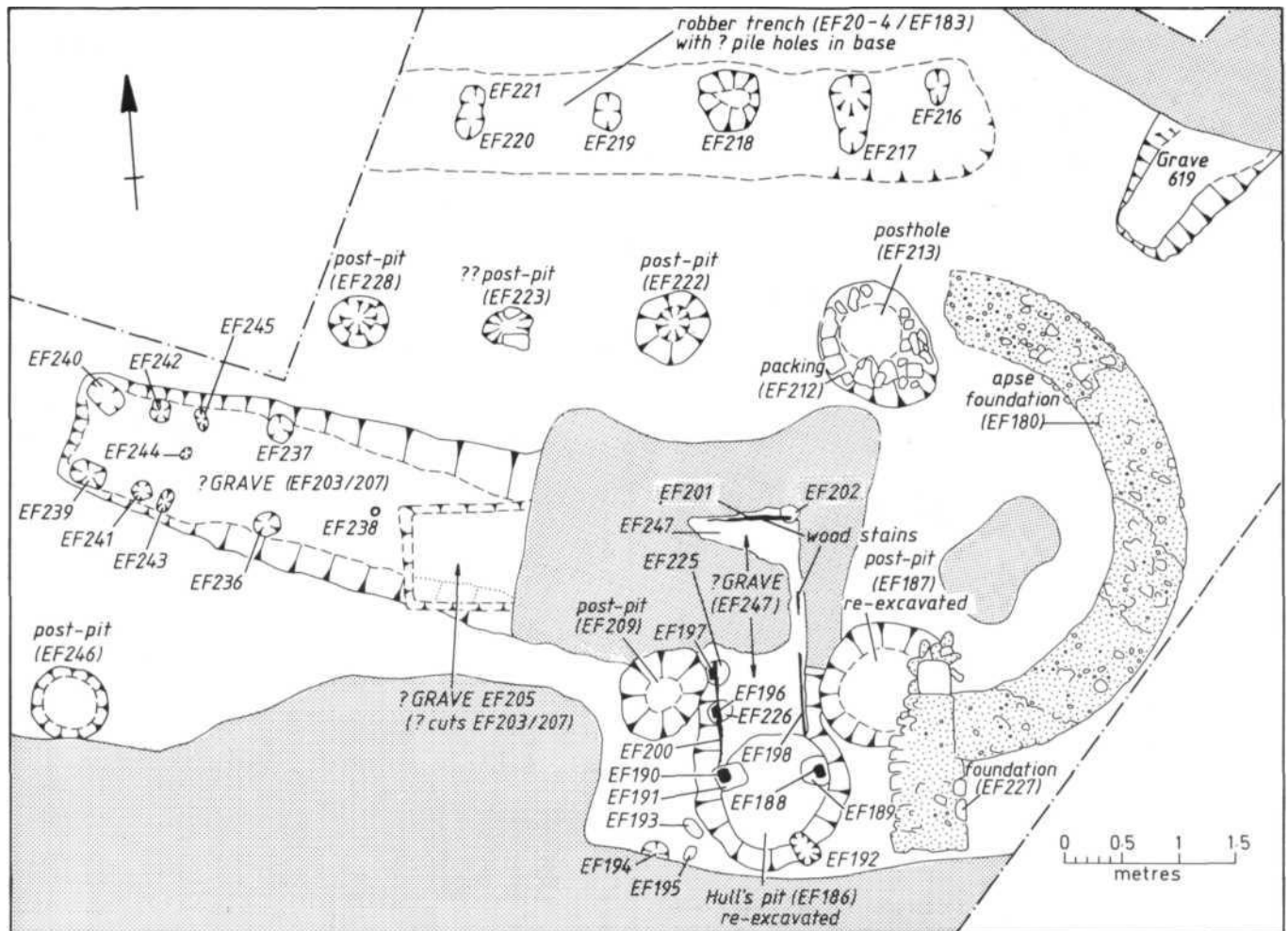


Fig 3.9 Detailed plan of the east end of the church. 1:63.

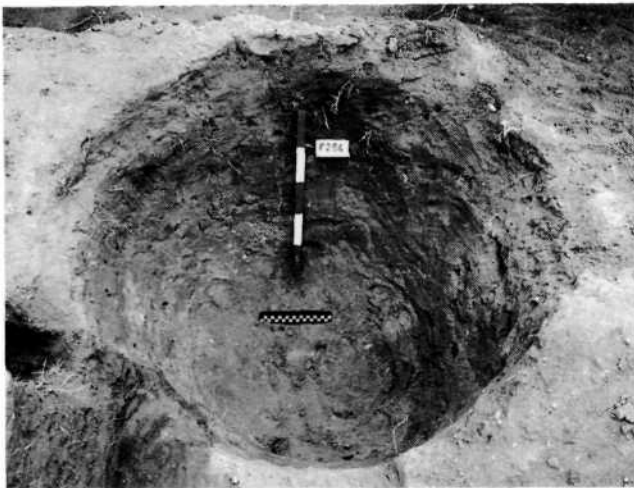
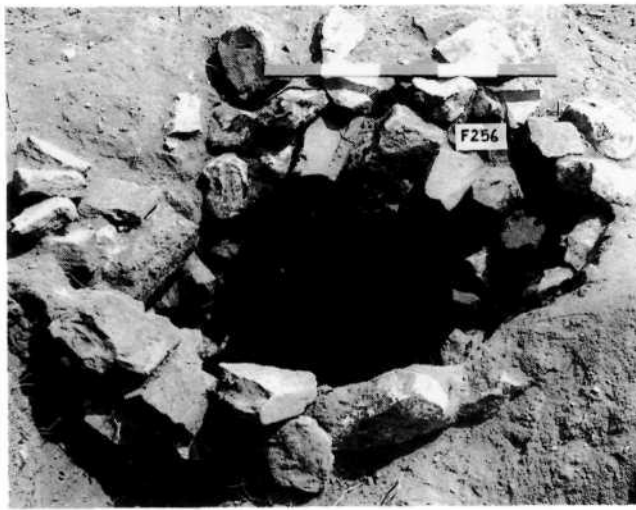
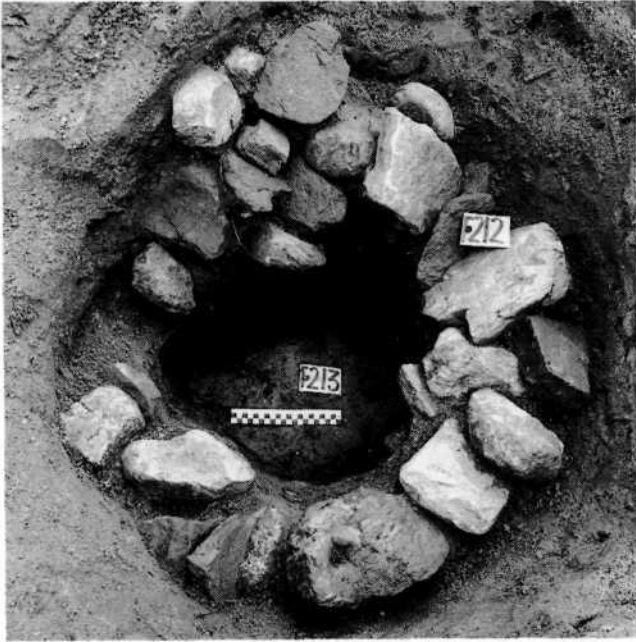


Fig 3.10 Phase 3 rubble-packed post-pits. Above: EF213 with posthole excavated. Centre: EF256 with posthole excavated. Below: EF213 after complete excavation of post-pit. [Pages 171-3]

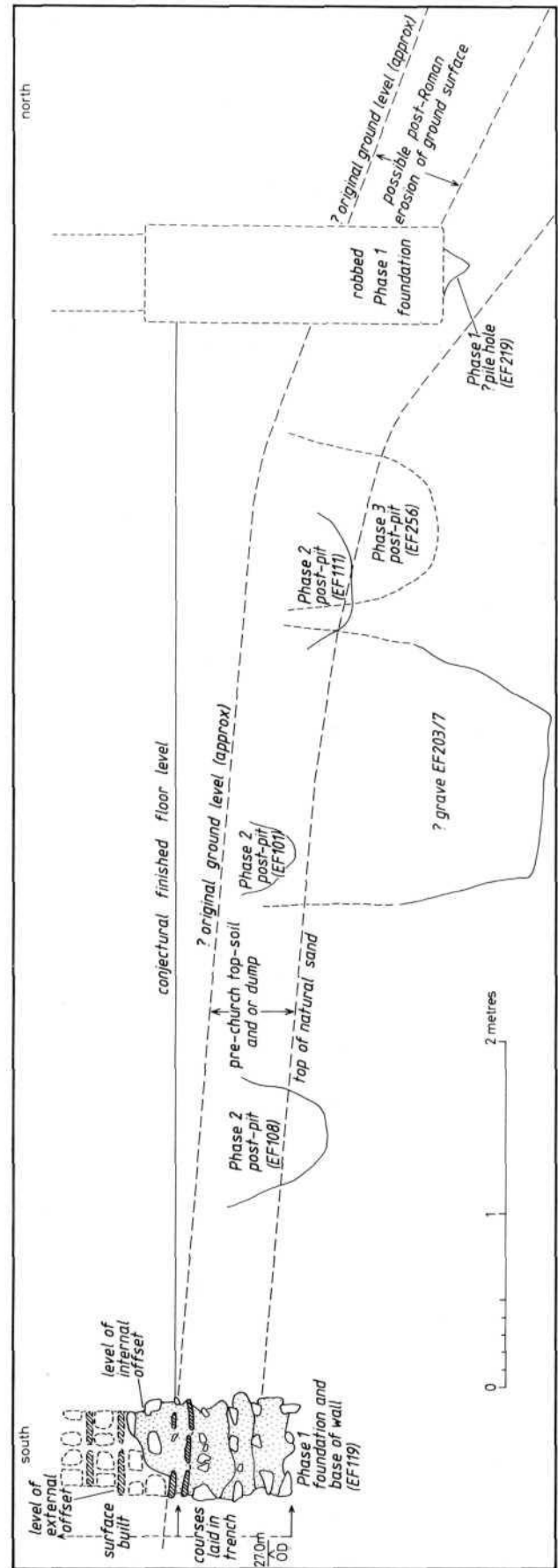


Fig 3.11 Schematic north-south section across the church to show the approximate relative levels of features and layers. 1:38. [Pages 171-3]

greensand. Thus it may be that the erection of the posts was contemporary with structural alterations which involved the dismantling of parts of the walls.

Pit EF126 contained two large fragments of lead sheets which had been cut up for melting down and reuse (Figs 3.22-3.23; see below). The pieces lay in the centre of the pit just above the bottom and thus could only have been buried after removal of the post.

Other pits formed north and south aisles (EF111-EF253-EF228-EF222 & EF108-EF246-EF209 resp). Although shallower than those of the first group, each post-pit could have been up to 0.75 m deep (Fig 3.11). The absence of rubble packing made it impossible to detect any postholes in the fill of these pits. Many of the pits contained fragments of wall plaster presumably from the building itself (see below).

Two other shallow depressions (EF223 & EF107; Fig 3.3) lay on the lines of the aisles. These were not very distinct features, and despite being aligned with the aisles, seem most likely to be spurious. If not, they suggest that the aisles were solid rather than colonnaded.

Two small post-pits indicate the probability of a north-south partition at the end of the aisles. One of these (EF104; Fig 3.3) had rubble packing *in situ* whilst the other (EF101; Fig 3.3) was unusual in that it contained some burnt material including charcoal fragments and daub with impressions of wattles, as if from a wall.

Other features inside the walled area are hard to explain. A trench (EF100; Fig 3.3) against the west wall may be associated with the rebuilding of the wall although it did not extend the full length of the rebuilt

section. Several large pits (EF162 & EF167-8; Fig 3.3) lie on the line of the south aisle near the west end of the church but they have no opposite numbers on the line of the north aisle and therefore are presumably post-demolition features of some kind. A north-south slot (EF165) contained two 4th-century coins and some fragments of painted wall plaster.

The possible graves

[Fig 3.3, 3.9, 3.12-3.14]

There were three large pits near the east end of the church. Two (EF247 & EF205) shared the alignment of the building and lay neatly to one side of its longitudinal axis (Figs 3.9 & 3.12). One of these pits was equidistant from two of the columns or posts forming the southern aisle. The third (EF203/7; Figs 3.9 & 3.12) pit was on a different alignment to the building and thus may have predated it. All three pits were roughly rectangular in shape and all were about the same depth (ie about 1.75 m from the original ground surface; Sx 3.1; Figs 3.6 & 3.11) with EF205 being about 5 cm deeper than the other two pits. The relationships between the three pits could not be established except that EF205 probably cut EF203/7. The north side of EF205 lined up with the north end of EF247 suggesting that the former may have butted neatly up against the other.

No remains of any inhumations survived in any of the three pits and nor were there any clear traces of coffins. Pits EF203/7 and EF247 contained iron nails but none in positions which suggested that they derived from *in situ* coffins. Thus the nails could

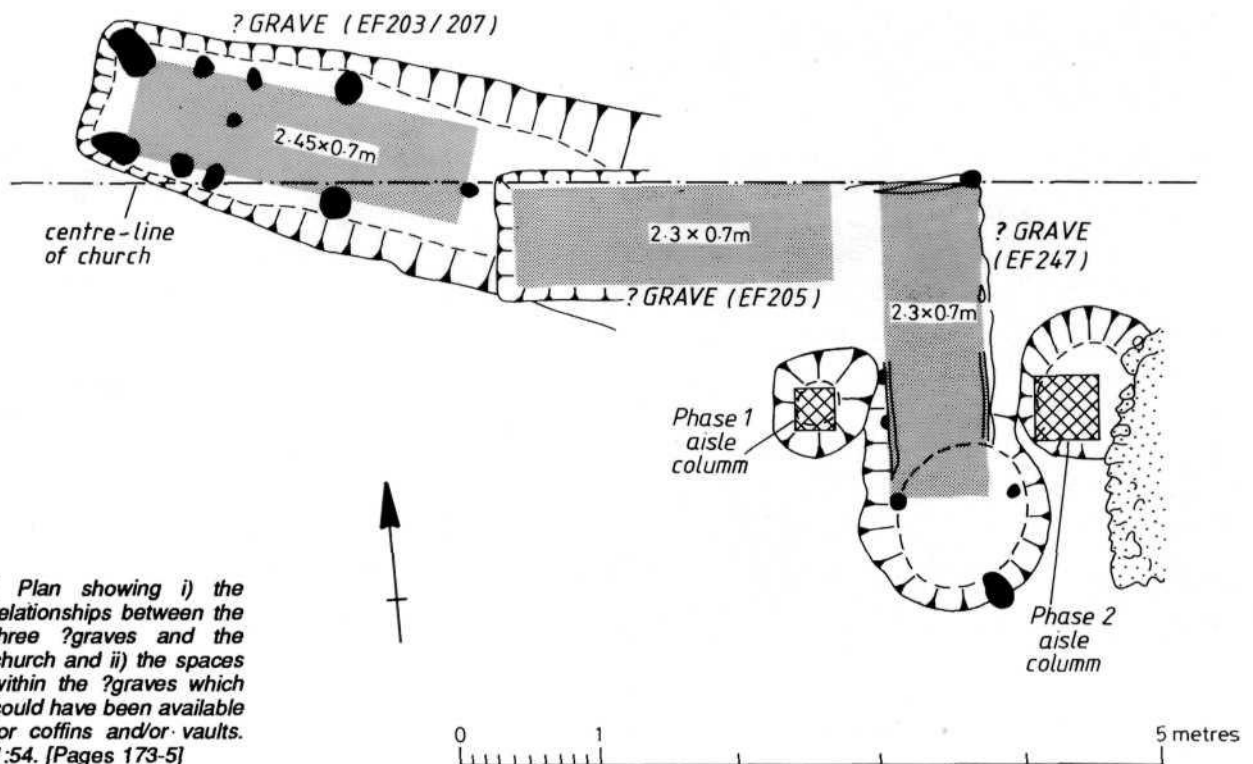


Fig 3.12 Plan showing i) the relationships between the three ?graves and the church and ii) the spaces within the ?graves which could have been available for coffins and/or vaults. 1:54. [Pages 173-5]

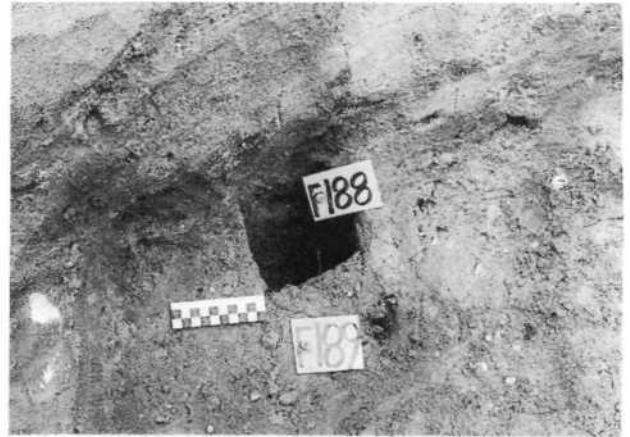


Fig 3.13 Left: ?grave EF247 seen from the south with the base of "Hull's pit" EF186 in the foreground. Right: two of the postholes under the sides of the ?vault. Note the square shape of both. [Pages 173-5]



Fig 3.14 ?Grave EF203/7. This was excavated in two parts. Left: the eastern half seen from the east. Right: the western half seen from the east. [Pages 173-5]

equally have come from timber vaults. The spatial relationships between all three features are such that each could have contained a vault or in the case of EF205 a coffin large enough for an adult (Fig 3.12). The southern end of EF247 had been destroyed by EF186, the base of which was at the same level as the base of EF247. Much of the northern half had been affected by EF181 (Fig 3.17 below). At the bottom of the pit a timber box had been constructed *in situ* which was a single-person variation on the timber vaults in the cemetery (see pp 111-14). The ?vault seemed to have consisted of planks which had been attached to small posts set in post-pits in the base of the pit (Figs 3.9 & 3.12-13). Five posts were detected, three (EF190/191, EF196/226, & EF197/225) on the west side and two on the east (EF188/189 & EF202). One (EF202) formed the north-east corner and two (EF190/191 & EF188/189) the south end although the presence of the pit EF186 makes this less certain. Presumably there must have been other posts; perhaps these did not penetrate the base of the pit which is why they were not detected. The wooden lining of the ?vault was traced around most of the surviving sides of the box as delicate lines up to 20 mm wide of light brownish sandy soil. The vault probably measured externally 2.3 x 0.7 m which in length is similar to the wooden vaults from the cemetery outside and is adequate to accommodate an adult coffin. Very little of the fill survived; what there was of it contained a few sherds of mid 2nd to early 3rd century pottery, a tanged iron punch (CAR 3, fig 115, 2980), and some iron nails (see below). EF202 also contained a small fragment of white-painted wall plaster. There were also small amounts of bone, none of which was human, namely cattle (7 gm) from EF247 and fowl (5 gm) from EF202.

No internal features were found in EF205 (Figs 3.9 & 3.12) and only one find — a coin of Marcus Aurelius (issued AD 166).

Ten stakes or small posts had been driven into the base of the third pit EF203/7 (Figs 3.9 3.12, & 3.14). The depths of these in cm were as follows: EF236 (20), EF237 (20), EF238 (20), EF239 (35), EF240 (15), EF241 (10), EF242 (20), EF243 (12), EF244 (8), and EF245 (10). The eight on the long sides formed four irregularly-spaced pairs. Presumably like the pit EF247, EF203/7 was the remains of a timber vault built *in situ* although there were a two significant differences between the two features: no traces of planks were noted around the sides of EF203/7 and the central stake hole EF244 is distinctly at variance with its interpretation as a vault.

The fill of the pit contained a small quantity of 2nd- to 3rd-century pottery, some bone (ie fowl (36 gm), cattle (83 gm), and pig (10 gm)), iron nails (see below), and a coin of Faustina II (issued 175-180). The upper 10 cm was excavated separately because it was thought to have been contaminated; finds from here included a coin of 330-5.

The nails from the complex can be summarised as follows. In all EF247 produced five iron nails, two from F188, two from EF202, and one from EF190. EF203

also yielded five iron nails. Although few in number, the best preserved nails within each group appear to be much the same size as each other and thus could be part of a single batch for a coffin. They generally are similar in appearance to the coffin nails from the Butt Road cemeteries, being small to medium in size. Four of the nails are complete: two nails from EF202 (62 mm long) and two from EF203 (70 mm long).

"Hull's pit" (EF186)

[Figs 3.2 & 3.3]

Mr M R Hull's work on the site in 1935 consisted of an examination of the apse and the excavation of a remarkable pit (our EF186). Before reconsidering the contents of the pit, it is worth citing part of M R Hull's published account of his discoveries (Hull 1954, 245).

'Opposite the south end of the apse, and quite close to it, there was a small pit, cut 6-7 ft deep. Remains at the bottom showed that it had been shuttered to hold back the soft sand. It was most probably a well. At the time of its construction water could have stood at its bottom. On the other hand, there was no peaty sludge, such as generally found at the bottom of a well. Nevertheless we are confident that we cleared it to the bottom and recovered all the contents.

The shaft appeared to be of about 3 ft. diameter, so that its wooden shuttering must have quite narrow. In the mouth, and possibly used to close it, though not quite lying level, was a large dressed block of sandstone. It was 30 in. square and 6 in. thick, with a string-moulding along one side. It apparently came from the entablature of a building. Such stones are rarely found in Colchester...

The contents of the pit were remarkable. Scattered throughout its fill, but with the earliest at the bottom, were [188] coins.... [including a silver medallion of Constantine II].

Besides the coins the pit contained the following.

The most part of a human skull and a complete thigh-bone. These were found at the bottom, below everything else. There was also one indeterminate piece of burnt bone.'

Other finds (Hull 1954, fig 111, 247) consisted of a silver armlet, silver ring, an incomplete iron stylus, an iron knife, part of an iron utensil (possibly a 'frying-pan' according to M R Hull), parts of a large iron bowl, many iron nails, some painted wall-plaster, a piece of marble, a 'great quantity' of bird bones, a complete small beaker, and substantial parts of at least six other pottery vessels. Hull concluded that,

'The whole is suggestive of a votive deposit dating from the late second century, but there is hardly sufficient evidence on which to class the building as a temple.'

The pit was clearly not a well. The water-table is probably about 5 or 6 m below the bottom of the pit which in any case stops on sand not the London Clay which it would need to do for a well. Hull's pit stopped

at around the base of our EF247 so that it is possible that the wooden shuttering he referred to was traces of wood at the base of that feature. However his memory of the wood must have been hazy since in an earlier draft of his report (in the CM) which is otherwise very similar to the published version he states that, 'The diameter was three feet and the sides must have been steyned with wood, no trace of which remained.' In the light of this contradiction, his assertion that the earliest examples of the coins were near the bottom needs to be treated with care especially since there are no surviving records giving depth measurements for the coins.

The coin series in the pit ends like the coin sequence from the rest of the site and points to a date after 388 for its backfill. The presence of wall plaster in the pit suggests that the backfilling took place after the building had become derelict; the large slab of dressed sandstone which was in the pit is also consistent with the notion of a ruined or partly ruined structure.

Hull's statement that the earliest coins lay at the bottom cannot to be taken to mean that the coins were in chronological order in the pit because this would mean that the pit filled up gradually over a period of more than a century. Such a circumstance seems inconceivable. More likely he meant that at least some of the earliest — say those issued before 200 — were at the bottom of the pit and that the rest were presumably in no obvious order. Certainly it is curious that despite all the 4th-century coins from the pit Hull stated that the feature dated from the late second century'. Perhaps he deduced this date from the positions of the earliest coins. If so, it is interesting that of the six coins predating 200 to come from the Site E excavations, one came from EF205 and another from EF203/7. It could be therefore that at least part of the complex belonged to the late 2nd to mid 3rd centuries (although EF203 also apparently contained a coin of 330-5). The coins cannot now be traced but fortunately some of the finds still survive in the museum. Most important of these are the human bones which were at the bottom of the pit 'below everything else' — including presumably all the coins. On examination the bones proved to be of considerable interest. The two bones are consistent in size and appear to belong to the same individual. This person was probably a female who was only 4 ft 9 in tall, between 29 and 57 years old, and had survived a severe head injury. The presence of the femur in such close proximity to the skull indicates that the bones could not have been part of an extended inhumation in the ?timber vault EF247. The absence of the mandible indicates that by the time of burial in the pit most if not all of the soft tissue of the body must have decayed.

Dr John Davies's analysis of the coins from the pit indicates that they are similar as a group to the coins from the area of the church as a whole (see below). Thus, despite the large number concerned, the coins are best interpreted as residual content in the pit's backfill and thus as a sample of the coinage lying

around the church when the pit was backfilled. They should be seen as an indicator of the density of the coins which the site contained by the end of the life of the building. Similarly the bird bone referred to above by Hull presumably can be interpreted in the same way since the animal bone from the site generally has an exceptionally high proportion of bird bone (see p 178-180). Nevertheless, the other finds in the pit seem to have been rather too numerous and large to be explicable as of residual origin in such a small pit. Might some of the large finds have been deliberate deposits?

Three explanations can be put forward, of which the first seems the most likely:

- 1) The pit was of one phase and was dug in the 5th century to bury the skull and femur in a part of the building which despite its ruinous state was still recognised as having religious significance. All the finds in it are residual and Hull was in error about the earliest coins being at the bottom.
- 2) The pit was of at least two phases. It was originally dug for the burial of the skull and femur perhaps as early as the late 2nd to mid 3rd century. Much later, after the building became derelict in the 5th century, the pit was either partly dug out or, more likely, another was dug into it possibly by persons looking for spoil. (The lead sheet in the backfill of the pit EF126 indicates that the stripping of the building for useful materials did involve the digging of pits.)
- 3) The pit was of one phase and equivalent to the second phase described above but that the skull, femur and at least some of the earliest coins were in the south end of the ?timber vault EF247 which Hull mistakenly took to be part of his pit.

Building 140

[Figs 3.15-16]

West of the church were the remains of a small utilitarian building of some kind (Figs 3.3 & 3.15). The remains consisted mainly of a group of about 20 small pits centred around a rectangular hearth. The pits varied in depth from 11 to 68 cm. The northern pits tended to be shallower than the others but they had been truncated by the post-Roman erosion which was more acute in the northern part of the site. Some of the pits formed lines suggesting that they had held the bases of posts for the walls of an irregularly-laid out building. The possible lines are as follows: EF53-EF44-EF43-EF42, EF86-EF83-EF78-EF84, EF81-EF45-EF61, & EF78-EF38-EF60-EF61-EF79-EF73a. The hearth was 1.1 m wide, at least 1.3 m long, and consisted of two to three roughly-coursed broken tile set in daub (Figs 3.15-16). The fire had clearly been concentrated at the centre of the hearth because

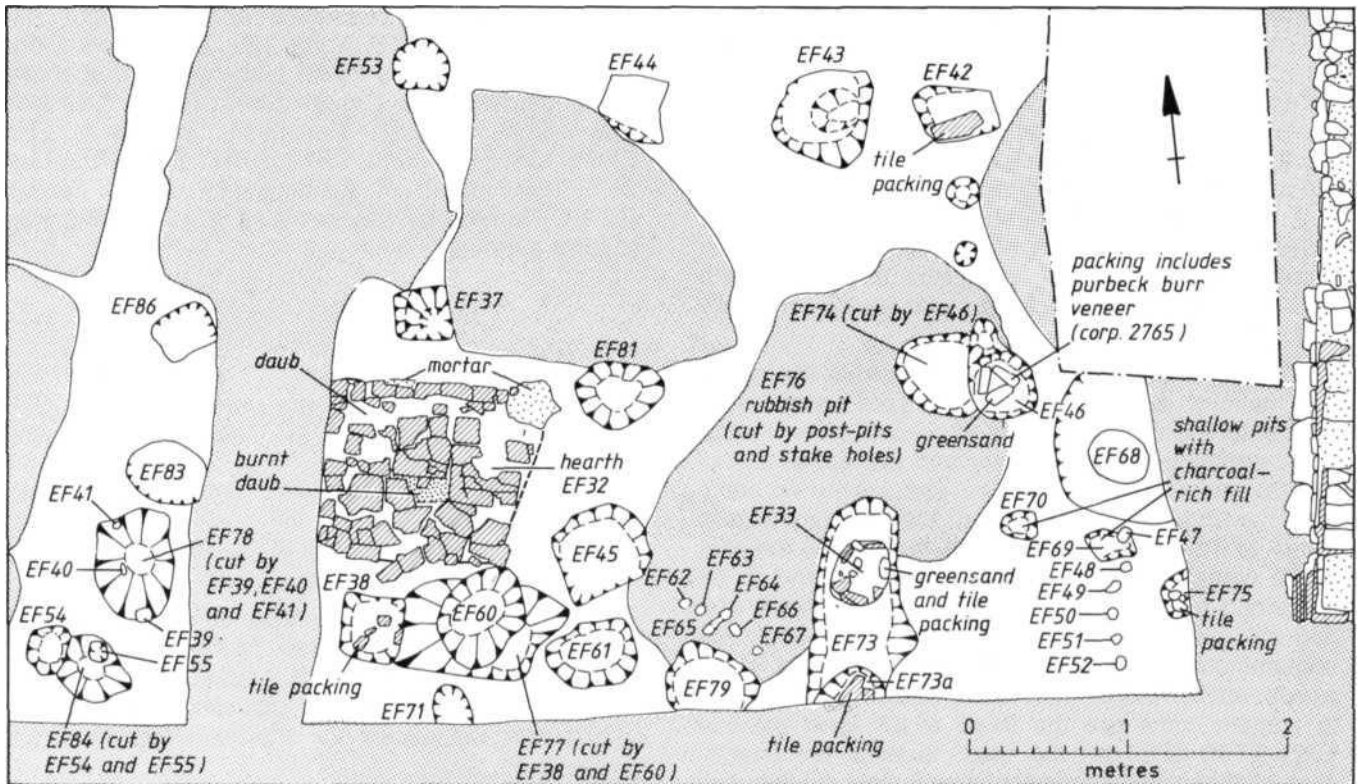


Fig 3.15 Detailed plan showing the remains of Building 140. 1:48. [Pages 176-8]

towards the middle the tile and daub were burnt and the tiles were cracked. The body of the hearth contained two coins (issued 324-30 & 330-5) indicating that it must have been altered (but not necessarily built) after 330. Also associated with the building were three groups of stake holes (EF47-52, EF62-7, & EF39-41).

The pits cut into a layer of sandy clay loam make-up (EL32) which almost everywhere overlay the natural sand apart from where it sealed a large pit (EF76). The pit EF76 was cut by several of the small pits (namely EF74, EF46, EF73, EF79, & EF45).

Also cutting into the dump were five pits with charcoal-rich fill (EF68-70, EF72, & EF78) of which two (EF68-69) contained a few small pieces of burnt bone of indeterminate type. These were early in the sequence of features associated with Building 140 because one of the pits (EF72) was sealed by the hearth, and two others (EF69 & EF78) were cut by some of the stake holes. The pits ranged in depth from 6 cm (EF69) to 78 cm (EF78).

There was no evidence that the walls had been plastered and nor was there any evidence to indicate the character of the roof. The fragments of tile in the destruction debris could have derived from the roof of the church or from internal features such as the hearth.

The building had been altered several times. Some of



Fig 3.16 The hearth EF32 in Building 140, from the west. [Pages 176-8]

the pits were themselves replacements for earlier pits which they cut (ie EF38 & EF60 cut EF77, EF33 & EF73a cut EF73, EF46 cut EF74 & EF54 cut EF84). Also there were two clusters of stake holes of which at least two seemed to post-date the post-pits, ie EF54-5/EF39-40 & EF62-7 & EF47-52.

Sealing the remains was an accumulation of deposits which post-dated the end of the building. These can be seen broadly as being divisible into two groups (EL10/EL13 & EL16/EL22/EL23/EL27). Both consisted of brown sandy loam mixed with many pieces of tile and some fragments of mortar. The uppermost group (EL10/EL13), which had been badly affected by the actions of roots and worms, merged with the lower one and was distinguishable from it mainly by the presence of post-Roman pottery sherds. The lower group was itself hard to distinguish from the hearth EF32. Many coins came from these layers especially EL13 and EL16.

The principle dating evidence comes from the coins. The make-up layer (EL32) contained pottery of 3rd- to 4th-century date and a coin of 335-45. The hearth EF32 contained similar pottery and two coins, one of 324-30 and the other of 330-5. There were no coins from the underlying pit EF76 but the pottery points to a 3rd- to 4th-century date for this feature. Of the pits, EF73 contained 3rd-century or later pottery. EF61 contained a coin of 335-7, EF38 coins of 345-8 and 330-45, and EF37 a coin of 350-60 (but might be contaminated with post-Roman material). In other words, apart from EF37 and the hearth, the only pits to contain coins are the three which form the line EF38-EF60-EF61 on the south side of the hearth. Two of these are secondary since they cut into the earlier pit EF77. The overlying destruction debris contained a large number of coins, the latest of which was issued 388-402 (E349). There were no finds from the small pits with charcoal-rich fill apart from the few fragments of burnt bone.

Thus the coin evidence provides a *terminus post quem* of 335 for the construction of the building and the presence of the coin in the hearth and make-up (EL32) suggests that the building was built *after* the start of the period of greatly heightened coin loss (ie c 330). A date of c 335-50 seems appropriate for its construction and a date of some time after 388 for its destruction or abandonment.

The small pits with the charcoal-rich fill are unlikely to have been the remains of human cremations. The amounts of bone were too small and, in any case, being 4th century they would have been unusually late.

Post-Roman features and other remains

[Fig 3.17]

There is no evidence to suggest much activity on the site between the end of the Roman period and the 19th century apart from the early robbing of the church which, although without clear dating evidence, could have been early Anglo-Saxon.

The post-Roman features (Fig 3.17) consist mainly of the following: recently-dug pits for planting young trees (eg EF2, EF14, EF114/127/129), 19th or 20th century robber trenches for the foundations of the

church (EF20-5, EF183, & EF208), 19th-century sand pit (EF184), various small 19th- and 20th-century pits especially south of Building 139, brick foundations and ?soft water tanks for an 19th-century outbuilding in the garden of 22 Crouch Street (EF34 & EF249) and archaeological trenches (including EF3, EF4/8/135, EF6, EF10, EF12, EF16, EF18, EF173-4, & EF186). South of Building 139 was a feature (EF132) formed by two trenches dug at right-angles to form a cross.

Finds

The animal bone

[Fig 3.18]

The animal bone has been reported on by Rosemary Luff in her analysis of the faunal remains from excavations in Colchester 1971-85 (*CAR 12*). We are indebted to her for kindly providing the help and information necessary for the following note and Figure 3.18.

Rosemary Luff points to the Butt Road Site E material as being anomalous because a) the proportion of bone of domestic fowl (*Gallus Gallus domesticus*) is exceptionally high (49 per cent; *CAR 12*, 83), b) the remains suggest that the bird carcasses were complete on site, and c) the birds were on average much larger than occurred elsewhere. She concludes that the birds were being butchered and consumed on the site (*CAR 12*, 87 & 97).

At Culver Street the proportion of chicken was only 5 per cent (Fig 3.18). Since the sample size here is large and drawn from widely-spread sub-sites, this is likely to represent a broadly-typical figure for a town-centre site. By contrast, the figure for the rest of Butt Road is exceptionally low, being only 1 per cent. Out of the all the other sites examined, the only other site to produce a high proportion of bird bone was the Gilberd School where, in Period 2, the proportion of domestic fowl reached 25 per cent and the proportion of other birds (mainly goose and mallard) was higher than anywhere else, Butt Road included. The later Gilberd School Roman deposits show comparatively high levels of bird bone but this probably reflects the presence of residual material of Period 2.

In an analysis of the surviving skeletal elements of chicken, it was found that, unlike any other site, the wing and leg bones at Butt Road Site E occur in approximately equal numbers thus suggesting that the birds were complete when brought to the site (*CAR 12*, 85-6, figs 5.1-5.4). Other bones such as skulls and clavicles are under-represented but this, it is felt, is to be explained by their more fragile nature.

The exceptional size of the Butt Road birds is indicated in a study of the distal lengths and distal widths of chicken tarsometatarsi (*CAR 12*, 97).

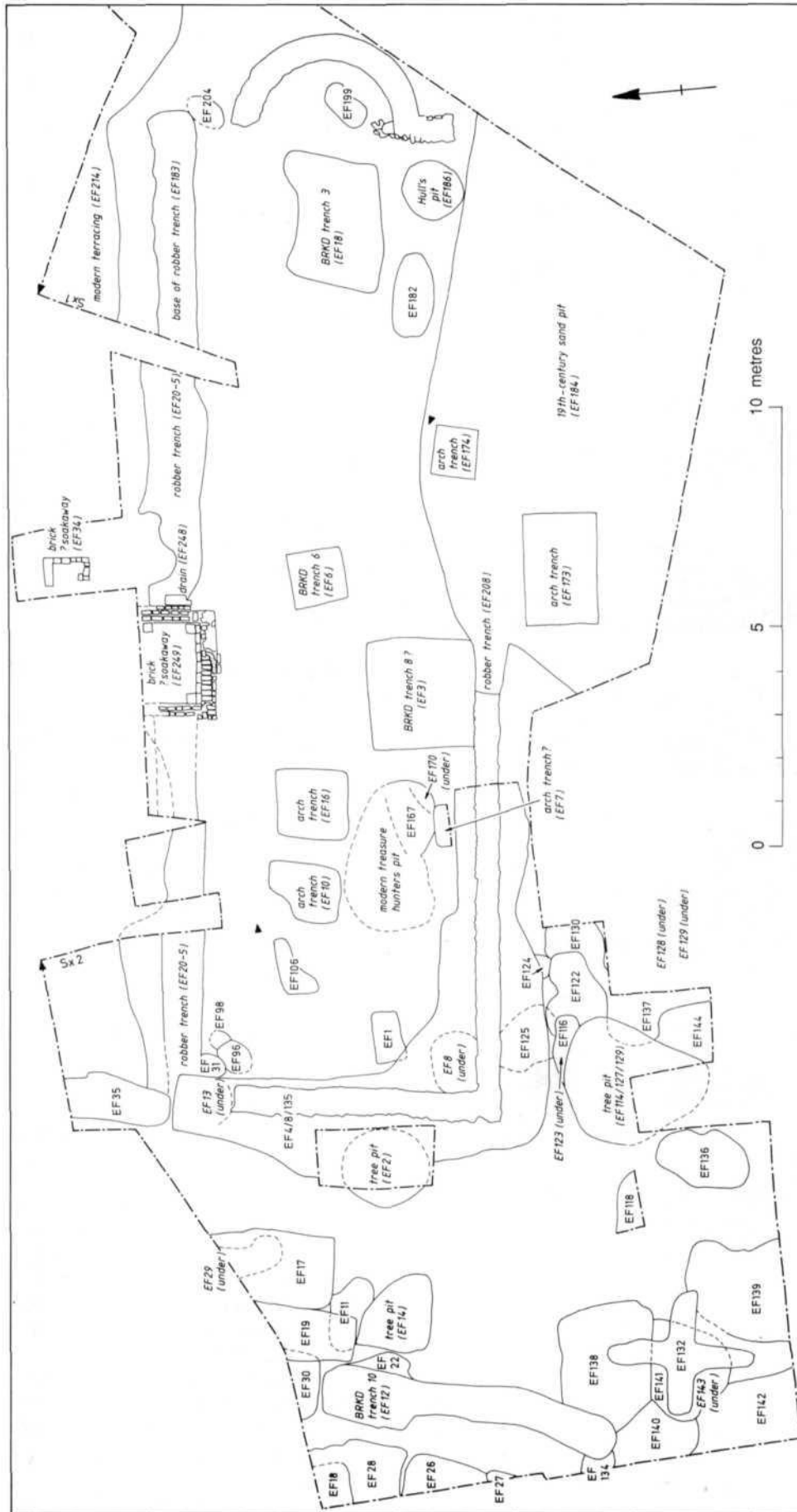


Fig 3.17 Plan of the post-Roman features on Site E. 1:142. [Page 178]

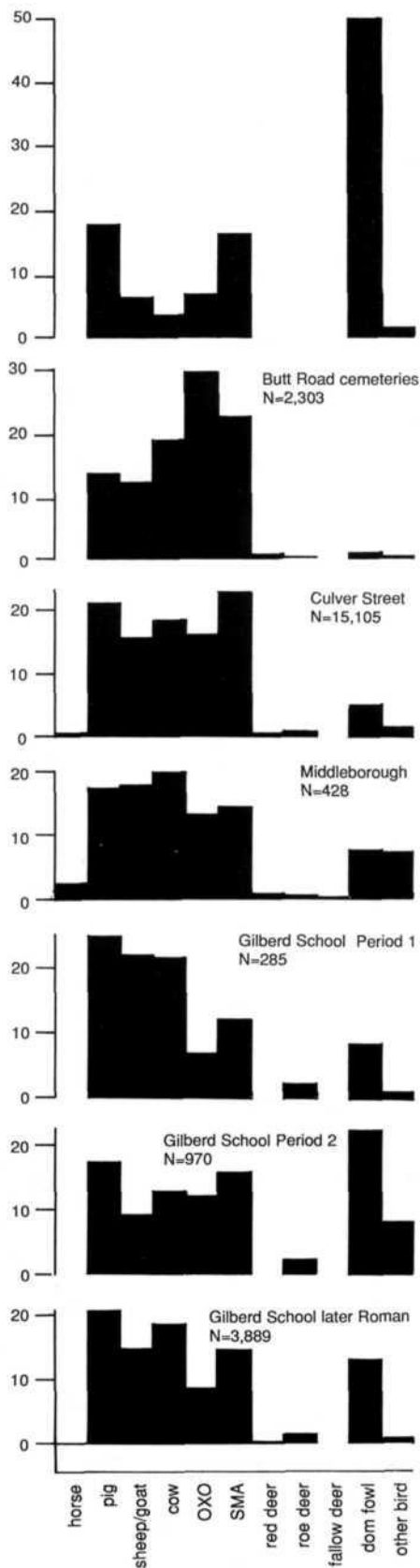


Fig 3.18 The proportions of the different species of animals represented on Site E (the church) compared with those from the rest of the Butt Road site and selected sites elsewhere in Colchester. OXO and SMA refer to unidentified large and small mammals resp. [Pages 178 & 180]

Young pig may also have been consumed in exceptional numbers on site. In contrast to elsewhere, pig at Butt Road Site E was much the commonest mammal represented in the bone assemblage (Fig 3.18; CAR 12, 45-6, fig 3.17) and the bones were generally more porous suggesting a higher proportion of immature animals.

The Butt Road mammalian bone was highly fragmented compared with elsewhere whereas the reverse was true for the avian bone (CAR 12, 45).

Coins from Site E and "Hull's pit"

by John A Davies

[Figs 3.19-20; Appendix 4, microfiche pp 989-1024]

A sizable group of coins was excavated in 1935 by M R Hull, from within the area of the Butt Road site. They come from a pit which had been dug into or above the south end of a timber vault grave south of the apse at the east end of the church. The coins are no longer available for study but a catalogue has been compiled from Hull's original identifications and notes (Hull 1958, 245-7). There were 186 Roman coins together with a silver medallion of Constantine II (317-40). They were recovered from throughout the pit fill possibly with some of the earliest issues lower down (p176).

A summary list of the coins from Hull's pit is provided in Appendix 4 (microfiche pp 989-1024) and expressed as a histogram in Figure 3.19. The values from the recent Butt Road excavations on Site E (the church site) are shown for comparison and also given in Appendix 4. The latter group is much larger, numbering 515 closely identifiable Roman coins. The results of the comparison are interesting. The two groups show a close correlation with a very similar pattern of loss. In particular, the Periods X and XI (259-94) saw low deposition. Hull did not identify barbarous radiates in his notes and it is likely that one or two of his Period X (259-75) coins belong to Period XI (275-94) which would make the pattern even more similar to the larger group. Loss in Period XIIIa (317-30) was very low, followed by very high loss in XIIIb (330-48). Both graphs and percentages are particularly closely comparable from Period XIIIb through to XVI (388-402).

Reece has distinguished different categories of site by their patterns of coin loss in the later Roman period (Reece 1979). Figure 3.20 shows site values of later 4th century coins (330-402) against those of the late 3rd century (259-94). The values have been plotted for over 50 Romano-British coin lists from sites of different function. The close association of the two assemblages from Butt Road in that diagram is striking and is remarkably similar even when compared to other Colchester sites. It must be concluded that Hull's pit group cannot be separated in statistical terms from the more recent site finds from the surrounding area.

It is unusual to find so large a number of site finds from a single excavated feature. Is it possible that this group contains elements of a votive deposit?

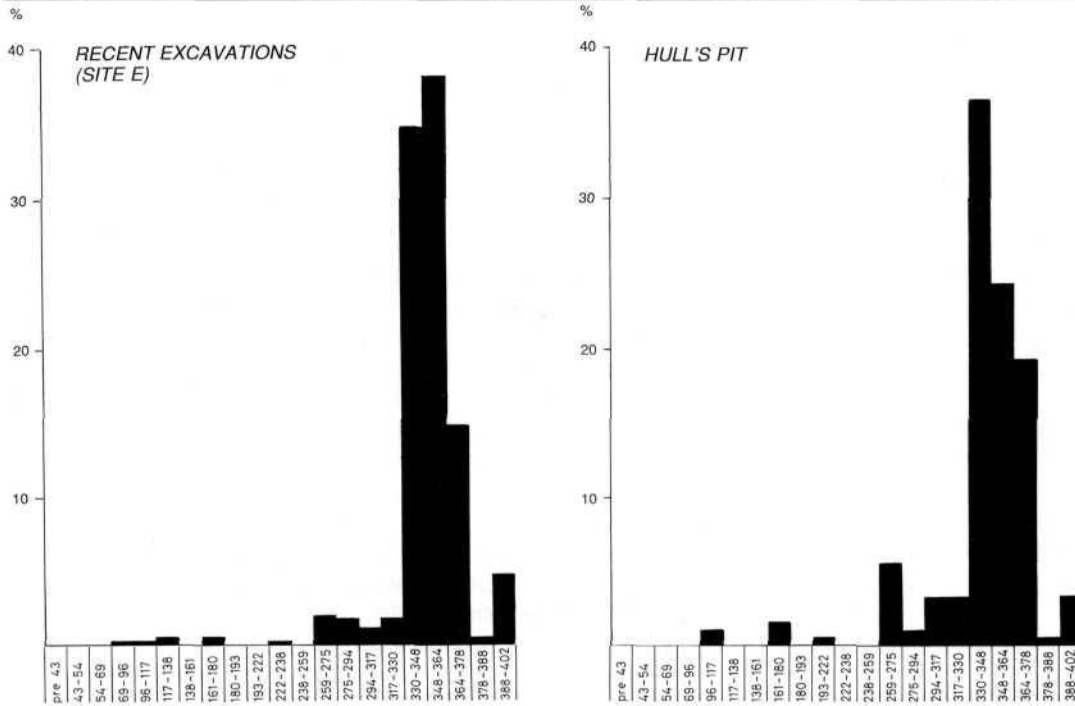


Fig 3.19 Comparison of the coins from Hull's pit and the recent excavations on Site E. [Pages 180-2]

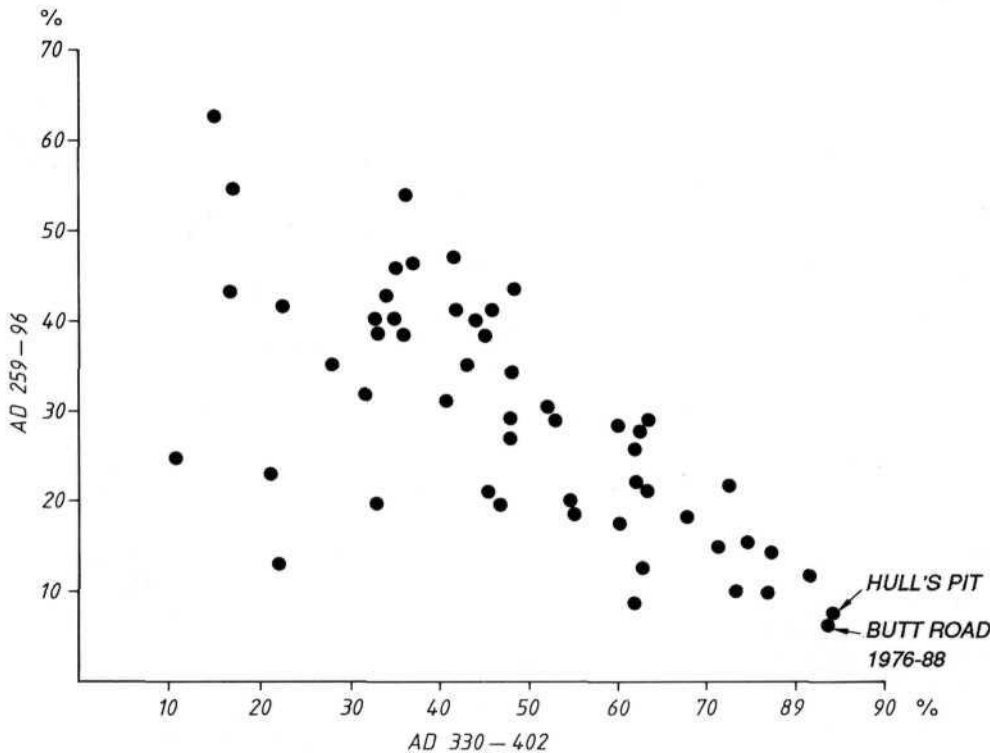


Fig 3.20 Comparison of the coins from Hull's pit, the most recent excavations (ie 1976-9 & 1988), and other Romano-British sites according to Reece 1979. [Pages 180-2]

Although there is little comparative evidence from votive sites, the coin groups from such deposits at the sacred spring at Bath and from Coventina's Well exhibit patterns which differ from the normal pattern of loss associated with Romano-British sites (Davies 1990). Hull's pit group does not show any similarities with these known votive deposits.

Could it be that a hoard or hoards were present either in the pit or more generally dispersed across the site? With the exception of the silver medallion, the range of types present and the mints represented are

consistent with site finds and many issues suffered from heavy wear, which is less likely to have been the case with hoard finds. Hull identified a number of 4th-century imitations of reduced module, of which 32 were FEL TEMP REPARATIO, falling horsemen', copies of the years 354-64. It is possible that a number of these could have been grave goods, as was the case in the Period 2 cemetery. Alternatively, some may have come from a dispersed hoard. However, their number is not abnormally large for site finds and Reece identified a similar proportion among the more recent Butt Road coins, which mainly came

from 5th-century destruction debris contexts.

Despite the large size of the assemblage and its association with a grave, the coins from Hull's pit are best interpreted as part of the overall site loss, alongside the more recently excavated coins from the surrounding area. If some of the coins do comprise a votive or hoard element or were grave goods, such coins would have accounted for a very minor portion of the group.

The main feature of the Site E assemblage is the high percentage of later 4th-century coin. The increase in coin loss after 330 is particularly significant and issues dated after this account for 87 per cent of the entire group. This pattern is consistent with a dating of the first phase of the church to between 320-40. The coin loss from the Site E and Hull's pit groups both suggest that this would have begun in the years just prior to 330, with major activity beginning from c 330 onwards. •

The skull and femur from "Hull's pit"

by Stephanie Pinter-Bellows

[Fig 3.21]

The skeleton from the pit excavated in the apse of the Butt Road church consists of a left femur and incomplete calvarium. Both bones are estimated to be of the same gender, and it is possible for them to be from the same individual. Assuming that both bones are from the same individual, the following picture can be drawn. This individual is female and was a young to middle-aged adult at the time of death (29-57 years). She was of a short stature, being only 4 ft 9 in; but there are no signs of severe chronic malnutrition having been part of the cause. She was quite muscular and extrapolating from the two bones present, healthy. She has a completely-healed closed depressed fracture on the right parietal.

Inventory and condition

The skeleton consists of a left femur, missing the head and an incomplete calvarium including a nearly complete frontal, incomplete left and right nasal bones, complete right parietal, incomplete left parietal, incomplete right sphenoid, incomplete right temporal, and incomplete occipital. Both bones are in good condition, though they show signs of weathering on external surfaces.

Sexing

In interpreting the sex assessment of this individual it is necessary to remember that the structural features being evaluated are being correlated with robusticity and size, as opposed to the pelvis where differences are associated with reproduction. The physical characteristics have ranges that overlap for the two sexes. Therefore, the sex of this individual cannot be assessed with 100 per cent certainty. The gender characteristics of the skeleton was established

following the criteria and procedures presented in Bass 1971, Brothwell 1972, Di Bennardo and Taylor 1979, Stewart 1979, and the Workshop of European Anthropologists 1980.

Calvarium. The supraorbital tori are small and not very prominent. The upper edges of the eye orbits are sharp. The frontal and parietals have retained their bossing and they are rounded and relatively large. The mastoid processes are small to medium. The posterior end of the zygomatic process ends without crest before the external auditory meatus. All of these features are characteristic of the female. This suite of features is considered to give a correct gender identification 80 per cent of the time (St Hoyme & Iscan 1989; Buikstra & Mielke 1985).

Femur. Gender was determined by the midshaft circumference. The femur has a midshaft circumference of 80 mm. This is well within the range of the female; specimens with a circumference of less than 86 mm are designated as female. This discriminant function is considered to give a correct gender identification 82-84 per cent of the time (Di Bennardo & Taylor 1979; Iscan & Miller-Shaivitz 1984).

Aging

To estimate accurately the age of an individual it is necessary to be able to analyse a variety of indicators located throughout the skeleton; no single skeletal indicator of age at death is ever likely to reflect accurately the many factors which accumulate with chronological age. Even then recent studies have shown that adults do not mature and degenerate at a constant rate (Iscan & Loth 1989; Cox 1989). The skull, in particular, exhibits very large variability in rate of closure of the sutures.

Calvarium. Endocranial suture rating following Acsadi and Nemeskeri (1970) gave an age range of 29-57, with a mean of 43 years at death. Ectocranial suture rating following Meindl and Lovejoy (1985) gave an age range of 33-57, with a mean of 45 years at death. However, it must be kept in mind that this aging technique is considered to give the age at death only 53 per cent of the time when used by itself (Lovejoy *et al* 1985).

Femur. The femur has a fused distal epiphysis showing that the individual was older than 18. There is, however, no sign of any degenerative osteoarthritis thus showing that extreme usage and/or extreme age has not taken place.

Measurements

Calvarium. Several measurements were possible in this case:

Maximum cranial length (Glabella-Opisthocranium)	167 mm
Maximum cranial breadth (Euryon-Euryon)	123 mm
Minimum frontal breadth (Frontotemporale-Frontotemporale)	87 mm
Auricular height (Porion-Bregma)	117 mm

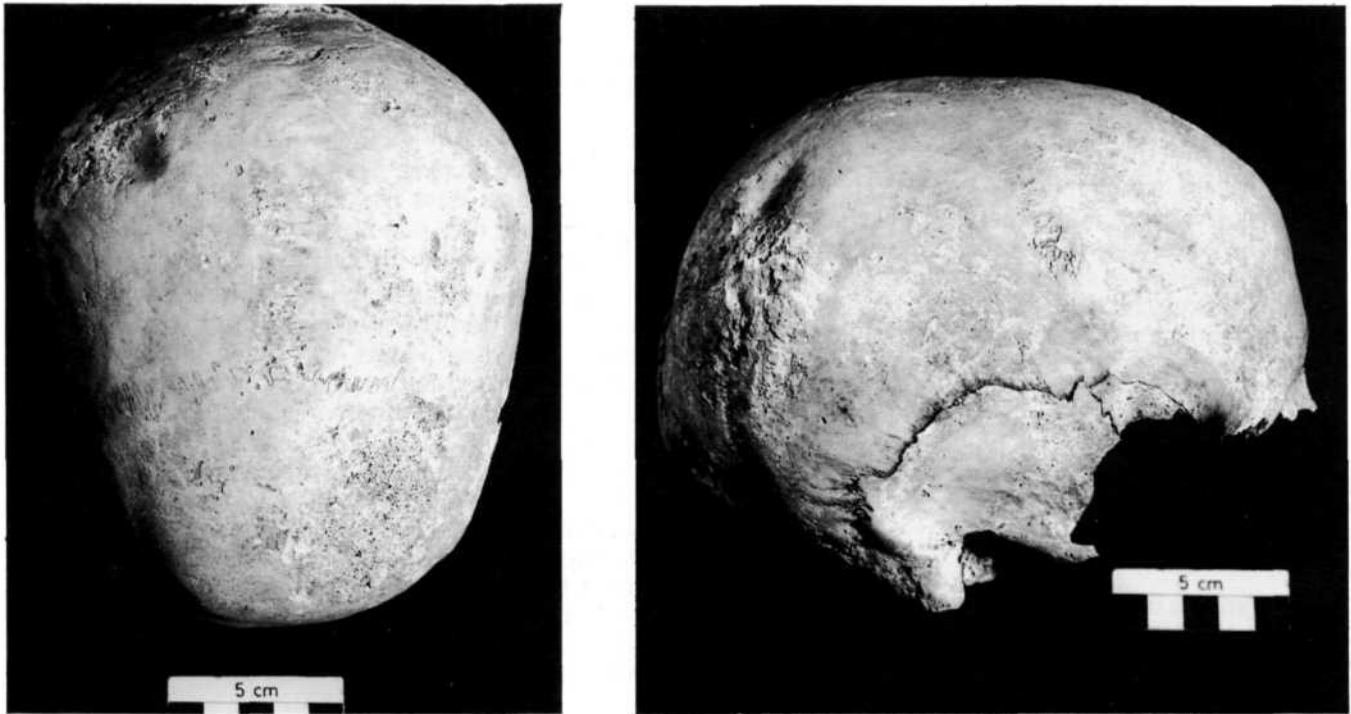


Fig 3.21 The calvarium found by M R Hull at the bottom of EF186 ("Hull's pir") in 1935. [Pages 182-4]

From the maximum cranial length and breadth it was possible to calculate the cephalic index for this individual. The cephalic index was dolichocephalic (73.6), a quite normal index.

Femur. The following measurements were taken:

Midpoint of the lesser trochanter to the most proximal extension of the popliteal surface	168 mm
The most proximal extension of the popliteal surface to the most proximal point of the intercondylar fossa	118 mm
The most proximal point of the intercondylar fossa to the most distal point of the medial condyle	36 mm
Anteroposterior subtrochanteric diameter	22 mm
Transverse subtrochanteric diameter	32 mm
Circumference at midshaft	80 mm
Anteroposterior diameter	24 mm
Transverse diameter	27 mm
Epicondylar width	75 mm

While the head of the femur is missing, from the first three measurements an estimation of stature can be calculated following Steele (1970) and Trotter (1970). This female had a stature of 4 ft 9 in \pm 1.5 in (147.99 \pm 3.72 cm). The average stature of females from this time period ranged from 5 ft 1 in to 5 ft 2.5 in, which is the current world-wide average for females (Wells 1969). Today, using the same averages, any female who is under 5 ft would be regarded as short. However, to be considered a 'dwarf' a female would need to be under 4 ft. Nor do any of the proportions of the femur suggest any hormonal abnormality. An individual's stature is the sum of a complex interaction

of genetic background, diet and developmental stress. Exactly how these three factors combined in the case of this individual can not be known. The muscle development on the femur (described below) discounts severe chronic starvation having taken place in this case.

Using the anteroposterior subtrochanteric diameter and the transverse subtrochanteric diameter, the femur shaft index (platymetric index) can be calculated. The index for this female is 71.87, which makes her platymetric. The flattening of the upper one-third of the thigh bone is found in populations of this period and earlier and has been attributed variously to habitual or nutritional factors (Brothwell 1972).

Pathologies and other observations

Calvarium. There is a healed closed depressed fracture on the right parietal, slightly medial of the parietal boss. The depression is 21 mm by 19 mm by 3 mm and is completely healed. The corresponding area on the inner table of the skull is slightly convex, though there is no evidence of blood pooling or pressure. The wound is known to be closed (ie having no connection between the outer skin surface and the fractured bone) because there is no sign of any osteomyelitic bone or osteitic pitting or irregularity of bone surface around the fracture site. Skull injuries most often represent intentional blows (Manchester 1983). The parietal is the second most common site for skull injuries during this time period (Manchester 1983). A study of types of injury related to skull region

found that depressed fractures were always located on the right parietal, obviously having something to do with how mace-like objects are used (Strouhal & Jungwirth 1980).

There are no signs of the anaemias sometimes associated with malnutrition.

Femur. While the femur is small, it is very well muscled. The gluteal tuberosity is a well developed crest. The linea aspera has enlarged to form a solid ridge (the pilaster of Broca) in the middle third of the shaft; this area represents the attachment sites of powerful adductor muscles. There is no sign of any osteoarthritis. •

Two fragments of lead sheet

[Figs 3.22-3]

Two fragments of lead sheet were in the backfill of the Phase 3 post-pit EF126. Each consisted of a corner of a larger sheet which had been cut into pieces with a pair of shears with the intention of removing the lead from the site for reuse. Measured flat, the two pieces are 72 x 40 and 48 x 47 cm. They presumably belong to the same sheet although, since none of the cut edges fit together, either the two pieces come from opposite corners or the original sheet was much bigger than the two pieces combined side by side would indicate. The fragments suggest that the original sheet measured at least 120 x 90 cm.

More fragments of sheet may have lain in the pit but unfortunately the site was looted one night by visitors who dug a large hole cutting into EF126 and EF167. They probably detected the presence of the lead with a metal detector which is why they chose this spot.

The uncut edges of the lead sheets each had a small rectangular bead on one side with a shallow longitudinal groove along its centre. There were no original folds in the lead nor were there any traces of any solder on the beaded edges to indicate a joint. There was no indication of any decoration or script but a thin line parallel to the sides had been scored on the lead and there was a row of three iron rivets at 45 degrees to the side. There was a gap of up to 2 mm between the underside of the rivet-heads and the surface of the lead where some a thin sheet of some kind seems to have been held in place.

The sheet was roughly folded before being cut up. The outer edges of each piece were brought up by hammering on the outer side with a blunt heavy tool. The marks of the tool show on the outer side of the lead as shallow depressions which do not extend past the folds. As the sides were being bent over, the corners were pinched together by repeated blows until they formed little flaps which were themselves bent over. When the edges had been folded so that they were at right angles to the base, the sheet was cut up with shears. The underside of one of the sheets was covered with incisions made by stabbing the lead with one of the blades of the shears. The

incisions clearly have no practical value and have the appearance of being the product of frustration or anger. There need be no great significance in these marks — perhaps it was only that the shears broke before the work could be finished? Why the lead should have been cut up in this way and then all of it not removed from the site is a also puzzle. Perhaps the fragments were buried in the pit for safe-keeping by someone who intended to come back and collect them but never did.

The purpose of the original lead sheet is unclear. It was almost certainly not part of the lining of a lead coffin. The sheet would have been too big unless it had been folded for the sides and bottom of a coffin which it clearly had not been. Could it have been part of the side of a lead tank of the sort which are associated with churches elsewhere (p 199; Watts 1991, 158-73)? These are made by soldering the narrow ends of a long sheet of lead together to form a narrow cylinder which is then soldered to a circular sheet to form the base. But these tanks are usually decorated and there was no sign that any of the sides of the lead sheet from Butt Road had been soldered.

Lamps

Five complete oil lamps were found on the Butt Road site all from Site E. Three 'rosette' lamps {CAR 2, 79-80, fig 83}, two almost identical and the third smaller but of similar design, lay in the 'destruction' debris (EL46b) overlying the western half of the remains of the church. They lay in a cluster in a spot adjacent to the southern edge of the robber trench EF21. These are of unusual design without known parallel outside Colchester and are likely to date to the late 3rd or early 4th century. (The context of these lamps has been reassessed since the publication of CAR 2 but the discussion there still holds good.)

Two other lamps lay on the site of Building 140. Both were roughly-made factory lamps (CAR 2, 78, fig 82). One was in the make-up for Building 140 (EL32) and the other in a post-Roman layer (EL13) comprised of a mixture of topsoil and destruction debris.

In the pre-Flavian period in Colchester lamps occur as grave goods (see Table 8.1, p 268), and both picture and open lamps of the same date are common site finds. However, the total number of Flavian and 2nd-century factory lamps recovered from the town is small, especially compared to that from London. A few complete late Roman lamps have been recovered (eg CAR 2, fig 82, 2100, 2105-6), but the group from Butt Road is undoubtedly remarkable. No human remains, disturbed or otherwise, lay in the vicinity of any these lamps to suggest that these had been grave goods. The occurrence of five examples in such a small area suggests that the church probably contained many lamps although, in this case, the number of lamp fragments is not high as might be expected. The occurrence of a lamp in the make-up



Fig 3.22 Two fragments of lead sheet in the backfill of the pit EF126. [Page 184]



Fig 3.23 The two fragments of lead sheet. Approximate scale of sheet 1:6. [Page 184]

of Building 140 is evidence which suggests that the construction of this structure is later than that of the church.

Architectural fragments

by Nina Crummy

Nine fragments of decorative veneers, granite, marble and Purbeck marble, came from the area of the cemetery. Some were from Period 1 contexts, others in Period 2 grave fill, and two were in post-medieval topsoil. None is likely to have derived from the cemetery church.

The building stone from the area of the church forms a highly distinctive group, consisting of a thick fragment of Purbeck burr veneer from the 4th- or 5th-century post-pit, F46, and three pieces from 5th-century destruction debris, two also thickish fragments of Purbeck burr, and one of a shelly limestone, also probably from the Purbeck beds. The slab from Hull's pit is also Purbeck burr. Measuring 685 by 585 mm, and varying from 130 to 205 mm thick, it is by far the largest piece of stone from the site, and also the only one to show any architectural detail. Both faces are rough, but a string course has been cut along part of one long edge, and another along one short edge. This implies that the slab was set at an external corner with both those edges displayed. The recovery of shelly Purbeck limestones from the area of the church when no such material was included in the foundations and is rare from elsewhere in the town suggests that it was brought to the site specifically for use in the above-ground walls.

Window glass

Only thirteen fragments of window glass were recovered from the whole of the Butt Road site. All are of cast glass and thus are broadly of 1st- to 3rd-century date. Only two of the group came from Site E, both being residual in post-Roman contexts. Presumably the glass from the church was removed for reuse or recycling — assuming of course that the windows had indeed contained glass rather than the more expensive mica. (The Butt Road glass forms part of the material studied by Hilary Cool and Jennifer Price (CAR 8).)

Small finds

by Nina Crummy

The small finds recovered from the area of the cemetery church (Building 139) are few in number compared both to the rest of the site and, in particular, to the coins from the church. Most derive from the destruction debris of the church, probably dating to

the first half of the 5th century (EL7, EL11, EL16, EL29, EL46, EL70) or the post-Roman mixed layers of debris and topsoil above it (EL6, EL13).

Some of the objects, for example armet fragments (CAR 2, 1690, fig 46, 1714), and finger-rings (*ibid*, 1751, fig 51, 1787), may be disturbed grave goods, or just the general scatter of casually-lost personal items expected on any Roman period site. Others may be associated with the construction or fittings of the church itself, a punch (*ibid*, fig 115, 2980; from the ?grave-pit EF247, pp 173-5) and a bolt from a barb-spring padlock (*ibid*, fig 206, 4694; from the trench EF100, see Fig 3.3).

The assemblage does, however, contain some interesting groups. The collection of lamps and the architectural stone have been discussed elsewhere (p 184 & above), but two other groups deserve attention. One is the later Roman military equipment, a hilt-guard (*ibid*, Fig 159, 4244) and a heart-shaped strap-end (*ibid*, 4252; CAR 1, fig 15, 5) both from the destruction debris of the church (EL11 and EL7 respectively). The other is a group of one bone and three pottery counters (CAR 2, fig 94, 2281, 2388-9, 2435) and two bone dice (*ibid*, fig 102, 2504-5). The bone counters and one die came from destruction debris (EL16, EL46), while one pottery counter was from post-Roman destruction debris/topsoil (EL13). The second die came from the rubble-filled pit EF94). The group seems to indicate that gaming was an important pastime for at least some of the people connected with the cemetery or the church.

Pottery

The Roman pottery from the site is to be included in CAR 10, the monograph devoted to all the Roman pottery from the Colchester excavations between 1971 and 1985. The total amount found on Site E was small (22 kg); the material has been catalogued and listed in the pottery archive according to context, fabric, and form.

Very little post-Roman pottery was found on Site E. Of the 150-200 sherds, less than a quarter date to before c 1500; the earliest piece is of the 10th or 11th century. Layer EL3 was a thick accumulation of topsoil containing only material up to the late 16th century. It sealed the demolition deposits over much of the church, none of which included any post-Roman finds. Like the Roman pottery from Butt Road, the post-Roman pottery is to be included in a monograph devoted to that topic alone (CAR 7).

Clay tobacco pipes

Thirty fragments of clay tobacco pipe were found on Site E, mainly from modern contexts. They date from the 16th century onwards and form part of the corpus dealt with in CAR 5 (47-66).

Interpretation of the chronology and structural remains

[Fig 3.24]

Interpretation is not straightforward but the following is a summary of the well-established key points which need to be considered.

- 1) Some new activity triggered a high level of coin loss on Site E between 320 and 340, if not c 330, which continued until at least c 400.
- 2) There was a Roman masonry building constructed on the spot sometime after the mid 2nd century at the very earliest which was in existence until at least c 400.
- 3) This building was of at least two main structural phases, the subsequent alterations including the addition of an apse at the east end.
- 4) The building also incorporated aisles.
- 5) There were three unusual pits inside the building, near its east end, of which two seemed to incorporate modest structures of timber.
- 6) No human bones survived in any of these pits.
- 7) Whatever these features were and regardless of their relationship to the church, there clearly had been something unusual in the ground at the east end of the building.
- 8) A human skull and femur were buried in a fourth pit close to one of the other three pits.
- 9) Finds from the fourth pit included an unusual iron frying pan, an unusual iron bowl, a complete knife and very many bird bones.
- 10) A comparatively crude timber structure was built west of the site of masonry building no earlier than 335.
- 11) This structure included a hearth.
- 12) The animal bone from the site contained a high proportion of bird and pig bone.
- 13) Although next to a densely-packed contemporary cemetery, there were no graves in the building or on the site of the adjacent timber structure, apart from possibly one or more of the three pits.

Some difficult areas which complicate any interpretation are as follows.

- 1) The masonry building need not have been built at the same time as the timber building, nor indeed when the rate of coin loss increased.
- 2) The relationships are unclear between the three pits one with another and the construction of the building.
- 3) The true character of the three pits is not known: on the one hand, they do not closely resemble any of the graves from the main cemetery but on the other hand, if they were not graves, it is hard to imagine what they were.

However, bearing these reservations in mind, the following interpretation is offered (Fig 3.24).

The first feature on the site of any importance was the pit EF203/7. This was probably a grave containing a timber vault for a single body. The dead person may have been an important local Christian such as a bishop. The date when the grave was dug is unclear. It should be seen as part of either the Period 1 or 2 cemeteries although its orientation does not readily fit the alignments of either category. Probably it was an outlier of the Period 1 cemetery — it might even have predated it and been dug as early as c 200.

Phase 1 of the masonry building was constructed over this grave. Built c330 (and thus of Constantinian date), the building took the form of a roofed rectangular structure which had no internal features. So important was it to position the building in relation to the grave that the north wall and the northern parts of the east and west walls had to be built on made-up ground where subsidence was a possibility which could have been avoided by siting the building a metre or so further south. The existence of the building caused the site to be visited by substantial numbers of people which resulted in a very much heightened level of coin loss. The presence of large quantities of lost coins does not necessarily imply commercial activities although of course this could have been the case. Money would have been needed for alms and to maintain the church and cemetery — the discovery of dice and counters suggests that even gambling could have taken place here.

The building was constructed primarily as a funeral banquet hall. This is a type of funerary structure which has been recognised abroad, Constantinian examples being always rectangular (according to Krautheimer 1965, 30). These were used for memorial services and funeral meals. The high proportions of bird and pig bone from the Period 2 levels at Site E fits in neatly with the proposition that many meals were consumed here. As was the custom elsewhere, the grave E203/7 may have been topped by a funeral banquet table (*mensa*).

Shortly after the construction of the funeral hall, perhaps around the middle of the century, the timber structure was erected to serve as a cook-house. The building underwent various structural changes and appears to have been positioned rather close to the west wall of the church as if the doorway into that building was elsewhere.

At some stage, an apse was added to the east end of the funeral hall and aisles inserted at the east end. The newly-formed nave and apse form a neatly integrated plan so that it is likely that they were constructed as part of the same scheme (Phase 2).

Later still, the nave was extended so as to run the full length of the building (Phase 3). This work was probably accompanied by demolition of parts of the external walls since rubble, apparently from the wall, was used as packing in the post-pits. It is not possible to say if the building ever contained clerestory windows. If it did, they could only have been constructed in Phase 3 when the extension of the nave could have been accompanied by a remodelling of the roof. Had the newly-extended part of the nave

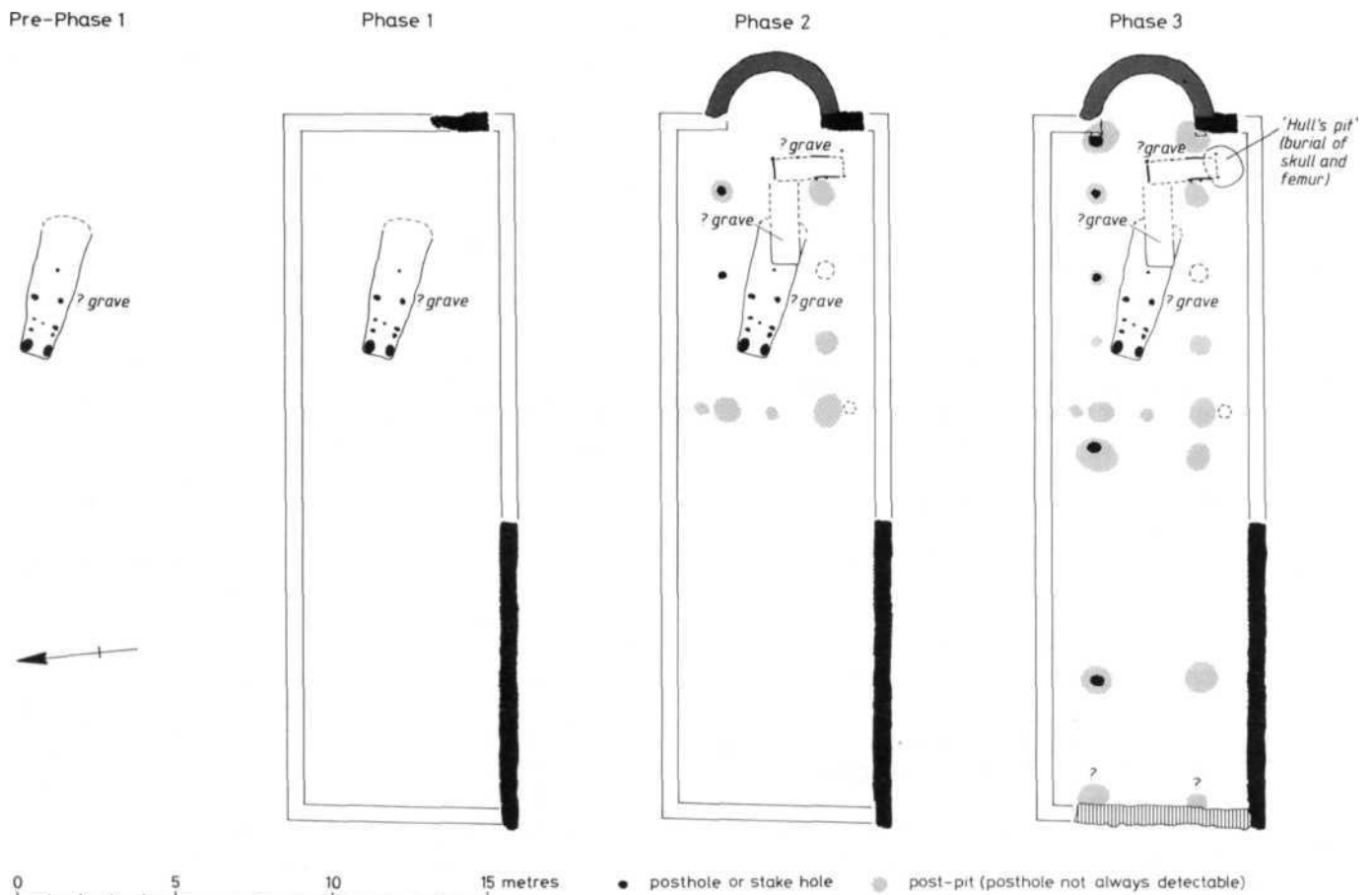


Fig 3.24 Conjectural development of the Butt Road church. 1:240. [Pages 187-9]

incorporated evenly-spaced columns or posts, then most of these must have been on stylobates or had shallow post-pits, the evidence for which has been destroyed.

In terms of church architecture generally, the variety of types of building which characterised much of the 4th century was gradually eliminated so that by c 380 church architecture was dominated by standard types with a nave, apse and two aisles as basic elements (Krautheimer 1965, 68-9). In the absence of any useful internal dating evidence at Butt Road, the construction of Phase 2 could be seen against this background and thus we could tentatively date it fairly late, say late 4th century with the construction of Phase 3, which made the plan more orthodox still, being say c 400.

Two graves were dug into the floor of the church. A timber vault large enough for one body was constructed in the base of one of them. One was placed between the columns and the other on the south side of the central axis of the building. The positioning of the latter may indicate the presence of an above-ground structure lying north of the central axis or that space was deliberately left for the insertion of another

grave to the north at a later date. The order of burial cannot be established and nor can either be attributed specifically to Phase 2 or 3. Phase 3 is tentatively preferred because this places EF247 more centrally between the two columns on either side.

Parts of the northern half of the church, being built on made-up ground, started to subside. The west wall had to be rebuilt as presumably did much of the north wall too. These repairs could have been carried out independently of the changes of Phases 2 and 3 although here they have been linked with Phase 3 (Fig 3.24) because of the rubble used as packing in the new post-pits.

The pottery and coin assemblages from Site E resemble the latest groups from the Roman town generally. Extramural occupation dwindled in Colchester in the late 3rd century and remained minimal for the rest of the life of the Roman town. This shrinking of the occupied suburbs is best explained by the periods of insecurity from the mid to late 3rd century onwards. However as the Butt Road church shows, it would appear that it was still possible to maintain buildings outside the town walls into the 5th century.

A pit was dug near the apse of the church to bury a human skull and femur. These could have been the bones of a relative of the person who buried them but why just two bones and why did the burial happen some considerable time after death? Could these instead have been holy relics? Krautheimer's observation that in the Latin west from c 450 there was an 'increasing inclination to deposit relics in every church' (Krautheimer 1965, 72) is relevant here. The top of the pit was sealed with a large part of a slab of worked stone. This might have been the corner of the top of a tomb in the form of a funeral banquet top, the sort of monument which could have existed over the adjacent graves. The presence of rubble and wall plaster in the backfill of the pit indicates that when the pit was dug the building, if not a ruin, was at least severely dilapidated. The circumstances surrounding the transition of the Roman town into the Anglo-Saxon period are of course obscure but such a scenario would imply that serious degeneration took place outside the walls if not inside while Christianity was still being practised in the area. Alternatively the event could have occurred centuries later following the revival of Christianity in Essex although Hull did not record any post-Roman finds from the pit.

Oddly the pit was not backfilled with the material which had been dug out of it in the first place. Instead the pit was filled in by scraping up material from the immediate surrounding area and thus it contained many of the coins and bones that had been lost or discarded throughout the years when the church was in use. The high number of such finds is presumably a reflection of the fact that the building had a floor of trampled soil and sand rather than a solid one which could have been kept clean. The presence of so much bone does not necessarily indicate that the place was habitually littered with food remains. The quantities which survived probably only represent a tiny fraction of the mountain of scraps which a century or more of meals could have produced. Every thousand burials could imply a thousand funeral meals and thus presumably the consumption of thousands of birds and other animals. Clearly most of the left-overs had been removed in antiquity.

Also in the pit were two unusual iron vessels, namely a frying pan and a large bowl or small cauldron. These, in conjunction with the complete knife, were probably some of the utensils used in the preparation and consumption of the meals. They must have been broken or worn out and discarded in the ruined church. Other vessels would have been used for the meals but these, along with the church plate, must have been removed for safe-keeping by members of the church.

The church was never completely demolished as one operation but by the end of the Roman period it had become a derelict ruin. By this stage, the roof was at least partly missing and at least some of the aisle posts had been taken down. Some of the materials were salvaged including a large flat sheet of lead which had been incorporated somewhere in the

building. The lead was folded up and cut into strips for removal off the site although two of the pieces were buried possibly for safe-keeping down a pit that shortly before had contained the base of one of the Phase 3 aisle posts. Whoever buried the lead never returned to claim it. Little interest was shown in salvaging any of the stone or tile building materials so that the walls of the church were left standing.

In general, the presence of the Butt Road church and the size of its cemetery indicates that there had been a large Christian community in the town. Although the building might have served as a congregational church especially in Phases 2 and 3, there would have been another presumably larger church inside the walls. The latter would have been used for regular service and the focal point for the Christian worship in Colchester.

The presence of the grave EF203/7 at the east end might be taken to indicate that the Butt Road building was a martyrial church. However, unlike martyria elsewhere, there is little suggestion in the distribution of the other graves in the area that there was much desire to be buried close to this special person; at the most there were only the two others buried in the church and no obvious clustering around the outside the building apart from possibly at the east end (Group E, p 92). Indeed the building appears to have stood at the edge of the cemetery if not adjacent to it. Moreover its likely date of construction (c 330) would be unusually early for the cult of martyrs.

Plan analysis of church

[Fig 3.25]

The ratio of length to width of the Phase 1 building was close to three to one. The overall width of the building was intended to be 25 *pes Monetalis* whereas it was 75 pM long plus the width of a wall (Fig 3.25). The nave was 10 pM wide and the apse was accordingly based on a semicircle of 5 pM radius apparently centred on the centre-line of the east wall (Fig 3.25). This much seems fairly certain but otherwise the spacing of the post-pits forming the aisles is rather irregular so that it is only possible to put forward a tentative analysis of the rest of the plan. The columns in the aisles are assumed to have been 1 pM wide (although there is little evidence for this apart from the rather imprecise sizes of the post-pits and postholes) whereas the external walls seem to have been 2 pM across. The best-fit spacing for the columns of the aisles is based on 7.5 pM (Fig 3.25). This dimension is also reflected in the aisles so that in effect the intercolumniation seems to have equalled the width of each aisle plus the width of the external walls.

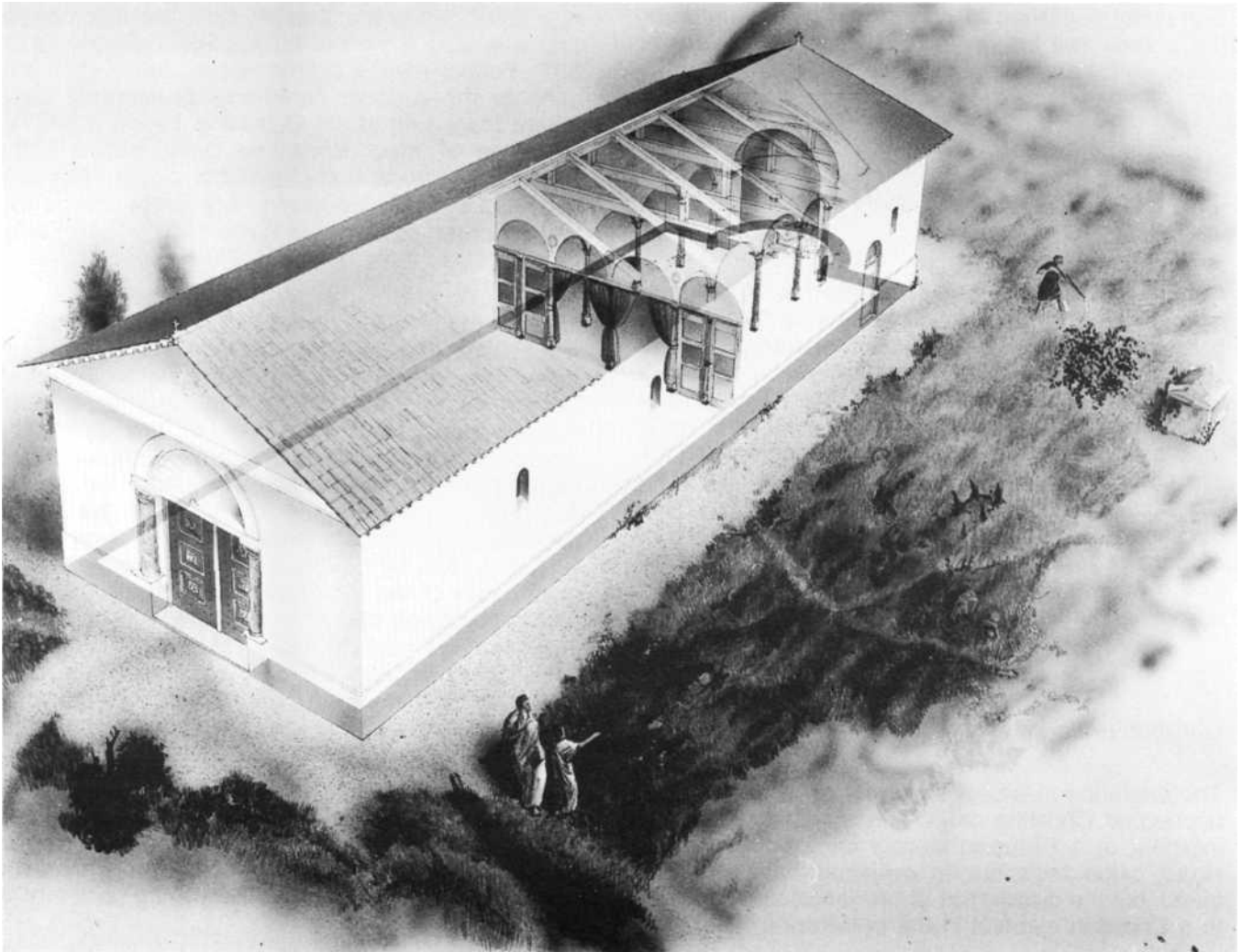
Little emerges by way of a clear pattern for the spacing of the Phase 3 posts. The positions of these



Laying out the remains of the church as a public monument (Fig 3.26) involved much hard and careful work. This was done by Stephen Benfield with the invaluable assistance of Denis Tripp. The cost of the work was borne by the Essex County Council with additional assistance from the Colchester Borough Council. A booklet, *Secrets of the grave*, was produced by the Trust to mark the official opening of the monument. Publication was made possible by a grant from the Environment Committee of the Essex County Council and was considerably improved by Peter Froste's fine reconstruction paintings of the church (one is our Figure 3.27). The support of John Hunter, Dave Buckley, and Debbie Priddy, all of the Essex County Council, played an invaluable role in bringing about the display of the church.

Left: Fig 3.26 The remains of the church shortly before the official opening as a monument in 1989. Viewed from the west.

Below: Fig 3.27 Artist's reconstruction of the Butt Road church Phase 2 viewed from the south-west. Drawn by Peter Froste.



4. AN ASSESSMENT OF THE EVIDENCE FOR CHRISTIANITY AT THE BUTT ROAD SITE

by Dorothy Watts

Introduction

In the light of the evidence presented by the archaeological remains at Butt Road and of other evidence for a Christian presence at Colchester (see below), identification of the site as an extramural Christian cemetery and church must now be seriously considered. When a number of criteria, developed in a study of 4th-century cemeteries and religious structures in Roman Britain (Watts 1991, chaps 3 & 4) are applied to the site, there is every indication that what we have here is a pagan cemetery overlaid by a Christian one, with an associated church possibly serving also as a martyrium. While the various characteristics of the site are not all of the same importance in such identification, their sum makes this interpretation difficult to reject. Although much of the evidence for Christianity now presented has been previously published in conjunction with other sites, the criteria will be reviewed here for the sake of convenience and completeness.

The evidence of the cemeteries

Camulodunum was a long-established and thoroughly Romanised town and, as might be expected, certain presumably Celtic features which one might find in cemeteries in a rural or less Romanised area are absent from both periods of burial at Butt Road. Since the Roman influence was probably greater in burial rites practised at Colchester, various characteristics are common to the two periods; the evidence for Christianity is thus not always conclusive. It has been necessary, therefore, to refer to other sites, a number of them as yet unpublished, in order to develop some of the criteria for a Christian identification (see the acknowledgements below for details of these sites).

Christian evidence in situ

The presence *in situ* of an object or inscription with undoubted Christian connotations would be a clear indicator of a Christian identity for the site. At Butt Road, such indisputable evidence has not been found, but the discoveries of two lead coffins do point to a Christian element in the cemetery (p 123). The

sides of the coffins are decorated with a saltire and circle motif flanking a central panel of scrolls, and the lid bears a zigzag and circle device and pecten shells (pp 123-5, Fig. 2.69).

All the symbols on coffins other than the scrolls may be paralleled in an undoubted Christian context. The cross and circle combination is found along with symbols such as the monogrammatic cross, the dove and the chalice on 4th-century *terra sigillata* from Gaul (Chenet 1941, 109-22). Both this motif and the zigzag and circle have also been found on several Romano-British lead tanks which are believed to have been connected with a form of the baptism ceremony practised in the 4th century (Watts 1991, chap 5.2). A zigzag, along with the Christian monogram of chi-rho, decorates a Roman lamp in the National Museum in Amman, Jordan. The pecten or scallop shell, a device borrowed from pagan funerary symbolism (eg Jessup 1954, pi 13), came to be the sign for St James the Greater, for a Christian pilgrim, and was also a symbol for baptism (Webber 1971, 367). Furthermore, it seems that an actual shell was used in the baptism ceremony, presumably as a patera (canon 48 of the Council of Elvira, c 305). In the eyes of early Christians there was a close connection between baptism and death (*Romans*, 6.4), and symbols decorating baptismal objects are found also on coffins (see Watts 1991, chap 5.2 for examples).

The scrolls present a problem. They may be an imitation of the 'strigil' devices found on many Roman sarcophagi. The earliest known Christian example dates from the end of the 2nd century (Cabrol & Leclercq 1920-53 vol 15.2, col 1693, s v *strigiles*). Further evidence for the use of the device by Christians comes from the epitaph of Eutropus, in the catacomb of St Helena at Rome: here the son of Eutropus, a sculptor, is depicted at his trade, decorating a stone sarcophagus with the strigil device (*ibid*, vol 15.1, fig 10786, s v *sarcophagus*). Yet the significance of the device remains unexplained. The scrolls could, on the other hand, represent not the strigil but the vine, which is also found on many Christian sarcophagi. This interpretation would at least have the merit of identification with a known Christian symbol, the significance of which is appreciated. Further research may clarify the matter.

Despite the problem of the scroll device, there would still seem to be ample grounds for identifying the lead coffins from the Period 2 cemetery at Butt Road as artefacts with Christian symbols. This, it is proposed here, assists with the identification of the cemetery as Christian.

West-east burials

Christians were interred with head to the west at least by the 3rd century, by which time they were also being buried in cemeteries apart from pagans (Hippolytus, *Apostolic Tradition*, 40; Eusebius *Historia Ecclesiastica*, 7.13.1). The burials of the catacombs at Rome, begun in the 2nd century, showed no preference for west-east burial; the 3rd century, however, saw the growth in North Africa of the great Christian cemeteries at Timgad and Tipasa with their west-east burials (often plaster-packed). There is little doubt that, by the 4th century, west-east was the favoured orientation for Christian burial. While not all graves of Christians would have been so orientated (eg the burials around the martyrdom at Salona, in Roman Illyricum (Dyggve 1951, fig 4.3)), for this analysis the distinction has had to be made: only west-east burials are examined in depth as possible Christian sites for comparison with Colchester.

The subject of grave orientation has been much discussed (eg Thomas 1981, 232-4 and references; Kendall 1982; Naess 1970; Ucko 1969-70), and theories advanced for the adoption of the custom by Christians. Undoubtedly, the east had special significance for them: the glory of God is seen in the rising of the sun (*Isaiah*, 59.19)); at the Second Coming, Christ will appear in the east (Matthew, 24.27); in the early baptismal rite, candidates faced the west to renounce the devil (Cyril of Jerusalem, *Mystagogic Catechesis*, 1.4), then turned east to pledge loyalty to Christ (Ambrose, *De mysteriis*, 7). Tertullian (*Apologeticus*, 16) says that Christians turned to the east to pray, but then accuses pagans who do so of sun worship.

While it has been suggested that a west-east burial alignment was adopted at some pagan sites in Britain (eg at Lankhills, Winchester) in the 4th century in response to a sun cult (Macdonald 1979, 425-6), it is likely that, at Butt Road, the shift from north-south to west-east was due to a more radical change in religious belief. Conversion to Christianity seems the logical conclusion. There is considerable evidence that the practices adopted in the Period 2 cemetery at Colchester, as in Cemetery 3 at Poundbury Camp, Dorchester (Green 1967-81), were quite different from those in the cemetery which preceded them; several of these practices, including west-east orientation probably reflected the prevailing Christian belief in a physical resurrection (see below).

Undisturbed burials

A characteristic of the Period 2 cemetery was the careful disposal of bodies so as not to disturb other west-east burials, although there was no such respect for the earlier, north-south burials over which they lay. The Period 1 burials at Butt Road were less dense

than in the later cemetery so it is uncertain if, like Period 2, care was taken to avoid disturbing the earlier burials of that phase.

While it had been a law of the Romans that a tomb dedicated *dis manibus* was inviolate (Gaius, *Institutes*, 2.4-6), an examination of some of the large cemeteries of 4th-century Britain such as Trentholme Drive at York, Bath Gate at Cirencester and Lankhills, Winchester, shows that the law had not been complied with in many instances. Yet there is no doubt that in other cemeteries (and these include ones which are probably Christian) care had been taken not to intersect or disturb earlier burials. That Christians did, in fact, make a point of caring for the graves of the deceased is confirmed by Julian the Apostate (*Ad Arsacium* 429D): he claimed that such treatment of the dead had done much to increase the popularity of Christianity.

This respect for graves, while probably reflecting 'Christian fellowship and piety' (Macdonald 1979, 427), would seem also to have been related to the belief in a physical resurrection, although a close study of the relevant texts indicates that official Church teaching did not, in fact, encompass such a belief. Two texts, one from Eusebius (*Historia Ecclesiastica* 5.1.61-63), the other from Tertullian (*Apologeticus* 37), show only that pagans, by their complete destruction of the physical remains of martyrs, thought that Christians held such a belief. If many early Christians did believe in the resurrection of the actual body interred — this seems very likely, and is borne out by Justin Martyr, whose own beliefs seem confused (*Dialogue* 80, cf 1 *Apologeticus*, 18) — then it was a faulty theology (see also Barnard 1967, 165-6). Cumont (1922, 68-9) observes: '... [Christians], if they no longer had fear of joining shades who wandered on the banks of the Styx, [were] still pursued by the superstitious dread that they would have no part in the resurrection of the flesh if their bodies did not rest in the grave.'

The Period 2 graves at Butt Road were arranged in an orderly fashion; although many grave cuts overlapped, disturbance of burials was largely avoided despite the density of the cemetery. This suggests reliance on grave markers. Possibly there was also a cemetery plan. Given the organisational capacity of the Church by the 4th century, this could readily explain the scarcity of intersected and disturbed burials in the Period 2 cemetery.

Supine and extended position

The same belief of Christians in a physical resurrection would have underlain the practice of carefully burying the body in a supine and extended position. It is best explained by the need of the dead to be in place to rise in immediate response to the reveille of the Last Trumpet (*Corinthians*, 15.22). It may not have been an original contribution to burial ritual by Christians, since the supine and extended

position was generally a feature of Roman inhumations; but positions other than this are also found in presumably pagan contexts before and during the Roman occupation and in post-Roman cemeteries.

The crouched position is typical of Iron Age burials in Britain (Whimster 1981, *passim*), yet in the mainly 4th-century cemetery at Trentholme Drive, York, all the children and most of the juveniles were crouched burials (Wenham 1968, 38). This suggests some sociological or quasi-religious reason or, as in the handful of cases at Bath Gate, Cirencester, perhaps a pathological cause (Wells 1982, 81), or even a return to the earlier, pre-Roman rite. At Lankhills (Clarke 1979), 21 bodies were laid on the left or right side, and some were perhaps sufficiently flexed to be regarded as crouched. They may, in fact, have been very late burials, since the flexed position was found in Anglo-Saxon cemeteries (eg Hirst 1980, fig 14.1b).

Prone burials are, as yet, imperfectly understood. A study by Harman *et al* (1981) of prone and decapitated burials has shown that these practices were found in late Romano-British cemeteries and continued into the Anglo-Saxon period, that they were rather more common in rural than in urban centres, and that both practices might occur in the one cemetery and in the one burial. The increasing frequency with which prone burials have been reported now discredits an interpretation of the practice as an undertaker's error. The practice was fairly widespread: there were prone burials in the late or sub-Roman cemetery at Queensford Farm in the Oxford region (Chambers 1987), and in the 'backyard' burials at Ashton, Northants (Watts, in prep); at Bath Gate, Cirencester, one-third of all female burials were prone (Anderson 1987, 9), as were twelve burials, or 4 per cent in the west-east cemetery at Lankhills (Clarke 1979, 138); at Alington Avenue, Fordington, in Dorset, one prone burial showed evidence of wounds, and this burial had been accompanied by that of a dog (Davies *era*/1986, 107). The reasons suggested for prone burial are that it was 'the final indignity inflicted on a corpse' for personal attributes or past actions or, more likely, that it was associated with some belief in an after-life (Harman *et al* 1981, 168). Christians appear to have taken care in the laying out of the body to have it ready to face east in a sitting or standing position at the Second Coming. The crouched or prone position for inhumations would, therefore, seem to be non-Christian.

At Butt Road, there were no prone or flexed burials in either the Period 1 organised cemetery or in Period 2 within the cemetery boundaries. All were supine and extended. However the remains of two adult males in prone position and an adolescent possibly lying supine were found in G41/G43, an irregularly cut grave located about two metres beyond the southern limit of the Period 2 cemetery (pp 105-6). The skeletons were in an attitude which suggests that the arms and legs had been bound. Although the grave is not aligned with those nearest to it, it is unlikely to have been from Period 1, since it cuts ditch AF152,

which may have been a boundary for the later cemetery. More likely it is contemporaneous with or later than the Period 2 burials. It does not seem to be closely associated with the presumed Christian graves. A parallel may be found with three of the decapitated burials at Poundbury, located beyond the limits of Cemetery 3. At that site, there was probably some significance in their being distanced from the putative Christian burials.

Absence of decapitated burials

There is no evidence in the Period 2 cemetery of mutilation, such as decapitation or the breaking of bones to allow the body to be fitted into the coffin or excavation (cf at Frilford: Bradford & Goodchild 1939). Such treatment of the body would contradict Julian's claim (*see above*) regarding Christians' care of the dead, and also seem to be incompatible with a belief in a physical resurrection.

Decapitation of bodies was a characteristic of cemeteries generally considered pagan. Its occurrence in pre-Christian Ireland (Rafferty 1981, 192) confirms that it was a Celtic, rather than a Roman practice. Since such burials were not found in other cemeteries believed to be Christian, it would seem that the absence of decapitated burials may be seen as a further criterion for the identification of the cemetery as Christian, given the occurrence of other conditions which also suggest this.

There are two sites at Colchester where decapitated burials have been observed. Both are probably pagan in context (p 266; *CAR6*, 323, 377-8). In one instance two decapitated inhumations were found within the walled area of the Roman town whilst the other was 200 m east of the Butt Road site. The latter (discovered 1930) was apparently crouched and was associated with inhumations which were thought to have been cut up.

In general, the practice of decapitation was noted at sites such as Alington Avenue in Dorchester, Bath Gate in Cirencester, Dunstable, Guilden Morden and the two cemeteries at Radley, all in a 4th-century context. But two other locations, each with concurrent rituals, suggest that Christians eschewed the practice: there were 8 decapitations in about 240 burials in the major cemetery at Lankhills, but none in the 18 of Feature 6, the presumed Christian enclosure; an even more conclusive example is from Ashton, where two lead tanks with Christian symbols have also been found (Guy 1977, Watts 1991, chapt 5.2): there were four decapitations in approximately 70 'backyard' burials in the town, but none in the west-east, undisturbed, supine and extended cemetery of about 180 inhumations to the south-west of the town (Watts, in prep). The situation at Poundbury is less clear: there were three decapitated burials in an area beyond the enclosure which bounded the presumed Christian Cemetery 3, but in the cemetery itself,

containing over 1000 graves, there was one decapitation (a woman) in whose grave there occurred the secondary interment of two infants. The excavator has, however, suggested that there was some special significance in this burial: 'Although perhaps not a martyr and therefore a cult figure, she was more than simply a criminal who had suffered capital punishment' (Green 1982, 67).

Several theories have been advanced for the practice of decapitated burial, all of which give a completely pagan interpretation (eg Green 1976, 49; Macdonald 1979, 414-21; Harman *et al* 1981, 167). It is not the place here to enter into the debate; it will suffice to point out that the practice would have been anathema to Christians who believed in a physical resurrection and who gave the same care to the dead as was given to the body of Christ (John, 19.39-42). This characteristic of Christian burial has already been discussed in relation to undisturbed burials, above.

With the exception of the one unusual burial at Poundbury 3, there was a complete absence of decapitated burials in those cemeteries having features which suggest a Christian identity (see Watts 1991, chapt 3): Icklingham (West 1976), Lankhills Feature 6 (Clarke 1979), the latest phase at Bradley Hill (Leech 1981) and at cemeteries as yet unpublished, including Ashton, Ancaster and Cannington (information from the archaeologists; see the acknowledgements below). To this list should be added the Period 2 burials at Butt Road.

'Plaster' burials

A further condition of the inhumed body related to the prevailing (Christian) belief in a physical resurrection which may, in certain circumstances, give an indication of a Christian identity, is evidence of the apparent attempt to preserve it. 'Plaster' burials is a generic term (Green 1977a, 52, n 1) used to describe inhumations employing various substances which encased or were in contact with a body, presumably with the aim of delaying decomposition. The practice was known in various parts of the empire from before the birth of Christ, and was adopted by Christians, particularly in North Africa (see Frend 1961 & pi 1.3 for Timgad, and Gsell 1902 (vol 2) 403 & n 7 for Tipasa, Sidi Embarek, Tebessa and Zraia). The subject has been extensively treated by Green (1977a, 52), who believes that not all plaster burials are Christian, but that 'when they occur in numbers and coincide with other features of Christian burial... [this] would suggest such sites are Christian'. This careful conclusion brooks little argument but, in the light of more recent excavations, some additional observations may be made.

In the first place, cemeteries occurred without plaster burials, yet, by other criteria, they are probably Christian. Examples would include Bradley Hill 3,

Lankhills Feature 6, Ancaster, Ashton and Cannington. Secondly, while plaster burials were found at sites such as Poundbury Cemetery 3 which, on other grounds, would seem to be Christian, they were also found in undoubtedly pagan contexts. A selection will serve as illustration: there were two such burials at Alington Avenue in Dorchester, a cemetery which contained, *inter alia*, three decapitations and two bodies accompanied by dogs (Davies *et al* 1986) (see Black 1983 for a study of burials with dogs). At Dunstable, there were 12 burials containing quicklime amongst the 112 humans (12 decapitated), four horses and one dog in the cemetery (Matthews 1982). At Trentholme Drive, there was one plaster burial (Wenham 1968, 40-1) There was also one in the Period 1 cemetery at Colchester (G687, p 36). if we bear in mind that in York, at various sites around the city, more than 40 other plaster burials have been uncovered, some of them quite likely Christian (Ramm 1971, 87-92), the one in the clearly pagan cemetery at Trentholme Drive is evidently following a local, perhaps newly-introduced and expensive burial fashion'. The same explanation might be given for the Dorchester examples as there were many plaster burials found in Poundbury 3, and for G687 in Butt Road Period 1, Phase 3, since plaster burials were found in the later Period 2 cemetery and also at the Balkerne Lane site (although the original burial place of this last example is not known; CAR 3, 144). It seems that what happened, in Roman Britain at least, was that a burial practice which had earlier been adopted by Christians was subsequently taken up by pagans as well.

Green (1977a) does say that, for plaster burials to be a pointer to a Christian identification, that characteristic should 'coincide with other features of Christian burial'. It is for this reason that the plaster burial G687 in Period I Phase 3 at Butt Road is unlikely to be Christian. But in the Period 2 cemetery there were six such burials and the bodies in that cemetery, as noted above, were west-east, undisturbed, supine and extended. In this instance, the presence of plaster would seem to be a characteristic of a Christian cemetery, though such a criterion for identification has less value than the others already proposed, and must be treated with caution and in context: in a general study of Romano-British burials there is nothing to indicate that 'plaster' will automatically equate with 'Christian'.

Presence of neonatal or very young infants

As noted earlier in this book (p 61), only in the Period 2 cemetery was there evidence for burials of very young infants or neonates in the same burial area as adults. The burial of the very young (under 6 months old) in the cemeteries of Roman Britain is not generally encountered before the 4th century. Although intramural burial was forbidden by the

Twelve Tables (Cicero, *De legibus*, 2.23.58)) and the law reaffirmed by various emperors (eg *S H A Pius*, 12.3; Ulpian, *Digesta*, 47.12.3.5), interment of infants within the bounds of a city or settlement seemed to have been normal practice. Both Juvenal (*Saturae*, 15.139) and Pliny (*Naturalis Historia*, 7.16.72) refer to the practice, as does Fulgentius (*Sermones Antiqui*, 7) in the Late Empire. Fulgentius implies that there was not such value placed on the lives of the very young to warrant a formal grave. The archaeological evidence from numerous sites in Britain shows that the custom of burial of infants *in subgrundariis* (under the eaves) had reached those distant shores early in the Roman period; it has been noted in houses at Colchester (approximately 25 recognised in the 1970s and 1980s: *CAR* 3, 26 & 232 and *CAR*, 6, 433).

While a number of 4th-century cemeteries in Roman Britain have a complete absence of burials of neonatals or of infants up to about six months old, for example at Frilford (Bradford & Goodchild 1939), Guilden Morden (Fox & Lethbridge 1926, Lethbridge 1939), Radley 1 (Atkinson 1952-3) and 2 (Frere 1984, 302), Ospringe (Whiting *et al* 1931), Church Piece (Harman *et al* 1978) and probably Trentholme Drive (Wenham 1968), there does seem to have been a move to the interment of babies in cemeteries alongside and, on occasion, with adults. This was apart from possible mother-child interments (as was the case in a burial at Lynch Farm, near Peterborough (Jones 1975, nos 24 & 40) and another at Queensford Farm (Harman *et al* 1981, 148)). Neonatal burials are found in the presumably pagan cemeteries of Bath Gate, Lankhills, Dunstable and in Cemetery 2 at Poundbury, although at this last site there were also contemporary neonatal burials in domestic building R16 nearby (Green 1982). In the Butt Road cemeteries, there were no infant or neonatal burials in Period 1 yet, despite the ravages of 19th-century terracing, they were found in Period 2 (p 61). They were also found in other cemeteries thought to be Christian.

The treatment of the infant burials in cemeteries with pagan characteristics is vastly different from those presumably Christian. In the first group, careless interment and intersection or disturbances in other graves often occur: for instance, at Dunstable one infant was decapitated and others were found in abandoned wells and cesspits; at Lankhills, of 17 neonatals 11 were cut by other burials, in the second group, the bodies are given equal respect with adults in undisturbed west-east graves. It seems that all Christians, whether newly-born or of more mature years, were given the same careful burial rites. These conditions obtained at Butt Road in Period 2 and at other cemeteries believed to be Christian, including Ancaster, Ashton, the last phase at Bradley Hill, Cannington, Icklingham, Lankhills Feature 6 and Poundbury, Cemetery 3.

It is suggested here that the move to the interment of infants in cemeteries along with adults was the result of the growth of Christianity and of the influence of Christ's teachings. The Gospels reflect his care for the

young (eg Luke, 18.15-27, 9.47-8; Matthew, 18.2-5; Mark, 9.36-7); early Christian writers took up the theme and voiced their abhorrence of infanticide (Justin Martyr, 1 *Apology*, 27-9; Tertullian, *Apologeticus*, 1 9.4-11; Minucius Felix, Octavius, 30.2). Most probably Christian teaching on the value of human life was taken from the Jewish faith: Tacitus (*Histories*, 5.5) tells us that the Jews did not practise infanticide, and in his study of the rise of the Christian religion, Friend (1984) notes that the Jewish catacomb at the Villa Torlonia in Rome contained the bodies of many infants, each given 'scrupulous care'.

It is highly likely that only those who had been baptised, or who were catechumens, were given burial in Christian cemeteries. This would to some extent account for the disproportionately small number of infant or neonatal burials in the Period 2 cemetery. There was a decline in infant baptism in the second half of the 4th century and although infants could still become catechumens this rank was probably regarded as 'less as a first preparation for baptism than as admission to second-class membership of the Church' (Yarnold 1978, 96); if such sentiment had prevailed, even fewer babies would have qualified for Christian burial.

Absence of certain types of grave goods

In the archetypal Christian burial, as depicted by Charles Thomas (1981, 231), the believer is buried extended, perhaps enshrouded, laid with head to the west in a coffin of wood, lead or stone; there is a complete absence of grave goods, since it is expected that the spirit, rather than the earthly body, will enjoy the life hereafter. But such a burial is an idealised one, where traditions of centuries have dictated the conventions to be observed in disposing of the body. In 4th-century Roman Britain, it would be unrealistic to expect pagan traditions to be discarded in the space of a few decades and, in a relatively large urban centre such as Colchester, the best one could hope for in a Christian cemetery would be an elimination of the more offensive pagan practices. It is as well to keep in mind canon 41 of the Council of Elvira, held in Spain about AD 305, which permitted pagan shrines to remain in Christian households, in order to avoid confrontation. Such accommodation must surely have taken place in other parts of the Romano-Celtic world as well, and it is reasonable to assume that it would have applied equally to the burials of the newly converted in Christian cemeteries.

Although it could be expected that the occurrence of grave goods would be much less in a Christian cemetery, it has been pointed out, rightly, that their total absence does not necessarily equate with Christianity (Macdonald 1979, 317; Thomas 1981, 231). Moreover, there seems to have been a tendency, as exemplified by Lankhills cemetery,

towards a decline in grave furniture during the 4th century. The presence of grave goods in one cemetery and the absence of them in another contemporary cemetery (as at Poundbury) does suggest a change in religious rites. But in successive cemeteries such as we have at Butt Road, it is unclear whether the relative absence of grave furniture in the later cemetery is due to religious belief, poverty, fashion or other factors.

It is more profitable to look instead at the incidence of various types of grave deposits in the two cemeteries at Butt Road and at other likely Christian sites. Such analysis allows the singling out of certain types of objects, the absence of which would identify a cemetery as Christian with a reasonable degree of certainty.

The most common object found in burials in both the late Iron Age and the Roman periods was the vessel for holding food or drink to provide nourishment for the departed. The Christian practice of holding a *refrigerium* at the graveside, and presumably leaving some of the food behind, had been condemned by Ambrose (Augustine, *Confessiones*, 6.2) and Augustine (*De moribus ecclesiae*, 34), so we know that the custom of leaving containers of food or drink in graves occurred, and was not approved by the Church. Its condemnation by Augustine (AD 354-430) implies that it was still carried on by Christians in his day. The occasional presence of vessels in graves cannot, therefore, be seen as indicating a pagan identity, although one would expect its occurrence to be rare in a presumed Christian cemetery. There were, in fact, few vessels found in cemeteries believed to be Christian: a grave from Feature 6 at Lankhills contained two, one a platter inscribed with an iota-chi on the upper side (see Watts 1991, 245-6, note 9 for a discussion of this symbol in Roman Britain) and a fish-like graffito on the reverse, and there is every likelihood that these markings were an indicator of Christianity; at Ancaster, one pot from the 2nd or 3rd century was found; at Ashton, where a comparison can be made between two concurrent burial practices, there were no vessels in the west-east formal cemetery, but they were found in about 10 per cent of the 'backyard' burials. At Butt Road, there were about 2 per cent with vessels in Period 2, compared with almost 30 per cent in Period 1; such a striking difference would seem to be significant and a possible indicator of Christianity.

But it may be, as has been suggested by Black (1986, 225), that the placing of vessels in graves had become a token practice, rather than a religious obligation. There is evidence that, even in pagan graves, pots were on occasion so placed that they could not have held anything (Rook 1973, 3). Grave 250 of the putative Christian Feature 6 at Lankhills, which contained the platter decorated with iota-chi and stylised fish (above) also yielded an inverted jar. Of the Colchester Period 2 vessels, only one could be ascertained as having been inverted on deposition (p 152, Table 2.60). It is perhaps significant, however, that at least twelve of the vessels found had been

placed outside the coffins (p 152, Table 2.60). These would have been less likely to have held food or drink than those within coffins. Unfortunately no organic evidence remains.

While some vessels with burials could possibly be completely without ritual significance, the presence of others containing the remains of animals or birds implies some sort of sacrifice to the gods of the underworld (*dis manibus*). It is likely that the 'joints' of meat frequently recorded in pagan burials were a form of token sacrifice. Cicero (*De legibus* 2.22) speaks of the sacrifice of a pig at Roman burials and at Romano-British sites whole horses (eg Matthews 1981) and dogs ((Black 1983) are found in burials, as well as joints from these and other common domestic animals and birds (Whimster 1981, 51-2). There are numerous examples from presumably pagan cemeteries, such as Bath Gate, Dunstable, Lankhills, Ospringe, Trentholme Drive and Poundbury, Cemetery 2.

Undoubtedly such a practice would have been strenuously opposed by the Church because of the implication of pagan sacrifice, and Christians abhorred any form of sacrifice (Tertullian, *Apologeticus*, 10.7-8). This is confirmed by the archaeological evidence: with the exception of burial 150 of Lankhills Feature 6 which is believed to be the initial (pagan) grave in the later Christian enclosure, there is a complete absence of animal or fowl remains in those Romano-British cemeteries proposed above as Christian, including the Period 2 cemetery at Butt Road. The absence of these would thus rank higher than the absence of pots as a criterion for identification of a Christian cemetery.

There is also an almost complete absence of hobnails, and this too may be taken as an indicator for a Christian identity for the Period 2 cemetery. The occurrence of 'hobnail burials' has frequently been noted, but the practice has never been satisfactorily explained. It may have been to provide footwear in case the deceased was compelled to wander the netherworld for a hundred years (Vergil, *Aeneid*, 6.326-30), or for the actual journey to the netherworld before crossing the River Styx. But this is a Roman concept, and hobnail burials occurred also in Gaul and Germany, which suggests a Celtic origin. The practice is known to have occurred in Britain as early as late 1st century, at Jordan Hill (Wame 1872), by which time local Britons would have adopted the Roman practice of using hobnails in the manufacture of shoes or boots. Hobnails have been found in both inhumation and cremation cemeteries which display pagan characteristics, although they were not found at every site thought to be pagan (eg the Radley 1945 excavation (Atkinson 1952-3) and Lynch Farm (Jones 1975)).

Why Christians would have opposed the practice is uncertain. Perhaps it represented a pagan view of the afterlife to which the church could not subscribe. Archaeological evidence suggests that the Church did, indeed, oppose the practice: there is either a complete absence or a very limited occurrence of hobnail burials in presumed Christian cemeteries. There were none in

the formal west-east cemetery at Ashton, while they were in 3 per cent of the backyard burials; at Poundbury only two graves, or 0.2 per cent had hobnails in Cemetery 3, but they were found in over 20 per cent of the Cemetery 2 burials; at Butt Road, fewer than 1 per cent had hobnails in Period 2, but about 16 per cent in Period 1. The evidence of contemporaneous sites at both Ashton and Poundbury would seem to confirm an interpretation of two different burial rites, one which included hobnailed footwear as grave furniture, and the other which eschewed it. This is also proposed for the Butt Road cemeteries.

Mention should also be made here of the almost complete absence of coins in the Butt Road Period 2 cemetery although, as a criterion for Christianity, it is far from secure. Coins, particularly those in the mouth, were a type of grave furniture which undoubtedly came from the Roman, and earlier, the Greek world (see Grinsell 1957). In all cemeteries examined, those with pagan characteristics and others which lacked such features, the incidence of coins in the mouth was very limited; this indicates that Charon's fee was a fairly rare custom in 4th-century Britain and may have occurred only in more wealthy cemeteries. At Lankhills, about 11 per cent or 42 burials had certain coin deposits; in half of these the coins were placed in the mouth (Clarke 1979, Tables 2 & 9). This might be compared with what was probably a cemetery of the poor, Bath Gate at Cirencester, where there were only three burials (about 0.7 per cent) with coins: in two instances the coins were in the mouth, and in the third they were placed over the eyes.

Of the probable Christian sites identified in the writer's 1991 study, only six of the cemeteries analysed had coins of any kind, and one of those was Butt Road Period 2. Here five graves yielded coins; in all but one case they were incorporated in armlets (Table 2.62, p 154). There were no instances of coins in the mouth in either period of burial at Butt Road.

One would expect that the practice would be uncommon in a Christian cemetery. There were, however, examples from apparently Christian sites, at Icklingham and Poundbury 3. Moreover, Grinsell (1957) has shown that the practice continued for many centuries in various parts of the Christianised world. Perhaps this was one of the practices to which the Church was prepared, if it was aware of it, to turn a blind eye (cf Gregory the Great, in his advice to Augustine (Bede, *Historia Ecclesiastica*, 1.27) and canon 41 of the Council of Elvira, cited above.) As a criterion for the identification of Christian cemeteries, the absence of coins in the mouth or as deliberate grave goods cannot rank very high, though it is a probably a pointer.

Vaults and focal burials

Two further features of the Period 2 cemetery which

may suggest a Christian identity for the site are now considered together: the incidence of vaults and what have been seen as focal burials in one particular group of graves. While the vaults themselves are somewhat unusual, they could merely represent a 'fashion' in burial of the time (pp 111-114). On the other hand, they may be a more substantial or expensive type of burial, similar to a mausoleum. Since both single and double burials occupied a relatively large area in what was a crowded cemetery, they may, in fact, have been seen as a means of demonstrating the wealth or importance of the occupants, while keeping to the teaching of the Church that the burials themselves be simple (eg Augustine, *Enarrationes in Psalmos*, 33 (2), 14).

What is of particular interest is the clustering of later graves around vaults CF55 and G366. Figures 2.64-5 demonstrate the sequential development from a small number of well-spaced graves to a densely packed group of over 30, focusing on the vaults. Focal burials are a feature of martyrial cemeteries, and examples occur in Europe (eg at Salona, noted above). At Butt Road there is no evidence for any martyrial burial in the cemetery itself, yet the density of graves around the two vaults suggests they were of special importance to those buried around them. Perhaps they were the graves of leaders of the Christian community, priests or deacons. The fact that many infant burials were found in this group may also be related. If the focal graves had been those of Christian leaders, then it is reasonable to assume that such leaders would have been committed to seeing the infant members of the family were baptised at the earliest opportunity, and thus qualify for Christian burial (see above: 'Presence of neonatal or very young infants', and also Watts 1991, chapt 3.1). Focal graves in Roman Britain have been suggested for the 4th- to 7th-century cemetery at Cannington (Rahtz 1977, 58) and perhaps Cemetery 3 at Poundbury (Watts 1991, 63). A further example in 4th-century Colchester would not be unreasonable.

Summary of evidence for a Christian cemetery

It is useful to summarise here the evidence from Period 2 of the Butt Road cemetery for a Christian identification of the site: the burials are west-east (that is, with heads to the west), undisturbed by others, supine and extended, and with an absence of decapitations; they include neonates or very young infants. There is a low incidence of grave goods, particularly vessels and coins; very few hobnails; a complete absence of animal or fowl remains such as would imply a sacrifice *dis manibus*. While the decorated lead coffins are not indisputably Christian, their decoration may be paralleled in a Christian context. The plaster burials, taken with the features noted here, may also be considered as an indicator of Christianity, as may also the clustering of related graves around a more elaborate, perhaps focal grave.

The evidence for the apsidal building

Having looked in some detail at the Butt Road cemetery for pointers to a Christian identification, we should now examine the apsidal building beside which the cemetery was located, in an effort to establish a Christian identity for that structure. Negative evidence is dealt with first.

Absence of non-religious features

The first and perhaps most obvious characteristic of a Christian church is that there should be an absence of domestic, industrial or agricultural features. It could be difficult to separate the secular from the sacred since the earliest churches had been in houses, and the two main sacraments employed everyday objects (the Eucharist was, after all, a meal; the Baptism, a form of bathing) in buildings which might not necessarily suggest themselves as churches.

It would seem that, in common with other cemetery churches, facilities were set up adjacent to the church for the preparation of ritual meals — *refrigeria* — to honour the dead (see Watts 1991, 69, 104, 117 on this custom). In the case of Nettleton building 23, these facilities were incorporated into the structure (Watts 1991, 104); at Butt Road, a building (140) adjacent to the presumed church had a hearth, and was probably used for this purpose. Meals seem to have been taken in the church. The site produced an unusual assemblage of animal bone pointing to the consumption in the immediate vicinity of chicken and possibly young pig (pp 178-80).

Another type of find which could suggest an industrial use was that of two fragments of lead sheet (Figs 3.22-3). But these pieces of undecorated metal sheeting may, in view of the probable lateness of the deposit, have been part of a lead artefact associated with the church or cemetery, rather than evidence for industrial activity on the site. For parallels, the circular lead tanks found at various sites in Roman Britain come immediately to mind, and their probable use in the baptism rite. While the tanks or fragments of tanks that have been identified as Roman are all decorated, it is possible that undecorated tanks existed. A recent and as yet unpublished find from Riby in Humberside of an undecorated circular lead tank along with middle-Saxon pottery may shed some light on the Butt Road lead sheet fragments (information kindly supplied by Dr Ben Whitwell, Humberside County Council). While it cannot be said with any confidence that the lead sheets were part such a vessel, there is no evidence that the sheets were products of industrial working on the site.

There is, therefore, some 'domestic' and 'industrial' evidence, but an absence of other features which would indicate a domestic or industrial purpose for the building. Similarly, there is no evidence for an agricultural use for the building before it became derelict.

Absence of pagan features

A corollary of an absence of non-religious features is that, at a Christian site, there should be an absence of pagan features or artefacts. There are no finds associated with the Butt Road building which suggest any pagan religious cults, Roman or Celtic.

East-west orientation

The building is orientated east-west, that is with an apse to the east and a presumed entrance to the west, and this orientation is often taken to indicate Christianity. It may indeed be a pointer, but it should be remembered that, for this period, there was as yet no preferred orientation for Christian churches. This is illustrated by the four Constantinian churches referred to below. Two had entrances to the west, the others to the east. While it is true that Tertullian said that Christians turned to the east to pray (*Apologeticus* 16), evidently this did not come to be the accepted orientation of Christians in churches until somewhat later. It seems that churches with an entrance to the east were quite common in the late 4th and early 5th century (Paulinus of Nola, *Epistulae*, 32.13). It may be, as suggested by Krautheimer (1965, 69), that early churches faced in various directions according to regional custom and local topography.

Basilical plan

The building at Butt Road is basilical, or at least partially so; the rear section may, at least in phase 2 of its existence, have served as a narthex or catechumeion. A basilical plan would seem at once to indicate a Christian identity. But such a layout was neither employed only in religious structures nor exclusive to Christianity. It was the plan of the law court found in a Roman forum, and the simplified version, without the aisles, was used in Britain in at least five pagan religious or quasi-religious buildings: the *scholae* from Corbridge and a possible one from Silchester (Lewis 1966, figs 63, 73, 75), a temple from Benwell, and a well-shrine from Housesteads 1 (Lewis 1966, figs 71 & 74). The London mithraeum was built on the basilical plan (Grimes 1955 & pi 43). In other parts of the Empire, the plan was also employed for various cults and for some synagogues (Krautheimer 1965, 20).

After the Peace of the Church in 313, however, when Christians were able to practise their faith in recognisable churches without fear of persecution, the basilical plan was that favoured by Constantine and his architects for new buildings. It was employed in four of the earliest Constantinian churches, the Church of the Nativity at Bethlehem, the Church of the Holy Sepulchre, Jerusalem, and St Peter's and St John Lateran at Rome. The plan was adopted in the

more Romanised parts of the provinces or adapted to the simpler apsed style without aisles. Examples of apsidal or basilical Christian churches from Roman Britain include those at Icklingham (West 1979), Richborough (Brown 1971), St Pancras, Canterbury (Jenkins 1976) and, in all likelihood, Silchester (Frere 1975).

Another type of church, found in northern (Celtic) Italy, and thus possibly an influence on church architecture in the west, was the rectangular building without any trace of an apse. This type of church was common around Aquileia and the surrounding area (Radford 1968, 27).

The Butt Road building appears originally to have been built as a rectangular structure, with an apse added. There would seem to be no reason to add the apse to a secular building (and we leave aside for the moment any discussion of buildings situated in a cemetery). But the addition of the apse (a Roman feature) to what may have originally been a rectangular chapel (possibly a Celtic feature, as at Aguntum (Radford 1968, 27)) in a cemetery, would be entirely in keeping with the emerging tradition of church architecture in the late 4th century. The evidence of a rectangular plan with apse added strongly suggests a Christian identity for the Butt Road building.

Apsidal burial

A further feature which enhances that identification is the evidence for up to three possible burials in prominent positions in the building.

The location of the altar in an early apsidal church was usually on the chord of the apse or just in the nave. This came to be seen as the holiest place in the church and the location for the tombs of martyrs or for reliquaries with some remains of a martyr. If the tomb was below ground level, the altar was placed over the burial; if above ground, it became the altar. The authority for such burials was probably *Revelation*, 6.9.

In the building at Butt Road, there is no remaining evidence of an altar, but the feature just into the nave below the apse appears to have been two graves, one north-south, the other east-west. They were located on the southern side of the nave, with space left, presumably for other burials, on the opposite side of the apse. These graves post-dated an earlier feature, which was possibly also a grave, located a little further to the west; it may have been the original focus for the building. As evidence for Christianity, these features must rank high, since apsidal burial in buildings was a peculiarly Christian practice, which continued into relatively modern times. Moreover, in Greek and Roman pagan religious thought burials equated with pollution. A burial inside a ritual building would be opposed (see Sozomen, *Ecclesiastical History* 5.19).

Associated cemetery

The final criterion for an identification of the structure at Butt Road as a church is its apparent association with a cemetery. In his study of Romano-British temples, Lewis (1966, 6) observes, 'Roman cemeteries near temples were not unknown', but he also adds that the occurrence of burials by temples was 'unusual'. An examination of the sites which Lewis suggests demonstrate this connection, Frilford, Jordan Hill, Lancing Down, Weycock and Worth, and those mentioned by Leech (1980), Henley Wood and Woodyates, has revealed no such connection (see Watts 1991, 113-15). There is no tradition of an association of burials and shrines or temples in pre-Christian Britain: there is no hard evidence for a cemetery/shrine link in the pre-Roman period, nor is there for a cemetery/temple link after the Roman occupation. This is not surprising, in view of the fact that, in Roman times at least, such association would have been most irregular: as noted above, it was believed that corpses might pollute a site (see Ammianus Marcellinus, 22.12 for an illustration from the late Roman period, and Herodotus 1.64 for classical Greece).

That is not to say that there were no buildings in Roman cemeteries; the mausoleum was a well known and readily recognisable feature of Roman burial grounds, but a mausoleum was not a temple. On the other hand, the Butt Road building was not a mausoleum. In an earlier publication (Watts 1991, 62-4) it was shown that there were few mausolea in 4th-century Roman Britain and that they were likely to be found in private burial areas, rather than in communal cemeteries. In all the putative pagan cemeteries of Roman Britain analysed, there is no known example of a building of a religious nature clearly associated with the burials. (It is noted that Esmond Cleary (1987), in his study of the extramural areas of Romano-British towns, shows in his town plans only one temple' sited on a cemetery (his fig 24). That building is Colchester 9, the apsidal structure at Butt Road now under discussion.) Thus, if religious structures were not found in the cemeteries of Roman Britain before the Christian period, it is proposed that the presence of non-domestic, non-industrial or non-agricultural buildings in association with cemeteries of the 4th century and beyond is an indicator of the Christian identity for both the building and the cemetery. It is very difficult indeed to interpret the site at Butt Road other than as a church and associated cemetery.

Summary of evidence for a Christian church

The evidence for the identification of the Butt Road building as a Christian church may now be summarised. It was a basilical structure, orientated west-east (that is, with apse to the east), with an internal feature of three burials. The building was

located beside a cemetery. There was no evidence for industrial, agricultural or domestic activity (although food was consumed on the site), nor for any pagan cult or practice.

External evidence

The evidence for a Christian identity considered so far has been internal, that is, related to the burials and the presumed church. But in order to gain a complete picture one should also look at external signs of a Christian presence at Colchester. Although such evidence cannot be given the same weighting as the internal, it can, nevertheless, provide a further indication of the existence of a community of Christians at Colchester in the 4th century.

There have been several separate finds at Colchester of objects bearing Christian or likely Christian symbols and inscriptions. The first is a pottery sherd inscribed with a chi-rho, found near the Temple of Claudius (Drury 1984, fig 16.10). The second is a lead object identified as a candlestick, decorated with an iota-chi and found at the Balkeme Lane site (CAR 2, fig 207, 4709). A bronze spoon, now lost, inscribed AETERNVS VIVAS, was recorded in Victorian times (Toynbee 1953, 21, fig 7), and a fragment of glass, decorated with a fish and palm motif, has also been found (Thomas 1981, 130). The significance of all these symbols for 4th century Christianity has been treated at some length previously (Watts 1991, chapt 5.1). As Thomas (1981, 100) has pointed out, evidence for Christianity on objects of little or no intrinsic value must rank high for the presence of Christianity at the place where they were found, since they were unlikely to have been carried around from place to another.

In addition to these archaeological finds, there is the possible literary evidence of the ecclesiastical list of the Council of Aries of 314, which gives the British bishops of London, York and the *Colonia Londinensium*. Jocelyn Toynbee (1953, 4-5) emends this last, clearly a corruption, to *Colonia Camulodunensium* because, she says, as the senior *colonia* Colchester most likely had a bishop, possibly the Primate of Britain. There are, of course, other interpretations of the text (see Thomas 1981, 131, 197 & references).

Conclusion

Roman Colchester was one of the earliest centres of Romanisation in Britain, and it is reasonable to expect that trends elsewhere in the Empire would be reflected here. The growth of Christianity, once its

adherents were free from the threat of persecution after 313 (the date of the so-called Edict of Milan), was rapid in Italy and the Hellenistic east. From the archaeological evidence as yet available, such progress would seem to have been less rapid in Britain. Nevertheless, the religion was able to find converts early in the 4th century in the major urban centres, and there was a gradual spread of Christianity into the rural areas mid-century, and particularly in Essex. The evidence of the church and cemetery complex at Butt Road suggests that Christians were being buried there, perhaps beside a simple rectangular church, not more than a decade or so after the Peace of the Church. The church, possibly built originally to honour a notable local Christian buried there, was extended at a later date to incorporate an apse, and this may have coincided with the burial or translation of the two bodies just below the apse. The growing interest in the cult of martyrs and relics (eg Jerome, *contra Vigilantium*, 5 & 9; Bede, *Historia Ecclesiastica*, 1.18) may have prompted Christians at Colchester to add this feature and to bring the plan of the building into line with that then emerging as the standard layout for churches.

Christianity at Colchester appears to have attracted people of modest circumstances: only two lead coffins and seven plaster burials in almost 700 graves in Period 2 at Butt Road cemetery does not suggest inordinate wealth. There are, however, examples of individual burials having richer grave deposits: the beautiful glass group (Fig 2.87, p 153) came from a small cluster of graves which may have constituted the burial of a family of some means; the vaults, taking up considerable space in an already-crowded cemetery, may indicate families of importance, if not also of wealth. But there were also poor graves, hollowed-out logs and meaner, shallower burials.

The church too, was relatively modest despite being in stone. Its plastered walls and earth floor do not indicate great wealth, and its construction was such as to necessitate major repairs during its lifetime. Clearly, then, the Christian congregation which supported the church did not constitute the richest members of Colchester society. If, as has been postulated, the city had a bishop, it may be that the Butt Road church served only part of the Christian community at Colchester. There was no certain evidence for a baptismal font at Butt Road and, since baptisms were performed at this time by bishops, it is reasonable to expect that somewhere else in the *colonia* there was a church with a font. An intramural site is thus more likely for the principal church at Colchester.

There is much yet to be learnt of 4th-century Britain and of the growth of Christianity, although this site has considerably increased our knowledge of early churches and cemeteries and of Roman Colchester. The lack of rich grave furniture and of splendid stone buildings, mosaic floors and inscriptions is no cause for regret. Such absence might be expected in a Romano-British Christian cemetery and church, and the Butt Road excavation has helped greatly in developing a means of identifying such sites.

Acknowledgements

This analysis could not have been carried out without access to much unpublished material. I am most grateful to the following archaeologists and organisations for having so generously made their records available to me: Mr David Wilson and Nottingham University (Ancaster), Mr Brian Dix and Northamptonshire County Council Archaeology Unit (Ashton), Emeritus Professor Philip Rahtz (Cannington), and Ms Susan Davies, Messrs David Farwell and Christopher Sparey Green and the Trust for Wessex Archaeology (Poundbury Camp, Dorchester).

5. EXCAVATIONS AND OBSERVATIONS IN THE GROUNDS OF ST JOHN'S ABBEY, 1971-85

Philip Crummy

Overview

[Fig 5.1]

Between 1971 and 1985, various small-scale excavations were carried out within the former grounds of St John's Abbey and in St Giles Masonic Centre (formerly St Giles's Church) (Fig 5.1). Some were in response to the redevelopment of the north-eastern corner of the grounds for a large roundabout forming the eastern end of the new southern relief road whilst others were associated with building operations in and around the redundant St Giles's Church. An outline of these investigations is included in CAR 1 where the principal results are set out and the conclusions discussed in the context of the early development of the precinct as far as can be deduced from the limited archaeological and written sources (CAR 1, 27-32 & 40-6). The following accounts give details of the excavations concerned and should be read in conjunction with the initial report.

The key events relating to the development of the abbey can be summarised as follows. In 1095 the abbey was measured out on the site of a small church apparently demolished to make way for the new buildings. Construction work began in the following year and in 1115 the abbey church was dedicated. In 1133 the monastery and a large part of Colchester were burnt and all the offices (*officine*) and the monks' dwellings (*habitula*) which were originally on the north side of the abbey church were transferred to the south side. The latter operation appears to have involved much earth-moving, the spoil from which was used to create a cemetery to the north of the abbey church. The parish church of St Giles was founded in the cemetery sometime between 1133 and 1171. The stone precinct wall was in existence by the time of the fire. The abbey was dissolved in 1539 and bought by John Lucas in 1548 who converted it into a grand family residence. In 1648, during the Siege of Colchester, most of the buildings were destroyed and the parish church of St Giles was badly damaged.

The excavations can be summarised in chronological order as follows (Fig 5.1).

i) Trial trenches (T1 to T4) were dug in the northeast corner of the grounds before building work began on a new roundabout. Trenches 1 and 2, excavated by machine, revealed several metres of dumped soil behind the precinct wall whilst Trenches 3 and 4, dug partly by hand, contained inhumations aligned east-west and associated with pottery dating to the late medieval period at the earliest (CAR 1, 41).

ii) In 1972, the remains of the small Anglo-Saxon church were discovered during the contractor's earth-

moving for the new roundabout. The building had been constructed on part of the site of a Roman cemetery. After the demolition of the church, its site was again used as a cemetery (see pp 213-8 below).

iii) Also in 1972, the same contractor's activities resulted in the inner face of the abbey wall being exposed. A long length of the wall was later destroyed (see pp 219-21 below).

iv) In 1973, part of the graveyard of St Giles's Church was removed to make a car park. The cemetery proved to have been set out on top of a large quantity of dumped soil which contained the remains of burnt buildings and which can be equated with the earth-moving of 1133 (see pp 220-1 below).

v) In 1975, limited excavations were undertaken in the nave of the former St Giles's Church (see pp 221-35 below).

vi) In 1977, some small trial holes were dug in an attempt to determine the western extent of the nave of the Anglo-Saxon church (ie Trenches T5, T6, & T7; Fig 5.1). The remains of the church proved to be too deep for the scale of the work possible at the time but it did become apparent that the dump of 1133 sealing the demolished church increased substantially in thickness to the west and that, in terms of levels and composition, it was the same as the dump observed in the graveyard of St Giles's in 1973 (CAR1, 44-5).

vii) In 1985, a doorway was cut through the south wall of the nave of St Giles's Church and the relationships between the south porch, the tower and the nave were examined (see p 230 below).

EXCAVATIONS IN THE GROUNDS OF ST JOHN'S ABBEY, 1972

Introduction

In 1972, the northwest corner of the precinct was lowered by several metres to make way for a large roundabout. During the contractor's earth-moving, part of a rubble foundation was exposed close to the southern boundary of the redevelopment site and permission was obtained for a hurried, two-week, archaeological excavation of the area. The work was carried out under difficult circumstances with the

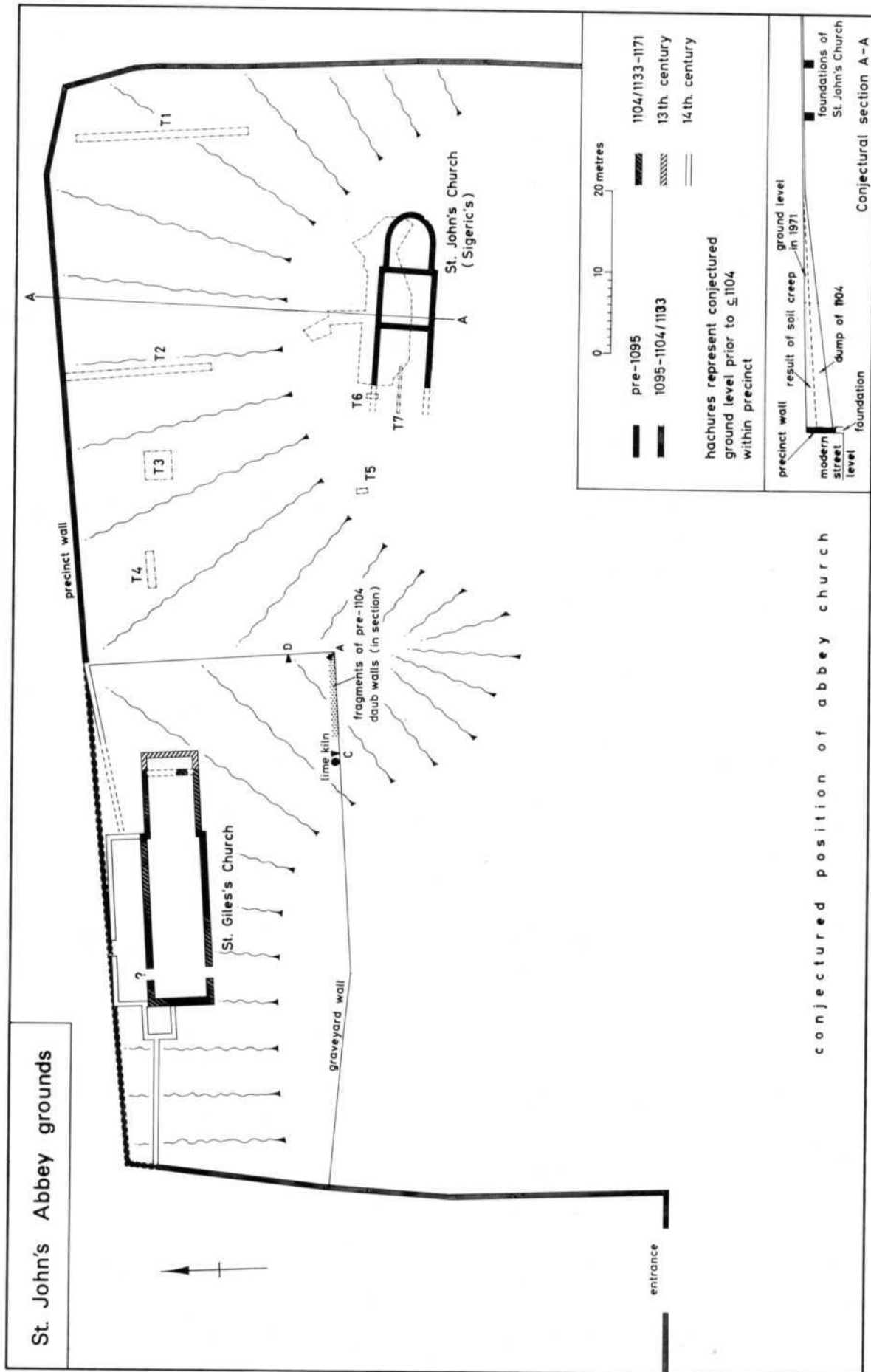


Fig 5.1 St. John's Abbey Grounds 1971-7: general plan. 1:680. [Pages 203-30]

contractor having to continue the bulk excavations within a few metres of the site. This resulted in the discovery of four additional graves (Fig 5.2). The various constraints affecting the archaeological investigation are reflected in the odd shape of the trench (Fig 5.3).

The remains encountered within the trench can be summarised as follows:

- a) two small pits, probably Late Bronze Age;
- b) Roman inhumation cemetery, 3rd to 4th centuries;
- c) the Anglo-Saxon or early Norman church of St John, demolished c 1095;
- d) a deep layer of soil, dumped in c 1133;
- e) first phase of medieval cemetery; graves lined with rubble, c 12th century but post c 1133;
- f) second phase of medieval cemetery; graves not lined, c 12th century but perhaps no later than 1171;
- g) later features.

Each burial is described and illustrated individually in microfiche (Appendix 5, pp 1025-79). Included with the descriptions of the votive vessels below are descriptions of three complete pottery vessels which were bought from the driver of an earth-moving machine. The vessels were apparently found in a group somewhere to the north of the main excavation. The human skeletal remains are described and discussed in Appendices 6 (pp 289-90) and 7 (microfiche pp 1080-2).

Earliest activity

[Fig 5.3]

Two small pits (F19, Fig 5.3; F20, not on plan) predated the Roman cemetery. These were shallow, being about 0.3 m deep, and filled with leached topsoil. Three sherds of flint-gritted pottery of Late Bronze Age date were found during the excavation. One came from F20; the others were in the medieval graves F23 and F27. The pottery is of the type found in substantial quantities at Sheepen (Hawkes & Hull 1947, 4) and the Fingringhoe site, excavated by the Colchester Archaeological Trust in 1975-6 (yet to be published). A flint was in the backfill of the Roman grave F70. Dr J Wymer describes it as a Neolithic flake knife with shallow, secondary working.

The Roman cemetery

[Figs 5.2-5.9]

The remains of 34 Roman graves were found, all having contained inhumations. The graves were up to 1.25 m deep and the bones were poorly preserved. Evidence for nailed wooden coffins was observed in most of the graves and took the form of iron nails or traces of decayed wood or both (Fig 5.6). The evidence survived erratically and it is possible that all the burials had incorporated coffins.

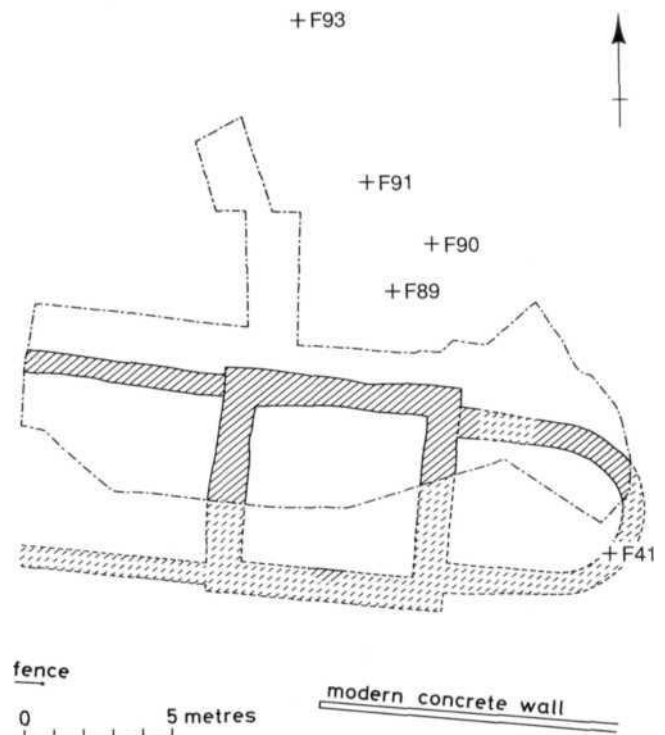


Fig 5.2 St John's Abbey Grounds 1972: small-scale plan showing positions of graves outside main area of excavation. 1:256. [Pages 205-9]

Grave-goods were almost entirely confined to children (Table 5.1). The exceptions were F47 which contained studded footwear, and F64 where a complete mature chicken had been laid just outside the head end of the coffin. In contrast to the adults, over three quarters of the children were accompanied by at least one object. The exceptions were F56, F65, and F82. Two children (F15 (Fig 5.5) & F47) wore armlets — three children, if F92 was a child as seems likely. In addition to the armlets, the child F15 (Fig 5.5) was accompanied by a small knife wrapped in textile (Fig 5.8, see p 213). The children F22 (Fig 5.5), F24/81, F63, F68, F69, F71, and F78 were provided with pots and the child F24 also wore studded footwear. The child F78 had been buried with a small glass flask and a small beaker.

The child F22 (Fig 5.5) was of special interest because it was accompanied not only by two vessels but also by a cranium of an adult dog and a small leather pouch or purse containing four coins in a neat stack. The coins were minted in 260-8 and 268-70 (x 3) thus showing that the burial almost certainly belonged to the decade 270-80. The dog cranium lay in the middle of the grave at the base of the backfill. It included the mandible, indicating that the animal had almost certainly been buried on the site and that the remains were not simply odd bones which had found their way into the backfill by chance. The only other dog bones from the site were a few metatarsals which were in the north-south foundation which cut F22. All these bones could have belonged to the same dog (see below). A possible explanation is that the dog (presumably having been a family pet) was

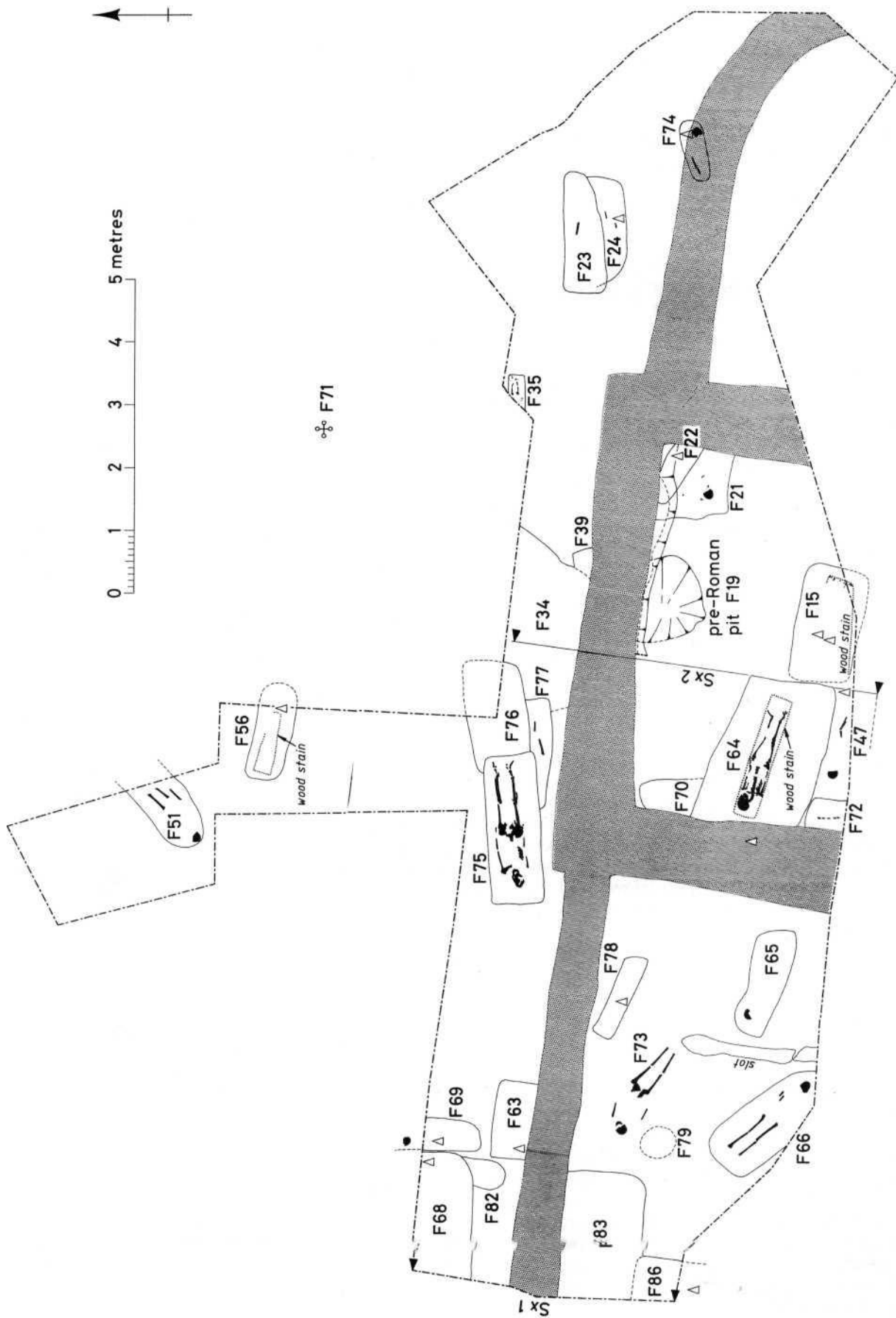


Fig 5.3 St John's Abbey Grounds 1972: Roman burials. 1:89. [Pages 205-9]

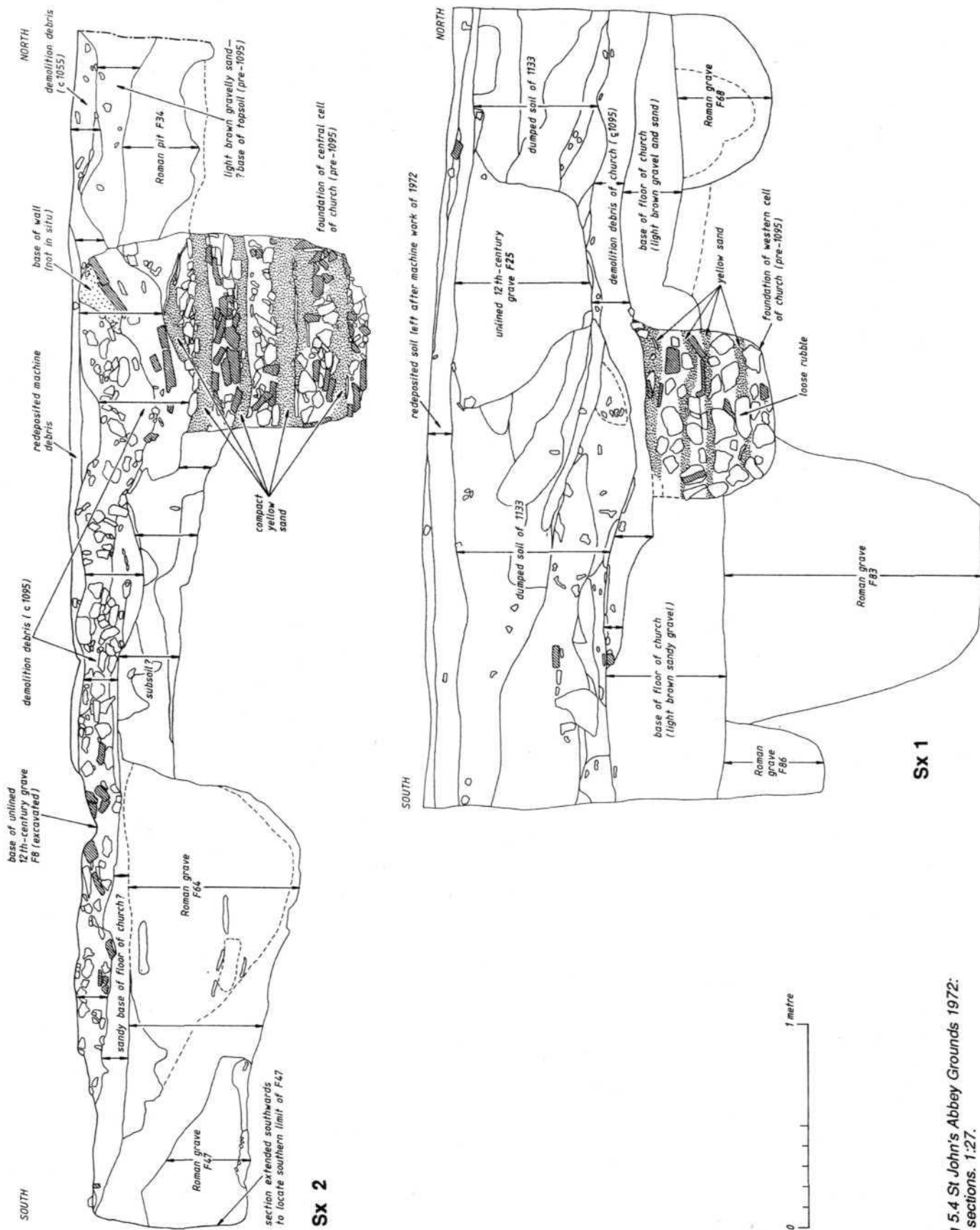


Fig 5.4 St John's Abbey Grounds 1972: sections. 1:27.

Grave	Age/sex	Wood stain	Coffin nails	Associated objects
F15	(teenager or small adult)	X	X	five armlets (1711-2, SF9, SF11, & SF12) including one in a ?pouch, and a small iron knife (Fig 5.8; 2950a)
F21	(?child)	-	X	-
F22	(child)	-	-	a small pottery beaker (Fig 5.7), a worn samian dish (Fig 5.7), four coins (AD 260-8 & 268-70x3) in a ?pouch, and a ?dog
F23	adult	-	-	-
F24	(child)	-	-	footwear and a pottery vessel **
F35	infant	-	X	-
F39	?	-	-	-
F41*	?	-	-	five or six armlets (1558, 1601, 1651, 1732, SF44, & SF45)
F47	adult/F	-	X	footwear (1849)
F51	17-24yrs	-	-	-
F56	6-10 yrs	X	-	in grave backfill: earrings (1798) on skull, and a small pottery beaker (Fig 5.7)
F63	(child)	-	X	a pottery lid (Fig 5.7)
F64	24-25 years/F	X	X	a complete mature chicken just outside head end of coffin
F65	child	-	X	-
F66	adult	-	X	-
F68	2-6 yrs	-	X	a pottery handleless flagon and a jar (Fig 5.7) ?outside coffin
F69	(child)	-	-	a pottery flagon (Fig 5.7) outside coffin
F70	(?child)	-	X	-
F71	(child)	-	X	a pottery bowl (Fig 5.7) outside coffin; tessera under vessel
F72	32-42/M	-	X	-
F73	adult	-	X	-
F74	42-45	-	-	a pottery vessel **, probably in backfill
F75	24-30/M	-	X	-
F76	adolescent	-	X	-
F77	(adult or adolescent)	-	-	-
F78	(child)	-	-	a small glass flask (Fig 5.7) and a small pottery beaker (Fig 5.7)
F82	child	-	X	-
F83	(adult or adolescent)	-	-	-
F86	?	-	-	a pottery vessel
F89*	?	-	-	?a pottery beaker (Fig 5.7) outside coffin and one 1st-century brooch (52), in backfill
F90*	?	-	X	?a copper-alloy finger-ring (1755) probably in backfill
F91*	?	-	X	-
F92*	?	-	X	a crushed pottery vessel ** and an armlet (1602) with a blue glass bead
F93*	?child	-	X	-
?grave disturbed by digger driver		-	-	a pottery cup/mug and two pottery beakers (Fig 5.7)

* Grave shown as a find-spot on Figure 5.4

** Vessel stolen in 1974

Table 5.1. Roman burials found in the grounds of St John's Abbey and their associated finds. Catalogue numbers in CAR 2 and small find numbers are shown in brackets. Ages in brackets have been estimated according to the size of grave or coffin.

buried in F22 along with the child. It was placed along the side of the grave so that the remains of its feet were cut through when the adjacent north-south foundation for the church was dug (Fig 5.5). Alternatively the grave F22 cut the head-end of the dog which had been placed either in a grave of its own or in the grave F21 (which was much bigger than needed for a normal burial; see Fig 5.5).

If the bones do really belong to the same dog, the survival pattern needs to be explained. The missing bones could have decayed completely as did the human bone in F22. Skulls tend to survive better on this site than the rest of the bones (as shown by the human remains) which would explain the presence of the head. The reason why the metatarsals should survive and none of the other bones, apart from the head, is obscure but it may be that the foundations of the church were less acid than the surrounding area.

Remains of another pouch probably existed in F15 where an armlet overlay (or was contained in) a small patch of decayed leather or wood.

Part of a broken pot and the skull of a child of six to ten years of age lay in the backfill of F56, and had clearly been redeposited from a disturbed grave. Despite the skull having been displaced, two earrings were held by corrosion products in their original positions on either side of the head. A brooch was in the backfill of grave F89 but it was incomplete and an early type (mid 1st century) and thus was probably a residual stray find. A complete copper-alloy finger-ring with a glass setting (CAR 2,1755) was found in grave F90 but it is not known if the ring was in the backfill or deliberately placed with the body. A fragment of a ring with an intaglio (CAR 2, 1786) was in the backfill of the medieval grave F13 and may have also derived

from a Roman grave. Other Roman objects from post-Roman contexts which may have derived from Roman graves consist of a complete seal-box (CAR 2, 2531) and a movable arm of a copper-alloy figurine (CAR 2, 4265).

Nearly all the bodies were roughly aligned on an east-west axis, all but two lying within 62 and 96 degrees west of north (Fig 5.9). The bodies were orientated with heads to the west, apart from F51 which lay northeast-southwest and F66 which had the head to the southeast. The bones in seven of the east-west graves (namely F56, F63, F68, F75, F76, F78, & F83) had completely decayed so that it was impossible to determine which way round the bodies had lain. Most of the burials were so close to an east-west alignment that deliberate orientation for most of them seems likely. However a few were not close to east-west (notably F22, F73, & F78) and it is possible that such an alignment was never intended in these cases. This is an important point in respect of F22 which, because of its coins, can be dated with confidence to 270-80, before the practice of burying the dead east-west seems to have become widespread.

Clearly the cemetery was in existence in 270-80 but like the Maldon Road site (pp 240-1) it is impossible to establish upper and lower limits for its period of use. The high incidence of graves aligned east-west suggests that some of these graves were later than c 320-30 in line with the pattern observed at the Butt Road site. The vessels which accompanied the dead cannot be closely dated but, in common with the coins, glass, and alignments, these are predominantly late and suggest that the burials should be placed within the date range of late 3rd to the 4th centuries (see below).

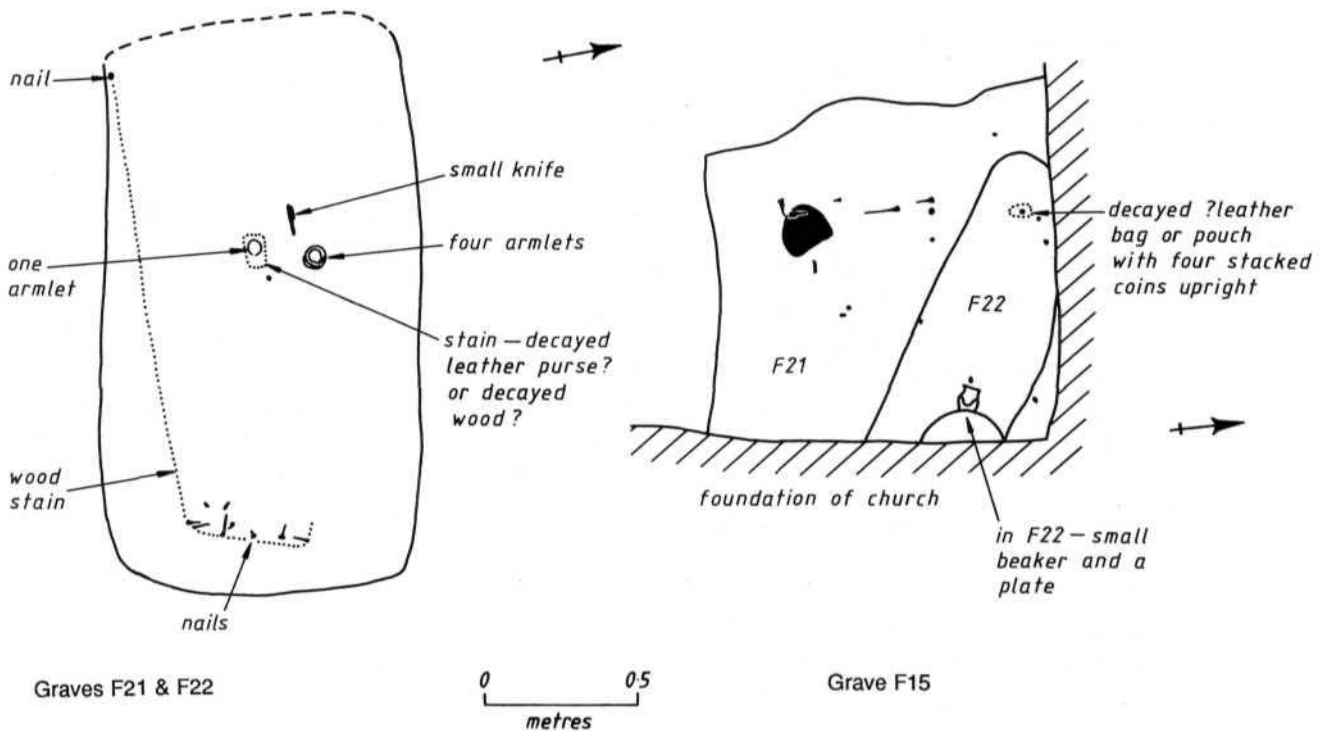
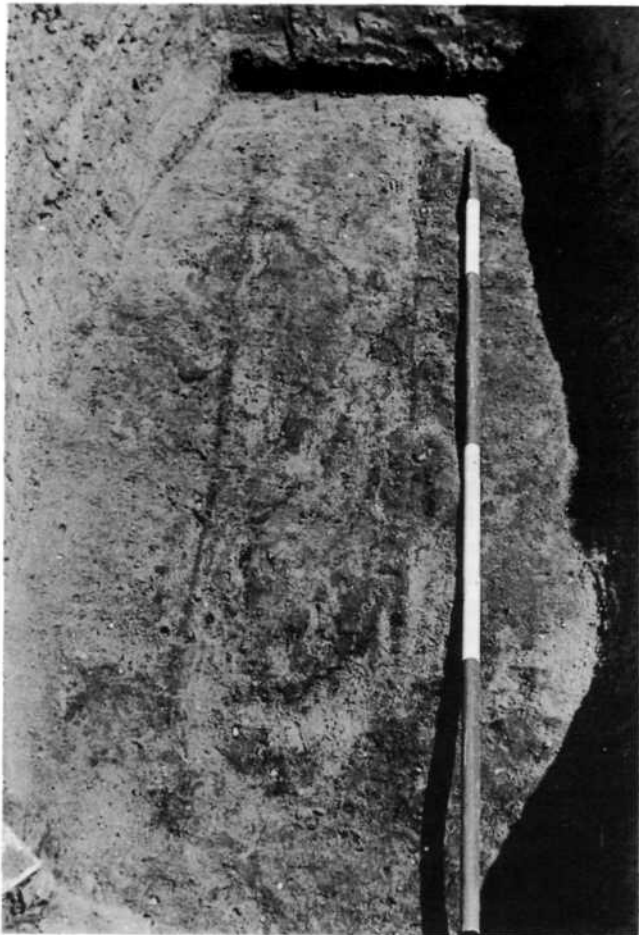


Fig 5.5 St John's Abbey Grounds 1972: Roman graves F15, F21, and F22. Not shown in F22 is the remains of the dog's head which lay in the centre of the



Pottery vessels
by R P Symonds and C Going
[Fig 5.7]

Grave F22 Fig 5.7a; Form type: P 833; IRB 137.
Part of miniature bulbous jar, with plain, slightly thickened rim. Short neck, without grooves; restricted base. Undecorated. Hard medium sandy grey ware, with abundant white and colourless quartz grains and sparse black iron ore particles. Rim diameter 63 mm; height 90 mm. Probably 3rd century +.

Fig 5.7b; Form type: P 835; IRB 137.

Part of large plate, *sigillata* form Dr 32, probably from Rheinzabern. Rim diameter 285 mm. Antonine.

Backfill of Fig 5.7; Form type: P 834; IRB 110.

Grave F56 Small ovoid beaker with flattened flaring rim and narrow neck, delineated by two grooves at base of neck; restricted base. White fabric with moderate red iron ore particles; slightly metallic red-brown colour-coating, with three pairs of vertical wavy lines in white-paint barbotine, from base of neck to lower body. Rim diameter 58 mm; height 128 mm. Probably late 3rd to 4th century.

Grave F63 Fig 5.7; Form type: P 838; IRB 116.

Lid with quarter-round convex in-turned rim, curved body, and restricted knob. Unburnished; sooted around rim. As the vessel is intact, the fabric is not visible, but the style and colour are consistent with Hadham ware. Probably late 3rd to 4th century.

Grave F68 Fig 5.7a; Form type: P 836; IRB 119.

Ovoid handleless flagon with flaring rim and short narrow neck delineated by a sharp down-turned cordon; restricted disk base. Four brown-painted bands encircling the body. As the vessel is intact, the fabric is uncertain, but is probably a buff ware with a thin cream slip; the style is that of either Hadham ware or Oxford ware. Rim diameter 55 mm; height 176 mm. Probably 3rd to 4th century.

Fig 5.7b; Form type: P 839; IRB 119.

Bulbous jar with thick, everted rim, very short neck delineated by a groove at the shoulder; restricted, flattened base. Undecorated. As the vessel is intact the fabric is uncertain, but it appears to be a hard sandy grey ware; the form is Cam 268b. ('These are beyond question the commonest vessels in Roman Colchester', Hull 1958, 285.) Rim diameter 135 mm; height 190 mm. 2nd century +.

Grave F69 Fig 5.7; Form type: P 831; IRB 120.

Ovoid flagon with thick rim, with three horizontal grooves on outside, cupped mouth, and short, very narrow neck, the internal diameter being only 6 mm; two-ribbed strap handle, very light double horizontal groove just below the handle; restricted disk base. Hadham ware: hard orange-red fabric with abundant white and colourless quartz grains, moderate black iron ore particles, and sparse white mica and red grog; orange-red slip, burnished horizontally between base and shoulder, vertically between shoulder and mouth. Rim diameter 35 mm; height 183 mm. Late 3rd to 4th century.



Fig 5.6 St John's Abbey Grounds 1972: Roman grave F64. Above left: an early stage in the excavation of F64 showing the traces of the sides and ends of the coffin (viewed from the west). Below left: a late stage in the excavation F64 when the sides and ends of the coffin are still visible (viewed from the east) [Pages 205]

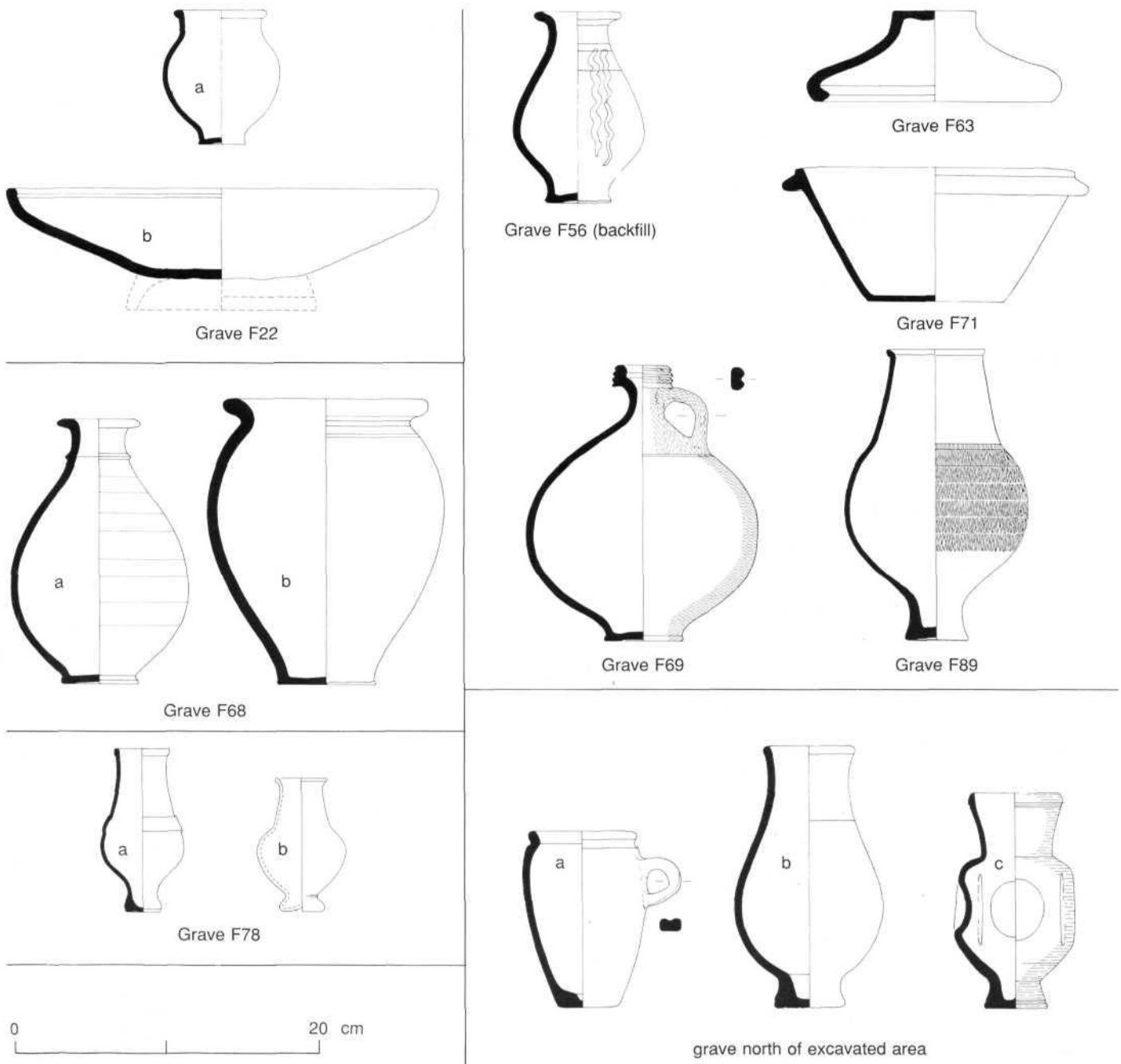


Fig 5.7 St John's Abbey Grounds 1972: pottery and glass vessel buried in the graves. 1:4. [Pages 210-13]

Grave F71 Fig 5.7; Form type: P 837; IRB 138.
 Straight-sided conical bowl with plain rounded rim and short curving flange; flat base. Horizontal burnishing all over, though the surface below the rim on the inside has become rough with wear. BB2 (Williams 1977), Colchester type B (Roman pottery volume, forthcoming): grey fabric with brown-grey core, abundant clear and colourless quartz grains, sparse black iron ore particles and fine mica visible at surface. Rim diameter 181 mm; height 86 mm. Early 3rd century +.

Grave F78 Fig 5.7a; Form type: P 832; IRB 130.
 Small pentice-moulded beaker, with small square-cut rim, tall inset neck, and high, sharply restricted base. Thick pentice at shoulder; tiny groove on

lower body. As the vessel is intact, the fabric is not clearly visible, but it appears to be buff-red and relatively fine; the surface has a semi-lustrous black colour-coating. This is most likely to be a late product of one of the East Gaulish *sigillata* workshops, such as Trier or the Argonne. Rim diameter 37 mm; height 108 mm. Probably late 3rd to 4th century.

Grave F89 Fig 5.7; Form type: P 840; IRB 139.
 Ovoid pentice-moulded beaker with everted, flattened rim, inset neck, and high restricted base. Thin pentice at shoulder, rather worn rouletting from base of neck to lower body. Colchester colour-coated ware: hard red fabric with moderate very fine red and white specks and moderate very

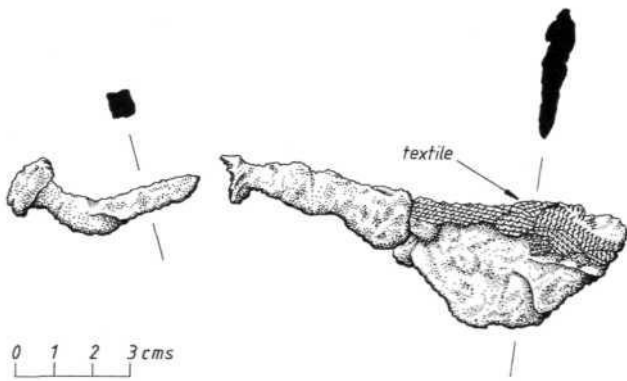


Fig 5.8 St John's Abbey Grounds 1972: iron knife from F15. 1:2. [Pages 205, 213, & Fig 5.5]

Grave north of excavated area

fine mica; with a dull red slip. Rim diameter 65 mm; height 192 mm. Probably 3rd to 4th century.

(Three pottery vessels found together and purchased from a workman.)

Fig 5.7a; Form type P 821; SBC.

Tall tankard with a bead rim. The fabric is Black-Burnished 1 and the form is Gillam 65 (Gillam 1970). Height 115 mm; rim diameter 70 mm. Date, probably mid to later 4th century. For a similar vessel, this time probably a Hadham product, see Maldon Road grave F53, Fig 6.7.

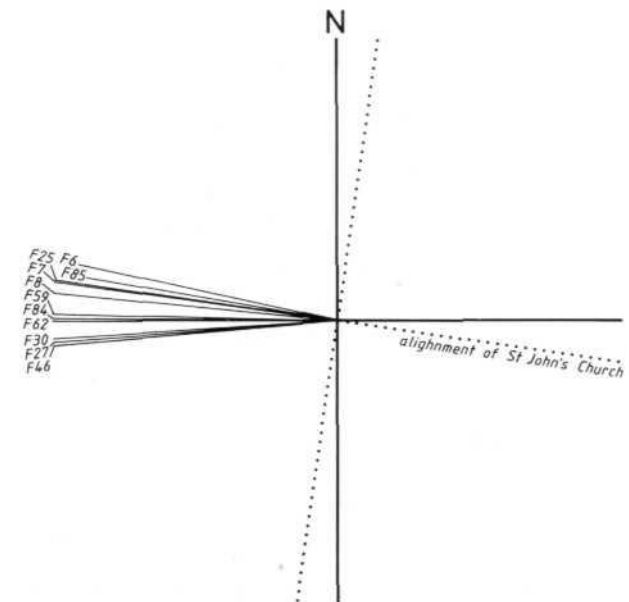
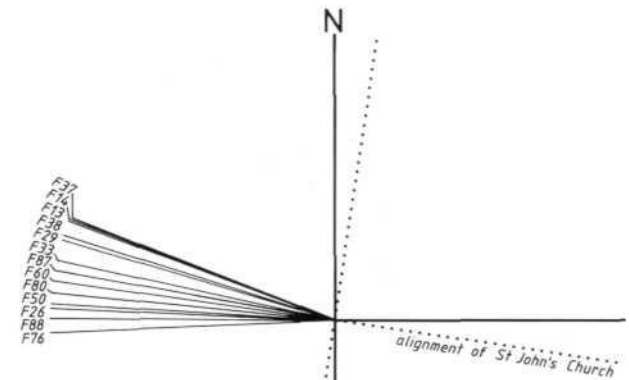
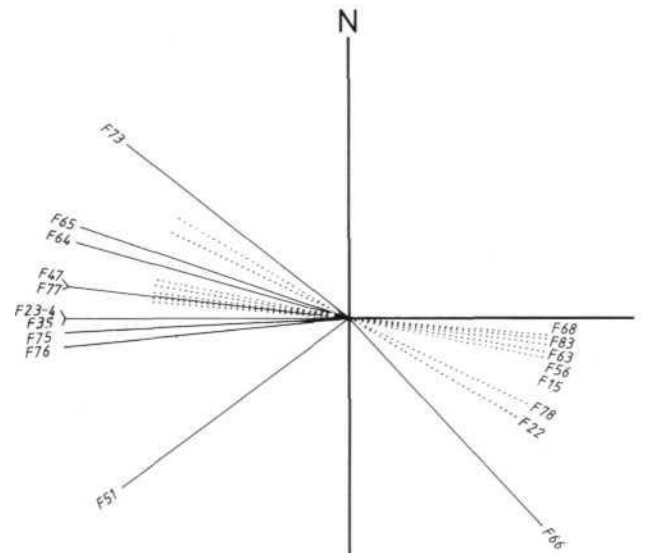
Fig 5.7b, Form type: P 822; SPC.

Weighty, tapered necked, slack profiled beaker form in a reduced ware, possibly not local. Rim diameter 60 mm; height 173 mm. Probably 4th century.

Fig 5.7c; Form type P 912; SPC.

Folded beaker (CAM 402 or 403), in an olive drab, metallic colour-coat. Possibly a Nene valley product. There is no definite production evidence for this form at Colchester. Fourth century.

The assemblage of vessels (thirteen pots and one glass vessel) retrieved from these burials indicates that this part of the cemetery was in use in the later 3rd and 4th centuries AD. Greater precision is not possible because the pottery dates may be considerably earlier than that of the graves. For example Grave 22 produced coin evidence showing it was not cut before AD 270. One of the two pottery vessels in the grave was a samian bowl of later Antonine date. The coins only provide the grave with a *terminus post quem*; it may be substantially older than even this. The vessel has seen much use. It is generally battered and pitted and at some stage its footring had been chiselled off, so the bowl was at least seventy years old when it was placed in the grave.



Right: Fig 5.9 St John's Abbey Grounds 1972: diagrams illustrating the alignments of the Roman graves (top), the lined medieval graves and St John's Church (centre), and the unlined medieval graves (bottom). The arrows point towards the head. Dotted lines in the top diagram indicate the alignments of burials where the bones have completely decayed and the position of the head could not be determined. [Pages 209, 215, & 217]

The general proportions of the two pentice moulded vessels found in them suggest that Graves 78 and 89 are both of 4th-century date. The latest burial appears to have been that found to the north of the excavation. This contained three pots: a BB1 tankard (the fabric is uncommon here much before the mid-4th century), a colour-coated beaker so far unrepresented in the Colchester kilns and certainly 4th century, and an unusual slack-profiled closed form which, while lacking close parallels, has a late feel to it. Taken together, these vessels suggest that the grave was not cut until well into the 4th century, and probably not before its second half. •

Glass vessel

by Hilary Cool and Jennifer Price

[Fig 5.7]

Grave F78 Glass vessel (Fig 5.7, b; *CARS*, no 860; IRB 130). Complete pear-shaped jar, beaker or flask. Greenish colourless. Out-turned rim, edge fire-rounded; wide straight-sided neck sloping out to junction with ovoid body with high rounded carination and lower body sloping in to narrow constriction above small open pushed-in base ring; slightly concave base with central kick. Circular pontil scar.

The shape of this vessel is more frequently found in colour-coated pottery than in glass vessels. It was, for example, the standard late Roman colour-coated beaker form in the Oxford industry, where it began to be made at the beginning of the 3rd century, and was also produced in most of the other colour-coated pottery centres (Young 1977, 152). Both the context and the greenish colour of **860** suggest that it too is of late Roman date. It is probably related to the ovoid jars of Isings Form 131 such as the ones from late Roman inhumations at Strasbourg (Arveiller & Arveiller-Dulong 1985, 96 nos 388-9) which were in use in the north-western provinces during the late 3rd and 4th centuries. These tend, however, not to have such a pronounced division between the neck and the body as occurs on this vessel, and it may well be therefore that the latter was a deliberate imitation of the contemporary and common pottery beaker form. •

Small finds

by Nina Crummy

[Fig 5.8]

Two burials, F15 and F41, in the Roman inhumation cemetery were accompanied by several armlets. Though no skeletal material from either grave survived, F15 is considered to be a child burial, and comparison with the Butt Road cemetery suggests that the burials were of females, probably juveniles or young adults (p 130). The evidence from Butt Road also indicates that graves containing several armlets are of 4th-, rather than late 3rd-, century date.

Five armlets were deposited in F15, of which only two were published in *CAR 2* (fig 45, 1711-12). These are a pair of quite stout copper-alloy bangles with debased snake's head terminals decorated with punched dots. The other three were stolen in 1974

and have been identified from a sketch made prior to the theft. Two were of shale, ornamented with notches (cf *ibid*, fig 38, 1560-61), the other was plain, penannular, and copper-alloy. A small iron knife in two fragments was also deposited in F15 (Fig 5.8; *ibid*, 2950a). The handle may have been fitted with a bone or wooden grip, but no trace of one now survives. The knife was wrapped in textile, fragments of which adhere to both sides of the blade and handle. A knife wrapped in textile together with several items of jewellery was found in a mid to late 4th-century juvenile female inhumation at Butt Road (G171, Table 2.24, p 67; *ibid*, fig 113, 2950).

Feature 41 contained six armlets, one of shale with cable decoration (*ibid*, fig 38, 1558), and five of copper-alloy, one wire (*ibid*, fig 41, 1601), one plain (*ibid*, fig 42, 1651), one of multiple motifs (*ibid*, fig 47, 1732), one bead-imitative (stolen but identified from a sketch), and fragments of one (possibly hollow) with repousse decoration of transverse grooves. The identification of the latter as an armlet is tentative. It was not catalogued in *CAR 2*.

Two graves contained a deposit of a single item of jewellery. A wire copper-alloy armlet (*ibid*, fig 41, 1602) lay in F92 (possibly a child), and a copper-alloy plain finger-ring was in F90. It is possible that the latter may be residual, not a deposit.

Adhering to the skull of a 6- to 10-year-old child, residual in F56, were two copper-alloy earrings (*ibid*, fig 53, 1798).

Hobnails from nailed footwear lay near the foot of the grave of a young adult female (F47). They do not appear to have been on the feet, but were probably inside the coffin.

Four coins lay together, probably in a purse, on the *terra sigillata* dish (pp 205 & 209, Fig 5.5) in F22 (a child's grave). Three are of Victorinus, 268-70, and one of Gallienus, 260-8 (*CAR 4*, 75). The close dating and predominance of the later emperor suggest that the deposit was made during the reign of Victorinus from money in current circulation.

Three other objects may be disturbed grave goods. One is a copper-alloy finger-ring set with an intaglio of dark blue glass showing a standing human figure (*CAR 2*, fig 50, 1786), and another a complete seal-box with enamelled lid. Both come from the backfill of 12th-century graves: the former from F13, the latter from F25. The third piece is a copper-alloy right arm from a figurine, recovered from 12th-century topsoil. •

St John's Church

[Figs 5.4 & 5.10]

The church of St John (Fig 5.10) was a three-celled structure, probably of two phases with rubble foundations made with alternating layers of sand and reused Roman rubble (Fig 5.4). The building had been demolished to foundation level. No floor levels

ST. JOHN'S CHURCH, COLCHESTER and post-Roman burials

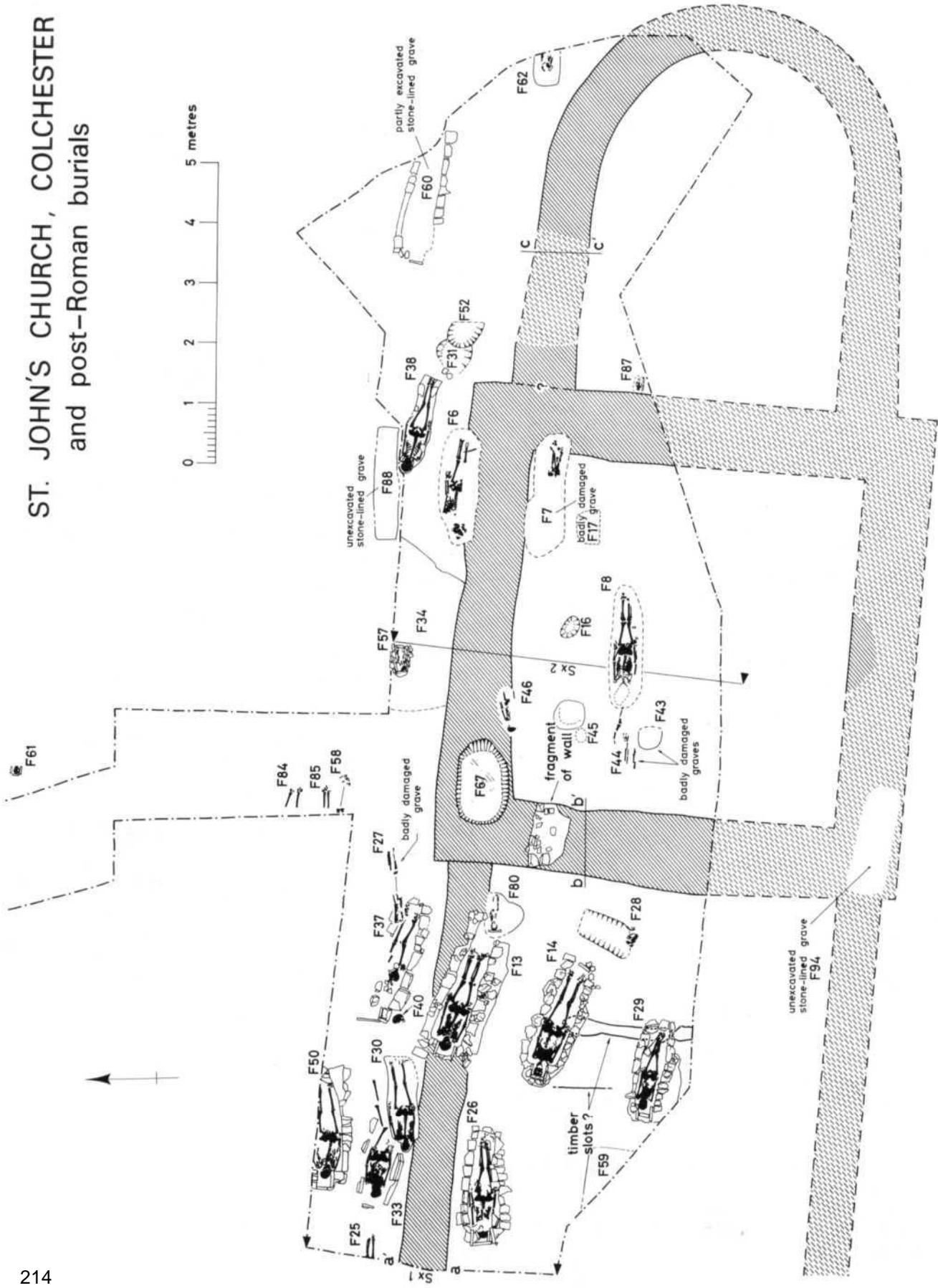


Fig 5.10 St John's Abbey Grounds 1972: St John's Church and the post-Roman burials. 1:90. [Pages 213-18]

or internal features survived apart from two shallow, sand-filled slots in the west cell (Fig 5.10). To the north of the church was a layer of light brown sandy loam which was the remains of a leached topsoil. Elsewhere, including inside the building, there was only disturbed natural sand; this contained some sherds of Thetford-type ware and two pieces of grass-tempered pottery (see below). Sealing the remains of the church was a layer of debris up to 0.4 m thick of dumped soil and broken building materials which had been left after the demolition of the building (Fig 5.4). The rubble was at its most concentrated over the eastern half of the building and in patches to the north of it. The western area contained mainly crushed mortar. Readers are referred to *CAR 1*, 41-5 for a fuller description and discussion of the building.

Much has been made of the notion that the building started off as a square Roman martyrrium or mausoleum on to which were added in post-Roman times an apsidal chancel to the east and a nave to the west. The original focus of the supposed primary structure, so the argument goes, was the grave F15 (Fig 5.3) which seems to lie in the centre of it. So attractive is this interpretation that it has now been presented as unqualified fact (Thomas 1981, 174-5, 185, fig 28, following Rodwell 1977, 38-9, fig 12). Whilst nothing was found in 1972 to rule out this possibility, it is an interpretation which, to judge by the evidence in the ground, seems very unlikely. As already explained in *CAR 1* (p 44), the foundations of the central cell are identical in character to the foundations of the chancel and the nave to the west, which is unlikely to have been the case if some had been Roman and others post-Roman. Moreover, as a group the foundations are quite unlike any Roman examples found so far in Colchester but instead have close 12th-century parallels, namely in the church of the Hospital of Mary Magdalen and St Botolph's Priory church (excavated 1989-90 and 1990-91 resp, and neither yet published). The distinguishing characteristic of these foundations is the way that layers of unmortared rubble are alternated with layers of packed sand or sandy soil. The Roman cemeteries covered large areas outside the walls of the town so that it would be a mistake to make too much of the combination of church and Roman cemetery. During the excavation, it was felt that the central cell and the chancel were of one build (unlike the western cell which was clearly a later addition). This would conflict with the martyrrium theory but the relationship is not certain (*CAR 1*, 44). Also the relationship between the graves F15 and F64 could not be determined. This too is unfortunate since had F15 proved to have been cut by F64, then the foundations of the central cell would have been shown to have post-dated the burial F15 since they themselves clearly cut F64. Nevertheless, wherever a Roman grave and the foundations of the church coincided, the foundations always proved to be the later and the overwhelming impression is that the whole of the three-cell building post-dated the Roman cemetery. Fortunately, the southern half of the central cell and most of the

western nave still survived so that there is some scope for a further, more leisurely examination of the building at a future date.

Dumped soil of 1133

[Fig 5.4]

The demolition debris was itself sealed by a large volume of dumped sand and soil. This was thickest in the west section (0.9 m deep; Fig 5.4) and petered out over the central cell of the church. Trial holes dug to the west in 1977 indicated that this material is probably attributable to the large-scale earth-moving which followed the fire of 1133 (*CAR 1*, 44).

Rubble-lined medieval graves

[Figs 5.9-5.12]

Cutting the dumped soil of 1133 and, where it was absent, the demolition debris of c 1095 were some early medieval graves (Figs 5.10-5.12). Two graves (F13 & F93) overlay the tops of the foundations of the western and central cells of the church. All were shallow, none originally being deeper than about 0.8 m. Many had been damaged during the contractor's earth-moving operations when the surface topsoil had been stripped. The earliest of the graves were lined with broken Roman building materials.

Fifteen lined graves were uncovered. The dead consisted of a mixture of men, women, and children (see below) and thus belonged to a lay cemetery. All were orientated with heads to the west (Fig 5.9) and arms by the sides. The graves appear to have been laid out in rows of which two were clear: F50/F33/F26 and F37/F13/F14/F29. The extent of the cemetery is unknown. In each grave, the lining was confined to the sides and was of variable height up to 0.3 m. The materials were all obtained from robbed Roman buildings and consisted mainly of broken tile, septaria, Kentish ragstone, and a few pieces of worked stone (see below). The quality of the lining varied. The best examples (F13, F14, F26, F29, & F50) had niches of broken tile for the head, and the rubble had been set in mortar so that the inner faces of the lining were smooth and even. The grave F33 was less well formed because it was lined with unmortared rubble and had no niche. The crudest example (F38) had a rudimentary lining made of a few loose stones and one piece of tile set upright by the right-hand side of the head. Three infants (F57, F80, & F87) were lined to varying degrees. None had niches, presumably, because being so small, these were difficult to make. The grave F57 was completely lined with unmortared tile except for one lump of septaria which was at the top of the head. The graves F80 and F87 incorporated only the occasional upright fragment of tile.

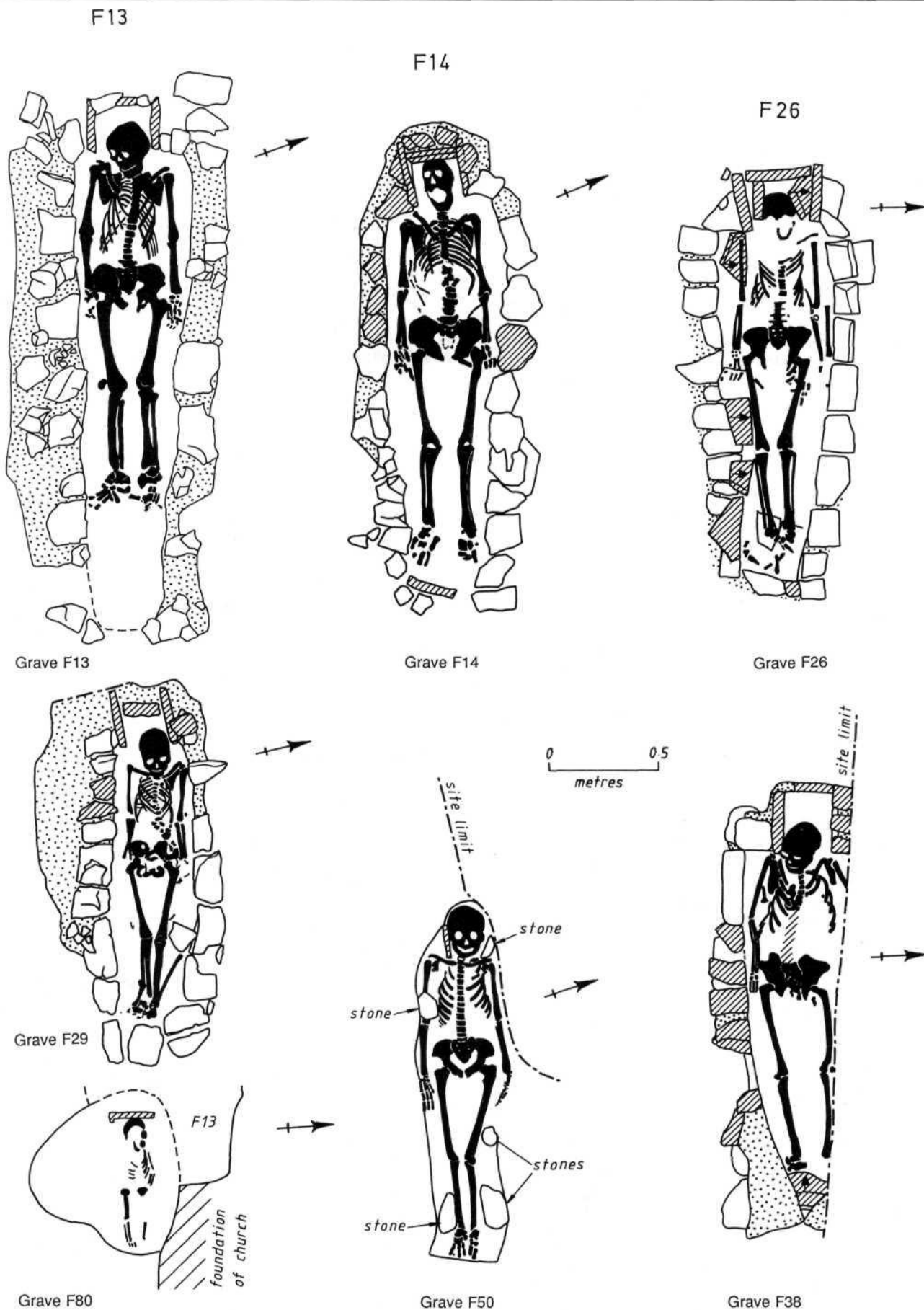


Fig 5.11 St John's Abbey Grounds 1972: a selection of the medieval lined or partly-lined graves. 1:25. [Pages 215-18]



Two of the graves (F13 & F29) contained iron nails thus indicating the possibility that wooden covers had been laid across the linings. This conclusion is reinforced by indications of displacement and damage to some of the bones when the bodies had reached an advanced state of decay. The movements of bone involved could only have occurred if each of the bodies had lain in a hollow space such as would be formed by a cover and the lining. In antiquity the right hand of F29 had been displaced while still articulated and a patella of F13 had been dislodged. Also the ribs and pelvis of F14 and part of the skull of F26 had been crushed as if by wooden covers which had collapsed as a result of decay. Where the lining did not occur all the way round a grave, such covers, if they existed, must have been supported by earth edges of the grave-cut.

Similar lined graves were excavated by Mr B P Blake in 1962 in the southwest corner of the walled area of the town. These were thought to have been in an early part of the cemetery of St Mary-at-the-Walls which is adjacent to the site and was formerly a parish church (CMR 1962-3, 7). Other examples were found at the east end of the St Botolph's Priory church in 1990-1, including one which had a large stone set over the niche to protect the head. No evidence of such an arrangement was found in 1972 but conceivably some might have been protected in this way since, as already mentioned, the upper parts of some of the burials had been damaged before the excavation began.



Unlined early medieval graves

[Figs 5.9-5.11]

Eighteen burials lay in shallow, unlined graves originally no more than 0.8 m deep. Most had been very badly damaged by the contractor. Like the rubble-lined graves, all had their heads to the west and all cut the dumped soil of 1133 or the demolition debris of the church where the dumped soil did not exist. Several graves (F6, F7, & F46) overlay the foundations of the church. Individually and as a group, the unlined-graves were more accurately aligned east-west than those with rubble linings (Fig 5.9). At least one of the graves (F30) had been shaped like a lined grave because it narrowed at the head end. It was impossible to tell if there had been others similarly shaped. Two graves contained nails (F27 & F28) and thus, like the lined graves, these may have had wooden covers. Indications of rows are not clear or convincing except perhaps F84/F85/F58/F27/F80/F28.

The grave F80 cut the foot of the grave F13 (both lined) thus indicating that the distinction between unlined and lined graves is probably not as clear-cut as presented here. Rather than the burials being reconcilable into two distinct phases, it is possible that there was a variety in the quality of the linings employed at any one time and that in the long term

Fig 5.12 St John's Abbey Grounds 1972: medieval lined graves F29 (above) and F57 (below). [Pages 215-17]

the quality degenerated until finally linings ceased to be used. Certainly the quality of the linings on the western side of the site was better than elsewhere. And also the lined grave F88 seems to have formed part of the same row as the unlined graves F6 and F7 as if they may all have been roughly contemporary.

No grave contained peg-tile or slate and the latest pottery associated with any of them is c 12th century. (The standard, common type of peg-tile is thought not to have occurred in Essex until the late 13th century (Drury 1982, 349).) A significant find was part of one side of a 12th-century pot in F62 (Fig 5.13).

The parish church of St Giles was founded in the cemetery of the abbey sometime between 1133 and 1171 (CAR 1, 41). The site of St John's church was presumably used as a lay burial ground because the building had formerly been a parish church and parishioners continued to be buried there despite the building having been demolished. Thus presumably only when a new parish church was built in another part of the abbey grounds did this practice stop (CAR 1, fig 36). Such a sequence certainly explains how this early group of burials came to survive so well without being destroyed by the large numbers of intercutting later graves which characterise church cemeteries. It also suggests that the burials were no later than 1133-1171.

The occupant of Grave F30 is remarkable for the injuries which he sustained and survived (pp 289-90)

The later features

[Fig 5.10]

The most substantial feature to post-date the cemetery was a north-south ditch F5 (not shown on plan). It was 0.6 m deep and ended next to the grave F60 which it also cut. The only datable finds in the ditch were early medieval. The remaining features were modern apart from three possible postholes (F16-8) and two small pits (F48 & 52).

The post-Roman pottery

by C M Cunningham

[Fig 5.13]

Only one sherd of Thetford-type ware was recognised. This was part of the rilled shoulder of a jar. It lay in sand below the church floor and predated the church's destruction, if not its construction. Thetford ware first appears c 850 (Hurst 1976, 365) and at Colchester can be shown to be largely residual after c 1100 (CAR 1, 40). This is significantly earlier than the bulk of the sandy medieval wares from the abbey and its destruction deposits.

The sand associated with the church produced 12 examples of early medieval sandy ware — our Fabric 13 (see CAR 8 and Cunningham 1982, 358 & 362); all

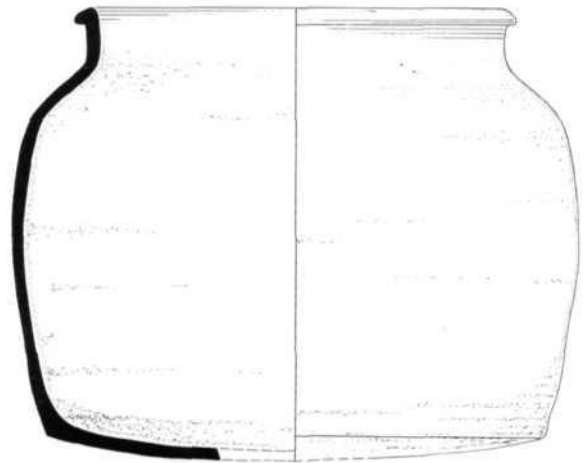


Fig 5.13 St John's Abbey Grounds 1972: 12th-century pot from F62. 1:4.

are body or base sherds and all are compatible with examples attributed to the 11th century elsewhere in Colchester. Four similar fragments were found in the destruction debris including an externally-thickened rim from a bowl. The graves F6, F30, F38, and F44 contained six more examples of this ware, mostly from thin-walled cooking pots, although F6 also produced a small possibly intrusive Tudor Green sherd, not earlier than the 14th century. Grave F62 contained a large fragment of a fairly developed sandy cooking pot of the 12th century (Fig 5.13). Three sherds of Fabric 13 from pit F5 suggest a date in the late 11th or 12th century. Two residual fragments of vegetable-tempered ware from this pit are probably early Anglo-Saxon.

A thin scatter of sherds of Fabric 13 was recovered from other contexts and site clearance including a simple rim from a cooking pot of the later 11th century (cf CAR 1, fig 35.106). The only other pottery types present were Colchester ware of the later 15th-16th century (Fabric 21a, see CAR 8 & Cunningham 1982, 367) and late stoneware.

The post-Roman pottery is summarised in tabular form in Appendix 8 (microfiche pp 1083-4).

Worked stone

by Nina Crummy

Four fragments of stone from medieval contexts were probably of Roman origin. All have mortar on either a broken edge or a polished face, a clear indication of reuse. One piece of Purbeck marble veneer (SF 129) came from the rubble over the apse of the church, and another (SF 132) from the stone-and-tile-lined grave, F26, which also contained a piece of shelly limestone veneer (SF 131), possibly from the Purbeck beds, and a coin of Caracalla. The fourth fragment of stone is roughly worked, probably limestone, and came from the stone-and-tile-lined grave, F33.

THE PRECINCT WALL OF ST JOHN'S ABBEY: OBSERVATIONS IN 1972

[Figs 5.1 & 5.14]

About 140 m of the surviving abbey wall was destroyed in 1972 as part of the works for the new roundabout. The wall stood to a height of about 2.75 m and tapered in width from about 1.0 m at the base to about 0.6 m at the top. It had been thought that the wall was of 16th-century date because it appeared to have been built of stone and 16th-century brick (RCHM 1922, 48). However what had previously been visible of the wall turned out to have been a refacing about 0.50 m thick added to a wall of much older date. The original structure was built entirely of reused Roman building materials, namely tile, septaria, and Kentish ragstone. The rear face was

well preserved and contained many original put-log holes (Fig 5.14). According to Trial Trench 2 of 1971 (Fig 5.1) and the observations made in 1972 at the time of the bulk excavations, the dump of 1133 appeared to have been deposited directly against the rear face of the wall implying that the wall was probably an original feature of the monastery (see section at foot of Fig 5.1). The absence of peg-tile suggests that the wall predates the late 13th century. (See Drury 1982, 349 for a discussion of peg-tile in Essex). Part of the original inner face of the wall is now exposed permanently next to the east side of St Giles Masonic Centre.

The refaced part of the wall had been garreted with small pieces of flint and was thus very reminiscent of the bastion found during the Lion Walk excavations. The latter was built c 1400 and demolished c 1648 (CAR 3, 84-5). The refacing incorporated fragments of worked stone which presumably came from the demolition of the abbey. Other fragments were found in 1973 in the graveyard of St Giles's Church (see below). It was possible to salvage some of these so

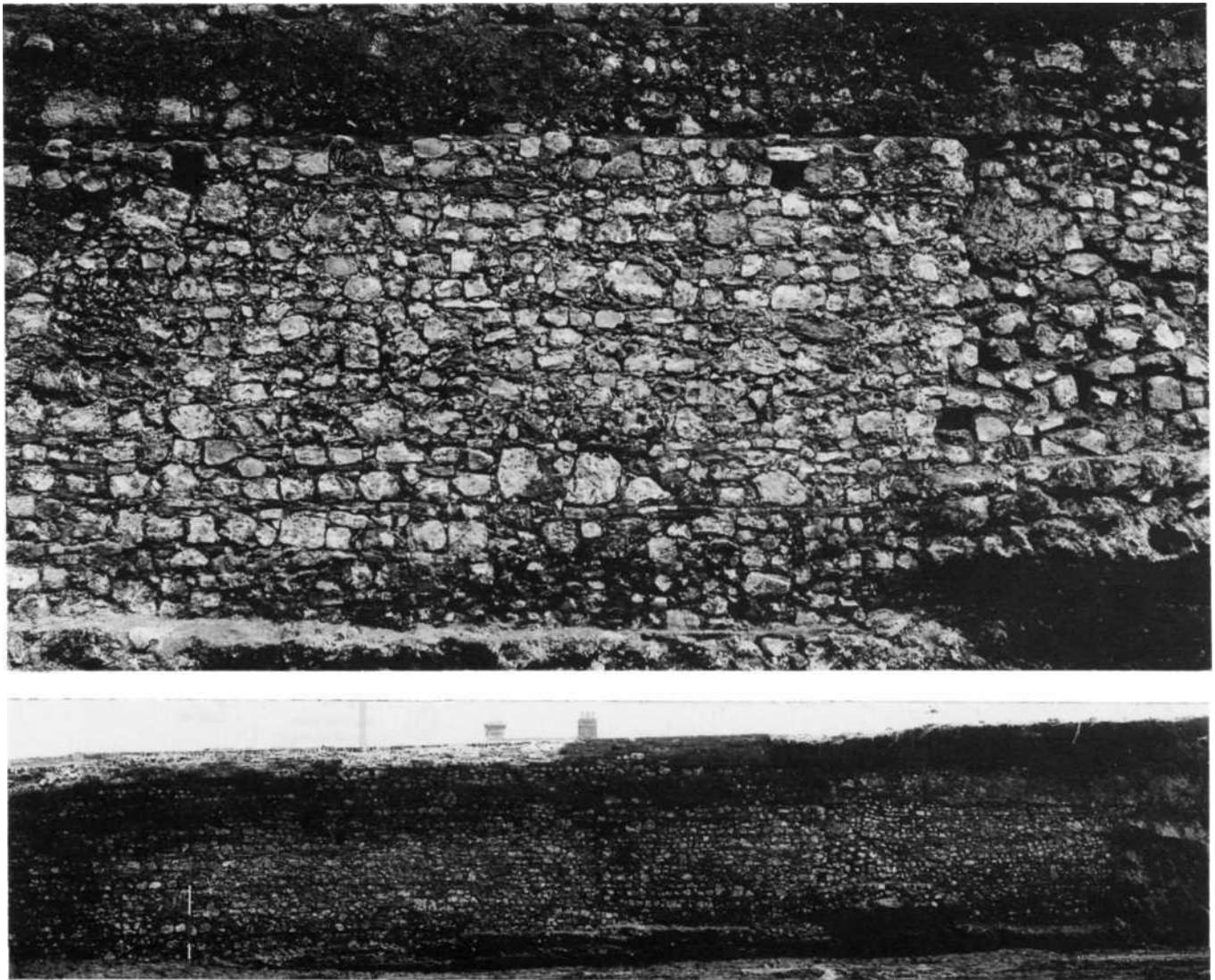


Fig 5.14 St John's Abbey Grounds 1972: inner face of the 12th-century precinct wall.

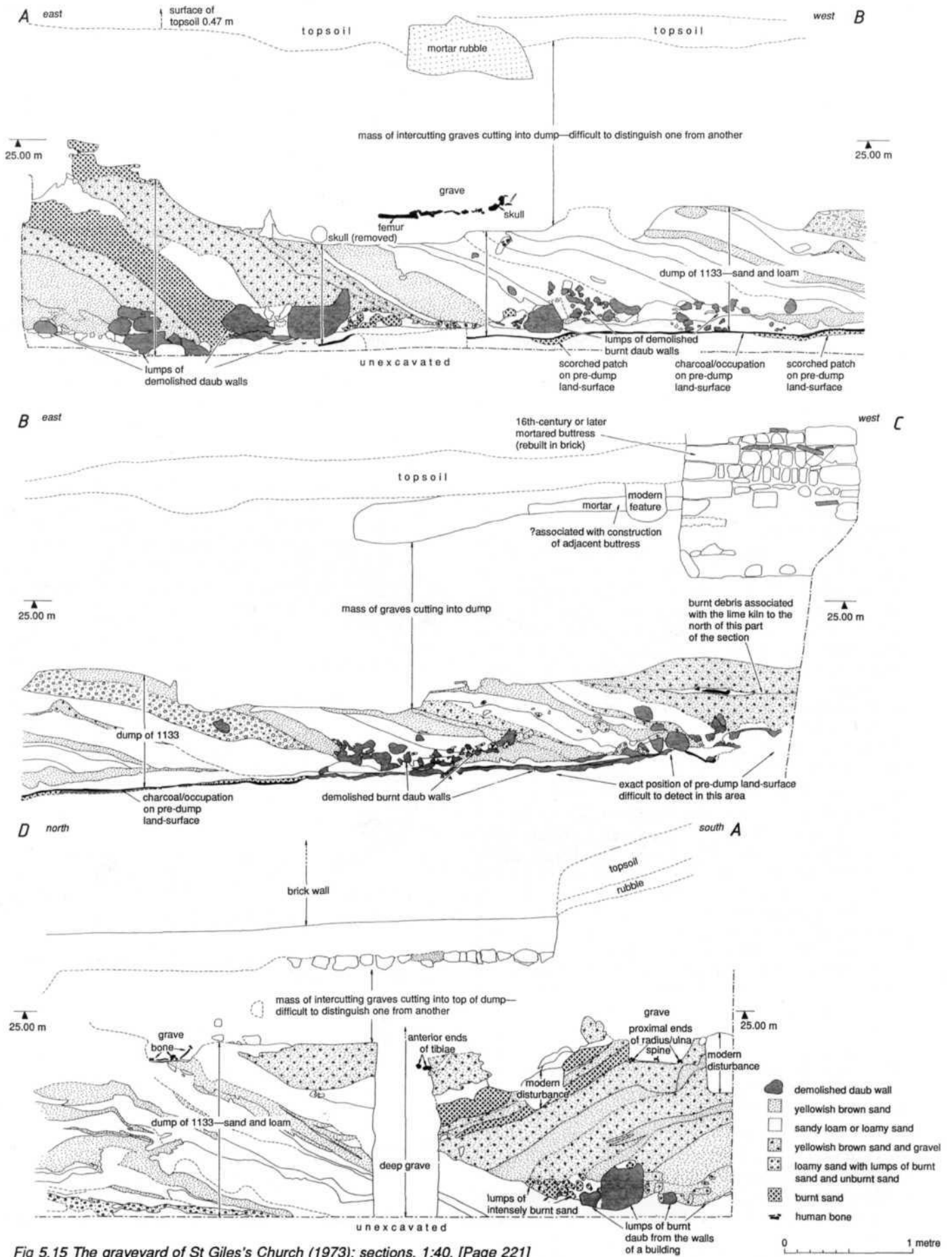


Fig 5.15 The graveyard of St Giles's Church (1973): sections. 1:40. [Page 221]

that they could be recorded (photographs now in the Colchester Museums). Some of the fragments were built into the repaired stump of the surviving wall adjacent to the east side of the St Giles Masonic Centre. This was done in such a way as to leave them permanently visible. Various other fragments of worked stone can be observed in the general locality of the abbey (RCHM 1922, 48). The refacing of the wall must have been done by the Lucas family (see p 227 below).

THE CEMETERY OF THE FORMER ST GILES'S CHURCH: OBSERVATIONS IN 1973

[Figs 5.1 & 5.15]

In 1973, part of the graveyard of the redundant St Giles's Church (now the St Giles Masonic Centre) was lowered by machine to make a private car park. The construction work was not preceded by archaeological investigations (partly because of pressure from Lion Walk and other sites) and the burials were removed by the contractor for reinterment elsewhere. The surface of the cemetery before the earth-moving began rose steeply towards the south-east corner with the result that most of the excavated soil derived from that part of the site. This left two substantial sections through the cemetery, one at the eastern side and another at the eastern end of the southern side (Figs 5.1 & 5.15).

The lower halves of the sections were occupied by a substantial quantity of dumped soil which contained the burnt remains of what appeared to have been demolished walls of solid sandy clay. The dumped material consisted of layers of sand and sandy loam mixed with lumps of burnt sandy clay up to 0.45 m thick. The dump survived to a height of 1.6 m and preserved the original ground surface on which it had been deposited. None of the lumps of sandy clay appeared to be *in situ* apart from one fragment which might have been the undisturbed stump of a wall of solid sandy clay (Fig 5.15). The walls are likely to be the remains of buildings destroyed during the fire of 1133 (see above). The precise method of construction is unclear. Probably the walls were made of sun-dried bricks since it would have been difficult to build them by daubing without a frame of some kind.

The remains of a lime kiln were observed near the western end of the southern section (Fig 5.1). It was sealed by the dumped material and cut into the original ground surface. It took the form of a circular pit approximately 4.0 m in diameter with scorched edges. Although unexcavated, it was clearly directly comparable to the early medieval lime kilns found at

Lion Walk (CAR 3, 30) and the Gilbert School site (CAR 6, 139).

The original depth of the dump could not be established because the upper part of it had been destroyed as a result of intensive grave digging in the cemetery. Few individual graves could be discerned in the sections but many fragments of human bone indicated that the ground had contained a mass of intercutting burials.

The church graveyard was bounded on its eastern and southern sides by a wall of two phases. The foundations were exposed in several places along the sections with the result that some surviving parts of the original wall and its foundation were uncovered (Fig 5.15). The wall, rebuilt above ground in red brick, had originally been of reused stone presumably from monastic buildings demolished in the mid 16th century or later, after the dissolution of the monastery. Fragments of reused stone can be found elsewhere in the area (see discussion of the precinct wall above).

Of the few burials which could be distinguished individually in the sections, several must have been sealed by the wall. These indicate that the cemetery was not merely in existence before the wall was built but that it had originally extended beyond the boundaries of the recent cemetery. The burials found in 1971 to the east of the graveyard wall (see p 203 above) can now be seen as part of the cemetery before it was reduced in size and in effect partitioned off from the rest of the grounds by the construction of the wall. The most obvious context for this change is the conversion of the monastery into a private residence in the mid 16th century. Although St John's Abbey no longer existed, the parish church of St Giles still flourished and no doubt the occupants of the former monastic establishment felt it appropriate to define (and reduce) the limits of the church graveyard. Presumably John Lucas was responsible (see p 227 below).

EXCAVATIONS IN THE ST GILES MASONIC CENTRE, 1975

by N A Smith and Philip Crummy

[Figs 5.1 & 5.16-5.25]

Introduction

[Figs 5.16-5.18]

The excavation in 1975 in the former St Giles's Church was undertaken when the owners, the Masonic Hall Co Ltd, were converting the building for

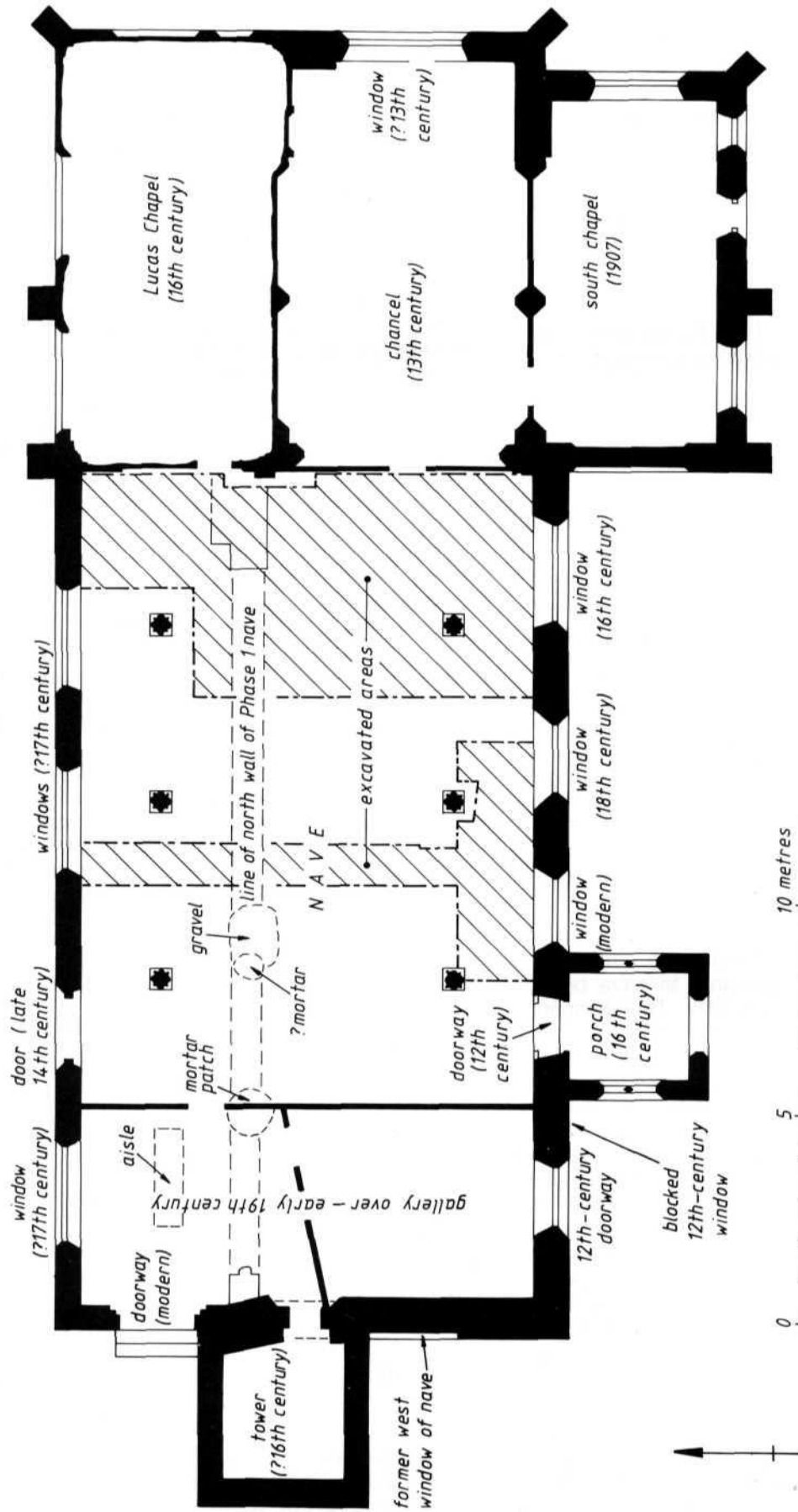


Fig 5.16 St Giles's Church 1975: the location of the trenches. 1:150. [Pages 221-30]

use as a Masonic centre. This work involved lowering the floor of the nave by about 0.3 m and therefore parts of the nave floor were investigated archaeologically beforehand. Although the depth of the excavation was limited to the base of the new floor, it was possible to excavate to a greater depth in some areas to obtain sections. The chancel, the Lucas Chapel, and the south chapel were not available for investigation because no building work was to be carried out in these places. The first area of the nave to be examined was the central part where a trench was dug in February 1975. This was followed in June of that year with a larger area at the east end. Permission to dig all the nave could not be obtained and thus when the contractors were lowering the floor at the west end of the nave, a watching brief was undertaken and several features recorded (Fig 5.16).

In its survey, the Royal Commission on Historic Monuments (RCHM 1922, 42-4) describes the church in terms of four main phases of construction: a 12th-century nave, a late 14th-century aisle, a 16th-century chapel and porch, and a modern vestry and interior. The evidence from the excavation does not conflict with this chronology so that the work can be described in these terms (Fig 5.17).

In 1983, a doorway was cut through the west end of the south wall of the nave and the opportunity was taken to examine the fabrics of the porch, tower and nave and the relationships between them (Fig 5.18). The results of this work are included below.

Phase 1 (1133/71 - 14th century)

[Figs 5.1 & 5.17-5.20]

The place and occasion of the founding of the church of St Giles have been discussed elsewhere, most recently in *CAR 3*, pp 40-6. For present purposes, it is sufficient to state that the church was established on made-up ground in the monks' cemetery to the north of the Abbey of St John between 1133 and 1165-71.

In Phase 1, the church consisted of a square-ended chancel and a long nave which measured internally 19.7 x 6.3 m. It was built of reused Roman building material, peg-tile being entirely absent as far as can be seen. The south wall of the nave is still largely intact and is 0.85 m thick with a quoin of Roman brick at its south-west angle (Fig 5.18). Close to the west end are the lower parts of the south doorway, the jambs of which are formed of Roman brick. A little further east and of similar construction is part of a blocked narrow round-headed window. The wall itself stands on a foundation of rubble (reused Roman material and no peg-tile) about 1.1 m wide and 0.8 m deep.

The excavation revealed that under the western half of the nave the foundation trenches were cut almost directly into the natural sand, which occurred at about 23.9 m OD. The sand, however, must have dipped sharply downwards to the north-east since it was not

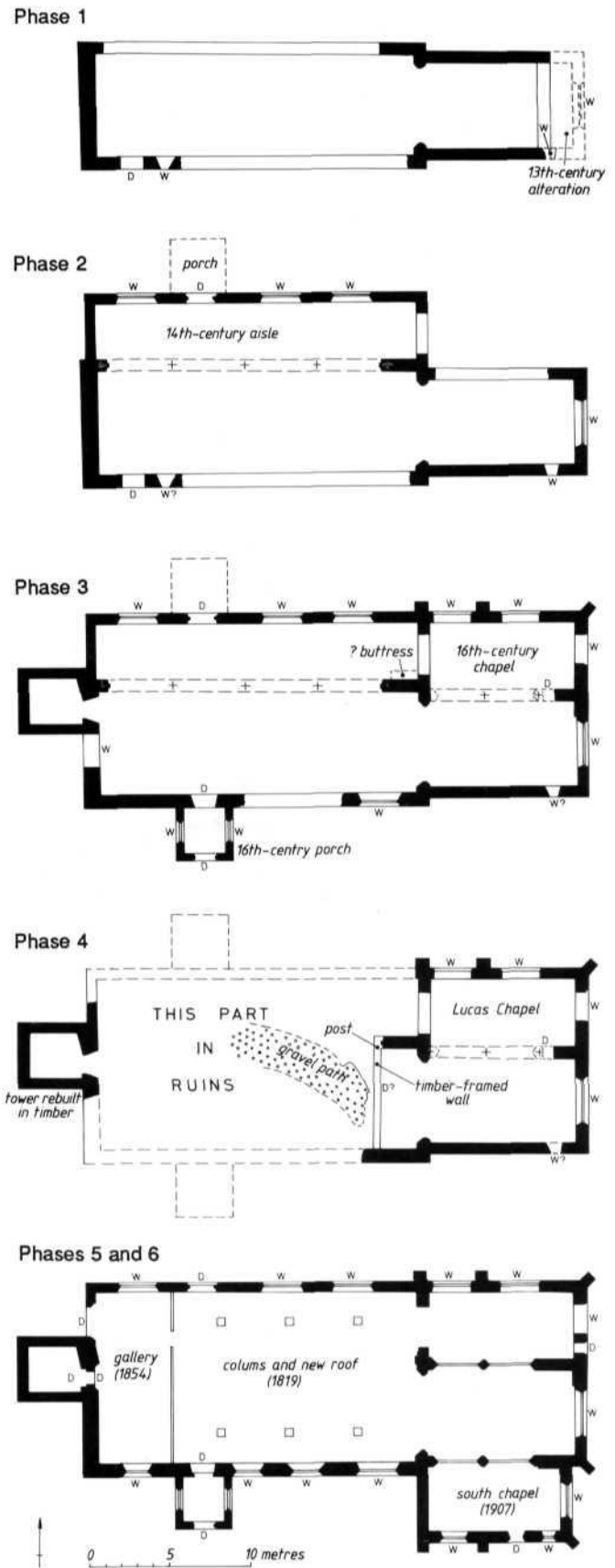


Fig 5.17 St Giles's Church 1975: the development of the church. 1:430. [Pages 223-30]

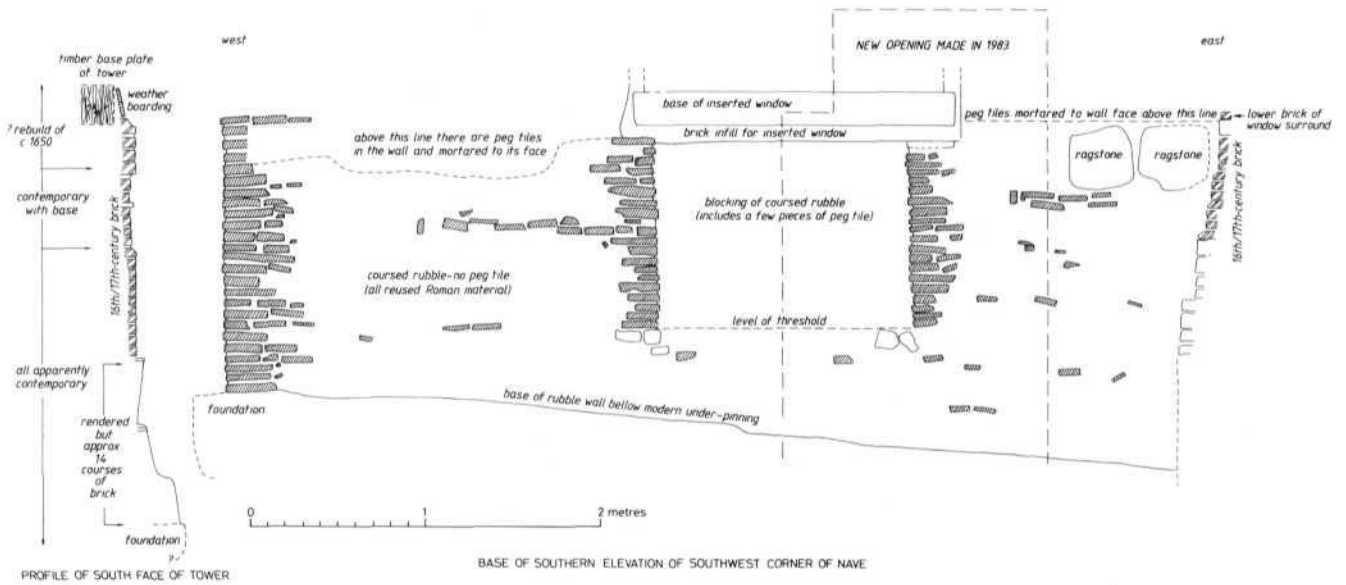


Fig 5.18 St Giles's Church 1983: the south-west corner of the nave, the porch and the tower. 1:44. [Pages 223 & 230]

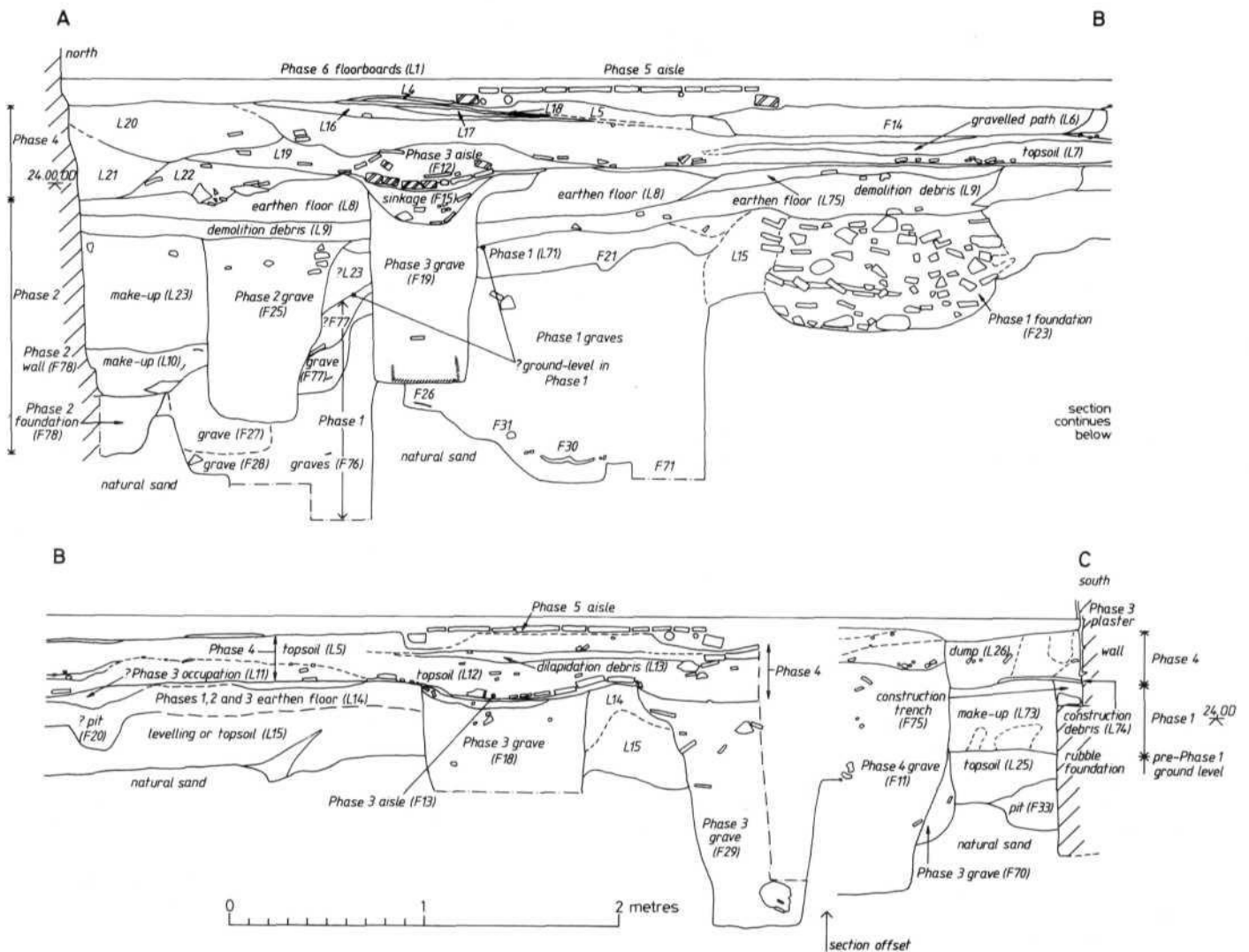


Fig 5.19 St Giles's Church 1975: Section AC. 1:32. [Pages 223-30]

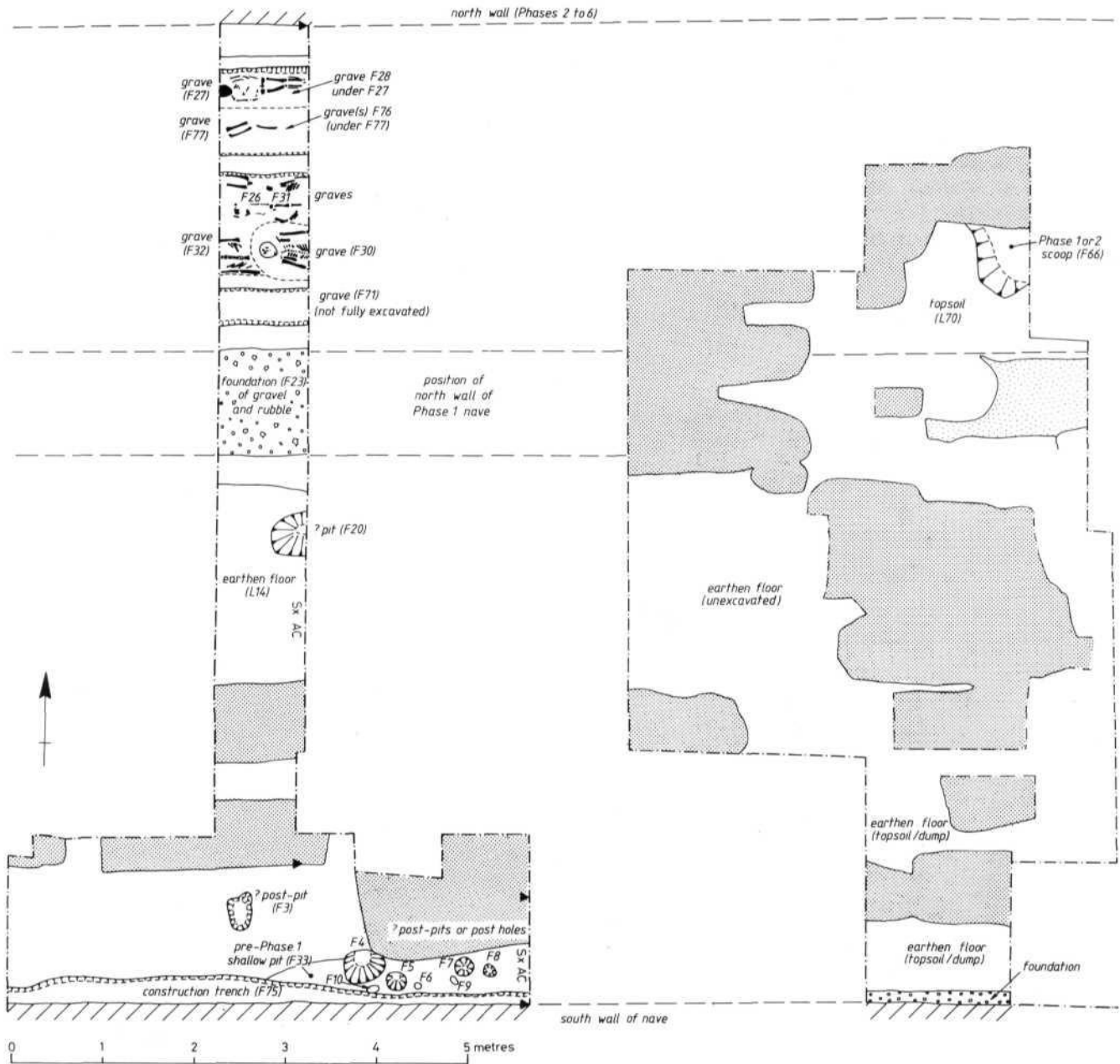


Fig 5.20 St Giles's Church 1975: Phase 1 (1133/71 to the 14th century). 1:70. [Pages 223-6]

reached during the excavation at the east end of the nave. Here the south wall rested on a foundation which, although still cut from about the same level as further west, cut into a layer of dumped soil and a layer of topsoil extending down to at least 23.3 m OD. The east end of the north wall rested on a foundation cut from a level of 23.35 m OD. About 0.55 m of soil was dumped against the inner face of this part of the wall in an attempt to make the surface of the floor horizontal. However the finished floor still sloped down towards the northeast corner of the nave and thus still continued to reflect the fall in the natural ground level beneath.

The base of a north-south wall was found under the chancel floor in 1972 when a heating duct was being laid (Fig 5.1). If, as seems likely, this was part of the original east wall of the church, then the Phase 1 chancel must have been 7.5 m long (including the thickness of the chancel arch) and square-ended. The lengthening of the chancel probably occurred in the 13th century because the RCHM records the existence of a lancet window of that date near the east end of its south wall (RCHM 1922, 43). According to William Wire, a 'nitch' and piscina were uncovered in the chancel in 1842 (Wire's Dairy, 14th & 15th November, MS in ERO, Colchester).

Several graves of Phase 1 (F26-8, F30-2, F71, & F76-7; Fig 5.20) lay outside the north wall and were sealed by the demolition debris marking the end of Phase 1 (Fig 5.19). The burials were closely packed with much intercutting. It is assumed that none of the graves found at the east end of the nave belonged to this phase although this may not be so. The graves on the north side of the nave show that the present precinct wall where it butts on to the church is not in its original position but must have passed to the north to enclose the church and the cemetery completely (Fig 5.1).

Phase 2 (14th - 16th centuries)

[Figs 5.16-5.17, 5.19, & 5.21-5.22]

Late in the 14th century (RCHM 1922, 43) the north aisle was added and the original north wall was replaced by an arcade. The new north wall was of coursed rubble and rested on a foundation of rammed sandy clay and small stones. The edge of the foundation was sealed by a thick dump of material (Fig 5.19, L10 & L23) which itself was sealed by a layer of mortar and stone fragments from the demolition of the Phase 1 north wall (Fig 5.19, L9).

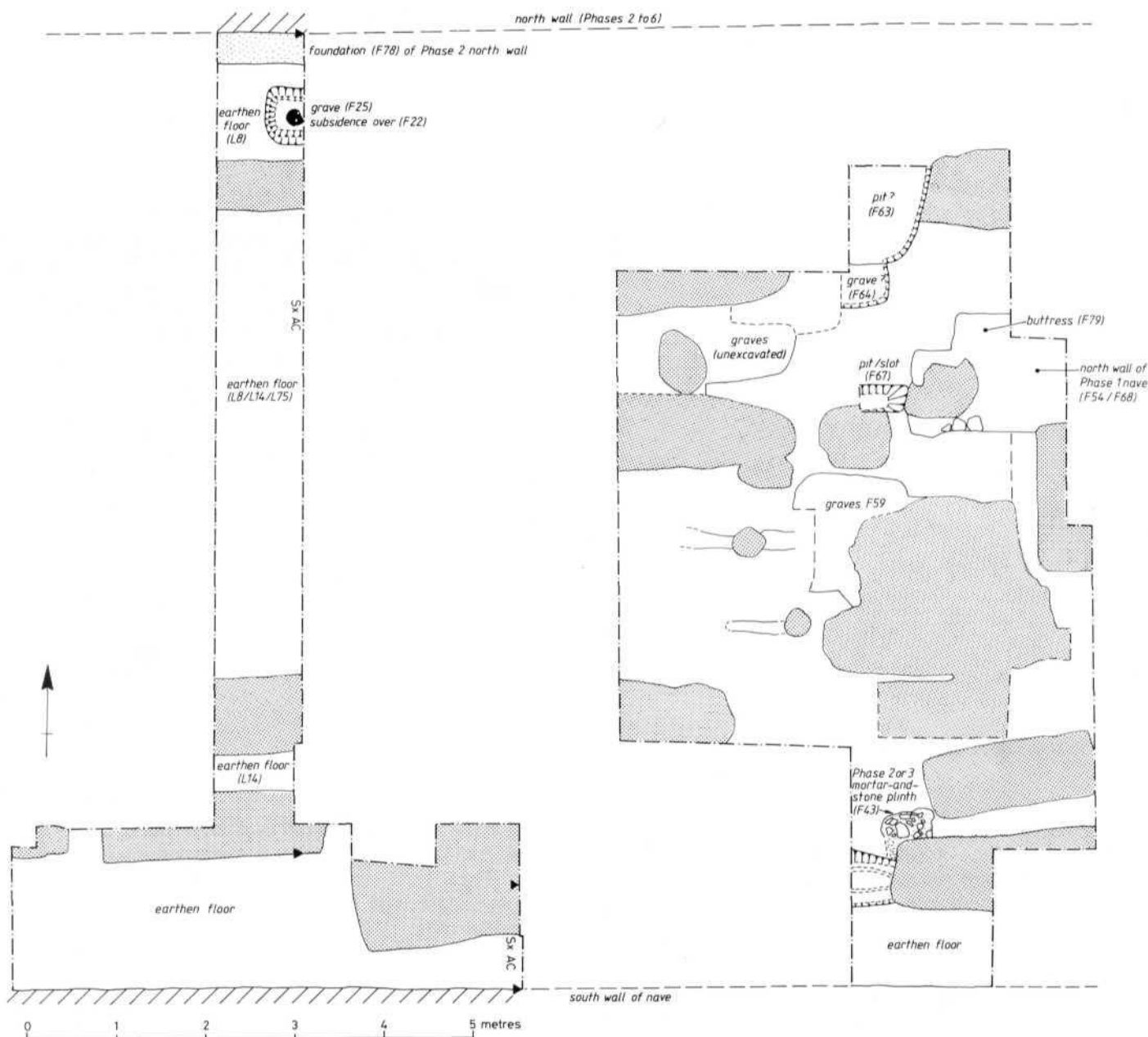


Fig 5.21 St Giles's Church 1975: Phase 2 (14th to the 16th centuries). 1:70. [Pages 226-7]

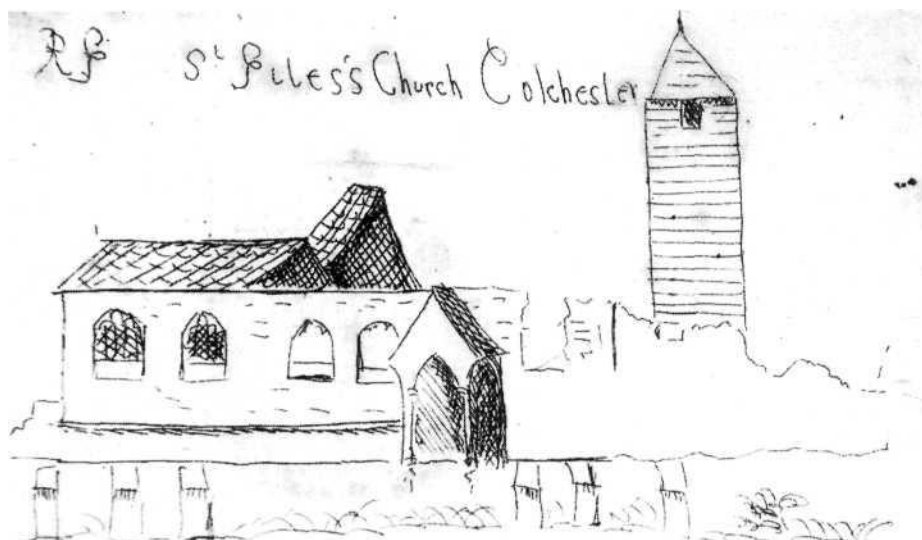


Fig 5.22 Sketch in Wire's Album of the north side of St Giles's in Phase 3.

This debris was sealed by a layer of earth (Fig 5.19, L8) laid to form the floor of the north aisle which, at the west end, remained a little lower than the earthen floor of the nave. Some of the demolition debris and more earth were spread across the east end of the nave to correct the slope of the Phase 1 floor and make it horizontal.

The stump of the east end of the original north wall was refaced. The plinth of the respond at the west end of the arcade and the mortar base of a pier were revealed during the contractor's excavation (Fig 5.16). These indicated that the arcade was probably of four arches onplinths about 0.7 m square.

An unattributed and undated sketch in Wire's Album (Fig 5.22) (MS in ERO, Colchester) shows a north porch projecting from the aisle. Probably this was also late 14th century in origin.

One grave (F25) appears to have been dug during the construction of the north aisle and others (including F59 & F64) were placed at the east end of the nave.

On the south side of the nave close to the chancel arch was a shallow mortar and rubble base (F43) which may have been for the pedestal of a pulpit.

Phase 3 (16th century - 1648)

[Figs 5.17, 5.19, & 5.23]

Phase 3 saw substantial improvements and expenditure not seen in the church since its construction. A chapel was added to the north side of the chancel, a porch and new doorway were provided on the south side of the nave, a tower was added to the west end and the interior of the nave was improved by the laying of a tile floor and brick aisles. The brick aisles may imply the provision of new pews.

The churchyard was enclosed for the first time and the precinct wall to the north was re-sited southwards to enable the parishioners to enter the church without having to pass through the former abbey grounds (see above). The scale and extent of these works suggest that they probably followed the acquisition of the former monastic site of St John's by John Lucas in 1548 and his conversion of it into his family home (Morant 1748, II, 36), especially since the new chapel (known now as the Lucas Chapel) was to become the burial place of the Lucas family. (However it should be noted that the Royal Commission dates the chapel to the early 16th century, ie pre-Dissolution.)

The tile floor sealed a demolition layer which overlay the earthen floor of Phase 2. The brick aisles are broadly contemporary with the tile floor although the surviving stratigraphic relationships were insufficient to determine if they had been laid at the same time. The floor was made of large, square, Flemish-type tiles glazed yellow or green, some having been laid diamond-wise. The floor extended for 3.4 m west of the chancel arch and from the south wall probably as far as the north aisle. A large area of the floor was missing but apparently it had been lifted and relaid over some graves into which it had sunk. Graves were also placed below the brick aisles (F19 & F62) but elsewhere the ground seems to have been largely undisturbed, no doubt reflecting to some extent the position of pews.

Phase 4 (1648 - 1819)

[Figs 5.17, 5.19, & 5.24]

In 1748 Morant stated that only the chancel, the tower, and a small part of the nave were in use because the rest of the nave was in ruins (Morant

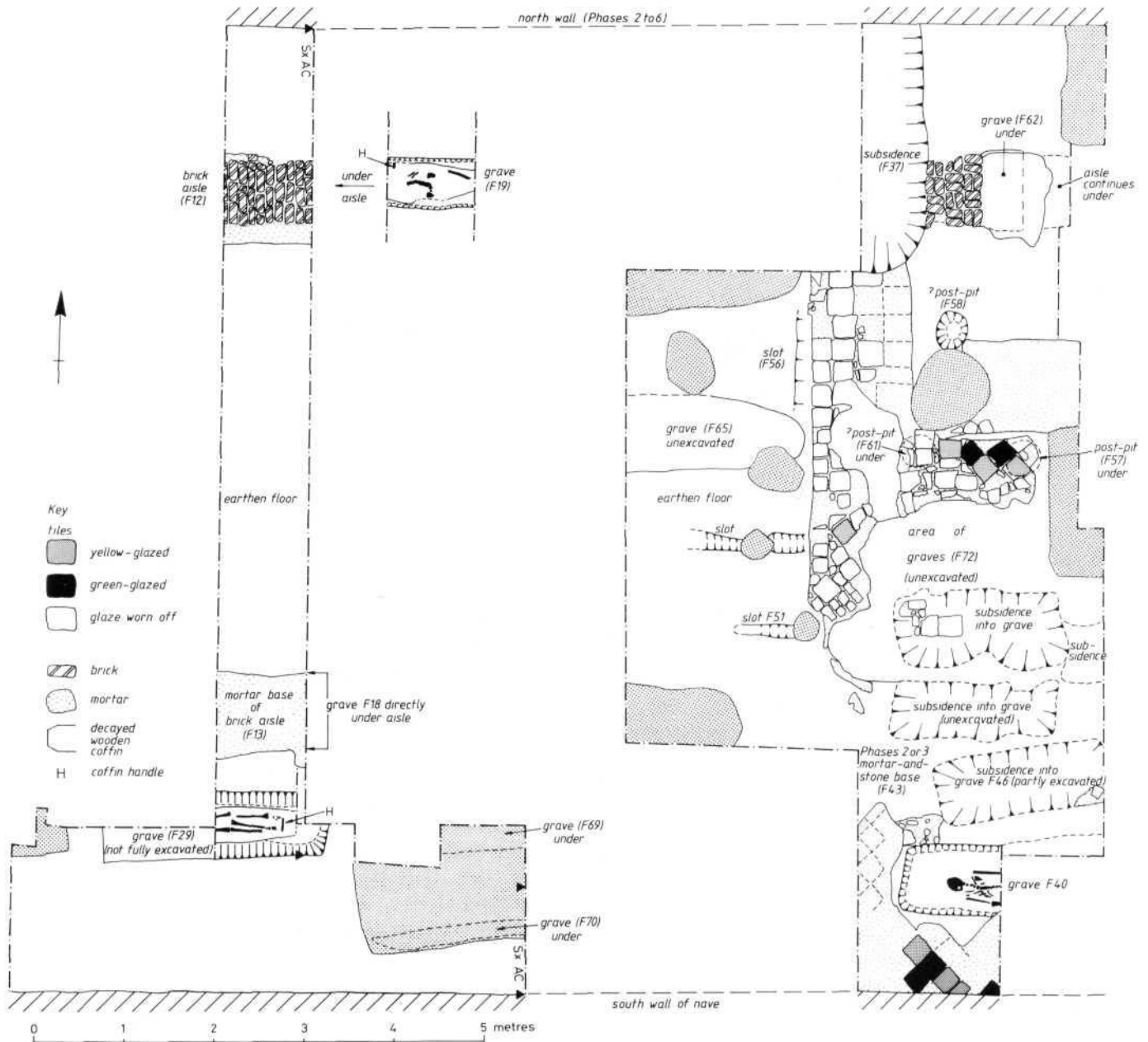


Fig 5.23 St Giles's Church 1975: Phase 3 (16th century to 1648). 1:70. [Page 227]

1748, II, 21). He could not explain the state of the building or say how long it had been in that condition but felt it must have been because of the siege of Colchester (of 1648). This is extremely likely especially since the Royalists used the former abbey grounds as a stronghold and were only driven out of it after bombardment with cannon led to a breach in the precinct wall. The west end of the church seems to have been the worst affected with the nave being left roofless and the upper part of the tower demolished.

The excavation revealed a layer of rubble make-up

including many relief floor tiles, fragments of worked stone and fragments of window glass extending west of the chancel for 2.3 m over the Phase 3 floor. The western edge of this layer was defined by a trench, possibly for a timber ground-plate, extending from the south wall as far north as the respond of the aisle arcade, where there were two large pits (F49 & F50), at least one of which had contained a post (F38). West of the trench and extending over the whole area of the nave and aisle were layers of rubble and mortar sealed by firm clean topsoil. A layer of gravel about 2 m wide had been laid as a path from the centre of the trench opposite the chancel towards the door in

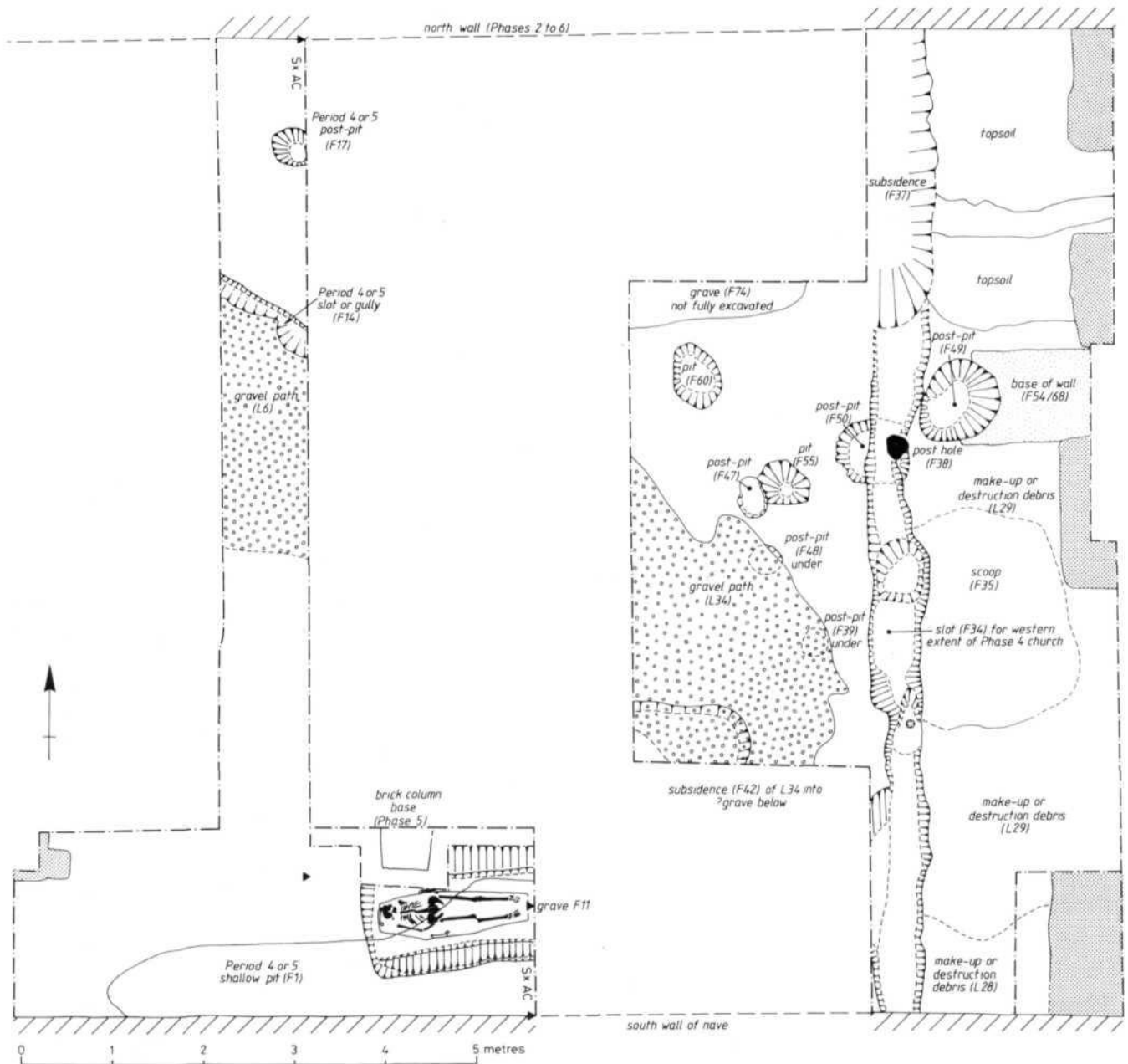


Fig 5.24 St Giles's Church 1975: Phase 4 (1648 to 1819). 1:70. [Pages 227-30]

the north wall of the north aisle. This bears out Morant's statement and suggests that a timber partition was erected across the nave with rubble to the east of it as make-up to bring the floor up to the level of the chancel. West of the partition the ruins of the nave were tidied up, the arcade probably removed, and the gravel path laid. The upper part of the tower was replaced in timber and provided with a new bell. The latter is dated 1657 (RCHM 1922, 43) and thus provides a likely time for these works. The sketch in Wire's Album (Fig 5.22) clearly confirms the above conclusions in relation to the general state and appearance of the church prior to 1819.

During the following years, several graves were dug in the ruined nave. A brick vault near the west end contained coffins with coffin-plates dated to the 1790s.

Sir Charles Lucas and Sir George Lisle, the two Royalist commanders shot for their parts in the siege, were buried in the Lucas Chapel and after the restoration of Charles II a grand memorial ceremony was held in which the grave was marked with an engraved marble stone. However despite the presence of this grave, the church was to remain very small for over a century. Having an extramural parish,

its parishioners suffered much during the siege when up to two hundred houses outside the walls were said to have been destroyed by fire. Moreover Colchester as a whole was exceptionally hard hit by the plague almost twenty years later when over 4,500 people — perhaps as much as half its population — died as a result of the epidemic. Thus not only did the church lose many of its parishioners, but its problems were further compounded by the demolition without replacement of the Lucas home and the removal of the opportunity of further benefactions from that source.

Phase 5 (1819 - 1907)

[Figs 5.17 & 5.19]

A plaque over the south door records that the church was enlarged and re-opened for divine service on December 12th in 1819. The debris within the nave and aisle was levelled and sealed by two aisles of white brick with a large area of flooring of white brick at the west end. To this phase belong the present roof (which covers the nave and aisle in one span) and the columns supporting it. The north porch was probably removed at this time (certainly before the publication of Monson's map of Colchester in 1848 since it is not shown there). The gallery at the west was added in 1854.

The enlargement of the church and the later increasing of its capacity with the addition of a gallery contrasts sharply with the diminutive church of Phase 3. Its change in fortune came at a time when there was a steep increase in the numbers attending the churches and chapels in Colchester, and when congregations of hundreds were common — even over a thousand was not unknown (Brown 1980, 153).

Phase 6 (1907 - 1975)

[Figs 5.17 & 5.19]

In 1907 the south chapel was added, the chancel and Lucas Chapel restored internally, and the whole east end refaced externally. The church was declared redundant in 1952.

The watching brief of 1983

[Fig 5.18]

Some recording work was done on the external elevation of the south-west corner of the nave when a doorway was cut through near the west end of the south wall in 1983 (Fig 5.18).

The south porch and the base of the tower were built mainly of thin orangey-red brick of 16th- to 17th-century date. Neither structure had been tied in to the nave wall. The lower part of the tower was of brick

and seemed to be of three phases (Fig 5.18). The brickwork of the first phase resembled the base of the porch and is therefore assumed to have been broadly contemporary with it (ie of Phase 3). The bricks in the second phase are similar to those of the first and it may be that this phase represents a partial rebuilding of the uppermost surviving part of the tower shortly after 1648 in preparation for the construction of the timber tower. The bricks in the last phase are thicker than the others (65 mm as opposed to 50 mm) and may point to a second phase of rebuilding.

The human skeletons

by *Stephanie Pinter-Bellows*

Methods and material

There are the remains of 11 skeletons from St Giles's Church. These come from four rough time groups. The largest group is from Phase 1, with 7 skeletons; the other phases have only one or two skeletons each. In most cases the bone matrix was in a fair state of preservation, though usually the skeletons were not complete. Some residual human bone was also found within the grave cuts. The bones were brushed clean and no preservative was applied.

The demographic characteristics of each skeleton were established following the criteria and procedures presented in Bass 1971, Flander 1978, Phenice 1969, and Stewart 1979. Priority for gender determination was given to innominate morphology. Cranium morphology was also used, and whenever possible, supplemented by univariate measurements of the femur and humerus head, the glenoid fossa of the scapula, and other robusticity characteristics. It is not possible to sex sub-adult or immature material.

A range of age determination techniques was used. Sub-adult age was determined through dental development (Logan and Kronfeld as presented in Downer 1975) and epiphyseal union (Krogman 1962, Brothwell 1972). Adult age was evaluated using the recommendations of the Workshop of European Anthropologists (1980) and auricular surface metamorphosis by Lovejoy *et al* (1985). A range of possible ages was first established using all indicators applicable, and then a final best estimate of age was determined by the smallest range of agreement among the indicators.

The maturation of children is considered a relatively regular process and the sub-adults have been divided into finer categories. The regularity of adult osteological maturation processes is under debate at the moment, as is the accuracy to which adult skeletal age can be estimated. The adults in this sample have been separated into three groups. Young adults (20-20.9), middle-aged adults (30-49.9), and old adults (50+).

The formulae for stature used individual bone lengths following Trotter (1952, 1958, & 1970). However, it

should be noted that the limb proportions for this population could differ from the modern Americans of north European ancestry used as a reference population, so the formulae is not necessarily appropriate. A summary of the inventory can be found in Appendix 9 on microfiche pages 1085-6.

Age, sex and stature

Phase 1 consists of 2 sub-adults and 5 adults. The sub-adults are one young child (F27), age 4 years ± 12 months and one older adolescent (F30), age 16-18 years. The adults are one female and 4 males. The female (F28) is middle-aged, with a height of 1.61 m (5 ft 4 in). One male (F29c) was a young adult; one (F77) was middle-aged, with a height of 1.77 m (5 ft 9 in); and two were adults of unknown age (F29a & F29b) with heights of 1.67 m (5 ft 8 in) and 1.74 m (5 ft 8 in) respectively.

Phase 2 contains a female adult (F25) of unknown age. Phase 3 has an adult of unknown age which is probably female (F40) with a height of 1.56 m (5 ft 2 in) and an old adult male (F62). Phase 4 includes one middle-aged female (F11), with a height of 1.54 m (5 ft 1 in).

Pathology

There is only one disease or pathology which was observed. The reason for the paucity of pathology is probably a mixture of the good health of these individuals and the incompleteness of the skeletons. The one observed pathology was in the Phase 1 middle-aged female F28. There are osteophytes on the right side of the bodies of thoracic vertebrae 2-4. Vertebral osteophytosis is a lesion resulting from additional subperiosteal bone formation on the anterolateral aspects of the superior and inferior borders of the vertebral body due to degenerative changes within the intervertebral disc. It is a very common condition; the severity and progression of this type of lesion has been related to obesity and work patterns (Manchester 1983). •

Glazed floor tiles

by Nina Crummy

Sixty-five tiles or fragments of tiles are catalogued in archive. The majority are plain glazed Flemish tiles, but at least one plain glazed tile (Tile 65) (and possibly also Tile 30) is of English manufacture, as is a fragment of a mosaic tile and nineteen relief-decorated tiles. Two Flemish tile fragments derive from Phase 1 contexts and two from Phase 2, and the relief-decorated tiles almost certainly pre-date the 16th century (p 234), so there is a strong possibility that at least parts of the church had tile floors before the tiling of the nave in Phase 3.

Plain tiles

Several of the Flemish tiles derive from the Phase 3 tile floor in the nave (F36) and one comes from the floor of the north aisle (F12), which was mainly of brick (Fig 5.23).

The tiles from the nave floor are yellow or green, the latter colour being achieved by adding copper to a lead glaze, the former by coating the tile with white slip before glazing. Most of the tiles were about 240 mm square (Fig 5.23; Tiles 34-5), though some smaller ones were also used. Tile 23, for example, is a fragment of a 111 mm square tile and has either been reused, or deliberately broken for inclusion in F36. A similar floor was laid in Building 28 at Lion Walk, probably in the 16th century, the tiles being the same size as those from St Giles's Church but the darker colour was greenish-brown, almost black, only a basic lead glaze having been used {CAR 3, 80-1}.

The complete tile from the aisle floor was brown and 125 mm square. Tiles of other sizes (146 mm, 180 mm, 195 mm, and 210 mm square) were also recovered, though none was *in situ*. They may be contemporary with the Phase 3 floor, or they may derive from a pre-Phase 3 floor. Where they are yellow or green the former source is probably most likely.

The fragment identified as positively of English manufacture (Tile 65) is brown to khaki in colour, and, though the fabric is oxidised externally, both the core and the upper surface beneath the glaze are much reduced. It derives from a Phase 4 or 5 pit, F1, and cannot be closely dated.

Mosaic

A small corner fragment from a mosaic tile derived from Phase 4 make-up/destruction debris L29. The two sides meet at a truncated obtuse angle. The tile may have been a lozenge with blunted side angles as Eames 1980, shape S40, though a more complicated shape is possible. The pattern, yellow on brown, is unidentifiable.

Relief-decorated tiles

Nineteen lead-glazed tiles decorated in relief are catalogued in the tile archive report. Five designs can be identified, four of which are known from other sites, all churches, in the town and surrounding district. The site at St Mary Magdalen Church produced 92 examples (recently excavated).

The tiles are on average 111 mm square and 19 mm thick, with at least a slight bevel on the edges. Some triangular examples were recovered at St Mary Magdalen Church, though none were identified at St Giles's. The fabric is a hard-fired sandy clay with some fine grit and the occasional flint pebble. For the products of the late 13th- and early 14th-century tile kiln at Danbury, Essex, Drury and Pratt (1975, 138) have argued that the inclusion of pebbles in the fabric

indicates that it was not puddled. Gravel, grit and pebbles were also noted in the tiles from the 14th-century Bawsey kiln, near King's Lynn, Norfolk (Eames 1955, 163).

The tiles are oxidised, with variable reduction of the core. On most a basic lead glaze was used which produced a dark to mid brown surface colour, speckled with green from iron impurities in the glaze. On one (Tile 4) copper was added to the glaze to produce a greenish-brown, or khaki, surface colour. Other examples of these tiles, from the St Mary Magdalen site, had white slip painted onto certain elements of the pattern to produce a two-colour effect, but no white slip has been noted on tiles from St Giles's.

Ward Perkins (1937, 129) has commented that relief-decorated tiles were uncomfortable underfoot and took this as a possible cause for the failure of such tiles to achieve widespread popularity in England. However, it should be borne in mind that modern feet are almost certainly more tender than medieval, and the tiles may have felt not only less harsh underfoot than might be expected, but even pleasantly textured. The tiles from St Giles's Church all show some wear, and one is so worn that the relief pattern is almost unidentifiable. Their precise location within the church is uncertain, but, assuming choice to be possible, clearly no effort was made to avoid walking on them.

The five designs (Fig 25, 1-5) are: A, a four-petalled floret, the petals pointing into the corners, and the spaces between filled with tracery; B, a six-petalled rosette; C1 and C2, a fleur-de-lys; and D, a shield, accentuated on the curved edges by a toothed line and containing a cross engrailed in relief, with a counter-relief mouchette in the spandrels.

The designs can be split into two groups: A and D; and B, C1 and C2. The motifs of the second group are solid figures raised above the background, while those of the first make use of outline and counter-relief as well as relief.

Designs B, C1 and C2 were probably moulded, ie the clay was pressed into a box the base of which was carved with the design in counter-relief, while Designs A and D were certainly stamped onto a tile blank (Keen 1972, 140-1). On one tile of Design D from St Mary Magdalen the stamp has been applied both off-centre, leaving an unstamped flange on the right, and with unequal pressure, so that the surface on the left is scarcely marked, and another in the Colchester Museums (unprovenanced, but possibly from St Botolph's Priory, see p 234), was stamped twice, the second impression being about 1 mm off the first.

Design A is similar to Eames 1980, design 2099, on a late 14th-century Nottingham-made inlaid tile from Ulverscroft Priory, Leicestershire (*ibid*, tile 2689). It is clearly linked not only to other four-petal floret designs, but also to those which show segments of interlinked circles (*ibid*, designs 184-6, and design 2085, a product of the Tyler Hill kilns, Canterbury, Kent). Full circles are produced when similar tiles of these designs are laid together. This does not really

work on Design A examples, but the ghost of the idea remains. Sixty examples of Design A were recovered on the St Mary Magdalen site, thirty were plain brown, twenty-one brown and yellow, and a few plain khaki or khaki and yellow.

A rosette of ovate petals is frequently employed as a motif on medieval tiles, both as the chief feature of a design or as a secondary element. Design B uses a six-petalled rosette, other examples of which can be seen from the Bawsey tile kiln, near King's Lynn, Norfolk (Eames 1955, pi 26, 28), and from Campsea Ash Priory, Suffolk, (Keen 1972, fig 38, 4, fig 39, 11, and fig 40, 15). A group of Design B tiles from Wormingford Church, about 6 miles (10 kms) north of Colchester, is in the collection of the Colchester Museums (8.1869). These tiles were included by Ward Perkins in his catalogue of British relief-decorated tiles, where he described them as unglazed (1937, 152). This observation is inaccurate. Though all the Wormingford tiles are considerably worn, they were clearly glazed, and on at least one example slip is still present on the petals, as it is on four out of the five Design B tiles from St Mary Magdalen.

The fleur-de-lys as a motif on medieval tiles is also common, again as either principal or subsidiary element in a design. The range of variations can be seen in Eames 1980, eg designs 2120-2139, and on tiles from Danbury, Essex, in Drury & Pratt 1975, fig 49, C26, D1-D4. A group of Design C1 tiles from Wormingford Church is in the Colchester Museums, as is another from the church of St Mary-at-the-Walls, Colchester. Both groups were catalogued by Ward Perkins (1937, 148, 152), who again inaccurately described the tiles as unglazed. In reality all are glazed, have slip dots in the field, and show traces of slip on or around the raised part of the design, as do all six Design C1 examples from St Mary Magdalen.

Further examples of both the rosette and fleur-de-lys tiles are noted by Ward Perkins in the collection of Moyse's Hall, Bury St Edmunds, Suffolk, though no provenance is given.

Designs based on armorial shields are also widely used by medieval tilers, and examples may be cited among the products of the kiln at Bawsey, near King's Lynn, Norfolk (Eames 1955, pi 24-5), the pavement from Burton Lazars leper hospital, Leicestershire (Eames 1980, designs 322-3, 331-5), the tiling at Danbury, Essex (Drury & Pratt 1975, fig 49, D6, fig 50, D17, D19), and Campsea Ash Priory, Suffolk (Keen 1972, fig 38, 5-6, fig 39, 7-10, 12).

Many of these shields are set diagonally on the tile, leaving three corners, top and sides, available for a secondary motif. Where they are set square only the two lower corners are available. The spandrels left free by the shield on the Colchester tiles are filled with a mouchette, a standard 'filling' motif also used on many of the Bawsey and Burton Lazars tiles. It is interesting to note that on the four designs from Bawsey showing an armorial shield set square it is placed within a decorated frame, round in three cases (which thus leaves four spandrels available for a

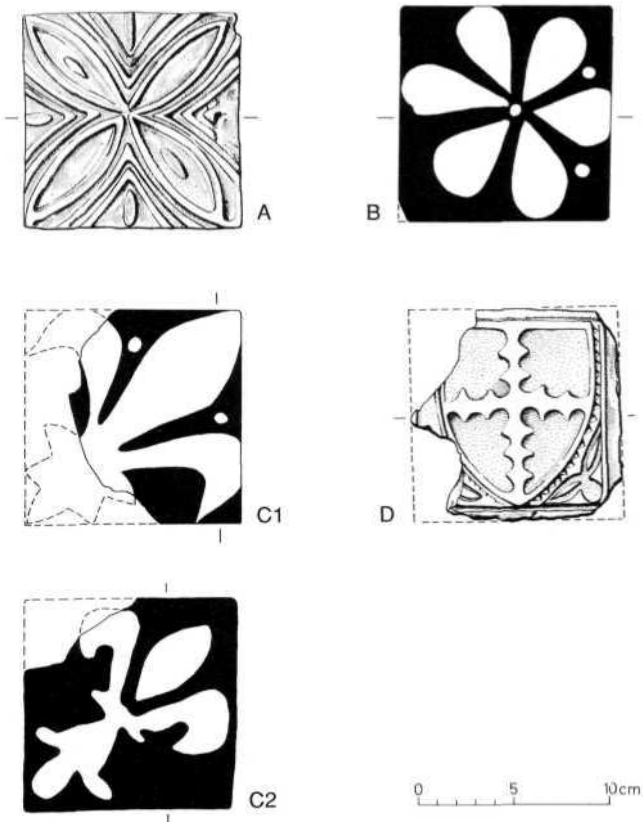


Fig 5.25 St Giles's Church 1975: glazed floor tiles. 1:4.
[Pages 231-5]

secondary motif), and shield-shaped in one (Eames 1955, pl 24, ii-iv, x). Eames identifies Bawsey designs II-IV as a series, with the decoration of the frame degenerating from a delicate scalloped pattern in design II, through triangular blobs in III, to elongated blobs in IV (*ibid*, 169). The toothed line accentuating the outline of the Colchester Design D shield clearly belongs within this design tradition, being most closely akin to III, though it is greatly reduced in importance.

A shield bearing an engrailed cross in relief, the chief feature of Design D, occurs, usually framed by a lobate quatrefoil, on a series of ?14th-century tiles from Suffolk, from Campsea Ash Priory (Keen 1972, fig 38, 6), Orford Church (Keen & Sherlock 1972, fig 47, 2-3), Dennington Church (*ibid*, 200), Sibton Abbey (*ibid*, 200; Eames 1980, catalogue no 7712), and Blythburgh Priory (Harley 1973, fig 52, 1). The device is that of the Ufford family of Suffolk, described by Foster (1902) as 'sable, a cross engrailed or'.

The St Mary Magdalen site produced seventeen tiles of Design D, fourteen with white slip, fired to yellow, on the raised cross. How far the tiler's colours can be interpreted as truly representing heraldic tinctures is uncertain. It is tempting to see the slipped areas as or (gold), and the darker field as a substitute for sable (black), which would permit this shield to be identified

as that of the Ufford family. However, there is no reason to suppose that the Uffords were connected by patronage to either St Giles's Church, St Botolph's Priory (where examples also occur), or the hospital or church of St Mary Magdalen, and the size, glaze, decorative techniques and design details used on the Suffolk tiles serve to separate them from, rather than link them to, the Colchester pieces.

Ward Perkins notes from Colchester 'two small relief tiles ... bearing the city arms ... stylistically closely akin to the Bawsey tiles'. These tiles are listed under the general heading of 'Castle Museum, Colchester', but are described as being 'in St Botolph's' (Ward Perkins 1937, 150). In view of the inaccuracies previously noted in Ward Perkins' catalogue, it seems likely that he did not personally see the tiles from Colchester, and the ambiguity of the provenance for this entry is matched by the phrase 'the city arms'.

Colchester is not a city but a borough, and its arms are sufficiently complex as to be instantly recognisable. The correct heraldic description for the modern version which closely follows the earliest known representation of the arms shown on a charter of Henry V dated 1413, is: 'Gules a cross raguly, couped proper, the arms joined in fylfot, between two ducal coronets in chief or, the bottom part of the cross entiled with a ducal coronet of the last, beneath each coronet a nail of the first, that in base piercing the cross' (Dansie c 1960-1970). The arms have changed slightly over the centuries in tincture (the cross has been vert (green), then argent (silver/white), then vert again) and small details (eg the junction of the horizontal and vertical shafts of the cross, and the nails), but there is no reason to suppose that the cross raguly has at any stage been replaced by a different type of cross, or that the coronets could be omitted.

No tiles bearing the Borough Arms have been located in the Colchester Museums, but Design D tiles were recovered from St Botolph's Priory during recent excavations, and an unprovenanced tile of Design D, found in the Colchester Museums and stored with, among others, tiles from the church of St Mary-at-the-Walls, may be one of the two armorial pieces recorded by Ward Perkins.

The relief-decorated tiles from Colchester are not products of the 14th-century Bawsey kiln, and relief decoration does not appear in the repertoire of known kilns of the late 13th or early 14th century in Essex (Drury & Pratt 1975, 149-159), nor of known kilns from further afield, eg Tyler Hill, Canterbury, Kent (Eames 1980, 210-12). The tiles also appear unmatched within the published collections of the British Museum (Eames 1980), though monochrome examples of Design D are superficially similar to tiles from Burton Lazars, Leicestershire, dated to the late 15th or early 16th century. However, the latter all have nail holes in the surface near the corners, a feature considered by Eames to possibly indicate a Netherlandish influence in their manufacture (*ibid*, 122), and one not present on the Colchester tiles. It is worth noting that Design A is also linked to

Leicestershire through a Nottingham-made inlaid tile from Ulverscroft Priory (p 232).

In the absence of any direct connections, it seems that the source of the Colchester tiles can only be resolved from their distribution pattern, and the date of their manufacture from site data.

The presence of these tiles in at least four Colchester churches, St Giles's, St Mary Magdalen, St Mary-at-the-Walls, and St Botolph's Priory, coupled with the examples from Wormingford, almost certainly indicates that they are of local manufacture, but detailed research to substantiate such a statement is not within the remit of this report. As Designs A and D suggest an east Midlands link, so the possible Design B and C tiles in Moyse's Hall, Bury St Edmunds, Suffolk, suggest a Suffolk link, which may be supported by Design D if the arms there depicted are those of the Ufford family. However, it would also be possible to argue that the arms were copied by a Colchester tiler from the Suffolk series listed above, and that the Moyse's Hall tiles are as likely to derive from north-east Essex as the Colchester tiles are from Suffolk.

The Design D tile in the Colchester Museums appears to be a waster. The surface is reduced, flecked with calcined grit, and shows no sign of any glaze or slip, though the tile is not distorted. But for the lack of distortion, this tile alone could have been taken as evidence for local manufacture, but as it is there may be a possibility that it was sold for use.

The date of the tiles cannot be established with any certainty. Paul Drury (notes in archive) describes them as 14th-century, a date often assigned to relief-decorated tiles if evidence to the contrary is lacking (eg Keen & Sherlock 1972, 200). The date seems inappropriate in this case.

The earliest stratified piece (Tile 5) from St Giles's occurs in a post-pit (F61) assigned to Phase 3, dated from the early 16th century to 1648. The majority derive from two Phase 4 (1648-1819) contexts, make-up/destruction debris L29, and shallow pit F35, and some from those contexts show signs of reuse. They are clearly earlier than 1648, but whether they date to Phase 3, Phase 2, or Phase 1 is uncertain. However, their absence from the Phase 3 tile floor F36 suggests that the only fragment from that period is residual, and a Phase 2 or earlier date is most likely.

Only two positive examples were found at St Botolph's Priory, one in post-medieval destruction debris, the other in post-medieval to modern topsoil. Of two possible examples, one derived from a floor in the south transept, suggesting a pre-Dissolution date is most likely.

The inclusion in Grave 173 at St Mary Magdalen of a complete tile of Design A as a deliberate deposit, placed face down between the femurs and with the diagonal aligned on the body, suggests that this individual was directly associated with the Colchester relief-decorated tiles. The precise association is unclear, but possibilities include the tile-maker, the

donor of a pavement made up of the tiles, or the paviour (or any combination of these).

If direct association between Grave 173 and the tiles can be accepted, then the date of the grave is likely to provide the best evidence for the date of the tiles. It cannot, unfortunately, be closely dated, and is allocated to Periods 2/3 (early 1200s to 1852). No tiles have been recovered from contexts dated earlier than Periods 2/3 at St Mary Magdalen, though five out of the fifteen fragments from contexts so dated have clearly been reused, and all are at least slightly worn, with some, including reused examples, noted as very worn.

St Mary Magdalen Period 3 starts in 1610 with the re-establishment of the hospital as an almshouse by James I, which gives a *terminus ante quem* for the tiles. A *terminus post quem* is provided by the beginning of Period 2, in the early 1200s, by features containing reused fragments, and by the grave deposit.

There are several documentary references to tilers and tilemakers in medieval and early post-medieval Colchester, and named individuals can be summarised thus: tilers — John Whiter, 1354, Court Rolls; John Frenshman (perhaps a first or second generation immigrant), 1376, Court Rolls; J... Stutte, 1443-4, Oathbook; J... Strut (?same man), 1448-9, Oath-book; J... Capon, 1490-1, Oathbook; R... Lysse, 1528-9, Oathbook; tilemakers — William Thursteyn, 1533-4, Oathbook; J.. Norman, 1553-4, Oathbook.

The Red Paper Book of Colchester records for 1424/5 an ordinance fixing the size of tiles to a standard to be kept in the moot hall. Unfortunately, the measurements are not noted. The ordinance was considered necessary because the town's tilemakers were making tiles from moulds of different sizes (Britnell 1986, 241). In the 15th century tile works were built at Wivenhoe to serve the manor house, home of the earls of Oxford (*ibid*, 253).

It is impossible to attribute these relief-decorated tiles to the Wivenhoe tile works, or to any of the named tilers or tilemakers. A date within a period broadly defined as late 14th to 15th century is probably most appropriate for them, though an early 16th-century date cannot be discounted. A date later than about 1525 is unlikely as St Botolph's Priory was dissolved in 1535 and the hospital of St Mary Magdalen was confiscated under Edward VI's Act of 1547 suppressing guilds and chantries (Martin 1959, 45-7). •

Small finds

by Nina Crummy

No small finds earlier than Phase 3 are catalogued in CAR 5. The majority derive from Phase 4 contexts, a few from later phases. A plain iron coffin handle (*ibid*, 3281) was recovered from a Phase 3 grave F29 (Fig 5.23), and a similar handle came from Phase 4 grave F29. Five handles decorated with an ornate foliate

design were recovered from F24A, a coffin in a Phase 4 burial vault (*ibid*, 3274-8). Coffins in the vault were fitted with plates dated to the 1790s (p 239).

Evidence of action during the siege is provided by a musket ball from Phase 4 make-up/destruction debris L29 (*ibid*, 3268).

The most remarkable small find from St Giles is a group of 83 marbles, or possibly solitaire pieces, from L2, floorboard dust/construction debris of Phases 5/6 (*ibid*, 2022-2104). Eighty-one of the marbles are of fired clay glazed in a variety of colours, black, blue, light grey, green, red, very dark pink/red, pink, and several shades of brown. The other two marbles are of wood, and a hazel-nut found with the group may be a replacement for a lost piece.

Also worth noting is a pipeclay figurine of a dog, possibly a spaniel (*ibid*, fig 53, 2114), from Phase 4 topsoil, L37. A fragment of another from the same mould was found in Period 2 topsoil on a site at 22 Crouch Street (CAR 6, 785). They are probably of 17th-century date. •

Architectural stone

by Andrew Harris and Nina Crummy

One fragment, an engaged capital of clunch, can be attributed to the beginning of Phase 1, though it comes from a Phase 4 (or 5) shallow pit (F1) and has clearly been radically adapted for reuse. The diagnostic features that remain are roll-moulded necking and part of a fillet, sufficient to indicate that the piece is part of a late 12th-century waterleaf capital, similar to those from the nearby Stanwell Street site (CAR 6, 373-4, 1077-8). There is a trace of red paint next to the fillet. As this piece is clunch, it is most likely to have been an internal, not external, feature. The date of the establishment of St Giles's Church can be set between 1133 and 1165-71 (p 223), and this fragment suggests that the end of that period is the most likely.

At some time, probably in the 14th century, about three-quarters of the capital was cut away. The cut face shows quite fine chisel tooling and a cross-shaped mason's mark. Set at right angles to the cut face is the beginning of a roll moulding. In reuse the stone was set obliquely to the original face of the capital.

Five fragments can be dated to the 14th century, and belong either to the end of Period 1 or the beginning of Period 2. The earliest, found in L2, floorboard dust/construction debris of Phases 5/6, is a piece of a window mullion of Ancaster-type limestone, with two bevelled faces and two glazing slots. One of these is filled with late mortar, indicating that the fragment was reused. There is a cross-shaped mason's mark on one face. The end faces show claw tooling, suggesting a date in the 13th or 14th century for the piece. Claw tooling was also present on a fragment of ashlar facing of white fine-grained limestone (not

oolitic), reused in the Phase 3 aisle floor, F12. Of early to mid 14th-century date is a fragment of a clunch roll mould with ogee terminal, from a door, window or arcade. This was recovered from Phase 3 demolition debris, L57. The other two 14th-century pieces are both of Ancaster-type oolitic limestone with the marks of chisel tooling. One, unstratified, shows no diagnostic features; the other is a fragment of a double ogee moulding found in Phase 4 dump/destruction debris, L21.

Six fragments, all from Phase 4 contexts, almost certainly derived from tombs or wall monuments. Two are of clunch, two of alabaster (probably of 17th- or 18th-century date), one of black Purbeck marble, and one, a small piece of a beaded mould painted red on white, of very fine-grained limestone with a slight ginger hue. This is probably from the quarries at Ancaster, Lincolnshire.

The remaining pieces are a plain uncarved voussoir, probably of Barnack stone, with quite deep chisel tooling on the upper face, possibly for keying, a very worn fragment of clunch with traces of two quirks, possibly from a window or door jamb, and a squared block of Ancaster-type limestone, worked on all six faces, with a shallow machine-finished groove on one face. The first two cannot be assigned a date, the third must be 18th century or later. •

Clay tobacco pipes

by Nina Crummy

Fragments of fifteen clay tobacco pipes from Phase 4 are catalogued in CAR 5. The earliest, from dump L3, is a Colchester Type 4 bowl dated 1640-60 (*ibid*, 2239). The same layer also produced two Type 6 bowls (1660-80; *ibid* 2607-8) and a stem fragment marked with six bands of rouletting (*ibid*, fig 64, 2979). From the subsidence F37 (Fig 5.24) came a Type 9 bowl dated 1700-40 (*ibid*, 2855), and a Type 12 dated 1780-1820 (*ibid*, 2899). The latter was marked with the initials EL in relief on the sides of the foot. This pipemaker is Elizabeth Lowthrop, who worked at Magdalen Street and Hythe Hill. Children from her marriage to Francis Lowthrop were baptised at St Giles's Church in 1819 (*ibid*, 64). •

Acknowledgements

We are grateful to the Colchester Borough Council for permission to carry out the excavations in the former grounds of St John's Abbey. Work took place in and around the former St Giles's church with the kind permission and co-operation of the owners of the St Giles Masonic Centre. Site supervisors were Tony Gouldwell and G Summers whilst most of the site planning was undertaken by Ewan Campbell and Tony Gouldwell.

6. EXCAVATIONS AT MALDON ROAD, 1971

by Philip Crummy

Introduction

[Figs 6.1-2]

The excavation of the Maldon Road site took place in the spring of 1971 and lasted six weeks. The site was in a temporary car park at the north end of Maldon Road (Fig 6.1). It lay on the line of the southern section of the proposed Inner Relief Road and was the only part of the route where the ground level was to be substantially reduced (by up to a metre or so). Some fragmentary inhumations had been exposed early in 1970 when nos 1-9 Maldon Road were demolished and the ground surface lowered to make the car park (observed by Miss B R K Dunnett). The area was of additional interest because it lies in the area of the site of the Crouched Friars (Chapter 7).

The principal remains uncovered during the excavation can be summarised as follows (Fig 6.2): 18 Roman inhumations of 4th-century and possibly late 3rd-century date, part of a Flavian-Trajanic building, and a series of pits belonging mainly to the 18th or 19th century. Nothing was found which could be positively related to the Crouched Friary. Compared with the Period 2 Butt Road cemetery with which it was contemporary, the Maldon Road cemetery was much less disciplined in its layout and thus presumably had been less well managed.

The inhumations

[Figs 6.2-6.5; Table 6.1]

Each inhumation is described and illustrated in Appendix 10 (microfiche pp 1087-1105) and a selection is illustrated in plan (Fig 6.3) and photographically (Fig 6.4). The human skeletal remains are discussed and listed in Appendices 6 (pp 289-90) and 7 (microfiche pp 1080-2) respectively. The vessels which accompanied some of the burials are illustrated in Figure 6.7 and described on page 243.

The acidity of the sand which underlies the site has meant that the bones and the iron objects were poorly preserved. All the inhumations appear to have been extended and laid on their backs with the hands to either side or crossed on the abdomen. Most of the bodies were placed with the head westwards or north-westwards (Fig 6.5). The presence of wooden coffins (Table 6.1) was indicated in seven graves by coffin nails (F8, F12, F15, F45, F53, & F68) and faint traces of decayed wood in the form of a brown stain (F12, F53, & F78). In general, these indications were so tenuous that it is possible that all the graves had contained coffins. Four inhumations were accompanied by vessels, two of glass (in F8 & F12) and four of pottery (in F53 & F68). The vessels in F12 and F68 had been placed inside the coffins whereas those in

Grave	Age/sex	Wood stain	Coffin nails	Associated objects
F4	adult			
F5	adult	-	-	
F7	(adult or adolescent)	-	-	footwear (1848a) on feet
F8	(adult or adolescent)	-	X	glass flask (Fig 6.7)
F12	20-30/F	X	X	glass <i>unguentaria</i> (Fig 6.7)
F14	(adult or adolescent)	-	-	fragments of pottery beaker (Fig 6.7) in backfill of F15
F15	15-18 yrs	-	X	footwear (1848) on feet
F43	(adult or adolescent)	-	-	
F44	16-32 mths	-	-	
F45	(adult or adolescent)	-	X	
F53	child	X	X	two pottery bowls and a pottery cup/mug (Fig 6.7)
F59	35-45 yrs/M	-	-	
F62	(adult or adolescent)	-	-	
F63	38-48 yrs/M	-	-	
F64	(adult or adolescent)	-	-	
F66	30-40/M	-	-	
F68	36-46/M	-	X	pottery jar (Fig 6.7) and footwear (1848b) on feet
F79	adolescent	X	-	

Ages in brackets have been estimated according to the size of grave or coffin

Table 6.1 Maldon Road 1971: Roman burials and their associated finds. Catalogue numbers in CAR2 shown in brackets.

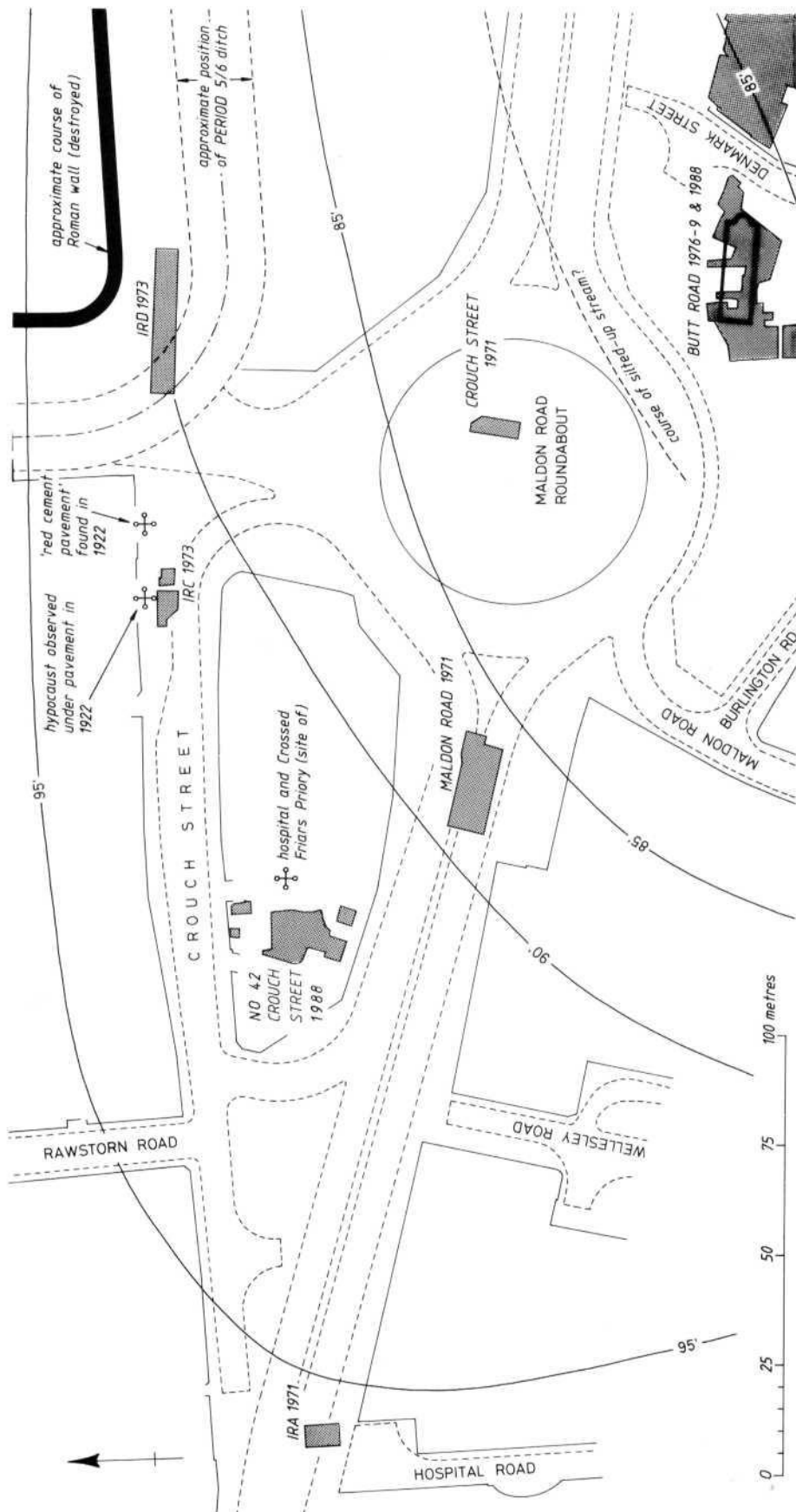


Fig 6.1 Sites at the western end of the southern section of the inner relief road. 1:1500. [Page 236]

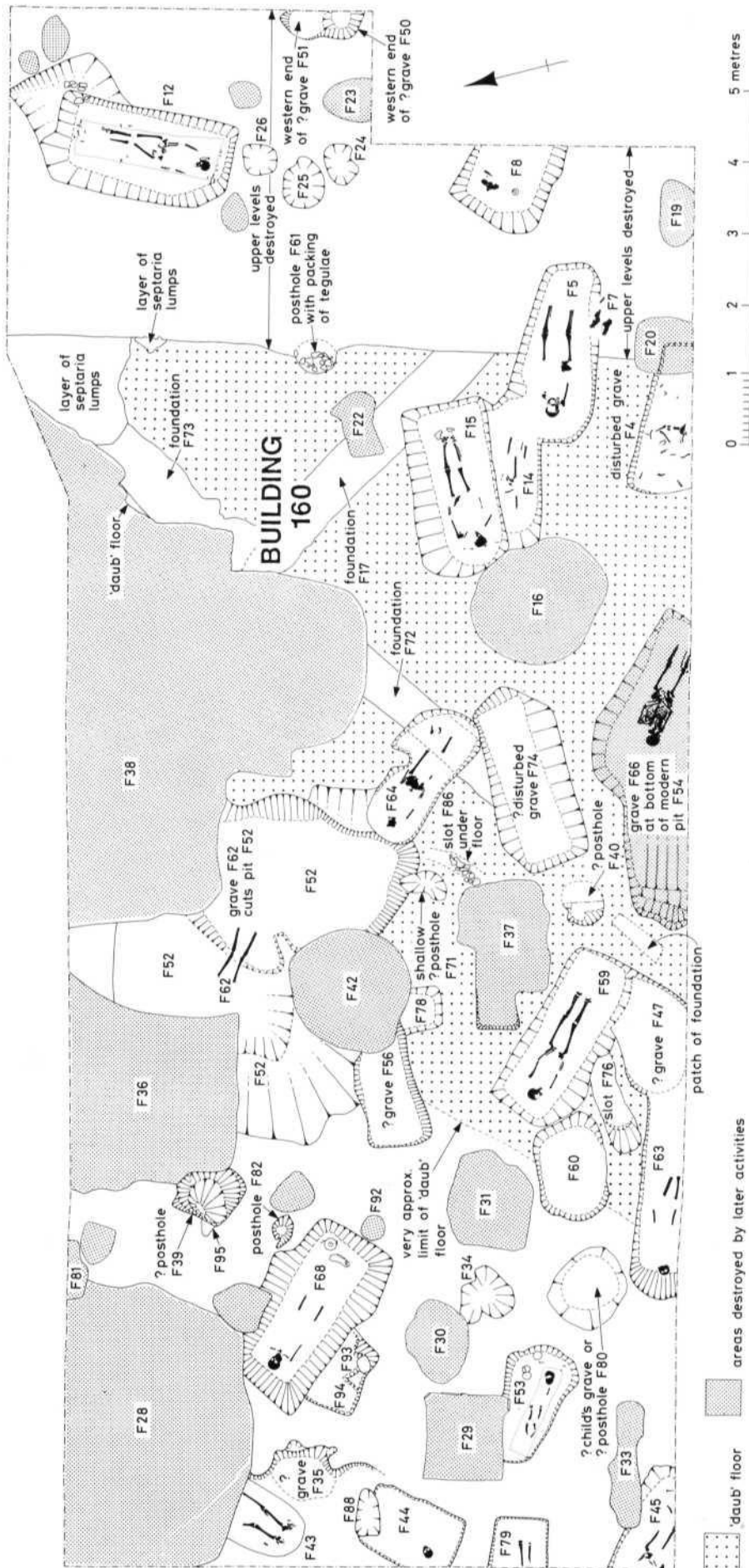


Fig 6.2 Maldon Road 1971: site plan. 1:89. [Pages 236-44]

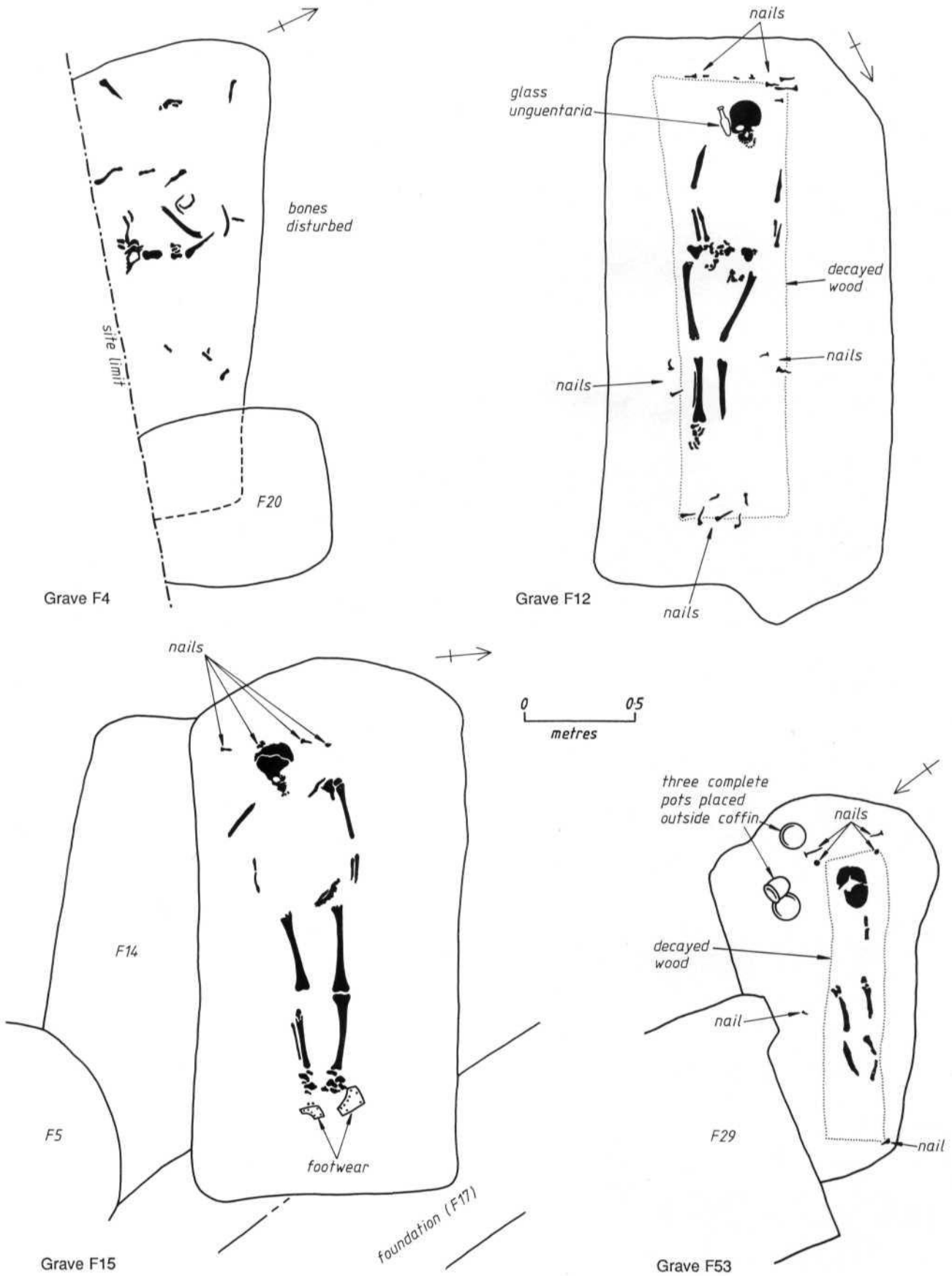


Fig 6.3 Maldon Road 1971; a selection of the Roman graves. 1:25. [Pages 236-42]

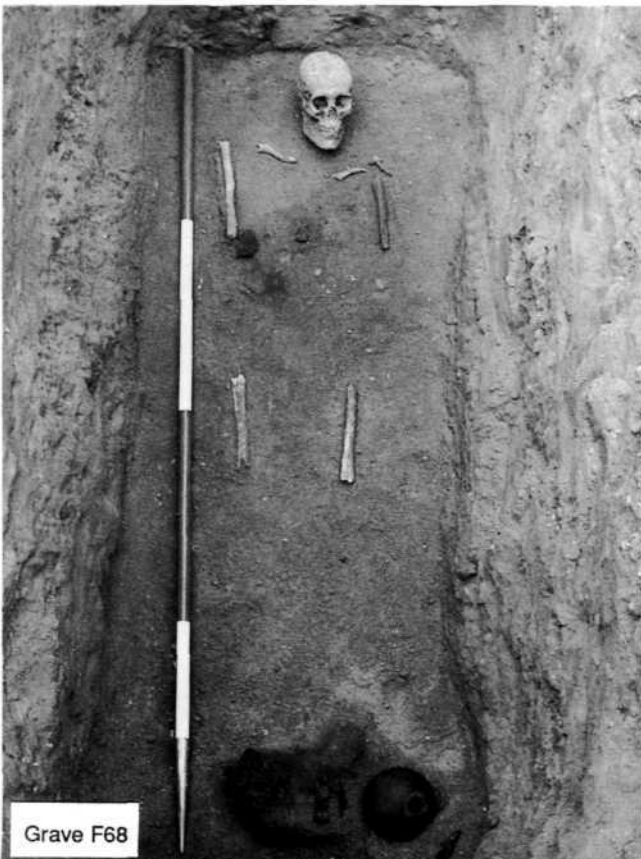
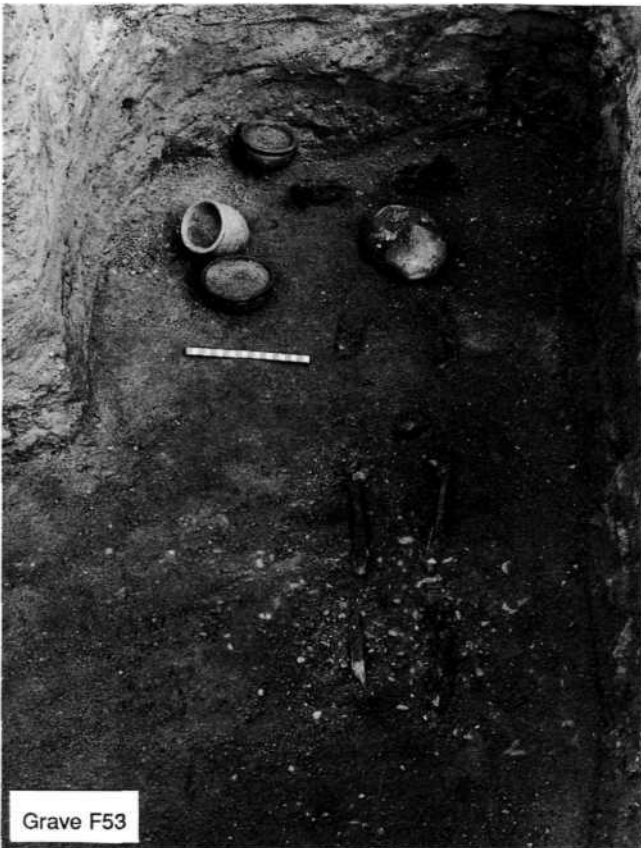


Fig 6.4 Maldon Road 1971: Roman graves F53 (above) and F68 (below). [Pages 236-40]

F53 and perhaps the glass flask in F8 were outside. A fifth inhumation (F14) was probably accompanied by a pottery vessel since fragments (Fig 6.7) were in the backfill of grave F15 which cut completely through one side of it. Iron hobnails showed that three corpses wore footwear (F7, F15, & F68; CAR 2: 1848a, 1848, & 1848b resp); one set (F7) were corroded onto the foot bones. Two of the inhumations appeared to have been disturbed in antiquity. The bones in F4 lay on the bottom of the grave as a jumbled scatter whereas in F74 (assuming it had been a grave) the bones were sprinkled throughout its fill.

A pair of armllets (CAR 2: 1603 & 1681) from a modern context (find no 76) may have been a disturbed grave deposit. An unstratified stud with a paste-like inlay possibly depicting Cupid and Psyche (CAR 2, fig 122, 3227) may be similarly explained.

On the basis of their alignment (Fig 6.5), the inhumations can be divided into three groups. Group A (F12, F43, & F44) consists of burials aligned approximately north-east to south-west. Group B (F7, F8, F45, F53, F59, F62, F64, F66, & F68) contains inhumations aligned approximately north-west to south-east. Inhumations in Group C (F5, F14, F15, F63, F79, & presumably F4) were aligned within 20 degrees of east-west.

The only stratigraphic relationships between graves were provided by the group F5, F7, F14, and F15. Graves F5 and F15 cut through F14 to penetrate its base and the grave F7 cut into the top of F5.

The principal dating evidence is as follows: a coin of 287-293 in grave F5 (Group B), 3rd- to 4th-century pottery in graves F8 (Group B) and F12 (Group A),

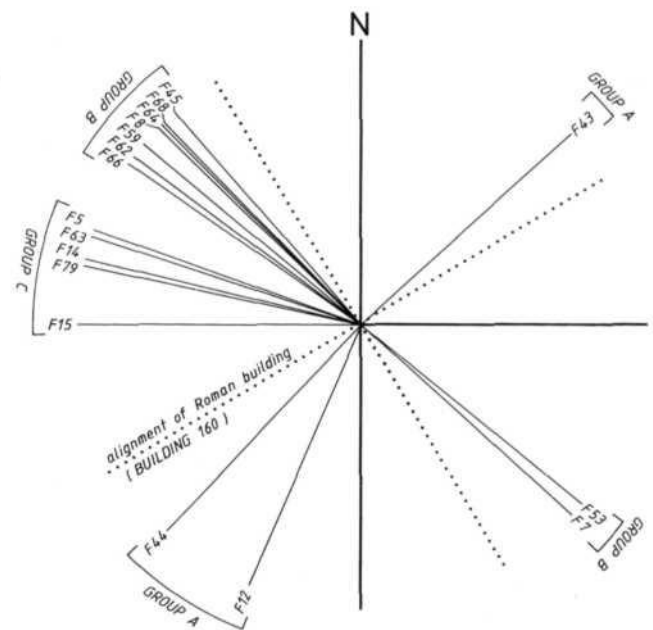


Fig 6.5 Maldon Road 1971: the alignments of the graves and Building 160. The position of the number shows the head end of the grave. [Pages 236-42]

and a Hadham-ware bowl of c325-400+ in grave F53 (Group B). The latest material in the remaining graves is mid 2nd to 3rd century although, because of the small quantities involved, it is likely that this is all residual and the graves are later. Thus the burials are likely to be predominantly 4th century although the starting date of the cemetery is impossible to determine. The three groups of burials may represent three phases in the use of the cemetery. The alignment of the burials in Group B was probably influenced by the alignment of the main street which turned to the south-east from the Balcerne Gate (Fig 6.6). Although about 190 metres from this street, the Group B burials were approximately at right angles to it. Similarly the alignment of the Group A burials may also have been affected by the street since they were roughly parallel to it. The burials of Group C appear to have been deliberately orientated (ie laid with heads westward). Their alignment and the dating evidence (limited as it is) support a date in the 4th century for the burials but whether they can be regarded as Christian is a moot point.

It may be that there are too few graves to justify grouping the graves into three discrete groups. Perhaps Groups B and C should be regarded as being one group, with F7 and F53 being anomalous in that the bodies were placed the opposite way round to all the others. However, whatever the interpretation, it is clear that too many of the graves had the head to the west to be simply a result of chance; clearly there was some degree of deliberate orientation even if the results were not accurate.

Possible graves

[Fig 6.2]

Six pits (F35, F47, F56, F80, F93, & F44) may, because of their shapes and depths, have been graves in which all the bone and ironwork had completely decayed. Also the edges of two deep pits (F50 & F51) were clipped by the eastern section of the site; these may also have been graves. The pit F74 was also probably a grave (see above).

Building 160 (Flavian - early 2nd century)

[Figs 6.2 & 6.5-6.6]

The remains of the Roman building (Building 160) were very fragmentary and indicated little about its plan, extent or function (Fig 6.2). Where inhumations and the remains of the building coincided, the burials always proved to be the later. The floors of the building were of sandy clay and the walls were built on shallow, rubble foundations containing small pieces of mortar, tile, and septaria. The foundations were in three sections (F17, F72, & F73) and the floor

was of two phases (a primary one and its replacement). The foundation F72 was sealed by the Phase 2 floor and thus had been demolished when the floors were laid. The foundation F17 was similar to F72 and F73 except that in places it was capped by a layer of septaria lumps. Inexplicably, the foundation F73 petered out at its north end into a spread of small fragments of septaria. The latest pottery in the foundations and floors was a small quantity of probable 2nd century or later date. The building sealed a shallow tile-filled slot (F68) containing some Flavian pottery. A large pit (F52) cut the floor and was filled with sandy clay and wall plaster, which probably derived from the demolition of the walls of the building. About 0.7 sq m of the plaster was recovered; it was predominantly pink with areas of white, red, and mustard, and white and green stripes and lines. (Details in site archive.) The latest pottery in the pit was of Flavian-Trajanic date. Thus probably the building was built during the Flavian period and demolished in the early 2nd century.

Although nearly 200 m from the main street to the north, the building was aligned at right angles to it (Fig 6.6). This indicates major property divisions along the south side of the street. However, the layout was not entirely regular because an anomalous alignment to the north-east of Building 160 is indicated by a minor street found during the Balcerne Lane excavation and Building 162, which was partly excavated in 1973 (Fig 6.6; CAR 6, 340, fig 13.23).

Other Roman features

[Fig 6.2]

The remaining features of Roman or probable Roman origin consist of pits and postholes. The only pit of significance is F52 which, because of its size and depth (about 1.5 m), was left partly unexcavated. It was irregular in plan and had steep, almost vertical ends. Its principal significance lies in its relationship to the Roman building and the dating evidence it provides for its demolition (see above). In addition to the wall plaster, the pit also contained a pair of copper-alloy spoon-probes (1931-2, CAR 2, fig 65), a copper-alloy key (4154, CAR 2, fig 140), a moulded strip of copper-alloy (4657, CAR 2, fig 204), and two other pieces of copper-alloy (4120, CAR 2, 339; 4599, CAR 2, 437).

The clearest examples of postholes were F13, F61, and F82, all of which contained post-packing. Two of the postholes (F13 & F61) had fragments of *tegulae* set upright. Elsewhere on the site, there were seven features which may also have been postholes, although none had packing (F39, F40, F71, F80, F83, F90, & F91). Since F13 appeared to cut grave F12, it seems likely that these features are late Roman or post-Roman and are therefore not associated with the Roman building.

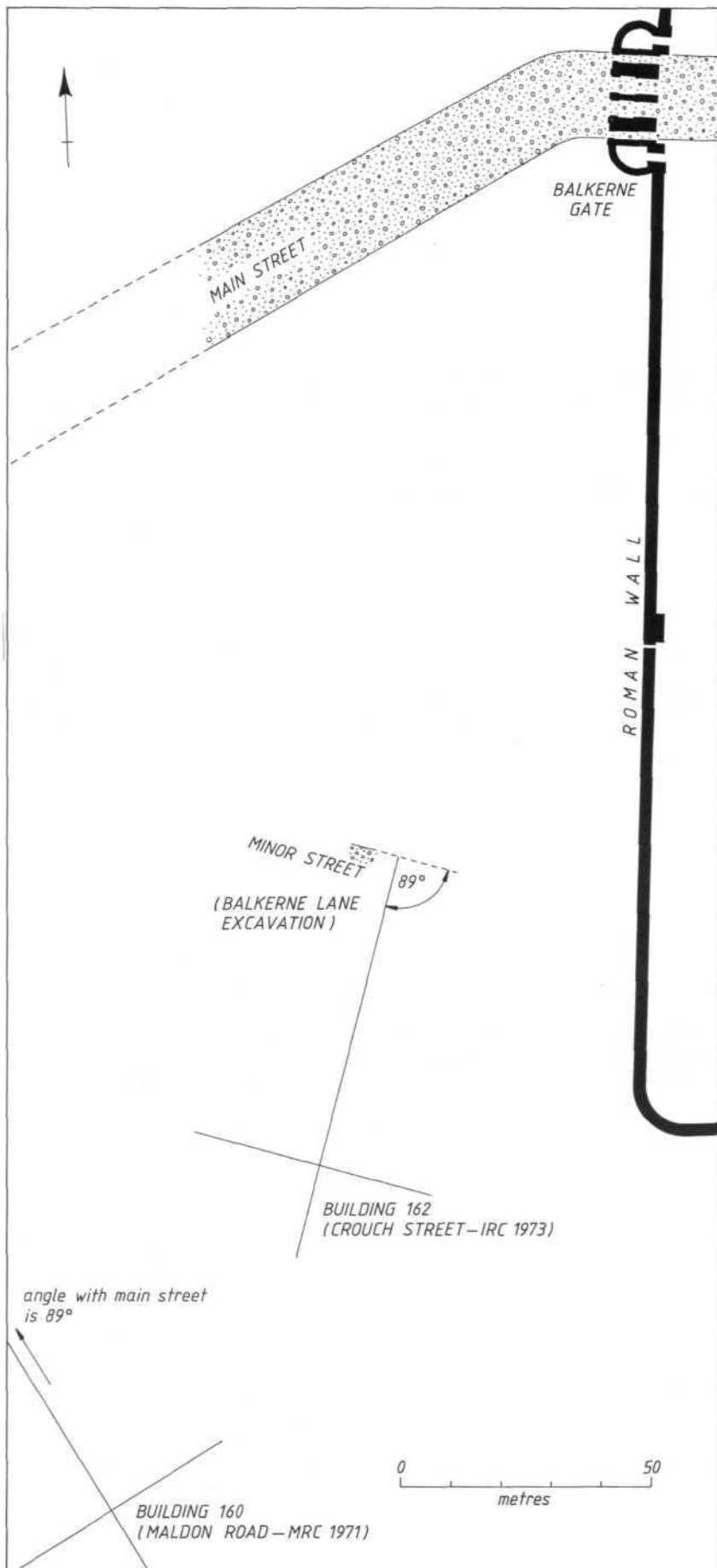


Fig 6.6 Maldon Road 1971: the alignment of Building 160 in relation to the alignments of Building 162 and the street through the Balcerne Gate. [Page 241]

Post-Roman features

[Fig 6.2]

The most substantial post-Roman remains consisted of a series of deep, vertical pits F28, F36, and F38. They appear to have been sand pits of 18th- or 19th-century date which stopped along a southern boundary no longer extant but indicated by the shape and alignment of the southern ends of these pits. The only other post-Roman feature of interest was a square pit (F29). The upper 0.2 m was lined with slates and slaked lime and then filled with the same material to form a solid layer 0.2 m thick of lime and horizontal slate. Below this capping the pit was filled with light brown sandy soil to a depth of at least a metre. No pottery was found in it and its purpose is obscure.

The pottery vessels

by R P Symonds and C Going

From the backfills of Graves F14 and F15

Fig 6.7; Form type: P 807; MRC 33 & 34. Colchester colour-coated pentice-moulded beaker (CAM 395), with a post-firing graffito, a crudely-scratched rectangle, on the neck. To judge from the attenuated proportions of this specimen a date in the later 3rd to 4th centuries is probable. Rim diameter 63 mm.

Grave F53

Fig 6.7a; Form type: P 810; MRC 89. Hadham-ware tankard. Hull described this form (which he classed as the CAM 124) as 'not rare'. One came (fortuitously) from Kiln 24. Another, from Grave 394 in Hull's series, was accompanied by eight other vessels while a third, from a grave in the St John's Abbey grounds, is published in this work (Fig 5.7, vessel a from grave north of excavated area). For a Hadham parallel, probably also from a grave, see Great Dunmow (Going & Ford 1988, fig 55.15).

Fig 6.7b; Form type: P 811; MRC 89.

Hadham ware bowl-jar, decorated with a row of pushed-out bosses each within an annular groove. Originally published by Roberts as his 'Romano-Saxon' type A20.1 (Roberts 1982, 42 & pi X.10). Probably mid to later 4th century. For a recent comment on the dating of these wares, see Going in Wickenden 1988, 71-3.

Fig 6.7c; Form type: P 812; MRC 89.

Plain-rimmed dish (CAM 40), in a local reduced ware. Burnished overall. Rim diameter 121 mm; height 40 mm. Probably 4th century.

Grave F68

Fig 6.7; Form type: P 809; MRC 113.

Narrow-necked jar, in coarse reduced ware. The form is a member of the portmanteau class the CAM 281. Probably later 3rd or 4th centuries AD.

Dates

The grave goods and vessels recovered from the fills of these interments are datable to the later 3rd or 4th centuries AD. The Colchester colour-coated ware beaker illustrated in Fig 6.7, found in Graves F14 and F15, provides each with a *terminus post quem* of the later 3rd or, more probably, of the early 4th century. The three pottery vessels from Grave F53 (Fig 6.7) are all likely to be 4th-century products, and the grave

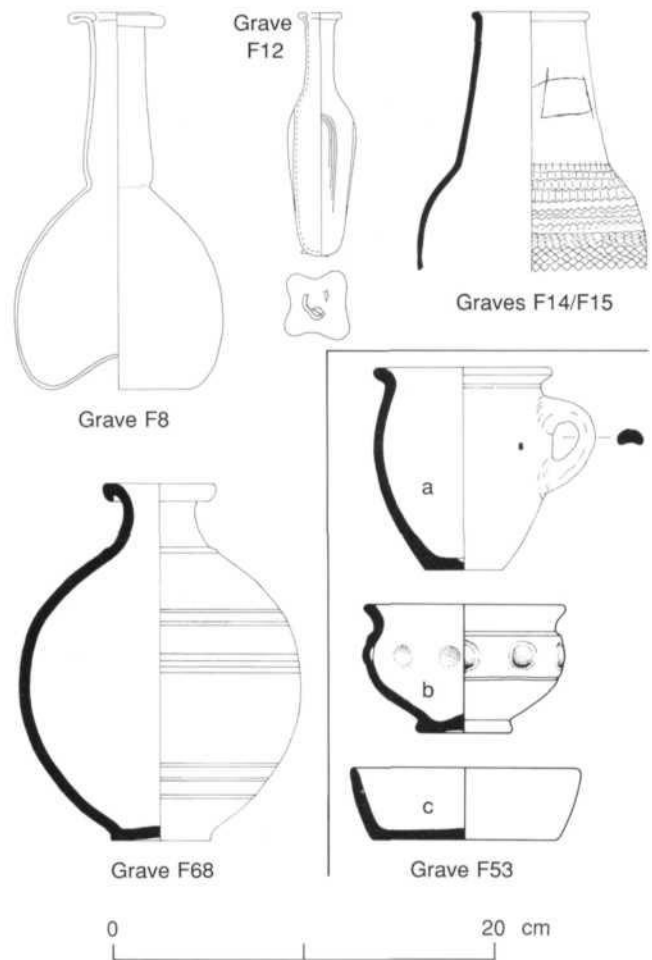


Fig 6.7 Maldon Road 1971: pottery and glass vessels buried in the graves. 1:4.

post mid-4th century AD. The vessel from Grave 68 (Fig 6.7) may be 3rd century in date or later.

The glass vessels

by Hilary Cool and Jennifer Price

Grave F8

Fig 6.7; CAR 8, no 1176; MRC 10, L15.

Thirty-one fragments, lacking only small parts of rim, neck and body. Green-tinged colourless. Simple ovoid flasks were in use throughout the Roman period and it is not possible to date examples closely. Those with folded and flattened rims and a kicked base like this example occur from the mid 2nd century onwards. The greenish colourless glass suggests a late 3rd- or 4th-century date. A colourless flask similar to this example was found in a mid to late 2nd-century inhumation at Infirmary Fields, Chester (Newstead 1914, 126, pi 31), and a greenish one came from a late Roman burial at Cirencester (McWhirr *et al* 1982, 132, fig 81.356).

Grave F12

Fig 6.7; CAR 6 no 1252; MRC 52.

Complete. Pale greenish colourless.

Indented unguent bottles are primarily late 2nd- and 3rd-century vessels that may have continued in use into the 4th century. They are not uncommon, but are not found in large numbers on any one site. This is the third example to be found at Colchester accompanying a burial, the others were found in a later 2nd-century grave (May 1930, 281, no 410, pl 87.100) and in a lead coffin (Brailsford 1958, 44, no 15, pi 12). A fragment from one was found at Culver Street and another was possibly found at Butt Road (CAR 8 nos 1251 & 1253). They have been recovered from 3rd-century burials at Ospringe (Whiting *et al.* 1931, 31, no 321, pi 31) and Brougham, Cumbria (Cool 1990), and others were found with burials at York (Harden 1962, 140, fig 89.HG9).

The coins *identified by Richard Reece*

Backfill of grave F5	MRC 11, SF8. Carausius, 287-293, <i>RIC</i> 98
Pit F52	MRC 121, SF84, c early 2nd-century, Claudius I, 43-64, copy of ffIC66
Topsoil	MRC ?73, SF35, ?modern, Faustina I, 141-160, WC(AP) 1161
Pit F23	SF36, modern, Antoninus Pius, 140-145, <i>RIC</i> 728

7. EXCAVATIONS AT NO 42 CROUCH STREET, COLCHESTER, 1988

by D Shimmin

Summary

Rescue excavation of this extra-mural site revealed several Roman burials, and also a tightly-packed medieval cemetery close to the street frontage. Foundations were uncovered further south from a large east-west building, which probably formed part of the hitherto elusive house of Crouched Friars.

Introduction

[Figs 7.1-3]

A short rescue excavation took place in August 1988 at No 42 Crouch Street, Colchester (TL 9912 2494; Fig 7.1), in advance of redevelopment for an office block. Previous discoveries in and around the site, which lies 150 m south-west of the Roman walled

town, can be summarised as follows:

1) A series of burials was discovered c 1895 during the construction of a greenhouse at No 38 Crouch Street. They were described thus: 'The skeletons were adult males and each man had been buried with a rude leaden cross on his chest' (Sier 1924, 200n). The position of the greenhouse (Fig 7.1) can be identified on maps but nothing else is known of the discovery.

2) Various foundations and burials were noted by E J Rudsdale during the construction of Scott's garage on the present site (ie No 42 Crouch Street) in 1928 (Fig 7.2). A description of the discovery was published in *Colchester Museum Report 1929* (pp 50-2); information from an unpublished plan of the remains in the Colchester Museums has been included in Figure 7.3. Rudsdale's plan corresponds well with the discoveries of 1988 except that we could find little justification for the exceptional width (8 ft: 2.4 m) of the foundations found by Rudsdale along the eastern side of the site.

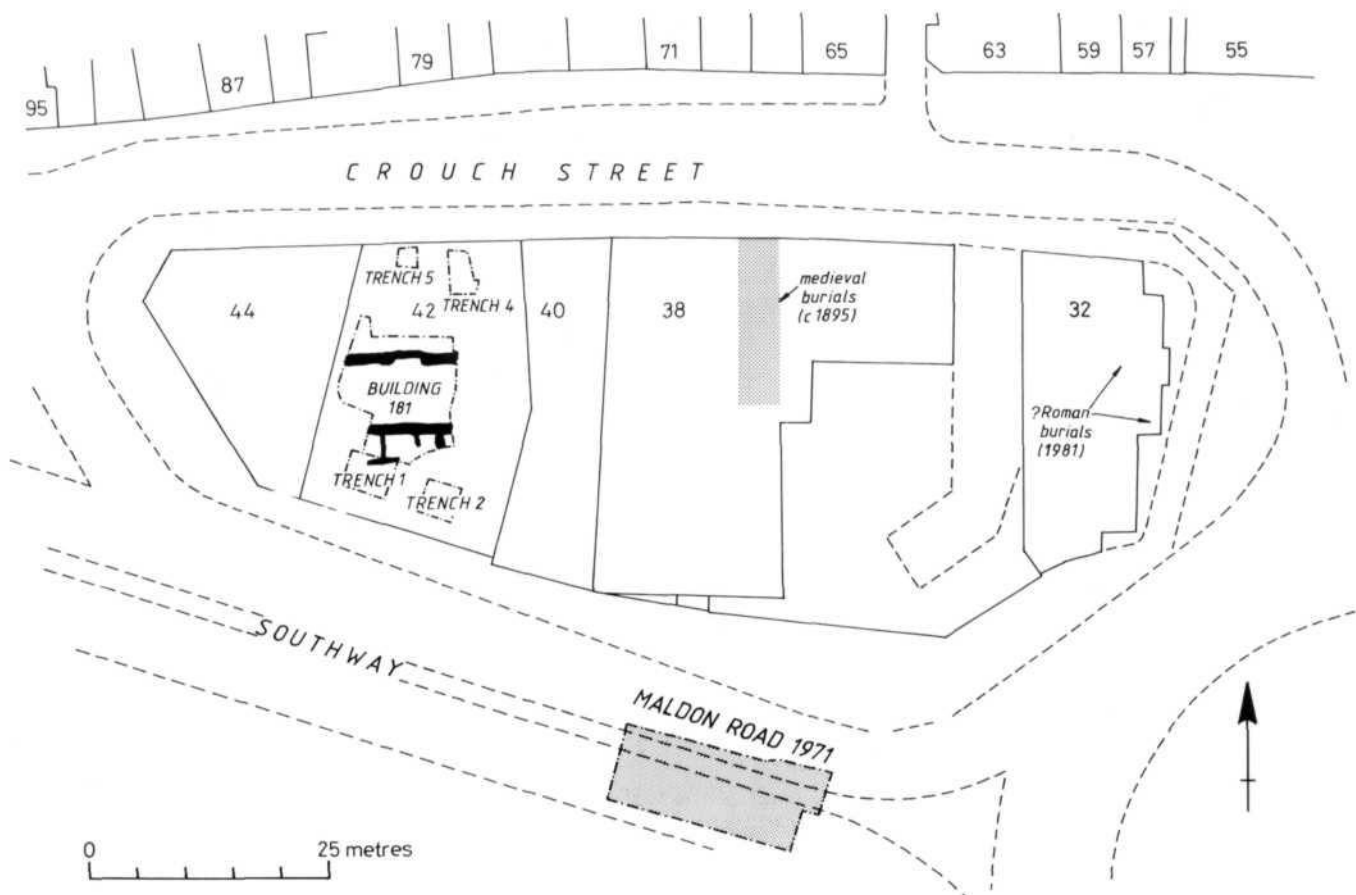


Fig 7.1 Archaeological discoveries on the south side of Crouch Street. [Pages 245-7]

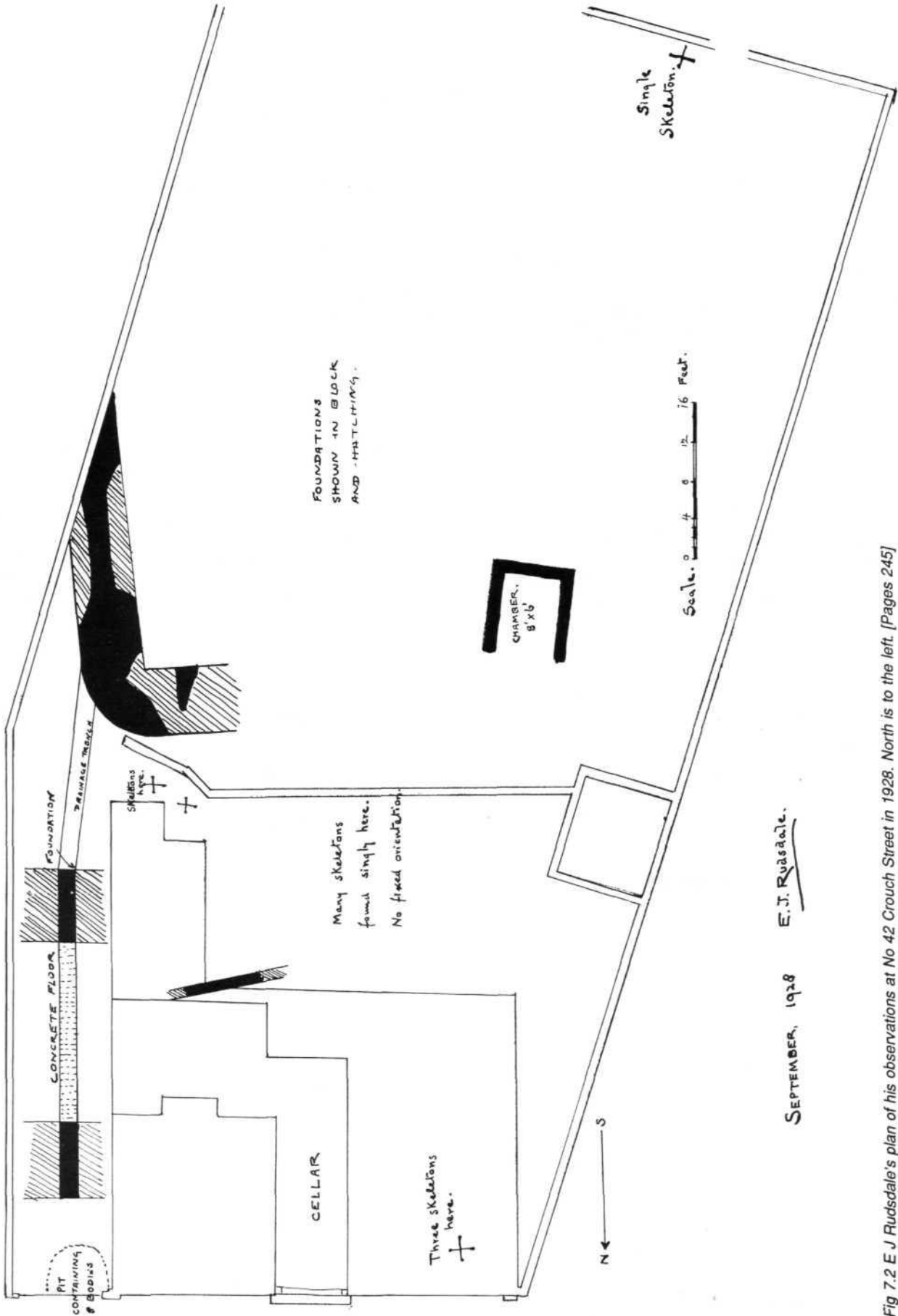


Fig 7.2 E J Rudsdale's plan of his observations at No 42 Crouch Street in 1928. North is to the left. [Pages 245]

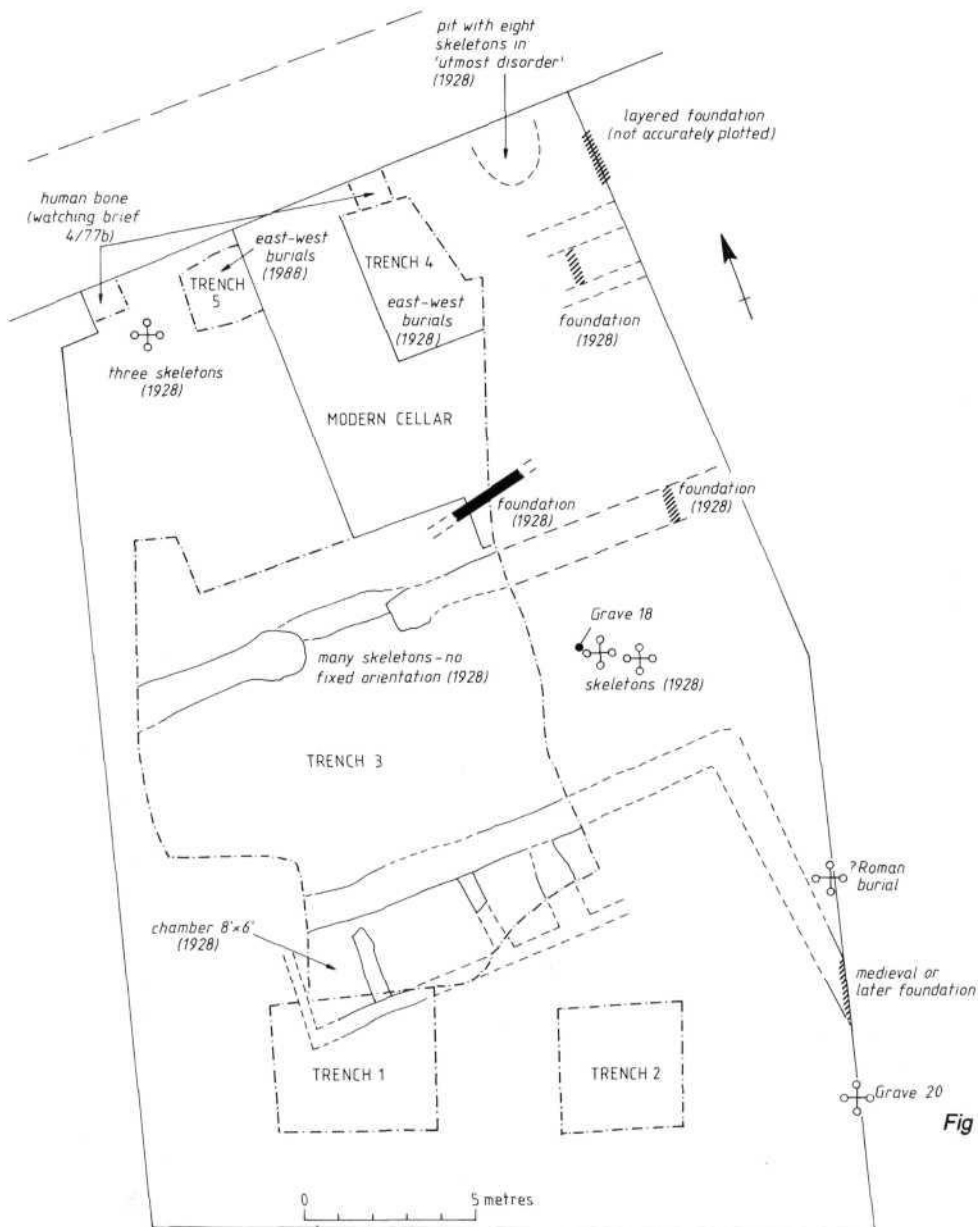


Fig 7.3 Crouched Friars based on the 1928 observations, the 1977 watching brief, and the 1988 excavation and subsequent watching brief. 1:222. [Pages 245-7]

3) Roman burials and part of a Roman building were excavated in 1971 in advance of the new southern relief road (Fig 7.1; MRC 1971, see pp 236-42).

4) Two probable medieval inhumations were observed in stanchion holes at the northern end of the present site (ie No 42 Crouch Street) during a watching brief in 1977 (Fig 7.3; CAR 6, 4/77b, 854).

5) Burials of uncertain date were noted in some stanchion holes during the construction of an office block at No 32 Crouch Street in 1981 (Fig 7.1; CAR 6, 3/81, 975-6).

In 1988, two trenches (Fig 7.1, Trenches 1 & 2) were hand dug down to natural sand in the southern part of the site; all that proved possible was limited excavation of the medieval and later levels at the northern end of the site either side of a modern cellar (Fig 7.1, Trenches 4 & 5), and a brief examination of the central area following machine stripping (Fig 7.6). The

eastern part of the site had been largely destroyed by the insertion of a series of petrol tanks. The contractor's trenches were inspected during ground-works.

Roman burials

[Fig 7.4]

Excavation of Roman deposits was only possible in Trenches 1 and 2, and here they were much disturbed by later pits. The fragmentary remains of an east-west child inhumation (G1) of probable Roman date was uncovered in Trench 1. The head was approximately to the east. There were two possible

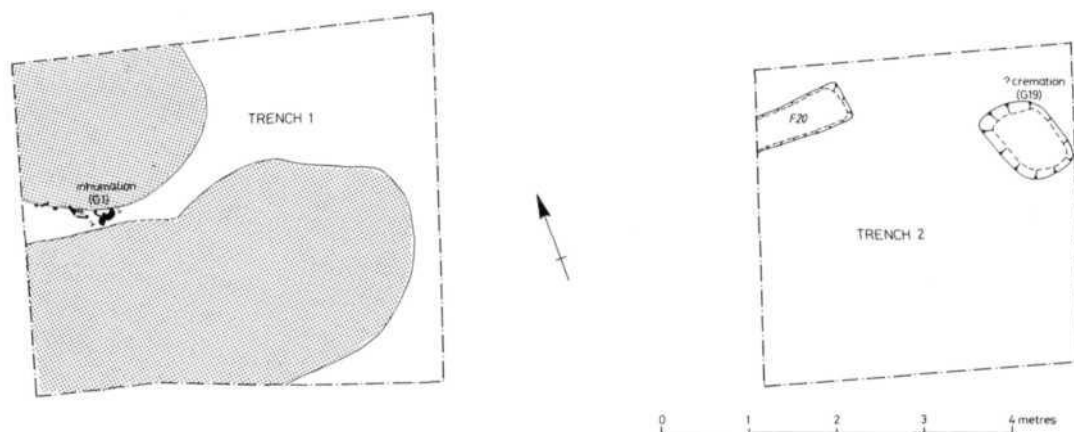


Fig 7.4 Crouch Street 1988. Roman. Trenches 1 and 2. 1:80. [Pages 247-8]

Roman burials (G19 & F20) in Trench 2. Some minute fragments of cremated, probably human, bone were recovered from G19, associated with three broken pottery vessels (p 255), and these probably indicate a disturbed cremation of 2nd- or 3rd-century date, perhaps of a child. An east-west rectangular pit (F20) had decayed timber sides and may possibly represent a disturbed inhumation.

A further east-west inhumation (G20; Fig 7.3) was observed in the east section in a contractor's trench 4 m north of the south-east corner of the site, and on stratigraphic grounds was probably of Roman date. A complete pottery vessel (see below) was found nearby by a workman and may possibly derive from this burial. Lower limb bones from another possible Roman inhumation were seen in the east section 6.5 m north of G20 at a depth of 1.55 m during groundworks but it was not possible to investigate it further.

The Roman inhumations may have been at the fringe of the small group of graves excavated in 1971 about 30 m to the south-east of the site (Fig 7.1) and described above (pp 236-42). No cremations were found in 1971 so that G19 may have been an isolated example.

A layer of Roman dump material up to 0.6 m thick was noted in contractor's trenches across the northern part of the site, sealed by post-Roman topsoil (the so-called 'dark earth') which was up to 1 m thick.

Post-Roman burials (?late medieval to early 16th century)

[Fig 7.5]

At the northern end of the site (Trenches 4 & 5) a series of shallow graves had been cut into the 'dark earth' (L15 & L16), and in some cases cut a thin gravelled surface (L22), which was stratified within

the deposit. The inhumations were aligned east-west with the heads to the west, and in most cases lay only 0.10-0.15 m below the ground level formed after the removal of the modern floors. Sixteen individual burials (G2-G17; see inventory, pp 254-5) were identified, although it proved difficult to distinguish grave cuts, especially in Trench 4 where the ground had been much disturbed by later terracing. There was no evidence that the bodies had been buried in coffins or that grave goods had been placed with the deceased. A large quantity of disarticulated human bone was recovered from the backfill of the graves and from later levels. In some instances (such as G4, G14, and G15), some of this bone had been carefully placed over the inhumations.

During contractor's groundworks, several other inhumations were observed east of Trench 4 and south of Trench 5. Further skeletons had been noted in 1928 both here and in the central part of the site (Fig 7.3). Also in the latter area, an isolated east-west inhumation (G18) was recovered from a contractor's trench 10 m south of Trench 4 in 1988. There was no direct evidence for the relationship between these burials and Building 181.

Dating evidence for the cemetery is slight and limited to a small quantity of 11th- to 13th-century pottery, a piece of late medieval painted glass, peg-tile and some slate, all of which were recovered from the dark earth and the graves. The intercutting of graves and the quantity of human bone recovered suggest that this was part of an intensively-used and long-lived cemetery, which together with the burials found in c 1895, 1928 and 1977 formed part of the Crouched Friars' burial ground. However the inhumations need not necessarily represent inmates of the friary or hospital, as the chapel had been granted burial rights in 1402 for the inhabitants of neighbouring parts of Crouch Street and Maldon Lane (VCHE, forthcoming). The age and sex ratio of the dead as indicated by the small 1988 sample of bone (see pp 253-5 below) seems to indicate such a cemetery, although the dating evidence is insufficiently precise to enable the burials to be attributed to either the 15th century or to an earlier phase of the friary.

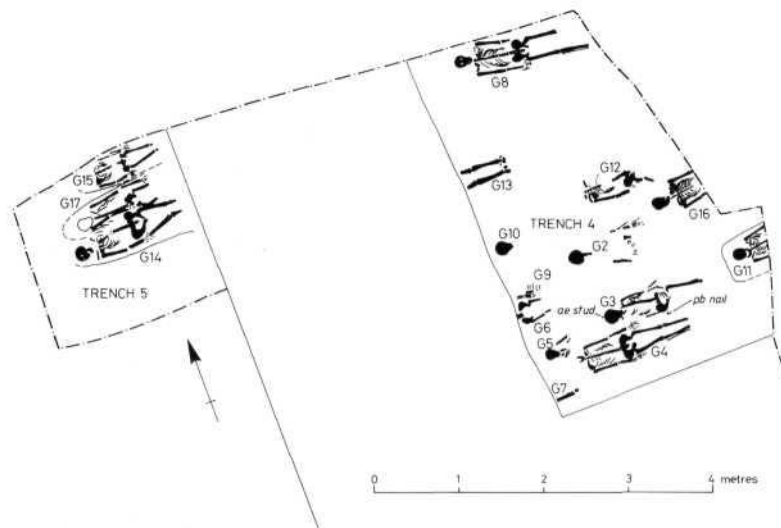


Fig 7.5 Crouch Street 1988. Late medieval to early 16th century burials. Trenches 4 and 5. 1:80. [Pages 248-9]

The cemetery probably lay to the south of the precinct wall situated along the street frontage, although no evidence for the wall was recovered and it is possible that it had been set back from the frontage (see below).

Building 181 (medieval to c 16th century)

[Figs 7.2, 7.3 & 7.6]

Part of a large east-west building extended for at least 12 m across the centre of the site (Fig 7.6) and was defined by two foundations (F25 & F27) 6.5 m apart, with a probable range of rooms, 3.0 m wide, to the south. Only limited excavation of the foundations was possible following clearance of modern rubble, but Rudsdale's observations of 1928 supplement this work and provide additional information about their plan (Figs 7.2 & 7.3). The foundations were shallow (0.2-0.4 m deep) and mostly robbed out. Where they survived, they proved to have been of stone-and-mortar construction with a few peg-tile fragments and in places a bedding layer of gravel.

No definite floors were uncovered and this, together with the shallowness of the foundations, suggests that the building had been disturbed by later terracing. Fragments of slate were recovered from associated deposits nearby and were especially common over the southern part of the site.

Most of the northern foundation (F27) had been robbed out and, where excavated, proved to be only 0.2 m deep and 1.0 m wide. The same foundation was apparently observed at the eastern side of the site in 1928, although here it was recorded as being

2.4 m wide. Two large probable pier bases (F26 & F28), 2.75 m apart, were incorporated in the line of the foundation. The eastern base (F26) was only partially robbed, with the stone-and-mortar foundation 0.3 m thick sealing a bedding layer of compacted gravel 0.5 m thick. The pier bases must have supported substantial load-bearing uprights, perhaps for an entrance. The robber trench for the foundation between F26 and F28 was narrower and offset slightly to the north, which suggests that this foundation may have been of secondary construction and possibly blocked an entrance.

The southernmost of the two large east-west foundations (F25) had also been robbed and, where excavated, was 0.4 m deep and 1.0 m wide, but did not incorporate pier bases. This foundation appears also to have been uncovered in 1928 at the eastern side of the site where it turned southwards and extended into the east section. This probably corresponds to an unrobbed foundation observed in the east section in 1988 some 28 m south of the street frontage. The upper part of the foundation was of stone and mortar and was 1.5 m wide and 0.8 m thick; the lower part was 2 m wide and at least 1 m deep and consisted of alternating unmortared layers of sand/gravel and topsoil. This structure may correspond to the foundations each 8 feet thick' described in 1928.

There were no features between F27 and F25 which could be attributed unequivocally to Building 181, and in particular no evidence for roof supports. Remains of a fine mortar floor (L20) north-west of F25 probably post-dated the foundations. No trace was uncovered of the skeletons noted in this area in 1928, and the east-west medieval inhumation (G18) observed in a contractor's trench immediately to the east of the excavated area could not definitely be associated with the structural remains.

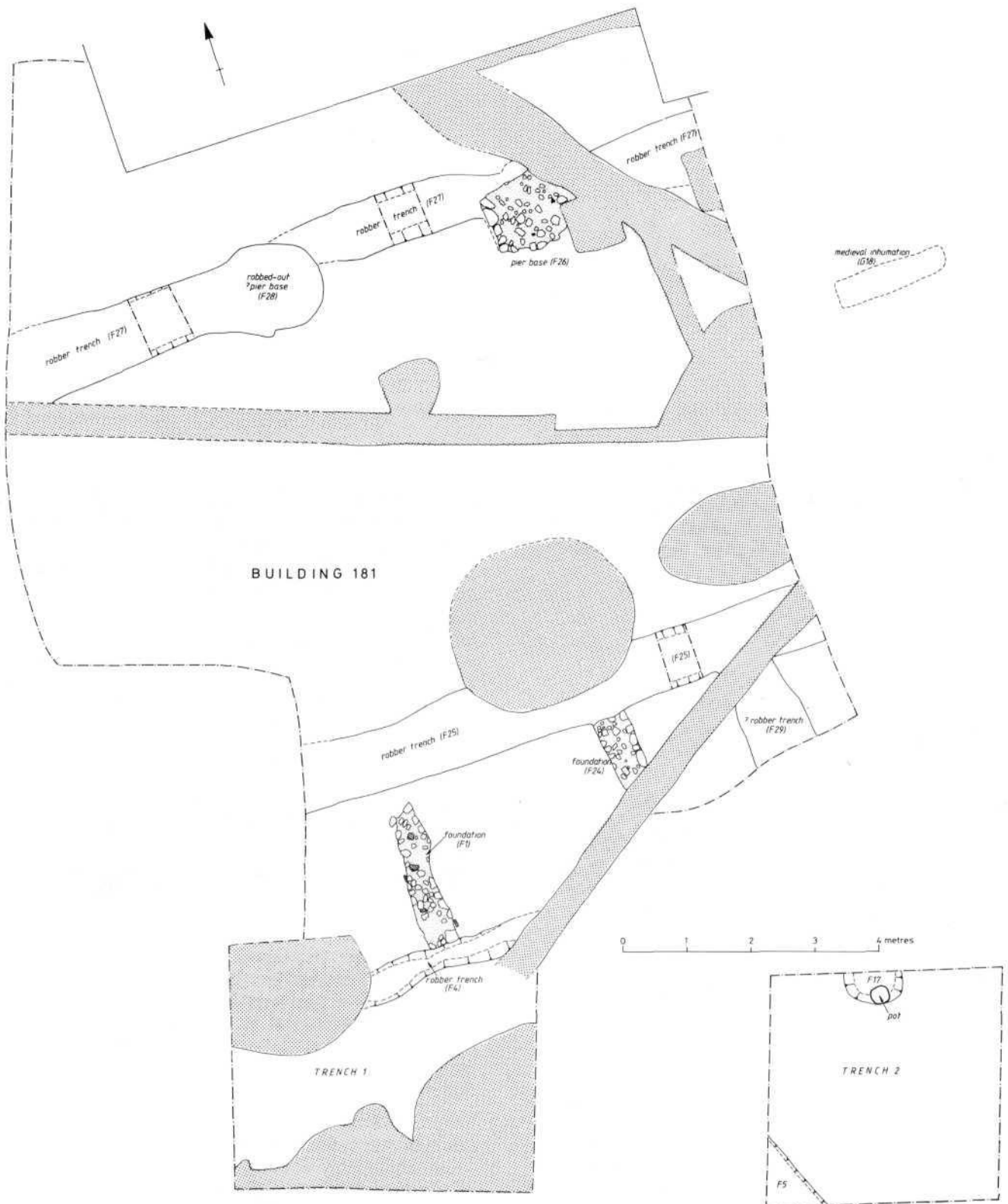


Fig 7.6 Crouch Street 1988. Medieval to post-medieval. Central area and Trenches 1 and 2. 1:90. [Pages 249-51]

Another foundation layered like the eastern arm of F25 was observed in a contractor's trench at the eastern side of the site near the street frontage, and a short stretch of foundation was revealed nearby in 1928. These were possibly associated with Building 181 although they did not extend into Trench 4, perhaps indicating that a north-south return foundation extended southwards to F27. The gravelled yard surface (L22) located in Trenches 4 & 5 north of F27 unfortunately could not be linked stratigraphically to Building 181.

To the south of F25 lay a probable range of rooms of slighter construction. Parts of two north-south foundations (F1 & F24) of stone-and-mortar construction with fragments of Roman tile and peg-tile apparently extended to a shallow robber trench for an east-west foundation (F4). A probable robber trench for another north-south foundation (F29) was observed to the east of F24, whilst a north-south foundation was apparently uncovered further west in 1928. This, together with F1, probably formed what Rudsdale referred to as a 'chamber 8 ft x 6 ft' (Fig 7.2). Again no floors survived, although there were patchy mortar and rubble spreads (L17 & L19) between F1 and F24 and to a lesser extent west of F1.

There was no definite evidence for structural remains to the south of F4, although the area was much disturbed by later activity. Most of an inverted pot (Fig 7.6; see p 255) of probable 13th-century date was recovered from a pit (F17) in Trench 2. Here also was the edge of a ?medieval pit (F5).

The dating evidence directly associated with Building 181 was very sparse. The foundations cut dark earth (L7, L13, & L18) which contained pottery of 11th- to 13th-century date and pieces of slate, while peg-tile fragments were incorporated into the foundations themselves. This suggests that the construction of the building was of 13th-century or later date. Likewise there is little dating evidence for its abandonment and the robbing of the foundations, apart from the fact that the latter were cut by modern features.

Discussion

[Fig 7.7]

The limited nature of the excavation makes interpretation of the structural remains difficult, although it is most likely that Building 181 formed part of the house of Crouched Friars (*VCHE*, forthcoming; Morant 1748, II, 41-3), which originated in the 12th or early 13th century as a hospital and chapel. The latter consisted (certainly in 1401) of a nave, chancel and bell-tower. In the early 15th century a chapel of St Mary was built, so that there were then two chapels and at least one hospital on the site. In c 1496 the Crouched Friars acquired ownership of the establishment after successfully claiming that the hospital had formerly belonged to them and they had

been expelled from it. The monastery probably occupied the northern end of a triangular plot extending from the west side of Maldon Road to what is now the rear wall of properties on the west side of Wellesley Road, but little is known about the layout of the monastery. By the 16th century the second chapel had probably been incorporated into the original one as a lady chapel, while at the Dissolution, in addition to the chapel and hospital, there was a 'Belfry, Cloister and other edifices, and the Churchyard' (Morant 1748, II, 41-3), and probably a precinct wall. After the Dissolution, the church was demolished (at a date not known) but, according to Morant, the rest of the monastery was 'converted' (apparently c 1620-30) into a private residence known as 'The Fryery' (according to the eye-witness account of the Siege of Colchester in Defoe's *Tour of Britain*, published 1724). In 1648, at the time of the Siege of Colchester, the house was owned by Sir Harbottle Grimston but was left too badly damaged by cannon and fire to be adequately restored for his needs. The building stood in ruins until it was repaired for use as the town work-house. Subsequently it was let as tenements for the poor until its demolition early in the 18th century.

Illustrations purporting to be the remains of the Crouched Friars monastery appear on the three earliest surviving maps of Colchester (Fig 7.7) although it is clear from the way in which existing buildings are depicted on these maps that their detail is untrustworthy. All are post-Dissolution in date so that it is not clear how much of the monastery had been demolished by the time the maps were prepared. The earliest plan, namely Norden's which was published in 1610 in Speed's *Atlas of England and Wales*, shows two groups of buildings linked by what appears to be a single north-south wall. The northern group is drawn in much the same way as the buildings lining the streets of the town whereas the southern group is treated differently and seems to have included a large building. Conceivably the single north-south wall could indicate the position of the cloister. The buildings lie inside what appears to be a walled precinct, part of the north side of which is set back from the street frontage where instead there seems to be a fence (compare with Norden's treatment of North Bridge on Fig 7.7). Another map of Colchester (British Library, additional MS 11564, ff 42v-43) is of c 1645-50 and, although similar in many respects to Norden's, does not seem to be simply a derivative of it. The plan of the Crouched Friars shows the precinct wall with a single building set against the south side. The latter presumably is the same as the southern group on Norden. The north side of the precinct is again set back from the street frontage where again there seems to be a fence. However, unlike Norden, the precinct wall has no dog-leg here. The third plan, on the 'Siege Map' of c 1650, is reminiscent of Norden and shows two groups of buildings in a walled enclosure, the southern one being Sir Harbottle Grimston's house and the northern group simply a row of houses or similar buildings.

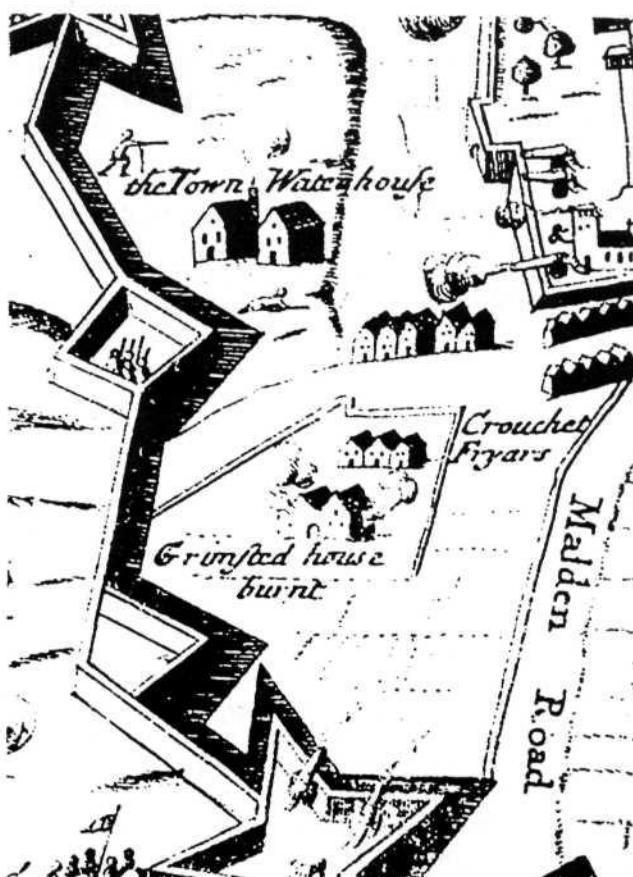
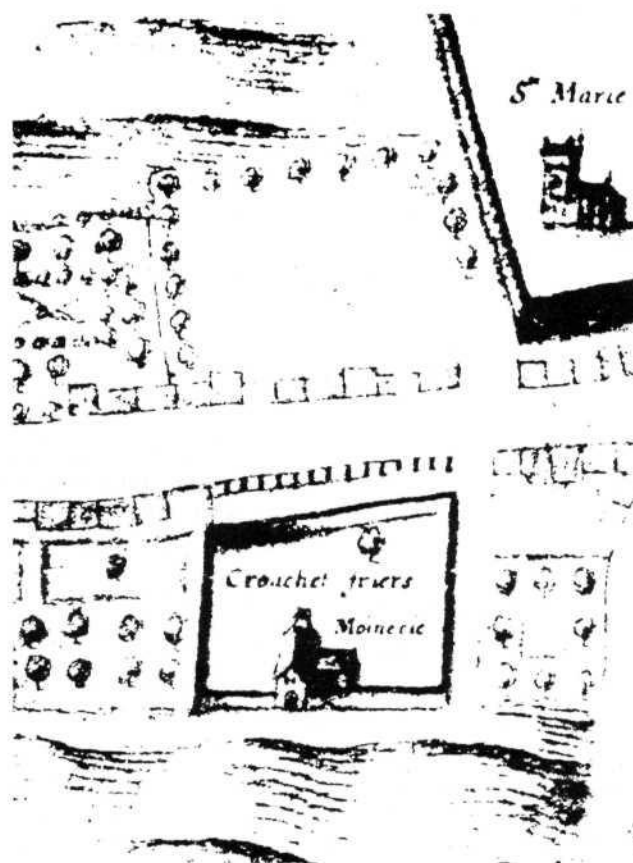
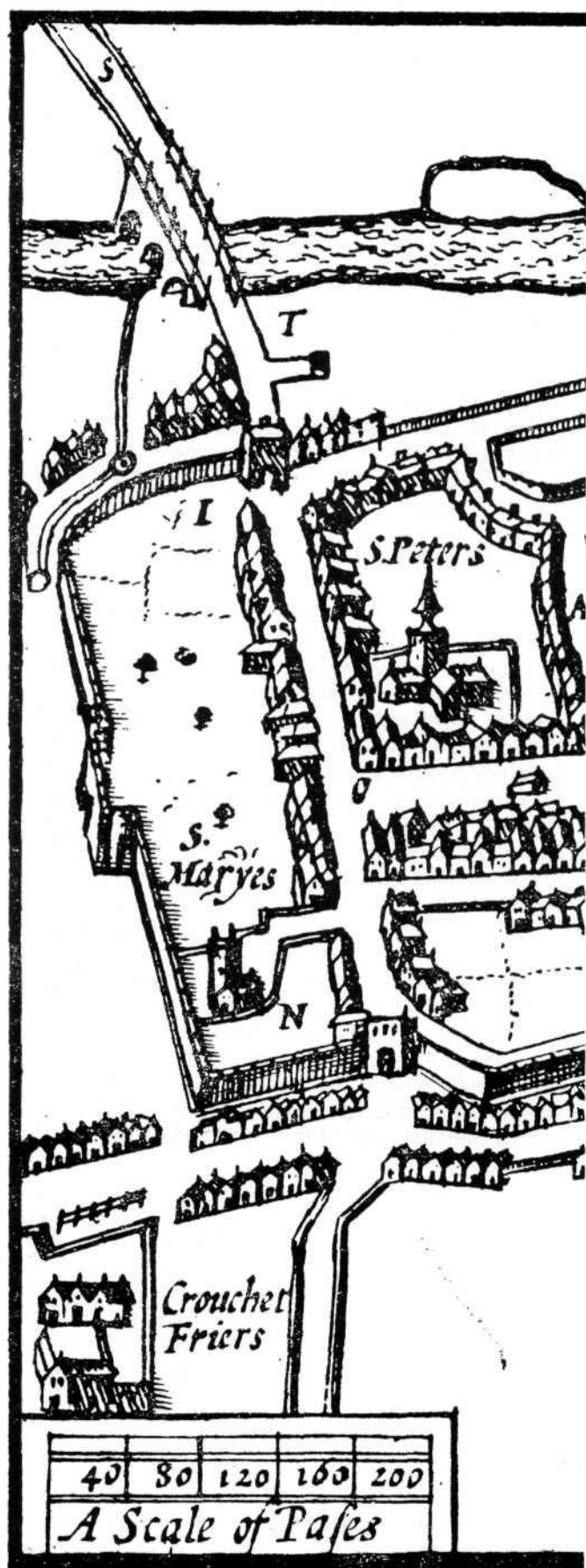


Fig 7.7 Extracts from the earliest maps of Colchester showing the Crouched Friars. Left: Norden 1610. Above right: 1645-50. Below right: 'Siege Map', c 1650. [Pages 251-3]

Caution is needed if the cartographic evidence is to be equated with the excavated remains, especially in view of the lack of detailed information regarding the full extent and stratigraphic relationships of the foundations and burials. It is possible for example that the northern foundation (F27) did not belong to a building but instead was part of the precinct wall, which contained a blocked gateway represented by piers F26 and F28, leaving Building 181 to consist only of the foundations to the south. The precinct wall is shown set back from the frontage in Norden, and this might explain why burials were discovered south of F27, although it would still leave burials outside the precinct. This seems unlikely unless they formed part of a late cemetery established after the acquisition in 1402 of the burial rights referred to above. Alternatively the burials may pre- or post-date the foundations.

The position of Building 181 is most likely to be represented by the northern group of buildings shown on the 1610 plan and the Siege Map (Fig 7.7). If these maps are to be believed, Building 181 was not part of Sir Harbottle Grimston's house and thus was not part of the main domestic complex of the monastery. The northern range of buildings presumably extended along the north side of the cloister, which was also the preferred location for the friary chapel. If Building 181 belonged to this range, then the large structure bounded by F25 and F27 could well form part of the chapel. The distribution of burials to the north would accord with this, and of course the presence of burials such as G18 and the 1928 skeletons south of F27 within the building could also be expected. The foundations south of F25 may be secondary, possibly even reusing F25 after the demolition of the larger structure and thus represent the northern group of buildings shown by Norden. This interpretation may be further strengthened by the suggestion that the foundations discovered in 1928 along the eastern part of the site indicate the position of the crossing, with the projected north-south return between the two northern examples forming part of the north transept,

extending eastwards beneath the properties, nos 38 and 40 Crouch Street.

Post-medieval and modern features

[Fig 7.8]

In Trench 1 there was a series of post-medieval (F7, F8, F10, F13, F16 & F19) and modern (F2 & F14) pits, while a large post-medieval pit or terrace (F11) extended over the whole of Trench 2 and was cut by an east-west gully (F6).

Human skeletons

by Stephanie Pinter-Bellows

Age, sex and stature

The skeletal sample from Crouch Street is too small to enable valid conclusions to be drawn about mortality rates; however a few observations can be made. The complete lack of neonatal and infant skeletons is demographically very unusual. Possibly the friable and fragile bones of the young children did not survive the soil conditions of burial and post-mortem disturbance, and/or they were buried in an alternative area. Aside from this lack of young children, the range in ages is what one would expect.

It has been possible to calculate stature for three males and two females. The three males have statures of 1.68 m (5 ft 6 in), to 1.58 m (5 ft 3 in) and 1.74 m (5 ft 8 in). The two females have statures of 1.56 m (5 ft 2 in) and 1.64 m (5 ft 5 in). These figures are consistent with mean statures for Anglo-Saxon and English medieval populations (White 1988).

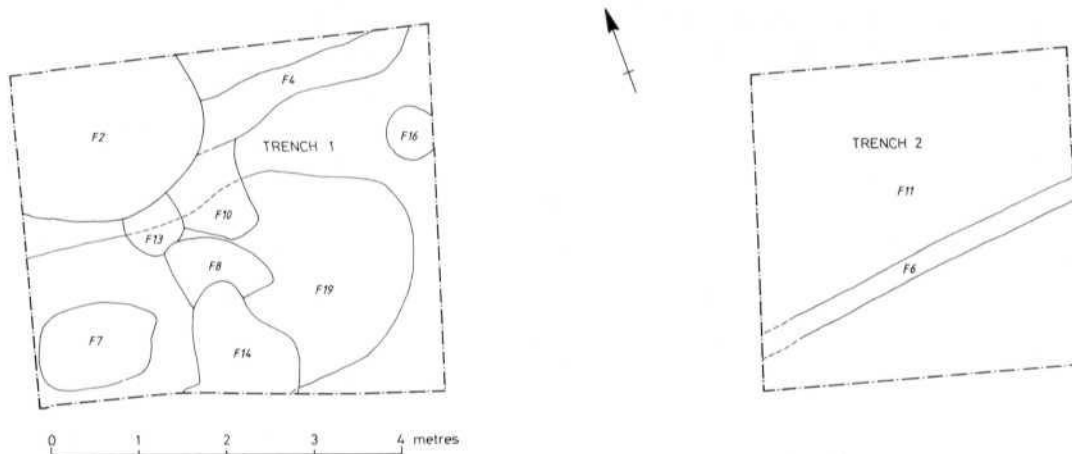


Fig 7.8 Crouch Street 1988. Post-medieval to modern. Trenches 1 and 2. 1:90. [Page 253]

Pathology

Several minor anomalies of skeletal development were found. Presumed failure of embryonic notochordal division was noted in one young female (G4) affecting the sacrum and adjacent vertebrae (lumbarisation of the first sacral segment). There was also one incidence of spina bifida occulta, in which there is a failure of osseous union of the vertebral neural arch in the midline posteriorly; in this case in the first cervical vertebrae in a middle-aged male (G2). Two females, a young adult (G4) and a middle-aged adult (G3), and one young adult male (G14) showed the congenital absence of one or more third molar teeth. None of these skeletal congenital anomalies are considered to have presented any symptoms or inconvenience to their possessors.

Two individuals show signs of healed fractures. A young adult female (G6) has a healed fracture of the right acetabulum of the pelvis. The site of the fracture has a bone callus and extra bone growth; this may have made walking difficult. The associated femur head shows some distortion and evidence of healed periostitis. A middle-aged male (G8) has a closed healed oblique fracture of the distal right humerus with almost no over-ride or shortening. An oblique fracture is due to torsional force and is unlikely to be due to a direct aggressive blow. This individual also has a second injury which might have happened in the same incident. The right mandibular condyle has become dislocated, a new articular surface being formed behind the original one with ensuing osteoarthritis.

A pathology thought perhaps to originate from stress to soft tissue, in this case the intervertebral discs, is Schmorl's node. Two middle-aged individuals, one male (G8) and one female (G3), show this stress in their thoracic vertebrae.

There are four cases of periostitis, a non-specific inflammatory lesion of the outer layer of the bone. An adolescent (G7) has severe long term periostitis of medial and lateral sides of the right tibia, the lateral side shows more healing with smooth thick striae, the medial side shows a thin layer of fine periostitis overlying striae. The periostitis on the head of a femur from a young female (G6) has been mentioned before. Periostitis was also present on the distal radius of a young adult male (G14), and the distal half of a fibula of the middle-aged male (G8).

The common skeletal diseases of degeneration are vertebral osteophytosis and osteoarthritis of the synovial joints. These pathologies are to some extent related, both progressing with advancing age. Three individuals have osteophytes: one solely in the thoracic vertebrae (middle-aged male, G2), one in the thoracic and lumbar vertebrae (middle-aged female, G3), and one solely in the lumbar vertebrae (old adult male, G12).

Osteoarthritis is a ubiquitous accompaniment of advancing age, and it may also be a secondary phenomenon as a sequel to other pathological processes. There is one case where the osteo-

arthrosis is secondary; the arthrosis in the right temporal-mandibular joint of the middle-aged male, G8, is the result of the dislocation of that side of the jaw. The rest of the osteoarthritis encountered is primary; this consists of two cases in the cervical vertebrae (old adult males, G17 & G12), one on the medial clavicle articulation (middle-aged male, G2), two on the acetabulum (old adult male, G12 and middle-aged male, G2), and one on the distal femoral articulation (middle-aged male, G2). •

Grave inventory

[Figs 7.4-5]

All medieval inhumations were aligned east-west with head to west (Fig 7.5).

- | | |
|-----|---|
| G1 | Probable Roman inhumation. Trench 1 (Fig 7.4).
Fragmentary remains of child (7 yr ± 24 mths). Aligned from north-west to south-east with head to south-east. No clear grave cut. 4 coffin nails but no wood stain. Cut by modern pit F2. |
| G2 | Medieval inhumation. Trench 4 (Fig 7.5).
Fragmentary remains of middle-aged adult ?male. No grave cut or coffin. |
| G3 | Medieval inhumation. Trench 4.
Female of middle age. Fairly complete. Stature 1.64 m. No grave cut or coffin. Copper-alloy stud by skull and lead nail by right pelvis. Cut by G4 and probably by G11. |
| G4 | Medieval inhumation. Trench 4.
Well-preserved young adult female. Skull (except mandible) and feet only missing. Stature 1.56 m. No grave cut or coffin. Much redeposited bone placed over skeleton. Cuts G3, G5 and ?G7. |
| G5 | Medieval inhumation. Trench 4.
Fragmentary child (5 yr ± 16 mths). No grave cut or coffin. Cut by G4. |
| G6 | Medieval inhumation. Trench 4.
Young adult female. Fairly incomplete. No grave cut or coffin. Cut by modern cellar. Cuts G9. |
| G7 | Medieval inhumation. Trench 4.
Adolescent. Largely incomplete. No grave cut or coffin. Cut by modern cellar and ?G4. |
| G8 | Medieval inhumation. Trench 4.
Well-preserved male of middle-age. Stature 1.68 m. No grave cut or coffin. Much redeposited bone in backfill sealing skeleton. |
| G9 | Medieval inhumation. Trench 4 (Fig 7.5).
Fragmentary child. No grave cut or coffin. Cuts L22. Cut by G6 and modern cellar. |
| G10 | ?Medieval inhumation. Trench 4.
Skull fragments only of child (6 yr ± 24 mths). No grave cut or coffin. |
| G11 | Medieval inhumation. Trench 4.
Well-preserved upper half of adult female. Lower half extended into east section of trench. Well defined grave cut. |
| G12 | Medieval inhumation. Trench 4.
Old adult ?male. Fairly incomplete. Stature 1.58 m. No grave cut or coffin. |
| G13 | Medieval inhumation. Trench 4.
Adult. Leg and ankle bones only present. No grave cut or coffin. Cut by modern cellar. |

- G14 Medieval inhumation. Trench 5.
Well-preserved young adult male. Well-defined grave cut, especially on south side. Much redeposited bone placed over skeleton. Cuts G17. Cut by modern cellar.
- G15 Medieval inhumation. Trench 5.
Child between 6 and 12 years of age. Fairly complete, excepting skull and feet. Grave-cut defined on south side. Redeposited bone placed over skeleton. Cut by modern cellar. ?Cuts G17.
- G16 Medieval inhumation. Trench 4.
Well-preserved upper half of adult male. Lower half of skeleton extended into east section of trench. No grave cut or coffin.
- G17 Medieval inhumation. Trench 5 (Fig 7.5).
Old adult male. Fairly complete. Stature 1.74 m. Well defined grave cut, notably on north side. Cut by G14, ?G15 and modern cellar.
- G18 Medieval inhumation. Contractor's trench (Figs 7.3 & 7.6).
Adult male. Skull fragments and some vertebrae only recovered from side of trench, at depth of 0.6 m below clearance level. No discernible grave cut or coffin. Cuts post-Roman topsoil (L18). Relationship with Building 181 unclear.
- G19 ?Roman cremation. Trench 2 (Fig 7.4).
?Child. Very small quantity of unidentifiable cremated ?human bone fragments, associated with 3 pots (see below). The backfill of the cremation pit (F12) also contained a quantity of animal bone, including 6 to 8 butchered vertebrae. Cut by post-medieval pit/terrace (F11).
- G20 ?Roman inhumation. Contractor's trench (Fig 7.3).
?Adult. Leg bones from a probable east-west Roman inhumation were observed in a contractor's trench against the east section, at a depth of 1.5 m. Slight grave cut visible cutting natural sand and sealed by topsoil, but no sign of a coffin. A pot (see below), found nearby by a workman, possibly derived from G20.

Date

Very little may be said on this evidence, but the condition of the pottery in Burial 19 suggests a 2nd-century date. The *unguentarium* is less informative. While Hull thought the form 'commonest... in the second century', these robust little vessels can survive unbroken for long periods and the use of one here in a (presumably later) interment is no surprise. •

Medieval pottery vessel
by J Cotter

Pit F17, Trench 2 An almost complete vessel in medieval sandy ware (Fabric 20; CAR 8). Dark grey silty-sandy fabric with a dull red-brown core. Aside from abundant quartz sand there are occasional larger grits of quartz sand and rarer flint up to 5 mm across, as well as moderate inclusions of earthy red iron oxide up to 4 mm. The body is globular with a simple thickened everted and internally-flattened rim and the usual medieval sagging base. The unevenness of the lower half of the body suggests it was hand-made but the rim and shoulder were finished on a wheel or turntable. External basal knife-trimming extended almost halfway up the body. This was the normal form and manufacturing technique of grey-ware cooking pots in Colchester between c

Complete pottery vessels

[Fig 7.9]

Roman pottery vessels
by C Going

- G19 Cremation. Three pottery vessels.
a) Everted-rimmed jar (the standard CAM 278) with broad 'smeared' burnish lattice decoration on the body. The base exterior is burnished overall. Sandy reduced ware, certainly local. Probably Antonine.
b) Small jar with an upright, bead rim. The upper and lower body are burnished overall, the body itself with vertical burnished lines. The exterior of the base is burnished. Part of the rim and upper body has been removed, possibly during the deposition ritual. Local reduced grey ware, fairly fine. Hadrianic-Antonine.
c) Central Gaulish *terra sigillata* of Dragendorff form 33. Complete. Stamped MACRINVS. Antonine.
- Possibly from G20 Complete white-ware vessel (pot kept by a workman). Small *unguentarium* (CAM 389a), complete. Approximately 140 mm high, rim diameter, 55 mm. Max body diameter, approx 90 mm. Pale buff or whitish-buff fabric, probably made locally (see Hull 1963a, fig 72.28-33 & pps 133-4). Second century? The vessel is in private hands, and has been described from monochrome photographs.

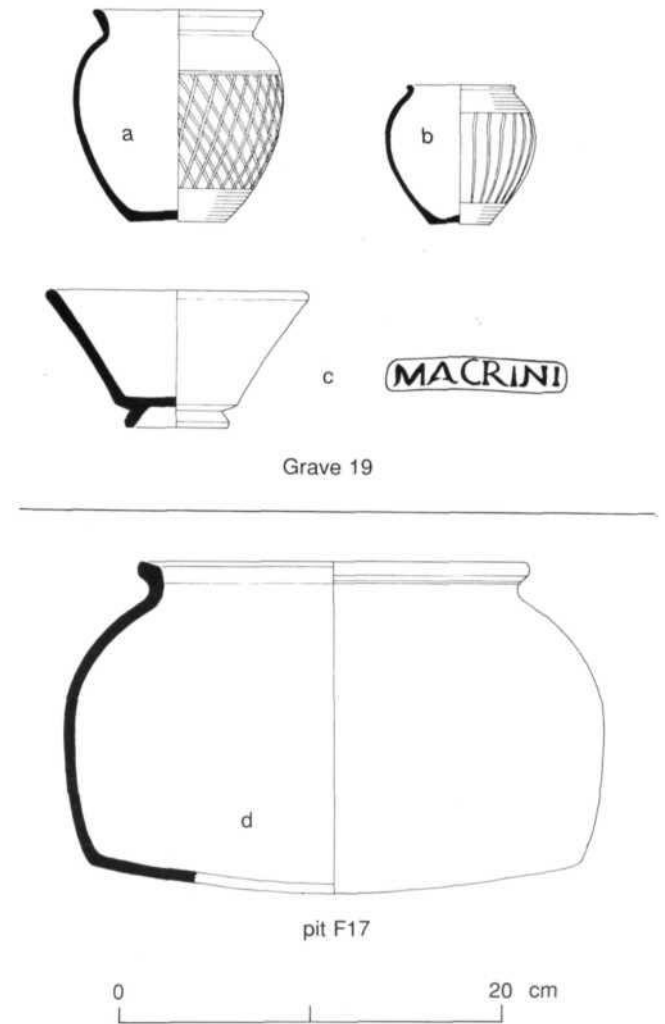


Fig 7.9 Pottery vessels. 1:4.

1175-1250. After this date they were usually wheel-thrown and with different rim forms (CAR 8). The presence in the same context of a small glazed sherd of early Colchester-type ware (Fabric 21A) suggests that the cooking pot falls later in this date range rather than earlier, perhaps within the years c 1200-50. •

Acknowledgements

Excavation was possible thanks to a donation from the developers, Frincon Holdings Ltd. Help with machining was received from Hills, the contractors. Assistance with various aspects of the documentary evidence from Janet Cooper of the Victoria County History was invaluable and is especially appreciated, as also are the contribution made by Philip Crummy to the discussion, the skeletal report by Stephanie Pinter-Bellows, and the pottery reports by Chris Going and John Cotter. Last but not least thanks go to the digging team, particularly M Napthan and S Benfield.

8: THE CEMETERIES OF ROMAN COLCHESTER

Philip Crummy

Introduction

Together the finds and excavations associated with the cemeteries of Roman Colchester provide one of the largest pools of information in the country about Romano-British urban cemeteries and burial practice. Over 1400 graves have been catalogued from the town and about 2,000 objects (excluding coffin nails and human bones) from the cemeteries are preserved in the Colchester Museums. The picture is however slightly unbalanced. Nearly all complete objects derive from cremations and thus mainly are of 1st- and 2nd-century date. This is because the early interest was directed towards objects so that inhumations, being frequently unaccompanied by grave goods, attracted much less attention. Human bones were rarely collected; this was true as much of the cremations as it was of the inhumations. Discoveries before c 1960 are documented in an unpublished inventory of graves from Roman Colchester compiled by Mr M R Hull. Since 1960, the major project in this field has been the Butt Road cemetery site, excavated mainly between 1976 and 1979, where over 700 inhumations of 3rd- and 4th-century date have been uncovered (see pp 4-163). The significance of the excavation is considerably enhanced by the presence on the edge of the cemetery of what was almost certainly a Roman church (see pp 164-91).

The following notes are intended to provide an outline of some of the more important information in Hull's inventory rather than be a substitute for the fuller publication which the material merits. The 'Hull Grave' numbers referred to below are the numbers used in his inventory as opposed to the grave numbers of Butt Road and elsewhere.

M R Hull's inventory of Roman graves

Compilation of the inventory seems to have begun around 1927. Hull took as his starting point the 144 groups set out and numbered by Thomas May for his *Catalogue of the Roman Pottery in the Colchester and Essex Museum* (Cambridge, 1930). Of these, the first 108 were in the Joslin Collection and the remainder mostly from the Jarmin Collection. Hull added to this fresh discoveries as they appeared and intermittently over the years added other groups, as he gleaned information about them from the

accession register and other sources. The list was still being added to until at least 1959, a few years before Hull's retirement as Museum Curator in 1963. The list closes with Graves 624-6 found in 1959 and Grave 627 which was probably found some years earlier. Almost all the pottery was drawn, whereas nearly all the glass and other objects were left unillustrated. In his usual fashion, Hull drew the pottery more or less by eye at a quarter reduction.

At an early stage Hull clearly intended that the inventory be published. He began to assemble a neat draft in which the various entries were retyped, the gaps filled in (such as a missing find-spot or accession number), and the tidied-up text was mounted below the finished drawings. Unfortunately, the task was never completed and the new draft ends at Grave 42. Hull compiled an index which lists principally the provenances of the graves (where known) and he gave some preliminary thought to appropriate illustrations. The latest numbers in the index show that this work must have been taking place in about 1935. Hull never reached the point where he could write some general description and discussion although fortunately there is a short section in *Roman Colchester* (pp 250-9) where Hull describes in broad terms his interpretation of the cemetery evidence. Why the project was abandoned is not hard to guess. In addition to his day-to-day curatorial duties, Hull was involved in a series of major projects: excavations at Sheepen, *Camulodunum* (Hawkes & Hull 1947), *Roman Colchester* (Hull 1958), *The Roman Potters' Kilns of Colchester* (Hull 1963a), the Victoria County History's *Roman Essex* (1963b), and his massive corpus of Romano-British brooches. In the light of all this, it is hardly surprising that the *Inventory of Roman Graves* was never brought to fruition. Sadly, whereas it would have taken Hull a comparatively short time to finish the task, completion of the inventory to publication standard would now represent a substantial undertaking.

Although, as explained, the inventory itself is unpublished, some of the graves have appeared in print, those since 1927 usually being described in terms of their grave numbers. Many are contained in the periodic reports of the Colchester Museum, especially for the years 1929, 1931, 1937-44, and 1950-4. All were discoveries contemporary with the period covered by the report in which they appeared. A small proportion of the objects are illustrated. Detailed publication of the graves found during the Sheepen excavations of the 1930s and 1959 is presented in Hull's *Roman Colchester* (pp 139-40 & 144-7) where, unlike the more general account of the

work of the 1930s in *Camulodunum* (Hawkes & Hull 1947), each grave is dealt with under its grave number according to the inventory. The general account of the cemeteries in *Roman Colchester* makes only a handful of references to the inventory grave numbers. The provenances of many of the graves are indicated on the plans at the back of the book showing the Roman remains outside the walled area of the town and most are given their grave numbers in the list on pages 292-6.

The distribution of known burials

[Figs 8.1-8.3]

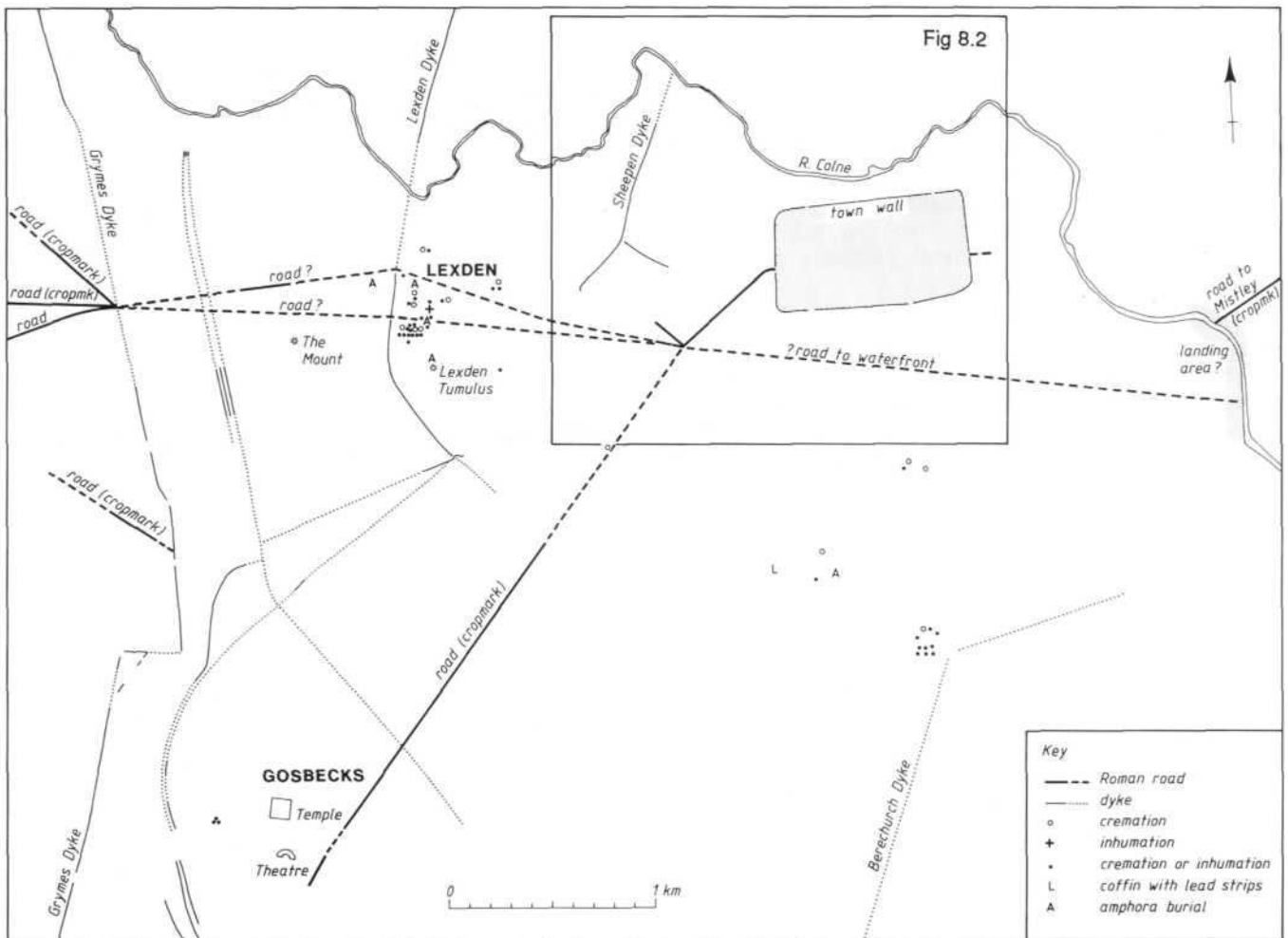
The distribution of the known graves is in part a reflection of the way in which the town's suburbs developed in the 19th and early 20th centuries and also is related to the locations of sand quarries around the town. The pattern is thus very distorted and not an indication of the actual distribution. Apart from those found during modern archaeological

excavations, the provenances of most of the graves can only be expressed in terms of parcels of land related mainly to building development or quarrying. The blocks of land are shown on Figure 8.2.

Nearly all of the graves in the inventory can be provenanced, albeit very approximately, apart from the first 144 grave groups which were found in the 19th century and are practically undocumented. To judge by the composition of the groups, a substantial number appear to have been muddled up. This is a particularly acute problem with the first 144 graves where as many as half of the groups seem of suspect composition. In general those found after the mid 1920s are much more reliable.

One of the first buildings on the Lexden Road was the Essex County Hospital. Its erection in 1819-20 (Area A in Fig 8.2) led to the discovery of at least one, if not two, burials (Graves 434 & 433 resp). But it was the uncovering of the large sculpture, the 'Colchester Sphinx', on the site of the hospital that created considerable public interest. Various other later building works on the site have also yielded further records of burials.

However, the major early site was the West Lodge



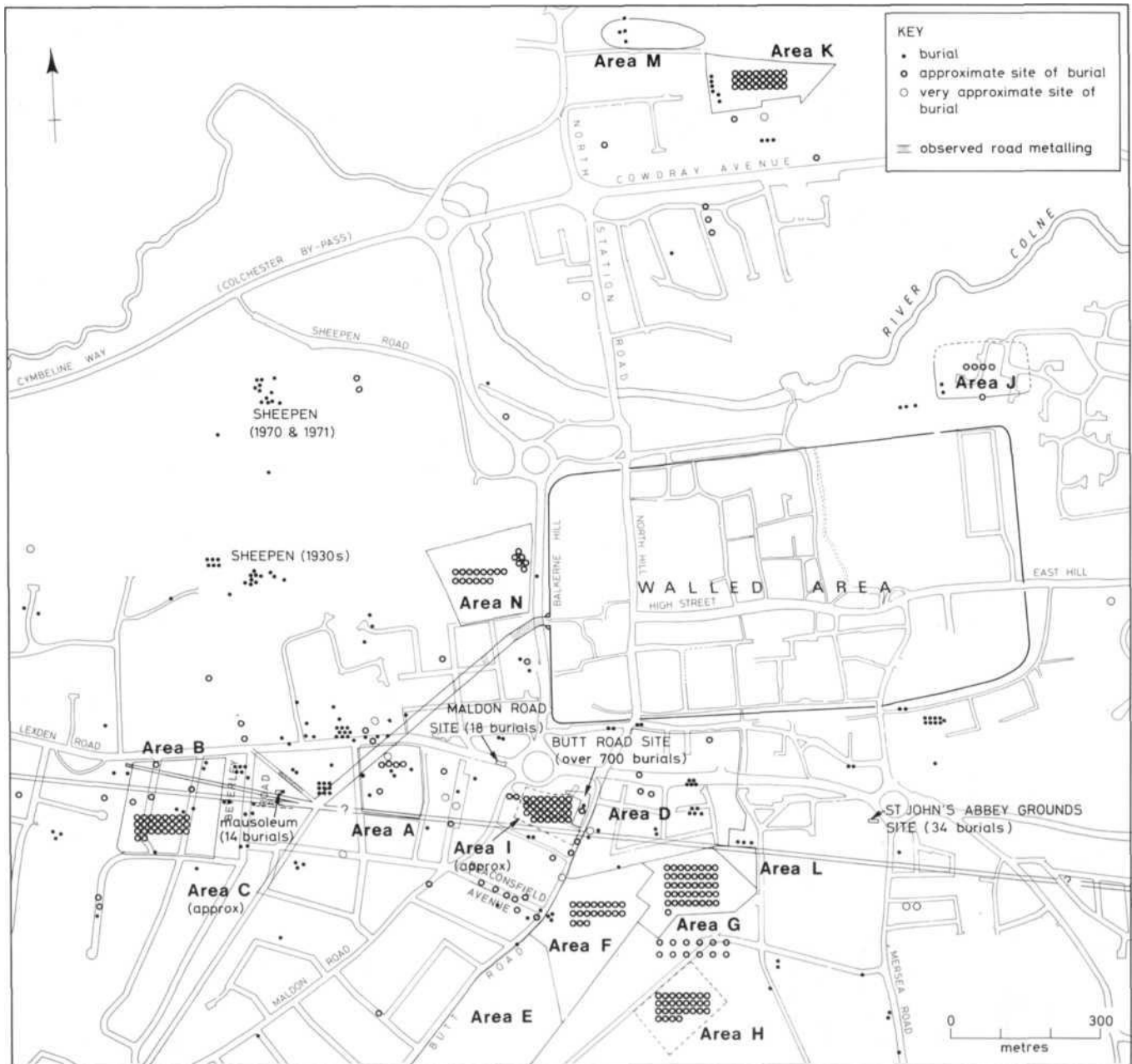


Fig 8.2 The provenances of Roman burials around the walled part of the Roman town. [Pages 258-63]

Estate (Area B) where from about 1848 the owner, Mr John Taylor, undertook substantial excavations following the discovery of burials during the construction of his house (Hull 1958, 250). The estate was about eight acres in size. Practically no records survive of the work, although Josiah Parish made coloured drawings said to show some of the groups *in situ* (eg Fig 8.3). Eventually Taylor presented to the Colchester Museum a total of 170 vessels which were to form the core of its early collection (Hull Graves 123-44 plus a few omitted by May). At least half of the West Lodge estate was dug. On the basis of the first acre, Taylor estimated that more than 2,000 vessels

were buried on his land. This suggests that he found many more objects than were handed over to the museum and that perhaps only the complete finds were saved.

After Taylor was George Joslin who, in his new house in the newly-built Beverley Road, amassed a very substantial private collection of antiquities almost entirely found in the Roman cemeteries within a quarter-mile radius of his house. When the collection was purchased for the Colchester Museum in 1893, it contained about 800 pottery and glass vessels and over 1,000 other objects, mainly coins. A spectacular



Fig 8.3 Three drawings of graves in situ at West Lodge, Colchester by Josiah Parish, top: Hull Grave 81; centre: Hull Grave 126; below: Hull Grave 128. [Page 259]

discovery was Hull Grave 3 which, in addition to other objects, contained the now well-known, but not fully-published, collection of pipeclay, comic figurines (Toynbee 1962, 186, pl 172) found at the rear of Joslin's house in 1866. Easily the most important object, however, was the magnificent tombstone discovered in the Beverley Road area and erected in honour of Facilis, a centurion of the Twentieth Legion

(RIB 200). Mr J E Price compiled a catalogue of the collection which was published in 1888. Most of Joslin's material seems to have come from contemporary housing developments to the south-east of the town centre, Alexandra Road and Wellesley Road being specifically recorded (*Arch J*, 33, 421). Joslin also bought the field on the south side of his house in order to excavate it but what was found there is unknown (Area C). The first 108 graves in Hull's inventory (which follows May) are from the Joslin collection. Hull later added to the series the grave groups omitted by May.

The Reverend E L Cutts, writing in the mid 1880s, said with the work of Joslin and Taylor clearly in mind, 'It [the cemetery area to the west of the town] has for many years past been explored with great skill; the circumstances of the discoveries have been carefully noted and recorded; drawings made of the objects *in situ*; and, finally, the objects themselves, kept in their original groups, are preserved in the town museum and in a private museum hardly inferior in importance....' (Cutts 1888, 42). Unfortunately, apart from Parish's drawings, the records referred to by Cutts do not survive and, as already mentioned, many of the groups are now clearly mixed.

Another important private collection was amassed from the cemeteries by Alderman A M Jarmin and was purchased for the town in 1892 (Hull Graves 109-22). No records survive for this material but much is thought to have been found in the area of Beaconsfield Avenue (built in the 1890s) and perhaps the Barracks (presumably the Artillery Barracks, built c 1875).

Area D seems relatively blank in terms of burials but this may reflect a low level of archaeological activity in 1800-1850 when this part of the town was being developed for residential housing. Included here are streets such as West Street, Wellington Street, and Cedars Road. The Cavalry Barracks (Area E), built c 1864, has the appearance of being barren and may indeed be so because it may lie on the fringes of the main cemetery areas. On the other hand a major source of pots and other objects from the cemeteries is the Abbey Field. Over the years, this has been encroached on by the Army as it extended its accommodation and other buildings. The construction of the Artillery Barracks (Area F: now Le Cateau Barracks) in c 1873-4 led to the museum acquiring about thirty vessels including at least nine of glass. Most of these were handed over to the museum by the then Secretary of State for Defence. Workmen said, presumably in relation to their foundation trenches, that they cut through hundreds of pots like currants in a drain (Hull 1958, 253). This dense spread, apparently made up entirely of cremations, must continue eastwards because many more were found when the Artillery Barracks were enlarged in 1903-5 (Area G). As a result of these works, about 100 vessels (apparently only one of which was of glass) and a number of other objects found their way from the site into the museum at this time, mainly through the diligence of Dr Henry Laver. The dense spread of cremations seems to extend southwards

under and beyond Circular Road North because at least 28 other burials were uncovered when this part of the Abbey Field was levelled for a sports ground in 1925 (Area H). Some of the vessels and a sketch plan showing the find spots of the burials are in the Colchester Museum. Elsewhere on the Abbey Field, a few burials have been discovered scattered more or less over the whole area (Fig 8.1).

Near the town centre, there were three sand or clay pits which yielded finds. The Butt Road pit (Area I) was being worked in the 1840s when William Wire recorded many finds and noted perhaps in excess of 200 skeletons, some of which were associated with pottery and glass vessels, personal ornaments, and other objects (p 5, Fig 2.1). Everett's pit (Area J) lay between the north-east corner of the walled area of the town and the river Colne where about 12 vessels and a lead lining from a wooden coffin have been recovered. The third pit lay near North Station, about half a mile north of the town walls and on the other side of the river (Area K). About 50 vessels (apparently only one of glass) from at least 30 burials were uncovered there in the years 1928-30. These probably all came from the west side of the pit. A fourth, very small pit (Area L) lay at the north-east corner of the Abbey Field but nothing appears to have been recorded as having been found in it. This pit was open in the 1840s.

The large excavation (Area M), dug for the railway cutting east of the station in 1842, was visited by Wire who noted several interments including two 'amphora burials'. A series of excavations in the garden of the Union (Area N), apparently for the disposal of rubbish, was responsible for a substantial number of discoveries principally during the years 1930-1. Evidence survives for 20 burials from the area although the extant finds consist almost entirely of human bone, apart from five pots and three lead cinerary vessels (Fig 8.7, p 267).

Six archaeological excavations have revealed substantial numbers of burials: Sheepen in the 1930s (18 burials; Hawkes & Hull 1947, 116; Hull 1963a, 144-7), the 'walled cemetery' in the grounds of the Colchester Royal Grammar School in 1934-9 (14 burials; Hall 1945), Sheepen in 1970-1 (12 late 3rd to 4th century inhumations and 5 pre-Flavian cremations; Niblett 1985, 22), the Maldon Road site in 1971 (18 3rd- to 4th century inhumations, pp 236-44), the St John's Abbey Grounds site in 1972 (34 inhumations; pp 205-13), and the Butt Road cemetery site in 1976-9 and 1988 (over 700 inhumations and at least 5 cremations; pp 4-162).

The identification of cemeteries

[Figs 8.1-8.2, 8.4, & 8.5]

Hull assigned the bulk of the Colchester graves to seven cemeteries (Hull 1958, 252-8) based on what

he perceived to be the main clusters of graves. However the excavations of the 1970s show that this is too simple an interpretation (as Hull himself would no doubt have expected) and that in reality the situation must have been much more complicated. It is more appropriate to term these 'cemetery areas' rather than simply 'cemeteries' because, as the excavations of the 1970s have shown, the burial grounds were probably of multi-phase development and of complex layout.

Hull's **Butt Road Cemetery** (Fig 8.2, Area I) appears from the recent excavations to have been at least two separate cemeteries, the main one of which (that partly excavated 1976-9 and 1986) consisted of two successive inhumation cemeteries. The site produced several cremations indicating an earlier phase still of burials. The burials at the Maldon Road site lie in Hull's West Cemetery. Yet clearly the Maldon Road graves are different from the bulk of the burials from this area which are mainly 1st- and 2nd-century cremations and different again from the multi-period inhumation cemeteries at Butt Road 150 m to the south-east. The graves in the latter, unlike those at Maldon Road, were compact in their distributions and comparatively consistent in their orientations.

Hull's **Northern Cemetery** (Figs 8.2 & 8.5, Area K) seems to have contained only cremations covering the whole period during which this was the standard rite. It represents a discrete group of burials which probably belonged to a cemetery which was in use for over two centuries or so. The group lies well to the north of the occupied area of the Roman town and is separated from it by the river Colne. Possibly the Northern Cemetery was the burial place of the inhabitants of the suburb which from the discovery of foundations and pavements in the vicinity of the Victoria Inn is known to have existed north of the river (CAR 6, 346-7, fig 13.58). The suburb lay about 250 m south of the main concentration of known burials in the Northern Cemetery.

Hull's **Lexden Cemetery** (Fig 8.1) also seems, like the Northern Cemetery, to represent a genuinely discrete group of burials which probably justify being regarded as associated in some way. The earliest burials were found over a number of years clustering in a small area about 80 m across just inside the Lexden Dyke and a little to the south of an entrance in it. Most if not all of these burials belong to the latter part of the 1st century BC but before c 10 BC. Later burials are more widely scattered throughout the Lexden Cemetery area and lack any obvious clustering. These date from the late 1st century BC and conclude with some 3rd or 4th century inhumations. The scattered burials include the Lexden Tumulus (Laver 1927), now dated to c 15-10 BC (Foster 1986, 178). There has been no archaeological excavation in the area apart from that of the Tumulus so that the scattered burials may not be as structureless as presently appears. (It is intended that details about the Lexden Cemetery area will be in CAR 11.)

Hull's **Union Cemetery** (Fig 8.2, Area N) yielded a

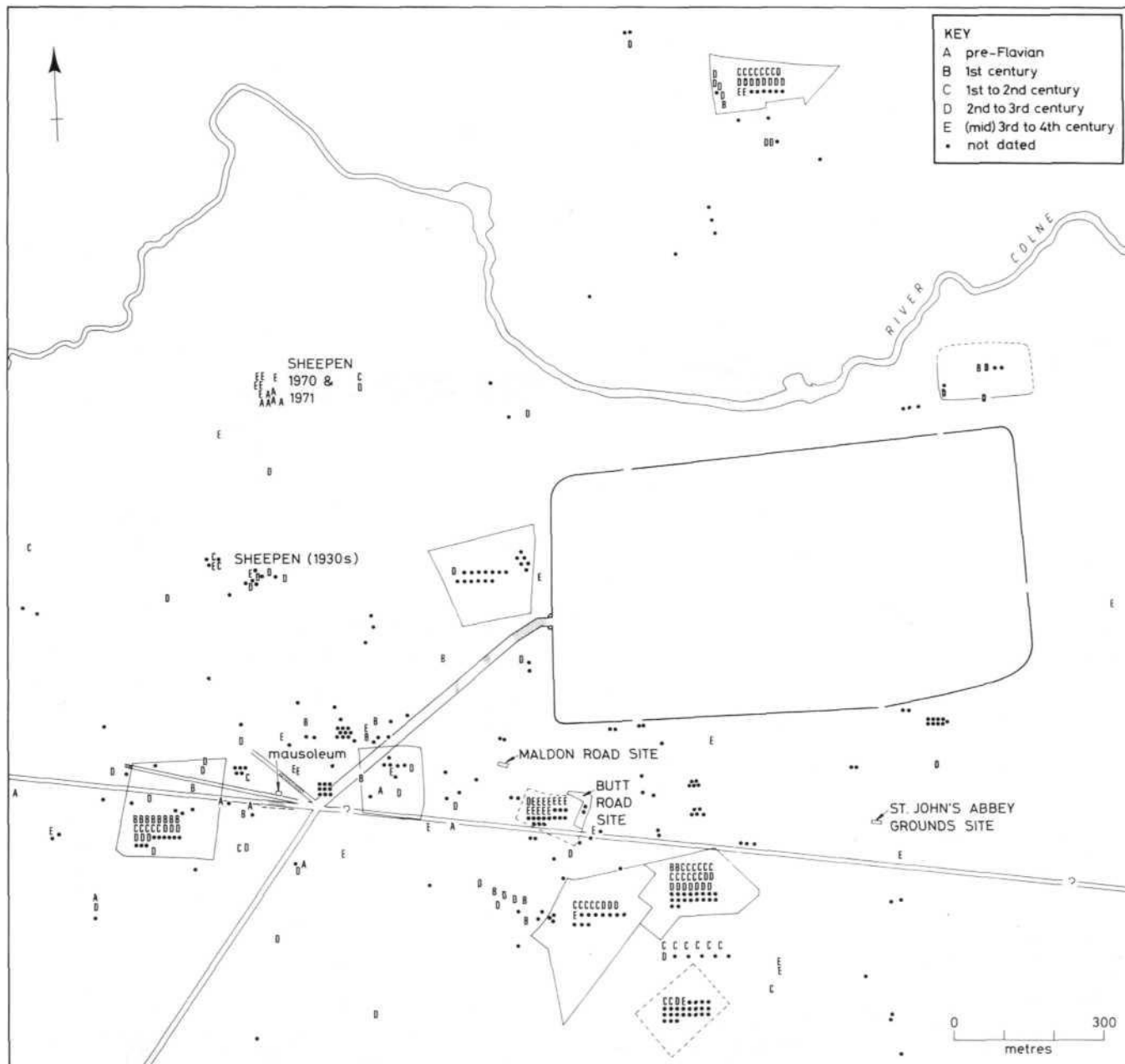


Fig 8.4 The distribution of Roman inhumations and cremations around the walled part of the Roman town in terms of dates. [Pages 261-3]

small group of burials, nearly all of which were inhumations. The only cremations recorded from the area were themselves unusual since they were in lead urns (Hull Graves 216, 266, & 267, p 267).

The area immediately to the north and east of the walled part of the town is practically devoid of recorded burials. Hull's **North-East Cemetery** (Fig 8.2, Area J) is an area which appears to have been exceptional but may not have been so because, as already explained, it was only the existence of a quarry pit which led to the discovery of burials there. The walled part of the town may well have been ringed by groups of burials of which the so-called 'North-East Cemetery' was just an example.

Hull's **West Cemetery** (Fig 8.2: roughly Area B across to Area I inclusive) and his **Abbey Field Cemetery** (Fig 8.2: roughly Areas D, F, G, & H) merge with the Butt Road Cemeteries to form what appears to have been the largest and most important cemetery area in the town. The key to its interpretation lies in understanding the layout of the streets not only because they split up the land into discrete units but also because they probably influenced the alignment not only of extramural buildings but also of some inhumations (p 341).

An important piece of work was the excavations carried out in the 1930s in the grounds of the Colchester Royal Grammar School by Mr A F Hall

(Hull 1958, 4-9). Here he discovered a major east-west street (his so-called 'three-track road') with a minor street nearby leading off to the north-west. Although he was unable to excavate the junction of the two streets, Hall was able to work out its position accurately and show that it lay 50 m to the east of his main excavations. Two other streets are known which point in the general direction of the junction. The more important of these was the street leading from the Balcerne Gate. Hull plotted this mainly on the strength of one sighting in Crowhurst Road and on the assumption (wrongly as it transpired) that the street turned sharply to the south-west immediately when it left the Balcerne Gate. As a result he reckoned that the Balcerne Gate street did not meet the main east-west street until a point well west of Hall's junction. Excavations at Balcerne Lane (CAR 3, 93-154) indicated that this was not so, and that the Balcerne Gate street did not turn sharply until it was beyond the ditch outside the gate. The other street leading in the general direction of Hall's junction was the one from Gosbecks which, from cropmark photographs, Hull calculated met the main east-west street west of the junction so as to pass over a point near the main street where metalling had been found (Hull 1958, fig 1). More recent photographs of the cropmarks at Gosbecks (Crummy 1979, fig 34) have enabled the street to be plotted with more precision than before, with the result that, assuming it to be in a straight line from Gosbecks, it now would seem to lead exactly to Hall's junction. (The metalling observed by Hall to the west (Hull 1958, 58, fig 1, G/1) must have been part of another gravelled feature.)

Determining the precise direction of the main east-west street west of Hall's junction is a problem. Hawkes and Hull in *Camulodunum* show the street as taking the form of a series of short straight stretches which more or less follow the modern Lexden Road and which passes through the Lexden and Gryme's Dykes where the modern road passes across them (more or less as shown here in Figure 8.1). In the case of Gryme's Dyke, there is no doubt that there was an entrance at the point where the present road crosses it because there are two streets known from cropmarks radiating from this spot (Fig 8.1). On the other hand, there is little hard evidence to support the presumed Lexden Dyke entrance other than the assumption that the modern road must cross the dyke at an original entrance because this would have provided a convenient ready-made gap in the earth-work. However there was an entrance about 230 m south of the presumed one on the Lexden Road; it was excavated by C F C Hawkes in 1932 (CAR 11; Hawkes & Hull 1947, 12-13). If Hall's plotting of the main east-west street is projected westwards in a straight line, then it would pass about 100 m to the north of this entrance. Since Hall was able to uncover the street only over a comparatively short distance, it is possible that he was not able to plot the alignment of the street very accurately; a realignment of about 3 or 4 degrees on his plan would make the street pass through the gap (as shown here in Fig 8.1).

If the street is projected eastwards in a straight line on

the adjusted alignment, it reaches the waterfront at the Hythe at a point corresponding to the probable centre of the medieval landing area (Fig 8.1). This was established as the 'New Hythe' in the Norman period as a replacement for 'Old Heath' (ie Old Hythe), an earlier, Anglo-Saxon landing area further downriver (CAR 1, 47). The position of the waterfront in the Roman period is obscure but the site of the medieval Hythe is one obvious possibility. A road was discovered in the 1970s linking a presumed waterfront at Mistley on the Orwell with Colchester (Farrands 1975). The road was straight and extended for about 4 km to meet the river Colne about 100 m north of where Hall's main east-west street would meet the Hythe on the alignment presumed here (Fig 8.1).

Had an east-west street to the river existed in the way described, then it would have passed just south of the Butt Road site. Although no metalling was on the site, the alignment and distribution of the graves nearest the south side of the site were consistent with such a supposition (pp 15 & 55). The presumed road is on the same alignment as the Roman church thus providing further support for its presence and alignment.

A notable aspect of the known tombstones and sculptured stone is their concentration along the frontages of the main approach into the colony where this passed across the major street junction. The concentration is most marked along the frontages of the parts of the roads labelled ABC on Figure 8.5. Clearly this must have been the most prestigious part of the cemetery areas. These frontages included the tombstones of Facilis and Longinus, Hall's 'walled cemetery' and, amongst others, the monument containing the 'Colchester Sphinx'.

Another feature of interest relating to the cemeteries is the fact that the distribution of known inhumations is distinctly different to that of cremations (Fig 8.4). Unlike the latter, the vast bulk of the recorded inhumations lies close to the town centre. The Union Cemetery area, which seems to contain almost nothing but inhumations, is adjacent to the town walls, and south of the town almost all the known inhumations lie between the line of the supposed road to the Hythe and the southern defences. Included in this last group are the inhumation cemeteries at Butt Road (pp 4-162), Maldon Road (pp 236-44), and St John's Abbey Grounds (pp 205-13). The difference between the distributions of the inhumations and cremations is presumably linked to the contraction of the town's suburbs in the late 3rd century when, apparently in response to Saxon raids on the town (or at least the threat of them), most of the houses in the suburbs were left in favour of more secure dwellings within the town walls. The evidence for these changes is substantial and comes principally from the Balcerne Lane and Middleborough excavations (CAR 3, 16-19). The positions of the inhumation cemeteries further corroborates this view because they indicate independently that, perhaps in the 3rd century, when inhumation became the predominant burial rite, there was a contraction

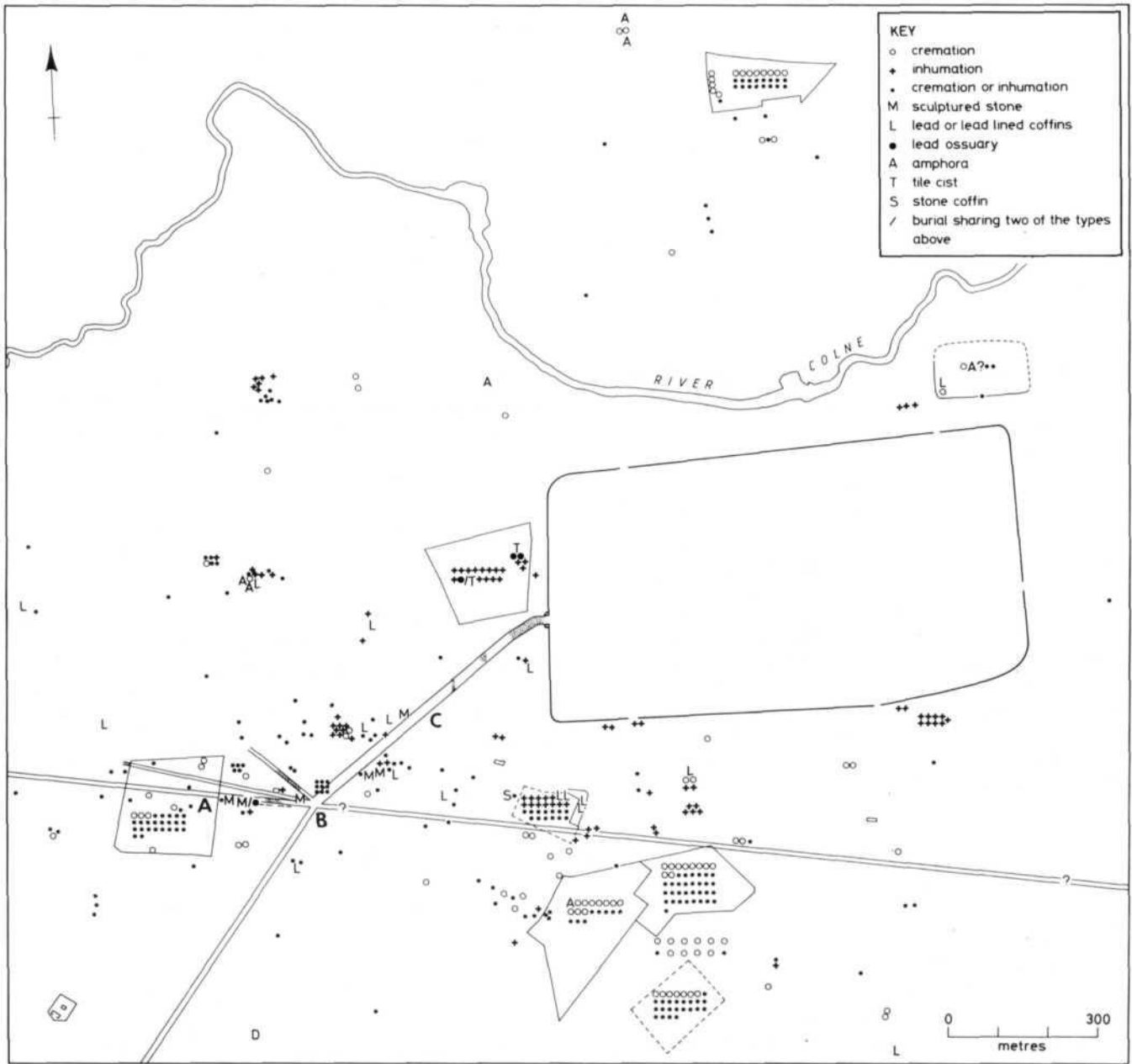


Fig 8.5 Types of Roman burial present around the walled pan of the town. [Pages 264-8]

of the *pomerium* thus freeing land for burial which had not been previously available.

Types of burials

At Colchester, there is no clear evidence for the date of the changeover from cremation to inhumation. Either it occurred *c* 250-275 or there was a lengthy period up until this time when the rites were used concurrently. The latest datable cremation appears to

be Hull Grave 408; this contained two pots, the one of which is Hadham Ware (of form CAM 365) and therefore is probably datable to after *c* 240 (Going in Andrews forthcoming, & Going pers comm). It is not possible to identify and date closely the earliest inhumations so that the appearance of inhumation as a burial rite cannot be placed more accurately than simply between *c* AD 150-275. Certainly, according to the more closely-dated examples, inhumations were taking place at Butt Road, Maldon Road, and St John's Abbey Grounds within the period *c* 250-300. Important in this respect is grave F22 at the St John's Abbey Grounds site which, to judge by the associated coins, was dug *c* 270-80 (p 209).

Cremations

[Figs 8.2-8.7]

Out of 630 graves, Hull catalogued only 144 (approximately) in which either burnt bones were specifically recorded or the term 'cinerary urn' is used. However it is clear that most — perhaps as many as 80 or 90 per cent — of the burials in Hull's inventory must have been from cremations. This is because the distributions of known cremations and inhumations are distinctly different and indicate that most of his burials were from areas predominantly used for cremations (see p 263). Also the bulk of the material is of 1st- and 2nd-century date and thus matches in period those cremations which can be dated. Moreover, compared with the interments from the recently-excavated inhumations, Hull's graves contain proportionally few armlets and necklaces (p 268, Tables 8.1 & 8.2) and objects of this kind seem to characterise inhumations.

The uncertainty in the actual numbers of cremations makes estimating the number of vessels per cremation very difficult. The problem is further compounded by the fact that many of the graves represent more than one burial. However, the typical cremation seems to have consisted of an urn for the bones, possibly one additional vessel, and no other objects. The average contents of a grave (according to Hull's inventory) works out at 2.4 vessels. The cremation was nearly always placed in a pot but a glass vessel or, in a few cases, a casket could be used. There is no clearly-documented example of a cremation having been buried without being in a container of some kind. Many of the vessels containing cremations are recorded as having been found sealed in some way, usually by a lid, a large fragment of pottery, or a tile. Often the objects placed with the body had been burnt, fused glass bottles being especially common.

The cremated remains, together with their other associated objects, were occasionally placed in cists of *tegulae*. At least eighteen examples are known from Colchester. The quality of the records of each of these varies. Often they are simply referred to as 'tile tomb' with no other information given. Sometimes the number of tiles involved is known but rarely their positions in the ground.

The simplest cist seems to have consisted of two upright tiles supporting a single horizontal one which formed a cover. In some cases (eg Hull Grave 121, Fig 8.6), a tile was used as a base. Some had four upright tiles, one on each side, whilst some incorporated six to make a completely-enclosed chamber. Exceptional was Hull Grave 455 which was found in Beverley Road in the 19th century. It consisted of a small square chamber made from forty coursed tiles, the upper overlapping the lower ones until they nearly reached the top where the aperture was closed by two tiles. The method of construction was similar to that used at the Mersea Barrow (Hull 1963b, 159-60). There is some doubt about the precise contents of the chamber but it is said to have contained four glass vessels (two with cremated

bones) plus possibly five pots (one with a coin of Domitian), a lamp, and two bronze pins (one with an amber head and some amber beads on the pin).

Over nineteen graves are recorded (up to 1990) as being associated with complete or nearly-complete amphoras. There is a distinctive concentration of these at Lexden (as indicated by 'A' on Figure 8.1 & Hull Grave 294; *CAR 11*: Groups 10-13 & 23-4) where they are pre-conquest, except perhaps Hull Grave 294 which may be Claudian. The others are all post-conquest (including those provenanced as simply Colchester) and they occurred widely around the town centre (indicated by 'A' on Fig 8.5). In the three, possibly four, cases where the type of the amphora can be established, they all prove to be form Dressel 20 (ie the Spanish globular type) which was the commonest amphora in the town from the Flavian period until about the end of the 3rd century. The size and shape of the globular amphora made it ideal for reuse as a ready-made cist. The neck and handles were usually cut off so that the grave goods (including the vessel containing the cremation) could be placed inside.

The records relating to the globular amphora burials are very patchy and incomplete. Nevertheless it is clear that they were usually well-endowed burials. The most substantial group of objects known from a single grave of this type is Hull Grave 302, the 'Lockhart Burial' (Hull 1963a, 144-6; Fig 8.7; *CMR* 1935, 18-26). Found during the Sheepen excavations of the 1930s, the amphora contained a wooden box or casket, nine pottery vessels, two glass vessels, a lamp, two brooches, a mirror, a knife, a bone needle, a bone pin,

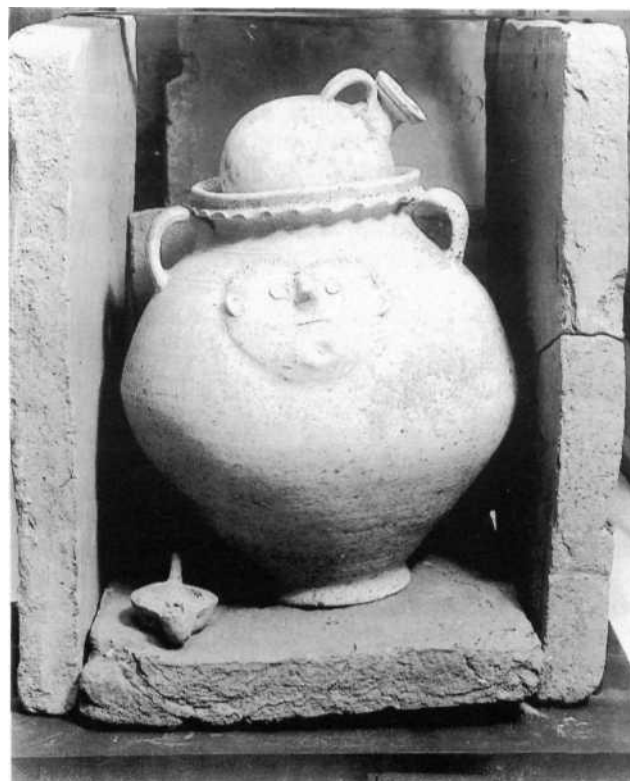


Fig 8.6 Tile tomb (Hull Grave 1.21) as displayed in the Colchester Museums.



Fig 8.7 'Amphora burial' during excavation at Sheepen in the 1930s (the 'Lockhart Burial' — Hull Grave 302).

twenty beads, and various other small objects. Outside the amphora lay a flagon. Another large amphora burial, found in 1843, apparently contained six glass vessels and a lamp. Of the twelve mirrors known from the Colchester cemeteries, three come from these burials (Hull Graves 302, 497, & 498). The dating evidence for this kind of burial, such as it is, points to it being current in the 2nd and 3rd centuries. The Lockhart Burial dates to c 150-200, whilst Hull Grave 359 contained a coin of Domitian, Hull Grave 203 (a dubious amphora burial) a coin of Hadrian, and Hull Grave 490 possibly one of Faustina.

Inhumations

Hull lists the inhumations of which he could find records (53 instances refer to more than one burial) but these must be very under-represented since inhumations attracted less antiquarian attention than cremations because of the frequent absence of pots or other objects. The excavated inhumations of the 1970s echo the earlier evidence of the variations to be found in Hull's inventory although in the latter there are a few features unparalleled in the work of the 1970s.

The alignments of the earliest inhumations varied considerably and presumably were influenced by physical features such as boundaries. The inhumations at the Maldon Road site fall into this category and seem to have been affected in alignment by the

nearest roads (p 341) whereas the Period 1 cemetery at Butt Road may have been influenced by plot boundaries and an east-west road to the south (pp 15 & 55). The practice of east-west orientation in which the head was placed at the west end brought with it greater organisation of the cemetery layout. In Colchester only the Butt Road site provides any dating evidence for the introduction of the latter event (ie c 320-40; see pp 159-60 & 180-2).

According to the evidence from the sites at Butt Road, Maldon Road, and St John's Abbey Grounds, well over 90 per cent of the inhumations were in wooden coffins. Coffins made of split tree trunks have been noted at Butt Road (p 122). Occasionally (less than 0.5 per cent at Butt Road), lead was used in the manufacture of coffins (p 267).

Stone coffins seem to have been very rare in Roman Colchester, only two being attested. One (Hull Grave 375), of adult size, was uncovered in Burlington Road near the Butt Road site. The other example (Hull Grave 153) is small and unprovenanced. It had been reworked and reused, first as a sink and then as a step in a building in the High Street.

There are a few cases where the inhumations appear to occur without coffins (Butt Road, p 13 & 105-11; Cedars Road, Hull Graves 270-2, 273A, & 287, & Rudsdale 1931). Some of the bodies had been placed carelessly in their graves with little regard for their disposition as if they were of a low social order or criminals. Some were flexed or prone, and at Butt Road one was a multiple burial in the form of three bodies in the same pit. The latter grave appeared to lie outside the main cemetery area.

Also without coffins were two decapitated burials found in 1983 on a site inside the walled part of the Roman town (CAR 6, 378, fig 13.252). In addition, one of the inhumations at Cedars Road (excavated in 1930):

'was lying in a crouching position, on the right side, orientated east to west, and had apparently been decapitated, the remains of the skull being found near the pelvis. There were a few traces of wood and three nails near the left side, though a coffin seems unlikely' (Hull's inventory, Hull Grave 271).

Nearby was another group of bones (Hull Grave 273A) which consisted of a human skull 'apparently deliberately cut up', three femurs and a right forearm. The fact that the bones were partly jumbled must make the decapitation dubious although the position of the body in the grave was abnormal and is at least consistent with the apparently low-grade status of similarly-buried corpses at Butt Road (pp 105-11). (For a discussion of decapitations, see pp 194-5.)

At least one child at Butt Road had been laid out extended, face upwards, on a *tegula* placed flanges upwards. Another *tegula* had then been placed on top with its flanges downwards. The infant had died at or within a few weeks of birth (p 124).

At Butt Road the edges of 9 graves were marked and 22 others were partially-lined with fragments of tile and Kentish ragstone. No other examples have been positively identified at Colchester although Hull Grave

289 consisted of two pots, one containing a cremation, in a grave lined with Kentish Rag. The details are insufficient to make clear if this was like a tile cist but made of rubble, or if it was simply rubble laid in the same manner as the material in the Butt Road graves (see p 101).

Burials with lead

[Fig 8.8]

Lead could be associated with burials in various ways.

a) lead coffins, lead-lined coffins, and lead 'strapping'

There are at least 21 coffins known from Colchester which were either made entirely from lead or were wooden coffins lined with lead. The records are not sufficient to allow the precise type to be identified with certainty in most cases. At least four contained gypsum or some other form of lime plaster (see p 275).

Lead coffins were usually decorated in relief on the lid and the sides. The commonest motifs are scallop shells, circles, and bead-and-reel. These seemed to have been formed by pressing into the moulds real scallop shells, the bases of pots with clear footings, and specially-carved wooden battens respectively. Some lead coffins had been placed inside wooden ones (ie Hull Graves 349, Balkerne Lane (CAR 3, 143-5) & Butt Road Grave 295); it is possible that this was the normal arrangement.

Lead-lined coffins consisted of plain sheets of lead folded and nailed to the inside of what presumably were standard wooden coffins. Sometimes the lid was decorated. A good example of a plain lining was found at the Oaks Drive site in 1975-6 by workmen who rolled it up ready to be sold for scrap (CAR 6, 344-5, fig 13.45). The nail holes and the original folds show how the lead sheet was attached to the wooden coffin. Other fairly certain cases of lead-lined coffins are Hull Graves 349 and 350. Of the latter, Hull wrote,

'It was quite plain except the lid which is ornamented by two crosses with a plain bar between, all formed by impressing a short piece of ornamental wooden moulding on the sand mould upon which the lead was cast. The upper parts of the sides and ends of the coffin had been bent down so as to cover the upper edge of the enclosing wooden coffin and the lid lay on these and was retained by iron nails driven through into the wood' (Hull's inventory).

It is not clear if a wooden lid was then fixed on top; the fact that the lead lid was decorated suggests that this may not have been the case although the wooden coffin containing the decorated lead coffin from Butt Road appears to have had a wooden lid. The lead lid of Hull Grave 349 was also decorated.

However it was unusual in that attached to one end so as to be over the face of the corpse was a length of lead pipe down which it is supposed food or drink was passed (Laver 1889). Butt Road Grave 403 contained a lead liner. Rather than having a lid, the edges of the liner were folded inwards (p 123).

Sometimes flat strips of lead were nailed internally along the joints to make what in effect must have been a cheap alternative to the fully-lined lead coffin. Hull Graves 290 and 371 are two definite examples; Hull Grave 616 may have been a third.

b) lead urns

Four of these are known from Colchester (Fig 8.7; Toller 1977, 27 & 45), each of which contained cremated bones. The most important is pre-Flavian and contained the cremated remains of Facilis (Hull Grave 39). This was a simple cylindrical-shaped urn with a flat lead disk for a lid. Hull Graves 266 and 267 each consist of a lead urn of similar design. They are cylindrical with rounded shoulders and upright necks. Both had close-fitting lead lids in the shape of a stopper. A similar but much shorter lead urn (Hull



Fig 8.8 Four lead ossuaries. Above: Hull Grave 39 (left) and Hull Grave 267 (right). Below: Hull Grave 266 (left) and Hull Grave 216 (right). [Pages 267-8]

Grave 216) was in a tile tomb. These last three may be late in terms of cremation burials since they all came from the Union Grounds where, apart from the lead urns, nothing has been found but inhumations. In addition to the lids on lead cremation urns, there is an isolated case of a crudely-made lid of cast lead covering a glass cremation urn inside an amphora (Hull Grave 181).

Objects buried with the dead

[Figs 8.5 & 8.9-8.12; Tables 8.1-8.4]

It is not a simple matter to determine the average number of objects buried with the typical grave. This

is partly because Hull's list, being largely and inevitably a catalogue of collectors' items, is distorted, and partly because the number of grave goods in each grave depended to an extent on location and period.

Butt Road throws light on the 4th century (pp 39 & 129-35). Here, for the presumed pre-Christian period, typically at least half of the graves contained at least one object. Later, with the introduction of east-west orientation, grave goods were rarer: only six per cent of adults and twelve per cent of children were accompanied by objects (girls being favoured because of the high proportion of personal adornments). There has been no extensive excavation of a cremation cemetery in Colchester so that the situation in the 1st and 2nd centuries is uncertain. However most cremations seem to have consisted of just a cinerary urn plus possibly one other vessel. The

pottery	1360+ (including 12tettines)
glass	132 (of which at least 69 are unguentaria)
armlets	63 +
necklaces	10 +
pins	23 +
brooches	28
mirrors	12
caskets	9 (+ 2 possible examples)
coins	66 (including 36 from Hull Grave 3)
lamps	71
earrings	1 pair
finger-rings/rings	8 +
misc & unidentified	- (not established)

Table 8.1. Approximate (probably minimum) totals of objects listed in Hull's Inventory of Graves. [Pages 268-75]

	Butt Road		Maldon Road (MRC 71)	St John's Abbey grounds (IRB 72)
	Period 1, Phase 3	Period 2		
pottery	20	13	4	12+?1
glass	1	8	2	1
armlets	3	104 +?2	-	12
necklaces	-	8 approx	-	-
pins	1	12	-	-
brooches	-	1	-	-
caskets	-	2	-	-
coins	-	6 (+5)	-	4
earrings	-	-	-	1 pair
finger-rings/rings	1	10 (+1)	-	?1
footwear	12	7	3	1
purses	1	-	-	?1
food offerings	-	-	-	1 chicken
combs	-	7	-	-
knives	-	1	-	1
miscellaneous	2	1+2+1+1+1	-	-

Table 8.2. Objects deposited in the graves at three cemetery sites excavated in the 1970s and 1980s. [Pages 268-75]

GRAVE NO	C	M	A	N	P	F	B	L	K	OTHERS
<i>female (with casket)</i>										
25	1	1	-	-	-	-	-	1	-	bead
81	1	1	1	1	-	1	-	-	1	32+ bone counters, 4 dice, tweezers & nail cleaner, ?pendant, pendant, 2 finger-rings
302	1	1	-	1	1	-	2	2	-	knife, bone discs, needle, spatula, ?finger-ring
325	1?		1+	-	-	-	10	-	-	
552	1		3	1	-	-	-	-	-	copper-alloy finger-ring
BUC G69	1		7?	2?	-	-	-	-	-	
BUCG519	1		4?	-	2	-	-	-	-	comb, pins on head
<i>?female (with casket)</i>										
9	1		-	-	-	-	4	-	-	(cremated bone in casket)
229	1		-	-	-	-	-	-	1	(cremated bone in casket?)
236	1?		-	-	-	-	-	-	-	
237	1		-	-	-	-	-	-	-	
296	1		-	-	-	-	-	-	-	(casket outside lead coffin, 0.3 m from head)
521	1		-	-	-	-	-	-	-	(tettine)
Sheepen (1971)	1									
<i>female (with mirror but no casket)</i>										
44	-	1	1							
93	-	1								
338	-	1					1	1		buckle
497	-	1						2		
498	-	1								
516	-	1					1			
536	-	1		1						
586a	-	1								
586d	-	1					1		1	1 ring
<i>presumably female</i>										
7				1	2+				3	bone object, iron object
28			2						1	copper-alloy chain
29			1?	1?						
52					1					glass ?mixing rod
69			5							
72					1					
74			3					1		
87			1							jet ring (?for hair), 3 jet beads, jet figure
88				1	2			1		
96			1			1				
97			4		3	1				
104					1					
105			7							1 ?spearhead
167				1						
168			4							
180			2							
218			1					1		
270			1							
279			1							
349										a pair of earrings
352			4							
362			3							?thimble, ring
363			1							
372			1							
392			3				1		2	
415			1							
420					1					'tiara'
422			1		1					shale object

continued....

...continued from previous page

GRAVE NO	C	M	A	N	P	F	B	L	K	OTHERS
423			-	-	2	-	-	-	-	
429			2?	-	-	-	-	-	-	shale hair-ring??
431			4	-	-	1	-	•	-	
449			-	1	-	-	-	-	-	
455			-	-	2	-	-	1	1	amber beads
466			1	-	-	-	-	-	-	
468			2	-	4	-	-	-	2	
522			-	1	-	-	1	1?	-	2 spindlewhorls
553			-	1?	-	-	-	-	-	
582			1?	-	-	-	-	-	-	
<i>gender uncertain</i>										
3			-	-	-	-	-	1	36	miniature couch, figurines, (tettine)
17			-	-	-	-	1	1	-	copper-alloy object
19			-	-	-	-	-	-	-	spoon
32			-	-	-	-	-	-	-	lead object
36			-	-	-	-	-	7	-	bone object
37			-	-	-	-	-	2	2	rings
45			-	-	-	-	-	1	-	bone box
75			-	-	-	-	-	-	3	spoon
95			-	-	-	1	-	-	-	'spear-head', bead, jet ring
109			-	-	-	-	4	-	-	
111			-	-	-	-	-	-	-	copper-alloy chain, 2 iron rings
273			-	-	-	-	-	-	-	iron knife
326			-	-	-	-	-	2	1	iron 'arrow-head', iron nails
340			-	-	-	-	-	2	-	a 'horn'
359			-	-	-	-	-	1	1	a copper-alloy leaf
425			-	-	-	-	-	-	-	tweezers, jet object
444			-	-	-	-	-	-	-	copper-alloy cup
446			-	-	-	-	-	-	-	axe head, whetstone
453			-	-	-	-	-	-	-	'head of an eagle'
490			-	-	-	-	-	1	1	
585a			-	-	-	-	2	1	1	copper-alloy chain (for the brooches)
585d			-	-	-	-	-	1	-	key
586b			-	-	-	-	-	-	1	2 rings (from a casket?)

Table 8.3. Contents of the graves as listed and described in Hull's inventory subdivided according to likely gender as indicated by the grave goods. The table includes the two graves at Butt Road which had caskets. Pottery and glass vessels are excluded apart from pots with facemasks. Also omitted are 9 graves containing 10 coins and 31 graves containing 39 lamps (plus associated whole vessels). [Pages 268-75]

C ...caskets, II ...mirrors, A...armlets, N ...necklaces, P ...pins, F ...facemaskflagns, B ...brooches, I__lamps, K ...coins (including pierced coins)

richest burials tend to have come from the area on the south-west side of the town (see below).

The objects occurring in the graves do not seem to have been specially-made funerary pieces but were objects which had been in normal everyday use. Most of the objects and vessels can be paralleled by finds from the town-centre sites although as site finds some may have been rare. In other words it is hard to see much difference between the objects used in everyday life and those in graves. Indeed it seems very likely that some objects may have been the more important or favoured possessions of the dead person.

In some cases, the vessels were poorly-made and of

inferior quality (eg wasters in Hull Graves 53 & 223). At least one had been repaired with lead (ie a *terra sigillata* platter in Hull Grave 86) thus suggesting extensive use. Often they are coated inside with lime-scale showing that they had been used previously.

A striking feature of the surviving vessels is that a large proportion of them are small examples of their type (eg those in Figures 8.9 & 8.10). This is also true of a few of the lamps (Fig 8.11). The most obvious explanation is that in life small pots and lamps could be associated with children and that objects of this type usually indicate children's graves. Certainly this conclusion holds good at the recently-excavated sites. At St John's Abbey Grounds, one grave yielded

GRAVE NO	AGE	C	A	N	P	B	K	OTHERS
<i>female</i>								
1	Y	-	13	1	-	-	-	bell and bead on one armlet
15	Y	-	2	-	-	-	2	
16	Y	-	4	-	-	-	-	
24	Y	-	6	-	-	-	-	
69	A	1	7	2?	-	-	2	
109	Y	-	4	-	-	-	-	comb
115	Y	-	1	-	1	-	-	
126 (?F)	A	-	1	-	-	-	-	
171	Y	-	17	1	-	-	-	2 finger-rings, footwear, knife
174 (F)	A	-	2	1	1	-	-	finger-ring, comb
291	?	-	1	-	-	-	-	
342	Y	-	-	-	1	-	-	
378	Y	-	14	-	-	-	-	
404	Y	-	3	-	-	-	-	headband
406	Y	-	1	-	-	-	1	
454	Y	-	5	-	-	-	-	
503	Y	-	6	2	-	-	1	
519	Y	1	7	-	2	-	-	comb
537	A	-	4	1	7	-	-	3 finger-rings
609	Y	-	2	-	-	-	-	
638	Y	-	2	-	-	-	-	
647	A	-	8	-	-	1	-	2 finger-rings, comb
679	A	-	1	-	-	-	-	
687 (F)	A	-	-	-	1	-	-	
<i>gender uncertain</i>								
41 (M)	A	-	-	-	-	-	-	finger-ring
70 (M)	Y	-	-	-	-	-	-	2 <i>styli</i>
94	Y	-	-	-	-	-	-	2 bells on chain
100 (?M)	A	-	-	-	-	-	-	footwear
101	Y	-	-	-	-	-	-	2 belts with copper-alloy fittings
125	A	-	-	-	-	-	-	footwear
177 (F)	A	-	-	-	-	-	-	footwear
188 (M)	A	-	-	-	-	-	-	footwear
258 (M)	?	-	-	-	-	-	-	comb
273	Y	-	-	-	-	-	-	footwear
274	?	-	-	-	-	-	-	footwear
277	Y	-	-	-	-	-	-	footwear (2 pairs)
278	?	-	-	-	-	-	3	?purse with pendants
298	A	-	-	-	-	-	-	footwear
327	A	-	-	-	-	-	-	finger-ring
377 (F)	A	-	-	-	-	-	-	comb
431 (M)	A	-	-	-	-	-	6	
439 (M)	A	-	-	-	-	-	-	finger-ring
444	Y	-	-	-	-	-	-	footwear
458	?	-	-	-	-	-	-	footwear
487	A	-	-	-	-	-	-	comb
500	A	-	-	-	-	-	-	footwear
533	?	-	-	-	-	-	-	footwear
554	A	-	-	-	-	-	-	footwear
555	Y	-	-	-	-	-	-	footwear
723 (F)	A	-	-	-	-	-	-	tube
730 (F)	A	-	-	-	-	-	-	footwear
601	A	-	-	-	-	-	-	footwear
613	?	-	-	-	-	-	-	footwear
628 (M)	A	-	-	-	-	-	-	key V:F7
693 (F)	A	-	-	-	-	-	-	lead-alloy dish

Table 8.4. The contents of the graves at Butt Road subdivided according to likely gender as indicated by the grave goods alone. Pottery and glass vessels are excluded. The gender where deduced from the bones alone is given in brackets in the first column. [Pages 268-75]

AGE ...Y (under 20) & A (over 20 years old), C ...caskets, A ...armlets, N ...necklaces, P ...pins, B ...brooches, K ...coins (including pierced coins)

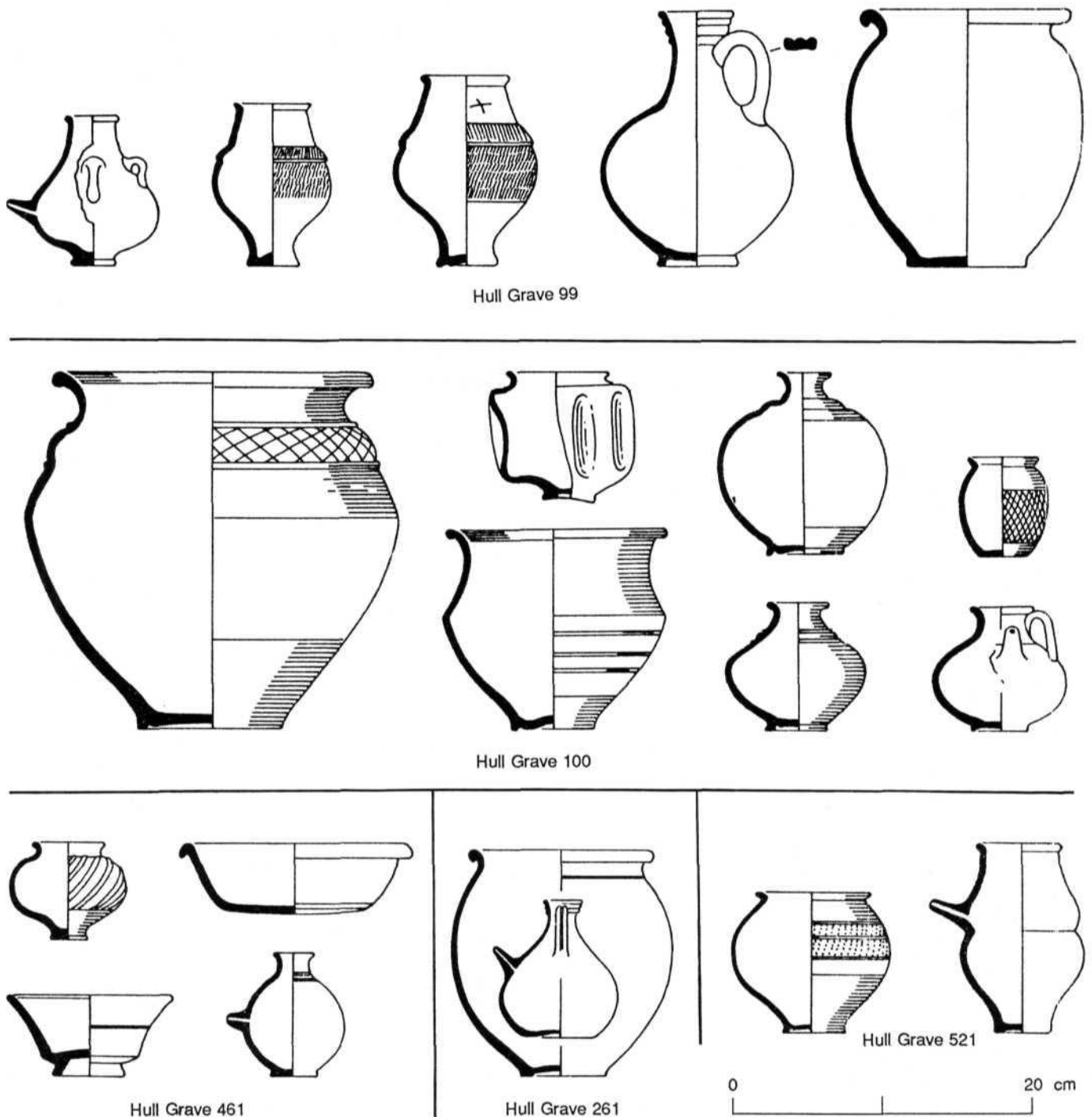


Fig 8.9 Examples of Hull graves containing small vessels. 1:4. [Pages 270 & 272-3]

two abnormally small vessels, one of glass and the other of pottery. The grave (F78), about 1.3 m long, belonged to a child whose age at death cannot be established. Grave F22 was also of a child. It contained a large platter and a tiny beaker 90 mm high. The grave of another child (F71) contained a pot which was probably slightly smaller than usual, but not obviously so. A group of three small pots probably came from the grave of a child but no information could be retrieved about the grave (p 212). At Maldon

Road, three small pots had been placed outside a child's coffin (F53) and at Butt Road, two small pots of identical form lay at one end of a child's grave (Grave 58). The other whole vessels from these three sites are of normal size and were associated with adults, apart from a miniature jar from Butt Road Grave 624 which stood upright outside the head end of the coffin. (The body in the latter is estimated as having been 18 to 20 years old. The bones are poorly preserved and the body appears to have been rather

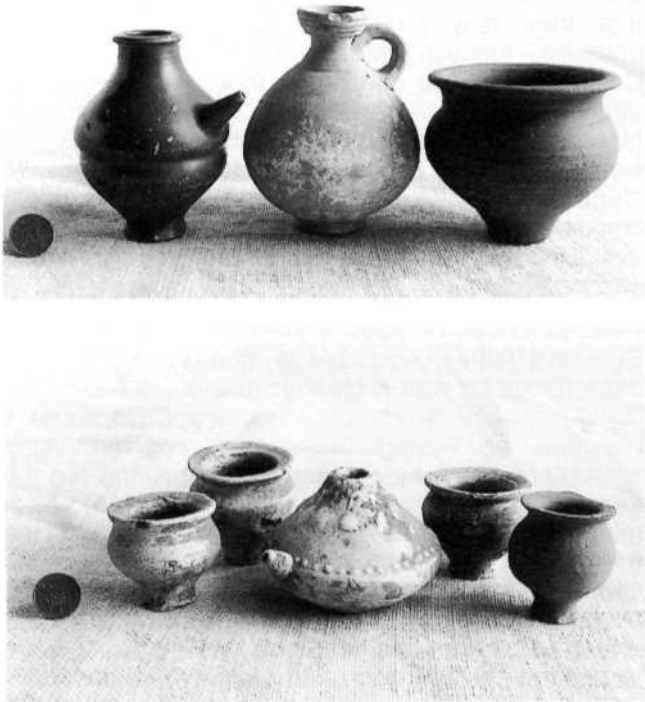


Fig 8.10 Two graves with small vessels and tettines. Above: Hull Grave 90. Below: Hull Grave 4. The scale is a two-penny piece.

short as if it might have been that of an adolescent.)

There was unlikely to have been any hard and fast rule that children should be accompanied by vessels smaller than average size as the platter referred to above from F22 in St John's Abbey Grounds indicates. Moreover the 1st- and 2nd-century graves with small objects tend to have a pot of normal size in the group; this is usually a jar or urn large enough for the cremated bone.

The reason for the occurrence of small pots is not clear. It was not simply because coffins of children had less room inside for large pots because often the pots were placed outside. They may reflect the size of the portions of food appropriate to the deceased, either in life (if the pots had been used by the deceased) or after death (if the vessels had been chosen specially for burial by the parents or guardians). The occurrence of small lamps in Hull Grave 36 complicates the issue because it is hard to understand why undersized lamps should be associated with children, unless they were toys (despite the fact that they could function as normal lamps). However Grave 36 contained eight other vessels. These are of normal size so that the grave may in any case have been of an adult.

The function of tettines is obscure and they have been interpreted variously as feeding bottles, lamp fillers, and inkpot fillers. At least 12 of Hull's graves contained tettines. However, almost without exception, they are associated with small pots (Figs 8.9 & 8.10), thus suggesting that these vessels should be regarded as feeding bottles or something similar (like the modern spouted cups designed to help infants drink rather than suck).

The gender of the dead person can sometimes be deduced from associated objects. Mirrors, necklaces, pins, and probably armlets can all be regarded as good indicators of the graves of females. Hull Grave 302, the 'Lockhart amphora burial', is probably the best example. Inside an amphora had been placed a mirror, twenty glass beads from a necklace, a bone pin, two brooches, a knife, a bone needle, a possible bone finger-ring, a handle of a spatula, nine pottery vessels including a honey-pot with the cremated bones, two glass unguentaria, a lamp, and various other objects. Outside the amphora lay a flagon (Hull 1963a, 144-6; CM? 1935, 18-26).

Caskets are problematic but would have been associated with females if they had been boxes for

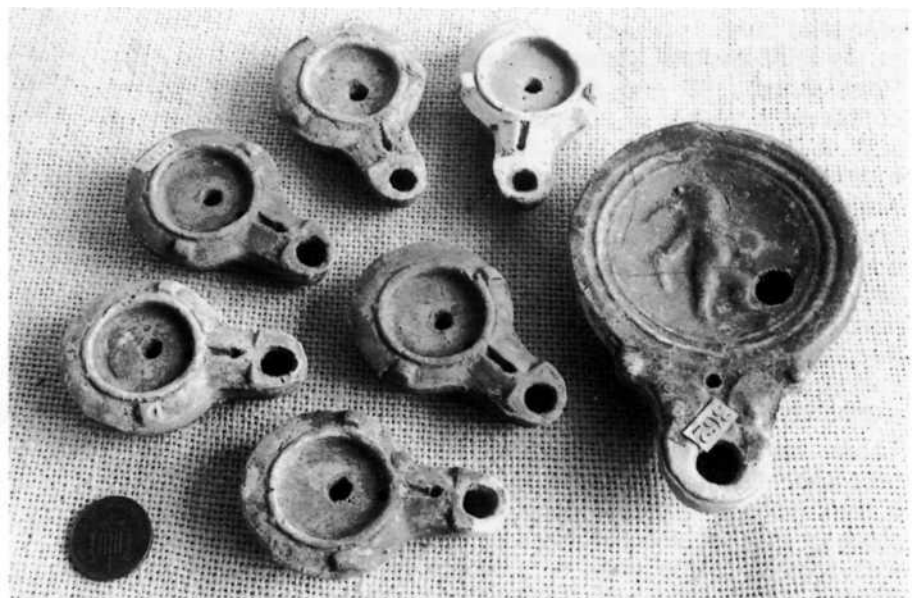


Fig 8.11 Lamps in Hull Grave 36. The scale is a two-penny piece. [Pages 270 & 273]

jewellery, toilet instruments, and cosmetics. Carcopino (1978, 188) describes how it was the practice of upper-class Roman women to keep these kinds of items in a special box which they would take with them to the baths, and a lockable box of this sort is depicted on a woman's tombstone from South Shields (Allason-Jones, 129 & 25, fig 6). The caskets from Butt Road Graves 69 and 519 contained various female personal adornments and in the latter case a comb, and thus fit the interpretation neatly. Of the 12 positively-identified caskets from Colchester, only six are known to have been associated with ornaments which can be regarded as indicating a female grave. Thus the evidence from Colchester as a whole is not unequivocal in this respect although neither does it mean that some of the caskets were from male graves simply because they were not associated with ornaments distinctly female in character. The important examples of caskets from the cremation cemetery at Skeleton Green in Braughing, Hertfordshire, are regarded as being specially-made funerary items intended primarily to hold the cremated remains (Borrill 1981, 304). This is for three reasons: a) all six were used as the container for the cremated remains, b) at least one casket seems to have been manufactured in such a way that once closed it could not be re-opened, and c) the lion-head motif on many of the studs (commonly found as parts of caskets from Braughing, Colchester, and elsewhere) is seen as symbolising the 'all-devouring jaws of death' because of the widespread occurrence of the lion in stone funerary monuments (Borrill 1981, 315-21; Toynbee 1964, 113). The gender attributions of the Braughing cremations are not particularly positive and therefore are not helpful. Four are regarded as probably female and two as 'probably males' (Borrill 1981, 317). Many of the caskets from Colchester had keyholes, lock-plates, and locking mechanisms and there is no evidence of any without keyholes like the one mentioned above from Braughing. Moreover, the casket in Hull Grave 296 still had the key in its keyhole (Hull 1963a, 144) as did that in G69 at Butt Road (p 148, Fig 2.84). Although at least two held cremated bone (Hull Graves 9 & 229), at least three of the later caskets accompanied inhumations (Butt Road Graves 69 and 519; Hull Grave 296) and contained a variety of objects but no bones (Table 8.3). It is hard to see the latter as specially-made funerary items: why, after making a wooden coffin, would it still have been felt necessary to provide a smaller box in the tradition of the so-called 'casket burials'? On balance the case for caskets being in effect the functional equivalent of the modern ladies' handbag or 'vanity box' is strong, although the frequency and ubiquity of the lion-head motif in casket-studs of the 1st and 2nd centuries needs to be explained.

There are at least five graves which contained face-neck flagons (Table 8.3; example in Figure 8.12). This is a distinctive type of vessel in which a piece of clay moulded in the form of a female face was applied to the neck of a flagon before firing (Munby 1975). A link with Celtic religious beliefs has

been argued for these vessels (Ross 1967, 102-4) and, more recently, the possibility has been advanced that they may have fulfilled a more mundane domestic function (Munby 1975, 188). The five Colchester graves containing these vessels are all attributable to females (Table 8.3) and therefore the face-neck flagons may have been favoured by women perhaps as containers for toilet materials. Certainly fragments of this type of vessel occur commonly on town-centre sites in Colchester indicating that they had a use in domestic contexts.

Clear traces of food in graves are rarely found. Butt Road produced no good evidence of food but at the St John's Abbey Grounds site, one grave (F64) had been furnished with a chicken (p 205). A few of the closed vessels from the Colchester graves are recorded as having been stoppered and thus presumably must have contained something (eg the flagons in Hull Grave 302: Hull 1963a, 145). Also, most vessels seem to have been placed upright in the grave as if containing food or drink. However, the situation is not clear-cut. Hull Grave 607 is well documented and of special significance because it is known to have consisted of five vessels which were arranged in such a way as to preclude the possibility that two of them contained food. The large pot contained the cremated bone and stood inside the small bowl whilst the flagon and the small beaker stood together in the large bowl. Of course the flagon and the beaker may not have been empty.

'Face pots' are vessels with a face on the body of the pot. The faces are formed before the pot is fired by applying strips of clay and pinching and marking the surface of the pot. Although fragments are commonly found on domestic sites in Colchester and elsewhere, these vessels are thought to have had some kind of ritual significance (Perring 1977, 255-61), at least



Fig 8.12 An example of a grave group with a face-neck flagon (Hull Grave 95).

when they occur as funerary urns (Braithwaite 1984, 126-8). A more prosaic explanation is that they were children's pots and that the faces were intended to introduce an element of fun. Colchester possesses a large number of these (eg the example in Figure 8.6) and certainly the faces show a very wide range of expressions which suggest that they were meant to be a source of amusement. If they were intended as pots for children, then graves which include these vessels ought to contain a substantial proportion of small pots. Of the five graves with face urns, two (Hull Graves 222 & 493) were not accompanied by other vessels or objects. Hull Grave 84 included three flagons, two of which were smaller than average, and a lamp. Hull Grave 121 (Fig 8.6) also contained a lamp and a flagon which was also small. Hull Grave 210 had a flagon and a jar, both smaller than average whilst Hull Grave 373 may have been associated with two small red flagons. Thus the evidence, whilst not positive, hints that the face urns may have been associated predominantly, if not exclusively, with children's graves.

The bodies in at least four lead coffins and seven wooden ones had been covered or at least partly covered by some kind of lime plaster. All are from the Butt Road site except the lead coffin found in 1976 during the Balkerne Lane excavations (*CAR 3*, 142-4) which itself was not in its original place of burial because it had been dug up and reburied. Two of the lead coffins, Hull Graves 331 and 368 (find-spots shown on Fig 2.1, pp 5-6), were found at the Butt Road sand pit in 1838 and 1844 and were recorded as being half full of a 'white lime-like substance' or 'lime'. None of this material survives so it cannot be properly identified. The other examples were all found recently and the substances contained in them have been analysed (pp 36-7 & 126, Table 2.45, & *CAR 3*, 144).

The Balkerne Lane coffin was not in its original position but in the 4th century had been redeposited in a Roman pit (*CAR 3*, 142-4); the site of its initial burial is unknown. Thus of those coffins which

contained plaster and which can be provenanced, all derive from the Butt Road site.

Areas for future research

The foregoing discussion is of limited scope and draws on Hull's inventory more or less as he left it. The information has been taken on trust as it appears in his inventory although, being unfinished, the inventory probably contains many errors and omissions. Clearly its completion and the thorough checking of its content would be of great value to future work in the town. In particular, a topic which merits closer examination than is possible here is the date of the transition from cremation to inhumation as the normal burial rite. This needs close examination of the pottery from the most relevant graves.

The complexity of the Butt Road cemetery and the degree to which the graves intersect have provided much information on its evolution and internal organisation. No excavation of comparable size has taken place of a cremation cemetery in Colchester. Such an excavation is clearly highly desirable although it is doubtful if it would turn out to be as fruitful as Butt Road.

A research topic which may prove of great value in future is ancient DNA. The Research Laboratory for Archaeology and the History of Art at the University of Oxford was provided with samples of the Butt Road material in the hope that DNA would throw some light on the genetics of the town's Romano-British population and possibly confirm some of the postulated family groups. Results have been slow to emerge and the project is expected to be long-term because of difficulties in distinguishing between ancient DNA and that introduced by modern contamination.

APPENDIX 1: Summary of burial characteristics, Butt Road

Key to table

Excavation

full	grave where all or most of the skeletal material was recovered even though part of the grave pit itself may have been destroyed or disturbed by later activity or was beyond the limit of the excavation
plan	grave planned but not fully excavated
section	a large part of the grave lay beyond the limit of the excavation
watching	grave detected during a watching brief
disturbed	grave mostly destroyed by later features

Skeletal material

Only bone from the primary skeleton is listed. Bones which appeared solid in the ground but did not survive lifting, and bones which were not lifted at all, are included, but those which had decayed to leave only a stain in the ground are not.

Column a: quantity surviving

s	skull (bracketed if only the teeth survived)
t	torso and upper limbs
p	pelvis
l	lower limbs
	no bone, or only very little, survived

Column b: state of preservation

eg poor	ranges from extremely poorly to fairly well preserved
frags	only small fragments were recovered
missing	bone recorded in site notes but now missing no skeletal material at all survived, was lifted, or was examined

Sex

F	female
?F	probable female
(F)	inferred from grave goods
I	indeterminate
M	male
?M	probable male
(M)	inferred from grave goods
?	not certain
	no report, or not available

Age

Where possible adults are given as young (20-29.9), middle-aged (30-49.9), or old (50+).	
(child) etc	age not certain, or not available, but inferred from the size of the coffin or the grave cut
?	not certain
	no report, or not available

Burial type

crem	cremation
inhum	inhumation
?unused	probably an unused grave pit

Coffin type

jar	bone from cremation deposited in a ceramic vessel
lead	inner lead coffin liner present
log	coffin appears to have been a hollowed-out section of a log
none	no coffin definitely, or likely, to have been present
nt	nailed timber (timber and nails located)
?plank	corpse may have been buried on a single timber board
+ plaster	variable quantity of lime plaster or gypsum inside coffin
tile	tile coffin, or tiles lining grave pit
t	timber (no nails located)
vault.	coffin placed inside timber vault presence or absence of coffin uncertain

Grave goods

Includes items of dress, that is objects probably not specifically deposited, and fragments of textile from the wrapping of both corpses and grave-goods. No entry is given in this column for badly damaged or partially excavated graves where an original lack of grave deposits cannot be confirmed. Vessels not listed as glass or metal are ceramic.

Grave	Excavation	Period	Alignment	Head	Skeletal material	a	b	Sex	Age	Burial type	Coffin type	Grave goods
1	full	2	E-W	W	-/-/l	good		I(F)	10 yrs	inhum	nt	inside coffin: bead ?necklace, armlets
2	full	2	E-W	-	-/-/-	-	-	-	(infant/child)	inhum	nt	none
3	disturbed	2	E-W	w	s/t/l	poor	?	?	young	inhum	nt	-
4	full	2	E-W	w	s/t/p/l	good		F	middle-aged	inhum	nt	-
5	?full	2	E-W	-	-/-/-	-	-	-	-	inhum	nt	-
6	disturbed	2	E-W	W	-/-/l	good		F	adult	inhum	-	-
7	disturbed	2	E-W	W	-/t/p/l	good		M	middle-aged	inhum	nt	-
8	not used											
9	full	2	E-W	w	s/-/l	poor		I	30 mths	inhum	nt	none
10	disturbed	2	E-W	w	s/-/l	frags	?	?	adult	inhum	nt	-
11	full	2	E-W	w	s/t/p/l	good		F	middle-aged	inhum	nt	none
12	full	2	E-W	w	s/t/p/l	poor		I	9-12 yrs	inhum	nt	-
13	full	2	E-W	w	s/-/l	frags		M	middle-aged	inhum	nt	none
14	disturbed	2	E-W	W	s/-/l	frags		?M	middle-aged	inhum	nt	-
15	full	2	E-W	-	-/-/-	-		(F)	(infant/child)	inhum	nt	inside coffin: glass vessel, bead & coin armlet, textile, armlet with bead
16	full	2	E-W	w	s/t/p/l	good		I (F)	6 yrs	inhum	nt	inside coffin: armlets, bead armlet or necklace
17	full	2	E-W	W	s/t/p/l	poor		M	old	inhum	nt	none
18	full	2	E-W	w	s/t/p/l	good		M	old	inhum	nt	inside coffin, ?deposit:
19	full	2	E-W	W	s/-/l	frags	-	-	(infant)	inhum	nt	com
20	full	2	E-W	W	s/t/p/l	good		M	young	inhum	t	none
21	disturbed	2	E-W	W	s/t/l	poor		M	middle-aged	inhum	t	-
22	full	2	E-W	w	s/t/p/l	good		I	9-11 yrs	inhum	nt	none
23	full	2	E-W	W	S/-/l	poor		F	middle-aged	inhum	nt	none
24	full	2	E-W	w	-/-/l	-		(F)	(child)	inhum	nt	inside coffin: armlets
25	full	2	E-W	w	s/t/p/l	good		M	middle-aged	inhum	nt	none
26	disturbed	2	E-W	w	-/-/l	good		M	adult	inhum	-	-
27	full	2	E-W	w	s/t/p/l	good		?F	18 yrs	inhum	nt	-
28	not used											
29	full	2	E-W	w	s/t/p/l	good		M	middle-aged	inhum	nt	none
30	full	2	E-W	W	s/t/p/l	good		M	middle-aged	inhum	nt	none
31	full	2	E-W	W	s/t/p/l	good		I	12 yrs	inhum	nt	none
32	disturbed	2	E-W	-	-/-/l	-		-	-	inhum	nt	-
33	full	2	E-W	W	s/t/l	poor		M	adult	inhum	nt	none
34	full	2	E-W	w	s/t/p/l	good		F	middle-aged	inhum	nt	none
35	full	2	E-W	W	s/t/p/l	good		M	young	inhum	nt	none
36	full	2	E-W	W	S/-/l	frags		?F	adolescent	inhum	nt	none
37	disturbed	2	E-W	W	-/-/l	poor		-	-	inhum	nt	-
38	not used											
39	full	2	E-W	W	s/t/p/l	poor		M	middle-aged	inhum	nt	none
40	disturbed	2	E-W	W	-/t/p/l	good		?F	adolescent	inhum	nt	-
41a	full	2	-	E	s/t/p/l	good		M	middle-aged	inhum	none	finger-ring
41b	full	2	-	w	s/-/l	good		?	adolescent	inhum	none	-
42	full	2	E-W	w	s/t/p/l	good		F	middle-aged	inhum	nt	none
43	full	2	-	w	s/t/p/l	good		M	middle-aged	inhum	none	none
44	not used											
45	full	2	E-W	w	-/-/l	poor		F	adult	inhum	nt	none
46	disturbed	2	E-W	-	-/-/l	-		-	(adult)	-	-	-
47	full	2	E-W	w	s/t/p/l	good		F	middle-aged	inhum	nt	none
48	disturbed	1	N-S	-	-/-/l	frags		?	adolescent	inhum	nt	-
49	full	2	E-W	w	s/t/p/l	good		F	middle-aged	inhum	nt	none
50	full	2	E-W	w	s/t/p/l	good		M	middle-aged	inhum	none	-
51	full	2	E-W	E	s/t/p/l	poor		F	middle-aged	inhum	none	none
52	disturbed	1	N-S	N	-/t/l	poor		M	adult	inhum	none	-
53	full	2	E-W	w	s/-/l	poor		I	2-3 yrs	inhum	nt	none
54	section	2	E-W	w	-/-/l	good		?	adult	inhum	nt	-
55	section	2	E-W	-	-/-/l	-		-	-	inhum	nt	-
56	full	2	E-W	w	s/t/p/l	good		F	adult	inhum	nt	none
57	full	2	E-W	-	-/-/l	-		-	(adult)	inhum	nt	none
58	full	2	E-W	w	-/-/l	frags		I	4-6 yrs	inhum	nt	outside coffin: two jars/beakers
59	full	2	E-W	w	s/t/p/l	good		M	middle-aged	inhum	nt	none
60	full	2	E-W	w	-/t/p/l	poor		M	middle-aged	inhum	nt	none
61	full	2	E-W	w	s/t/p/l	good		F	young	inhum	nt	-
62	disturbed	2	E-W	w	-i-i-n	poor		?	adolescent	inhum	-	-
63	disturbed	2	E-W	w	s/t/p/l	poor		F	young	inhum	nt	-

Appendix 1: Summary of burial characteristics, Butt Road

Grave	Excavation	Period	Align- ment	Head	Skeletal a	material b	Sex	Age	Burial type	Coffin type	Grave goods
64	section	2	E-W	-	-/-/-	-	-	-	inhum	nt	-
65	full	2	E-W	W	s/t/-/l	good	F	middle-aged	inhum	nt	none
66	disturbed	2	E-W	w	-/-/-l	good	M	adult	inhum	nt	-
67	full	2	E-W	w	s/t/p/l	poor	?F	adult	inhum	nt	none
68	section	2	E-W	w	-/-/-	-	-	(adult)	inhum	nt	-
69	full	2	E-W	w	-/-/-l	poor	(F)	adult	inhum	nt	inside coffin: box containing bead necklace(s), armlets (one with pierced coin), & textile; ?deposit: coin
70	full	1	N-S	s	(s)/-/-/l	poor	M	17-18 yrs	inhum	nt	inside coffin: two <i>styli</i> ; outside coffin: dish or bowl
71	section	2	E-W	w	-/-/-l	-	-	-	inhum	none	-
72	section	2	E-W	w	-/-/-l	poor	-	-	inhum	nt	-
73	section	2	E-W	w	-/-/-l	poor	-	-	inhum	nt	-
74	full	2	E-W	w	-/-/-l	poor	?F	adult	inhum	nt	none
75	full	2	E-W	W	-nv-i-	poor	M	middle-aged	inhum	nt	none
76	section	2	E-W	w	-lV/-l	poor	-	-	inhum	nt	-
77	full	2	E-W	w	s/t/p/l	good	M	middle-aged	inhum	nt	inside coffin: textile
78	section	2	E-W	-	-/-/-	-	-	-	inhum	nt	-
79	disturbed	2	E-W	w	s/-/-	frags	-	-	inhum	nt	-
80	disturbed	2	E-W	w	s/-/-	frags	?F	adult	inhum	-	-
81	disturbed	2	E-W	w	-t/p/i	good	?	maximum 17 yrs	inhum	-	-
82	full	2	E-W	w	S/-/-l	poor	?	adult	inhum	nt	none
83	disturbed	2	E-W	w	-A/-l	poor	?	adult	inhum	?none	none
84	full	2	E-W	w	S/t/-/l	poor	?F	adult	inhum	nt	none
85	section	2	E-W	w	-/-/-	frags	I	8-10 yrs	inhum	-	-
86	section	2	E-W	w	-/-/p/l	good	M	adult	inhum	nt	-
87	disturbed	2	E-W	w	S/t/-/l	good	M	young	inhum	nt	-
88	disturbed	2	E-W	w	-t/p/l	good	?M	adult	inhum	nt	-
89	full	1	N-S	N	S/-/-l	poor	?	adult	inhum	nt	none
90	full	2	E-W	w	s/t/p/l	good	F	middle-aged	inhum	nt	none
91	full	2	E-W	w	s/t/p/l	good	M	middle-aged	inhum	nt	none
92	full	2	E-W	W	-t/p/l	good	I	6-7 yrs	inhum	nt	none
93	disturbed	2	E-W	W	s/t/p/l	good	?F	middle-aged	inhum	t	none
94	full	2	E-W	-	-/-/-	-	-	(child)	inhum	nt	inside coffin: two bells on a chain outside coffin: jar
95	disturbed	1	N-S	N	s/-/-	frags	I	child	inhum	nt	inside coffin: beaker
96	disturbed	2	E-W	W	-/-/-	-	-	-	inhum	nt	inside coffin: footwear; outside coffin: glass bowl
97	full	2	E-W	-	-/-/-	-	-	(infant/child)	inhum	nt	none
98	full	2	E-W	w	s/t/-/l	poor	I	child	inhum	nt	none
99	full	1	N-S	N	S/-/-l	poor	I	child	inhum	nt	inside coffin: beaker
100	full	1	N-S	N	-/-/-l	poor	?M	adult	inhum	nt	inside coffin: footwear; outside coffin: glass bowl
101	full	2	E-W	W	-t/p/l	poor	I(M)	9-11 yrs	inhum	nt	inside coffin: two leather belts
102	full	2	E-W	W	s/t/p/l	good	M	middle-aged	inhum	nt	none
103	full	2	E-W	W	s/t/p/l	good	F	middle-aged	inhum	nt	none
104	disturbed	2	E-W	-	-/-/-	-	-	-	inhum	-	-
105	full	2	E-W	w	s/-/-	frags	I	child	inhum	nt	none
106	full	2	E-W	-	-/-/-	-	-	(infant/child)	inhum	nt	none
107	disturbed	2	E-W	-	-/-/-	-	-	-	inhum	nt	-
108	not used										
109	full	2	E-W	w	s/t/-/l	good	"(F)	4-5 yrs	inhum	nt	inside coffin: armlets, comb
110	full	2	E-W	w	s/t/p/l	good	M	middle-aged	inhum	nt	none
111	full	2	E-W	w	s/t/p/l	good	I	5-6 yrs	inhum	nt	none
112	full	2	E-W	w	s/t/-/l	poor	?M	middle-aged	inhum	nt	none
113	full	2	E-W	w	s/t/p/l	good	I	12-13 yrs	inhum	nt	none
114	disturbed	2	E-W	w	-/-/-l	good	?F	adult	inhum	nt	-
115	full	2	E-W	w	s/t/p/l	poor	I(F)	12-14 yrs	inhum	nt	inside coffin: hairpin; outside coffin: armlet
116	disturbed	2	E-W	-	-/-/-	-	-	-	inhum	nt	-
117	full	2	E-W	w	s/t/p/l	good	M	middle-aged	inhum	nt	none
118	disturbed	2	E-W	-	-/-/-	-	-	-	inhum	-	-
119	full	1	N-S	N	s/t/p/l	poor	M	middle-aged	inhum	nt	none
120	full	2	E-W	w	s/t/p/l	good	?F	middle-aged	inhum	t	none
121a	full	2	E-W	w	s/t/-/l	poor	M	middle-aged	inhum	nt	none
121b	full	2	E-W	W	s/t/p/l	good	M	middle-aged	inhum	nt	none

Grave	Excavation	Period	Align- ment	Head	Skeletal material a	material b	Sex	Age	Burial type	Coffin type	Grave goods
122	full	2	E-W	W	s/t-/l	poor	M	middle-aged	inhum	nt	none
123	full	2	E-W	W	s/t/p/l	good	l	6-7 yrs	inhum	nt	none
124	full	2	E-W	W	(s)/-/-/	frags	?	(child)	inhum	nt	none
125	full	1	N-S	N	s/t-/l	poor	?	adult	inhum	nt	inside coffin: footwear
126	disturbed	1	N-S	N	s/t-/l	poor	?F	middle-aged	inhum	nt	inside coffin: armlet
127	full	2	E-W	-	-/-/-	-	-	(infant)	inhum	nt	none
128	full	2	E-W	W	s/t/p/l	good	M	middle-aged	inhum	nt	none
129	full	2	E-W	W	s/-/-	frags	l	3-5 yrs	inhum	nt	none
130	full	2	E-W	-	-/-/-	-	-	(child)	inhum	nt	none
131	full	2	E-W	w	s/t/p/l	good	M	middle-aged	inhum	t	none
132	full	2	E-W	W	S/-/-	poor	?F	middle-aged	inhum	nt	outside coffin: glass bottle
133	disturbed	2	E-W	W		good	M	middle-aged	inhum	nt	inside coffin & disturbed, ?deposit: bead
134	full	2	E-W	W	s/t-/l	poor	F	adult	inhum	nt	none
135	section	2	E-W	W	s/-N-	frags	?F	adult	inhum	nt	-
136	full	2	E-W	w	s/t/p/l	poor	M	adult	inhum	nt	none
137	not used										
138	full	2	E-W	W	s/t-/l	poor	M	adult	inhum	nt	none
139	full	2	E-W	W	s/t/p/l	poor	M	adult	inhum	nt	none
140	full	2	E-W	W	-/t-/l	poor	M	adult	inhum	nt	none
141	full	2	E-W	W	s/t/p/l	good	F	adult	inhum	nt	none
142	full	2	E-W	W	S/-/-	poor	?	(adult)	inhum	nt	none
143	full	2	E-W	W	s/t-/l	poor	M	middle-aged	inhum	t	-
144	section	2	E-W	W	-/-/-	-	-	-	inhum	none	-
145	full	2	E-W	w	s/t/p/l	good	l	16 mths	inhum	nt	none
146	full	2	E-W	W	s/t-/l	poor	?	adult	inhum	nt	none
147	full	2	E-W	W	s/t/p/l	good	M	middle-aged	inhum	nt	none
148	full	2	E-W	W	s/t/p/l	good	M	middle-aged	inhum	nt	none
149	full	2	E-W	-	-/-/-	-	-	-	?unused	-	none
150	full	2	E-W	W	s/t/p/l	good	l	11-12 yrs	inhum	t	none
151	full	2	E-W	W	s/t-/l	poor	M	old	inhum	nt	none
152	disturbed	1	N-S	s	-/t/p/l	good	M	adult	inhum	none	-
153	section	2	E-W	W	s/-/-	-	-	(adult)	inhum	-	-
154	full	2	E-W	W	s/t/-/-	frags	l	7 yrs	inhum	nt	none
155	full	2	E-W	W	(s)/-/-/	frags	M	middle-aged	inhum	nt	none
156	full	2	E-W	W	s/t/p/l	good	M	middle-aged	inhum	nt	-
157	full	2	E-W	W	s/t/p/l	good	F	young	inhum	nt	none
158	full	2	E-W	W	s/t/p/l	good	F	middle-aged	inhum	nt	none
159	disturbed	1	N-S	s	-/V-/	good	-	adolescent	inhum	-	-
160	full	2	E-W	W	s/v-n	poor	M	middle-aged	inhum	nt	none
161	full	2	E-W	w	-/-/-l	poor	l	2 mths	inhum	nt	none
162	section	2	E-W	-	-/-/-	-	-	-	inhum	nt	-
163	section	2	E-W	w	s/t/-/-	poor	-	(adult)	inhum	none	-
164	full	2	E-W	w	SN-/l	poor	F	old	inhum	nt	none
165	section	2	E-W	w	S/t/-	frags	l	2-4 yrs	inhum	nt	-
166	disturbed	2	E-W	-	-/-/-	-	-	(adult)	inhum	nt	-
167	full	2	E-W	w	s/t/p/l	good	F	middle-aged	inhum	nt	none
168	full	2	E-W	w	S/-/-l	frags	?	young	inhum	nt	none
169	full	2	E-W	w	s/t/p/l	poor	F	middle-aged	inhum	nt	none
170	disturbed	1	N-S	N	-/t/p/l	good	M	adult	inhum	t	inside coffin: jar
171	full	2	E-W	w	-/t-/l	poor	l(F)	12-15 yrs	inhum	nt	inside coffin: bead ?necklace, armlets, finger-rings, footwear, ?scabbarded knife, textile
172	disturbed	2	E-W	w	S/t/p/l	good	F	middle-aged	inhum	nt	none
173	full	2	E-W	w	s/t/p/l	poor	M	middle-aged	inhum	nt	none
174	full	2	E-W	w	S/t-/l	poor	F	adult	inhum	nt	inside coffin: glass bottle, hairpin, bead armlet or necklace, armlets, finger-ring, comb
175	full	2	E-W	w	s/t/p/l	good	F	middle-aged	inhum	nt	none
176	full	2	E-W	w	-/t-/l	frags	?	adult	inhum	t	none
177	full	1	N-S	N	-/t-/l	frags	F	adult	inhum	nt	inside coffin: footwear
178	full	2	E-W	w	s/t/p/l	good	F	young	inhum	nt	none
179	section	2	E-W	w	s/t/p/l	good	M	middle-aged	inhum	nt	none
180	full	2	E-W	w	s/t/p/l	good	M	middle-aged	inhum	nt	inside coffin: glass flagon & cup

Appendix 1: Summary of burial characteristics, Butt Road

Grave	Excavation	Period	Align- ment	Head a	Skeletal material b	Sex	Age	Burial type	Coffin type	Grave goods	
181	full	2	E-W	W	s/t/p/l	poor	?	adult	inhum	nt	none
182	full	2	E-W	W	s/t/p/l	good	F	young	inhum	nt + plaster	none
183	full	2	E-W	w	s/t/p/l	good	M	middle-aged	inhum	nt	none
184	full	2	E-W	w	s/t/p/l	good	M	middle-aged	inhum	nt	none
185	full	2	E-W	W	s/t/-/l	poor	?	middle-aged	inhum	nt	none
186	full	2	E-W	W	-/t/p/l	good	F	old	inhum	log	-
187	full	2	E-W	W	S/-/-/l	poor	?	young	inhum	nt	-
188	full	2	E-W	w	s/t/-/l	poor	M	adult	inhum	nt	outside coffin: footwear
189	full	2	E-W	w	s/t/-/l	poor	M	old	inhum	nt	none
190	full	2	E-W	w	s/t/p/l	good	F	old	inhum	t	none
191	full	2	E-W	W	s/t/p/l	good	F	old	inhum	nt in vault	none
192	full	2	E-W	W	(s)/-/-/l	-	-	(infant)	inhum	nt	none
193	full	2	E-W	W	s/t/-/l	frags	?	adult	inhum	nt	none
194	full	2	E-W	W	s/t/-/l	frags	l-	3-5 yrs	inhum	nt	none
195	full	2	E-W	-	-/-/-/l	-	-	(infant)	inhum	nt	-
196	full	2	E-W	W	s/t/p/l	good	F	old	inhum	nt	none
197	disturbed	1	N-S	N	-/-/-/l	good	?	adult	inhum	none	-
198	full	2	E-W	W	s/t/-/l	poor	l	3-4 yrs	inhum	t	none
199	full	2	E-W	W	s/t/-/l	poor	l	infant	inhum	nt	none
200	full	2	E-W	W	s/t/p/l	good	l	2-3 yrs	inhum	nt	none
201	disturbed	2	E-W	W	-/-/-/l	good	?	adult	inhum	nt	-
202	full	2	E-W	W	s/t/p/l	good	M	old	inhum	nt	none
203	full	2	E-W	W	S/-/-/l	poor	?	adult	inhum	nt in vault	none
204	full	2	E-W	w	s/t/p/l	good	M	young	inhum	nt	none
205	full	2	E-W	W	s/t/p/l	poor	M	middle-aged	inhum	nt	none
206	full	2	E-W	W	s/t/p/l	good	M	old	inhum	nt	none
207	disturbed	2	E-W	W	s/t/-/l	poor	?	adult	inhum	t	-
208	full	2	E-W	w	s/t/p/l	good	M	middle-aged	inhum	t	none
209	full	2	E-W	w	s/t/-/l	frags	?	(child)	inhum	?none	none
210	full	2	E-W	w	-/t/-/l	poor	M	young	inhum	nt	none
211	full	2	E-W	w	s/t/p/l	good	M	old	inhum	nt	none
212	disturbed	2	E-W	w	s/t/-/l	poor	?	adult	inhum	t	-
213	full	2	E-W	w	s/t/p/l	good	M	old	inhum	nt	none
214	full	2	E-W	w	-/t/p/l	poor	M	middle-aged	inhum	nt	none
215	full	2	E-W	w	s/t/-/l	poor	l	14-16 yrs	inhum	nt	none
216	full	2	E-W	w	s/t/p/l	poor	M	adult	inhum	nt	none
217	full	2	E-W	w	s/t/p/l	good	l	8 yrs	inhum	nt	none
218	full	2	E-W	w	s/t/-/l	frags	l	child	inhum	log	none
219	disturbed	2	E-W	w	s/t/-/l	good	M	middle-aged	inhum	nt	-
220	not a grave										
221	full	2	E-W	w	s/t/p/l	poor	l	8 yrs	inhum	nt	-
222	not a grave										
223	full	1	N-S	N	s/t/p/l	poor	?	adult	inhum	nt	outside coffin: jar
224	full	2	E-W	w	s/t/p/l	good	F	middle-aged	inhum	nt	none
225	full	2	E-W	w	s/t/p/l	good	M	middle-aged	inhum	nt in vault	none
226	full	2	E-W	w	s/t/p/l	poor	?	adult	inhum	t	none
227	full	2	E-W	w	s/t/p/l	good	M	old	inhum	nt	none
228	disturbed	2	E-W	-	-/-/-/l	-	-	(child)	inhum	nt	-
229	full	2	E-W	w	(s)/-/-/l	-	-	(child)	inhum	nt	none
230	disturbed	2	E-W	w	-/-/-/l	poor	?	?	inhum	nt	-
231	full	2	E-W	w	-/V/-/l	frags	?	(adult)	inhum	nt	-
232	full	2	E-W	w	(s)/-/-/l	-	-	(child)	inhum	nt	none
233	full	2	E-W	w	s/t/p/l	good	F	adult	inhum	t	none
234	full	2	E-W	w	s/t/p/l	poor	?	adult	inhum	nt	none
235	full	2	E-W	w	s/t/-/l	poor	F	adult	inhum	nt	none
236	full	2	E-W	w	s/t/7-	frags	?	(adult)	inhum	nt	none
237	full	2	E-W	w	S/-/-/l	frags	?	adult	inhum	nt	none
238	full	2	E-W	w	s/t/-/l	good	l	10-12 yrs	inhum	nt	none
239	disturbed	2	E-W	-	-/-/-/l	-	-	-	inhum	nt	-
240	full	2	E-W	w	s/t/p/l	poor	?	adult	inhum	nt	-
241	section	2	E-W	w	-/-/-/l	poor	?	adult	inhum	nt	-
242	full	2	E-W	w	s/t/-/l	good	l	infant	inhum	nt	none
243	full	2	E-W	w	s/t/p/l	good	M	middle-aged	inhum	nt	none
244	full	2	E-W	w	s/t/p/l	poor	F	young	inhum	nt	none
245	full	2	E-W	w	-/-/-/l	poor	?	adult	inhum	t	none
246	full	2	E-W	w	s/t/p/l	good	M	adult	inhum	t	none
247	full	2	E-W	w	s/t/p/l	poor	l	adolescent	inhum	nt	none
248	full	2	E-W	w	-/-/-/l	frags	?	adult	inhum	nt	none
249	full	2	E-W	w	s/t/p/l	good	M	middle-aged	inhum	nt	none
250	full	2	E-W	w	s/-/-/l	-	-	(infant/child)	inhum	nt	none
251	full	2	E-W	w	s/t/-/l	poor	M	adult	inhum	nt	none

Grave	Excavation	Period	Align- ment	Head a	Skeletal material b	Sex	Age	Burial type	Coffin type	Grave goods	
252	full	2	E-W	W	-/-/1	frags	?	?	inhum	t	-
253	full	2	E-W	W	s/t/-/	poor	M	middle-aged	inhum	nt	none
254	full	2	E-W	W	s/t/-/1	poor	-	infant	inhum	tile	none
255	full	2	E-W	W	s/t/p/1	good	F	old	inhum	nt	-
256	full	2	E-W	W	s/t/p/1	poor	M	young	inhum	nt	none
257	full	2	E-W	W	-/-/-/	-	-	(child)	inhum	nt	-
258	full	2	E-W	W	s/t/p/1	poor	M	?(adult)	inhum	nt	inside coffin: comb
259	full	2	E-W	w	-/-/-/	-	-	-	inhum	nt	-
260	full	2	E-W	W	s/t/p/1	poor	M	adult	inhum	nt	none
261	full	2	E-W	W	s/t/-/1	poor	l	8 yrs	inhum	nt	none
262	full	2	E-W	W	S/1/-/1	poor	?	adult	inhum	nt	none
263	full	2	E-W	w	s/v-n	poor	l	3 yrs	inhum	nt	none
264	full	2	E-W	W	S/1/-/1	poor	l	5 yrs	inhum	nt	none
265	disturbed	2	E-W	-	-/-/-/	-	-	(child?)	inhum	t	-
266	full	2	E-W	w	s/t/p/1	good	M	young	inhum	nt	none
267	full	2	E-W	W	s/t/p/1	good	M	middle-aged	inhum	nt	none
268	not used										
269	full	2	E-W	W	S/-/1	poor	M	adult	inhum	nt	none
270	full	2	E-W	W	s/t/p/1	poor	F	young	inhum	nt	none
271	full	2	E-W	w	s/v-n	poor	?	adult	inhum	nt	none
272	full	2	E-W	W	s/t/-/1	poor	?	adult	inhum	t	none
273	full	1	N-S	N	s/-/1	-	-	(child)	inhum	nt	inside coffin: footwear
274	disturbed	1	N-S	N	-/-/-/	-	-	-	inhum	nt	inside coffin: footwear
275	full	1	N-S	N	-/-/-/	-	-	-	inhum	nt	none
276	disturbed	1	N-S	N	-/-/1	-	?	(child)	inhum	t	-
277	full	1	N-S	N	(s)/-/-/	-	-	(child)	inhum	nt	inside coffin: two pairs footwear
278	disturbed	1	N-S		-/-/-/				inhum	nt	inside coffin: chain-link ?purse containing pierced amulets
279	full	2	E-W	-	-/-/-/	-	-	(child)	inhum	nt	-
280	disturbed	2	E-W	W	s/t/-/1	frags	?	adult	inhum	t	-
281	full	2	E-W	W	s/t/p/1	good	F	young	inhum	nt	-
282	disturbed	1	N-S	s	(s)/-/-/	frags	-	(child)	inhum	nt	-
283	full	2	E-W	W	s/t/p/1	good	l	neonate	inhum	nt	none
284	full	2	E-W	W	s/t/p/1	good	M	middle-aged	inhum	t	none
285	full	2	E-W	W	s/t/p/1	good	M	middle-aged	inhum	nt	none
286	full	2	E-W	W	s/t/p/1	good	F	young	inhum	nt	none
287	full	2	E-W	W	(s)/-/-/	frags	l	2-3 yrs	inhum	nt	-
288	full	2	E-W	W	s/t/p/1	good	F	young	inhum	nt	none
289	?full	2	E-W	W	-/-/-/	-	-	-	?unused	-	none
290	disturbed	1	N-S	-	-/-/-/	-	-	-	inhum	nt	-
291	disturbed	1	N-S	-	-/-/-/	-	(F)	-	inhum	nt	outside coffin: three bowls, bead armband
292	full	2	E-W	w	s/t/-/1	poor	l	5 yrs	inhum	nt	-
293	full	2	E-W	-	-/-/-/	-	-	(child)	inhum	nt	-
294	full	2	E-W	w	s/t/-/1	poor	?	adult	inhum	nt	none
295	full	2	E-W	w	s/t/p/1	good	l	2 yrs	inhum	nt & lead, + plaster	inside coffin: textile impression; outside coffin: jar
296	disturbed	2	E-W	w	s/-/1	poor	l	child	inhum	nt	-
297	disturbed	1	N-S	N	s/t/p/1	poor	M	young	inhum	none	flagon base
298	full	2	E-W	w	(s)/t/-/1	poor	?	adult	inhum	nt	outside coffin: jar, footwear
299	full	2	E-W	w	-/-/-/1	frags	?	adult	inhum	nt	outside coffin: jar
300	full	2	E-W	w	(s)/t/-/1	frags	?	adult	inhum	nt	none
301	full	2	E-W	w	s/t/-/1	poor	F	middle-aged	inhum	nt	-
302	full	2	E-W	w	S/-/1	frags	?	adult	inhum	nt	none
303	section	2	E-W	w	-/-/-/	poor	?	adult	inhum	t	-
304	full	2	E-W	w	S/V-1	poor	?	adult	inhum	nt	none
305	full	1	N-S	s	s/t/p/1	good	M	young	inhum	none	jar base
306	full	2	E-W	w	s/t/p/1	good	M	middle-aged	inhum	nt	none
307	section	2	E-W	w	-/-/-/1	good	?	adult	inhum	nt	-
308	section	2	E-W	w	-/t/p/1	poor	M	adult	inhum	nt	-
309	section	2	E-W	w	s/t/-/1	poor	?	young	inhum	nt	-
310	full	2	E-W	w	s/t/p/1	poor	?	middle-aged	inhum	t	none
311	full	2	E-W	w	s/t/p/1	good	M	middle-aged	inhum	nt	none
312	disturbed	1	N-S	s	s/t/p/1	good	1	12-13 yrs	inhum	none	-
313	full	2	E-W	w	s/t/p/1	good	M	middle-aged	inhum	nt	none
314	full	2	E-W	w	s/t/-/1	poor	1	1-2 yrs	inhum	t	none
315	disturbed	2	E-W	w	s/t/p/1	poor	?	adult	inhum	nt	-

Appendix 1: Summary of burial characteristics, Butt Road

Grave	Excavation	Period	Align- ment	Head	Skeletal a	material b	Sex	Age	Burial type	Coffin type	Grave goods
316	disturbed	2	E-W	W	S/-/I	poor	F	middle-aged	inhum	?nt	
317	full	2	E-W	W	S/-/I	poor	?	adult	inhum	none	none
318	full	2	E-W	W	s/t/p/l	good	M	old	inhum	nt	none
319	full	2	E-W	W	s/t/p/l	poor	F	old	inhum	nt	none
320	full	2	E-W		-/-/-				inhum	nt	inside coffin: two glass vessels; outside coffin: bowl
321	full	2	E-W	-	-/-/-	-	-	(child)	inhum	nt	none
322	full	2	E-W	W	s/t/p/l	poor	M	middle-aged	inhum	nt	none
323	full	2	E-W	W	(s)/t/p/l	poor	I	5-6 yrs	inhum	nt	-
324	full	1	N-S	N	s/t/p/l	poor	?	middle-aged	inhum	none	flagon
325	full	2	E-W	W	s/t/p/l	good	F	middle-aged	inhum	nt	none
326	disturbed	2	E-W	w	-/t/-/l	poor	-	-	inhum	t	-
327	disturbed	1	N-S	N	s/t/p/l	poor	?	old	inhum	nt	inside coffin: jar, finger-ring
328	full	2	E-W	W	s/t/-/l	poor	F	adult	inhum	nt	none
329	full	2	E-W	W	s/t/-/l	poor	F	young	inhum	nt	none
330	full	2	E-W	W	s/t/p/l	good	I	4-5 yrs	inhum	nt	none
331	full	2	E-W	W	s/t/-/l	poor	I	18 mths-2yrs	inhum	nt	none
332	disturbed	2	E-W	W	-/I/-/l	missing	-	-	inhum	nt	-
333	full	2	E-W	W	s/t/p/l	poor	F	young	inhum	nt	none
334	section	2	E-W	W	s/t/p/l	poor	F	middle-aged	inhum	nt	-
335	full	2	E-W	-	-/-/-	-	-	(infant/child)	inhum	nt	none
336	full	2	E-W	w	s/t/p/l	poor	M	young	inhum	nt	none
337	full	2	E-W	w	s/t/p/l	poor	?	adult	inhum	nt	none
338	full	2	E-W	w	s/t/p/l	good	F	young	inhum	t	none
339	full	2	E-W	w	s/-/-/	frags	-	(child)	inhum	nt	-
340	full	2	E-W	W	s/-/-/	frags	I	3-4 yrs	inhum	nt	none
341	full	2	E-W	w	s/t/p/l	good	M	middle-aged	inhum	none (tile)	none
342	full	2	E-W	w	s/t/p/l	good	I(F)	7 yrs	inhum	?nt	inside coffin: hairpin
343	full	2	E-W	W	s/t/p/l	poor	M	middle-aged	inhum	t	none
344	section	2	E-W	w	s/t/-/	poor	M	middle-aged	inhum	t	-
345	full	2	E-W	w	s/t/p/l	good	F	middle-aged	inhum	nt	none
346	full	2	E-W	w	S/t/p/l	good	F	young	inhum	nt	none
347	full	2	E-W	w	s/t/p/l	good	I	4 yrs	inhum	nt	inside coffin: copper-alloy fragments
348	disturbed	2	E-W	w	-/I/-/l	missing	-	(child)	inhum	nt	-
349	full	2	E-W	w	s/t/p/l	good	M	middle-aged	inhum	nt	
350	full	2	E-W	w	s/t/p/l	good	M	middle-aged	inhum	t	none
351	full	2	E-W	w	s/t/p/l	poor	M	middle-aged	inhum	nt	none
352	full	2	E-W	w	s/t/p/l	good	I	13-15 yrs	inhum	nt	none
353	full	2	E-W	w	s/t/p/l	good	M	young	inhum	nt	none
354	full	2	E-W	w	s/t/p/l	poor	?	middle-aged	inhum	nt	none
355	full	2	E-W	-	-/-/-	-	-	(child)	inhum	nt	none
356	full	2	E-W	w	S/-/I	poor	I	2 yrs	inhum	nt	none
357	full	2	E-W	w	s/t/p/l	poor	M	middle-aged	inhum	t	none
358	full	2	E-W	w	s/t/p/l	good	F	young	inhum	nt	none
359	full	2	E-W	w	s/t/p/l	good	I	6 yrs	inhum	nt	none
360	full	2	E-W	w	s/t/p/l	good	F	middle-aged	inhum	nt	none
361	full	2	E-W	w	s/t/p/l	good	M	middle-aged	inhum	log	-
362	full	2	E-W	w	s/t/-/	poor	I	neonate	inhum	nt	none
363	section	2	E-W	w	s/t/-/	good	F	middle-aged	inhum	nt	-
364	full	2	E-W	-	-/-/-	-	-	(infant)	inhum	t	none
365	section	2	E-W	w	s/-/-/	-	-	-	inhum	nt	-
366	full	2	E-W	w	s/t/p/l	poor	M	middle-aged	inhum	nt in vault	none
367	section	2	E-W	w	s/-/-/	good	F	middle-aged	inhum	nt	-
368	section	2	E-W	-	-/I/-/	-	-	(child?)	inhum	nt	-
369	full	2	E-W	w	s/t/-/l	poor	F	young	inhum	nt	none
370	full	2	E-W	w	s/t/p/l	good	M	young	inhum	nt	-
371	disturbed	1	N-S	s	S/U-I	poor	?	middle-aged	inhum	none	-
372	full	2	E-W	w	s/t/p/l	good	M	middle-aged	inhum	nt	none
373	full	2	E-W	w	s/t/-/l	poor	M	young	inhum	t	none
374	full	2	E-W	w	s/t/p/l	good	M	young	inhum	nt	none
375	full	2	E-W	w	s/t/p/l	good	M	middle-aged	inhum	nt	none
376	full	2	E-W	w	s/t/p/l	good	I	13-14 yrs	inhum	nt	-
377	full	2	E-W	w	s/t/p/l	good	F	young	inhum	nt	inside coffin: comb
378	full	2	E-W	w	s/t/p/l	good	I(F)	12 yrs	inhum	nt	inside coffin: armlets
379	full	2	E-W	w	s/t/p/l	good	M	middle-aged	inhum	nt	none
380	full	2	E-W	w	s/t/p/l	good	M	middle-aged	inhum	nt	none
381	not a grave										
382	full	2	E-W	w	s/t/p/l	poor	I	18mths-2 yrs	inhum	nt	none

Grave	Excavation	Period	Alignment	Head a	Skeletal material b	Sex	Age	Burial type	Coffin type	Grave goods
383	full	2	E-W	W	-/-/1	missing	(child?)	inhum	none	none
384	full	2	E-W	W	s/t/p/l	poor	F	middle-aged	inhum	none (?plank)
385	full	2	E-W	w	s/t/-/l	poor	?	middle-aged	inhum	nt
386	full	2	E-W	w	s/t/p/l	good	F	young	inhum	nt
387	full	2	E-W	-	-/-/-/	-	-	(infant)	inhum	nt
388	full	2	E-W	w	s/t/-/l	good	I	neonate	inhum	nt
389	section	2	E-W	w	-IV-/	poor	?	?	inhum	t
390	disturbed	2	E-W	w	-/-/1	poor	?	adult	inhum	?none
391	full	2	E-W	W	s/t/p/l	good	I	7 yrs	inhum	nt
392	full	2	E-W	W	s/t/p/l	good	I	neonate	inhum	nt
393	full	2	E-W	w	s/t/p/l	good	M	young	inhum	nt
394	full	2	E-W	w	s/t/p/l	good	I	tiny infant	inhum	t
395	full	2	E-W	w	s/t/p/l	good	M	middle-aged	inhum	nt in vault + plaster
396	full	2	E-W	W	s/t/p/l	good	F	middle-aged	inhum	nt in vault + plaster
397	section	2	E-W	-	-/-/-/	-	-	-	inhum	nt
398	full	2	E-W	w	s/t/p/l	good	F	young	inhum	nt
399	full	2	E-W	W	s/t/p/l	good	F	middle-aged	inhum	nt
400	full	2	E-W	w	s/t/p/l	good	I	14 yrs	inhum	t
401	section	2	E-W	W	s/-/1	good	M	adult	inhum	t
402	full	2	E-W	W	s/t/p/l	good	M	young	inhum	nt
403	full	2	E-W	w	s/t/p/l	good	F	middle-aged	inhum	nt & lead
404	full	2	E-W	.	-/-/-/	-	(F)	(child)	inhum	nt
405	full	2	E-W	W	s/t/p/l	good	M	middle-aged	inhum	nt
406	full	2	E-W	-	-/-/-/	-	(F)	(infant/child)	inhum	nt
407	disturbed	2	E-W	-	-/-/-/	-	-	(infant/child)	inhum	nt
408	full	2	E-W	w	s/t/p/l	good	?	middle-aged	inhum	nt
409	full	2	E-W	W	s/t/p/l	poor	?	adult	inhum	nt
410	full	2	E-W	W	s/t/p/l	good	M	adult	inhum	t
411	full	2	E-W	W	s/t/p/l	poor	F	middle-aged	inhum	nt
412	full	2	E-W	w	s/t/p/l	good	F	middle-aged	inhum	nt
413	section	2	E-W	W	s/-/1	good	F	young	inhum	nt
414	full	2	E-W	w	s/t/p/l	poor	F	middle-aged	inhum	nt
415	not used									
416	full	2	E-W	W	s/t/p/l	poor	M	middle-aged	inhum	nt
417	full	2	E-W	w	s/t/-/l	poor	F	young	inhum	t
418	section	2	E-W	W	«-/-/1	-	-	-	inhum	nt
419	full	2	E-W	W	s/t/p/l	poor	?	middle-aged	inhum	nt
420	full	2	E-W	W	s/t/p/l	poor	1	middle-aged	inhum	nt
421	section	2	E-W	-	-/-/1	-	-	-	inhum	t
422	full	2	E-W	w	s/t/-/l	poor	M	middle-aged	inhum	nt
423	full	2	E-W	W	s/t/-/l	poor	?	young	inhum	nt
424	full	2	E-W	w	s/t/p/l	poor	M	middle-aged	inhum	nt
425	full	2	E-W	w	s/t/p/l	poor	F	young	inhum	nt
426	full	2	E-W	w	s/t/p/l	good	M	middle-aged	inhum	nt
427	full	2	E-W	-	-/-/-/	-	-	(child)	inhum	nt
428	full	2	E-W	W	s/t/-/l	poor	M	middle-aged	inhum	t
429	full	2	E-W	w	s/t/p/l	poor	M	middle-aged	inhum	nt
430	full	2	E-W	W	s/t/p/l	poor	F	young	inhum	nt
431	full	2	E-W	W	s/t/p/l	good	M	middle-aged	inhum	nt
432	disturbed	2	E-W	-	s/-/1	-	1	2-3 yrs	inhum	-
433	disturbed	2	E-W	W	S/-/1	frags	?	adult	inhum	-
434	full	2	E-W	W	-/t/p/l	good	F	young	inhum	nt
435	section	2	E-W	W	s/-/1	frag	-	-	inhum	nt
436	full	2	E-W	W	s/t/p/l	poor	M	young	inhum	nt
437	full	2	E-W	W	-/t/p/l	frags	-	(infant/child)	inhum	nt
438	full	2	E-W	-	-/-/-/	-	-	(child)	inhum	nt
439	full	2	E-W	W	s/t/p/l	poor	M	young	inhum	nt
440	full	2	E-W	W	s/t/p/l	poor	F	middle-aged	inhum	t
441	full	2	E-W	W	s/t/p/l	good	M	middle-aged	inhum	nt
442	full	2	E-W	W	s/t/p/l	poor	M	middle-aged	inhum	t
443	full	2	E-W	w	S/-/1	poor	?	adult	inhum	nt
444	full	2	E-W	W	s/t/-/l	poor	1	4 yrs	inhum	nt
445	full	2	E-W	W	s/t/p/l	good	F	young	inhum	nt
446	full	2	E-W	w	s/t/p/l	good	F	middle-aged	inhum	nt
447	disturbed	1	N-S	N	S/U/1	poor	?	middle-aged	inhum	none
448	disturbed	2	E-W	W	-/t/p/l	poor	?	adult	inhum	nt
449	full	2	E-W	w	s/t/-/l	poor	-	(adult)	inhum	nt

Appendix 1: Summary of burial characteristics, Butt Road

Grave	Excavation	Period	Align-ment	Head	Skeletal material	Sex	Age	Burial type	Coffin type	Grave goods
				a	b					
450	disturbed	2	E-W	W	-/-/-/		(adult)	inhum	nt	-
451	disturbed	2	E-W	W	-/-/-/	missing	-	inhum	nt	-
452	full	2	E-W	W	s/t/p/l	good	F young	inhum	nt	outside coffin: beaker
453	full	2	E-W	W	s/t/-/	poor	? young	inhum	t	-
454	full	2	E-W	W	s/t/p/l	good	1(F) 5 yrs	inhum	nt	?inside coffin: armlets
455	full	2	E-W	W	s/t/p/l	good	F middle-aged	inhum	nt	-
456	disturbed	1	N-S	S	-/-/-/	poor	-	inhum	nt	-
457	full	2	E-W	W	s/-/-/-	-	-	inhum	nt	none
458	disturbed	1	N-S	N	-	-	-	inhum	nt	inside coffin: footwear
459	full	2	E-W	W	s/t/p/l	good	? young	inhum	nt	-
460	full	2	E-W	W	s/t/p/l	good	F young	inhum	nt	none
461	full	2	E-W	W	S/-/-/	poor	9 adult	inhum	nt	-
462	disturbed	2	E-W	W	s/t/7-	poor	F adult	inhum	nt	none
463	full	2	E-W	W	s/t/p/l	poor	? ?	inhum	nt	-
464	full	2	E-W	W	&/-/-/	frags	1 2 yrs	inhum	nt	-
465	disturbed	2	E-W	-	-/-/-/	-	-	inhum	-	-
466	full	2	E-W	w	-/t/-/	poor	? adult	inhum	nt	none
467	full	2	E-W	w	S/-/-/	frags	? adult	inhum	nt	-
468	full	2	E-W	w	s/t/-/	poor	? adult	inhum	nt	none
469	full	2	E-W	w	S/-/-/	poor	1 adult	inhum	nt	none
470	full	2	E-W	w	S/-/-/	frags	1 1 yr	inhum	nt	none
471	disturbed	2	E-W	w	s/t/7-	poor	1 18 mths	inhum	nt	-
472	full	2	E-W	w	s/t/p/l	good	M middle-aged	inhum	nt	none
473	full	2	E-W	w	-/-/-/	-	- (infant)	inhum	none	none
474	full	2	E-W	w	s/t/p/l	poor	F adult	inhum	nt	-
475	disturbed	2	E-W	w	-/t/p/l	poor	M young	inhum	nt	none
476	full	2	E-W	-	-/-/-/	-	- (infant/child)	inhum	none	none
477	full	2	E-W	w	s/t/p/l	poor	M adult	inhum	nt	none
478	full	2	E-W	w	s/t/-/	poor	? adult	inhum	nt	-
479	disturbed	2	E-W	w	-/t/p/l	poor	M young	inhum	nt	-
480	full	2	E-W	w	-/-/-/	poor	- (infant)	inhum	none	none
481	full	2	E-W	w	s/-/-/	frags	- young child	inhum	nt	none
482	disturbed	2	E-W	w	s/t/-/	poor	V adult	inhum	nt	-
483	full	2	E-W	w	s/t/p/l	poor	F young	inhum	nt	-
484	full	2	E-W	-	-/-/-/	-	- (child)	inhum	nt	-
485	disturbed	1	N-S	s	-/t/p/l	poor	- 2-3 yrs	inhum	nt	-
486	full	2	E-W	w	s/t/p/l	good	F middle-aged	inhum	nt	none
487	full	2	E-W	w	s/t/p/l	good	? middle-aged	inhum	nt	inside coffin: comb
488	full	2	E-W	w	s/t/p/l	poor	M middle-aged	inhum	nt	-
489	full	2	E-W	w	S/-/-/	poor	? adult	inhum	none	-
490	section	2	E-W	w	S/-/-/	good	F adult	inhum	none	-
491	full	2	E-W	w	s/t/p/l	good	M young	inhum	nt	none
492	full	2	E-W	w	s/t/p/l	poor	M young	inhum	nt	none
493	full	2	E-W	w	s/t/p/l	poor	F adult	inhum	nt	none
494	full	2	E-W	w	s/t/p/l	good	M middle-aged	inhum	nt	none
495	full	2	E-W	w	s/t/-/	poor	1 adult	inhum	t	none
496	full	2	E-W	w	s/t/p/l	good	M young	inhum	nt	none
497	full	2	E-W	w	s/t/p/l	poor	? adult	inhum	nt	none
498	not a grave									
499	full	2	E-W	w	s/t/p/l	poor	F middle-aged	inhum	nt	none
500	full	2	E-W	w	s/t/p/l	poor	? young	inhum	nt	inside coffin: footwear
501	disturbed	2	E-W	w	s/-/-/	frags	1 child	inhum	nt	-
502	full	2	E-W	w	s/-/-/	frags	1 young infant	inhum	nt	-
503	full	2	E-W	E	s/-/-/	frags	1(F) young infant	inhum	nt	inside coffin: bead armlet + coin, disc & ring, armlets, bead necklaces
504	full	2	E-W	-	-/-/-/	-	- (child)	inhum	nt	none
505	full	2	E-W	w	s/t/p/l	good	F middle-aged	inhum	nt	none
506	full	2	E-W	w	s/t/p/l	poor	F middle-aged	inhum	t	none
507	disturbed	2	E-W	-	-/-/-/	-	- (adult?)	inhum	none	-
508	disturbed	2	E-W	-	-/-/-/	-	- (adult?)	inhum	none	-
509	full	2	E-W	w	s/t/p/l	good	M young	inhum	nt	none
510	full	2	E-W	w	s/t/p/l	good	1 14 yrs	inhum	nt	none
511	full	2	E-W	w	s/t/-/	poor	F middle-aged	inhum	t	none
512	disturbed	2	E-W	-	-/-/-/	-	-	inhum	nt	-
513	full	2	E-W	w	s/t/p/l	good	F young	inhum	nt	none
514	full	2	E-W	w	s/t/-/	poor	? young	inhum	nt	none
515	disturbed	2	E-W	w	-/t/-/	poor	? adult	inhum	nt	-
516	full	2	E-W	-	-/-/-/	-	-	inhum	none	none
517	?full	2	E-W	w	s/t/-/	frags	1 infant	inhum	none	none

Appendix 1: Summary of burial characteristics, Butt Road

Grave	Excavation	Period	Alignment	Head	Skeletal material	Sex	Age	Burial type	Coffin type	Grave goods
518	full	2	E-W		-/-/-		(child)	inhum	nt	none
519	full	2	E-W	W	s/t/p/l	good	(F) 7 yrs	inhum	nt	inside coffin: hairpins, wooden box containing armlets, comb
520	full	2	E-W	W	s/-/-	poor	I 4-5 yrs	inhum	nt	-
521	full	2	E-W	W	s/t/p/l	good	M old	inhum	nt	-
522	full	1	N-S	-	-/-/-	-	(adult)	inhum	nt	-
523	full	2	E-W	W	S/-/l	poor	I 12 yrs	inhum	t	none
524	disturbed	2	E-W	W	-/-/l	good	? adult	inhum	nt	-
525	full	2	E-W	W	s/t/p/l	poor	M old	inhum	nt	none
526	section	2	E-W	W	s/t/-	frags	-	inhum	none	-
527	full	2	E-W	W	s/t/p/l	poor	M old	inhum	nt	none
528	full	2	E-W	W	s/t/p/l	poor	? adolescent	inhum	none	none
529	full	2	E-W	W	s/t/-/l	poor	? old	inhum	t	none
530	full	2	E-W	W	s/t/-/l	poor	F adolescent	inhum	none	none
531	full	2	E-W	W	s/t/p/l	poor	F old	inhum	none	none
532	full	2	E-W	W	s/t/p/l	poor	? middle-aged	inhum	nt	none
533	disturbed	1	N-S	N	-/-/l	poor	? ?	inhum	nt	inside coffin: footwear; outside coffin: jar & dish
534	full	2	E-W	W	s/t/p/l	poor	M old	inhum	nt	none
535	full	2	E-W	W	S/-/l	poor	I 18 yrs	inhum	t	none
536	full	2	E-W	W	S/t/-/l	frags	I infant	inhum	nt	none
537	section	2	E-W	W	S/-/-	frags	?(F) adult	inhum	none	hairpins, bead necklace, armlets, finger-rings
538	disturbed	2	E-W	W	S/-/-	frag	? ?	inhum	none	-
539	full	2	E-W	W	s/-/-	poor	I child	inhum	nt	none
540	disturbed	1	N-S	-	-/-/-	-	-	inhum	t	-
541	full	1	N-S	s	s/t/p/l	poor	- older child	inhum	nt	none
542	full	2	E-W	W	s/t/p/l	poor	? adult	inhum	nt	-
543	full	2	E-W	W	s/t/p/l	good	M young	inhum	nt + plaster	none
544	disturbed	2	E-W	W	-/-/l	poor	? adult	inhum	none	-
545	full	2	E-W	W	s/t/p/l	poor	I 6-7 yrs	inhum	nt	-
546	full	2	E-W	W	s/-/-	?missing	-	inhum	none	-
547	full	2	E-W	W	s/t/-/l	poor	- adult	inhum	nt	none
548	full	2	E-W	-	-/-/-	-	(adult)	inhum	nt	none
549	full	2	E-W	W	s/t/p/l	poor	F adult	inhum	nt	none
550	full	2	E-W	-	-/-/-	-	-	inhum	t & tile	-
551	full	2	E-W	W	s/t/p/l	poor	? adult	inhum	nt	none
552	full	2	E-W	W	s/t/-/l	poor	F middle-aged	inhum	nt	none
553	full	2	E-W	W	s/t/-/l	poor	? ?	inhum	nt	none
554	disturbed	1	N-S	N	-/t/-/l	poor	? adult	inhum	nt	inside coffin: footwear,
555	full	1	N-S	s	S/-/l	poor	- older child	inhum	nt	jar outside coffin: footwear, jar
556	full	2	E-W	W	s/t/p/l	poor	F young	inhum	nt	none
557	full	2	E-W	W	s/t/p/l	poor	F adult	inhum	t	-
558	full	2	E-W	W	s/t/p/l	good	M middle-aged	inhum	nt	-
559	full	2	E-W	W	s/t/p/l	good	F young	inhum	nt	-
560	full	2	E-W	W	s/t/-/l	frags	I 30 mths-3 yrs	inhum	nt	none
561	disturbed	2	E-W	W	s/-/-	frags	I child	inhum	t	-
562	full	2	E-W	W	s/t/p/l	poor	F middle-aged	inhum	nt	none
563	disturbed	2	E-W	W	-/t/p/l	poor	M adult	inhum	none	-
564	full	2	E-W	-	-/-/-	-	(child)	inhum	nt	none
565	full	2	E-W	W	s/t/-/l	poor	? adult	inhum	nt	none
566	full	2	E-W	W	-/-/l	poor	? ?	inhum	nt	none
567	full	2	E-W	W	s/t/p/l	good	F middle-aged	inhum	nt	none
568	full	2	E-W	W	s/t/p/l	poor	? ?	inhum	nt	none
569	full	2	E-W	W	s/t/p/l	poor	I 14-15 yrs	inhum	nt	none
570	full	2	E-W	W	s/t/p/l	good	M 15-16 yrs	inhum	nt	one
571	full	2	E-W	W	s/t/p/l	good	F middle-aged	inhum	t	none
572	full	2	E-W	W	s/t/-/l	poor	? old	inhum	nt	none
573	full	1	N-S	s	s/t/p/l	good	M middle-aged	inhum	t	none
574	full	2	E-W	W	s/t/p/l	good	M middle-aged	inhum	nt	none
575	disturbed	2	E-W	W	s/t/-/l	good	M young	inhum	none	-
576	disturbed	2	E-W	W	-/-/l	poor	? adult	inhum	none	-
577	full	2	E-W	W	s/t/-/l	poor	? adult	inhum	none	none
578	disturbed	2	E-W	W	-/-/l	-	-	inhum	nt	-
579	disturbed	2	E-W	W	-/-/l	poor	? adult	inhum	nt	-
580	full	2	E-W	W	s/t/-/l	poor	? adult	inhum	nt	none
581	full	2	E-W	-	-IXI-I-	frags	? ?(adult)	inhum	none	-

Appendix 1: Summary of burial characteristics, Butt Road

Grave	Excavation	Period	Alignment	Head	Skeletal material	a	b	Sex	Age	Burial type	Coffin type	Grave goods
582	full	2	E-W	W	s/t/p/l	good	M	middle-aged	inhum	nt	none	
583	full	2	E-W	W	s/-/-/-	frags	-	(adult)	inhum	nt	none	
584	full	2	E-W	W	S/-/I	poor	-	(child)	inhum	t	none	
585	full	2	E-W	W	s/t/p/l	poor	?	young	inhum	t	none	
586	full	2	E-W	W	S/-/I	poor	F	young	inhum	nt	none	
587	full	2	E-W	W	s/t/p/l	poor	?	old	inhum	nt	none	
588	full	2	E-W	W	s/t/p/l	poor	?	adult	inhum	nt.	none	
589	full	2	E-W	W	S/-/I	poor	?	adult	inhum	nt	none	
590	full	2	E-W	-	-/-/-/-	-	-	(infant/chi;d)	inhum	nt	none	
591	full	2	E-W	-	-/-/-/-	-	-	(infant/child)	inhum	nt	none	
592	full	2	E-W	W	s/t/-/l	poor	?	old	inhum	nt in vault	none	
593	full	2	E-W	W	s/t/p/l	good	?	middle-aged	inhum	nt	none	
594	full	2	E-W	W	s/t/p/l	good	F	middle-aged	inhum	nt	none	
595	full	2	E-W	W	s/t/p/l	good	I	12-13 yrs	inhum	nt	none	
596	full	2	E-W	W	s/t/p/l	poor	?	old	inhum	nt	none	
597	full	1	N-S	s	s/t/p/l	poor	F	middle-aged	inhum	none	none	
598	full	2	E-W	W	-/-/I	poor	?	?	inhum	nt	-	
599	full	2	E-W	W	s/t/p/l	poor	F	young	inhum	nt	none	
600	full	2	E-W	W	s/t/p/l	poor	?	old	inhum	nt	none	
601	full	1	N-S	s	s/t/p/l	poor	?	middle-aged	inhum	nt	inside coffin: jar, beaker, footwear; outside coffin: jar	
602	full	2	E-W	W	s/-/-/-	frags	I	3-5 yrs	inhum	nt	none	
603	full	2	E-W	W	(s)/-/-/-	-	-	(infant/child)	inhum	nt	-	
604	full	1	N-S	N	s/t/p/l	good	M	middle-aged	inhum	none	none	
605	disturbed	1	N-S	s	-/-/p/l	poor	?	adult	inhum	nt	-	
606	full	2	E-W	W	-/-/-/-	-	-	(adult)	inhum	nt	none	
607	full	2	E-W	W	(s)/-/-/-	-	-	(child)	inhum	t	none	
608	full	2	E-W	W	S/t/p/l	poor	F	adult	inhum	nt	none	
609	full	2	E-W	w	s/-/-/-	frags	(F)	(child)	inhum	nt	inside coffin: armllet, bead armllet/necklace	
610	full	2	E-W	w	s/t/-/l	poor	I	13-14 yrs	inhum	t	-	
611	full	2	E-W	w	s/t/p/l	good	M	young	inhum	nt	none	
612	disturbed	2	E-W	w	s/-/-/-	-	-	-	inhum	none	-	
613	disturbed	2	E-W	w	S/-/I	poor	?	?(adult)	inhum	nt	-	
614	full	2	E-W	w	s/-N-	frags	?	young	inhum	nt	-	
615	full	2	E-W	w	s/-/-/-	poor	?	?(child)	inhum	nt	none	
616	full	2	E-W	w	s/t/-/-	poor	?	adult	inhum	nt	none	
617	full	2	E-W	w	s/t/-/l	poor	?	?	inhum	nt	none	
618	full	2	E-W	w	s/t/-/-	poor	?	adolescent	inhum	nt	none	
619	disturbed	1	N-S	-	-/-/-/-	-	-	-	inhum	t	-	
620	full	2	E-W	w	s/-/-/-	poor	?	adult	inhum	nt	inside coffin: glass vessel	
621	full	2	E-W	w	s/t/-/l	poor	?	adult	inhum	nt	inside coffin: jar	
622	full	2	E-W	w	s/t/p/l	poor	M	middle-aged	inhum	nt	none	
623	full	2	E-W	w	S/t/p/l	poor	F	middle-aged	inhum	nt	none	
624	full	1	N-S	s	s/t/-/l	poor	?	18-20 yrs	inhum	nt	outside coffin: jar	
625	full	2	E-W	w	-/-/-/-	-	-	-	inhum	nt	none	
626	full	2	E-W	w	S/-/I	poor	?	adult	inhum	t	none	
627	full	2	E-W	w	s/t/-/l	poor	I	7-8 yrs	inhum	nt	none	
628	full	2	E-W	w	s/t/-/l	poor	M	adult	inhum	nt	inside coffin: key	
629	disturbed	2	E-W	w	-/-/I	poor	?	adult	inhum	none	none	
630	disturbed	2	E-W	w	S/t/p/-	poor	?	adult	inhum	none	-	
631	full	2	E-W	w	s/t/p/l	good	I	10-11 yrs	inhum	nt	none	
632	full	2	E-W	w	s/t/-/l	poor	I	6-7 yrs	inhum	nt	-	
633	section/plan	1	N-S	-	-/-/-/-	-	-	-	inhum	t	-	
634	full	1	N-S	s	s/t/-/l	poor	?	young	inhum	none	none	
635	disturbed	2	E-W	w	s/t/-/-	good	M	old	inhum	nt	-	
636	disturbed	2	E-W	-	-/-/-/-	-	-	-	inhum	t	-	
637	full	2	E-W	w	s/-/-/-	poor	I	older child	inhum	none	-	
638	full	2	E-W	w	s/-/-/-	poor	I(F)	13-14 yrs	inhum	nt	inside coffin: armllets	
639	full	2	E-W	w	s/t/p/l	good	M	young	inhum	nt	none	
640	full	2	E-W	w	s/-N-	poor	I	3-6 yrs	inhum	nt	none	
641	full	2	E-W	w	s/t/p/l	poor	M	young	inhum	nt	none	
642	full	2	E-W	w	s/t/p/l	good	I	13-14 yrs	inhum	nt	none	
643	full	2	E-W	w	s/t/p/l	good	M	old	inhum	nt	none	
644	full	2	E-W	w	s/t/-/l	poor	I	8-10 yrs	inhum	nt	-	
645	full	2	E-W	w	s/t/-/-	poor	I	3-4 yrs	inhum	in G646 coffin	-	
646	full	2	E-W	w	s/t/p/l	poor	F	middle-aged	inhum	nt	-	

Appendix 1: Summary of burial characteristics, Butt Road

Grave	Excavation	Period	Align-ment	Head	Skeletal material	a	b	Sex	Age	Burial type	Coffin type	Grave goods
647	full	2	E-W	W	s/t-/l	poor	?(F)	adult		inhum	nt	inside coffin: brooch, comb, armlets, finger-rings
648	full	2	E-W	W	s-/p/l	poor	?	?		inhum	nt	-
649	full	2	E-W	w	s/t/p/l	poor	?	18-20 yrs		inhum	nt	-
650	-	1	-	-	-	-	-	child		crem	lidded jar	none
651	full	1	N-S	s	-/t/p/l	good	?	adult		inhum	nt	-
652	full	2	E-W	W	S/-/l	frags	?	?		inhum	nt	-
653	full	2	E-W	W	s/t/p/l	poor	F	adult		inhum	nt	none
654	not used											
655	not used											
656	full	2	E-W	w	s/t/p/l	poor	M	middle-aged		inhum	none	none
657	section	2	E-W	w	s/-/l	poor	?	old		inhum	t	-
658	full	2	E-W	w	s/t/p/l	poor	M	old		inhum	nt	none
659	full	2	E-W	w	s/t/l	poor	M	middle-aged		inhum	nt	none
660	section	2	E-W	-	-/-/l	-	-	-		inhum	nt	-
661	full	2	E-W	w	s/t/p/l	good	I	1 yr		inhum	nt	none
662	-	-	-	-	-	-	?M	adult		crem	jar	none
663	full	2	E-W	w	s/t/p/l	poor	?	old		inhum	nt	none
664	section	2	E-W	W	s/t/p/-	good	M	middle-aged		inhum	t	-
665	section	2	E-W	W	s/t/-/l	good	F	middle-aged		inhum	nt	-
666	full	2	E-W	w	-/-/l	poor	?	adult		inhum	t	none
667	full	2	E-W	W	s-/p/l	poor	I	17-18 yrs		inhum	nt	none
668	full	2	E-W	W	-/-/l	poor	?	young		inhum	none	-
669	full	2	E-W	W	S/-/l	poor	?	?		inhum	none	none
670	full	2	E-W	W	s/t/p/l	good	F	middle-aged		inhum	nt	none
671	full	2	E-W	w	s/t/p/l	poor	F	old		inhum	nt	none
672	section	2	E-W	w	S/l/-/l	good	I	6-7 yrs (adult)		inhum	nt	-
673	plan	2	E-W	-	-/-/l	-	-	-		inhum	t	-
674	full	2	E-W	W	s/t/p/l	poor	?	old		inhum	nt	none
675	full	2	E-W	W	s/t/-/l	poor	?	adult		inhum	t	-
676	disturbed	2	E-W	-	-/-/l	-	-	(child)		inhum	nt	-
677	full	2	E-W	w	s/t/p/l	good	I	11-12 yrs		inhum	nt in vault	none
678	full	1	N-S	N	s/t/-/l	poor	?	old		inhum	nt	outside coffin: jar
679	disturbed	1	N-S	N	S/-/l	poor	?(F)	adult		inhum	nt	inside coffin: armlet; outside coffin: beaker
680	full	2	E-W	W	s/t/p/l	poor	M	middle-aged		inhum	nt in vault	none
681	full	2	E-W	W	s/t/-/l	poor	I	4-5 yrs		inhum	none	none
682	full	2	E-W	W	s/t/p/l	good	M	young		inhum	tile	none
683	full	2	E-W	W	-/-/l	poor	?	adult		inhum	nt	none
684	full	2	E-W	W	s/t/p/l	good	M	old		inhum	nt	none
685	full	2	E-W	w	s/t/-/l	poor	?	young		inhum	none	none
686	full	1	N-S	s	S/-/l	frags	I	3-4 yrs		inhum	nt	none
687	full	1	N-S	N	s/t/-/l	good	F	young		inhum	nt + plaster	inside coffin: hairpin, textile; outside coffin: jar
688	plan	2	E-W	w	s/-/l	poor	?	adult		inhum	none	-
689	full	2	E-W	W	s/-/l	poor	?	?		inhum	nt	none
690	section	2	E-W	w	s/t/-/l	good	F	old		inhum	nt	-
691	section	2	E-W	W	s/t/-/l	poor	F	old		inhum	nt	-
692	full	2	E-W	w	-/l/-/l	-	-	-		inhum	t	none
693	disturbed	1	N-S	N	s/t/p/l	good	F	adult		inhum	none	cup, pewter dish, glass bowl & flask
694a	full	1	N-S	s	s/t/-/l	poor	?	adult		inhum	none	none
694b	full	1	N-S	?s	s/-/l	poor	?	adult		?inhum	none	none
695	full	2	E-W	w	-/l/-/l	-	-	(infant/child)		inhum	?tile	none
696	full	2	E-W	w	s/-/l	-	-	(child)		inhum	nt	none
697	full	2	E-W	w	s/t/p/l	good	M	young		inhum	nt ?+ plaster	none
698	full	2	E-W	w	-/t/-/l	poor	?	adult		inhum	nt	none
699	disturbed	2	E-W	w	-/t/-/l	-	-	-		inhum	nt	-
700	disturbed	1	N-S	s	-/-/l	poor	?	adult		inhum	?nt	-
701	disturbed	2	E-W	w	s/t/p/l	good	F	middle-aged		inhum	nt	none
702	disturbed	2	E-W	w	-/p/l	poor	?	adult		inhum	nt	-
703	full	2	E-W	-	-/-/l	-	-	-		inhum	nt	none
704	full	2	E-W	w	s/-/p/l	poor	F	adult		inhum	nt	none
705	full	2	E-W	-	-/l/-/l	-	-	(child)		inhum	nt	none
706	disturbed	2	E-W	w	-/t/p/l	good	M	adult		inhum	nt	none
707	full	2	E-W	w	s/t/p/l	poor	F	adult		inhum	nt	none
708	full	2	E-W	w	s/t/p/l	good	M	middle-aged		inhum	nt	none
709	full	2	E-W	w	s/t/-/l	poor	?	adult		inhum	nt	none
710	disturbed	2	E-W	w	-/l/-/l	good	F	adult		inhum	nt	none
711	disturbed	2	E-W	w	s/t/p/l	poor	F	adult		inhum	nt	none

Appendix 1: Summary of burial characteristics, Butt Road

Grave	Excavation	Period	Align-ment	Head	Skeletal	material	Sex	Age	Burial	Coffin	Grave goods
				a	b				type	type	
712	disturbed	2	E-W	W	-/t/p/l	good	M	adult	inhum	nt	none
713	disturbed	2	E-W	W	s/t/p/-	good	M	adult	inhum	none	none
714	full	2	E-W	W	s/t/p/l	poor	l	12-13 yrs	inhum	nt	none
715	disturbed	2	E-W	w	s/t/-/-	good	l	11-13 yrs	?inhum	none	none
716	disturbed	2	E-W	w	s/-/-/-	poor	l	8-9 yrs	inhum	nt	none
717	full	2	E-W	w	s/t/-/-	poor	M	adult	inhum	nt	none
718	disturbed	2	E-W	w	-/-/-/l	poor	?	adult	inhum	nt	none
719	disturbed	2	E-W	w	s/-/p/-	poor	F	adult	inhum	nt	none
720	section	2	E-W	w	-/-/-/l	poor	?	adult	inhum	nt	none
721	full	2	E-W	w	s/t/p/l	good	F	adult	inhum	nt	none
722	disturbed	2	E-W	w	s/t/p/l	poor	?	middle-aged	inhum	nt	none
723	full	2	E-W	w	S/-/-/l	poor	F	adult	inhum	nt	inside coffin: cu-alloy tube; outside coffin: bowl
724	disturbed	2	E-W	w	-/-/-/l	frags	?	?(child)	inhum	nt	none
725	full	2	E-W	w	s/-/-/-	frags	l	30-36 mths	inhum	nt	none
726	full	2	E-W	w	s/t/-/l	poor	F	adult	inhum	nt	none
727	full	2	E-W	w	-/t/p/l	poor	F	old	inhum	nt	none
728	full	2	E-W	w	S/-/-/l	poor	?	adult	inhum	nt	none
729	full	2	E-W	w	-/-/-/-	-	-	-	inhum	?nt	none
730	full	2	E-W	w	s/t/p/l	poor	F	adult	inhum	nt	inside coffin: footwear; outside coffin: jar, beaker
731	full	2	E-W	w	s/t/-/-	poor	l	12-13 yrs	inhum	?nt	none
732	disturbed	2	E-W	w	-/-/-/-	-	-	-	inhum	none	none
733	full	2	E-W	w	s/t/p/l	poor	F	adult	inhum	nt	none
734	full	2	E-W	w	s/-/p/l	poor	?	adult	inhum	nt	none
735	full	2	E-W	w	s/t/-/l	poor	M	adult	inhum	nt	none
736	disturbed	2	E-W	w	s/-/-/-	poor	M	adult	inhum	nt	none
737	full	2	E-W	w	s/t/p/l	good	F	old	inhum	nt + plaster	none
738	plan	2	E-W	-	-/-/-/-	-	-	-	inhum	nt	-
739	section	2	E-W	w	s/-/-/-	frags	F	adult	inhum	nt	-
740	watching	2	E-W	w	s/t/-/l	poor	M	adult	inhum	-	-
741	watching	2	E-W	w	-A/-/l	good	F	adult	inhum	nt	none

[Appendices 2-5 are on microfiche (pp 304-1079).]

APPENDIX 6:

Analysis and description of the human remains from St John's Abbey Grounds and the Maldon Road site, 1971-2

by Ann Stirland with a note by Stephanie Pinter-Bellows

These remains are from two sites excavated in Colchester between 1971 and 1972, namely St John's Abbey Grounds 1972 (IRB 72; pp 205-218) and 1971 (SUA 71; p 203; CAR 1, 41), and Maldon Road 1971 (MRC 71; pp 236-41). The material is arranged here into five groups according to date ranging from the 1st/2nd centuries to the late medieval to early post-medieval. These are:

- Group 1:* St John's Abbey Grounds (IRB 1972): probably c 1133-1171
- Group 2:* St John's Abbey Grounds 1971 (SUA 71): late medieval/early post-medieval
- Group 3:* St John's Abbey Grounds (IRB 1972): Roman (3rd-4th centuries)
- Group 4:* Maldon Road (MRC 1971): Roman (3rd-4th centuries)

The Roman bone is in a poor condition, the post-Roman material being much better preserved. Of the bone that has survived, the best is from the grounds of St John's Abbey, again from the post-Roman phase. Given the small size of the samples in each group, it is not possible to draw any valid statistical conclusions. All possible data has, however, been tabulated under the following headings: 1) inventory of human bone (see Appendix 7, microfiche pp 1080-2), 2) metrical data and dentition, 3) non-metrical data, and 4) paleopathology. The following discussion concentrates on some general points made from the metrical data and dentition and some particular points in the paleopathology.

Metrical data

Five categories have been employed in the sexing of individuals. They are: M = male; F = female; ?M; ?F; and ?. These categories only apply to the sexing of adults. It is not possible to sex sub-adult or immature material. Age determination follows the age categories used with the Butt Road material. (See Table 2.2 on p 16 for a definition of the age ranges.)

Within Group 1 there are two sub-groups. One of these is a group of 12th-century burials from stone-and-tile lined graves. Of these, F26 and F38 are definitely male and F57 is an infant, possibly a neonate, although no teeth survive. F26 is a young adult with a height of 1.69 m or about 5 ft 8 in. F38 is middle-aged, with a height of 1.63 m or just over 5 ft 5 in. Of the rest, six are male and one is a ?male of 12-18 years. F33 is the youngest (a sub- or young adult) and the shortest of the males (1.69 m or about 5 ft 8 ins) and F14 is the oldest (late middle age) and

one of the tallest (1.74 m or nearly 5 ft 10 ins); F37 is the same height as the latter.

The rest of this post-Roman group ranges from two probable neonates (F80 & F87) to a middle-aged female (F61), and two late middle-aged or old adults (F61 & F28), both of whom were probably male. The stature range is from 1.58 m or nearly 5 ft 3 in for the female F6 to 1.75 m or about 5 ft 10 in for the female F27a — a tall woman by any standards and just taller than any male in this group.

The Roman burials range from a young child of around two (MRC 71, F44) to two middle-aged males (MRC 1971, F63 & F68). The Roman remains are generally so poor that only two calculations for stature were possible.

Paleopathology

All cases of both ossified cartilage and Schmorl's nodes in all groups occur in adults, usually over the age of about 35 years. These conditions can reflect a hard physical life. Only three cases of true osteoarthritis of the spine survive, in numbers F14, F30 and F38 from Group 1. All the cases of osteophytosis occur in older subjects and the osteochondritis dissecans of both knees that F14 suffered probably occurred in adolescence.

There are two cases worthy of special mention in Group 1. There is premature obliteration of the lamboid and sphenoid sutures of the skull where they should meet at asterion in the adolescent F29. F30 appears to have suffered multiple traumatic injury, probably in adolescence, which he survived (Fig App 6.1, pp 214 & 217). The left mandible was fractured; the right tibia and probably the fibula suffered a spiral or a comminuted fracture, leading to a mal-alignment of the bone and periostitis of its surface. This mal-alignment itself led to complications with the foot producing fusion of three of the tarsals with osteophytosis and periostitis of the articular surfaces of the fibula, tibia and of the fused talus. The whole tibia appears less dense than usual and it does have a very thin cortex, and an undifferentiated structure. This same individual also dislocated his right shoulder and this was never put back correctly, so that he had arthritis of this shoulder and the articulation of bone on bone producing ebumation (polishing). There were various traumatic events which could have produced this amount of pathology. Perhaps a serious fall or several severe blows with a weapon caused these injuries.

Cases of cribra orbitalia, enamel hypoplasia and cranial porosity are thought by some to imply periods of growth cessation, often through dietary deficiencies



Fig App 6.1 Radiograph of bones from St John's Abbey Grounds (IRB 1972) grave F30 (12th century).

such as a lack of iron in childhood. Vitamin deficiencies will often produce similar results, although some specific deficiencies such as a lack of vitamin D produce particular effects, such as rickets. Periods of a lack of growth in childhood caused by severe or long-term illness also leave their effects on the skeleton. Enamel hypoplasia is one such effect as are the transverse lines of arrested growth in the long bones which may be seen in some radiographs.

All pathology appears to be more pronounced in Group 1. This may be a function of the better survival of these burials or it may reflect a harder life style than that enjoyed by the Romans.

Acknowledgements

My grateful thanks to Dr M J Gallant FRCR, consultant radiologist and his team at Northampton General Hospital for their help with both the taking and the diagnosis of the radiographs.

Note on grave F12 from Maldon Road (MRC 71)* *by Stephanie Pinter-Bellows*

The skeleton F12 is that of a gracile young-adult female (Workshop of European Anthropologists

1980). There is healed periostitis on the middle third of both the left and right tibia on both the medial and lateral surfaces. Lesions of this type usually result from ulcers related to varicose veins or repeated injury to the skin over the shin. The teeth have multiple lines of enamel hypoplasia. It occurs during the development of the teeth and is associated with general systemic disorders and nutritional deficiency. There is retention of the deciduous maxillary right second molar.

The bones are in fair to poor condition, the skeleton being approximately 50 per cent complete. The skull, metacarpals, leg bones and feet are in better condition than the upper body and trunk whilst the axial skeleton is almost completely nonexistent. On all the bones, areas of the outer table are exfoliating.

* This skeleton was not part of the group given to Ann Stirland for examination and had to be reported on later.

[Appendices 7-10 are on microfiche (pp 1080-1105).]

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ABBREVIATIONS

BAR	British Archaeological Reports (British Series)
CAR	Colchester Archaeological Report
CAR 1	Philip Crummy, <i>Aspects of Anglo-Saxon and Norman Colchester</i> , CBA Research Report, 39
CAR 2	Nina Crummy, <i>The Roman small finds from excavations in Colchester 1971-9</i>
CAR 3	Philip Crummy, <i>Excavations at Lion Walk, Balke Lane, and Middleborough, Colchester, Essex</i>
CAR 4	Nina Crummy (ed), <i>The coins from excavations in Colchester 1971-9</i>
CAR 5	Nina Crummy (ed), <i>The Post-Roman small finds from excavations in Colchester 1971-85</i>
CAR 6	Philip Crummy, <i>Excavations at Culver Street, the Gilbert School, and miscellaneous sites in Colchester 1971-85</i>
CAR 7	John Cotter & Carol Cunningham, <i>Post-Roman pottery from excavations in Colchester, 1971-85</i>
CAR 8	Hilary Cool & J Price, <i>Roman glass from excavations in Colchester, 1971-85</i>
CAR 10	Robin Symonds & Sue Wade, <i>Roman pottery from excavations in Colchester, 1971-85</i>
CAR 11	C F C Hawkes & Philip Crummy, <i>Camulodunum II</i>
CAR 12	Rosemary Luff, <i>Animal bones from excavations in Colchester, 1971-85</i>
CK	R A G Carson & J P C Kent, 'Bronze Roman imperial coinage of the later Empire', in Carson, Hill & Kent 1960
CBA	Council for British Archaeology
CM	Colchester Museums
CMR	Colchester and Essex Museum Annual Report
Drag	Dragendorff
ERO	Essex Record Office
HBMC	Historic Buildings and Monuments Commission
RCHM	Royal Commission on Historical Monuments
RIC 6	<i>Roman Imperial Coinage</i> , 6, C H V Sutherland & R A G Carson (eds)
SF	small find number
VCHE	<i>Victoria County History of Essex</i>
Wire	MSS in ERO

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









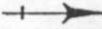
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APPENDIX 2:

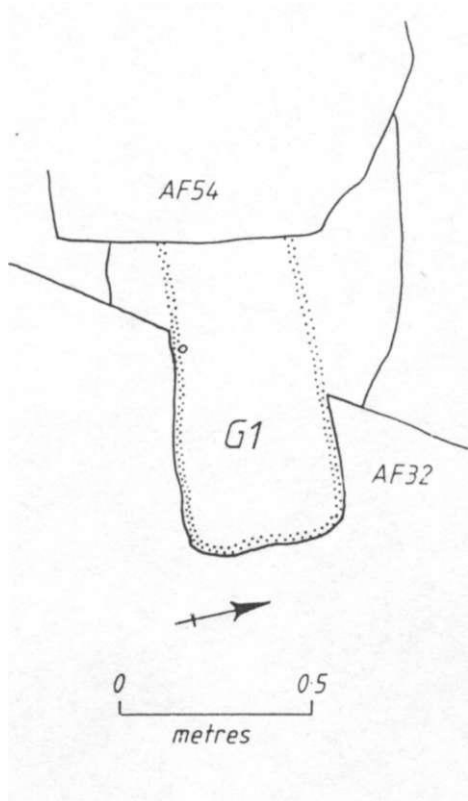
Plans and descriptions of the individual graves at the Butt Road site
(BUC 1976-8, 1986, & 1988)

BUC : GRAVE DRAWINGS

KEY

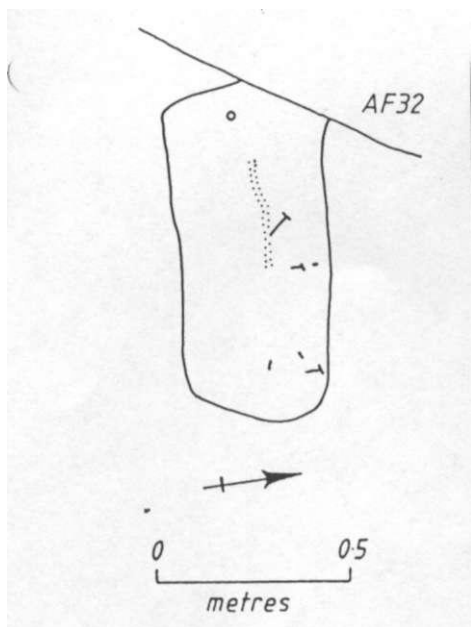
	<i>bone</i>
	<i>bone stain</i>
	<i>wood stain (usually represents coffin)</i>
	<i>other stain</i>
	<i>grave goods with reference number</i>
	<i>charcoal</i>
	<i>footwear</i>
	<i>nail - horizontal</i>
	<i>nail - vertical with point up</i>
	<i>nail - vertical with point down</i>
	<i>tile</i>
	<i>true north</i>

G 1

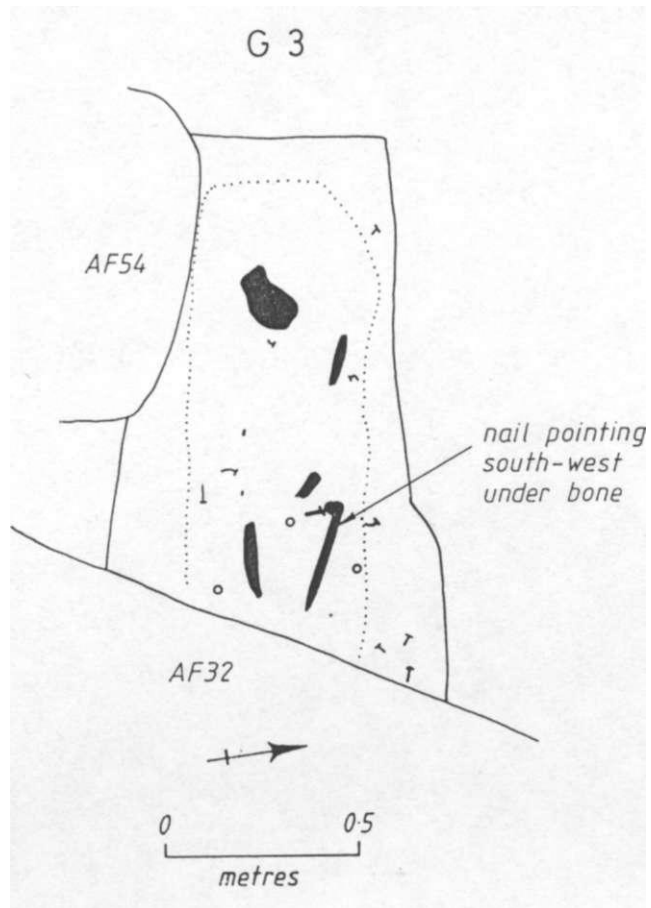


Grave 1 E-W (head to w). Cut by modern features AF32 and AF44. Possibly cut by Period 2 G3. Relationship to Period 2 G23 uncertain. Nailed timber coffin. Child, aged 10 years +. Skeleton not planned. Inside coffin against the S side lay armlets of bone and copper-alloy. and necklace of amber and glass beads.

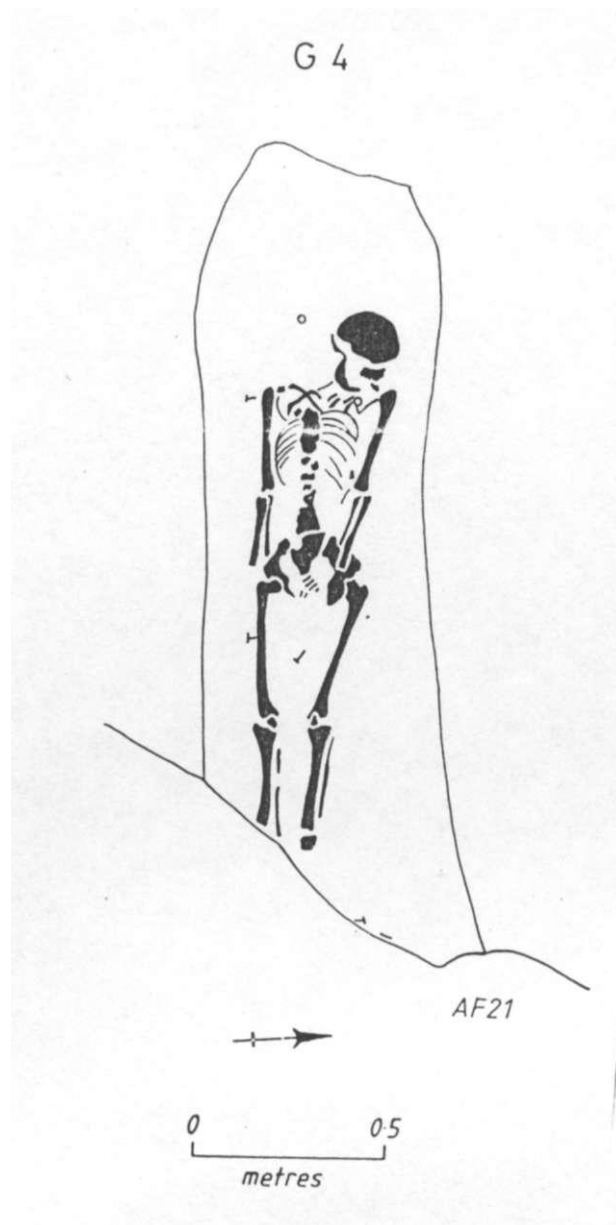
G 2



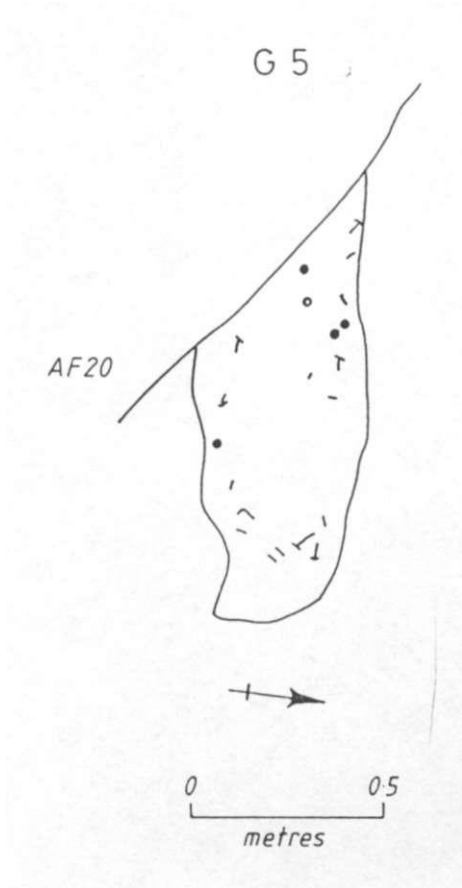
Grave 2 E-W. Isolated grave (in area of post-medieval terracing). Cut by modern pipe trench AF32. Nailed timber coffin, length 0.7 m. width uncertain. No skeletal material. Coffin length indicates infant or small child.



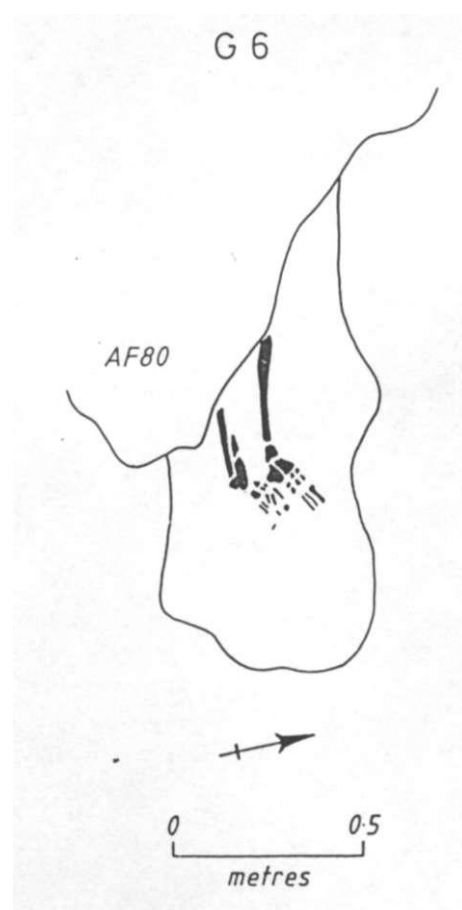
Grave 3 E-W (head to W). Cuts Period 2 G23. Possibly cuts Period 2 G1. Cut by modern features AF 32. AF5R. E end destroyed by AF32. Nailed timber coffin. Young adult, sex uncertain. Skeleton supine. Skull fragmentary, surviving bones in very poor condition.



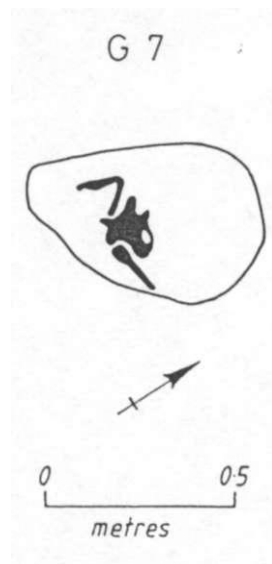
Grave 4 E-W (head to W). Isolated grave (in area of post-medieval terracing). Cut. and E end destroyed. by modern pipe trench **AF21**. Nailed timber coffin (no timber stain located). Middle-aged female. Skeleton supine. Surviving bones well preserved.



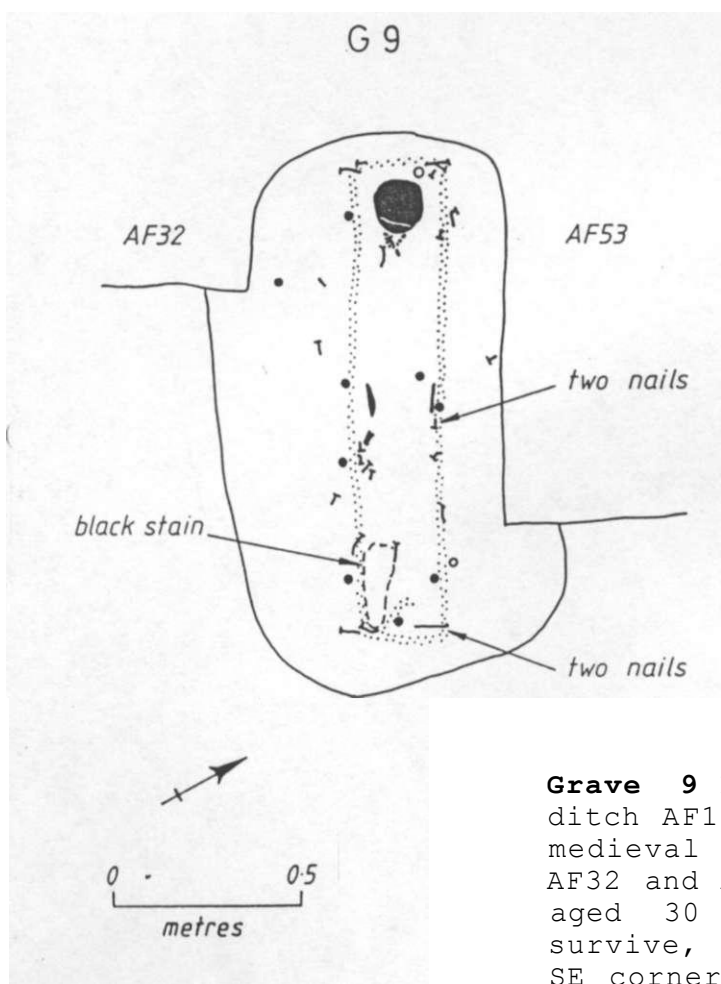
Grave 5 E-W. Cuts Period 1 pit AF96. Isolated grave (in area of post-medieval terracing). Cut by modern features AF20. AF23. AF24. W end destroyed by AF20. Nailed timber coffin (no timber stain located). length greater than 0.92 m. width 0.3 m. No skeletal material.



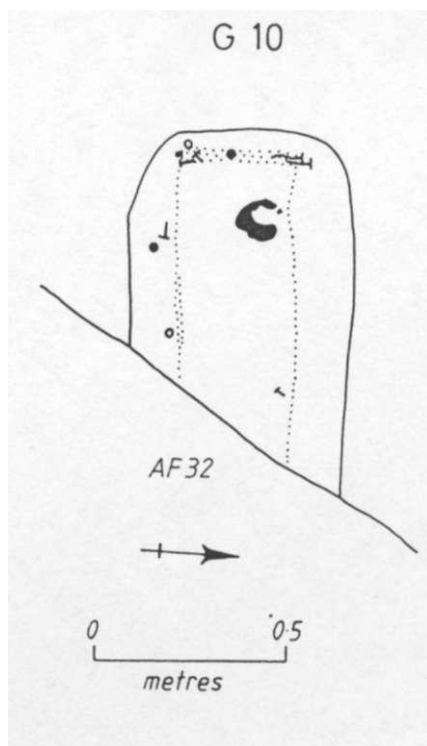
Grave 6 E-W (head to W). Cuts Period 2 G16. Cut and largely destroyed by modern feature AF80. Only E end remains. No timber stain or nails located. possibly no coffin. Adult female. Only lower leg and foot bones survive, in good condition.



Grave 7 E-W (head to W). Isolated grave (in area of post-medieval terracing). Cut and largely destroyed by modern feature AF64. Surviving part contained nails (not plotted) and probably both disturbed and undisturbed bones. Two skeletons may be represented, middle-aged male in situ (G7). and redeposited bones from earlier burial disturbed by G7.

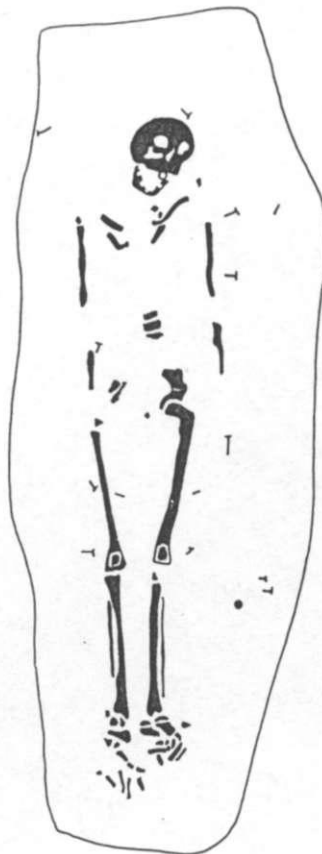


Grave 9 E-W (head to W). Cuts Period 1 E-W ditch AF152. Isolated grave (in area of post-medieval terracing). Cut by modern features AF32 and AF53. Nailed timber coffin. Child, aged 30 months. Skeleton supine. Few bones survive, all in very poor condition. Soil in SE corner of coffin stained black.

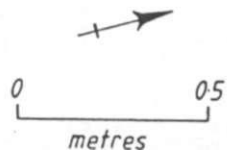


Grave 10 E-W (head to W). Isolated grave (in area of post-medieval terracing). Cut by modern pipe trenches AF7. AF32. E end of grave destroyed by AF32. Nailed timber coffin. Adult, sex uncertain. Skull only remains, in very poor condition.

G 11



*nail pointing
south-west
under skull*



Grave 11 E-W (head to W). Cuts Period 1 pits AF168 and AF169. Isolated grave. Cut by modern wall footing AF2. Nailed timber coffin (timber stain not located). Middle-aged female. Skeleton supine. Surviving bones in fair condition.

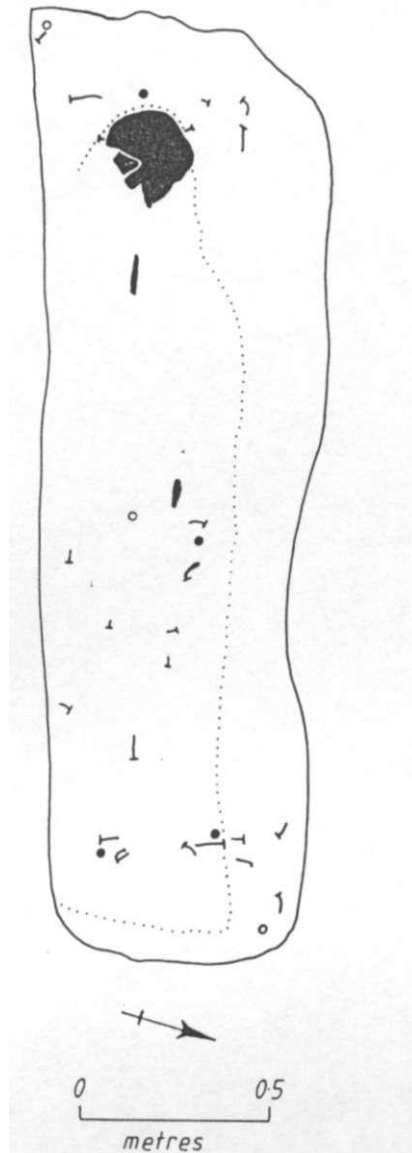
G 12



Grave 12 E-W (head to W). Cut by Period 2 G25. G40, and modern features AF79. AF32. Relationship to Period 2 G19 uncertain. Nailed timber coffin (nails not illustrated, no timber stain located). Child, aged 9 to 12 years. Skeleton supine. Surviving bones in poor condition.

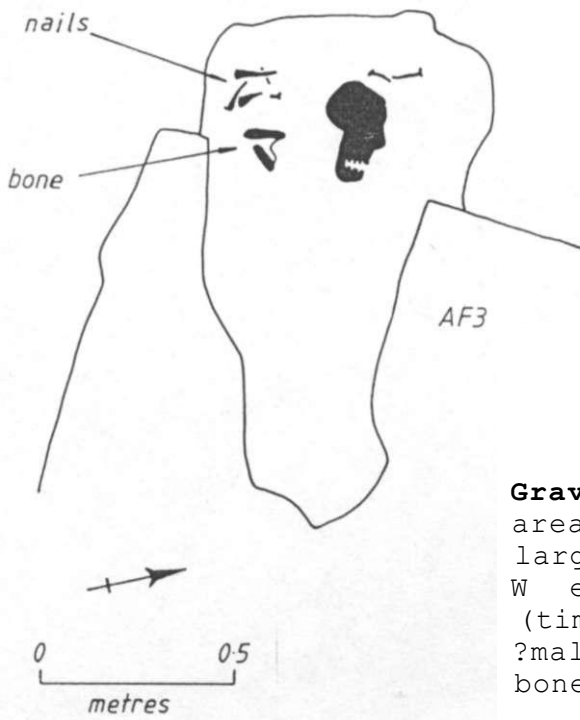
G 13

nail pointing south below skull



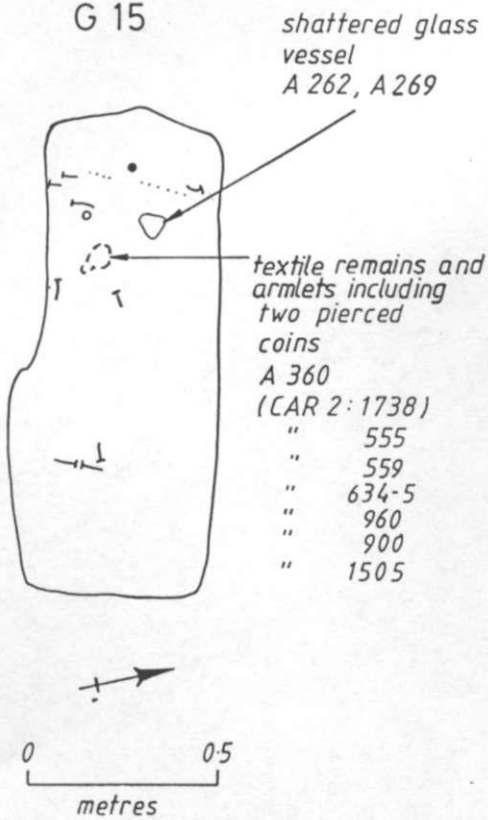
Grave 13 E-W (head to W). Cuts Period 1 E-W ditch AF152. Isolated grave (in area of post-medieval terracing). Cut by modern feature AF99. Nailed timber coffin. Middle-aged male. Few bones survive. all in very poor condition.

G 14



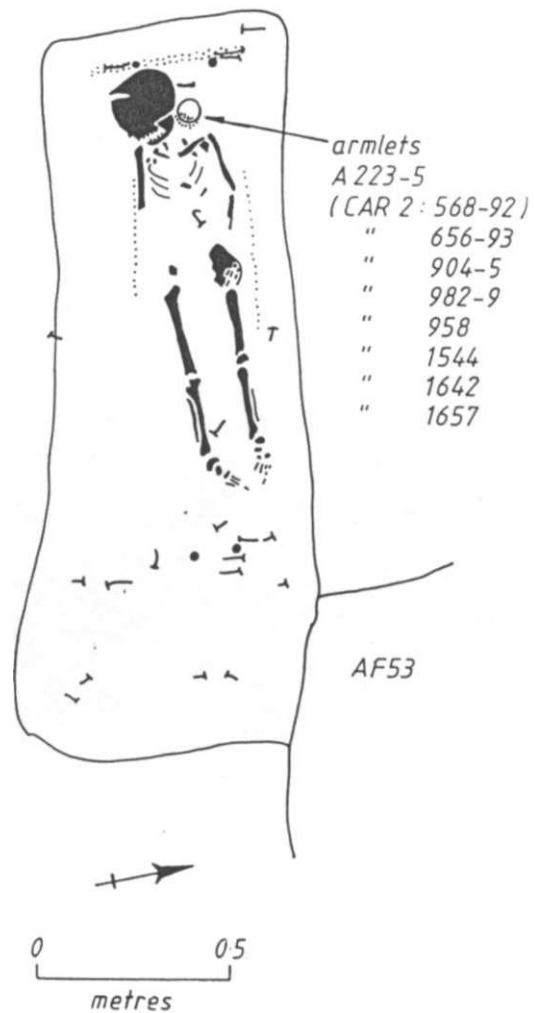
Grave 14 E-W (head to W). ?Isolated grave (in area of post-medieval terracing). Cut and largely destroyed by modern coal bunker AF3. W end only remains. Nailed timber coffin (timber stain not located). Middle-aged ?male. Only skull and few upper post-cranial bones survive, in poor condition.

G 15

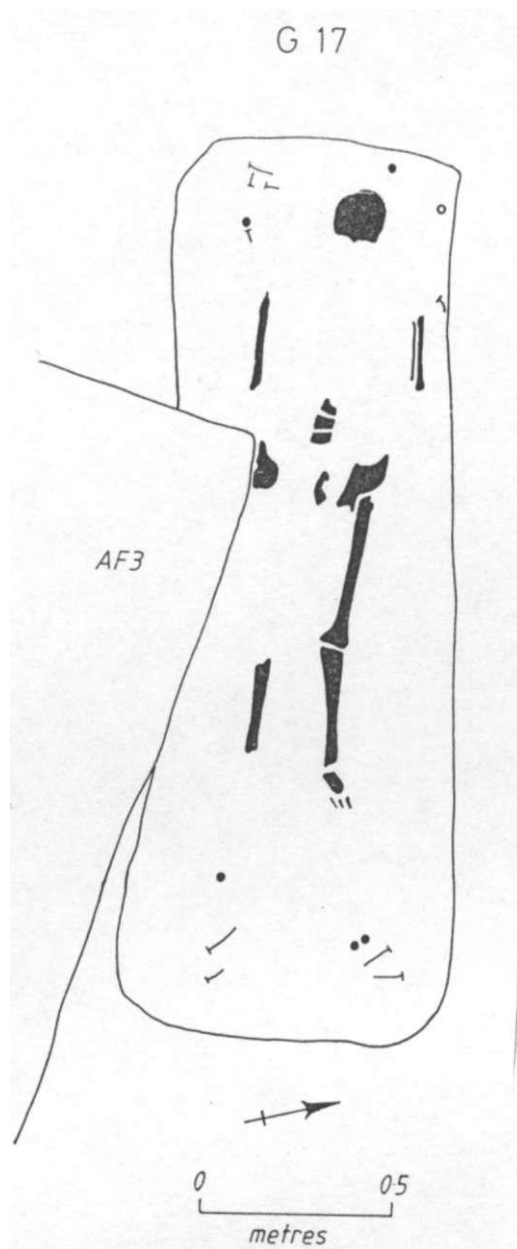


Grave 15 E-W. Cuts Period 1 E-W ditch AF152. Period 2 G24. G25. Nailed timber coffin, length 0.75 m. width uncertain. No skeletal material. Coffin size suggests infant or small child. Inside W end of coffin lay shattered glass vessel (probably placed to left of skull). and two armlets, one of iron with a glass bead threaded on and one of glass and amber beads with two pierced coins of the House of Valentinian. AD **364-78** (originally placed close to right shoulder). Small fragments of textile were associated with iron armlet. preserved by contact with metal corrosion products.

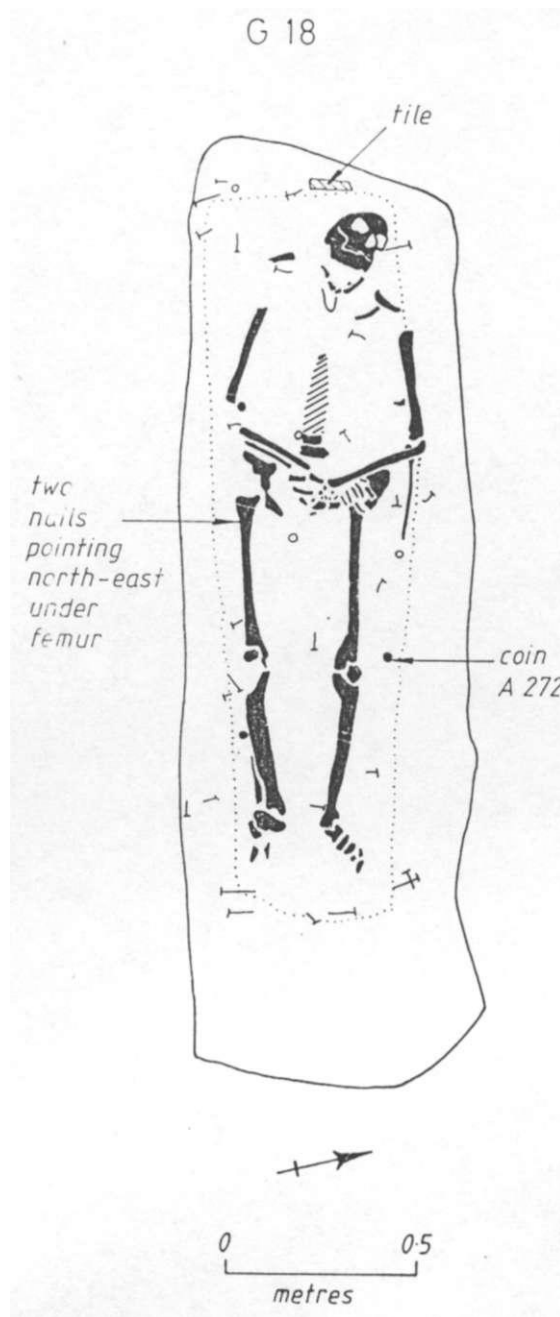
G 16



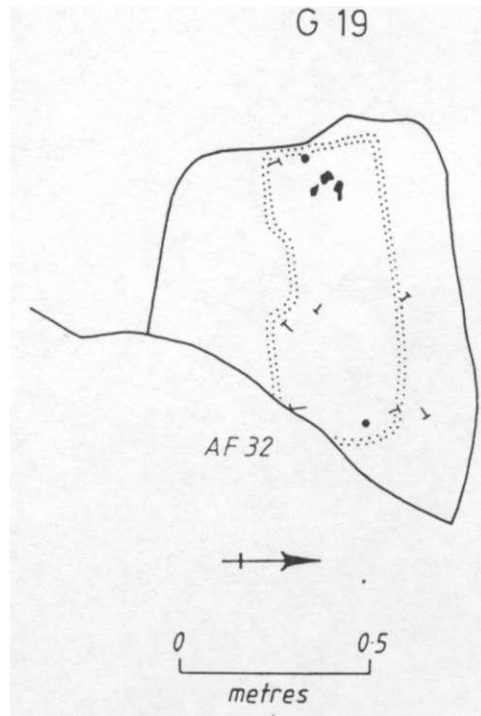
Grave 16 E-W (head to W). Cuts Period 2 G22. Cut by Period 2 G6, modern features AF54. AF56. AF79. AF100. Nailed timber coffin. Child. aged 6 years. Skeleton supine. Surviving bones well preserved. Inside W end of coffin to left of skull lay one shale and two copper-alloy armlets. and an armlet or necklace of glass beads.



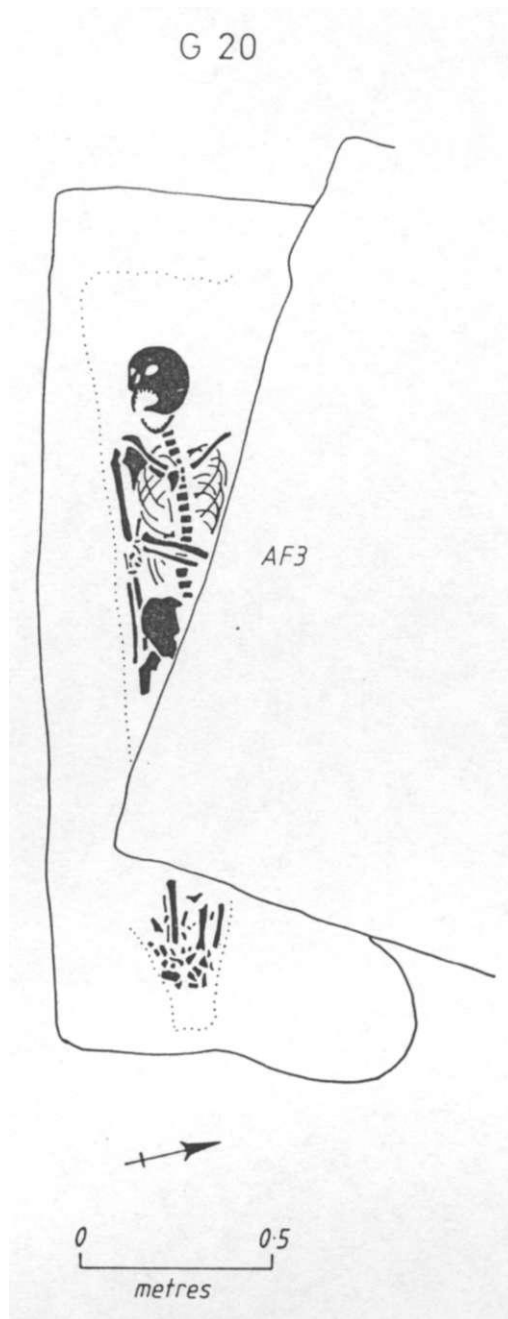
Grave 17 E-W (head to W). Cuts Period 2 G23. Cut by modern coal bunker AF3. Nailed timber coffin (no timber stain located). Elderly male. Skeleton supine. Surviving bones in poor condition.



Grave 18 E-W (head to w). Cuts Period 1 pits AF168 and AF169. Isolated grave (in area of post-medieval terracing). Cut by modern features AF2, AF21, AF103. Nailed timber coffin. Elderly male. Skeleton supine. Surviving bones well preserved. Dupondius of Antoninus Pius. AD 138-61, found between left femur and N side of coffin. Although find-spot consistent with that of object placed in or on top of coffin, early date suggests residual in fill. One small fragment of tile lay vertically against outer edge of timber stain at W of coffin, about 0.15 m above bottom of grave. Rather small for grave marker, probably also residual.

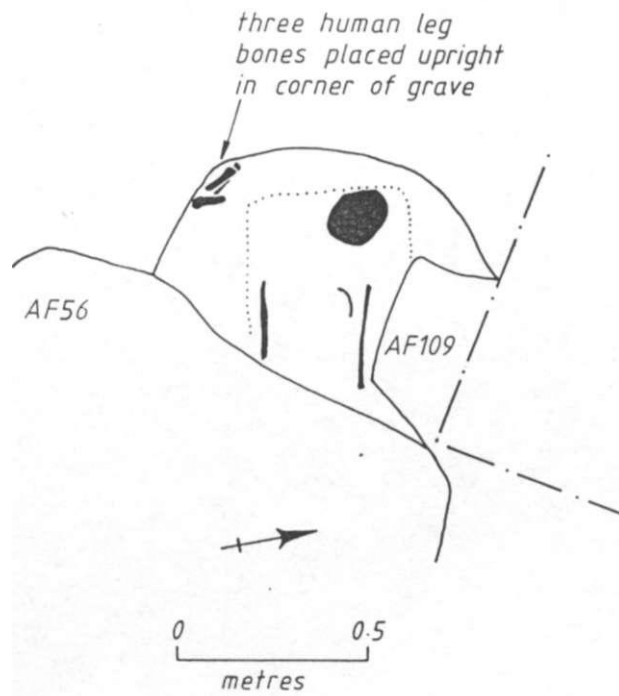


Grave 19 E-W (head to W). Cuts Period 2 G37. Cut by modern features AF6, AF52, AF32. Relationship to Period 2 G12 uncertain. Nailed timber coffin. length 0.74 m, width 0.3 m. Only three small skull fragments remain, in very poor condition. Coffin length indicates infant or small child.

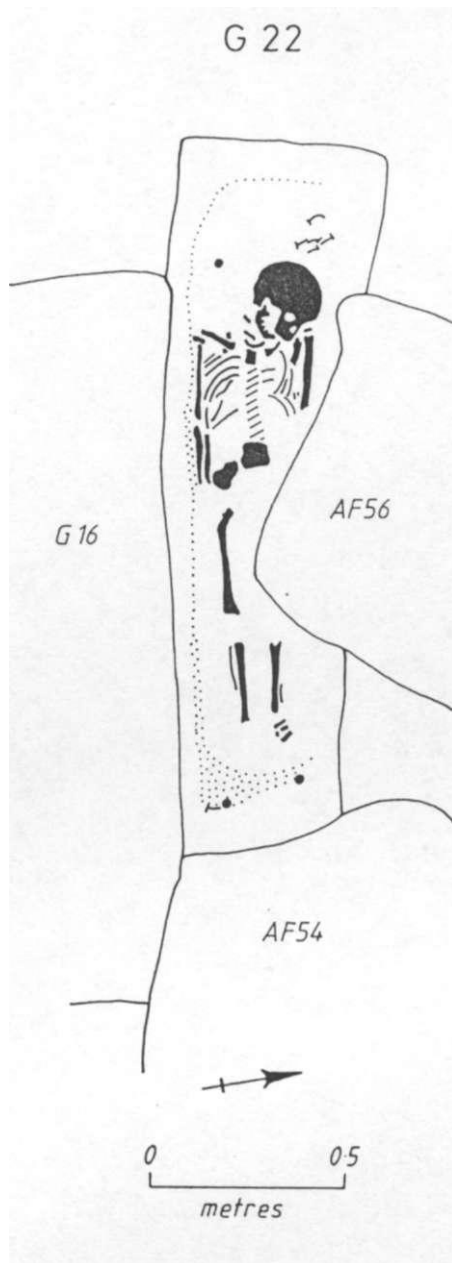


Grave 20 E-W (head to W). Cuts Period 2 G25, G39, G40. Cut and partly destroyed by modern coal bunker AF3. Relationship to Period 2 G36 uncertain. Timber coffin (nails only found in upper grave fill). Young adult male. Skeleton supine. Surviving bones in good condition.

G 21

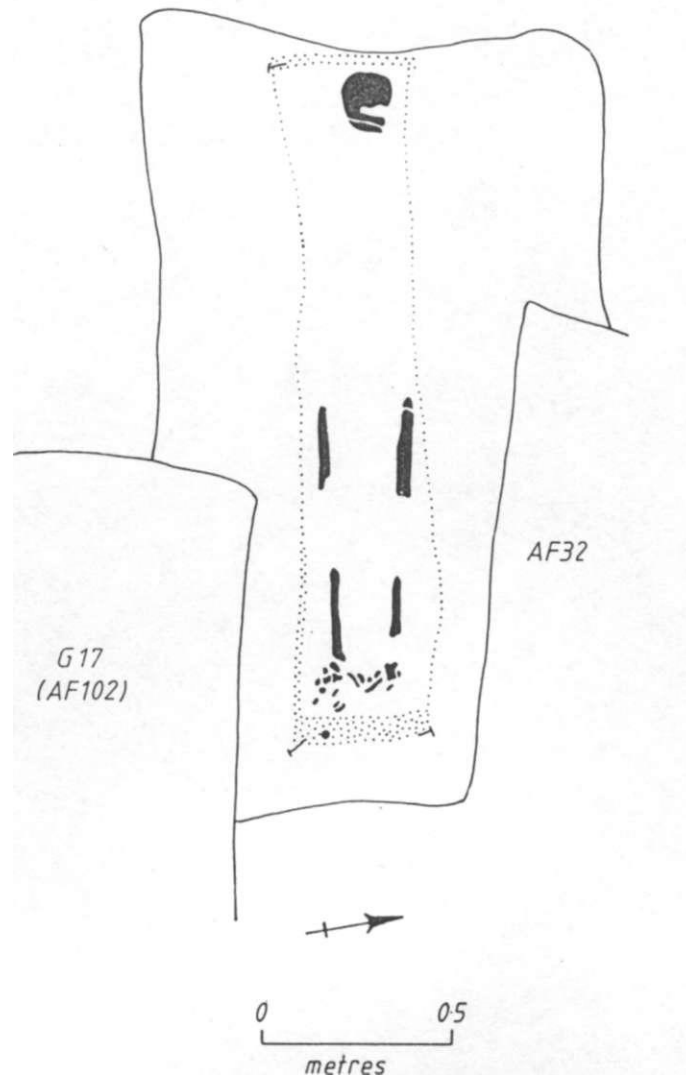


Grave 21 E-W (head to W). Isolated grave, in very disturbed area. Cut. and largely destroyed. by modern features AF56, AF106. AF109. Timber coffin (no nails located). Middle-aged male. Skeleton supine. Only skull and some upper post-cranial bones survive. In very poor condition. Three human leg bones, origin unknown. redeposited upright against SW corner of grave.

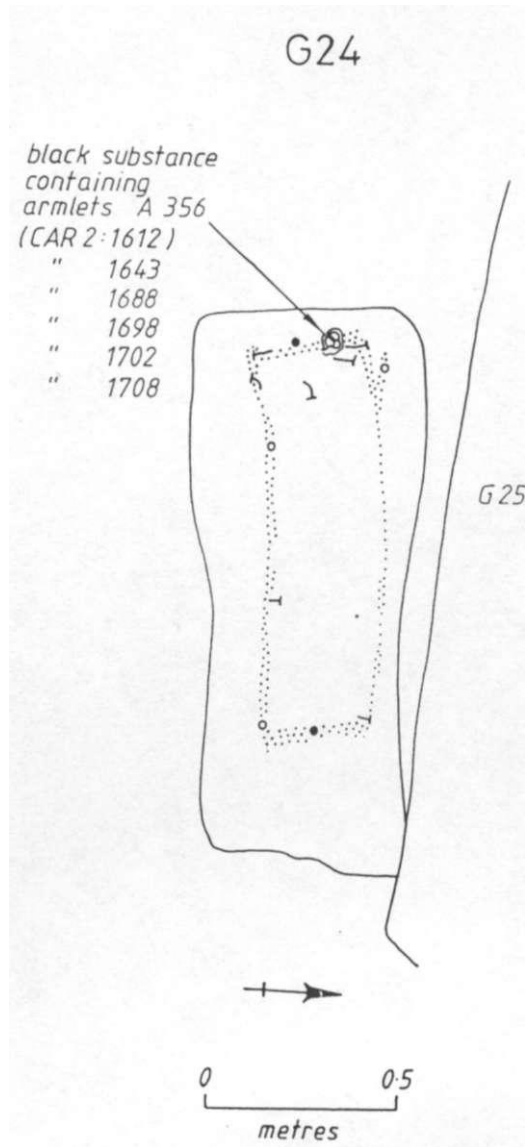


Grave 22 E-W (head to W). Cut by Period 2 G16. modern features AF54.

G 23

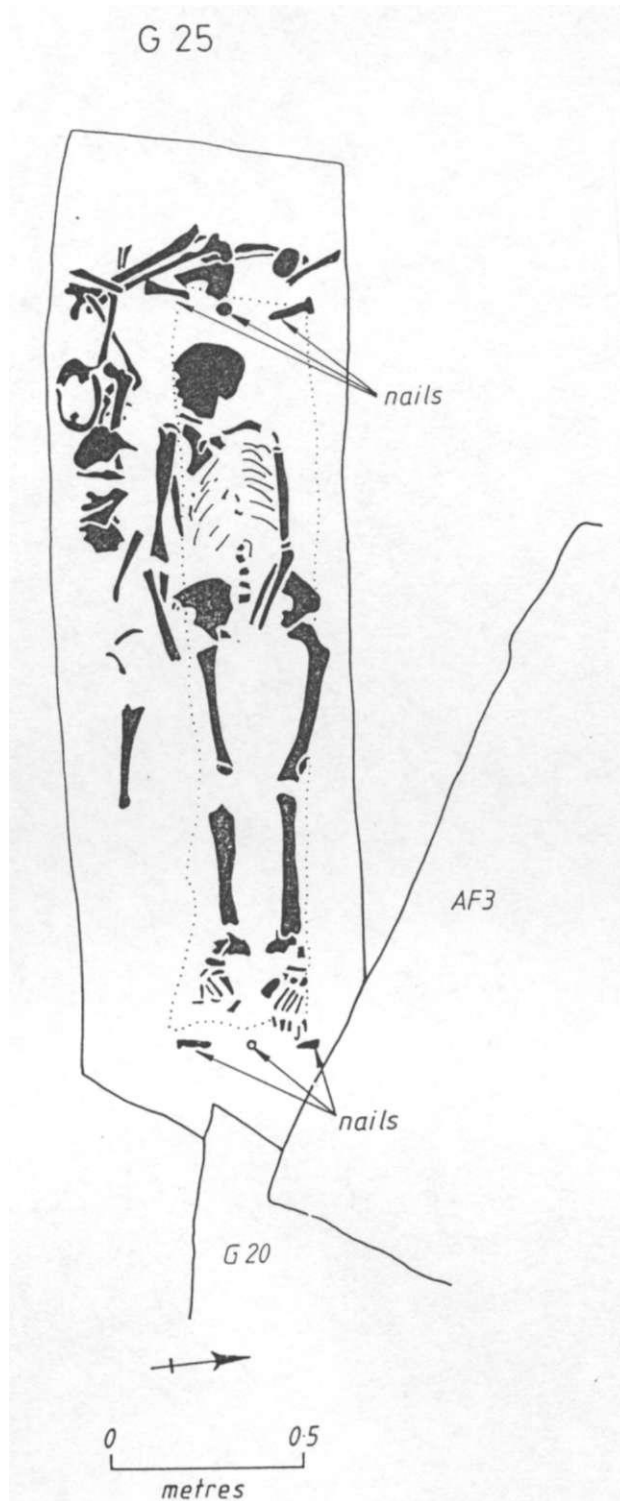


Grave 23 E-W (head to W). Cut by Period 2 G3. G17. modern pipe trench AF32. Relationship to Period 2 G1 uncertain. Nailed timber coffin. Middle-aged female. Skeleton supine. Only skull, shafts of leg long bones. and foot bones survive, in poor condition.

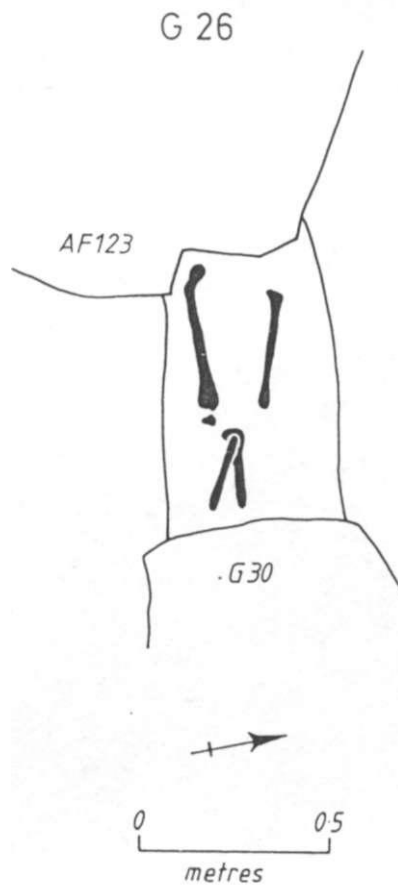


Grave 24 E-W (head to W). Cuts Period 1 E-W ditch AF152. Cut by Period 2 G15. G25. Nailed timber coffin. length 0.98 m, width 0.36 m. No skeletal material. Coffin length indicates small child. Inside coffin in NW corner lay group of copper-alloy armlets. Soil around armlets stained black.

G 25

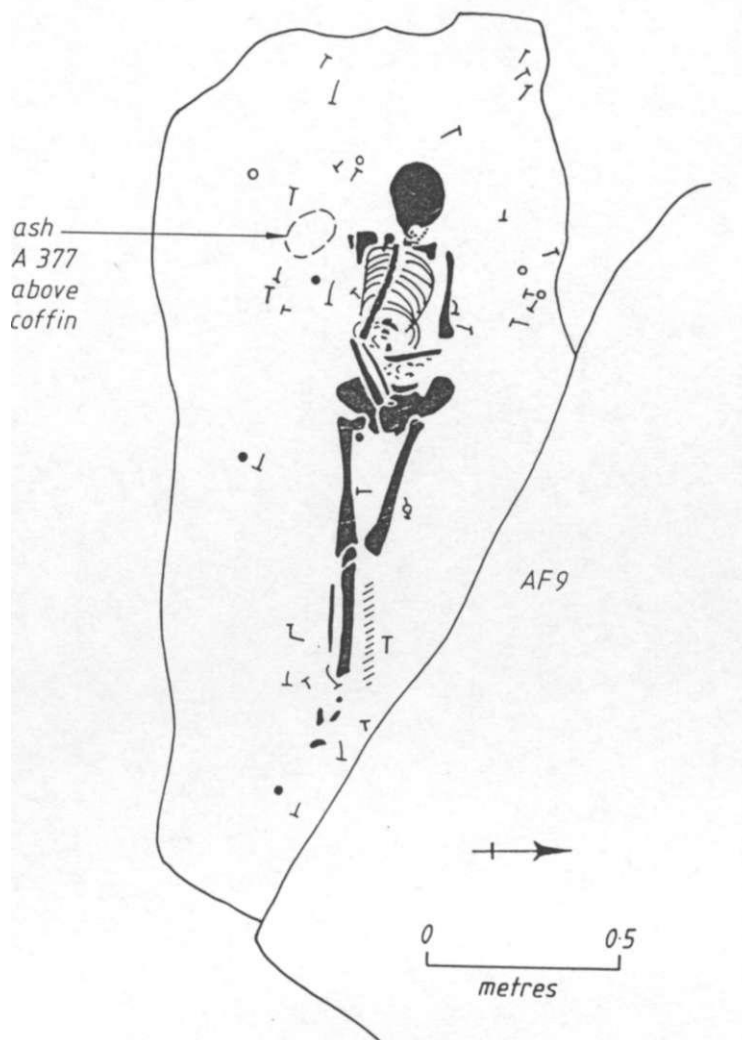


Grave 25 E-W (head to W). Cuts Period 2 G12. G24. G40. Cut by Period 2 G15. G20. modern coal bunker AF3. Nailed timber coffin. Middle-aged male. Skeleton supine. Bones in good condition. In grave fill surrounding W and S sides of coffin was a collection of human bones representing at least two individuals (a young adult female and an elderly male). These were possibly displaced from G40 and another. now completely destroyed, grave.



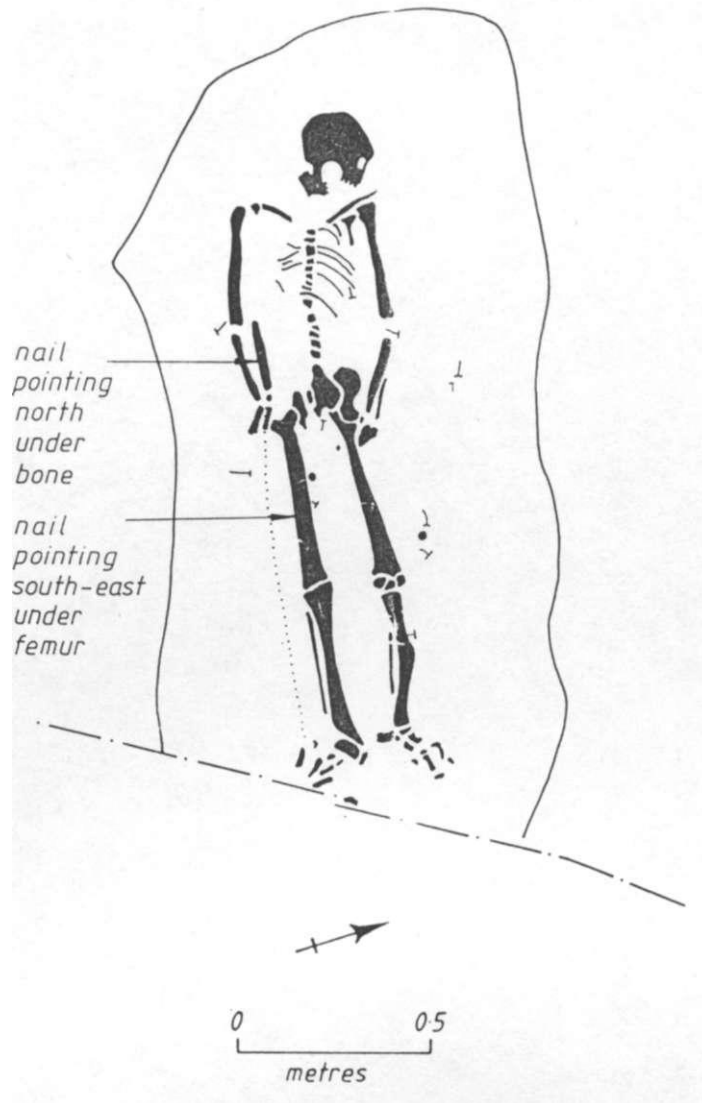
Grave 26 E-W (head to W). Cuts Period 1 E-W ditch AF152. Cut by Period 2 G30. Period 2 or post-Roman pit AF123, post-medieval cultivation furrows AF43. AF49. W and E ends destroyed by AF123 and G30. No timber stain or nails definitely associated with grave. Adult male. Only leg bones survived in good condition. Tibiae crossed (?disturbed).

G 27



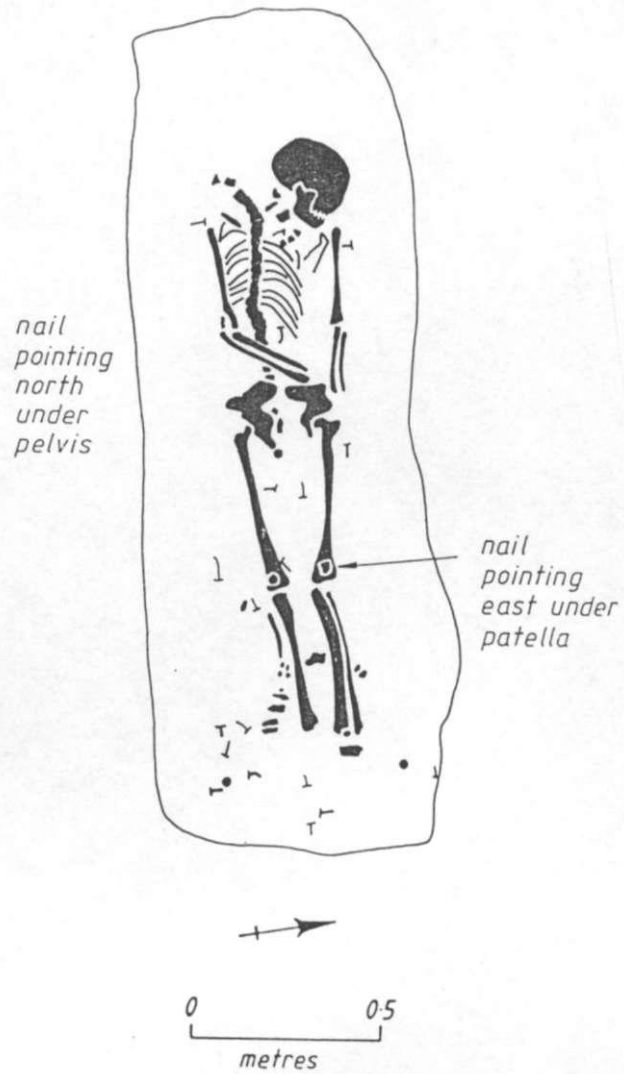
Grave 27 E-W (head to W). Isolated grave (in area of post-medieval terracing). Cut by modern features AF9. AF76. Nailed timber coffin (timber stain not illustrated). 18-year-old ?female. Skeleton supine. Bones in good condition. Small patch of ash found immediately above coffin. Unlikely to be associated with burial as minute fragments of charcoal were distributed throughout fill.

G 29

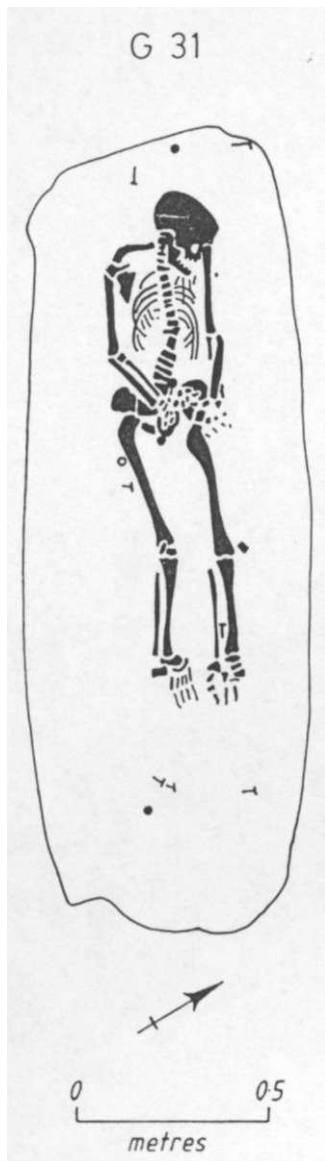


Grave 29 E-W (head to w). Isolated grave (in area of post-medieval terracing). Cut **by** post-medieval cultivation furrow AF119. modern features AF10, AF42. Extreme E end not excavated. Nailed timber coffin. Middle-aged male. Skeleton supine. Bones in good condition.

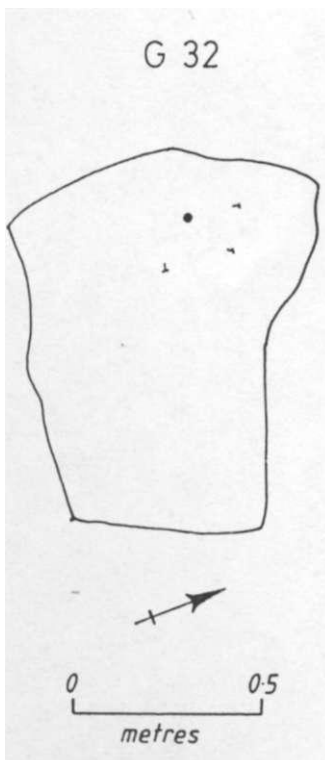
G 30



Grave 30 E-W (head to W). Cuts Period 1 E-W ditch AF152. Period 2 G26. G46. Cut by post-medieval cultivation furrows AF48. AF49. Nailed timber coffin (timber stain not located). Middle-aged male. Skeleton supine. Bones in good condition.

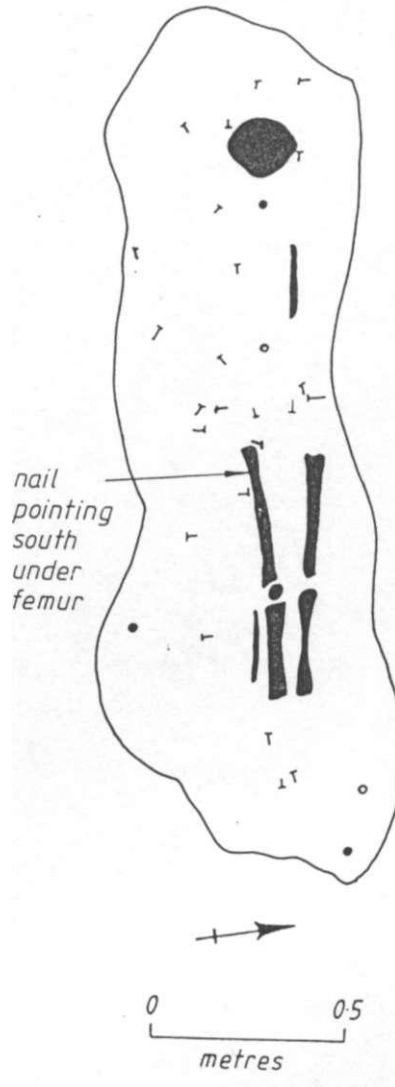


Grave 31 E-W (head to W). Cuts Period 2 G34. Cut by modern feature AF115. Nailed timber coffin (timber stain not illustrated). Child. 12 years old. Skeleton supine. Bones in very good condition.

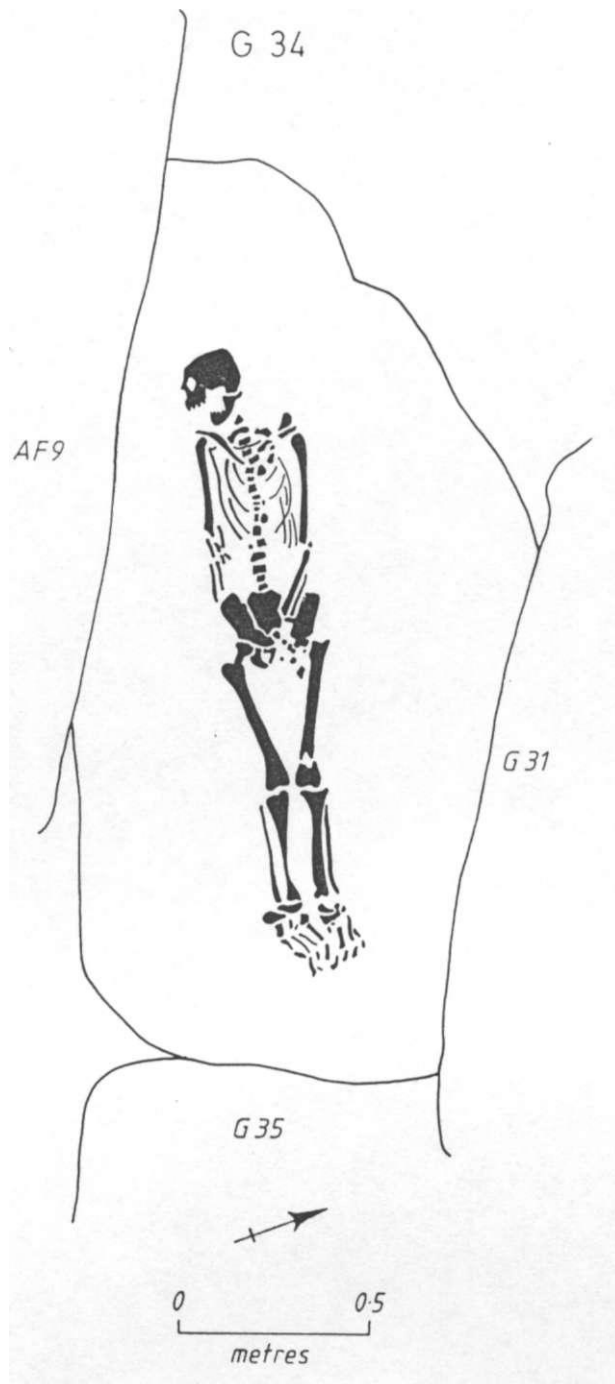


Grave 32 E-W. Cuts Period 2 G128. Nailed timber coffin (no timber stain located). No skeletal material.

G 33



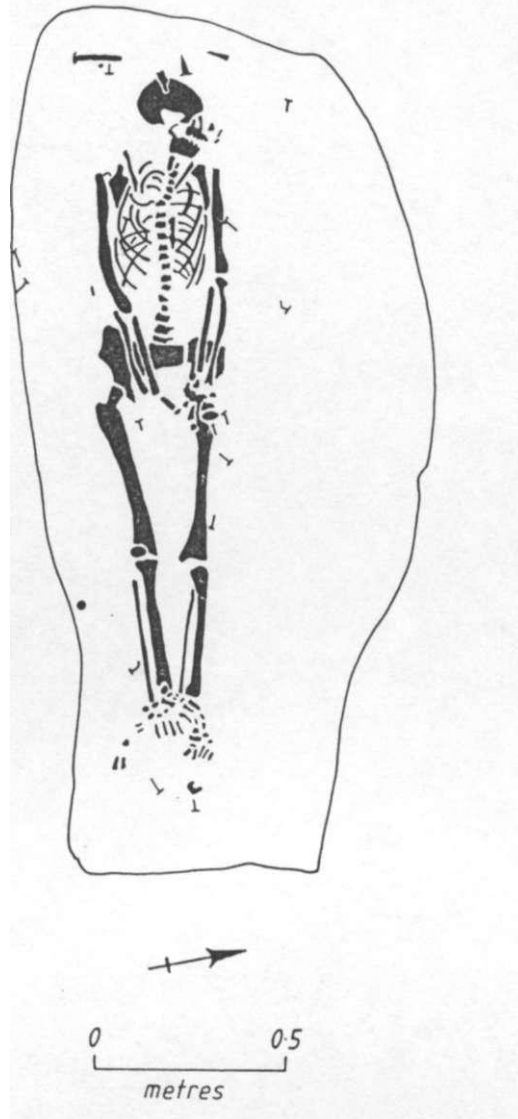
Grave 33 E-W (head to W). Cuts Period 2 **G35**. G46 and **G47**. Cut by post-medieval cultivation furrows AF48. AF49. modern wall footing AF10. Irregular sides of grave possibly due to collapse in antiquity. Nailed timber coffin (no timber stain located). Adult male. Skeleton supine. Only skull. shaft of left humerus, and most leg long bones survive, in poor condition.



Grave 34 E-W (head to W). Cuts and seals Period 2 G42. Cut by Period 2 G31. G35. modern feature AF9. Nailed timber coffin (nails not plotted, no timber stain located). Coffin laid almost directly on top of remains in G42. Middle-aged female. Skeleton supine. Bones in good condition.

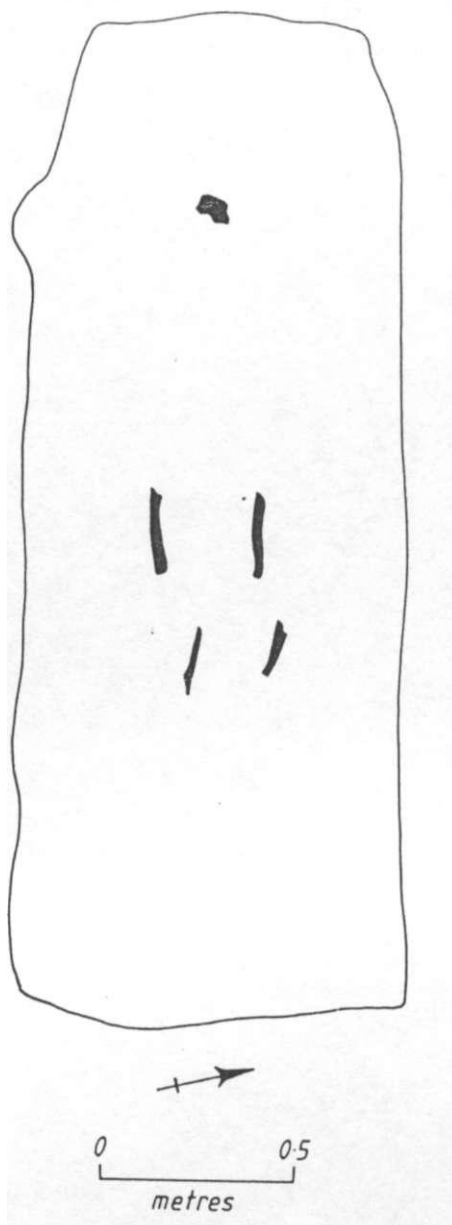
G 35

nail pointing south-east below skull

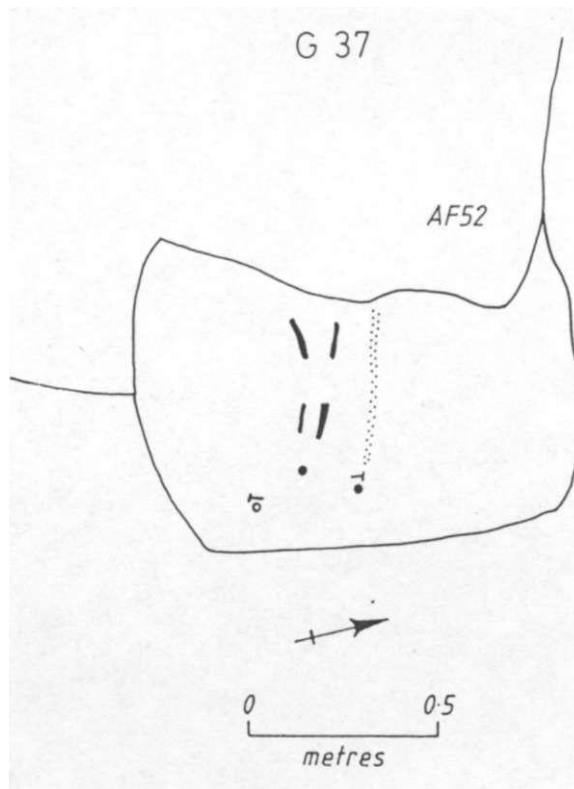


Grave 35 E-W (head to W). Cuts Period 2 **G34**.
G46. Cut by Period 2 G33. Nailed timber
coffin (timber stain not illustrated). Young
adult male. Skeleton supine. Bones in good condition.

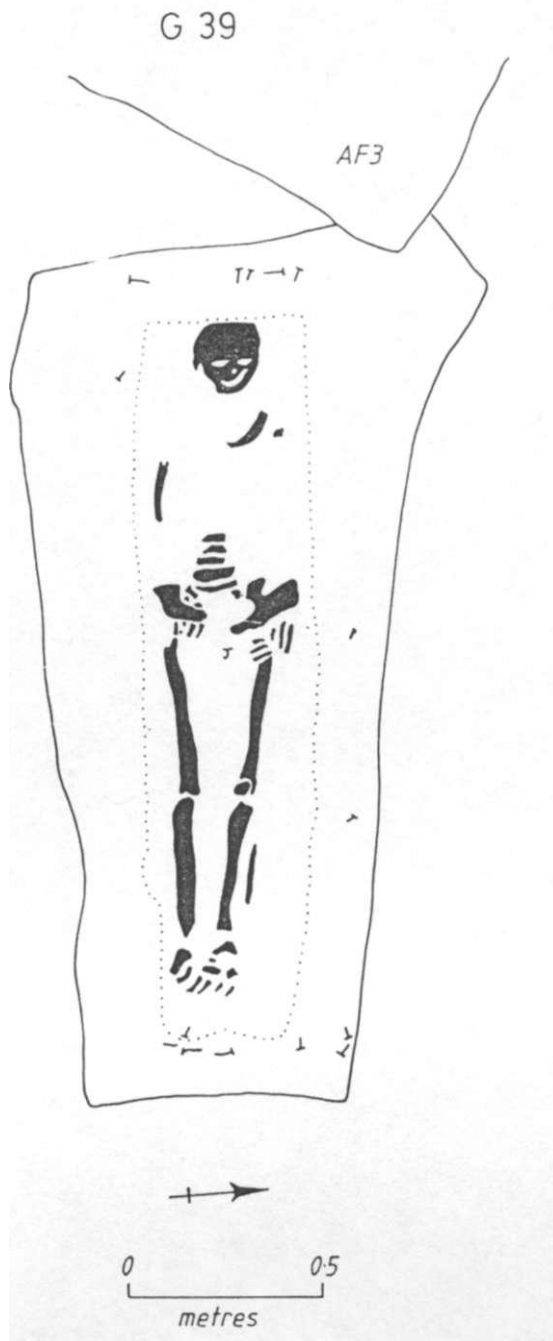
G 36



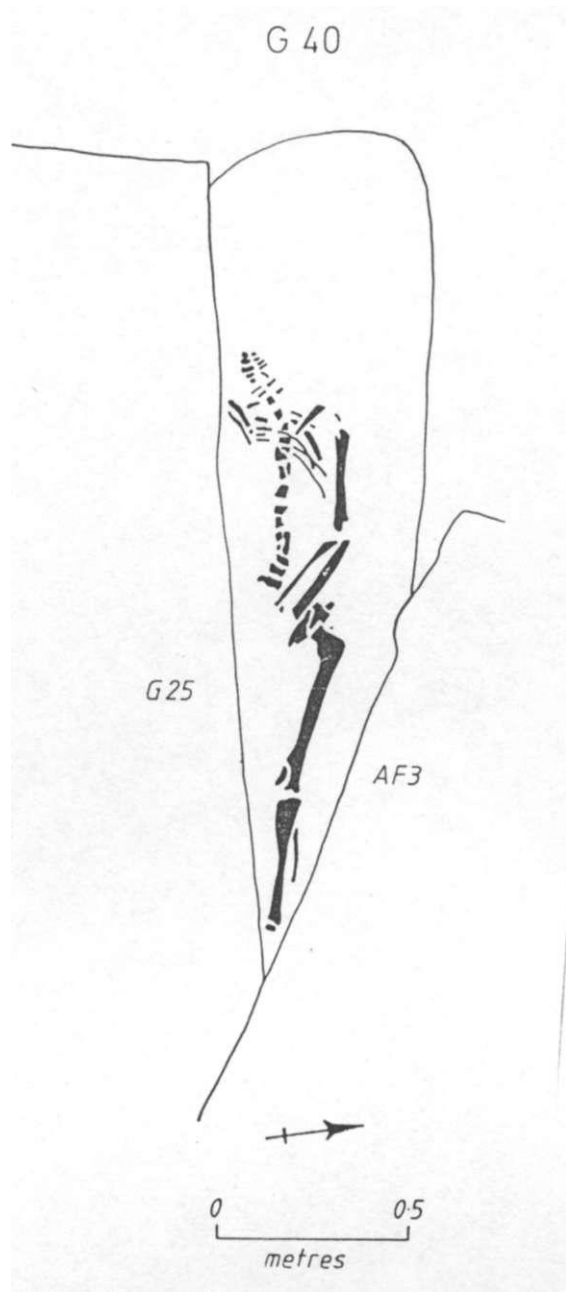
Grave 36 E-W (head to W). Cuts Period 1 G48. Relationship to Period 2 G20 uncertain. Cut by modern feature AF141. Nailed timber coffin (nails not plotted, patchy timber stain not illustrated). Adolescent ?female. Skeleton supine. Only part of skull and shafts of leg long bones survive, in very poor condition.



Grave 37 E-W (head to W). Cut by Period 2 G19. Cut. and W half destroyed, by modern pit AF52. Nailed timber coffin. Only shafts of leg long bones remained. in poor condition. They appear not to have survived lifting. Coffin and bone size indicate child.

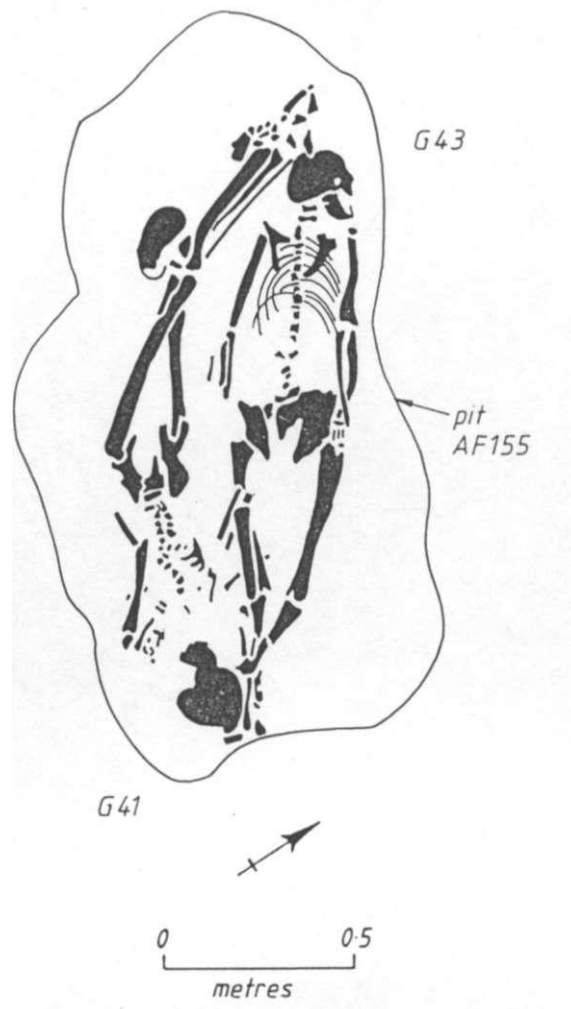


Grave 39 E-W (head to W). Cuts Period 1 G48. Period 2 G45. G49. Cut by Period 2 G20. modern coal bunker AF3. Nailed timber coffin. Middle-aged male. Surviving bones in poor condition.

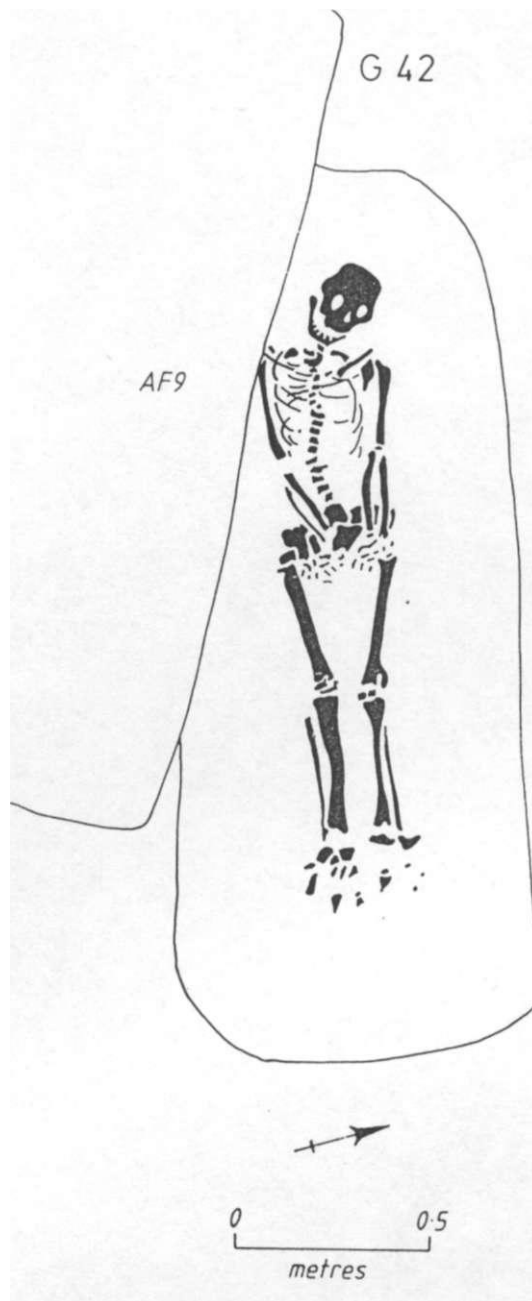


Grave 40 E-W (head to W). Cuts Period 2 G12. Cut by Period 2 G20, G25. modern coal bunker **AF3**. Nailed timber coffin, only located near left shoulder (not illustrated). Adolescent ?female. Skeleton supine. Surviving bones in good condition. Bones on right side removed by, and probably among those redeposited in, G25.

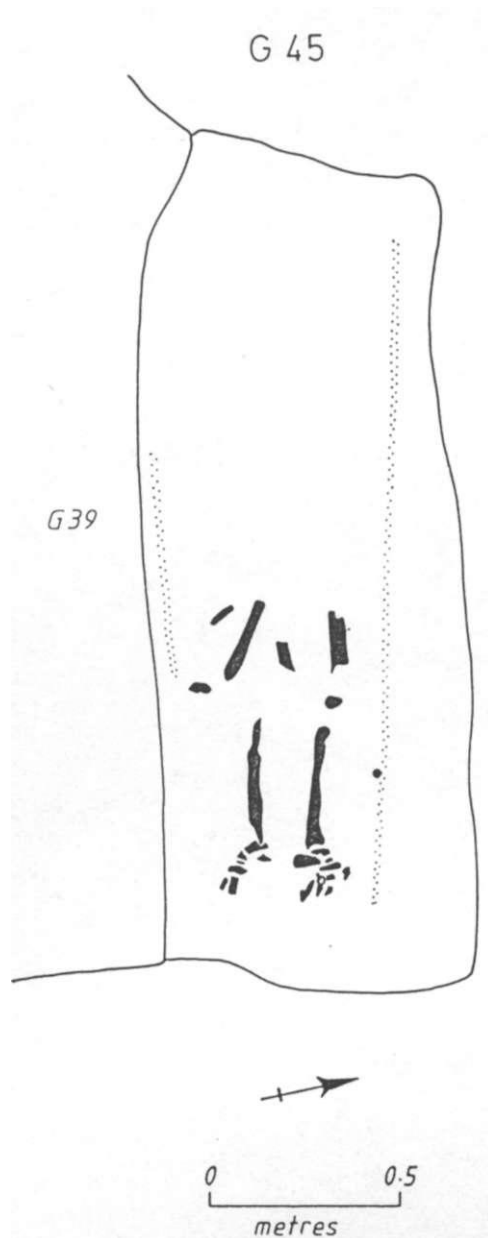
G 41 and G 43



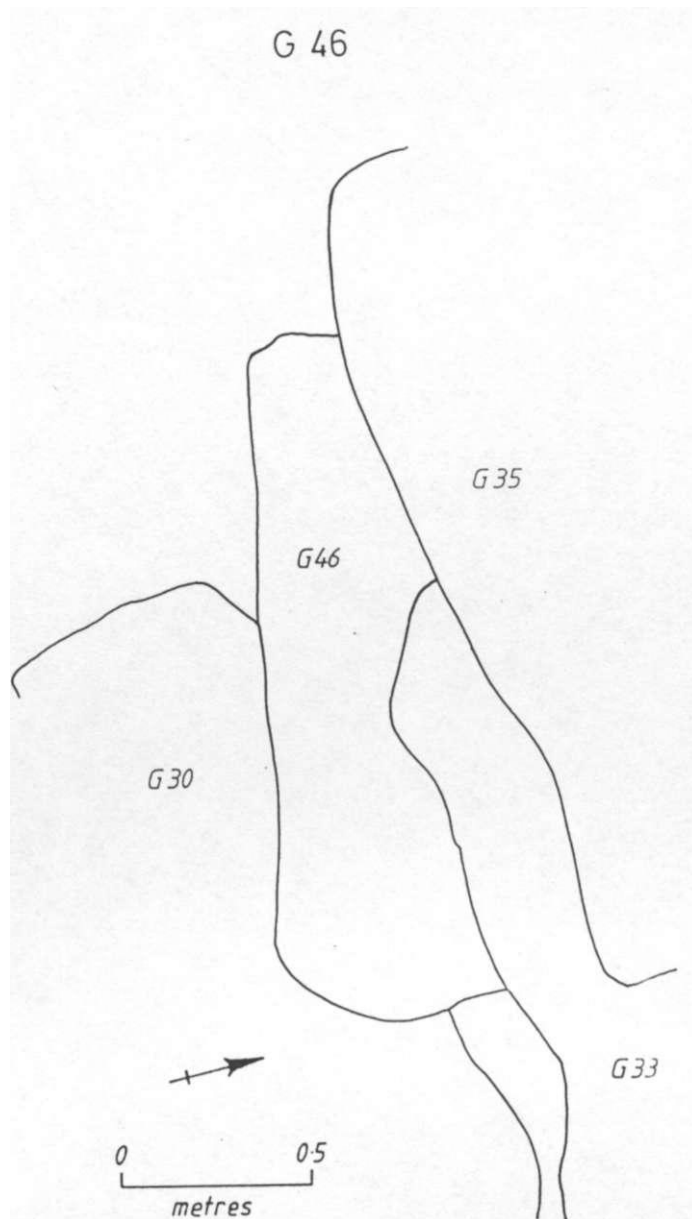
Grave 41/43 Probably Period 2. Cuts Period 1 E-W ditch AF152. Isolated grave. Unusual group of three burials in an irregularly-shaped pit outside S limit of Period 2 cemetery (see G51). No coffins. Pit contained skeletons of two middle-aged males and skull of adolescent. G41 (uppermost skeleton) lay with head to E. G43 with head to W. Adolescent skull close to, but at lower level than. knees of G41. Both skeletons prone, lower legs crossed and arms slightly twisted so that elbows raised above level of rest of skeleton. Copper-alloy ring found on left index finger of G41.



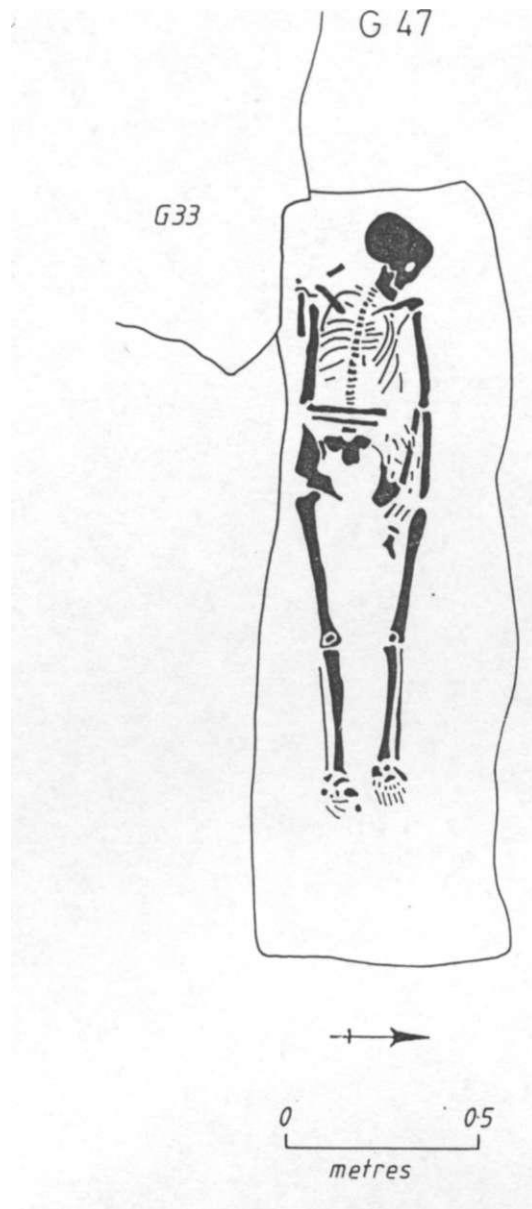
Grave 42 E-W (head to W). Cut and sealed by Period 2 G34. Cut by modern feature **AF9**. Timber coffin (no nails recovered. timber stain not illustrated). Coffin of G34 lay directly over that of G42. Middle-aged female. Skeleton supine. Bones in good condition.



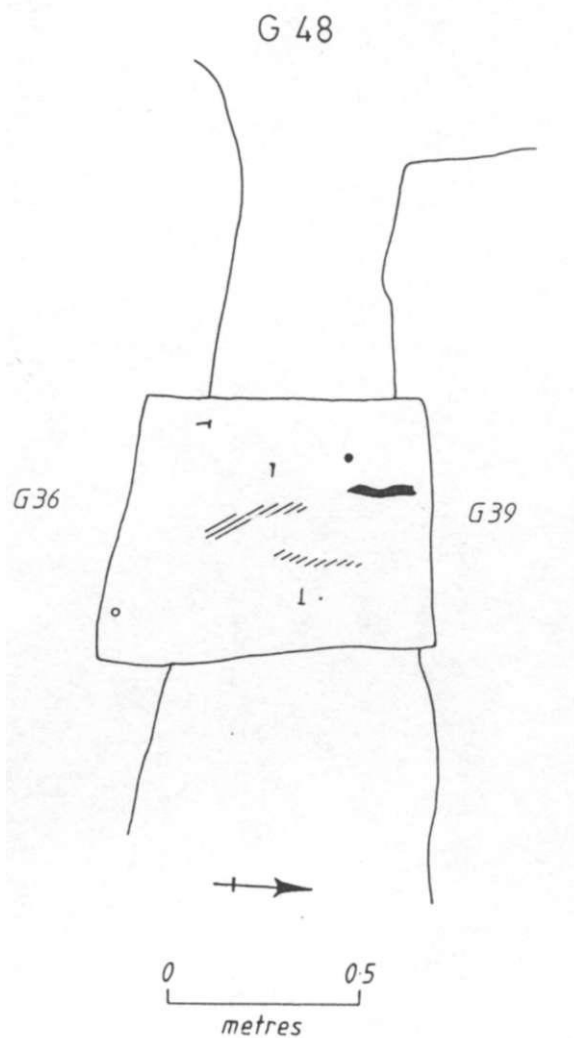
Grave 45 E-W (head to W). Cuts Period 2 **G49**. Cut by Period 2 **G39**. Nailed timber coffin (only one nail recovered). Adult female. Skeleton supine. Only some leg and foot bones remain, in poor condition. Bones in region of right femur displaced in antiquity. possibly result of disintegration of coffin.



Grave 46 E-W. Cut by Period 2 G30. G33. G35.
No coffin or skeletal material recovered.
Size of grave suggests adult burial.

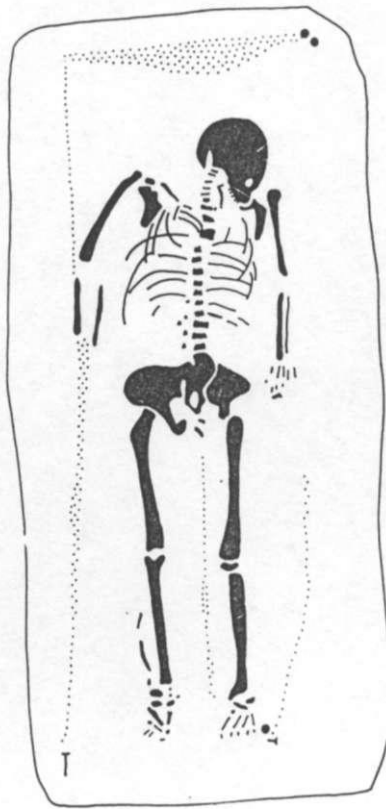


Grave 47 E-W (head to W). Cut by Period 2 **G33**. Nailed timber coffin (nails not plotted, no timber stain located). Middle-aged female. Skeleton supine. Bones in good condition.



Grave 48 N-S. Isolated grave. Cut by Period 2 **G36. G39.** Both ends destroyed. Nailed timber coffin (timber stain not illustrated). Adolescent, sex uncertain. Only few fragments of bone remain, in very poor condition.

G 49

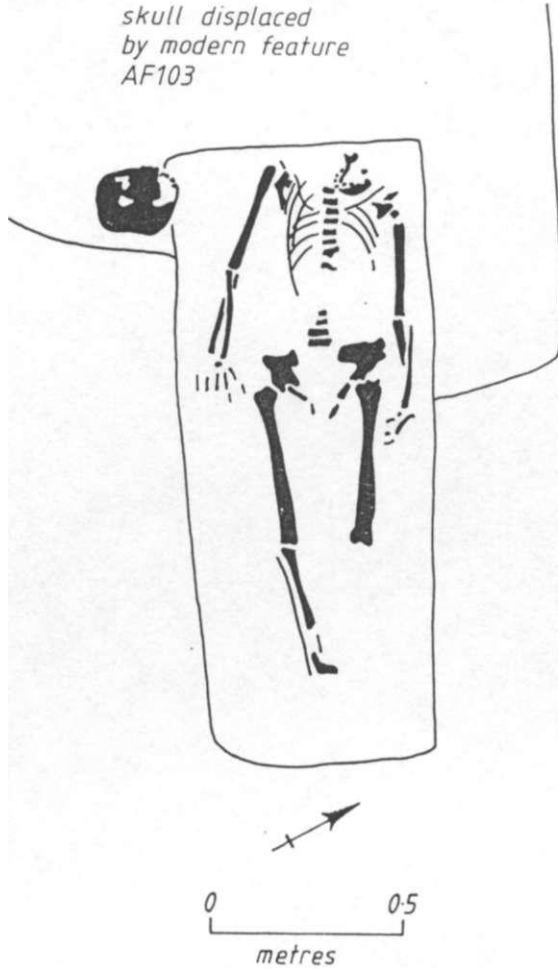


0 0.5
metres

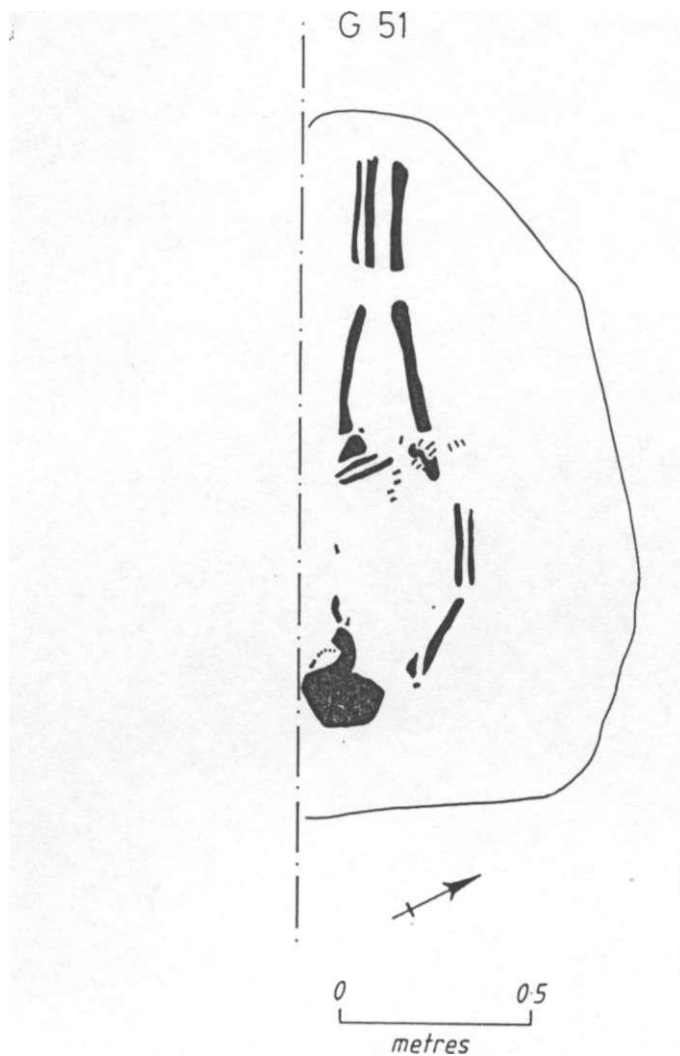
Grave 49 E-W (head to W). Cut by Period 2
G39. G45. Nailed timber coffin. unusually
wide (0.62 m). Middle-aged female. Skeleton
supine. Bones in fair condition.

G 50

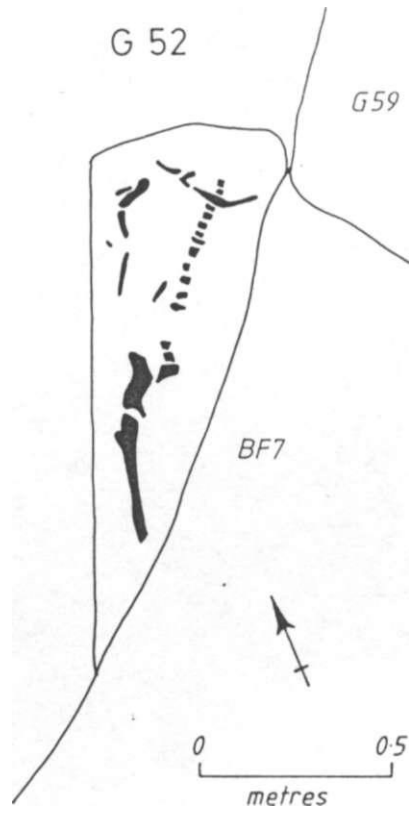
skull displaced
by modern feature
AF103



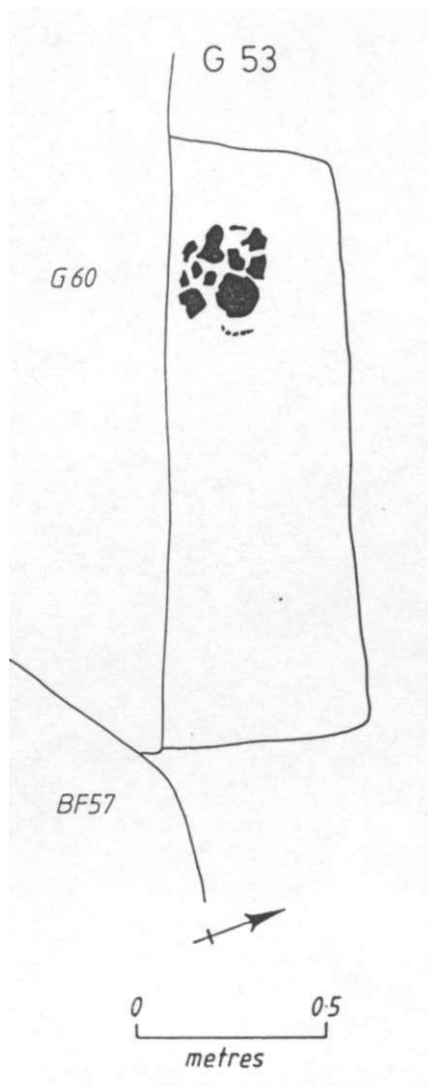
Grave 50 E-W (head to W). Cuts Period 1 E-W ditch AF152. gravel-pit AF169. Isolated grave. Cut. and W end destroyed. by modern features AF103. AF134. No nails or timber stain located. Middle-aged male. Skeleton supine. Skull displaced by AF103. Surviving bones in fair condition.



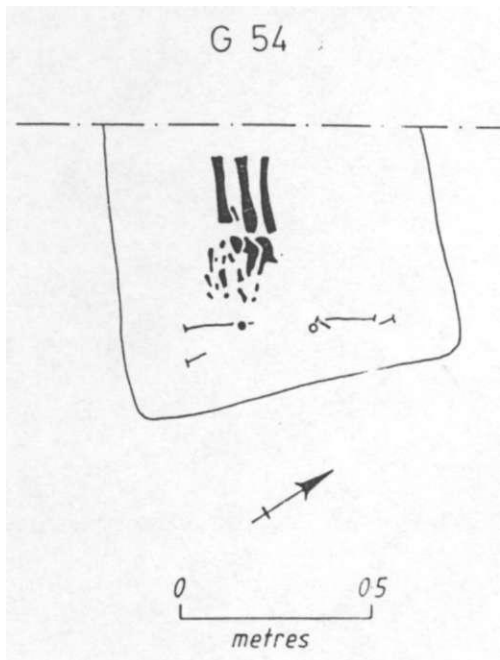
Grave 51 Probably Period 2. Cuts Period 1 gravel pit AF169. S side not excavated. Isolated grave. Unusual burial in pit outside S limit of Period 2 cemetery (see G41/G43). Grave pit has sloping edges. No coffin. Middle-aged female. Skeleton supine. laid with head to E. Surviving bones in poor condition.



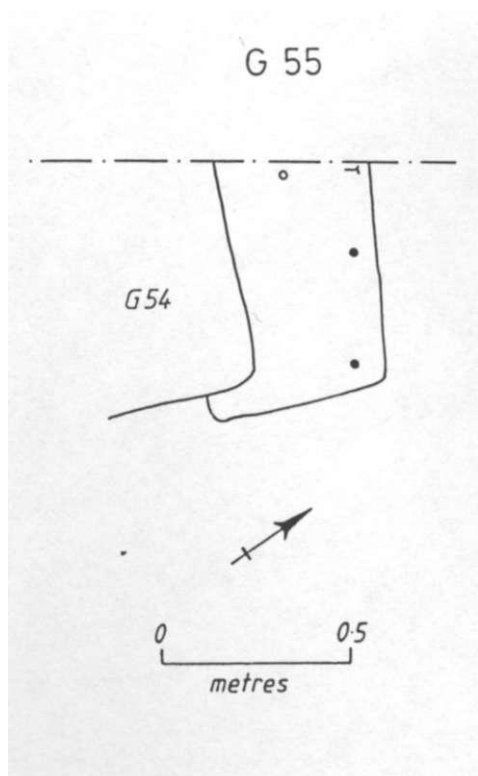
Grave 52 N-S (head to N) . Isolated grave . Cut and largely destroyed by modern



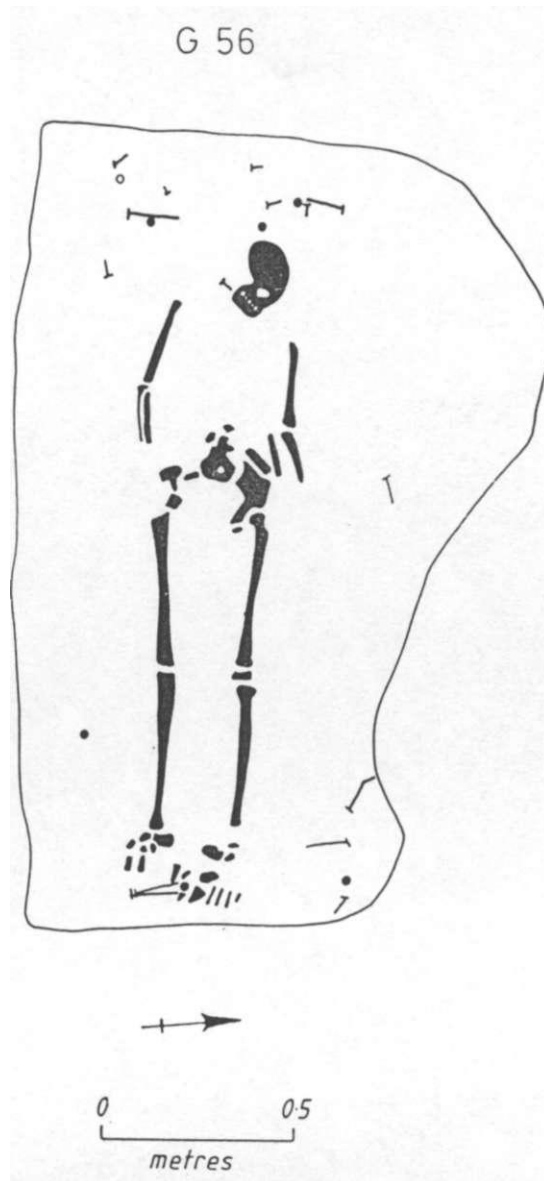
Grave 53 E-W (head to W). Cut by Period 2
G60. modern features BF8, BF11. Nailed timber coffin (no timber stain located)



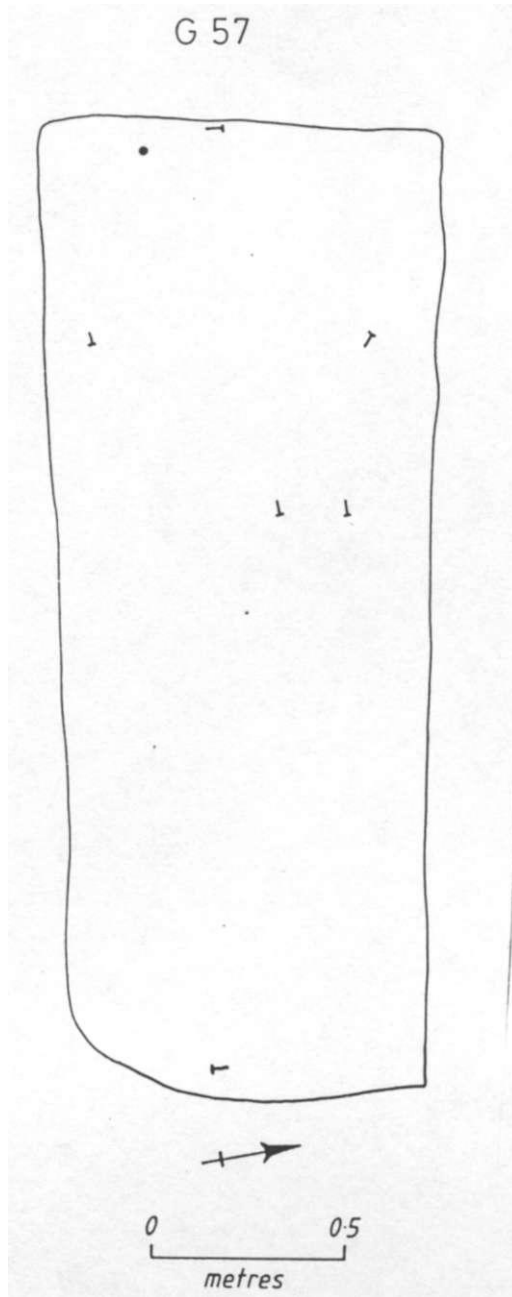
Grave 54 E-W (head to W). Cuts Period 2 **G55**. Extreme E end only excavated. Nailed timber coffin (no timber stain located). Adult, sex uncertain. Only lower leg and foot bones recovered.



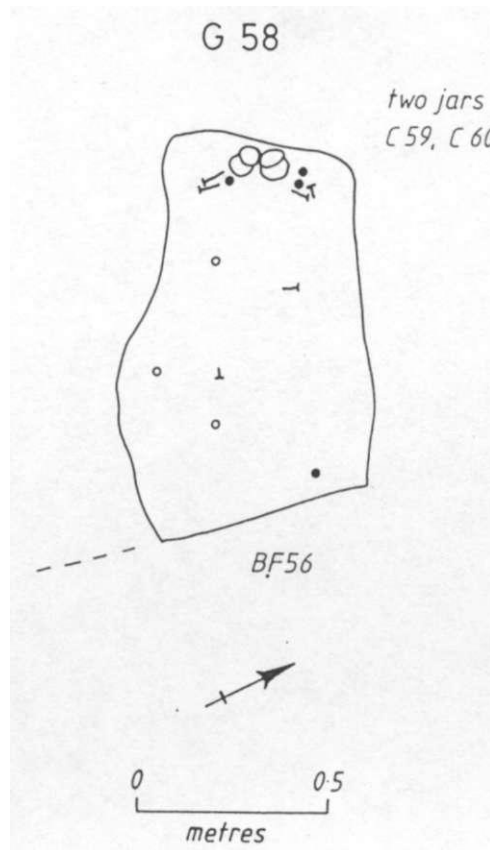
Grave 55 E-W. Cut by Period 2 **G54**. Extreme E end only excavated. Nailed timber coffin (no timber stain located). No skeletal material.



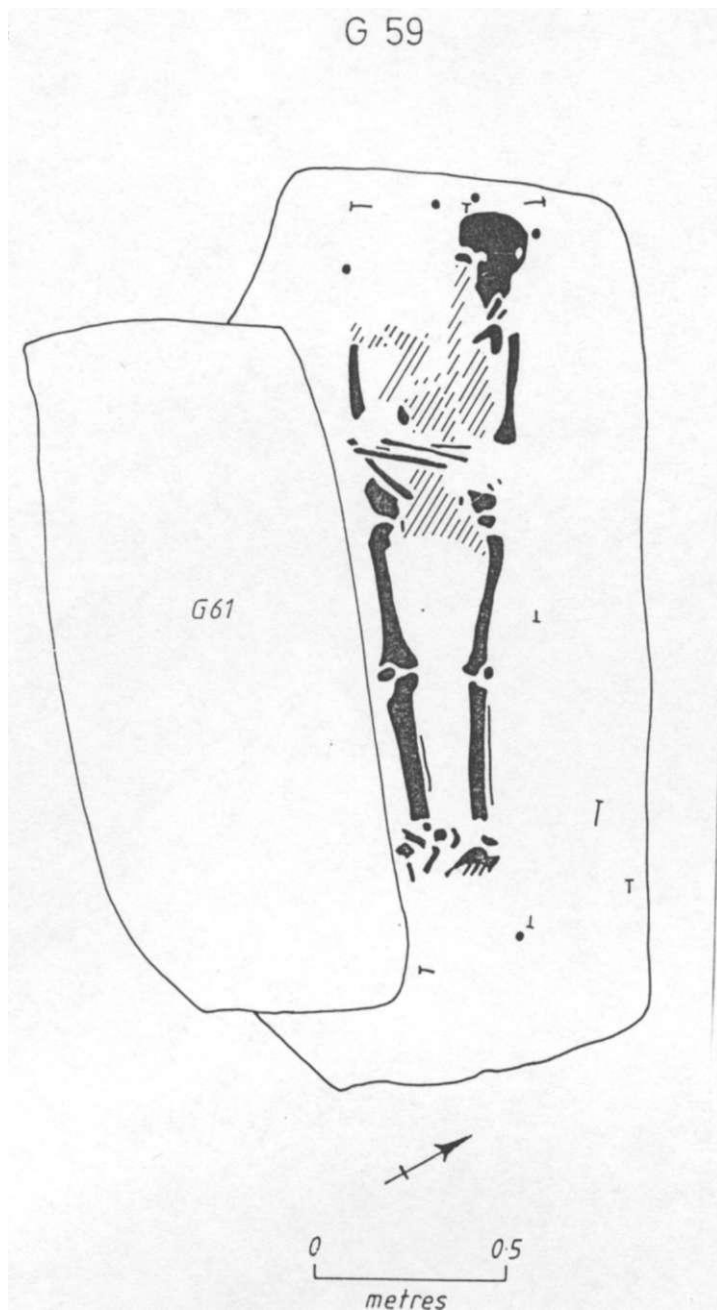
Grave 56 E-W (head to W). Cuts Period 2 **G57**. Nailed timber coffin (timber stain not illustrated). Adult female. Skeleton supine. Bones in fair condition. Skull in semi-upright position against NW corner of coffin. N side of grave pit collapsed before grave backfilled. Skull position may be due to shifting of corpse within coffin as result of grave collapse.



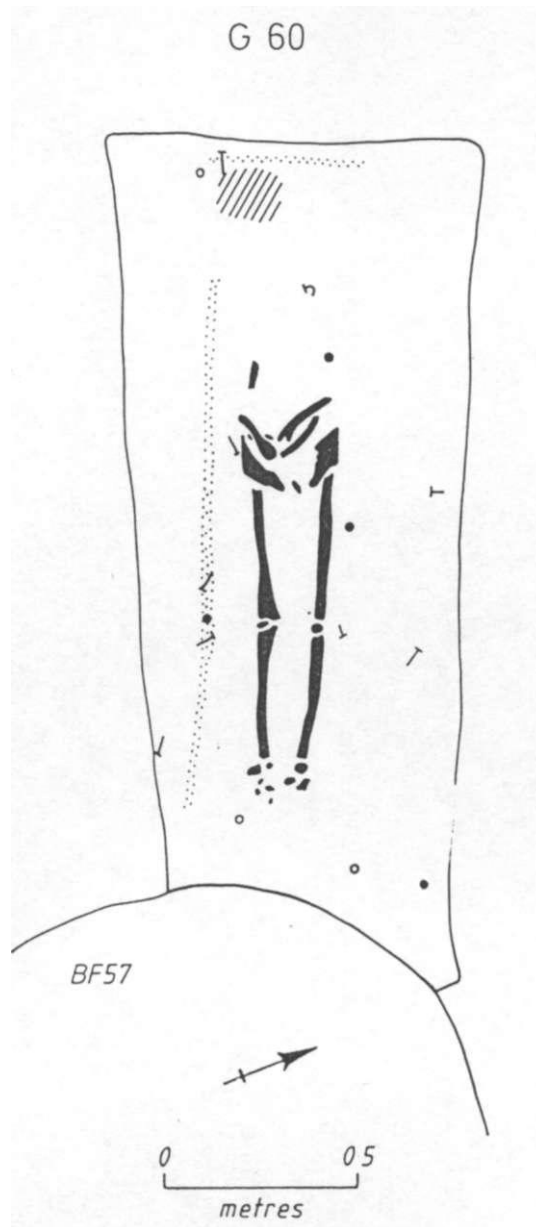
Grave 57 E-W. Cut by Period 2 G56. Nailed coffin (no timber stain located), length 2.46 m. No skeletal material. Coffin size indicates adult.



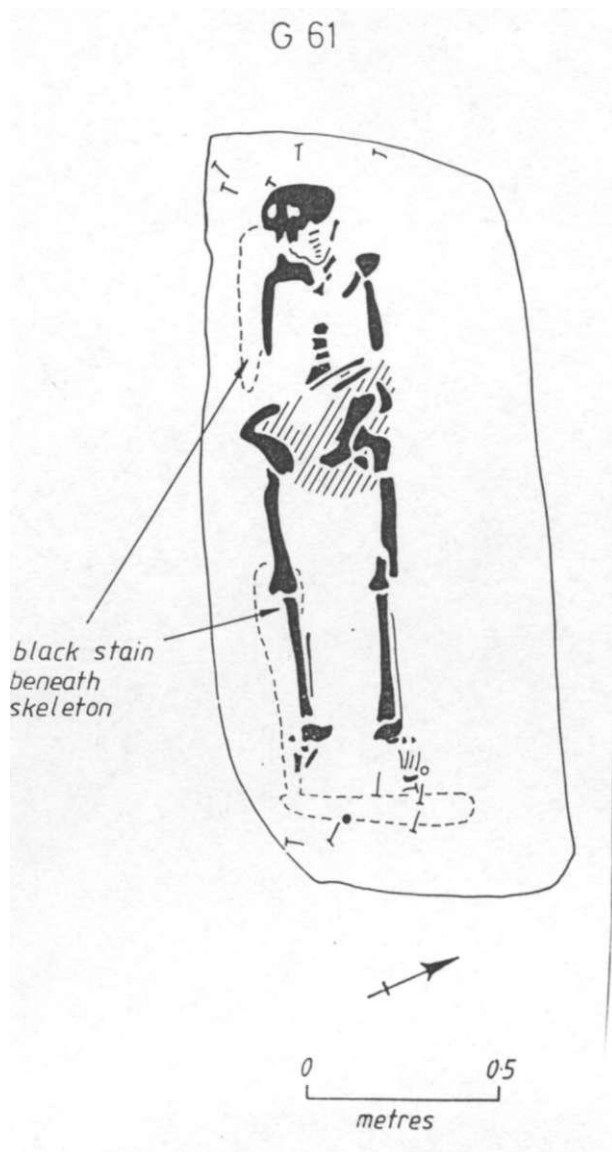
Grave 58 E-W. Cuts Period 2 **G60**. **G79**. Cut and sealed by Period 2 ?foundation **BF56**. Nailed timber coffin (timber stain not illustrated). Child. aged 4 to 6 years. Only few fragments of bone from E end of grave remain (not illustrated). Two small shouldered beakers (or miniature jars) of red-slipped Oxford ware lay outside W end of coffin.



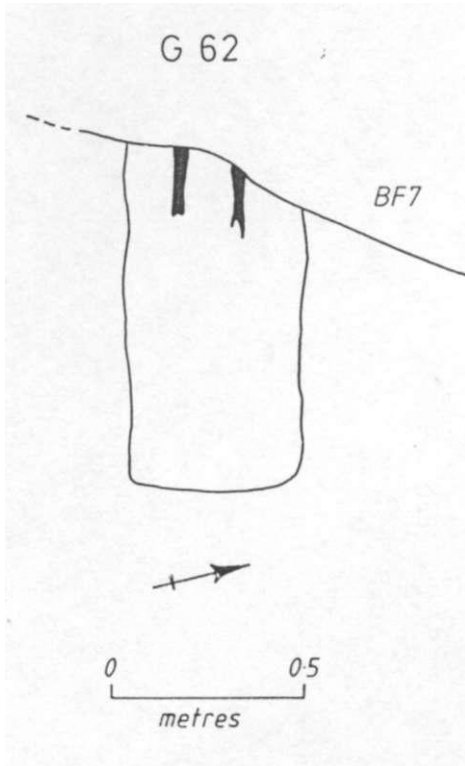
Grave 59 E-W (head to W). Cut by Period **2**
G 61. post-Roman pit **BF 44**. modern pipe trench
BF7. Nailed timber coffin (timber stain not
illustrated). Middle-aged male. Skeleton
supine. Upper post-cranial bones in poor
condition, skull and lower post-cranial bones
well-preserved.



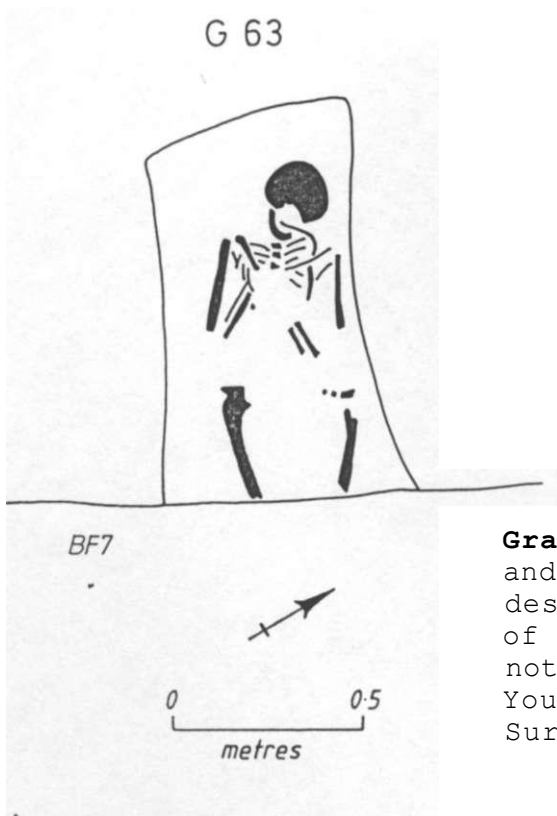
Grave 60 E-W (head to W). Cuts Period **2 G53**. **G79**. Cut by Period **2 G58**. modern feature **BF57**. Nailed timber coffin. Middle-aged male. Skeleton supine. Only lower part of the skeleton remains, in fair condition.



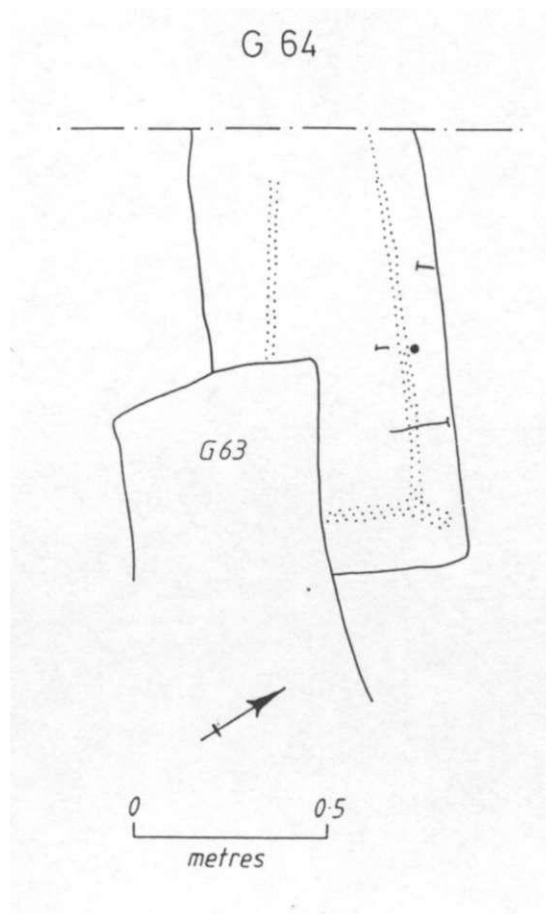
Grave 61 E-W (head to W). Cuts Period 2 **G59**. Nailed timber coffin. timber stain much darker than those usually found. Young adult female. Skeleton supine. Surviving bones in fair condition. Running almost vertically for depth of 1.2 m to bottom of SW corner of grave was a brown wood stain (not illustrated). possibly an upright plank or post.



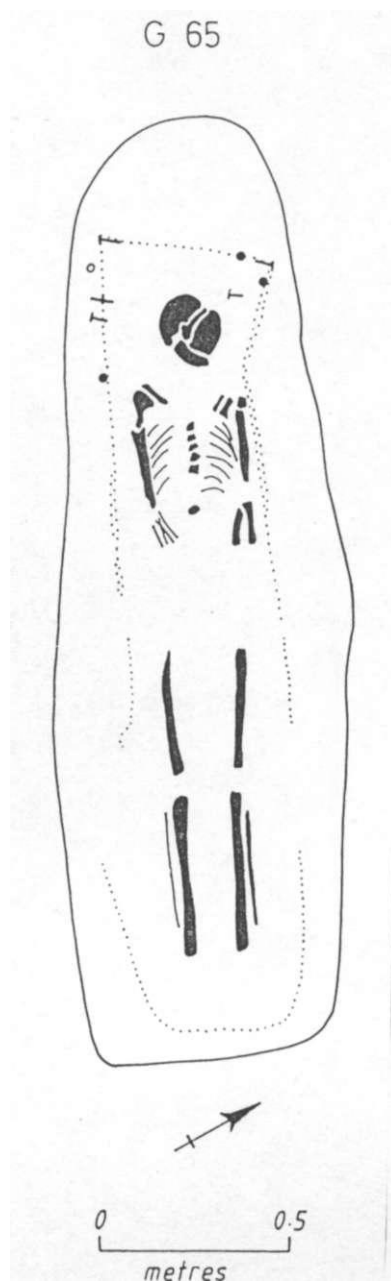
Grave **62** E-W (head to W). Isolated grave. Cut and largely destroyed by modern feature **BF7**. Only E end of grave remains. No timber stain or nails located. Adolescent, sex uncertain. Only shafts- of femora survive, in poor condition.



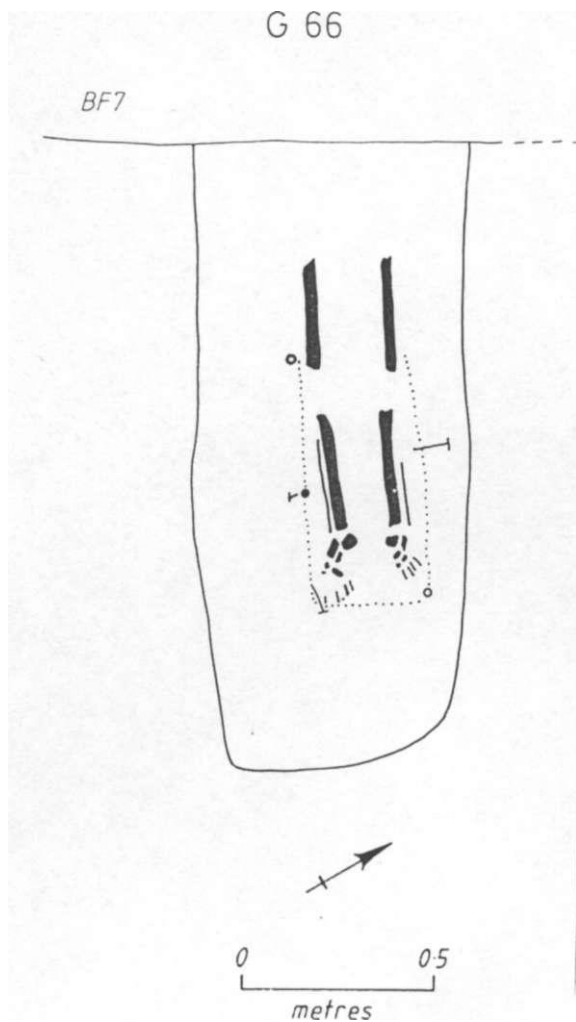
Grave **63** E-W (head to W). Cuts Period **1 G89** and **G99**. Period **2 G64**. **G81**. Cut and largely destroyed by modern feature **BF7**. Only W end of grave remains. Nailed timber coffin (nails not illustrated, no timber stain located). Young adult female. Skeleton supine. Surviving bones in poor condition.



Grave 64 E-W. Cuts Period 1 G99. Cut by Period 2 G63. Relationship to Period 2 G241 uncertain. Only E end excavated. Nailed timber coffin. surviving length 0.98 m. No skeletal material.

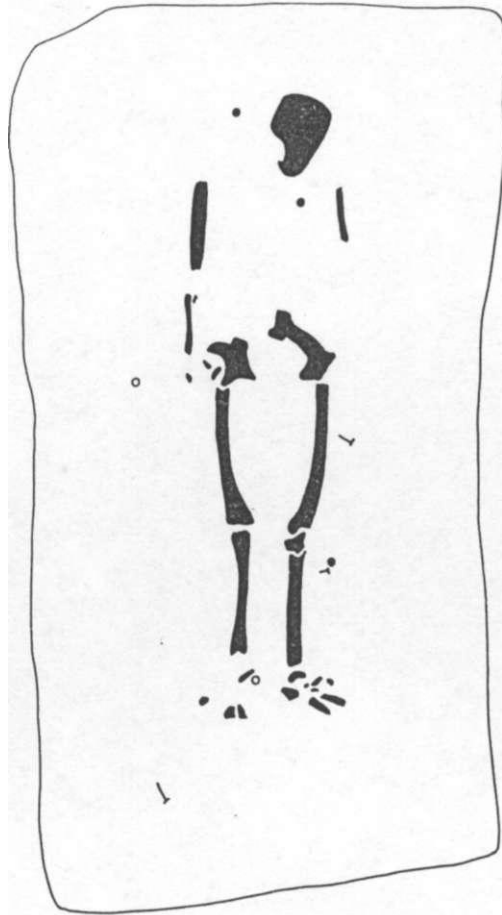


Grave 65 E-W (head to W). Cuts Period 1 G100. Period 2 G90. G198. Cut by modern feature BF7. Relationship to Period 2 G205 uncertain. Nailed timber coffin. Middle-aged female. Skeleton supine. Surviving bones in poor condition.

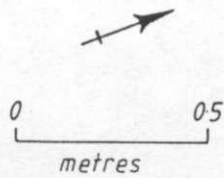


Grave 66 E-W (head to W). Cuts Period 1 G100. Period 2 G91. G201. Cut. and W half destroyed, by modern feature BF7. Nailed timber coffin. Adult male. Only leg and foot bones remain, in fair condition.

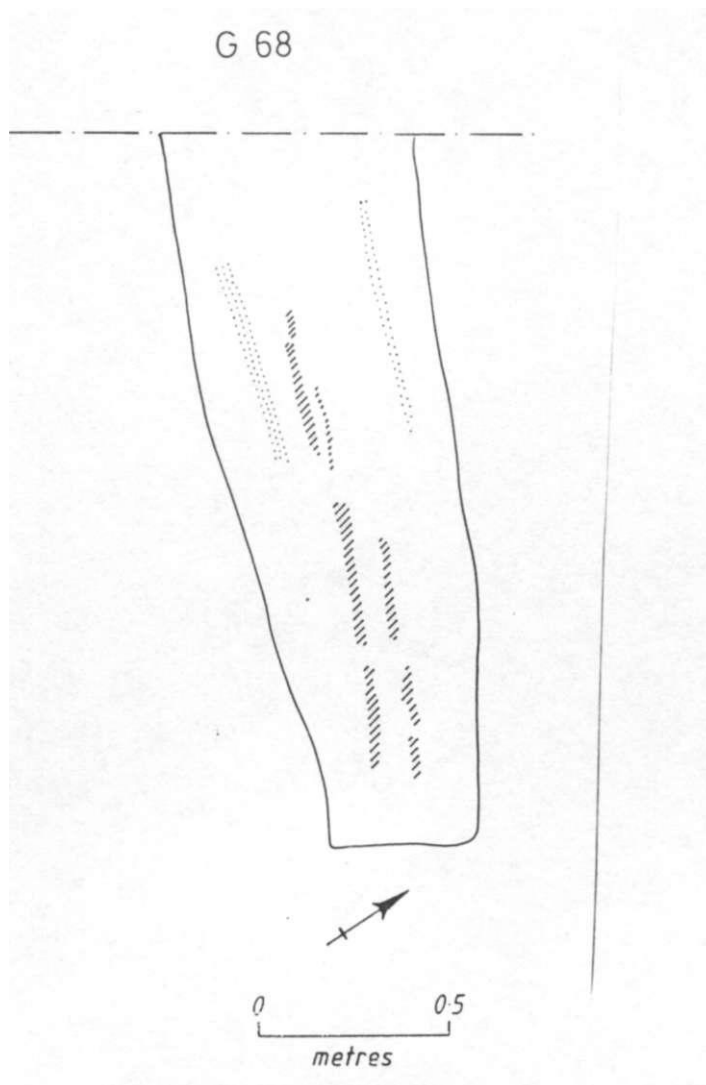
G 67



*nail,
point up
beneath
skull*

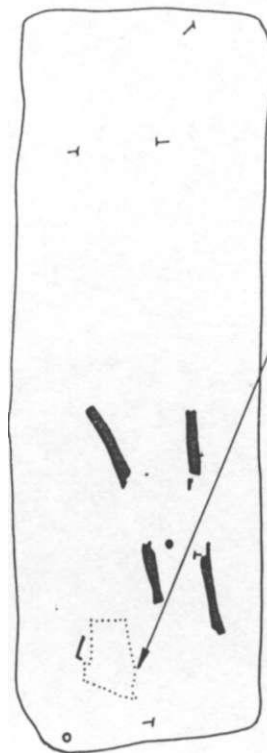


Grave 67 E-W (head to W). Cuts Period 1 G119. Period 2 G96. Cut by modern feature BF7. Nailed timber coffin (timber stain not illustrated). Adult ?female. Skeleton supine. Surviving bones in poor condition.



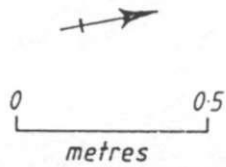
Grave 68 E-W (head to W). Cut by modern feature BF7. Relationship to Period 2 G85 uncertain. Extreme w end not excavated. Nailed timber coffin (nails not illustrated), surviving length 1.72 m. Only faint impressions of limb bones remained. Lengths of impressions and of coffin indicate an adult.

G 69

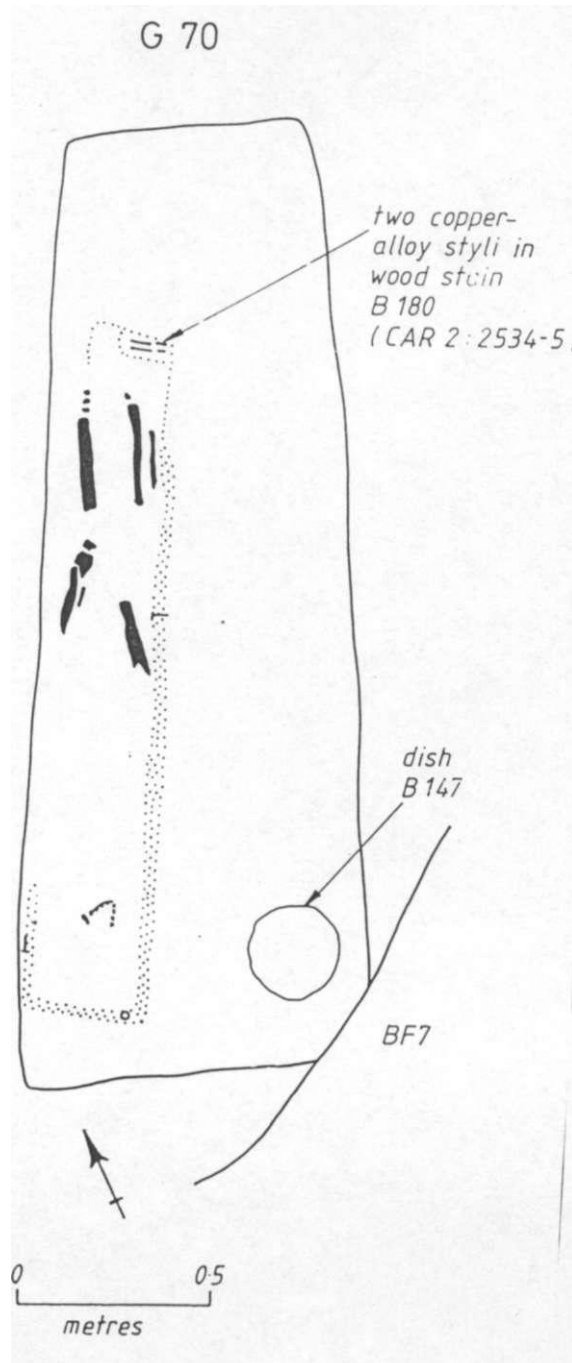


wooden box with
lock and key
containing
armlets and
bead necklace(s)

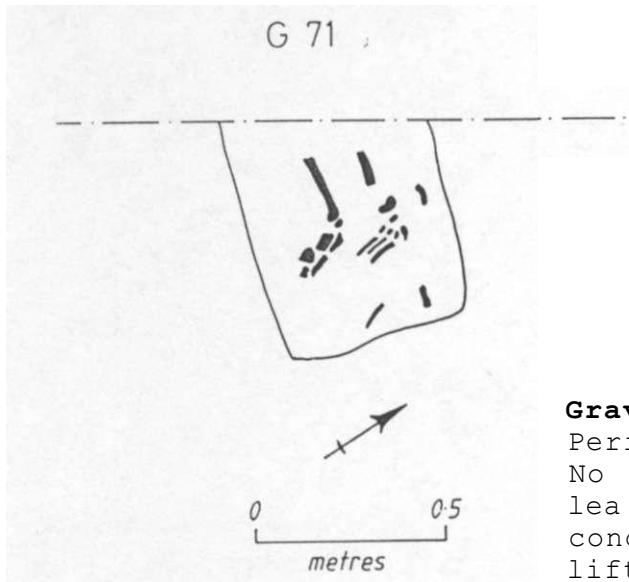
B 182-7
B 201-220
B 237
B 281-327
(CAR 2:595-615, 896,
910, 991-2,
1380-2, 1387-1413,
1418, 1482-95,
807-900, 951-5,
1042-3, 1349-69,
1507-9, 1545-6,
1629, 1634
1654-5, 1733)



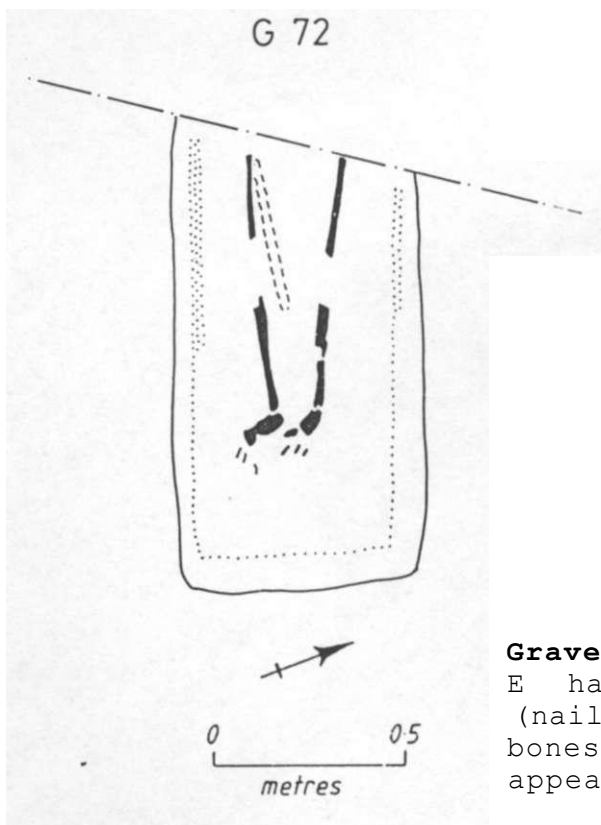
Grave 69 E-W (head to W). Cuts Period 2 G83. Cut by modern feature BF7. Nailed timber coffin (timber stain not illustrated). Adult, sex uncertain. In SE corner of



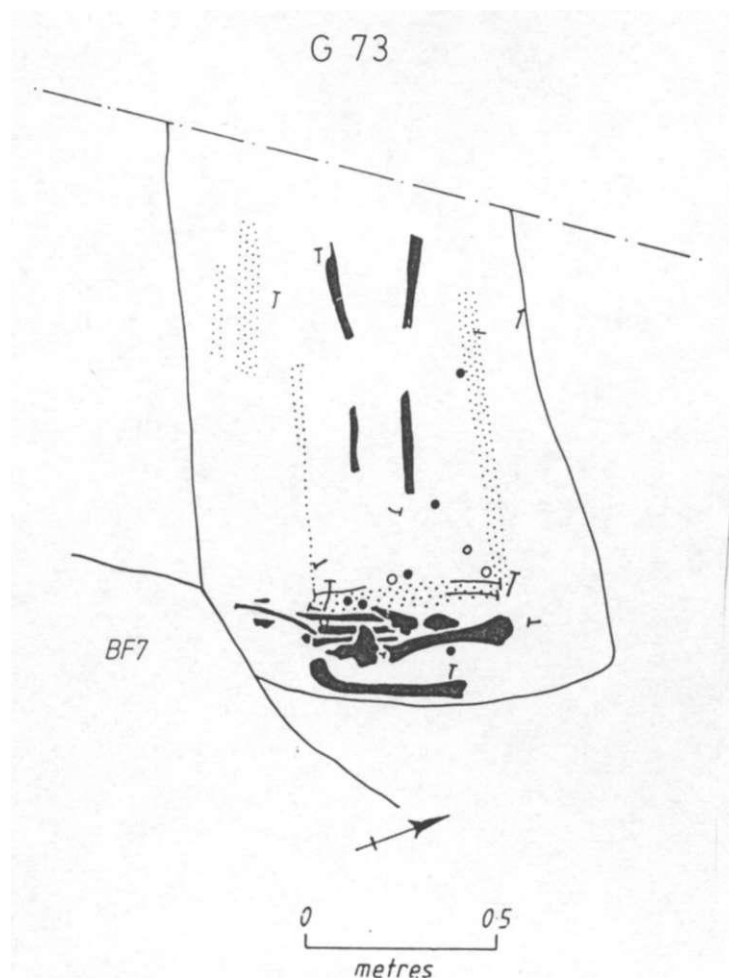
Grave 70 N-S (head to S). Isolated grave. Cut by modern feature BF7. Nailed timber coffin. 17- to 18-year-old male. Skeleton probably supine. Only teeth and shafts of leg long bones survive. Two copper-alloy styli lay, apparently within a patch of timber staining, parallel to each other in NE corner of the coffin. Timber patch may have been floor of coffin, or, less likely, wooden container for styli. Outside coffin in SE corner of grave lay inverted dish/bowl (fragmented but complete) of black burnished ware (BB2).



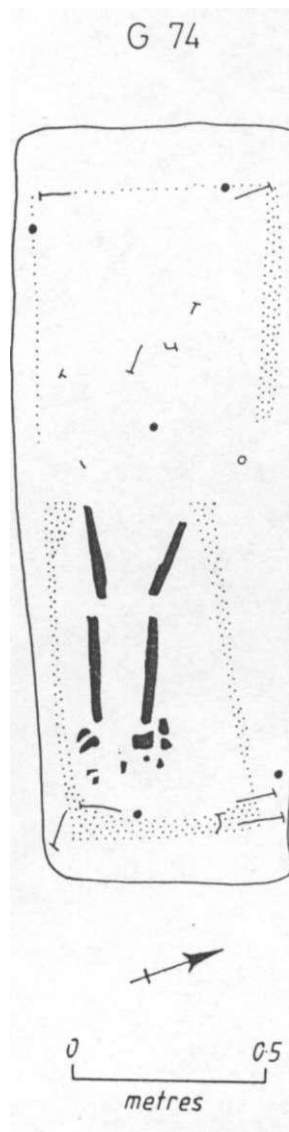
Grave 71 E-W (head to W). Cuts Period 1 G95. Period 2 G73. Extreme E end only excavated. No nails or timber stain located. Only lower leg and foot bones remained. in fair condition. They appear not to have survived lifting.



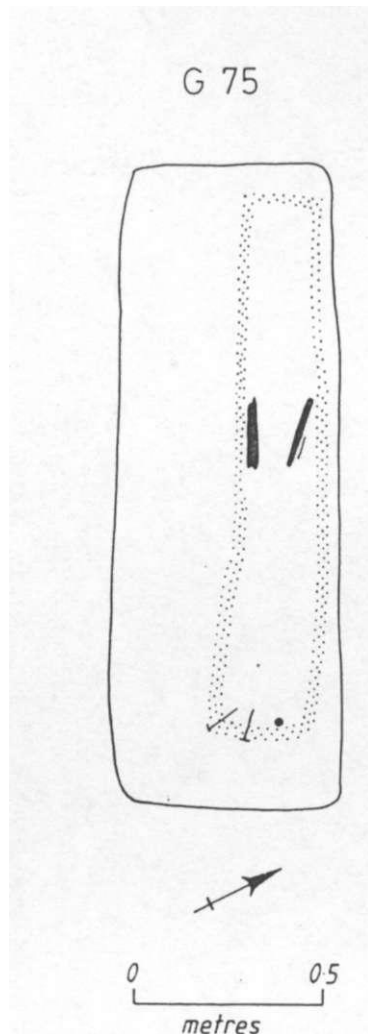
Grave 72 E-W (head to W). Cuts Period 2 G76. E half only excavated. Nailed timber coffin (nails not illustrated). Only leg and foot bones were noted. in fair condition. They appear not to have survived lifting.



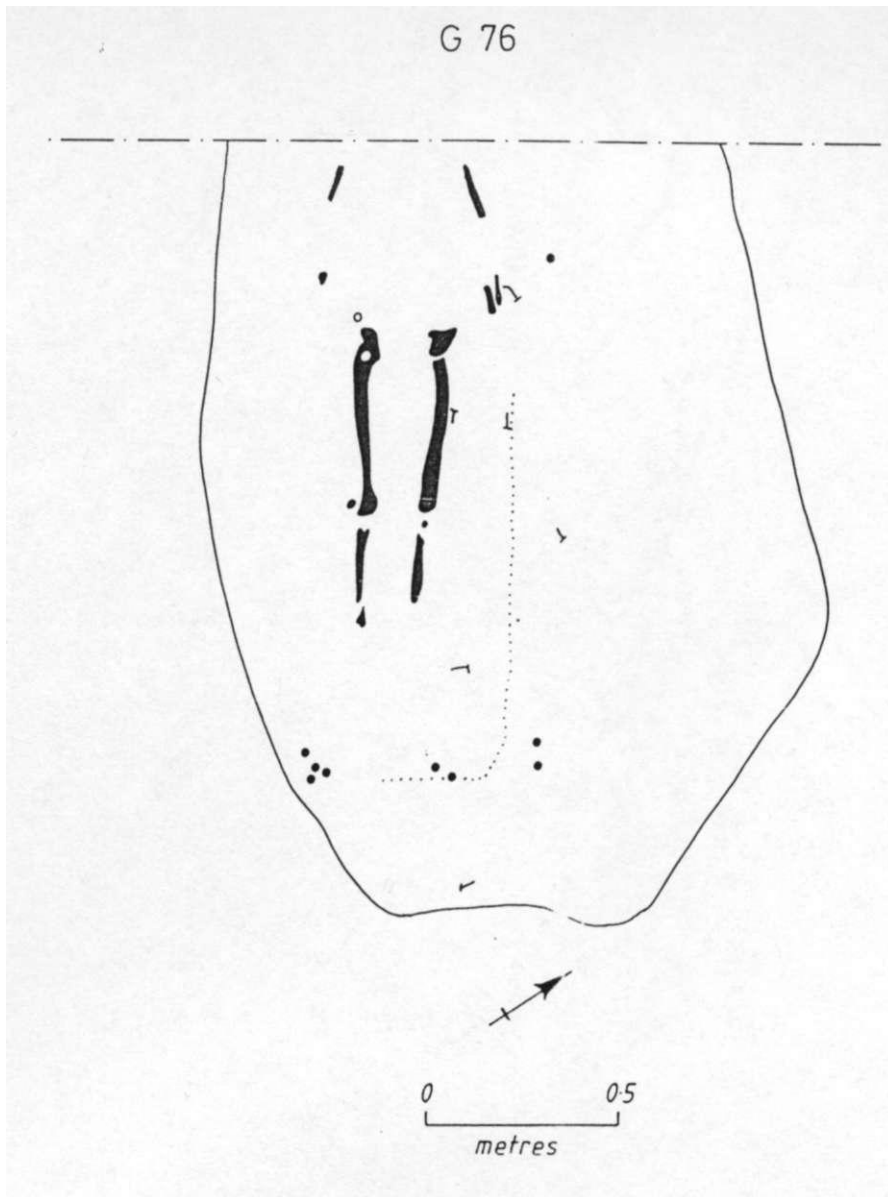
Grave 73 E-W (head to W). Cuts Period 1 G95. Period 2 G80. Cut by Period 2 G71. modern feature BF7. E half only excavated. Nailed timber coffin. Only shafts of leg long bones remained. in poor condition. They appear not to have survived lifting. A pile of human bones. their original grave unknown. lay between E end of coffin and E end of grave.



Grave 74 E-W (head to W). Cuts Period **1 G89**. **G223**. Period **2 G87**. **G88**. Cut by modern feature BF1. Nailed timber coffin. Adult ?female. Only leg long bones and some foot bones remain, in poor condition.



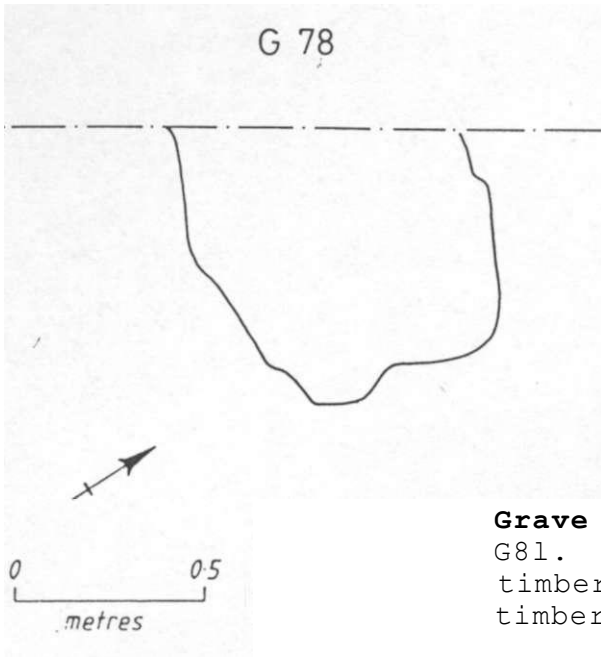
Grave 75 E-W (head to W). Cuts Period 1 G100. Period 2 G90. G200. Cut by Period 2 G76. Nailed timber coffin. Middle-aged male. Only shafts of some long bones remain. Three stones (BF48) lay at Roman ground level on line which coincided with N side of G75. Probably surface markers.



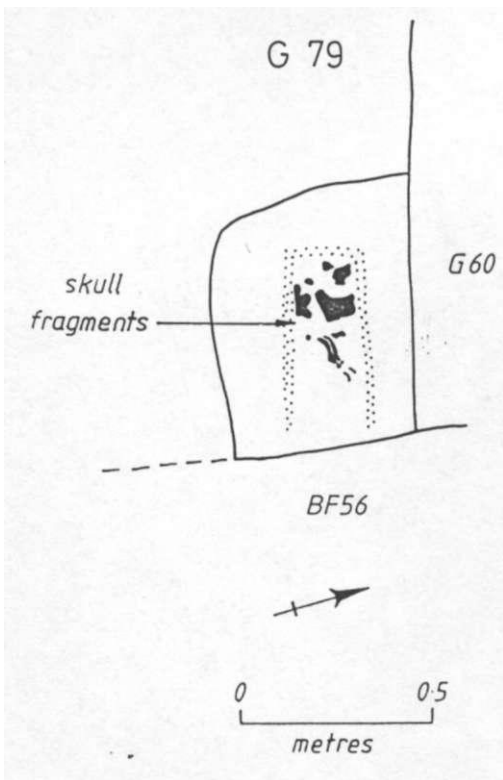
Grave 76 E-W (head to W). Cuts Period 1 G95. G100. Period 2 G75. Cut by Period 2 G72. modern feature BF7. Extreme W end not excavated. Upper part of N side of grave pit irregular and exceptionally broad (1.56 m). possibly result of collapse at time of interment. Nailed timber coffin. Only fragments of arm and leg long bones and pelvis were noted. in poor condition. They appear not to have survived lifting.



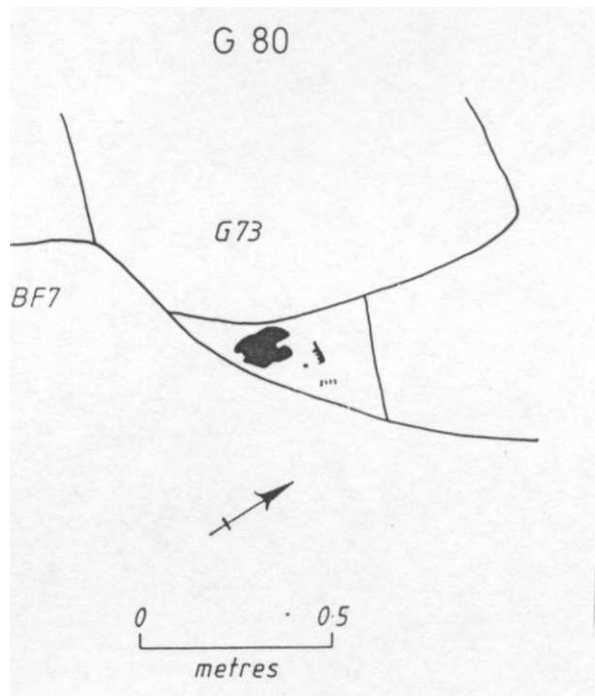
Grave 77 E-W (head to W). Cuts Period 1 G89. G223. Probably cuts Period 2 G205. Cut by modern feature BF7. Nailed timber coffin. W end of coffin distorted. probably result of soil pressure. Middle-aged male. Skeleton supine. Surviving bones in fair condition. Fragment of silk, almost certainly of Chinese manufacture. preserved on surface of one right arm bone. Fragments of incomplete jar of black-burnished ware (BB1) lay outside coffin on N side and inside coffin across lower left leg, almost certainly from Period 1 G223.



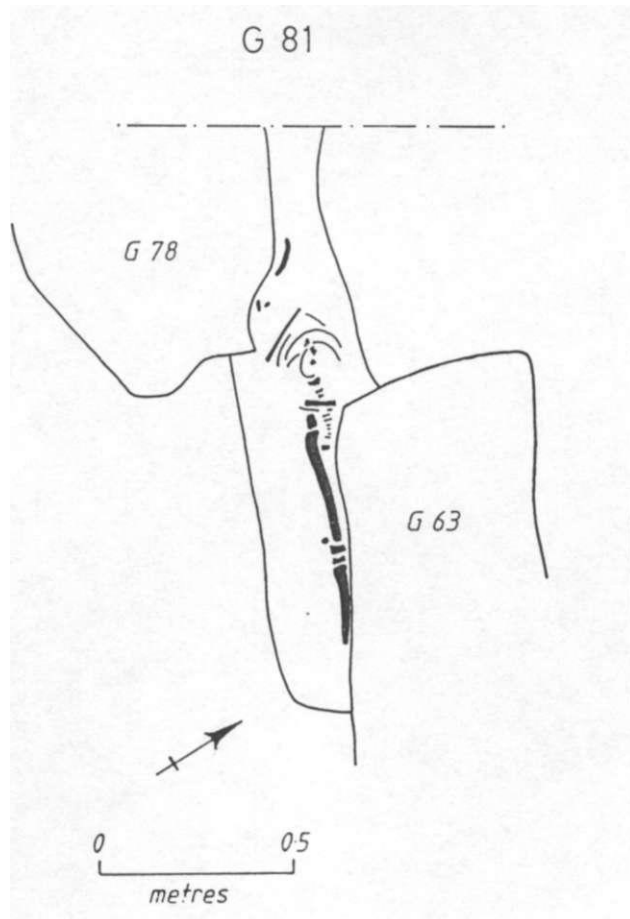
Grave 78 E-W. Cuts Period 1 G99. Period 2 G81. Extreme E end only excavated. Nailed timber coffin (nails not illustrated. no timber stain located). No skeletal material.



Grave 79 E-W (head to W). Cut by Period 2 G58. G60, modern feature BF57. Sealed by Period 2 ?foundation BF56. Relationship to Period 2 G107 uncertain. E end destroyed by BF57. Nailed timber coffin (nails not plotted), surviving length 0.44 m. width 0.18 m. Only fragments of skull remained. They appear not to have survived lifting. Coffin width indicates infant.

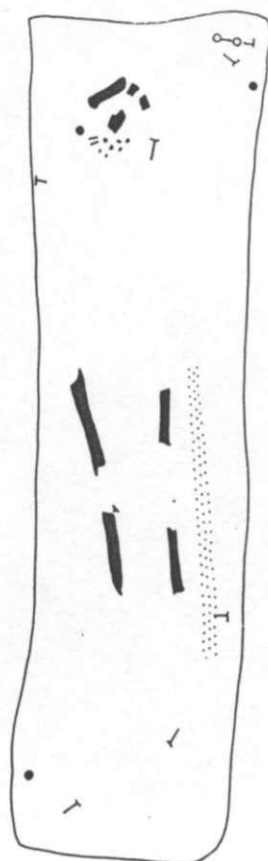


Grave 80 E-W (head to W). Cut and largely destroyed by Period 2 G73. modern feature BF7. Only small part of W end remained. No nails or timber stain located. Adult ?female. Only fragments of skull survive.

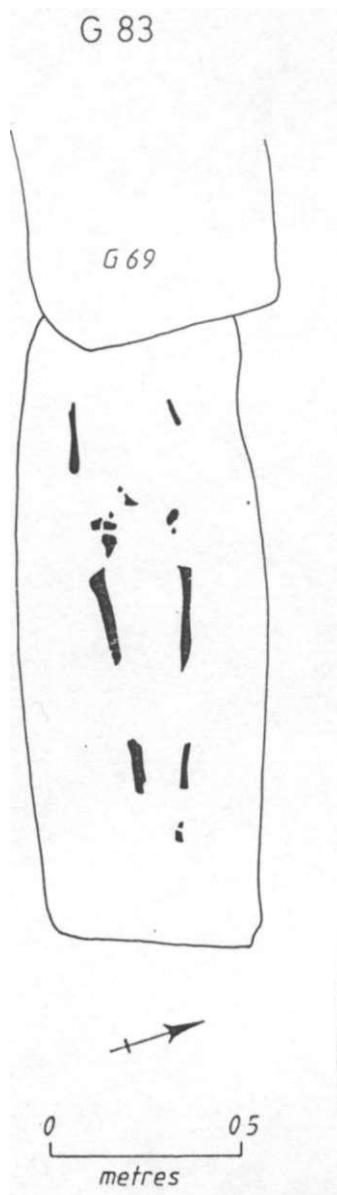


Grave 81 E-W (head to W). Cuts Period 1 G99. Cut and largely destroyed by Period 2 G63. G78. No nails or timber stain located. Adolescent up to 17 years old. sex indeterminate. Skeleton supine. Surviving bones in fair condition.

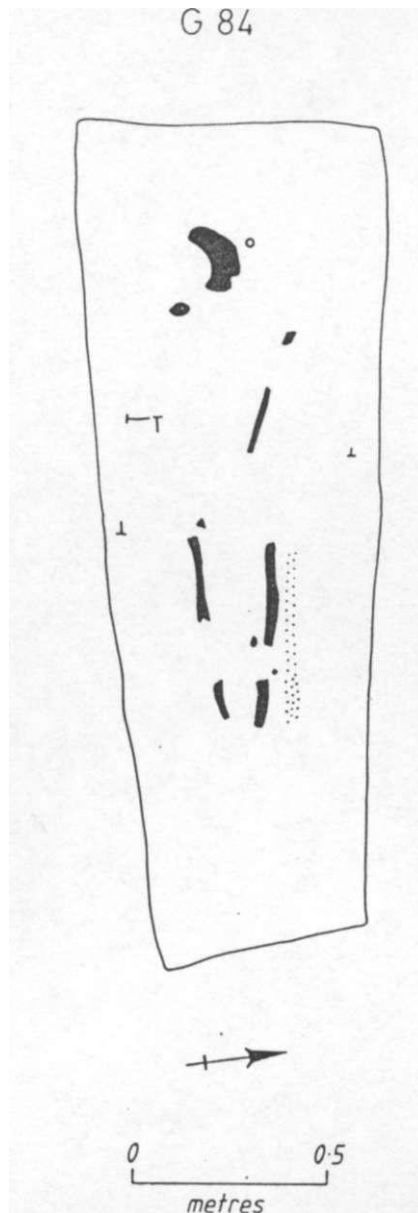
G 82



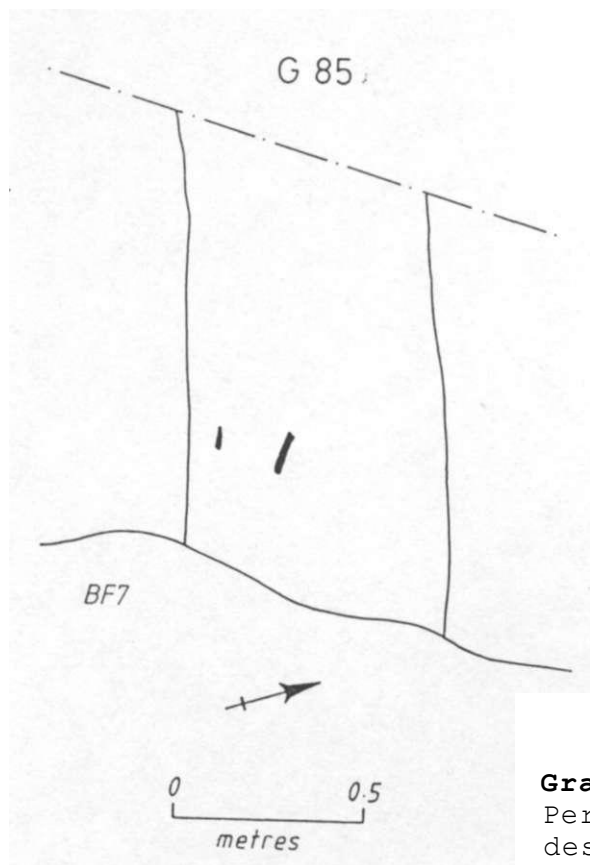
Grave 82 E-W (head to W). Cuts Period 2 G105. G113. Nailed timber coffin. Adult. sex uncertain. Only fragments of skull and shafts of leg long bones remain. in very poor condition.



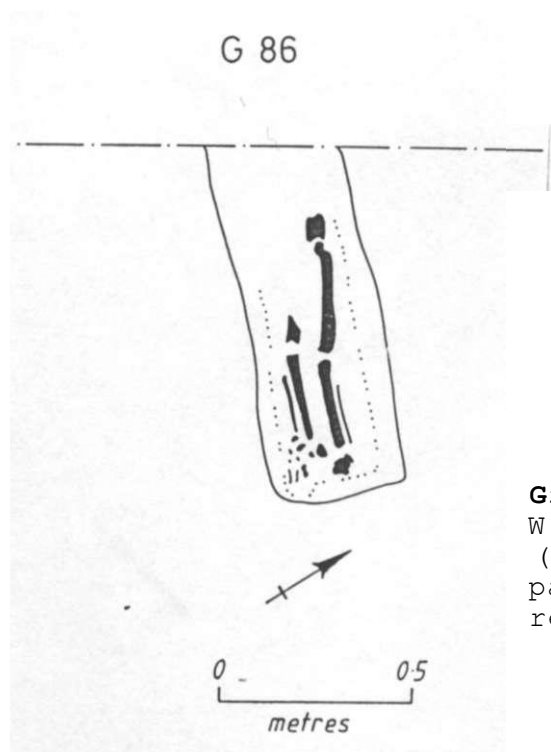
Grave 83 E-W (head to W). Cuts Period 2 **G98**. Cut. and W end (with skull) destroyed. by Period 2 **G69**. **No** nails or timber stain located. Adult. sex uncertain. Surviving bones in very poor condition.



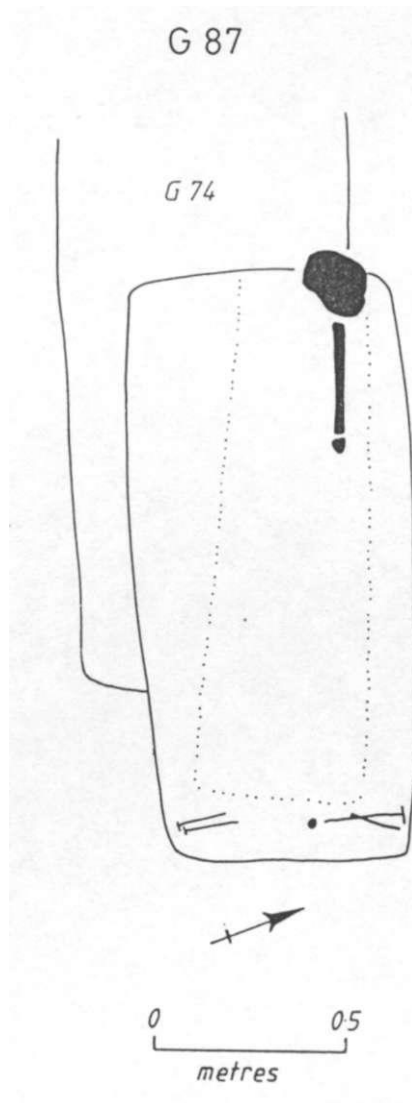
Grave 84 E-W (head to W). Cuts Period 2 G102. G103. G112. Nailed timber coffin. Adult ?female. Only fragments of skull and shafts of some long bones remain. in very poor condition.



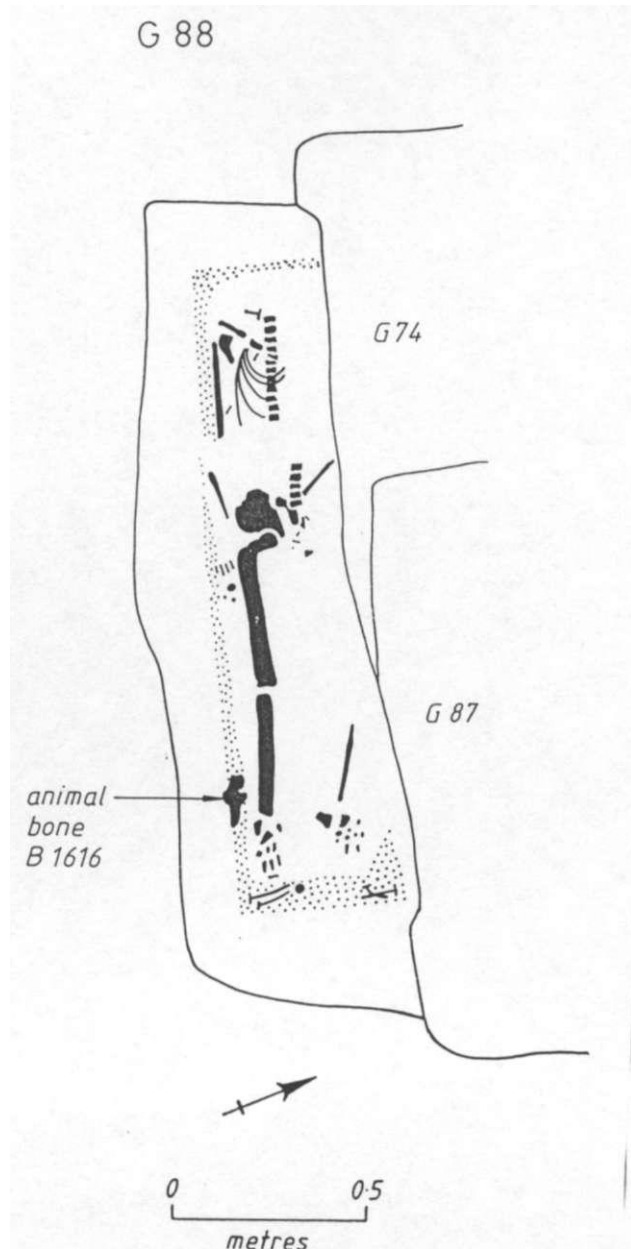
Grave 85 E-W (head to W). Relationship to Period 2 G68 uncertain. Cut. and E end destroyed. by modern feature BF7. W end not excavated. No nails or timber stain located. Child. aged 8 to 10 years. Only fragments of femora survive, in very poor condition.



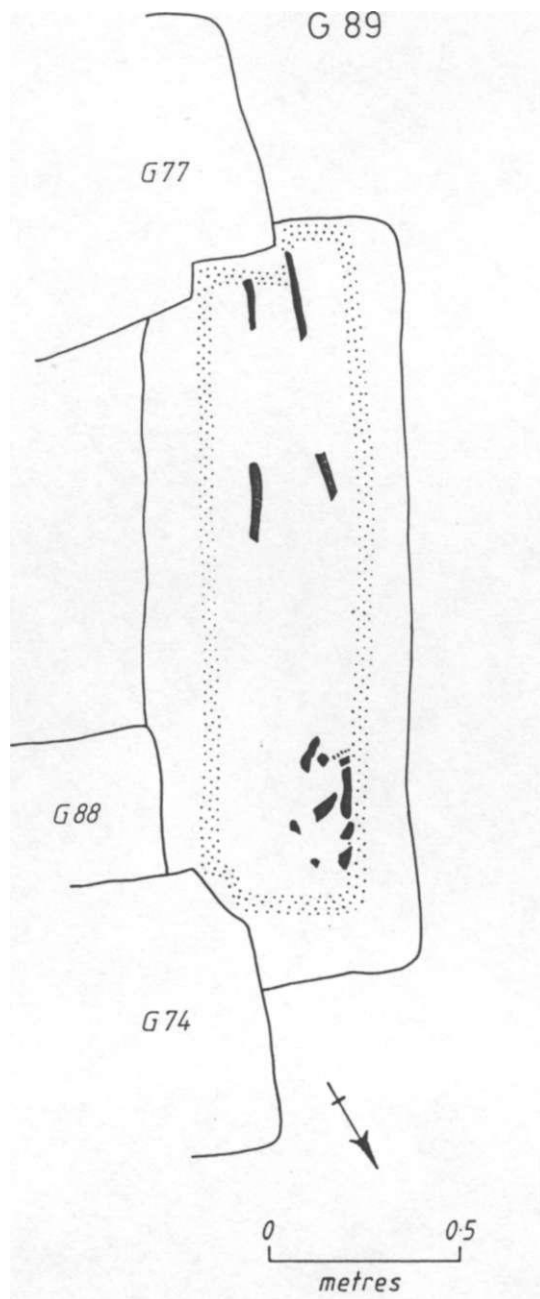
Grave 86 E-W (head to W). Cuts Period 2 G241. W end not excavated. Nailed timber coffin (nails not illustrated). Adult male. Only parts of pelvis and some leg and foot bones remain.



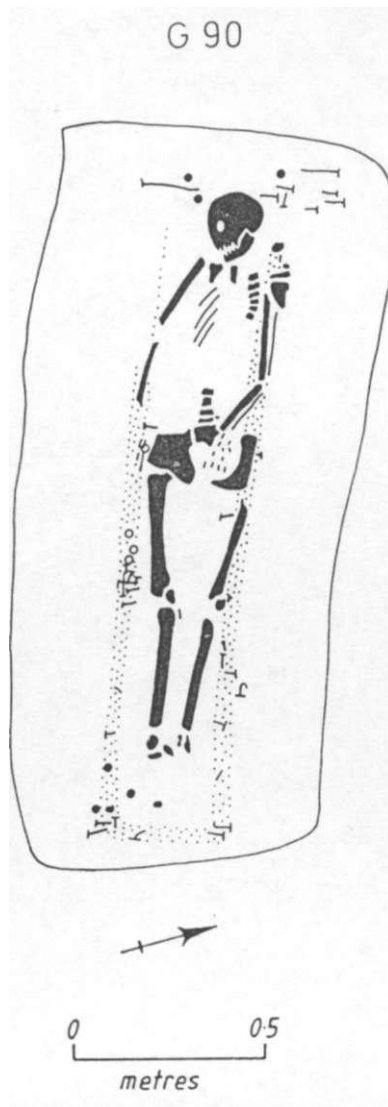
Grave 87 E-W (head to W). Cuts Period 2 G88. Cut. and W end destroyed, by Period 2 G74. Nailed timber coffin. Bones displaced by G74. Young adult male. Bones in fair condition.



Grave 88 E-W (head to W). Cuts Period 1 G89. G223. Cut by Period 2 G74. G87. G195. S side destroyed by G74. Nailed timber coffin. Adult ?male. Skeleton supine. Surviving bones well preserved.

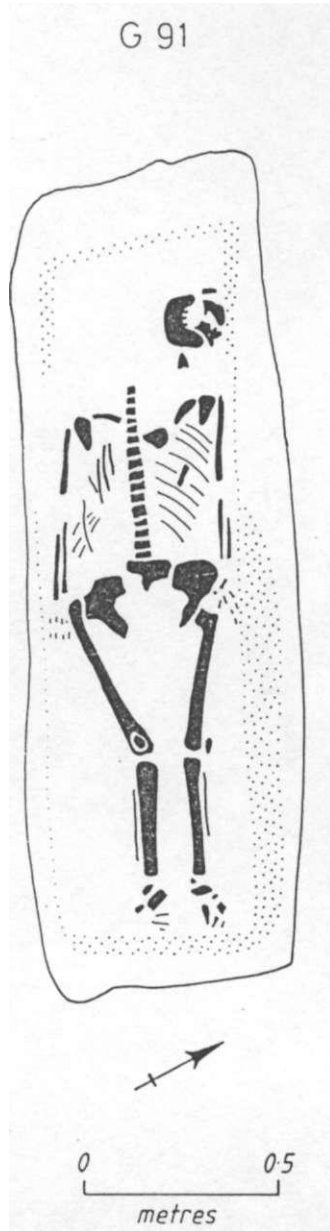


Grave 89 N-S (head to N). Isolated grave. Cut by Period 2 **G63**. **G74**. **G77**. **G88**. modern feature **BF7**. Nailed timber coffin (nails not illustrated). Adult, sex uncertain. Skeleton probably supine. Only fragments of skull and leg bones survive, in poor condition.



Grave 90 E-W (head to W). Cuts Period 2 G200. Cut by Period 2 G65. G75. Nailed timber coffin. Middle-aged female. Skeleton supine. Surviving bones in fair condition.

G 91



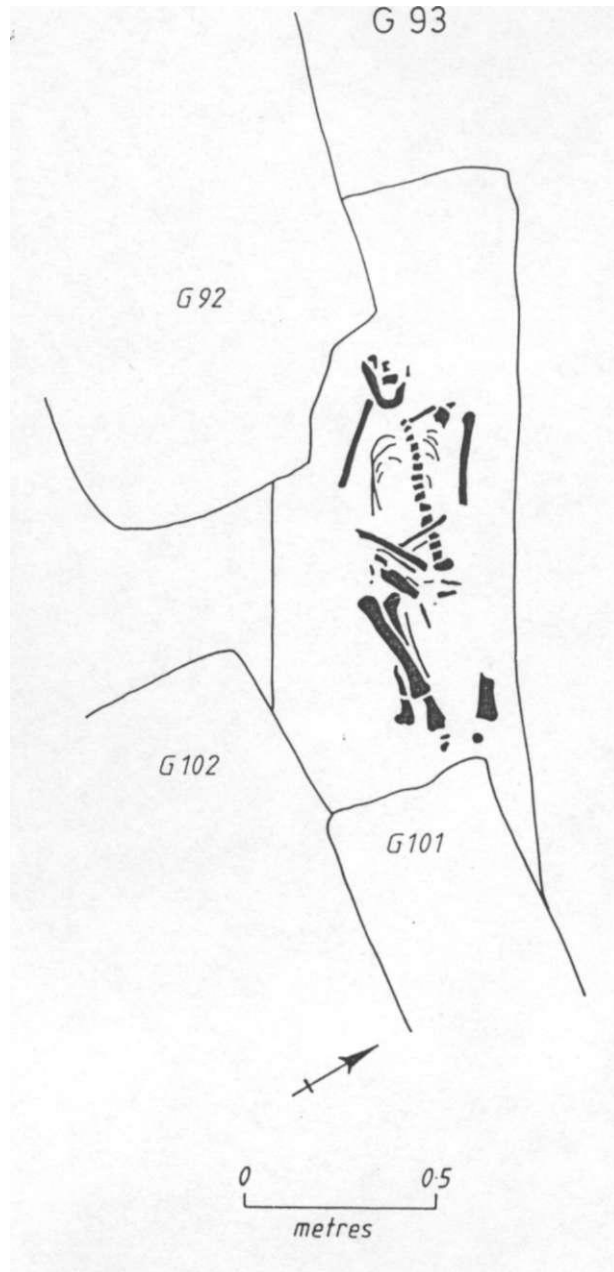
Grave 91 E-W (head to W). Cuts Period 1 G100, G119. Period 2 G206. Cut by Period 2 G66. G194, G199. Relationship to Period 2 G201 uncertain. Nailed timber coffin (nails not illustrated). Middle-aged male. Skeleton supine. Bones in good condition.

G 92



0 0.5
metres

Grave 92 E-W (head to W). Cuts Period 2 G93.
Cut and sealed by Period 2 ?foundation BF56.
Part of grave destroyed by vandals before
excavation completed. Nailed timber coffin
(nails not plotted, timber stain faint. not
illustrated). Child. aged 6 to 7 years.
Skeleton supine. Surviving bones in fair
condition.

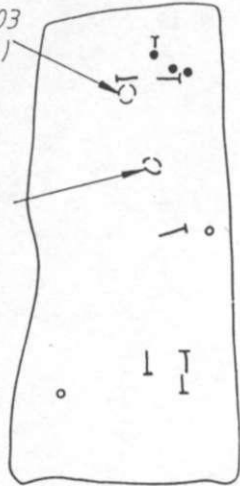


Grave 93 E-W (head to W). Cuts Period 2 G107. Cut by Period 2 G92. G101. Sealed by Period 2 ?foundation BF56. Relationship to Period 2 G102 uncertain. Timber coffin (no nails recovered). Middle-aged ?female. Skeleton supine. Surviving bones in fair condition. The lower leg bones were removed by G101 but placed by the right femur.

G.94

copper-alloy
bells on
iron chain B403
(CAR 2: 1809-10)

fe ring
B 402



0 0.5
metres

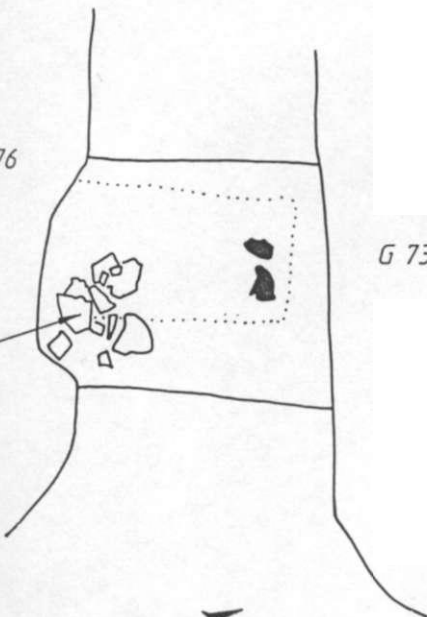
Grave 94 E-W. Isolated grave. Cut and sealed by Period 2 ?foundation BF56. Nailed timber coffin (no timber stain located), length 0.85 m, width 0.18 m. No skeletal material. Coffin size indicates small child. Inside SW corner of coffin lay an iron chain on which were suspended two copper-alloy bells. An iron ring lay on bottom of coffin about 0.25 m from W end and midway between two sides, either armband or coffin fitting.

G 95

G 76

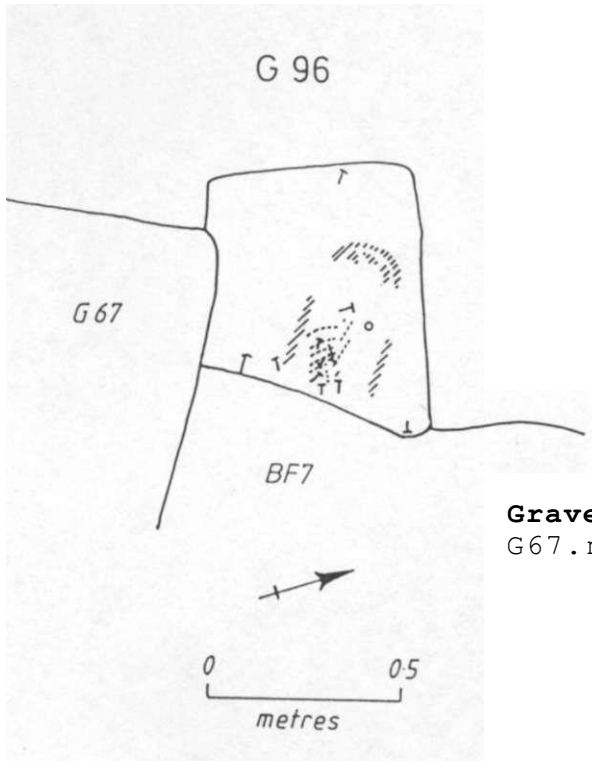
G 73

crushed
pot
B 428

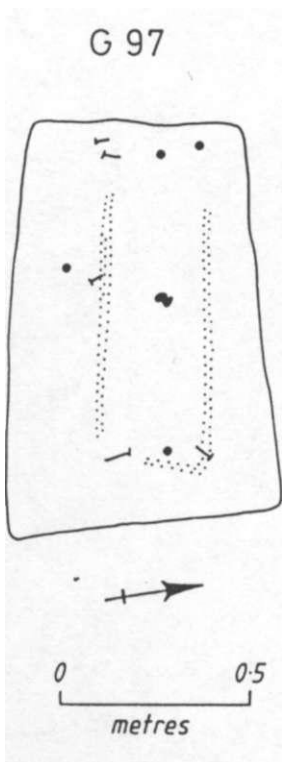


0 0.5
metres

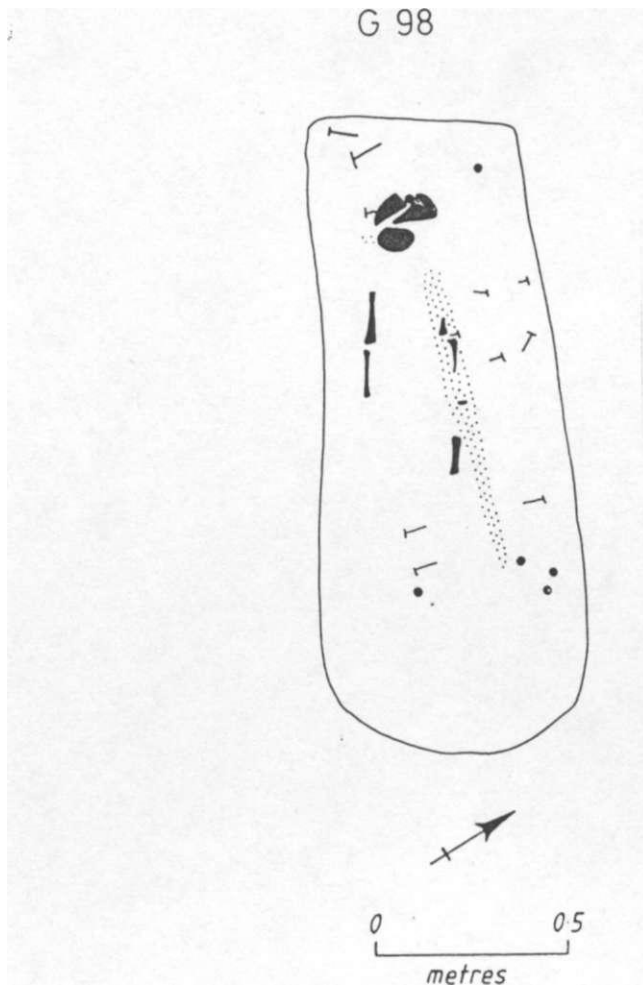
Grave 95 N-S (head to N). Isolated grave. Cut by Period 2 G71. G73. G76. S end of coffin removed by G76. Nailed timber coffin (nails not illustrated). Child. Only fragments of skull remain. Sherds of coarse grey ware jar inside coffin on E side. 0.5 m from N end.



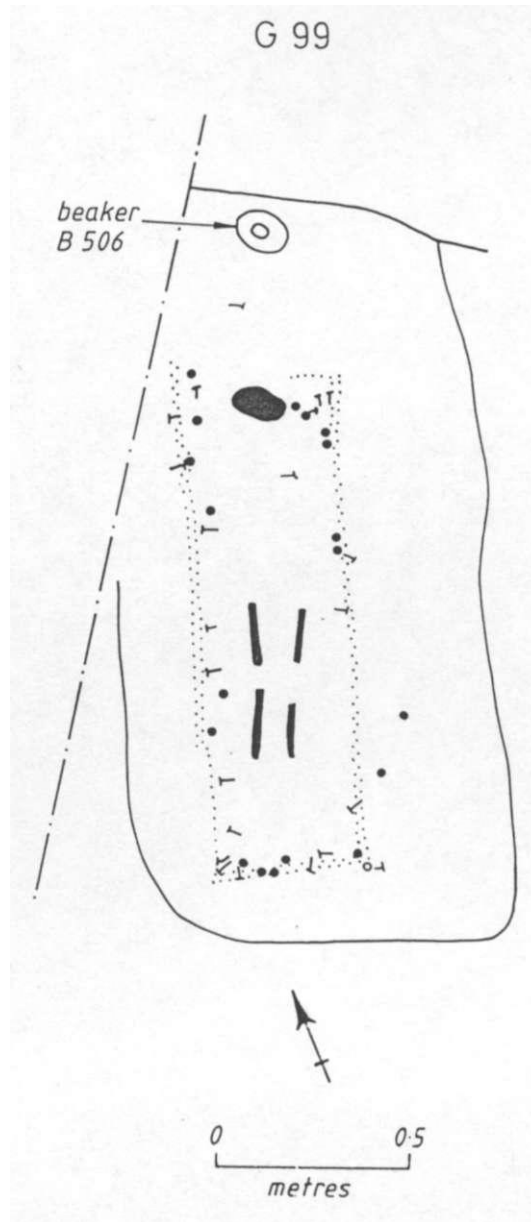
Grave 96 E-W (head to W). Cut by Period 2 G67. modern feature BF7. Only Whalf remains. Nailed timber



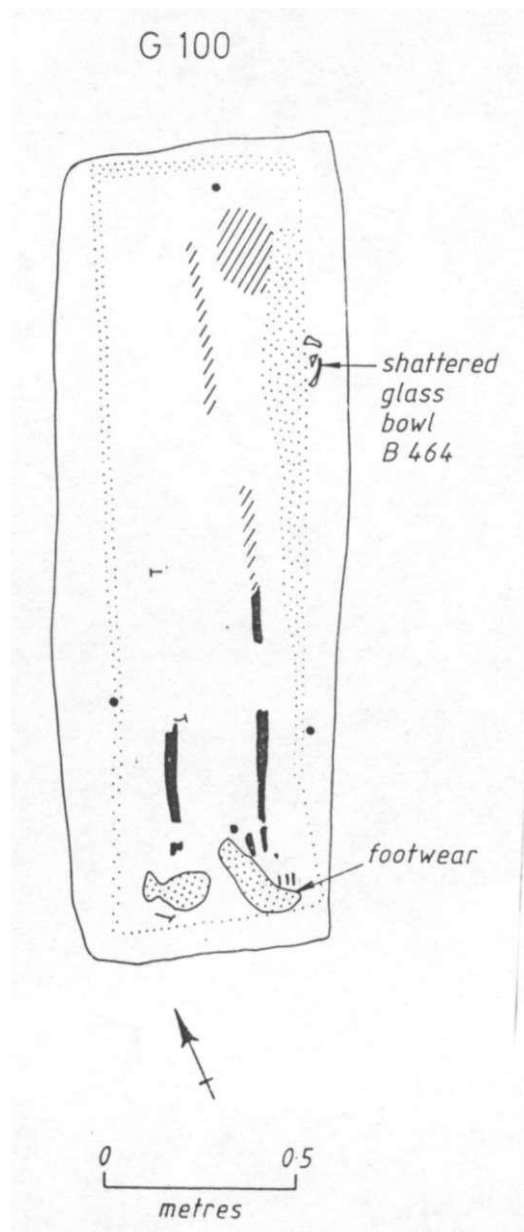
Grave 97 E-W. Cuts Period 2 G98. Nailed timber coffin. length 0.78 m. width 0.24 m. No skeletal material. Coffin size indicates infant or small child.



Grave 98 E-W (head to W). Cuts Period 2 G112. Cut by Period 2 G83. G97. Nailed timber coffin. Child. Only fragments of skull, arm and leg bones survive, in poor condition.

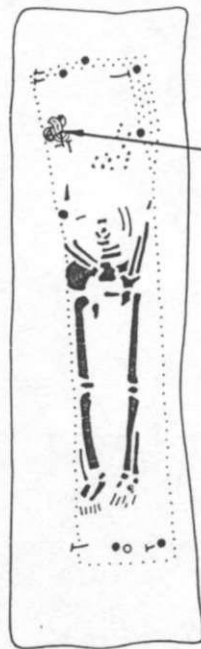


Grave 99 N-S (head to N). Isolated grave. Cut by Period 2 G63. G64. G78. G81. G241. Nailed timber coffin. Child. Skeleton supine. Only skull and shafts of leg long bones survive, in poor condition. Outside N end of coffin stood a beaker of Colchester colour-coated ware.



Grave 100 N-S (head to N). Isolated grave. Cut by Period 2 G65. G66. G75. G76. G91. Nailed timber coffin. Adult ?male. Skeleton probably supine. Some foot bones and fragments of shafts of leg long bones survive, in very poor condition. Positions of skull and some post-cranial stains in soil. Inside coffin iron hobnails from leather shoes remain by foot bones. Outside coffin. on E side some 0.5 m from N end. lay a fragmented glass bowl. Isings Form 42.

G 101



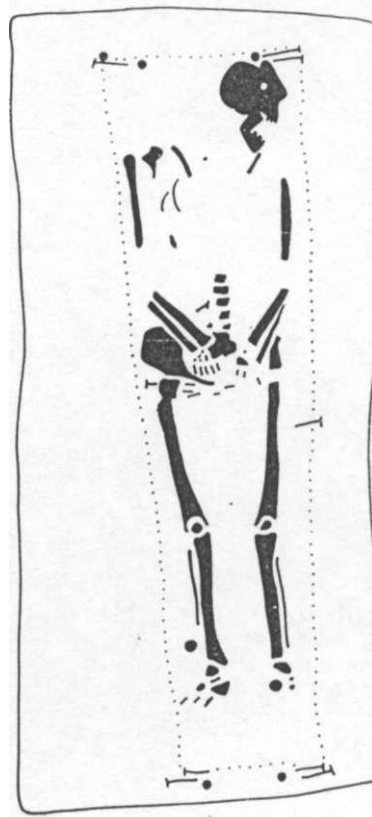
two belts
3532-4 3541
(CAR 2:4248-4251)



0 05
metres

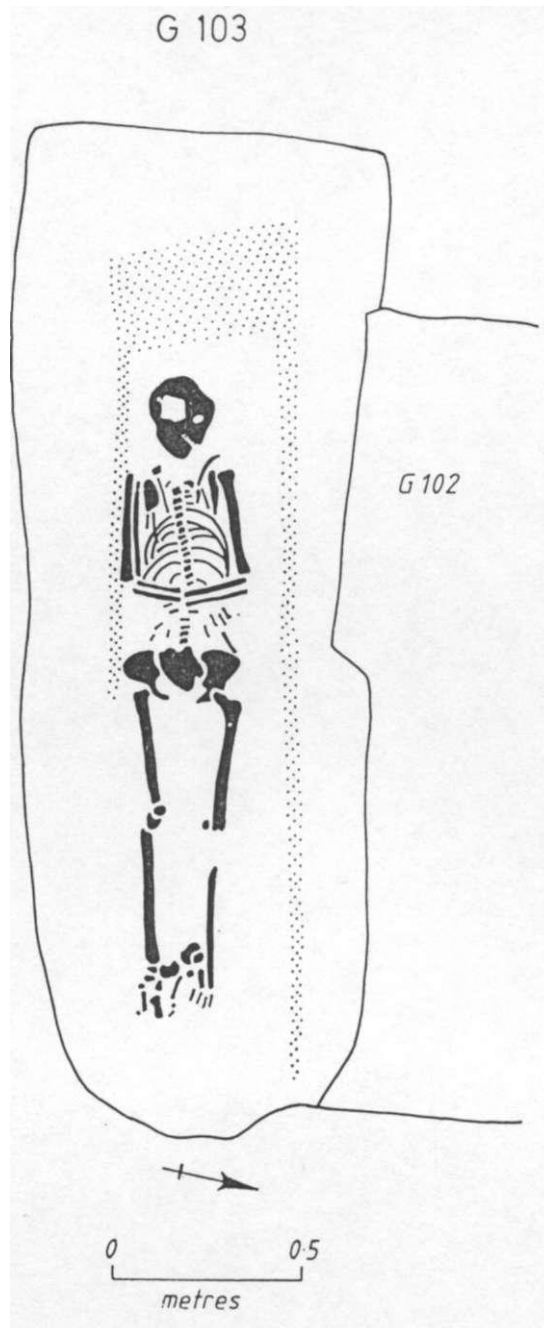
Grave 101 E-W (head to W). Cuts Period 2 G93. G102. Nailed timber coffin. Child, aged 9 to 11 years. Skeleton supine. Only lower post-cranial skeleton remains. Inside coffin, close to SW corner, probably by right shoulder, lay a pair of leather belts, folded and parallel to each other (leather only a stain in soil). Each belt fitted with a copper-alloy buckle and strap-end.

G 102

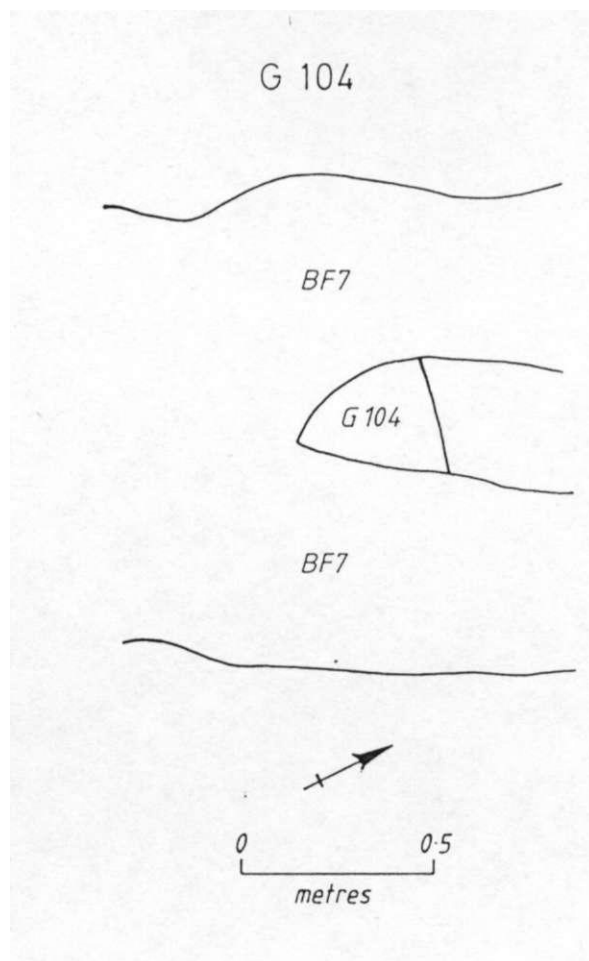


0 0.5
metres

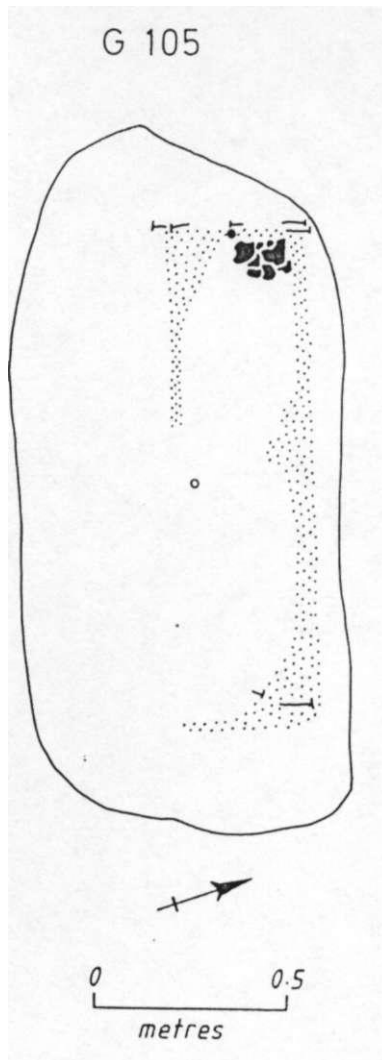
Grave 102 E-W (head to W). Cuts Period 2 G103. Cut by Period 2 G84. G101. Relationship to G93 uncertain. Nailed timber coffin. Middle-aged male. Skeleton supine. Surviving bones in good condition.



Grave 103 E-W (head to W). Cuts Period 1 G170. Period 2 **G 112**. Cut by Period 2 G84. G102. Nailed timber coffin (nails not illustrated). Timber stain at W end very wide, probably from outward collapse of coffin headboard. Middle-aged female. Skeleton supine. Surviving bones in good condition.

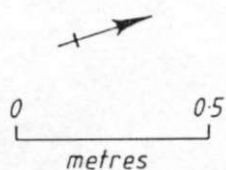
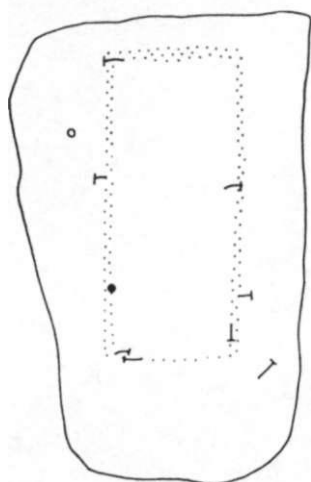


Grave 104 E-W. ?Isolated grave. Cut and largely destroyed by modern feature BF7. Only small part of N side of grave survived. It contained one small fragment of bone.



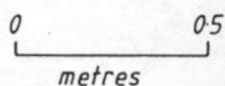
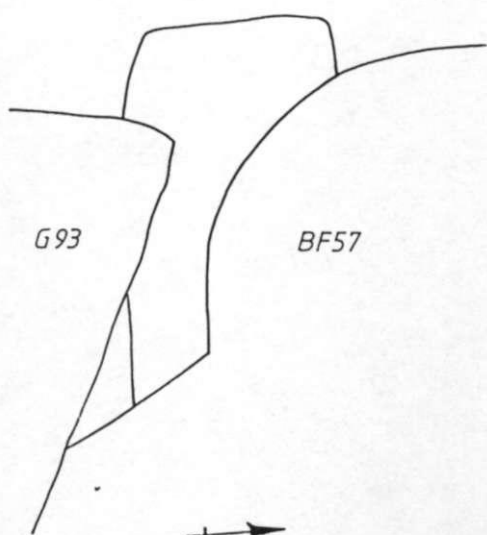
Grave 105 E-W (head to W). Cuts Period 2 G113. Cut by Period 2 G82. Nailed timber coffin. Child. Only fragments of skull remain, in poor condition.

G 106

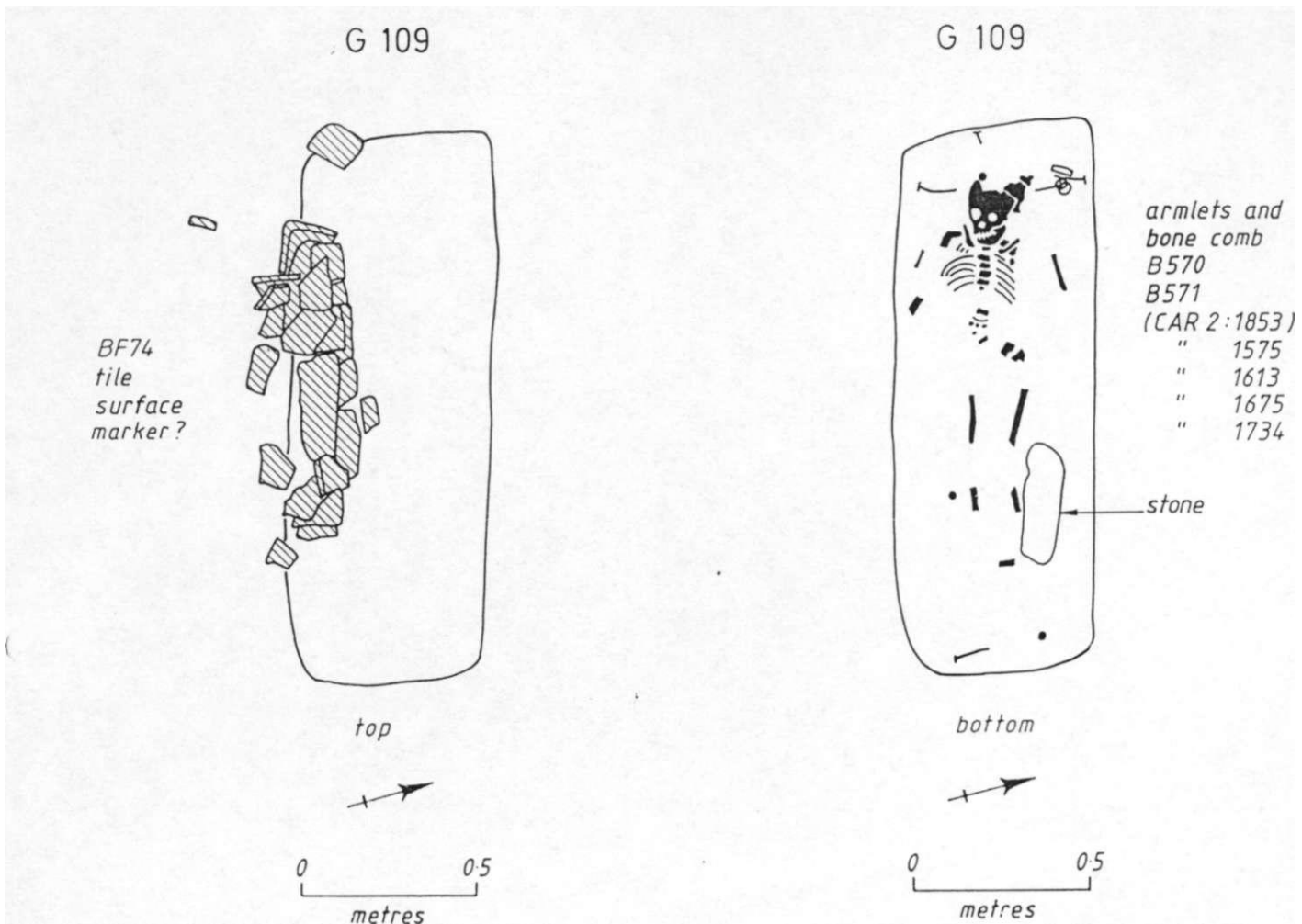


Grave 106 E-W. Isolated grave. Nailed timber coffin. 0.76 m long. 0.32 m wide. No skeletal material. Coffin size indicates infant or small child.

G 107



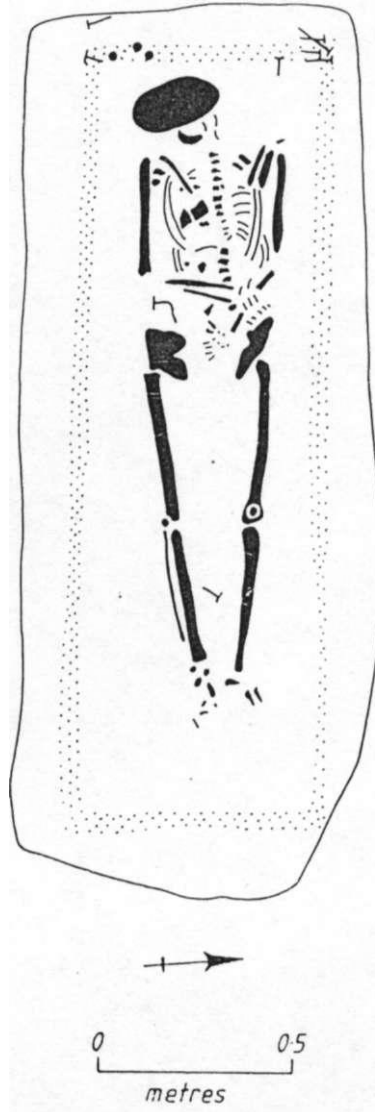
Grave 107 E-W. Cut by Period 2 G93. Cut and sealed by Period 2 ?foundation BF56. Cut and largely destroyed by modern feature BF57. Relationship to Period 2 G79 uncertain. Nailed timber coffin (nails not illustrated, no timber stain located). No skeletal material.



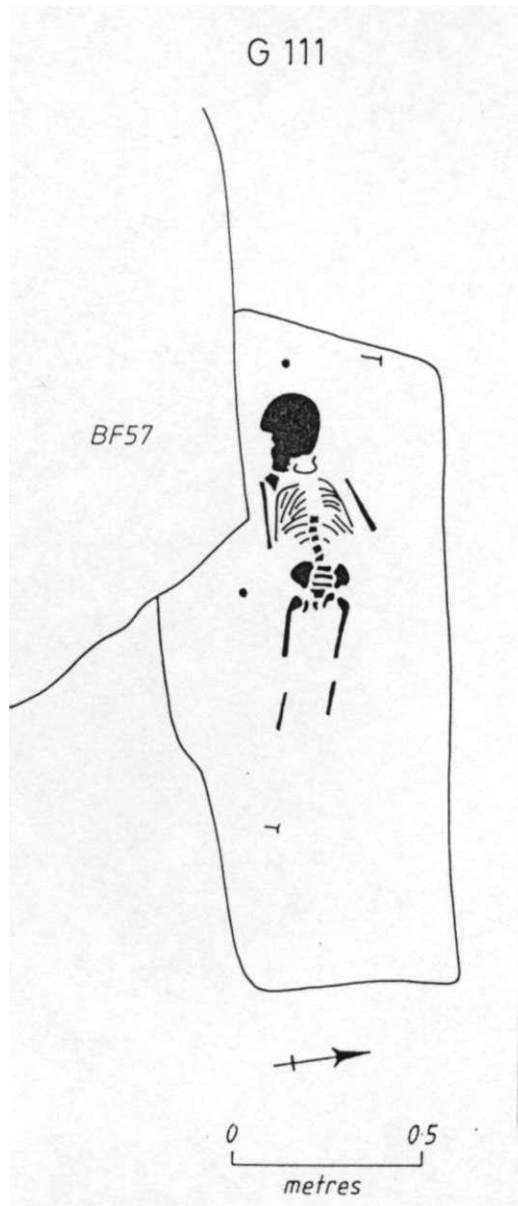
Grave 109 E-W (head to W). Cuts Period 1 G119. Isolated grave. Nailed timber coffin (timber stain not located). Child, aged 4 to 5 years. Skeleton supine. Skull crushed, other surviving bones in poor condition. In NW corner of coffin lay an antler comb and four armlets (bone, copper-alloy, iron). On bottom of N side of grave, resting directly against left leg bones, lay a large block of stone (unidentified). At Roman ground level a group of tiles (**BF74**) lay on S side of grave, overlapping edge of grave pit. Probably surface markers.

G 110

including bones from G 117

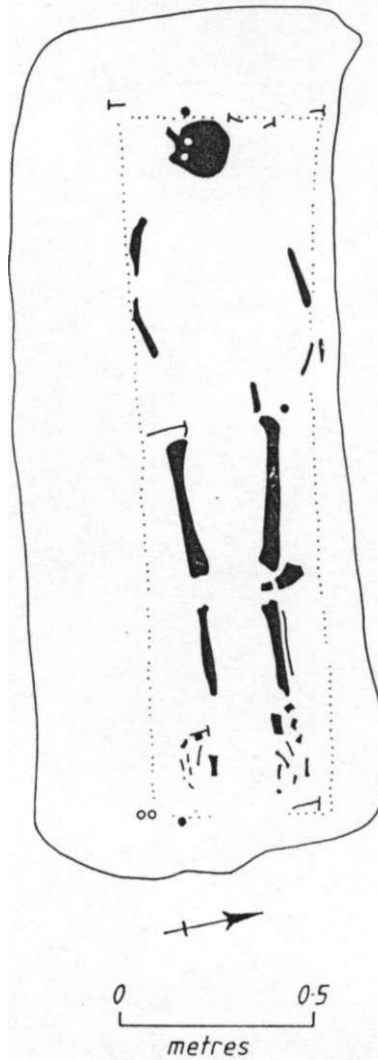


Grave 110 E-W (head to W). Cuts Period 1 timber-lined shaft BF119. Period 2 G127. Cuts and directly overlies Period 1 G126. Relationship to Period 1 G126 uncertain. Nailed timber coffin, laid directly on top of coffin of G117. Latter must ha



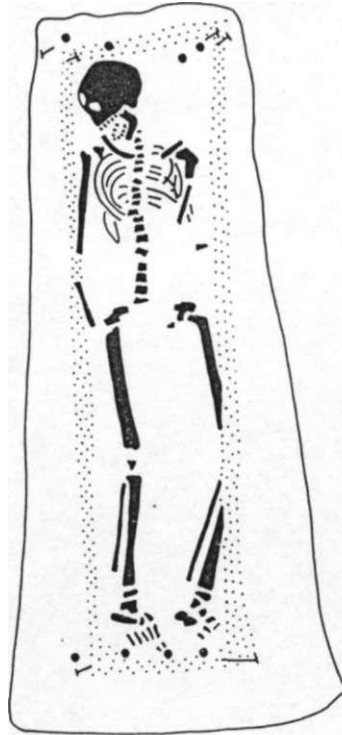
Grave 111 E-W (head to W). Cuts Period 2 G116. G120. Cut by modern feature BF57. Nailed timber coffin (no timber stain located). Child, aged 5 to 6 years. Skeleton supine. Surviving bones in fair condition.

G 112



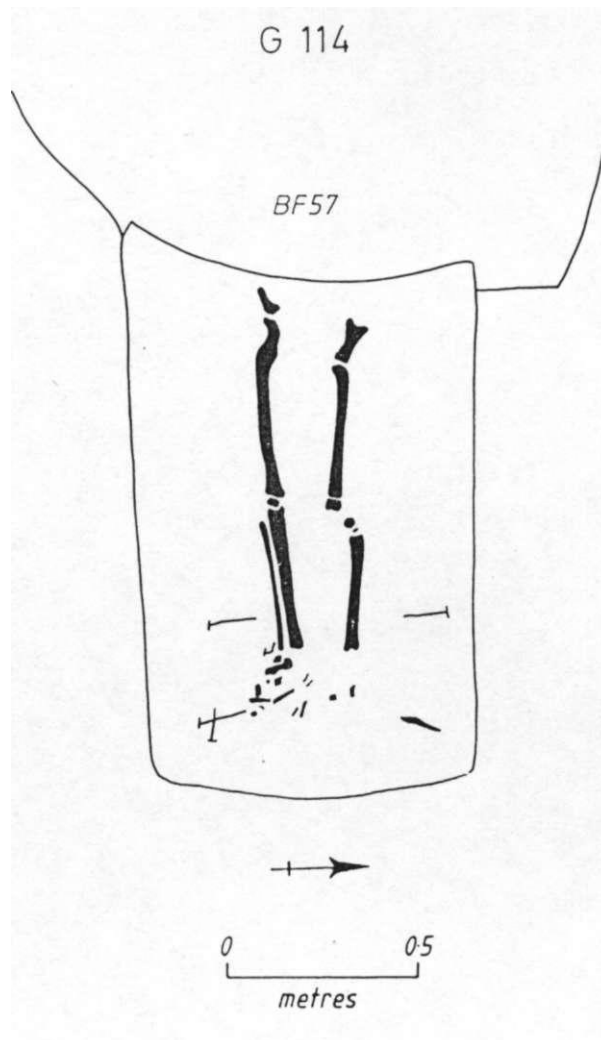
Grave 112 E-W (head to W). Cuts Period 1 G170. Cut by Period 2 G84. G98. G103. Nailed timber coffin. Middle-aged ?male. Skeleton supine. Cranium and few remaining fragments of upper post-cranial skeleton in poor condition, leg and foot bones well preserved.

G 113

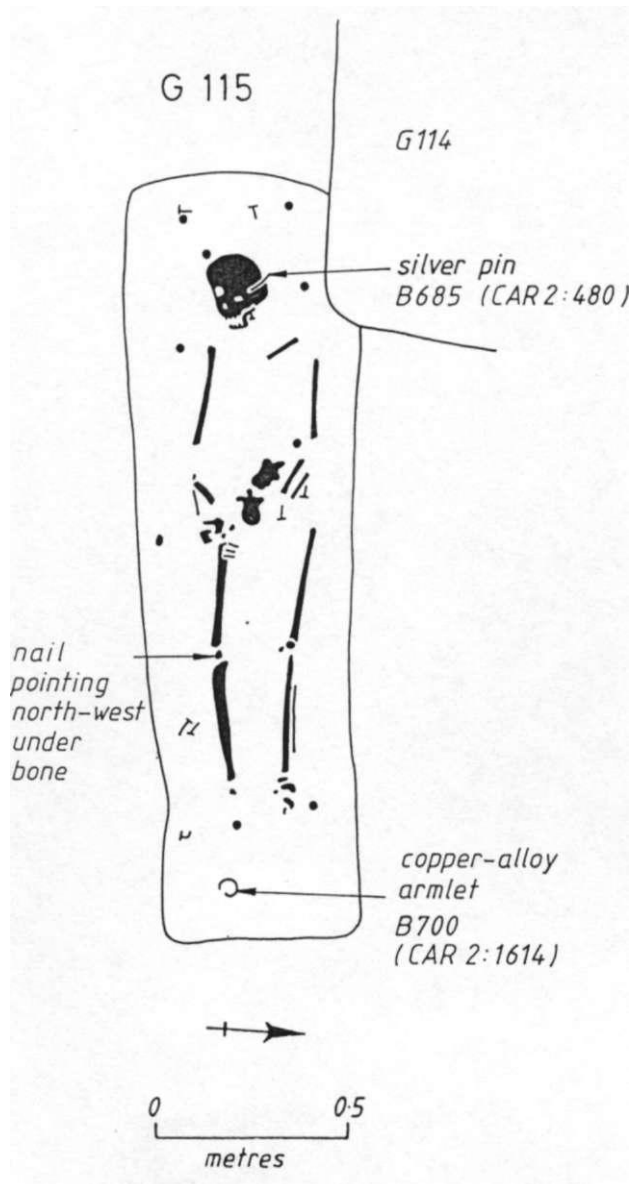


0 0.5
metres

Grave 113 E-W (head to W). Cut by Period 2 G82. G105. Nailed timber coffin. Child, aged 12 to 13 years. Skeleton supine. Surviving bones in good condition.



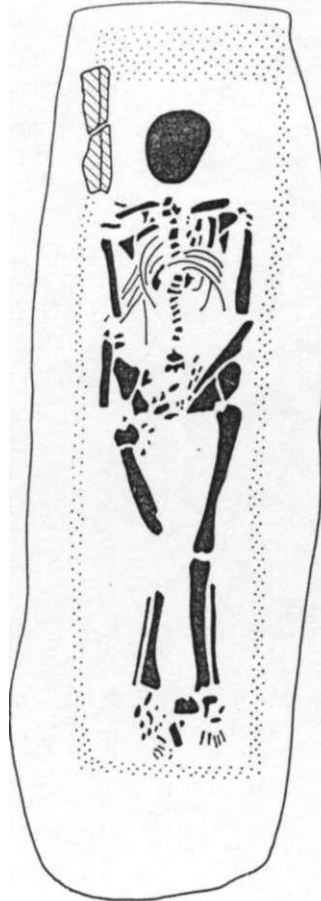
Grave 114 E-W (head to W). Cuts Period 2 G115. G116, G118 and G120. W half of grave destroyed by modern feature BF57. Nailed timber coffin (timber stain not located). Adult ?female. Skeleton supine. Surviving bones in good condition.



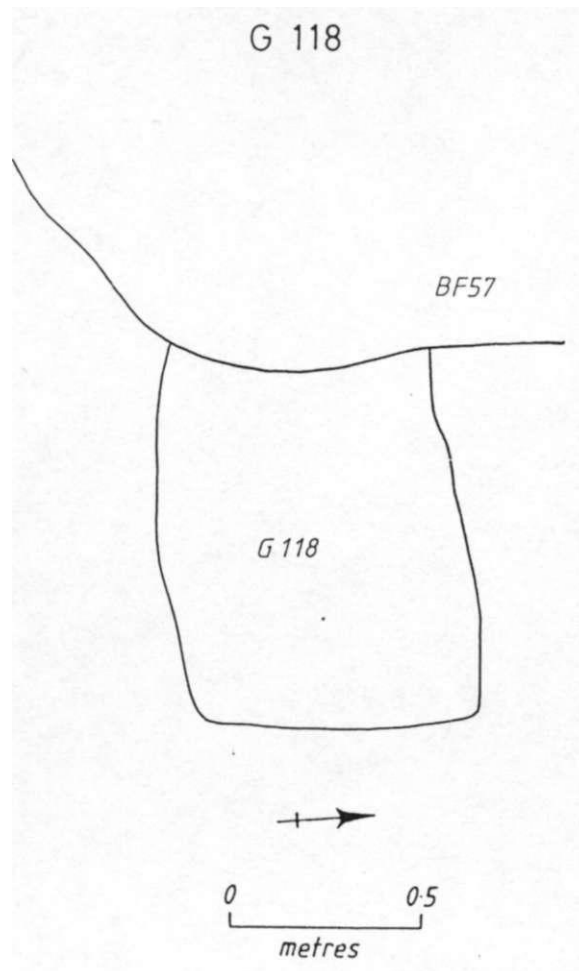
Grave 115 E-W (head to W). Cuts Period 2 G121a-b. G123. Cut by Period 2 G114. Nailed timber coffin (timber stain not located). Child. aged 12 to 14 years. Skeleton supine. Surviving bones in poor condition. Inside coffin on skull lay silver hairpin. At E end of grave outside coffin lay one copper-alloy armlet, possibly residual.

G 117

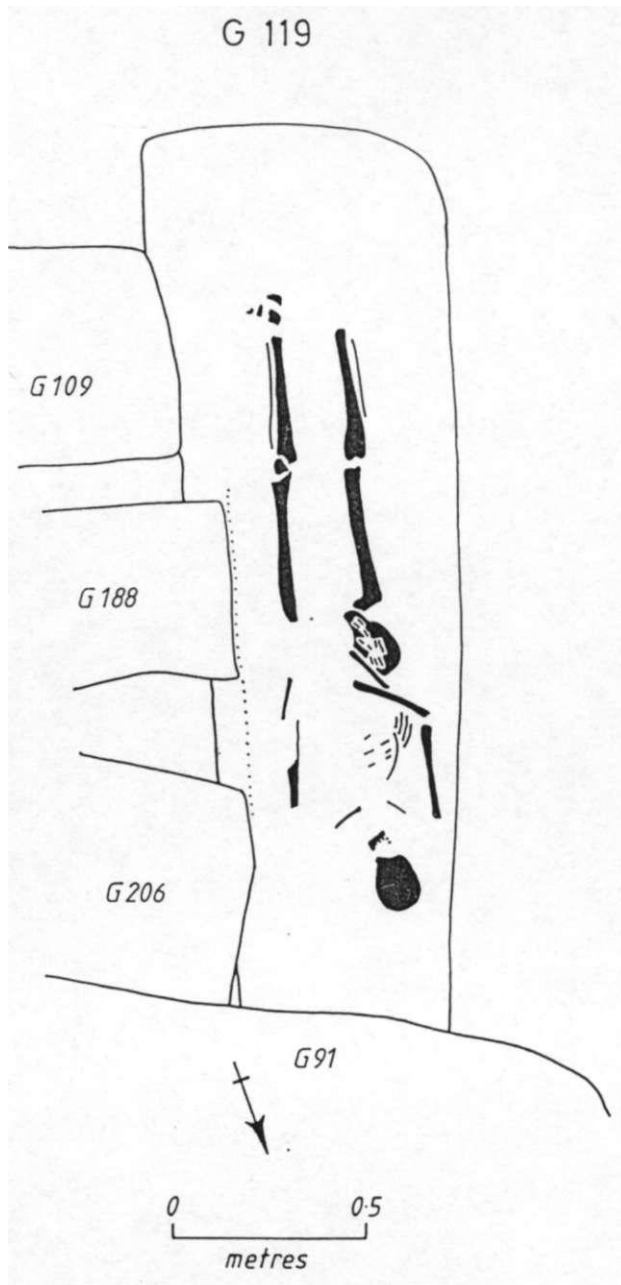
including bones from G110



Grave 117 E-W (head to W). Cuts Period 1 timber-lined shaft BF119. Cut and directly overlain by Period 2 G110. skeleton of which sank into coffin cavity of G117. Nailed timber coffin (nails not illustrated). Middle-aged male. Skeleton supine. Bones in good condition. Two tegula fragments set on edge between coffin and S side of grave pit near SW corner. Adjacent Period 2 G127 also contained tiles set on edge at W end.

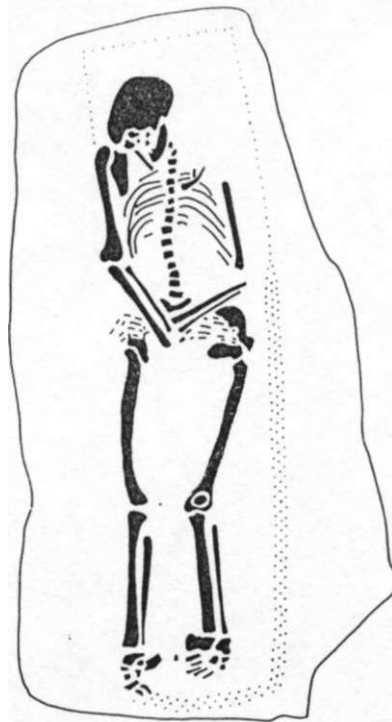


Grave 118 E-W. Cuts Period 2 G116. G120. Cut by Period 2 G114. modern feature BF57. W half destroyed by BF57. No trace of coffin or skeletal material recovered.



Grave 119 N-S (head to N). Isolated grave. Cut by Period 2 G67. G91. G109. G188. G206. Nailed timber coffin (nails not illustrated). Middle-aged male. Skeleton supine. Surviving bones in poor condition. Skull and upper post-cranial bones covered with thin black deposit.

G 120

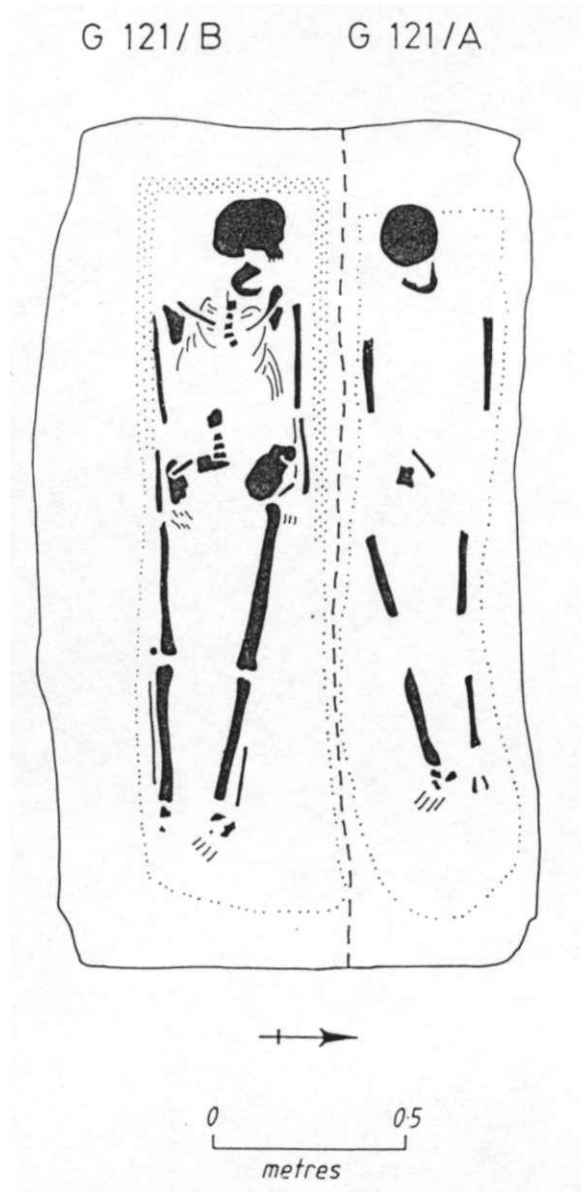


0 0.5
metres

Grave 120 E-W (head to W). Cuts Period 2 G129. Cut by Period 2 G111. G114. G118. ?foundation BF66. Timber coffin (no nails recovered). Middle-aged ?female. Skeleton supine. Bones in good condition.

G 121/B

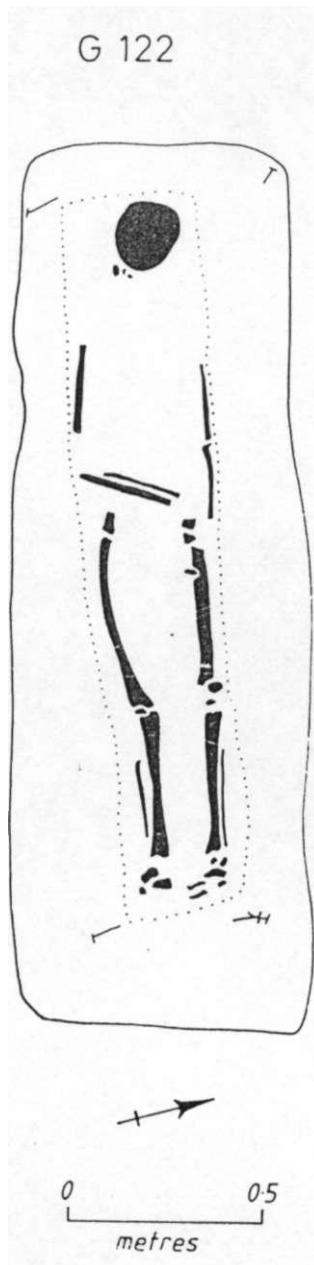
G 121/A



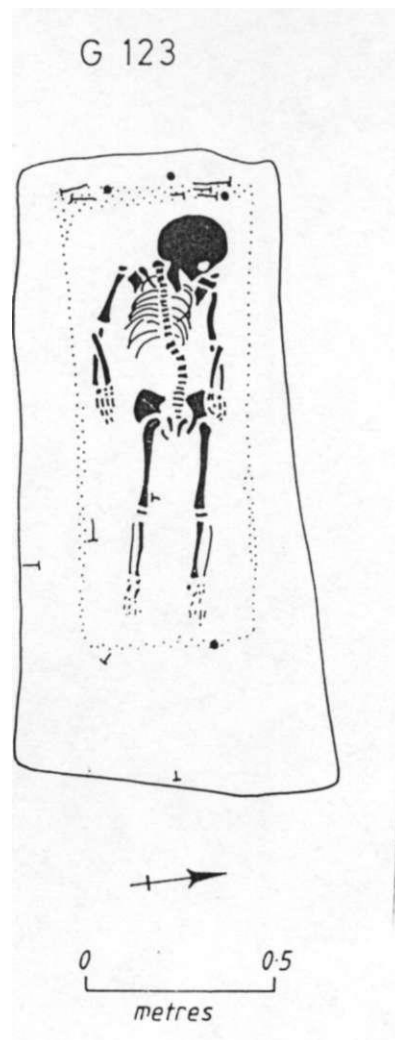
Grave 121a-b Cuts Period 1 G177. Cut by Period 2 G115. Two adjacent Per

G121a E-W (head to W). Relationship to G121b uncertain. Nailed timber co

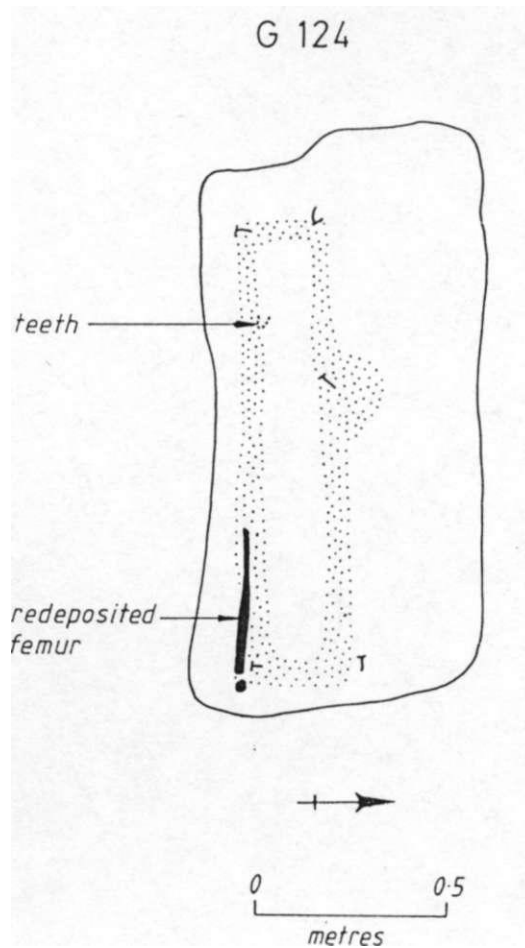
G121b E-W (head to W). Relationship to G121a uncertain. Nailed timber coffin (one nail only recovered, not plotted). Middle-aged male. Skeleton supine. Surviving bones in good condition.



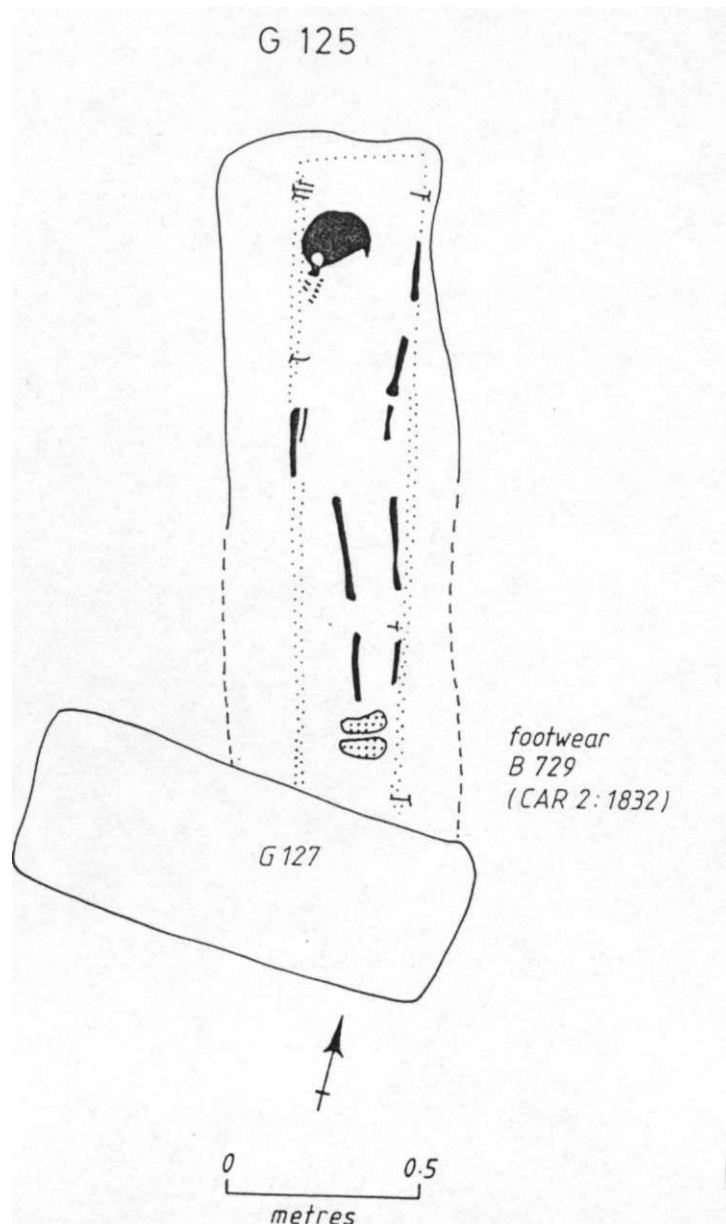
Grave 122 E-W (head to W). Relationship to Period 2 G130 uncertain. Nailed timber coffin. Middle-aged male. Skeleton supine. Skull and lower post-cranial skeleton well preserved. but only fragments of some upper post-cranial bones remain, in poor condition.



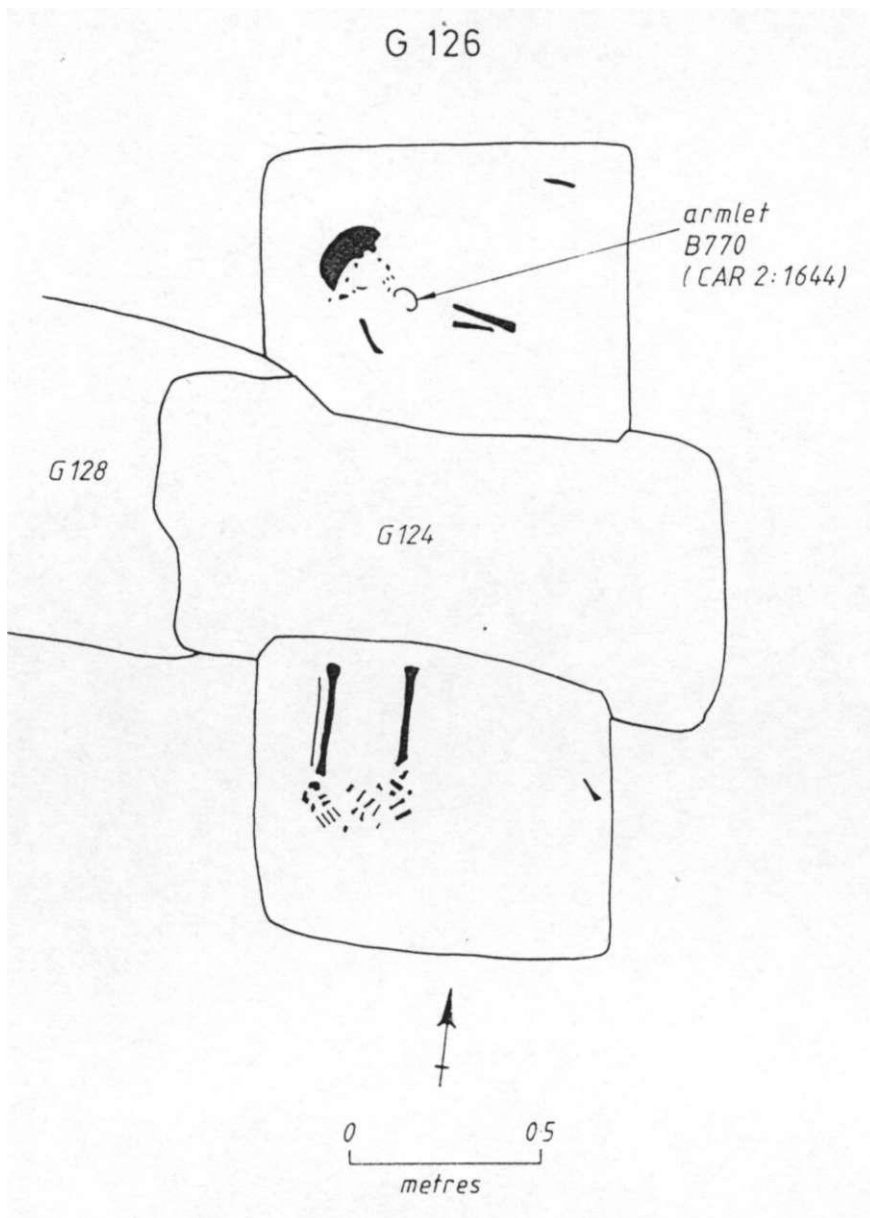
Grave 123 E-W (head to W). Cut by Period 2 G115. Relationship to Period 2 G158 uncertain. Nailed timber coffin. Child, aged 6 to 7 years. Skeleton supine. Bones in good condition.



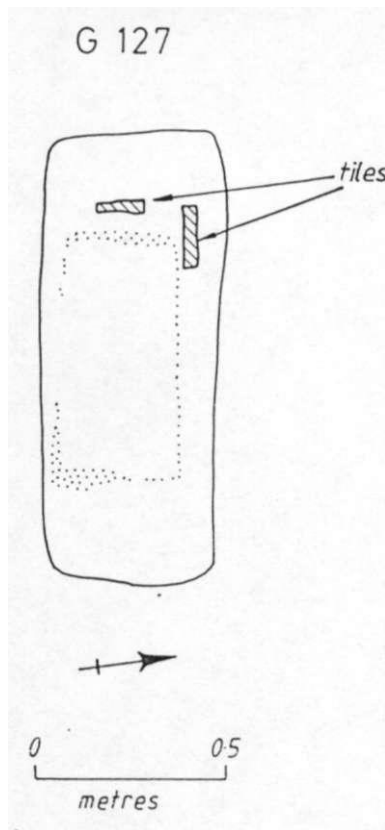
Grave 124 E-W (head to W). Cuts Period 1 G126. Cut by Period 2 G128. Nailed timber coffin. length 1.1 m. width 0.14 m. Timber stain projected outwards near mid point of N side. Projection coincided with position of an outward-pointing horizontal nail. Teeth recorded as surviving. but now missing. Coffin size indicates small child. Two human bones. including a femur. placed outside coffin near SE corner of grave. Both probably from Period 1 G126.



Grave 125 N-S (head to N). Cuts Period 1 timber-lined shaft BF119. Isolated grave. Cut by Period 2 G127. Nailed timber coffin. Adult, sex uncertain. Skeleton supine. Only skull and fragments of long bones remain. Inside coffin at S end lay pair of hobnailed shoes, set at right angles to leg bones.

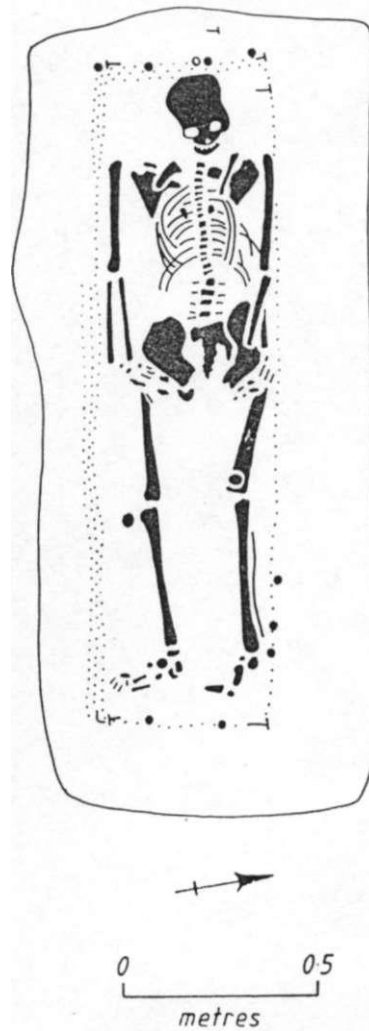


Grave 126 N-S (head to N). Isolated grave. Cut by Period 2 G124. G128. Relationship to Period 2 G110 uncertain. Central section of grave destroyed by G124, which contained redeposited bones probably deriving from G126. Nailed timber coffin (no timber stain located). Middle-aged ?female. Skeleton probably supine. Lower leg and foot bones fairly well preserved. Fragments of skull and arm long bones are all that remain of upper skeleton. in poor condition. Left arm appeared bent. elbow projecting outward from body. hand resting near chin or shoulder. Copper-alloy armlet appears to have been on left wrist.



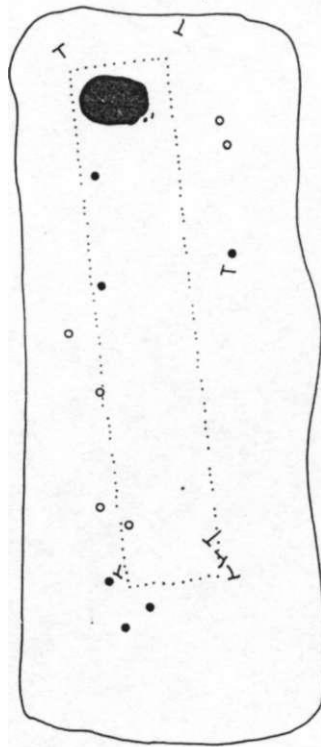
Grave 127 E-W. Cuts Period 1 G125. timber-lined shaft BF119. Cut by Period 2 G110. Nailed timber coffin (nails not illustrated), length 0.58 m. width 0.28 m. No skeletal material survives. Coffin size indicates Infant. Several fragments of tile were set upright at W end of grave, outside coffin. Adjacent Period 2 G117 also contained vertically set tiles at W end.

G 128



Grave 128 E-W (head to w). Cuts Period G126. Period 2 G124. Cut by Period 2 G32 Nailed timber coffin. Middle-aged male Skeleton supine. Bones in good condition.

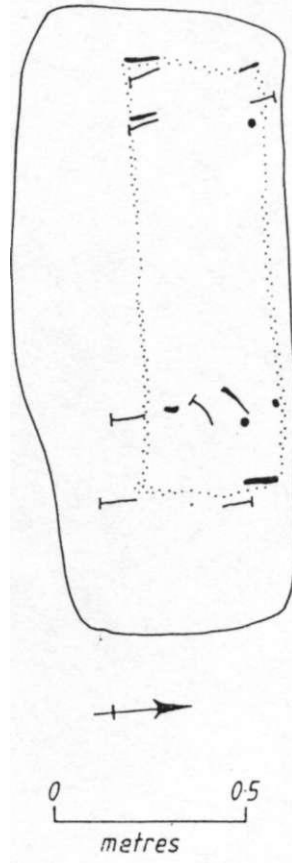
G 129



0 0.5
metres

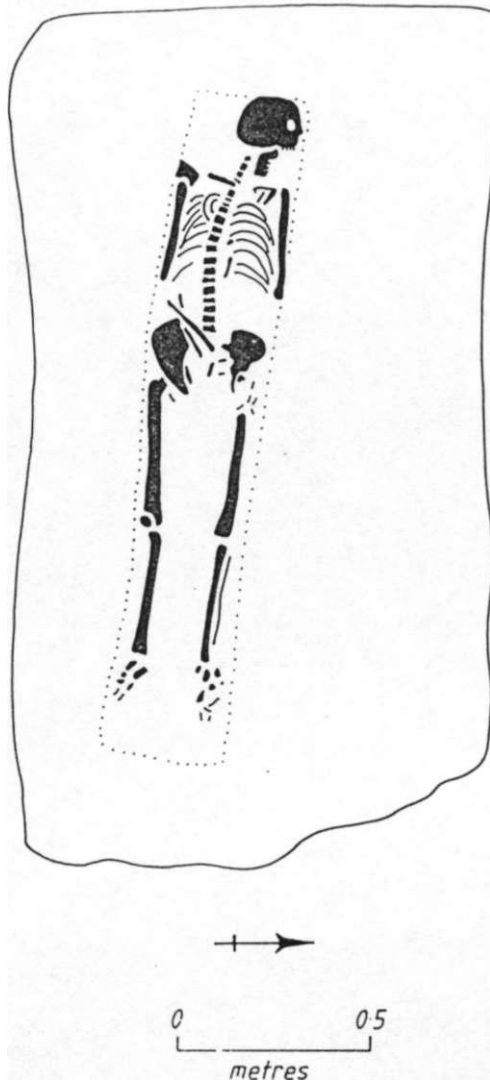
Grave 129 E-W (head to W). Cut by Period 2 G120. Cut and sealed by Period 2 ?foundation BF66. Nailed timber coffin. Child, aged 3 to 5 years. Only fragments of skull remain.

G 130



Grave 130 E-W. Cuts Period 2 G133. G138. Relationship to Period 2 G122 uncertain. Nailed timber coffin, length 1.1 m. width 0.3 m. No skeletal material. Coffin size indicates small child.

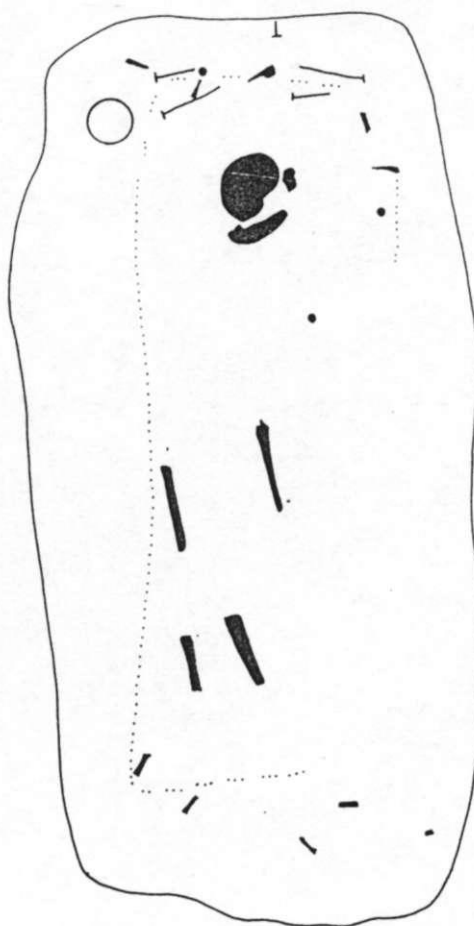
G 131



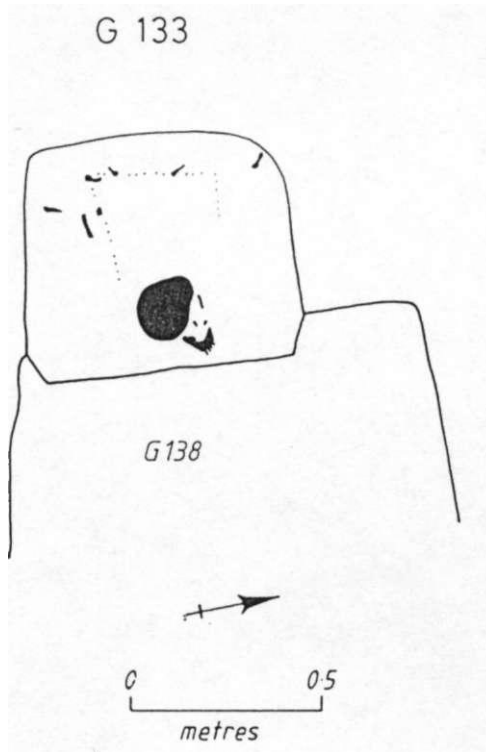
Grave 131 E-W (head to W). Cuts Period 1 N-S ditch BF159. Cut by Period 2 G132. Timber coffin, no nails found at coffin level, several present in upper grave fill. Middle-aged male. Skeleton supine. Bones in good condition.

G 132

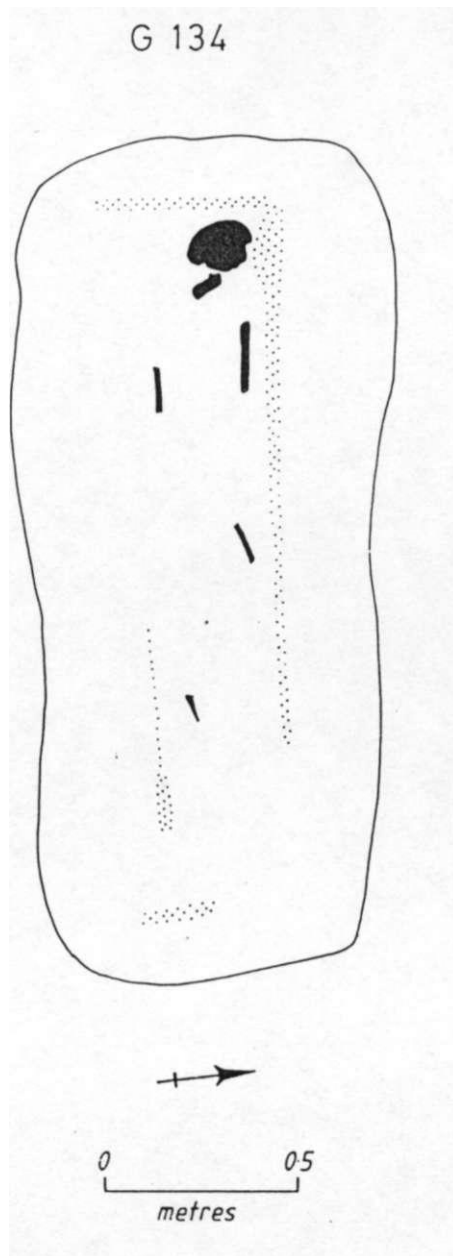
bottle
B1098



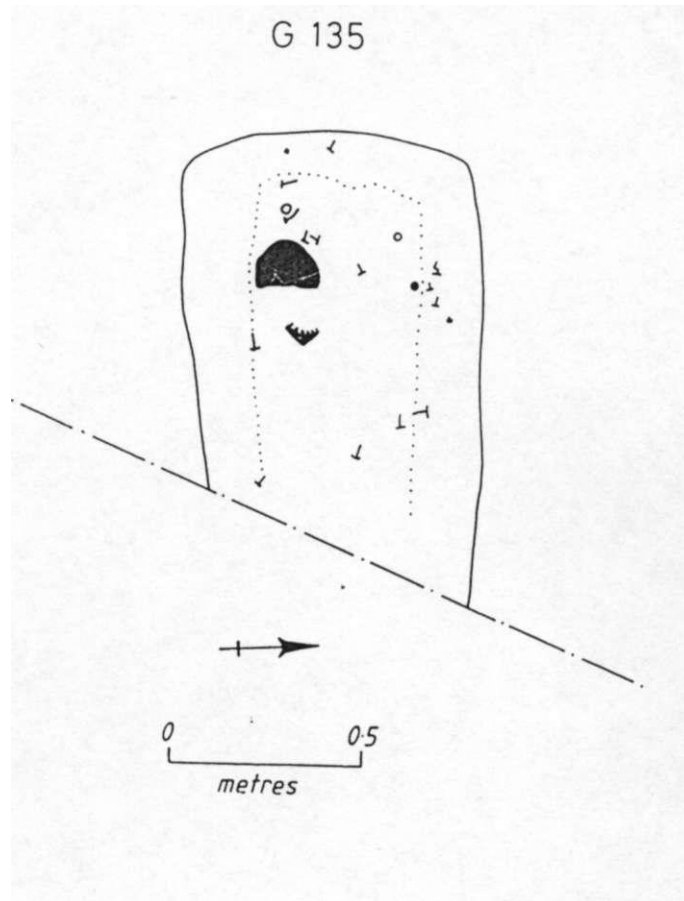
Grave 132 E-W (head to W). Cuts Period 2 G131. G151. Relationship to Period 2 G172 uncertain. Nailed timber coffin. Middle-aged ?female. Only fragments of skull and leg long bones remain. in poor condition. Outside coffin in SW corner of grave lay a glass one-handed cylindrical bottle.



Grave 133 E-W (head to W). Cuts Period 1 or 2 E-W ditch BF167. Cut by Period 2 G130. G138. W end only remained. Nailed timber coffin. Middle-aged male. Only skull remains. Inside coffin next to skull lay one jet bead. Fill of G138, which destroyed most of G133. contained several other jet beads. Identification of skull as male puts interpretation of beads as grave deposit for G133 in doubt. Bead next to G133 skull interpreted as residual in fill on coffin lid and fallen there when lid collapsed.



Grave 134 E-W (head to W). Isolated grave. Nailed timber coffin (one nail only recovered. not illustrated). Adult female. Only fragments of skull and shafts of some long bones remain, in poor condition.

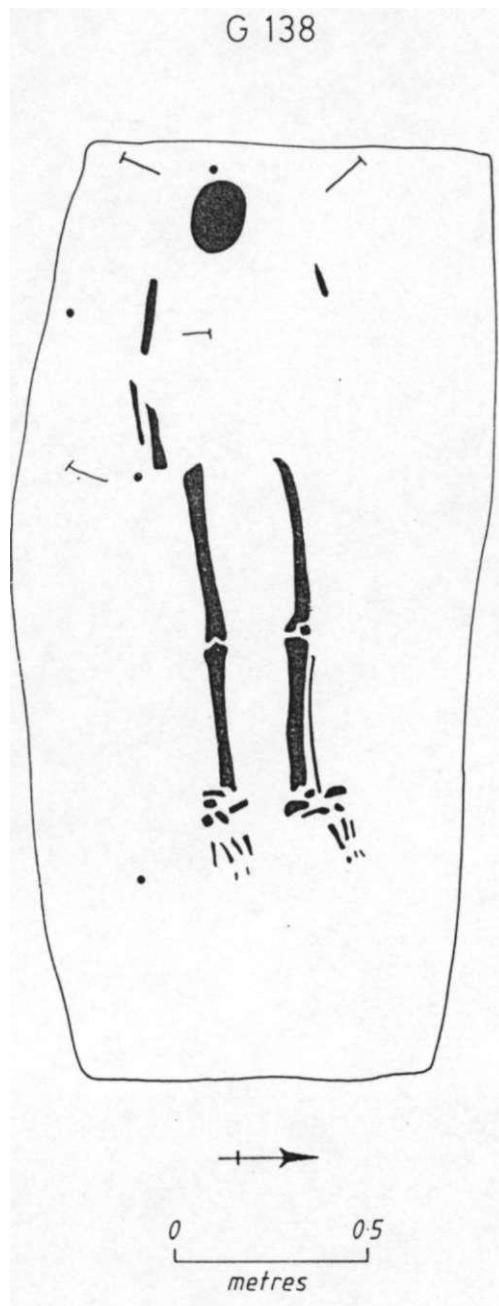


Grave 135 E-W (head to W). Isolated grave. W half only excavated. Nailed timber coffin. Adult ?female. Only fragments of skull remain. in poor condition.

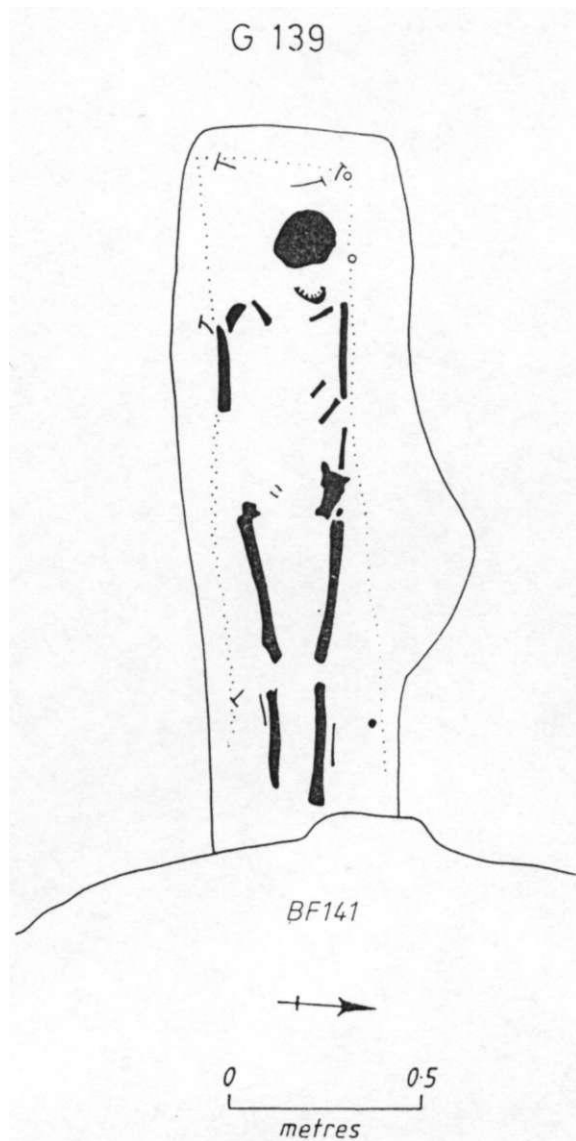
G 136



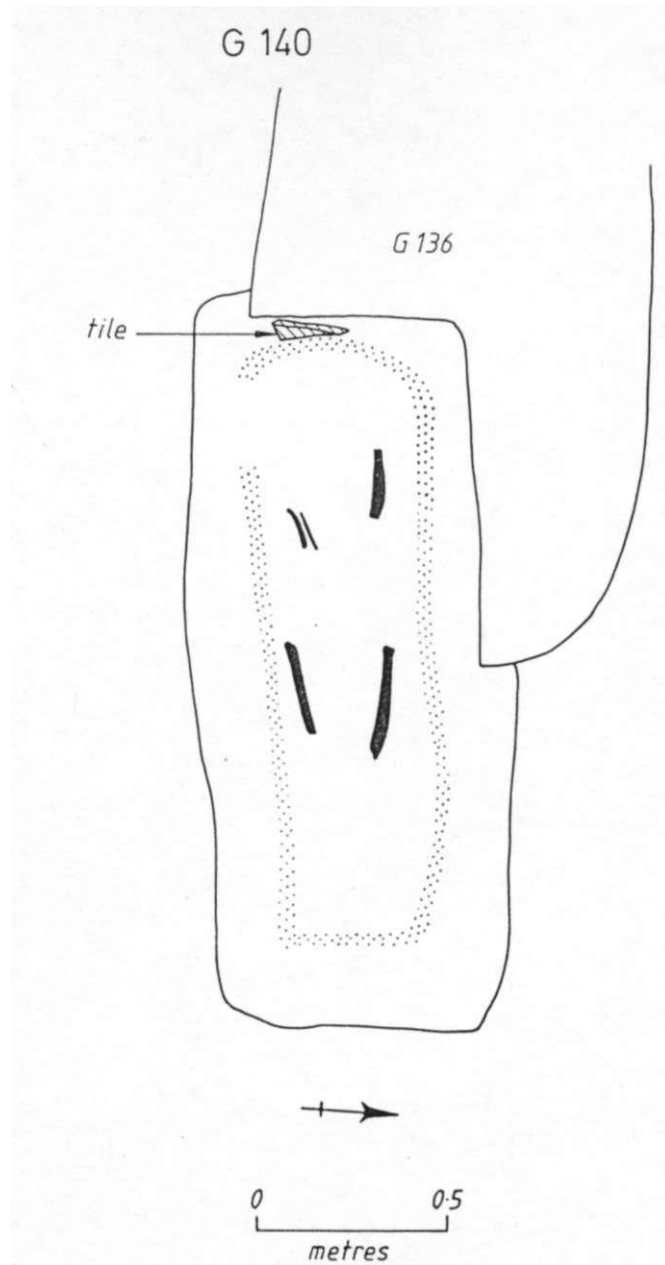
Grave 136 E-W (head to W). Cuts Period 1 G152. Period 2 G140. G141. Relationship to Period 2 G174 uncertain. Nailed timber coffin (timber stain not illustrated). Adult male. Skeleton supine. Surviving bones in poor-condition.



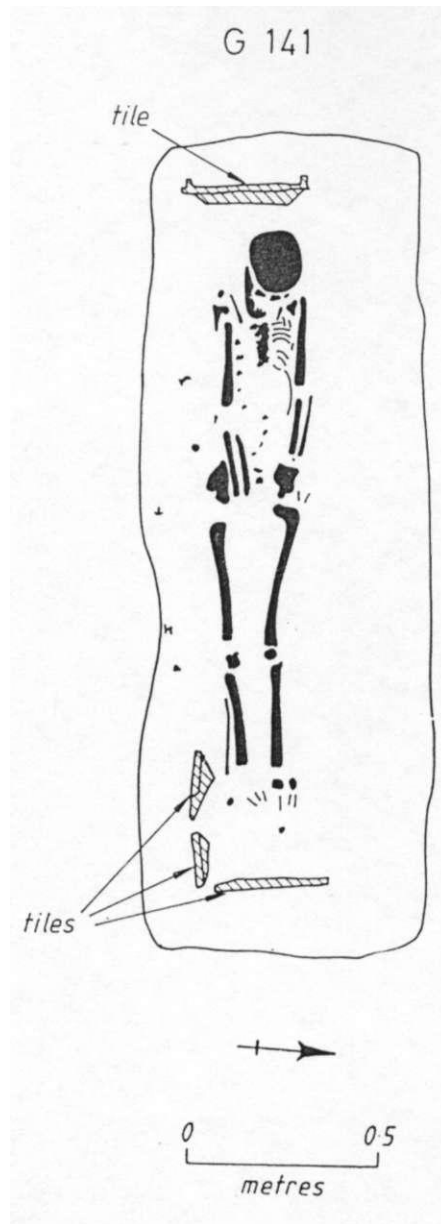
Grave 138 E-W (head to W). Cuts Period 1 or 2 E-W ditch BF167. Period 2 G133. Cut by Period 2 G130. Nailed timber coffin (timber stain not illustrated). Adult male. Skeleton supine. Little remains of upper post-cranial skeleton, lower in good condition. Grave fill included jet beads and skeletal material possibly redeposited from G133.



Grave 139 E-W (head to W). Isolated grave, but much disturbance in immediate area. Cut by modern pits BF141. BF146. which destroyed extreme E end and removed most of fill above level of coffin. Nailed timber coffin. Adult male. Skeleton supine. Surviving bones in poor condition.

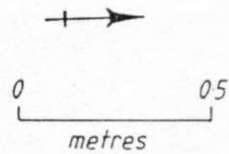
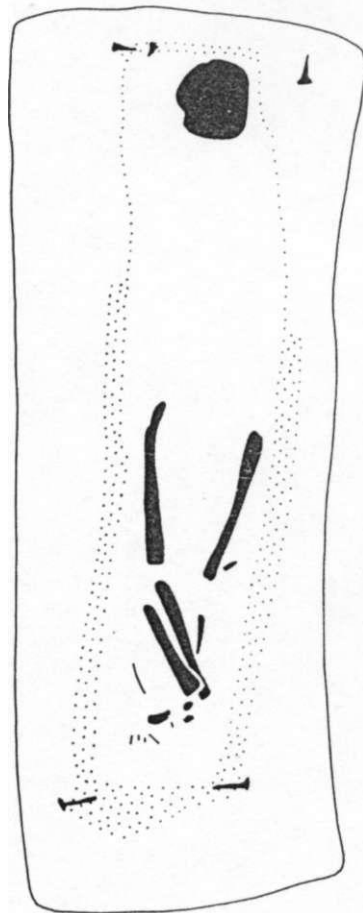


Grave 140 E-W (head to W). Cuts Period 1 G152. Cut by Period 2 G136. Nailed timber coffin (nails not plotted). Adult male. Skull displaced by G136. not illustrated. Only fragments of some long bones remain. in poor condition. Single piece of tile set on edge at W end of coffin.

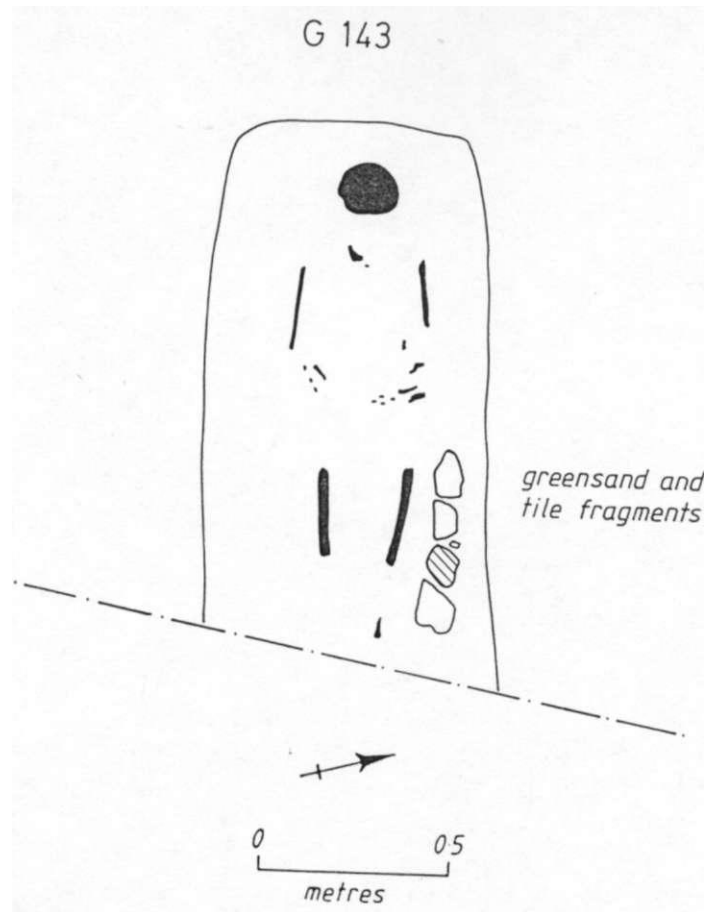


Grave 141 E-W (head to W). Cuts Period 1 G152. Cut by Period 2 G136. Period 2 or post-Roman pit BF170. Nailed coffin (nails only along S side, no timber stain located). Adult female. Skeleton supine. Bones in good condition. One tegula set on edge at W end of grave, another at E end. and two fragments on S side close to E end.

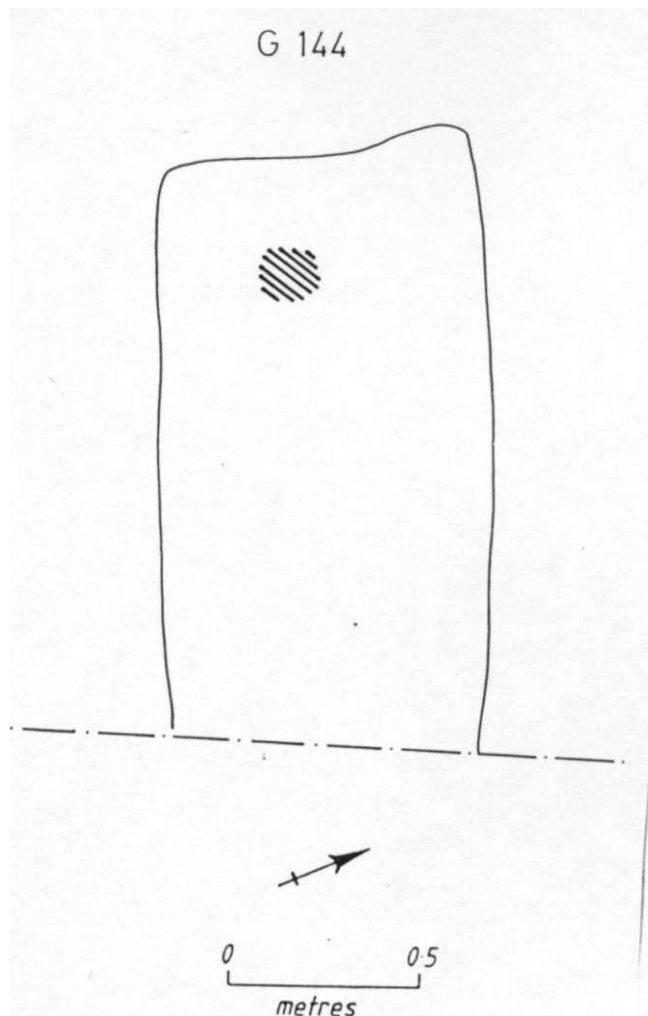
G 142



Grave 142 E-W (head to W). Cuts Period 1 pit BF159. Period 2 G169. Nailed timber coffin, length 1.92 m, width 0.4 m. Age and sex uncertain. Coffin size indicates adult. Only skull (damaged) and some leg and foot bones remain. Tibiae displaced in antiquity, presumably result of pressure on coffin sides, which buckled inward.

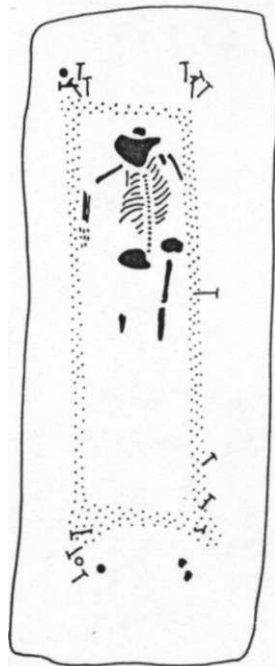


Grave 143 E-W (head to W). Cuts Period 2 G162, G165. E end not excavated. Timber coffin (no nails recovered. slight timber stain showing on photograph after excavation complete). Middle-aged male. Skeleton supine. Surviving bones in poor condition. Along N side and about 0.08 m above bottom of grave, pieces of greensand and one fragment of tile lay in a row running from about pelvis to knee.



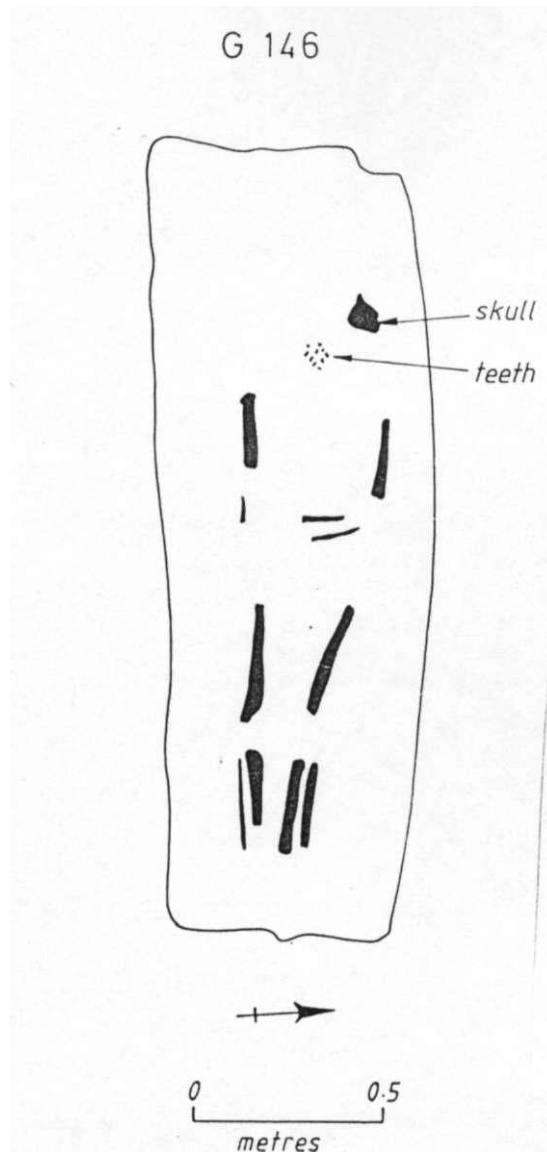
Grave 144 E-W (head to W). Cuts Period 2 G145. E end not excavated. Poorly preserved grave, length greater than 1.5 m, width 0.86 m. No nails or timber stain located. No skeletal material. Grave size indicates adult. Stain in soil indicated position of skull.

G 145



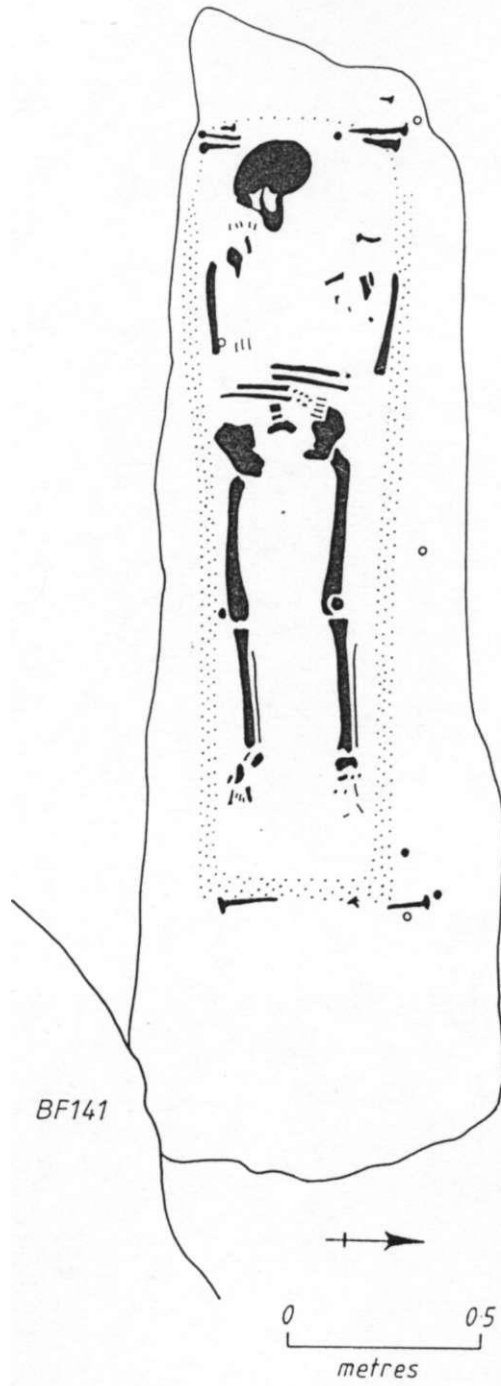
0 0.5
metres

Grave 145 E-W (head to W). Cut by Period 2 G144. Nailed timber coffin. with full impression of sunken lid directly above bones. Infant. aged 16 months. Skeleton supine. arms at sides and bent at elbows. Bones in fair condition. Skeleton lay at W end of coffin, gap of up to 0.4 m at E end.

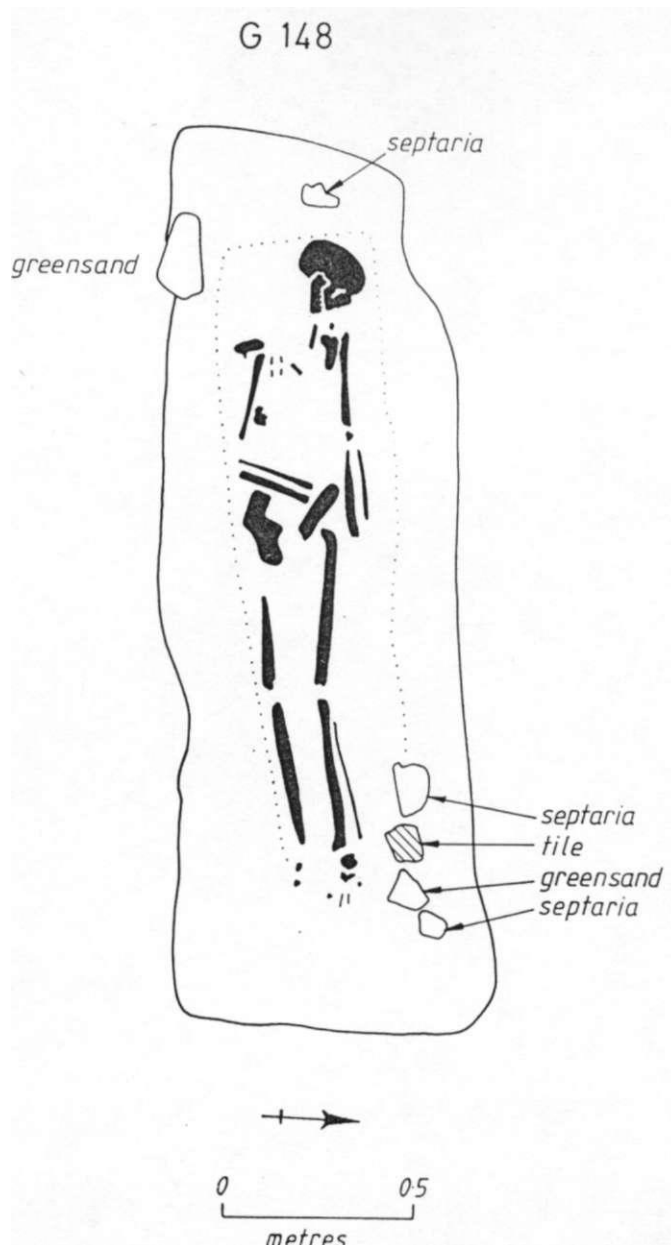


Grave 146 E-W (head to W). Cuts Period 1 G197. Period 2 G175. Nailed timber coffin (nails not illustrated. timber stain not located). Adult, sex uncertain. Only part of skull with some teeth and shafts of limb bones remain, in poor condition.

G 147

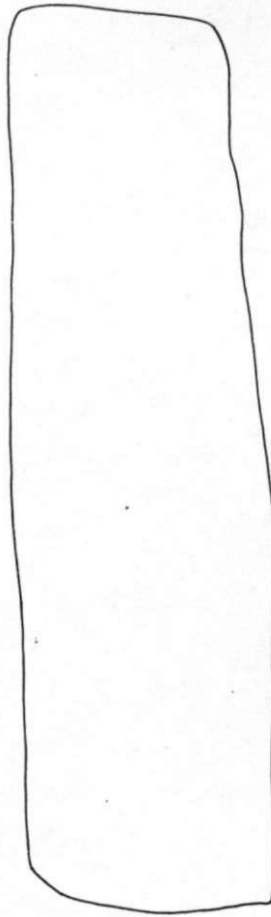


Grave 147 E-W (head to W) . Cuts Period 1 G159 . Period 2 G155 . Cuts and seals Pe



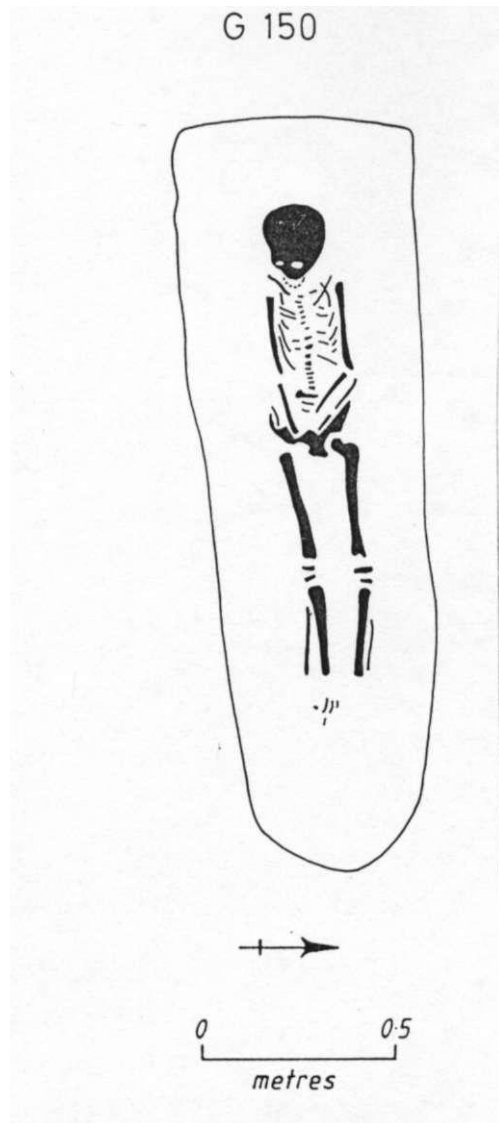
Grave 148 E-W (head to W). Cuts Period 2 G155. G156. G190. Timber coffin (no nails recovered). Middle-aged male. Skeleton supine. Bones in fair condition. Stone and tile partially lined grave, about 0.15-0.3 m above bottom. A row of greensand, septaria and tile was set along N side running from about middle of left tibia to just beyond foot. A large lump of greensand lay by SW corner of coffin, and a small piece of septaria at W end near NW corner.

G 149



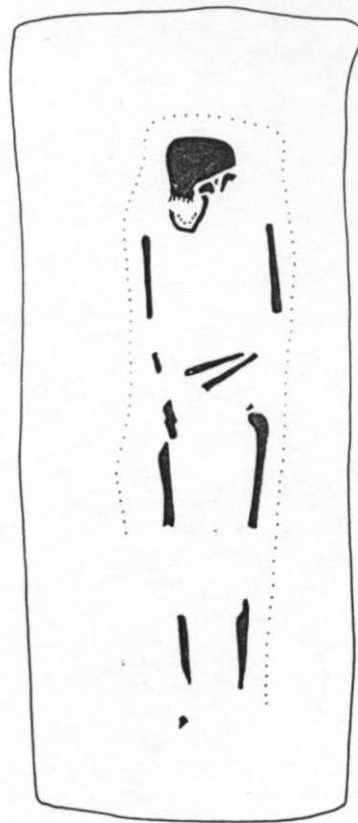
0 0.5
metres

Grave 149 E-W. Cuts Period 1 G159. Cut and sealed by Period 2 G147. The lowest 0.35 m of fill appeared free from disturbance. but contained no trace of a burial. Coffin of G147 was free from subsidence, which suggests that contents of G149 had settled by time of later interment. Bottom of grave was uneven and covered with indentations, possibly shovel marks. Either remains within G149 totally decomposed, or original grave digging abandoned, perhaps because G149 removed head of Period 1 G159.



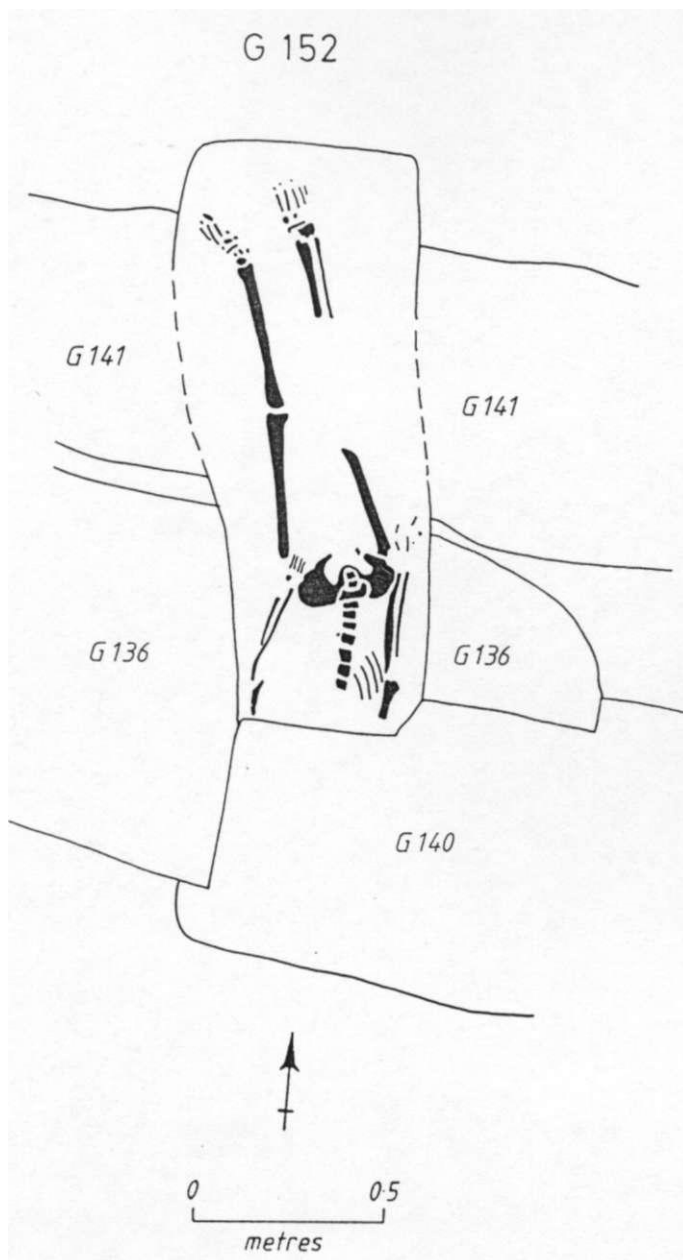
Grave 150 E-W (head to W). Cuts Period 2 G163. Timber coffin (no nails recovered, timber stain not illustrated). Child aged. 11 to 12 years. Skeleton supine. Bones in good condition.

G 151

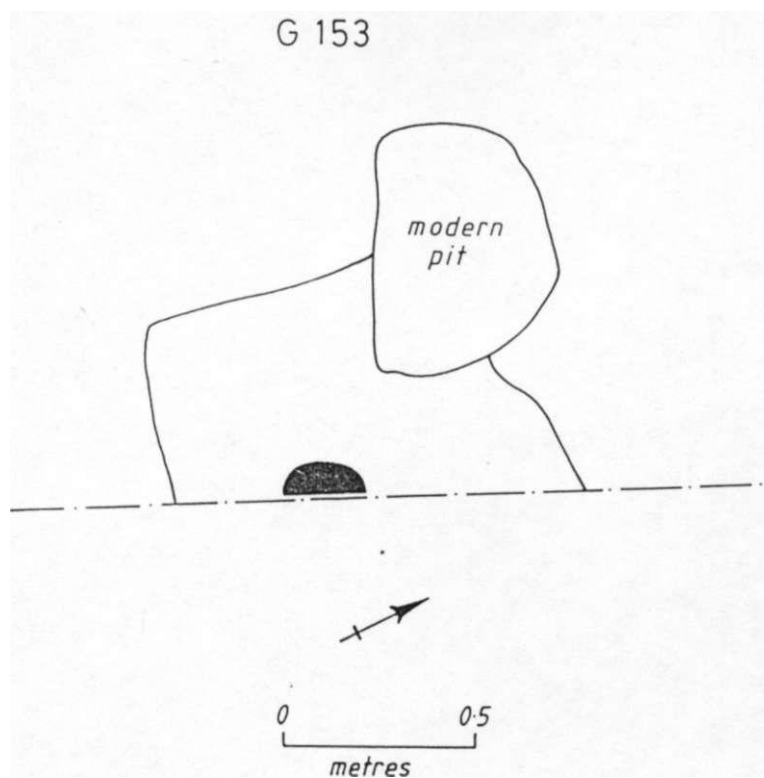


0 0.5
metres

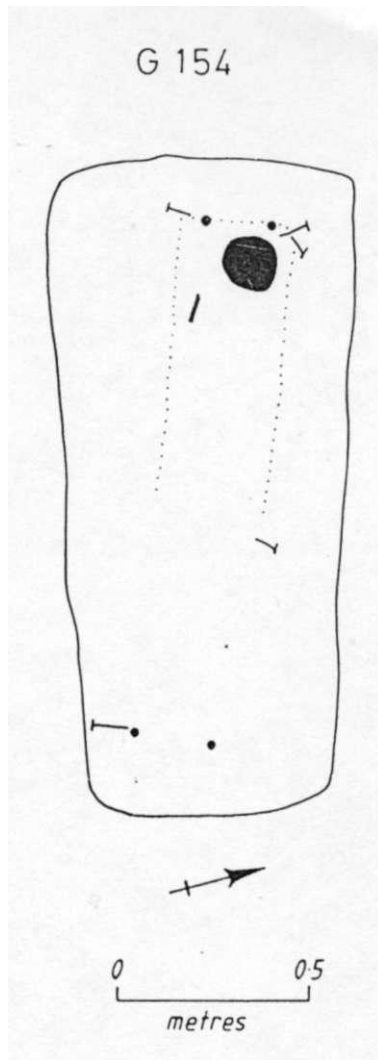
Grave 151 E-W (head to W). Cut by Period 2 G132. Relationship to Period 2 G180 uncertain. Nailed timber coffin (nails not illustrated). Elderly male. Skeleton supine. Only skull and fragments of shafts of long bones remain, in poor condition.



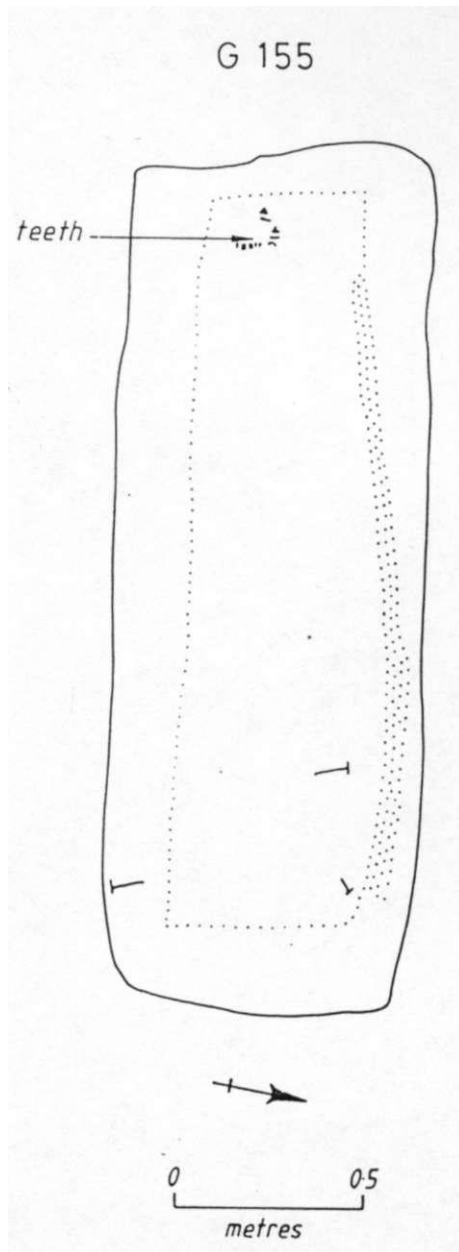
Grave 152 N-S (head to S). Isolated grave. Cut by Period 2 G136. G140. G141. S end destroyed by G140. No coffin. Adult male. Skeleton supine. Surviving bones in good condition.



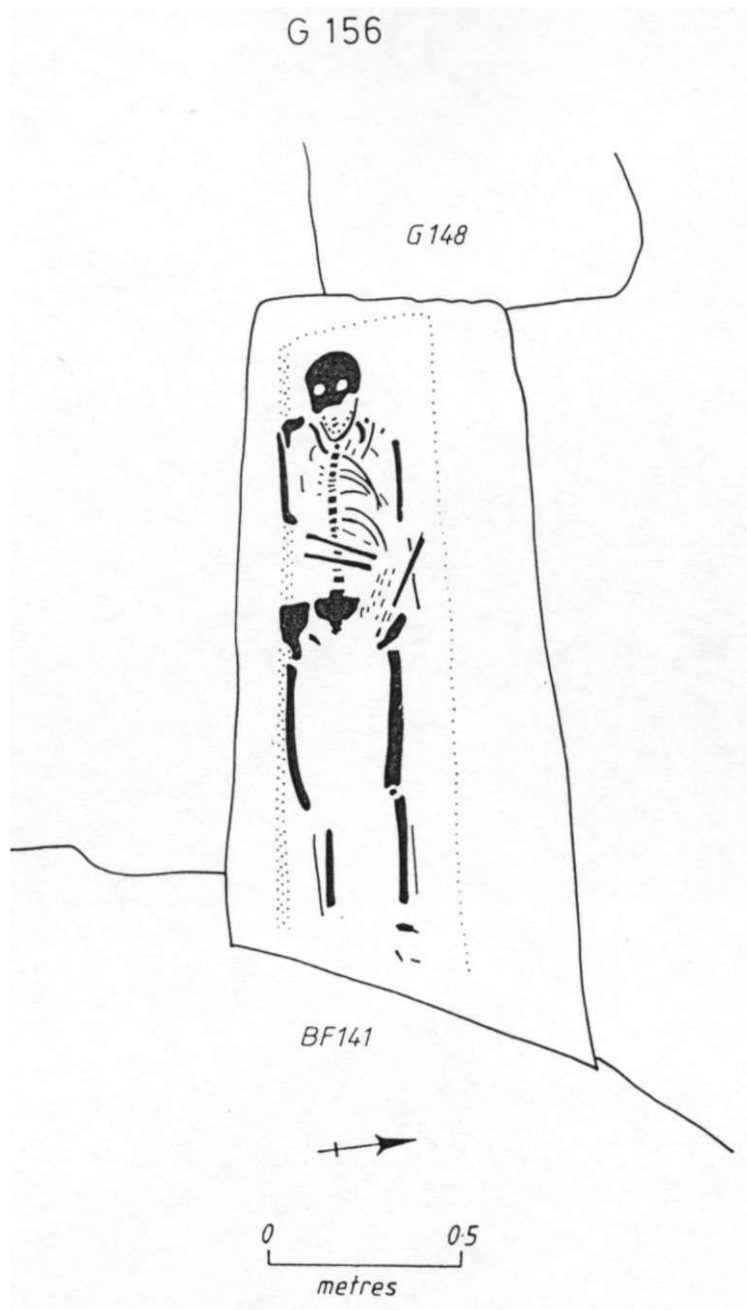
Grave 153 E-W (head to W) . Cuts Period 2 G179 . Only extreme W end excavated .



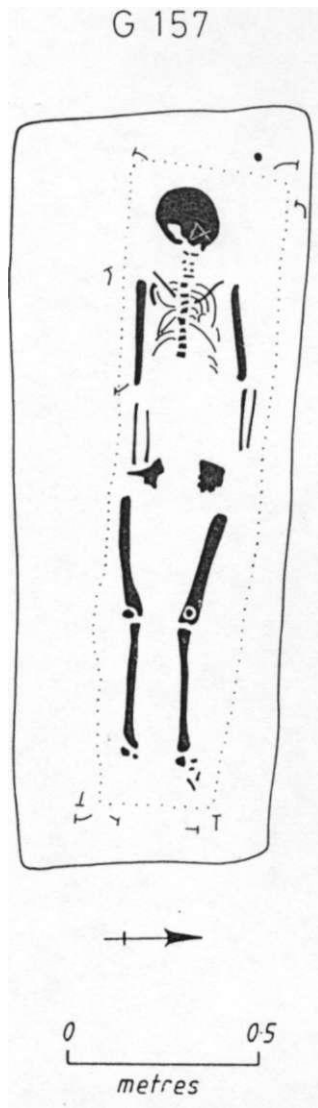
Grave 154 E-W (head to W). Cuts Period 1 G197. Period 2 G166. Nailed timber coffin. Child. aged 7 years. Only skull, fairly well preserved. and one fragment of right humerus remain.



Grave 155 E-W (head to W). Cuts Period 2 G190. Cut by Period 2 G147. G148. Nailed timber coffin. Middle-aged male. Only teeth and tiny fragments of skull survive.

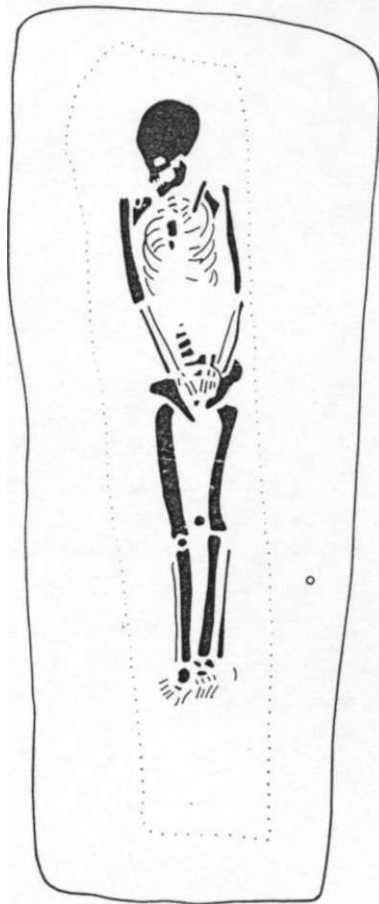


Grave 156 E-W (head to W). Cut by Period 2 G148. modern pits BF141. BF146. Extreme E end destroyed by BF141. Nailed timber coffin (nails not illustrated). Middle-aged male. Skeleton supine. Bones in good condition.



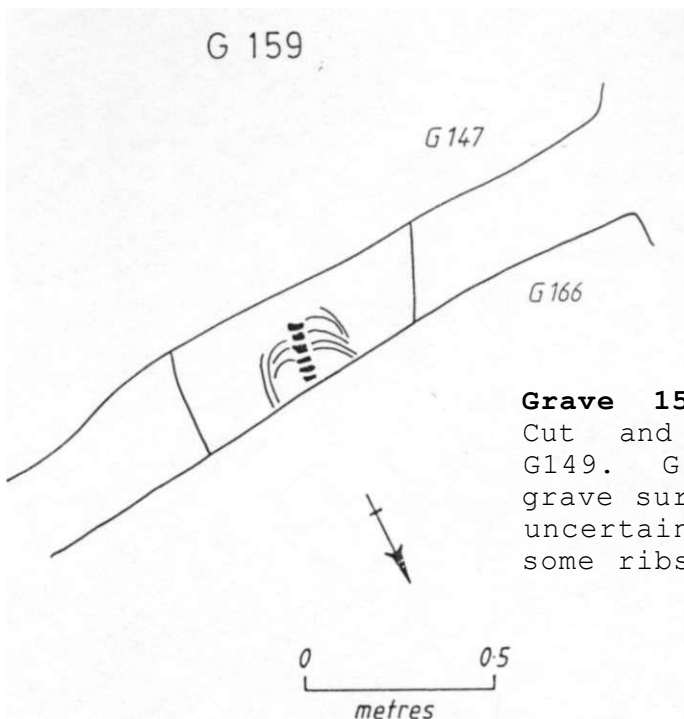
Grave 157 E-W (head to W). Relationship to Period 1 pit and timber-lined well. Period 2 G158 uncertain. Nailed timber coffin. Young adult female. Skeleton supine. Bones in fair condition.

G 158

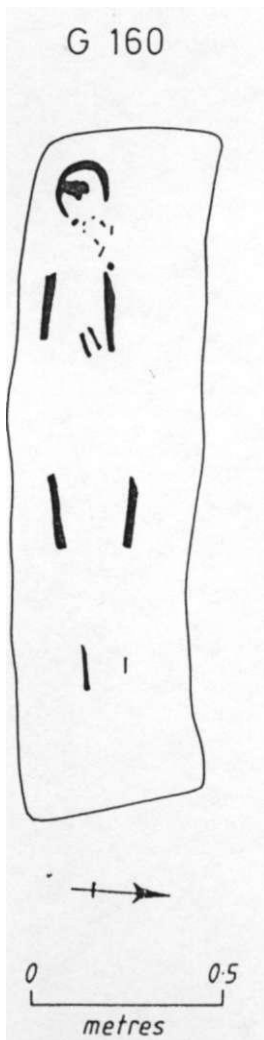


0 0.5
metres

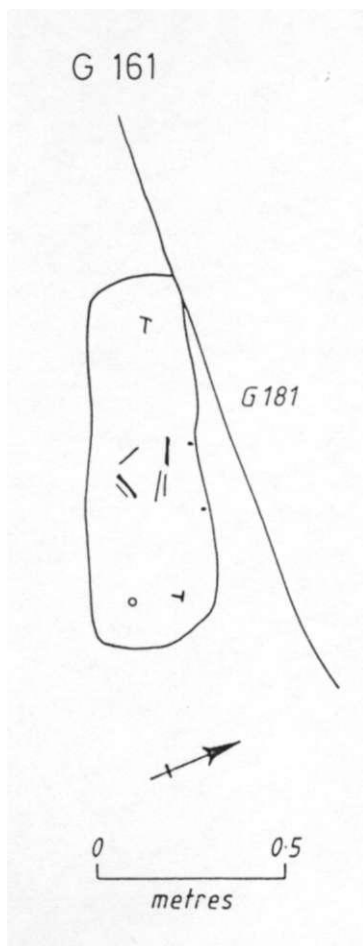
Grave 158 E-W (head to W). Relationships to Period 2 G123 and G157 uncertain (of top of coffin). Middle-aged female. Skeleton supine. Bones in good condition.



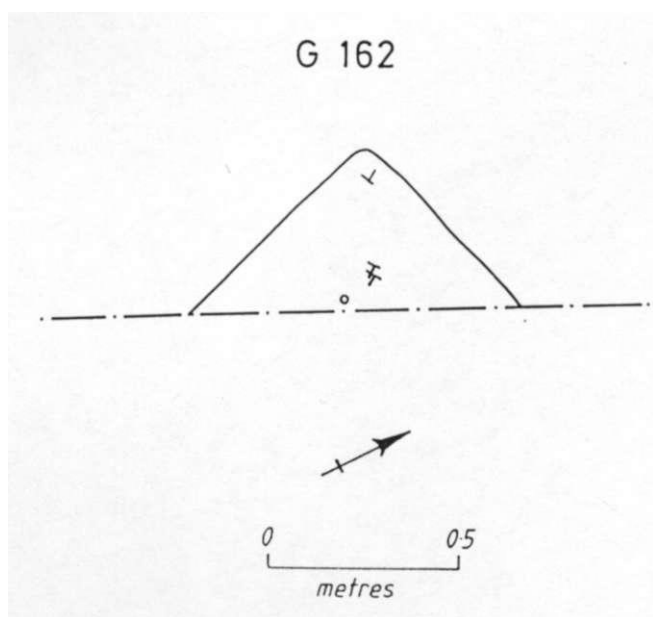
Grave 159 N-S (head to S). Isolated grave. Cut and largely destroyed by Period 2 G147, G149. G166. Only 0.3 m length of middle of grave survived. No coffin. Adolescent. sex uncertain. Skeleton probably supine. Only some ribs and vertebrae remain.



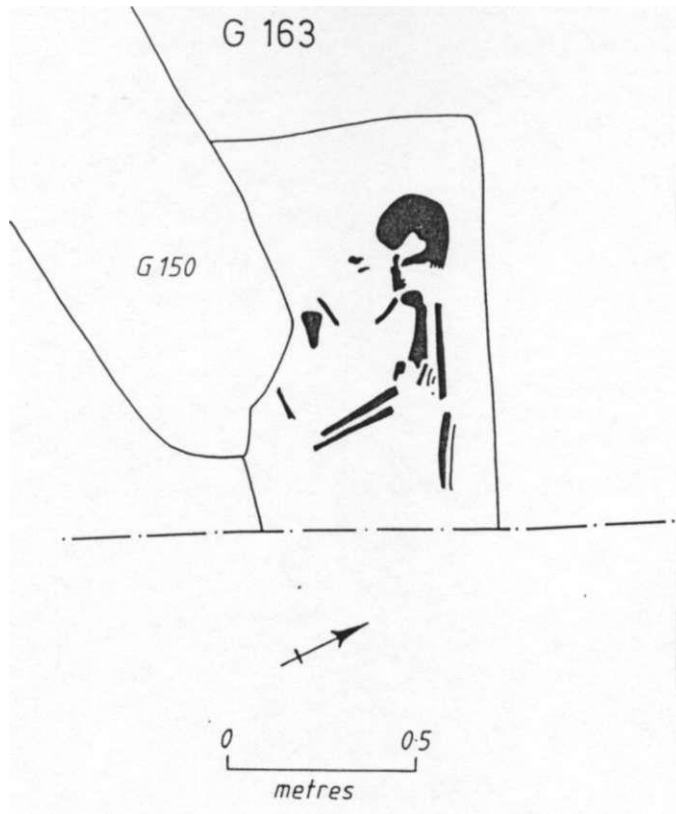
Grave 160 E-W (head to W). Isolated grave. Nailed timber coffin (not illustrated). Middle-aged male. Skeleton supine. Only fragments of skull and long bones remain. in poor condition.



Grave 161 E-W (head to W). Relationship to Period 2 G181 uncertain. Nailed timber coffin (no timber stain located). Infant. aged 2 months. Only shafts of leg long bones survive, in poor condition.

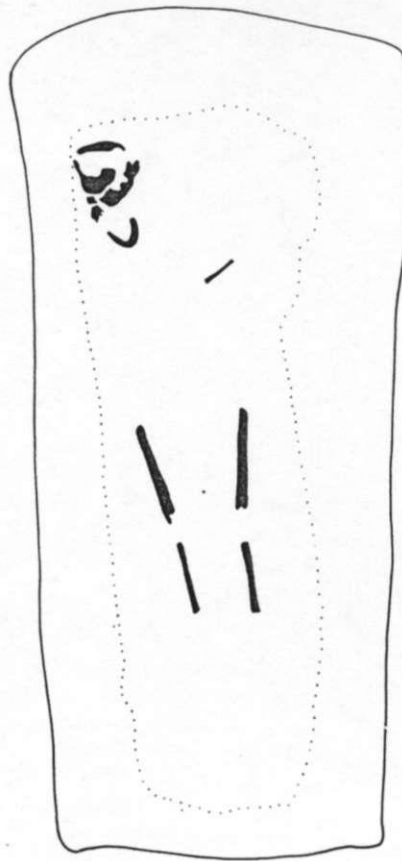


Grave 162 E-W. Cut by Period 2 G143. Only the NW corner was examined. Nailed timber coffin (timber stain not located). Nail pattern suggests E-W orientation. No skeletal material.

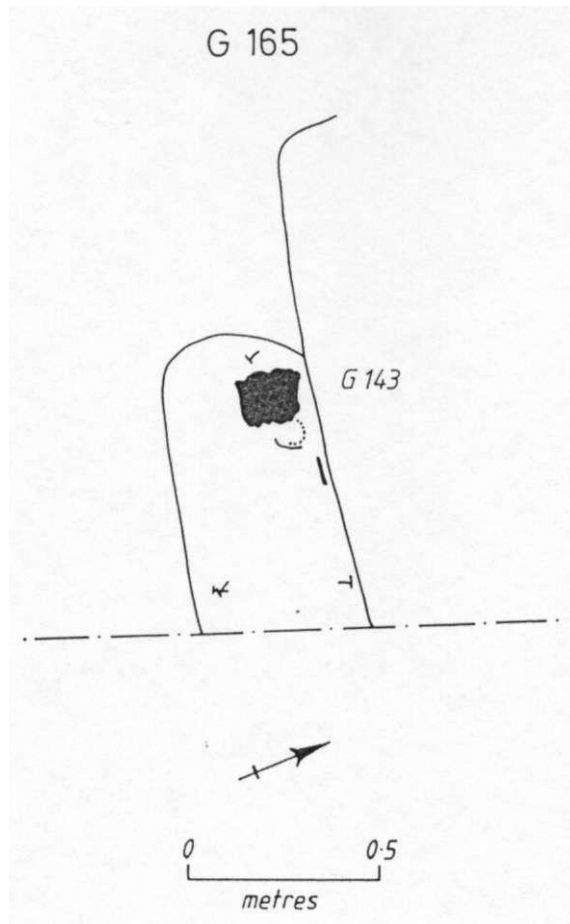


Grave 163 E-W (head to W). Cut and partly removed by Period 2 G150. Only W end of grave excavated. No trace of coffin found. Skeleton supine. Surviving bones poorly preserved. Right arm bent so that hand touches left humerus. No pathological report. bones probably did not survive lifting.

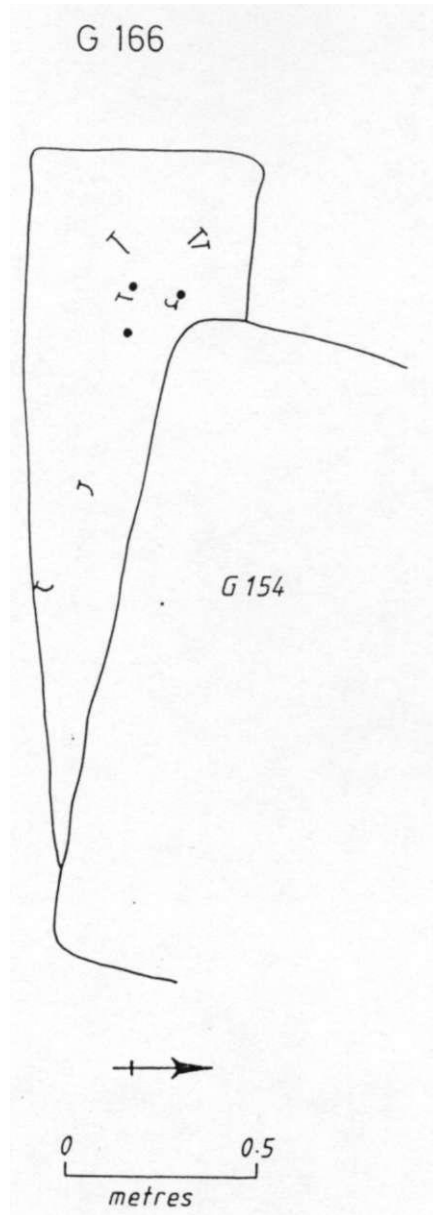
G 164



Grave 164 E-W (head to W). Cuts Period 1 G177. Period 2 G176. Relationship to Period 2 G174 uncertain. Nailed timber coffin (nails not illustrated). Elderly female. Skeleton supine. Only skull (fragmented) and shafts of some long bones remain, in poor condition.

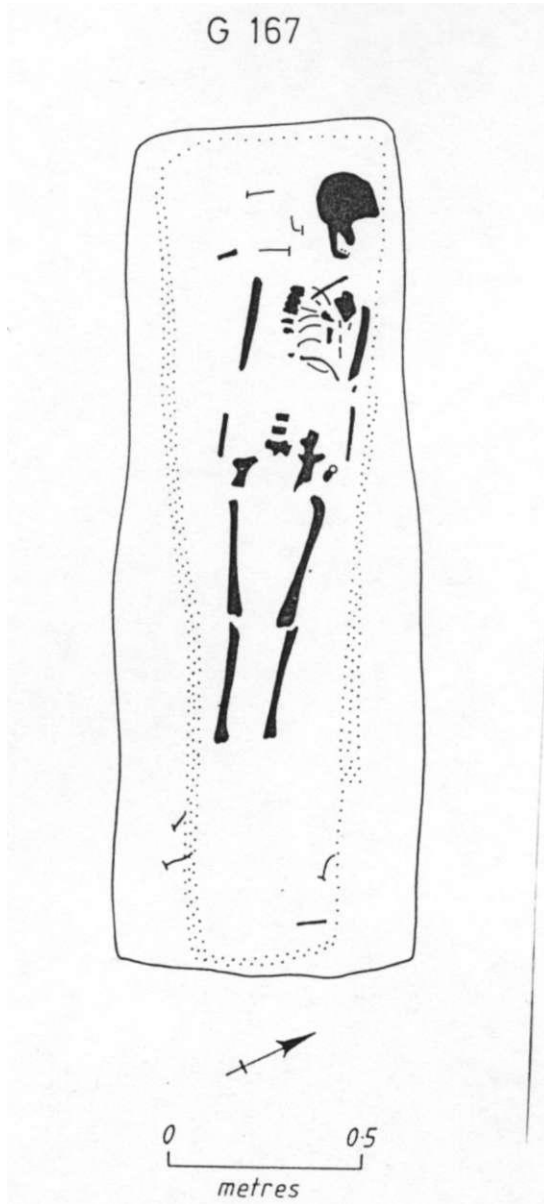


Grave 165 E-W (head to W). Cut and N side removed by Period 2 G143 Very shallow grave. Only W end excavated. Nailed timber coffin (timber stain not illustrated). Child, aged 2 to 4 years. Only part of skull (with mandible) and left humerus survive. in poor condition.



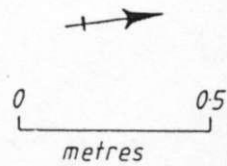
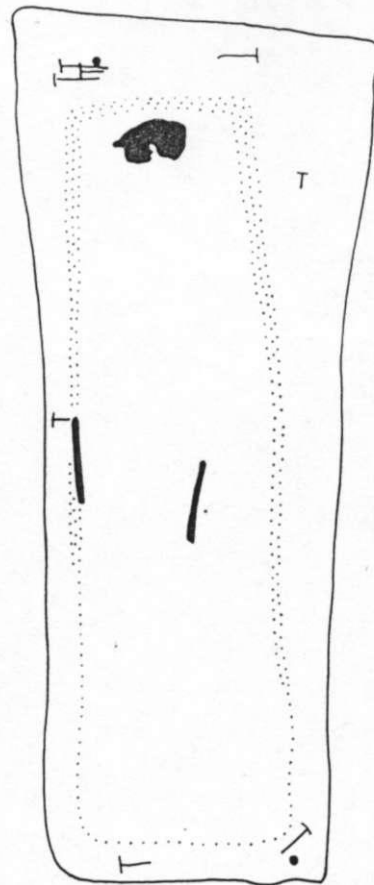
Grave 166 E-W. Cuts Period 1 G159. Cut and partly destroyed by Period 2 G154. Nailed timber coffin (timber stain not illustrated). Surviving length of grave 1.9 m. width 0.56 m. No skeletal material. Grave size indicates adult.

G 167

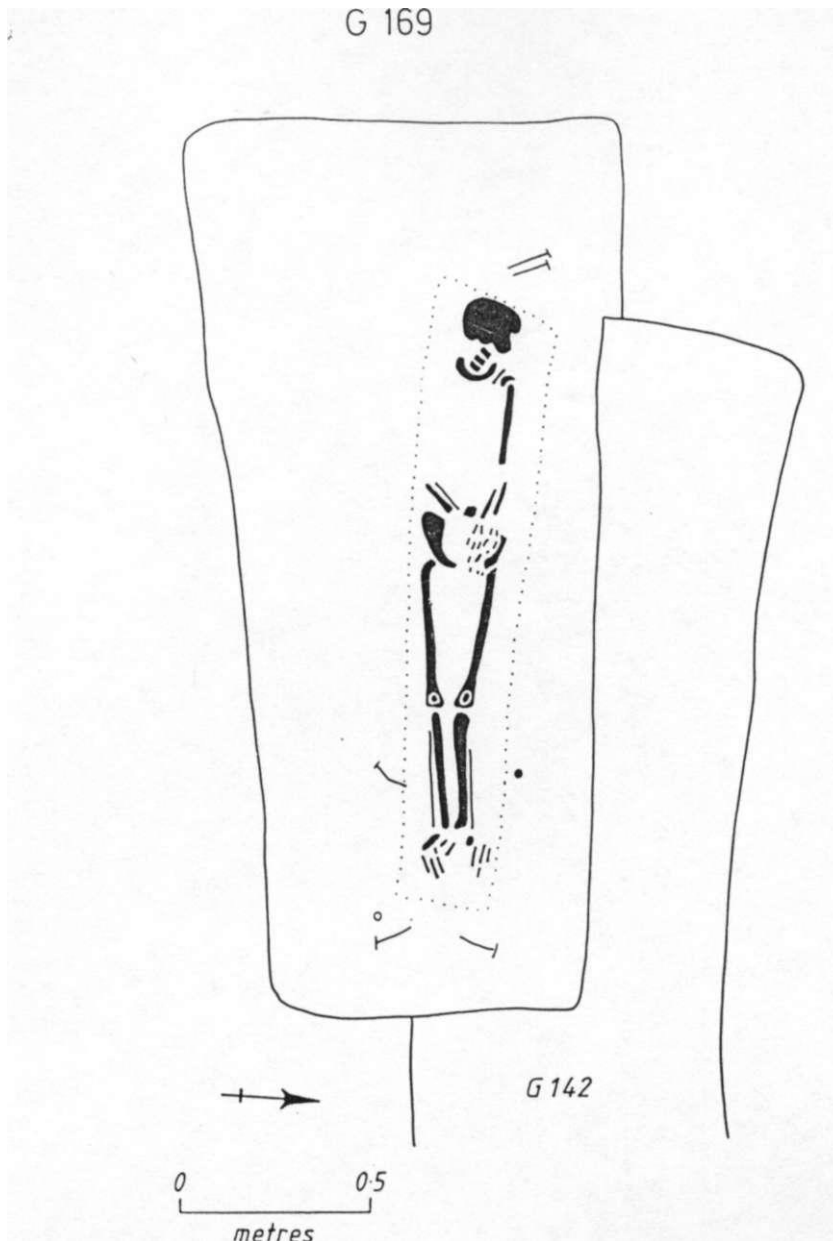


Grave 167 E-W (head to W). Cuts Period 2 G175. G183. G184. Nailed timber coffin. Middle-aged females. Skeleton supine. Surviving bones in fair condition.

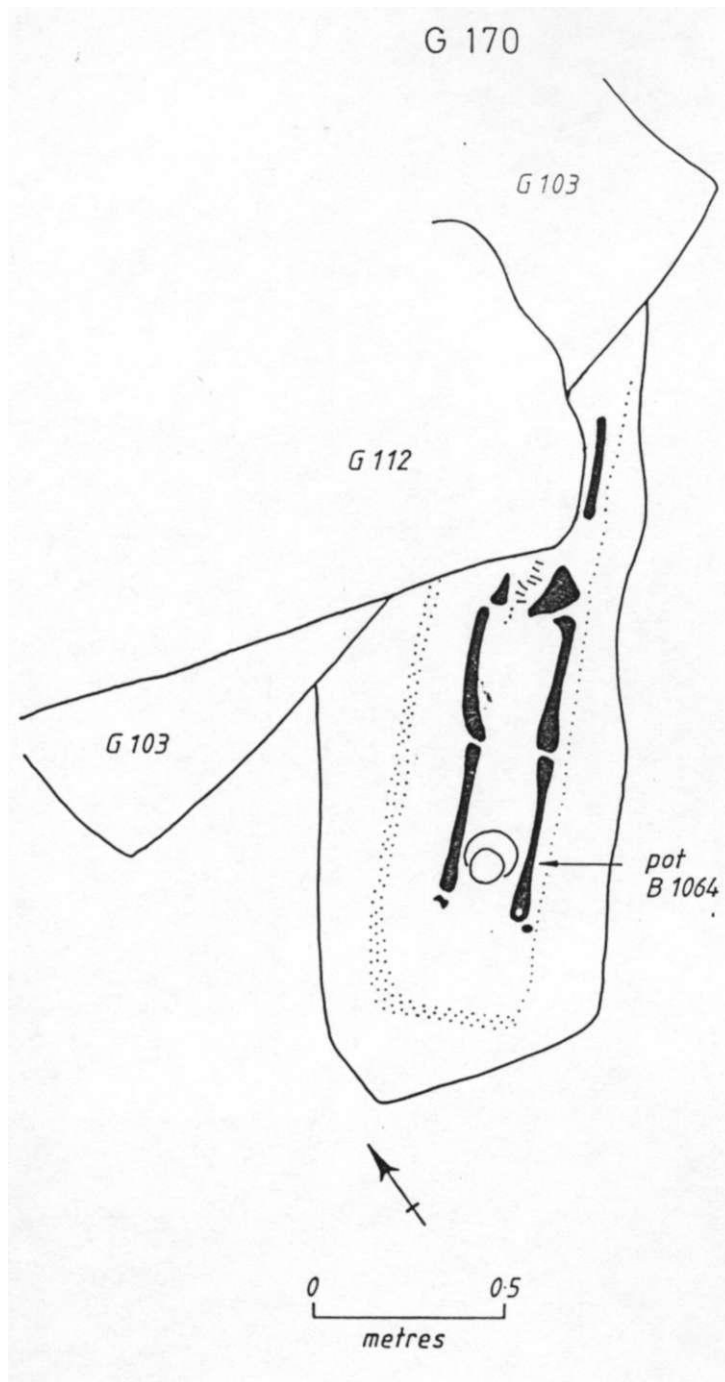
G 168



Grave 168 E-W (head to W). Cuts Period 1 G177. Period 2 G186. Nailed timber coffin. Young adult. sex uncertain. Only part of skull and shafts of femora remain. in poor condition.

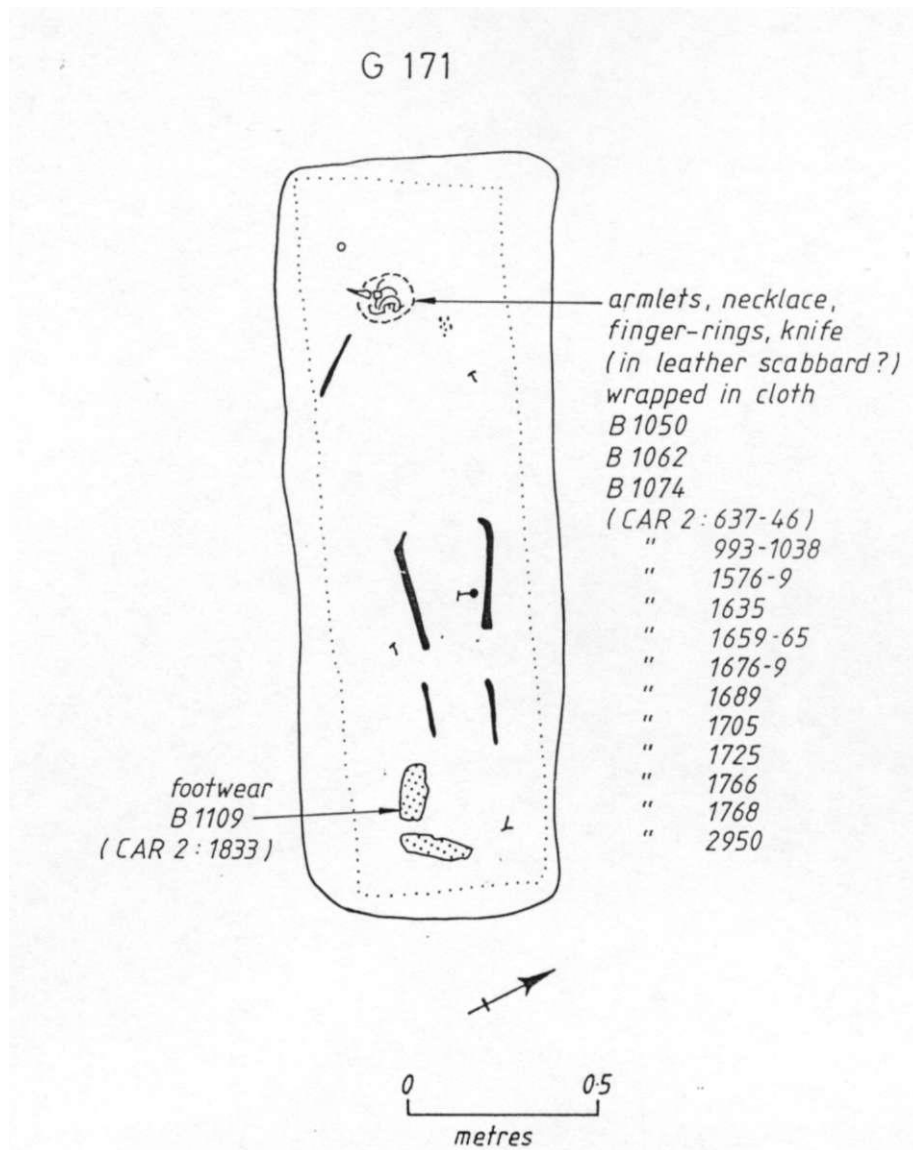


Grave 169 E-W (head to W). Cuts Period 1 N-S ditch BF159. Cut by Period 2 G142. Nailed timber coffin. Middle-aged female. Skeleton supine. Surviving bones in poor condition.

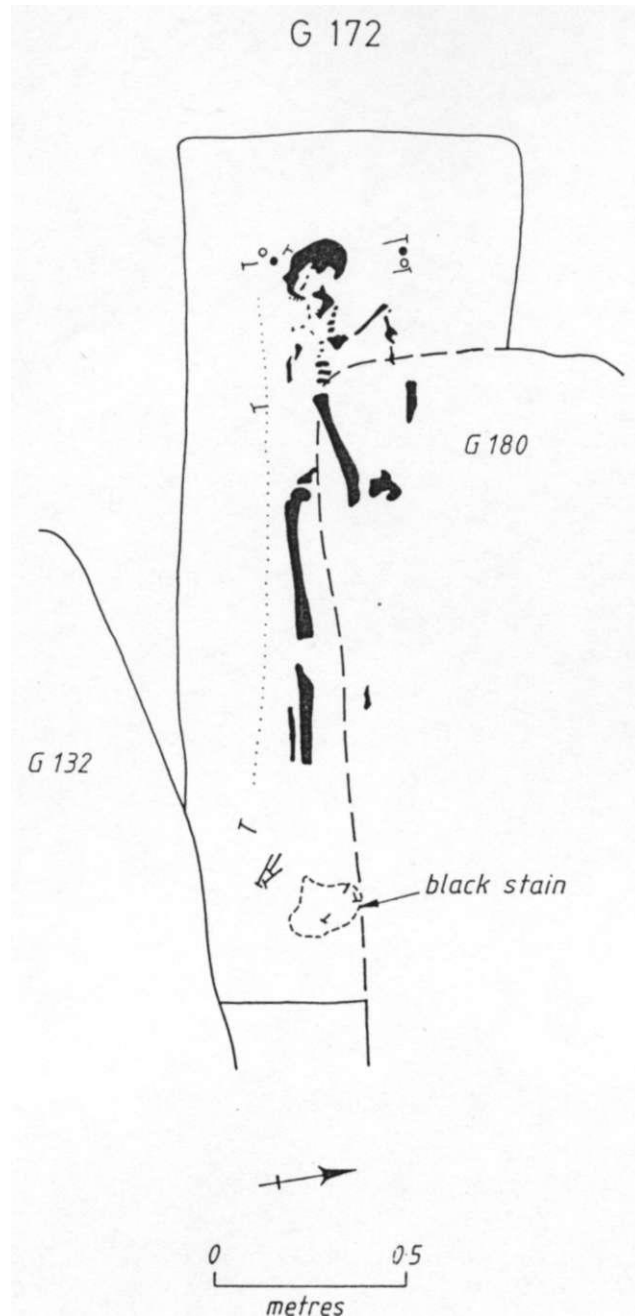


Grave 170 N-S (head to N). Isolated grave. Cut by Period 2 G103. G112. N end destroyed by later burials. Timber coffin (no nails recovered). Adult male. Skeleton supine. Surviving bones in good condition. Coarse grey ware jar (CAM 108). between lower legs.

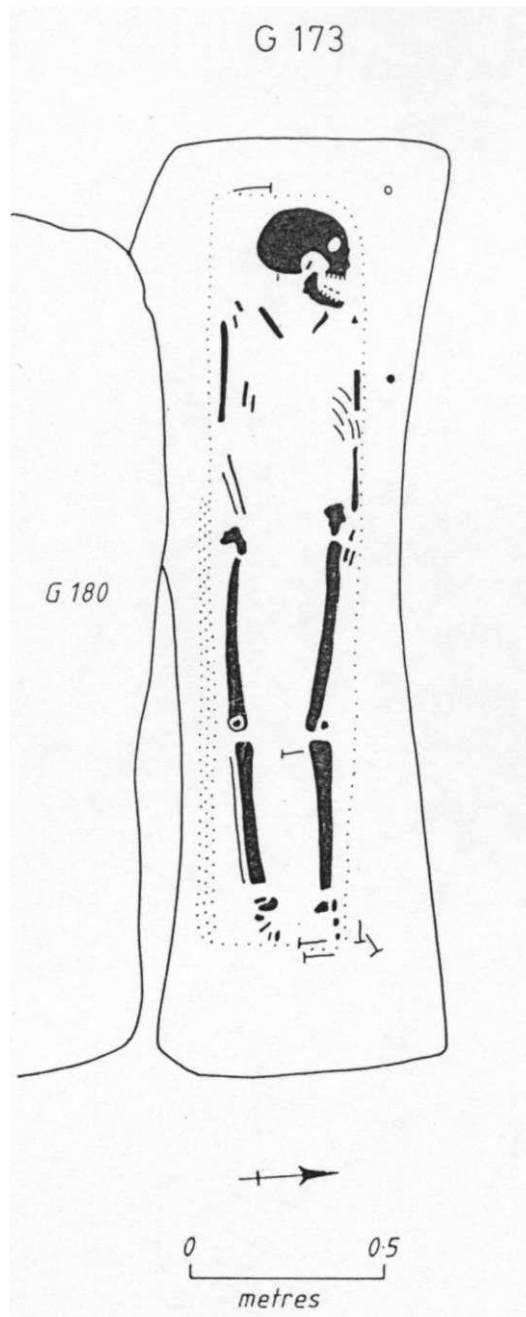
G 171



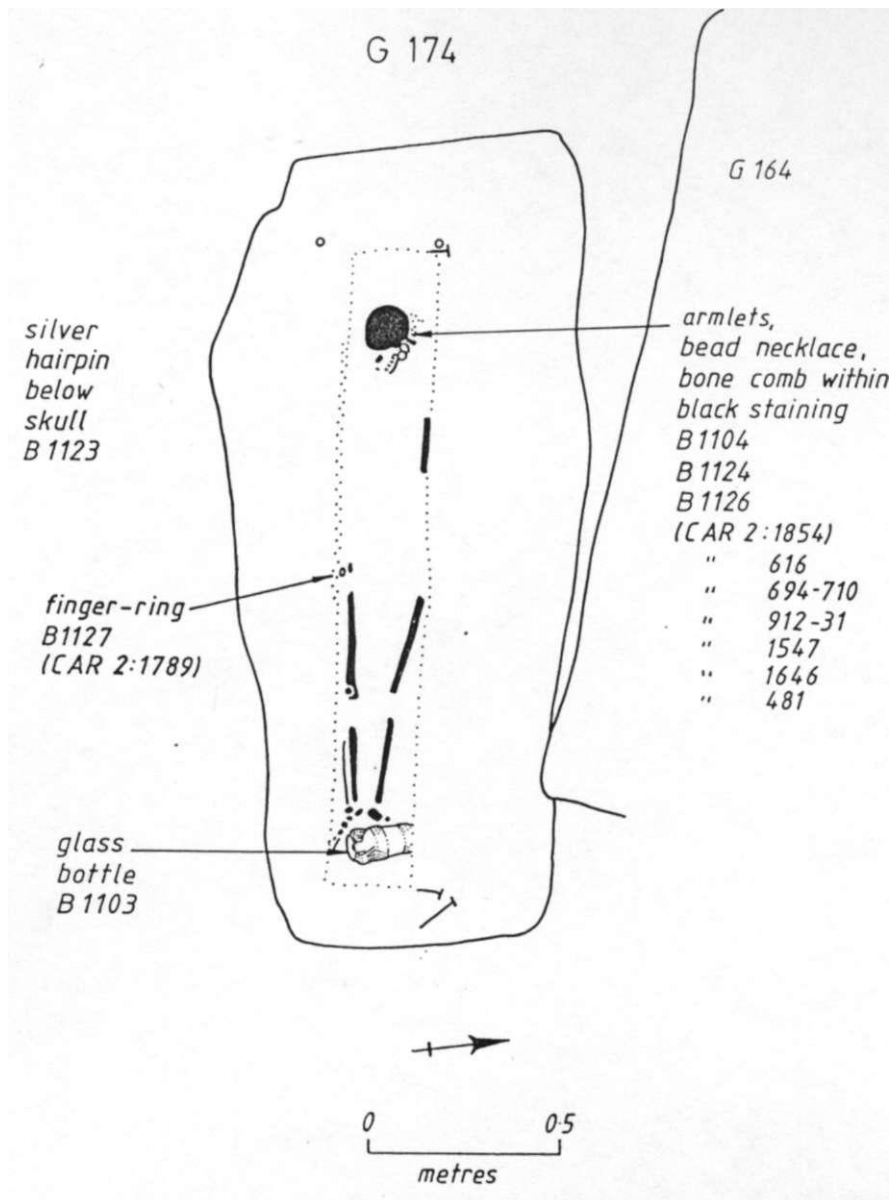
Grave 171 E-W (head to W). Cuts Period 2 G179. Nailed timber coffin. Child, aged 12 to 15 years. Only shafts of some long bones remain. in poor condition. Pair of hobnailed shoes in SE corner of coffin at right angles to each other. At W end. probably originally close up against right side of skull. lay ?necklace of glass beads. bone and copper-alloy armlets, copper-alloy finger-rings, and iron knife (?sheathed in leather scabbard) with copper-alloy handle. suspended from copper-alloy chain. Fragments of mineral-preserved textile on knife blade. and underlying group of grave goods. Grave goods contained within patch of dark soil.



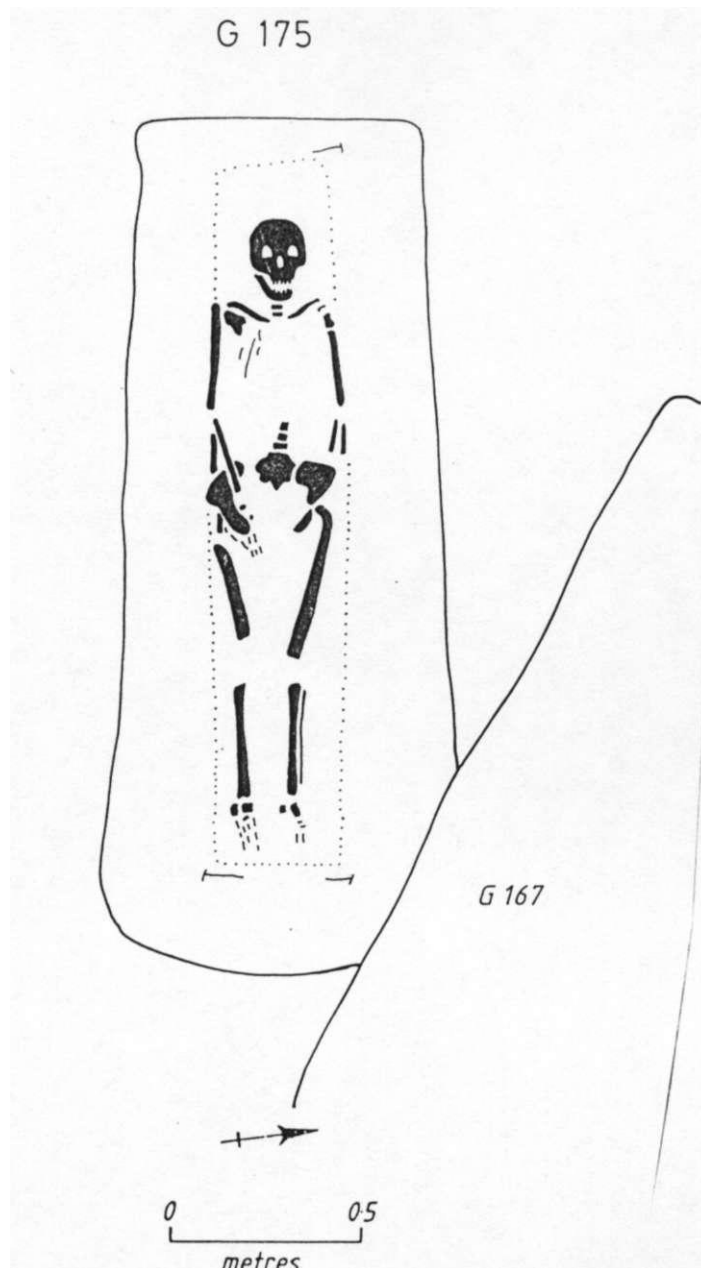
Grave 172 E-W (head to W). Cut and partly destroyed by Period 2 G180. Relationship to Period 2 G132 uncertain. Nailed timber coffin. Middle-aged female. Skeleton supine. Some bones disturbed and redeposited by cutting of G180. Surviving bones in poor condition. skull fragmented. Patch of black-stained soil containing 3 nails lay beyond foot of coffin.



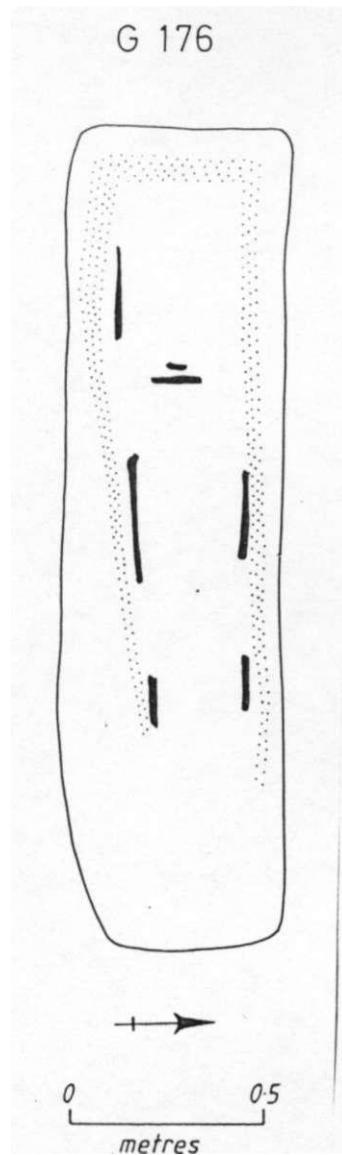
Grave 173 E-W (head to W). Cut by Period 2 G180. Nailed timber coffin. Middle-aged male. Skeleton supine. Surviving bones in poor condition.



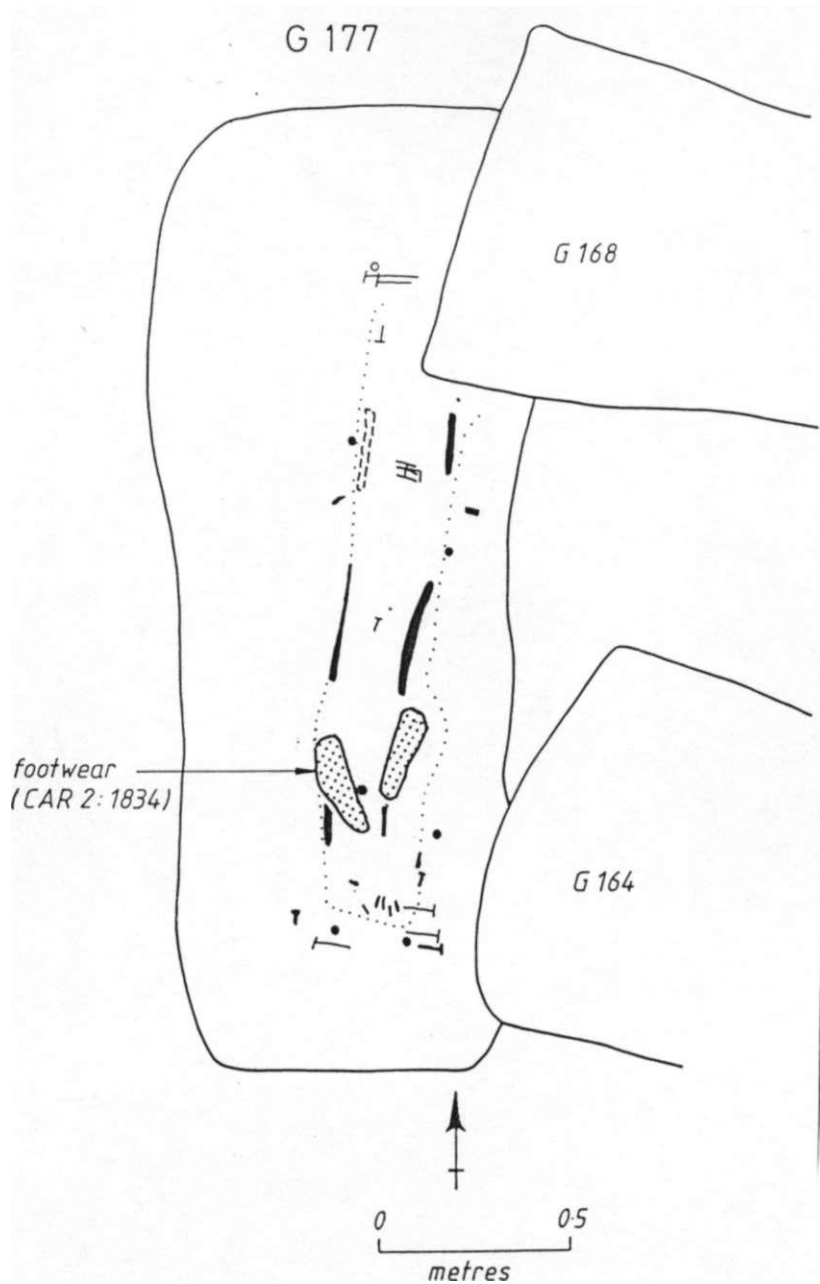
Grave 174 E-W (head to W). Relationships to Period 2 G136 and G164 uncertain. Nailed timber coffin. Adult female. Skeleton supine. Only skull. part of right humerus. and leg and foot bones remain, latter in good condition. rest poorly preserved. Inside coffin lay a glass barrel bottle (Isings Form 128) across left foot. silver close to pelvis. silver hairpin beneath skull. and. contained within dark patch of soil, antler comb and items of jewellery close up against left side of skull. Jewellery consisted of ?necklace of copper-alloy and glass beads and armlets of shale and copper-alloy.



Grave 175 E-W (head to W). Cuts Period 1 G197. Cut by Period 2 G146. G167. Nailed timber coffin. Middle-aged female. Skeleton supine. Surviving bones in fair condition.

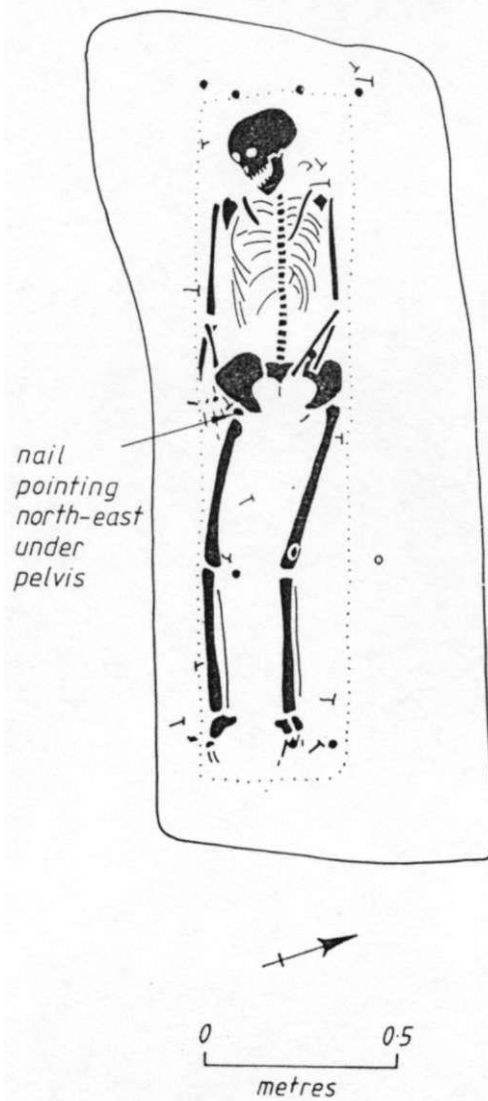


Grave 176 E-W (head to W). Cuts Period 2 G186. Cut by Period 2 G164. Timber coffin (no nails recovered). Adult, sex uncertain. Only shafts of some long bones survive. in poor condition.



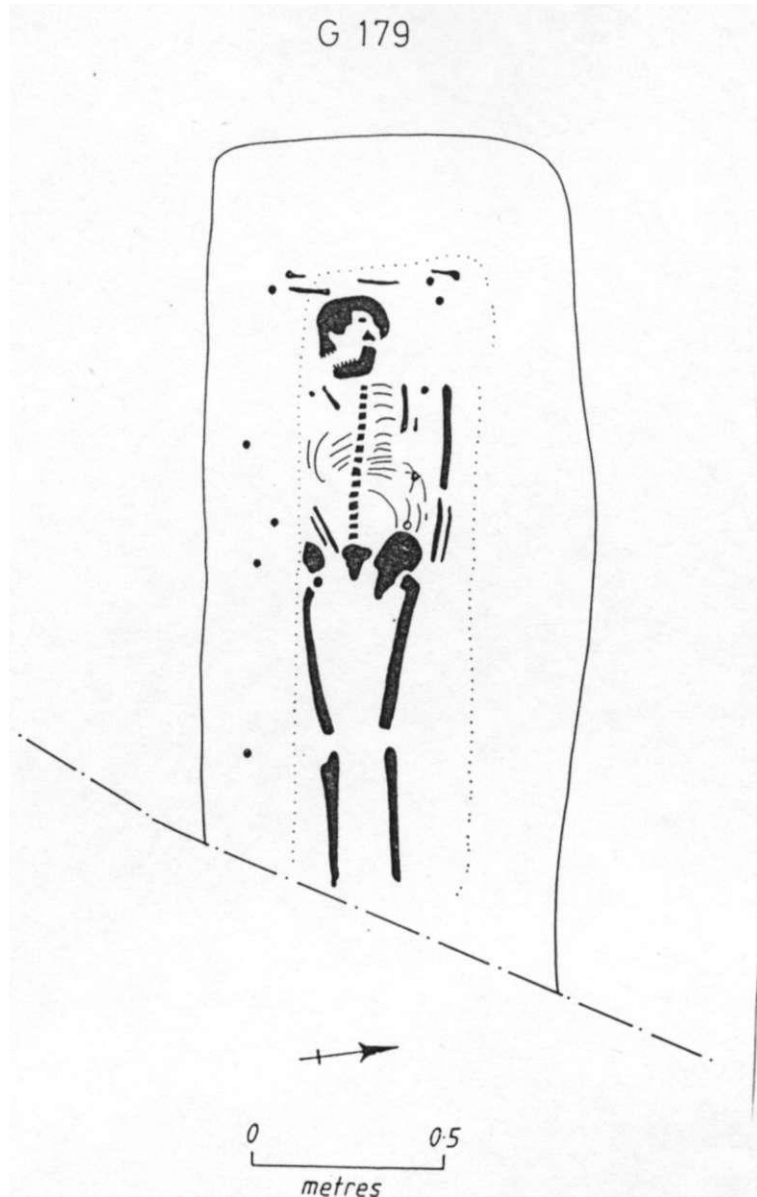
Grave 177 N-S (head to N). Isolated grave. Cut and partly destroyed by Period 2 G121. G164. G168. Nailed timber coffin. Adult female. Skeleton probably supine. Only shafts of some long bones, some vertebrae, and some foot bones remain. in very poor condition. Hobnailed shoe lay on each tibia.

G 178



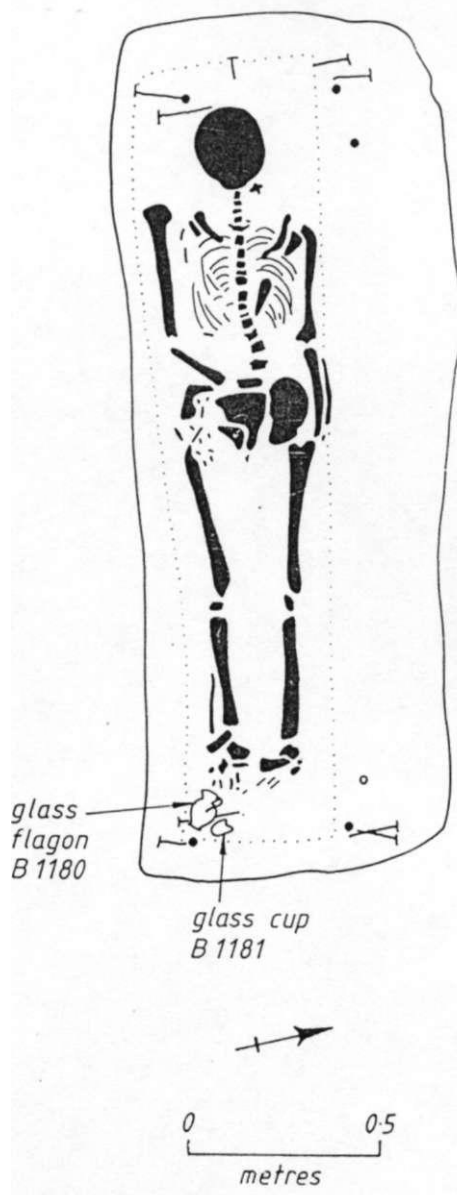
Grave 178 E-W (head to W). Cuts Period 1 N-S ditch BF159. Period 2 timber vault BF163 (G191/G203). Cut by modern pipe-trench BF126. Nailed timber coffin. Young adult female. Skeleton supine. Bones in good condition.

G 179



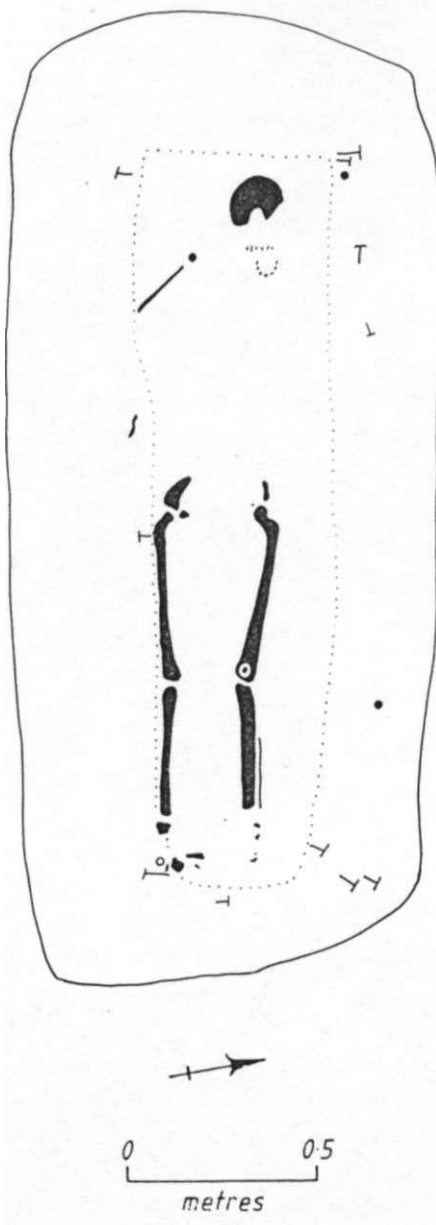
Grave 179 E-W (head to W). Cut by Period 2 G153. G171. Extreme E end not excavated. Nailed timber coffin. Middle-aged male. Skeleton supine. Bones in fair condition.

G 180

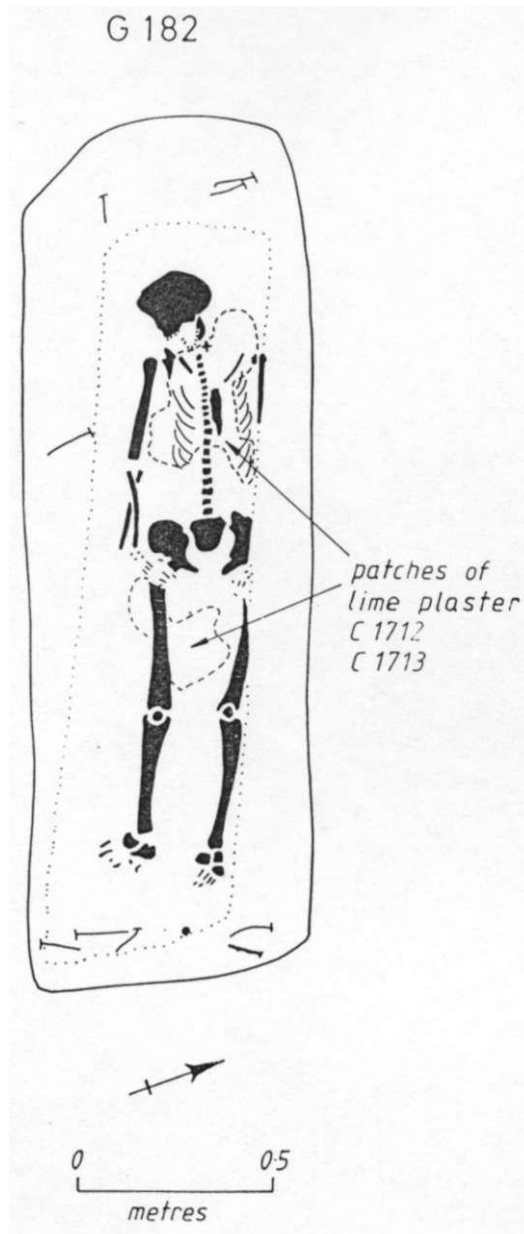


Grave 180 E-W (head to W). Cuts Period 2 G172. G173. Relationship to Period 2 G151 uncertain. Nailed timber coffin. Middle-aged male. Skeleton supine. Bones in good condition (skull stolen). In SE corner of coffin lay glass ovoid jug (Isings Form 120) and bowl (Isings Form 96). latter fragmented.

G 181

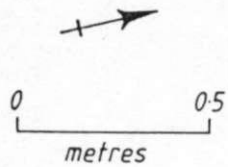
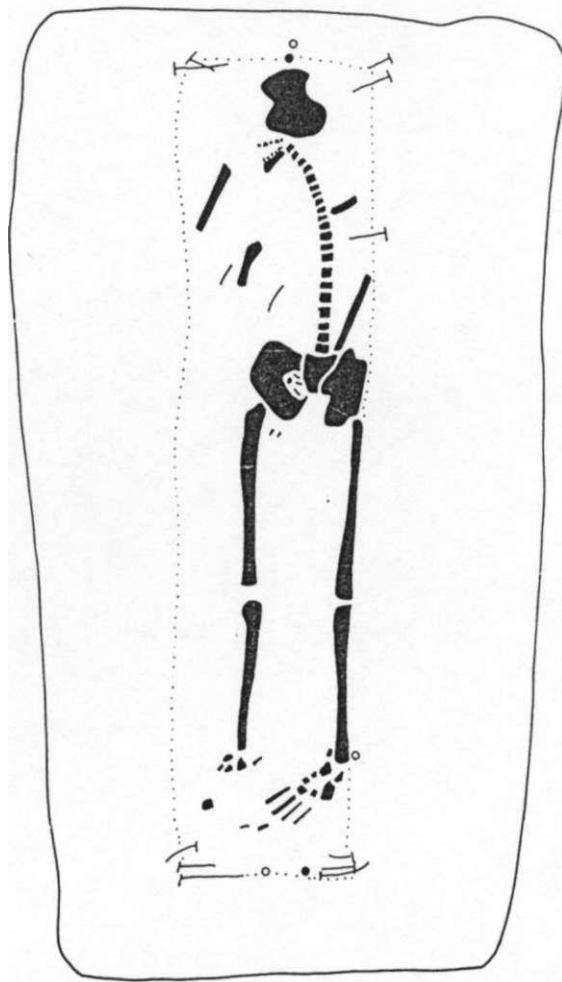


Grave 181 E-W (head to W). Cuts Period 1 N-S ditch CF60. Period 2 G228. Cut by Period 2 G182. Relationship to Period 2 G161 uncertain. Nailed timber coffin. Adult, sex uncertain. Skeleton supine. Surviving bones in poor condition.

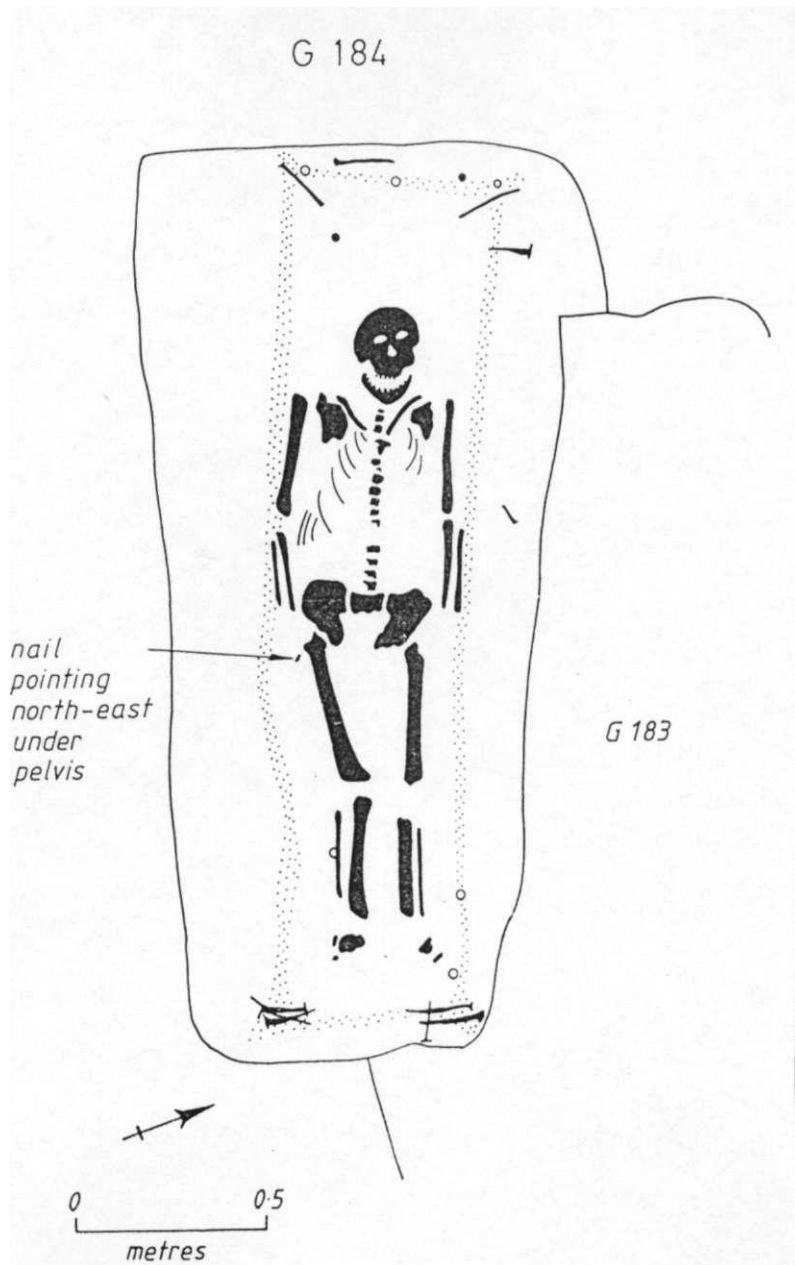


Grave 182 E-W (head to W). Cuts Period 2 G181. G446. Relationship to Period 2 uncertain. Nailed timber coffin. Young adult female. Skeleton supine. Bones in good condition. Patches of lime plaster in region of torso and upper legs.

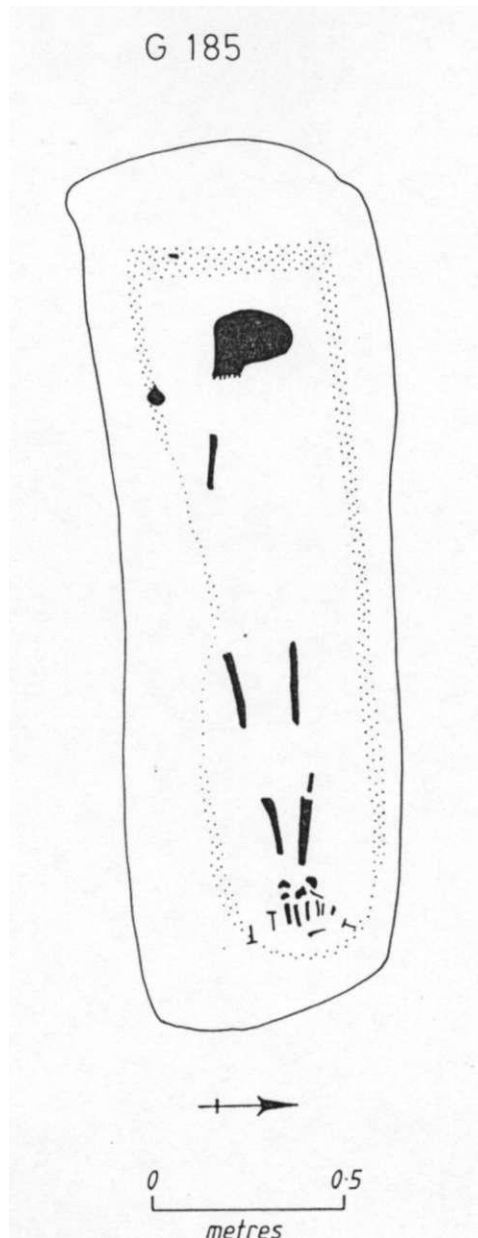
G 183



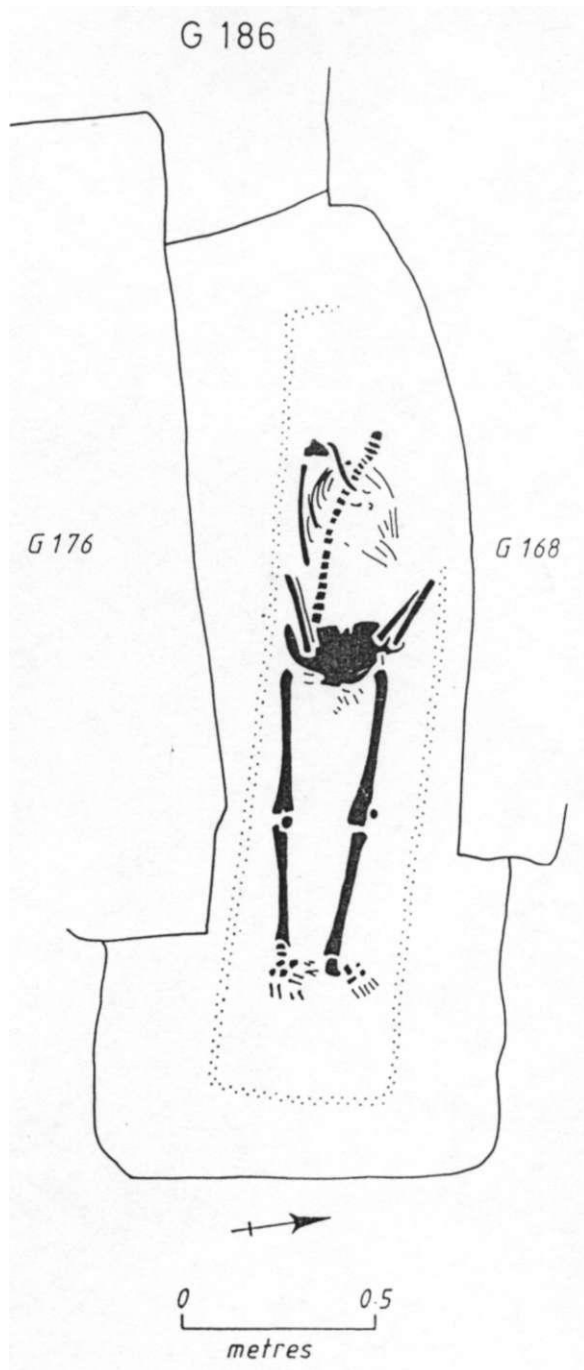
Grave 183 E-W (head to W). Cuts Period 2 G184. Cut by Period 2 G167. Nailed timber coffin. Middle-aged male. Skeleton supine. Surviving bones in fair condition.



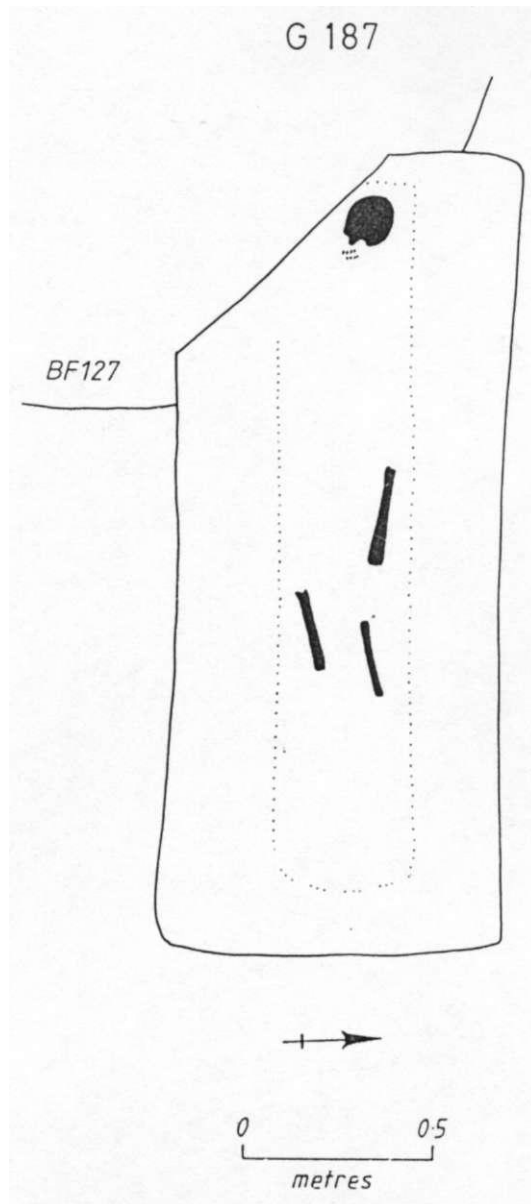
Grave 184 E-W (head to W). Cut by Period 2 G167. G183. Nailed timber coffin. Middle-aged male. Skeleton supine. Bones in good condition.



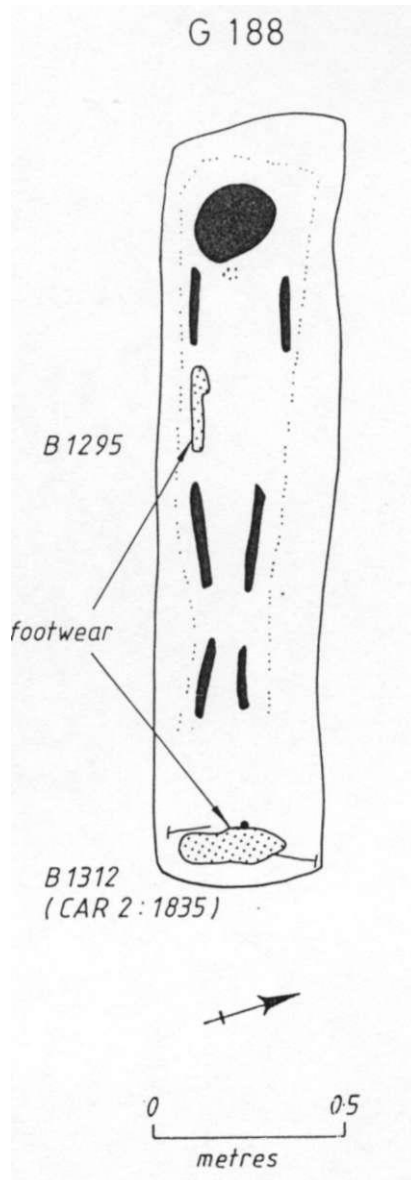
Grave 185 E-W (head to W). Cuts Period 2 G189, G190. Cut by modern pipe trench B. Nailed timber coffin. Middle-aged adult, sex uncertain. Skeleton supine. Only skull (fragmented). shaft of right humerus. leg long bones shafts. and foot bones remain, in very poor condition.



Grave 186 E-W (head to W). Cut by Period 2 G168. G176. Coffin a segment of hollowed tree trunk. Black-stained soil over left leg bones and radius may indicate lid. Elderly female. Skeleton supine. Skull and some upper post-cranial bones removed by G168. Remaining bones in good condition.

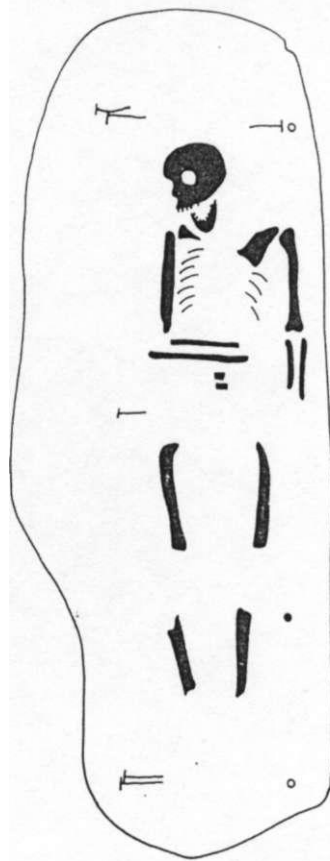


Grave 187 E-W (head to W). Cuts Period 1 or 2 N-S ditch BF165. Period 2 G211. Cut by modern features BF127. BF156. Shallow grave. Nailed timber coffin (nails not illustrated). Young adult, sex uncertain. Only skull and shafts of some leg long bones remain. in poor condition.



Grave 188 E-W (head to W). Cuts Period 1 G119. Period 2 G206. Relationship to Period 2 G219 uncertain. Nailed timber coffin. Adult male. Only skull and shafts of humeri and leg long bones remain, in poor condition. Pair of hobnailed shoes outside coffin. One across E end, other about halfway along S side.

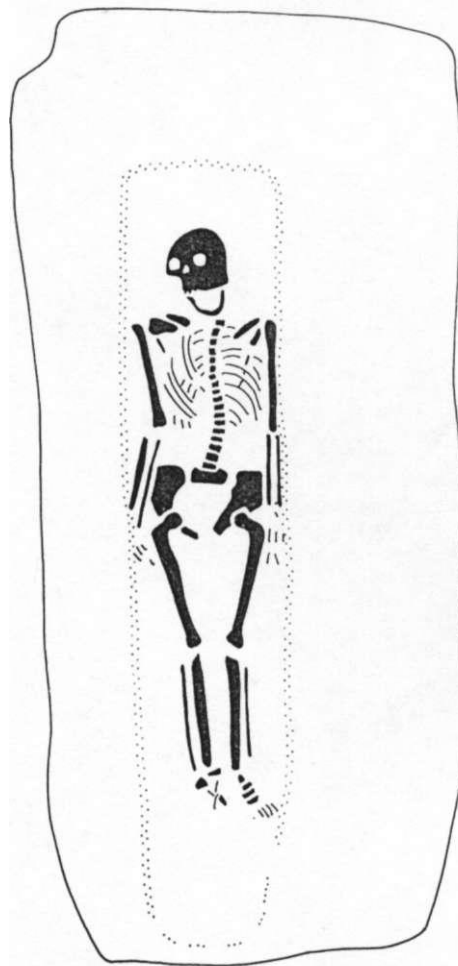
G 189



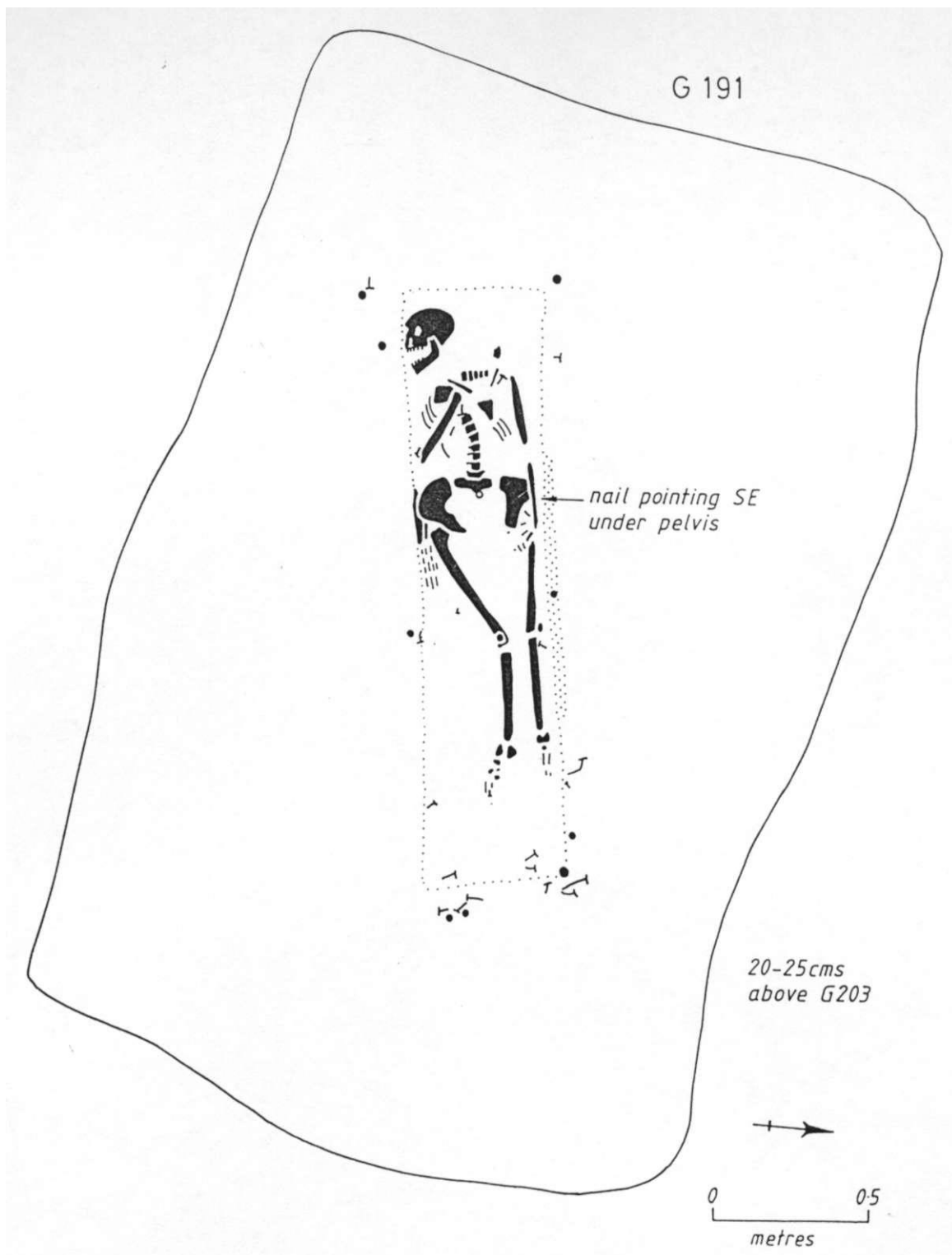
0 0.5
metres

Grave 189 E-W (head to W). Cut by Period 2 G185. Nailed timber coffin (no timber stain located). Elderly male. Skeleton supine. Right forearm bent across body so that hand touched. or lay close to. top of left elbow. Surviving bones in poor condition.

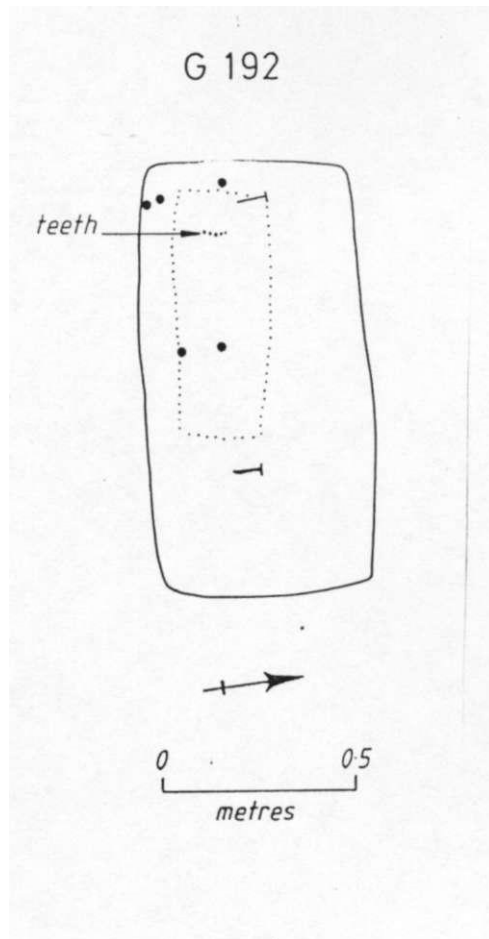
G 190



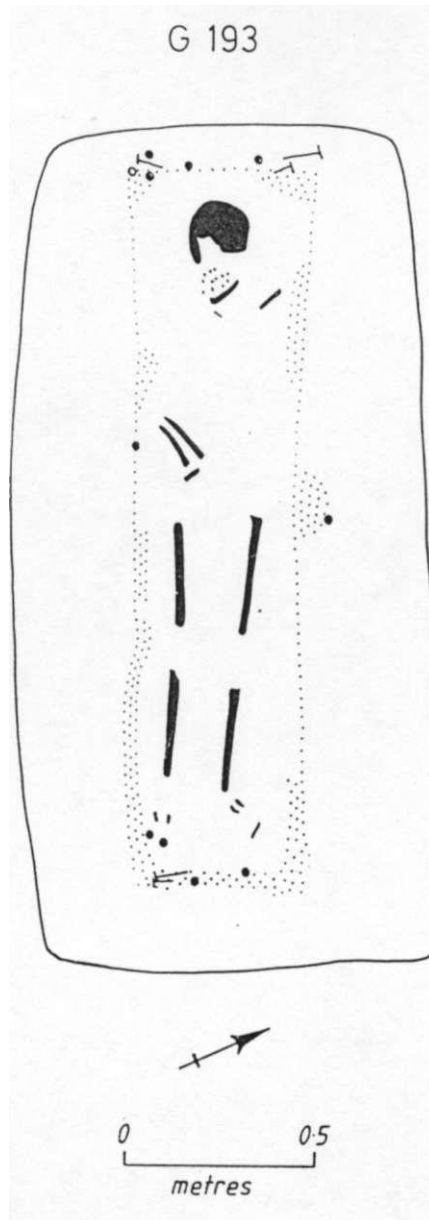
Grave 190 E-W (head to W). Cut by Period 2 G148. G155. G185. Timber coffin (no nails recovered). Elderly female. Skeleton supine. Bones in very good condition.



Grave 191 E-W (head to W). Later of two burials in Period 2 timber vault BF163. Seals (0.2-0.25 m above) primary vault burial G203. and set almost diagonally across vault from NE to SW corners. BF163 cuts Period 2 G208. G191 cut by Period 2 G178. Nailed timber coffin. Elderly female. Skeleton supine. Collapse of coffin disturbed upper post-cranial bones, notably right shoulder, which lies on upper vertebrae. Bones in good condition.

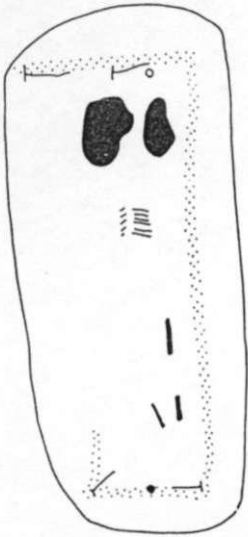


Grave 192 E-W (head to W). Cuts Period 1 or 2 N-S ditch BF165. Period 2 G207. Nailed timber coffin. length 0.62 m. width 0.24 m. Only a few teeth remain. Coffin size indicates infant.



Grave 193 E-W (head to W). Cuts Period 1 or 2 N-S ditch BF165. Period 2 G207. Nailed timber coffin. Adult. sex uncertain. Skeleton supine. Surviving bones in very poor condition.

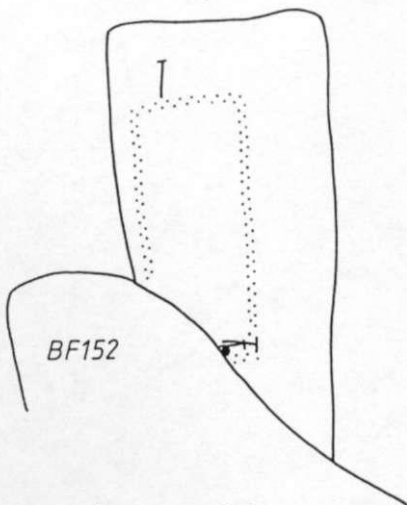
G 194



0 0.5
metres

Grave 194 E-W (head to W). Cuts Period 2 G91, G199. **G206**. Nailed timber coffin (stain on S side missing). Child. aged 3 to 5 years. Skull badly crushed, other surviving bones in poor condition.

G 195



0 0.5
metres

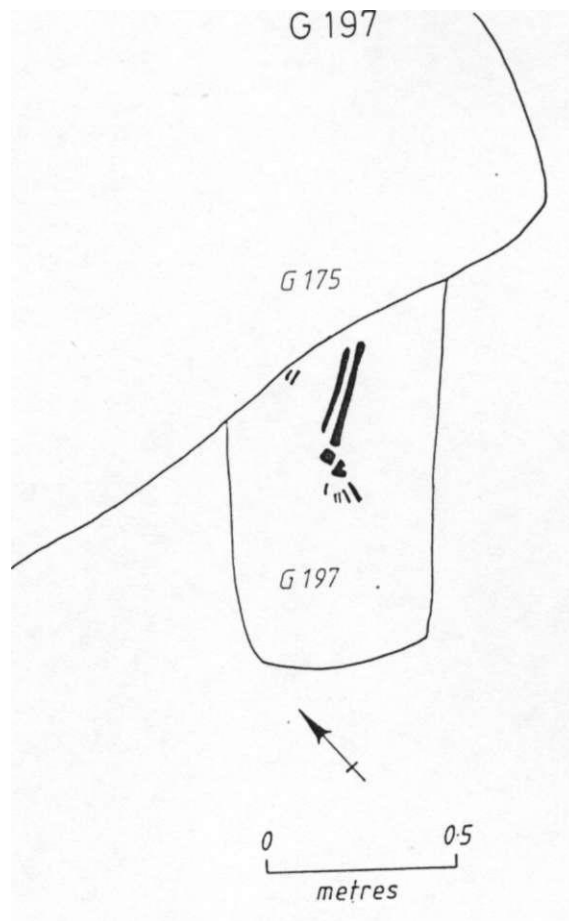
Grave 195 E-W. Cuts Period 1 G223. Period 2 G88. Cut and SE corner destroyed by modern feature BF152. Nailed timber coffin. length 0.64 m long. 0.24 m wide. No skeletal material survives. Coffin size indicates child.

G 196

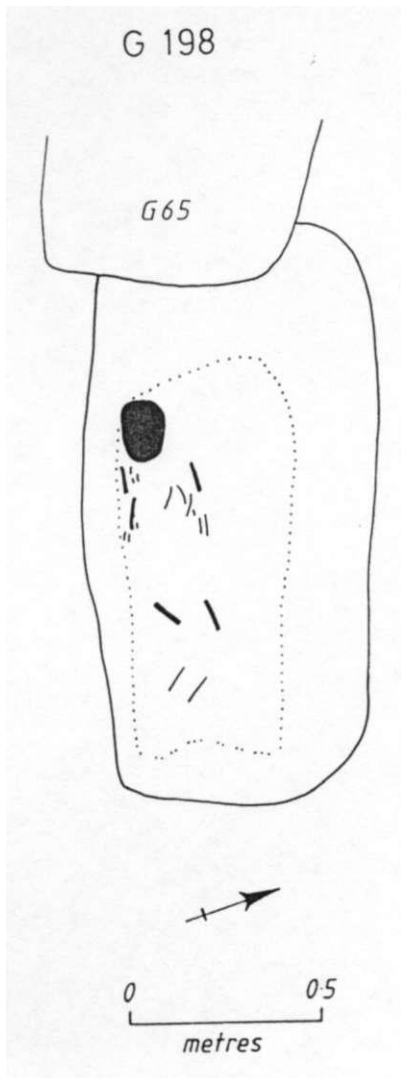


0 0.5
metres

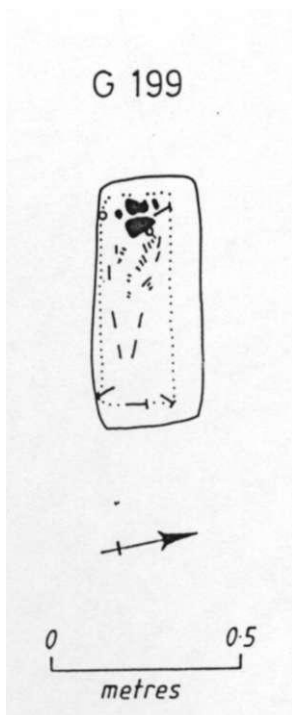
Grave 196 E-W (head to W). Cuts Period 2 G207. Cut by Period 2 G211. Relationship to Period 2 G202 uncertain. Nailed timber coffin. Elderly female. Skeleton supine. Surviving bones in good condition. Skull lies against timber stain at W end of coffin. gap of 0.12 m between toe bones and E end.



Grave 197 N-S (head to N). Isolated grave. Cut by Period 2 G146. G154 and G175. Only S end remains. No coffin. Adult, sex uncertain. Position of remaining leg and foot bones suggests that body lay on left side. with left leg bent more than right.

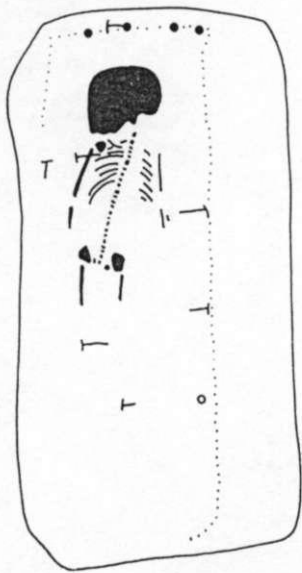


Grave 198 E-W (head to W). Cuts Period 1 or 2 N-S ditch BF165. Cut by Period 2 065. Timber coffin (no nails recovered). Child, aged 3 to 4 years. Skeleton supine. Legs slightly bent to left. Surviving bones in poor condition.



Grave 199 E-W (head to W). Cuts Period 2 G91. Cut by Period 2 G194. Relationship to Period 2 G201 uncertain. Nailed timber coffin, length 0.54 m. width 0.18 m. Infant. Skeleton supine. Surviving bones in good condition.

G 200



0 0.5
metres

Grave 200 E-W (head to W). Cut by Period 2 G75. G90. Nailed timber coffin. Child, aged 2 to 3 years. Skeleton supine. Surviving bones in good condition, though lower legs and feet missing. Gap of at least 0.4 m between conjectured position of toe bones and E end of coffin.

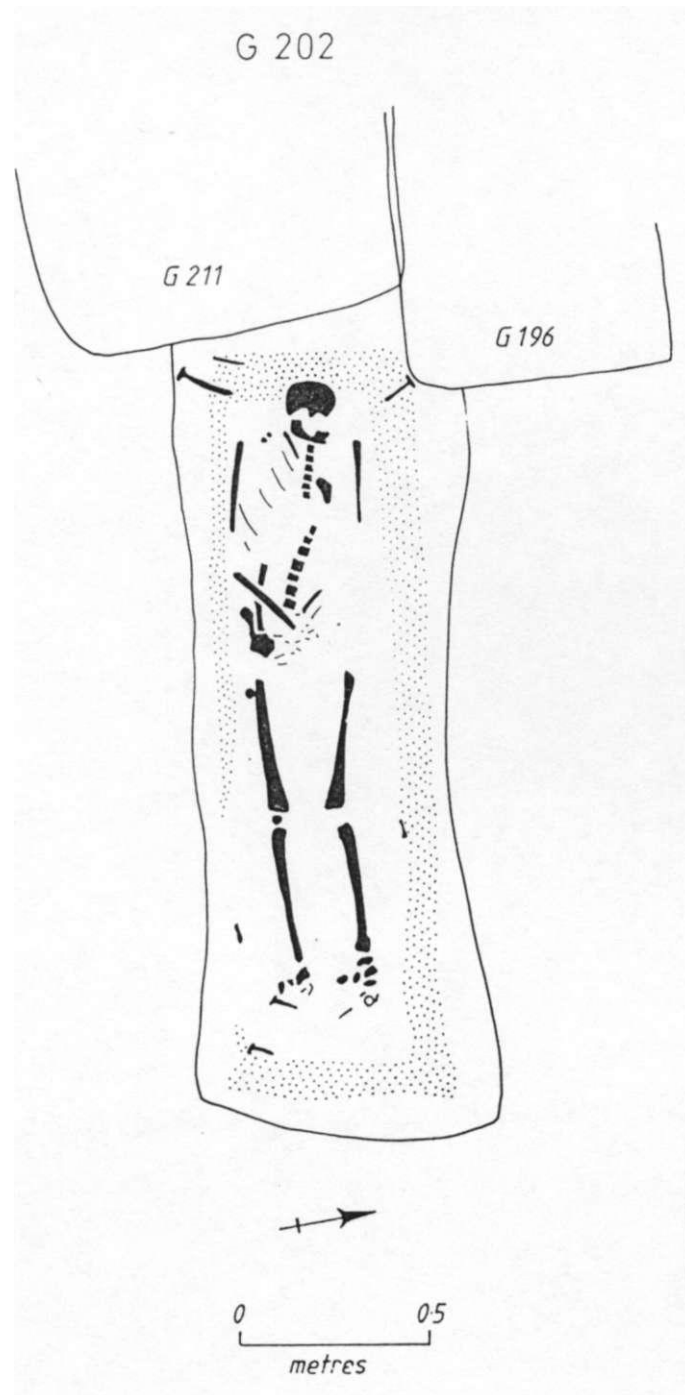
G 201



G66

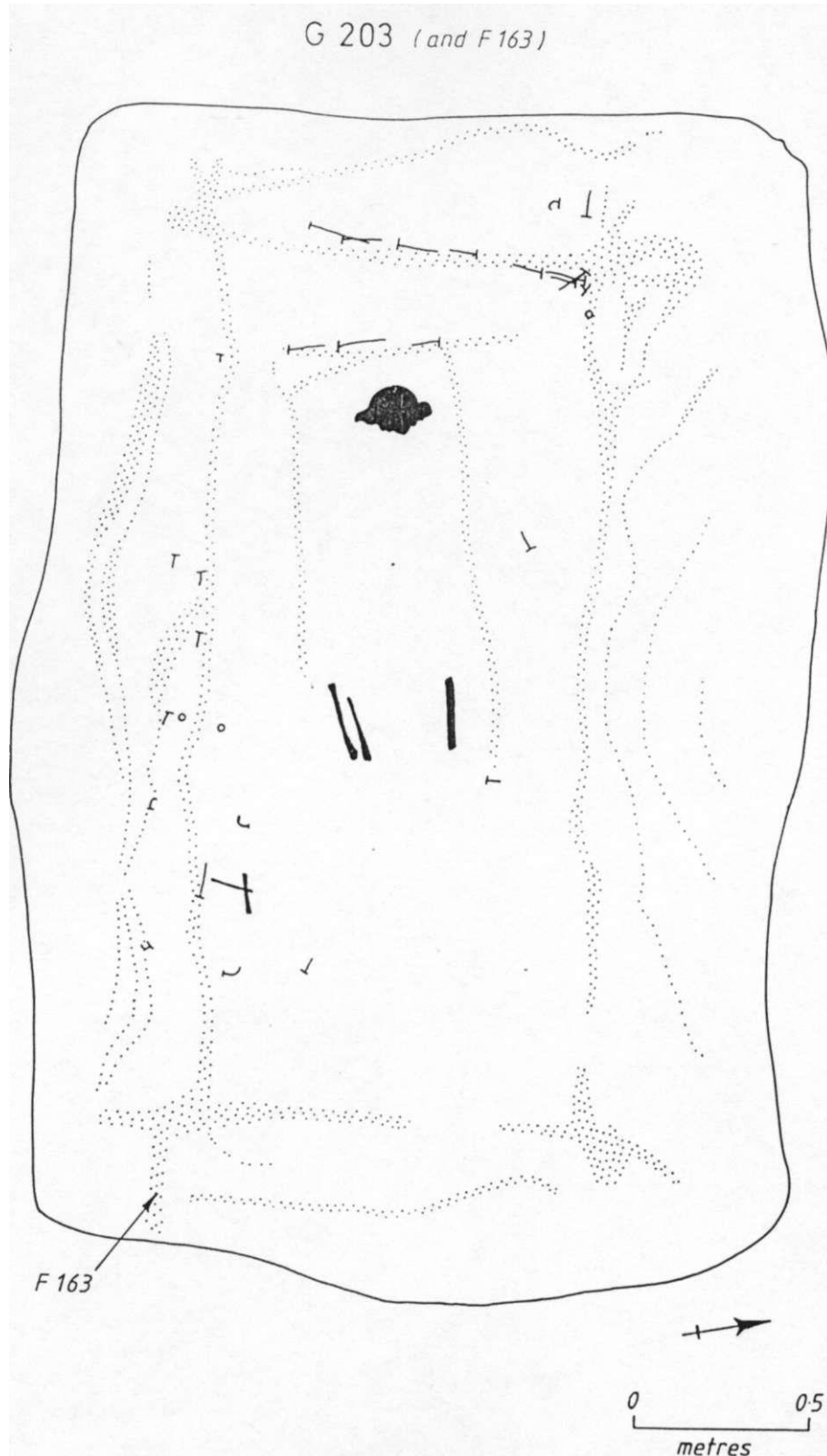
0 0.5
metres

Grave 201 E-W (head to W). Cut and largely destroyed by Period 2 G66. Relationships to Period 2 G91 and G199 uncertain. Only E end remains. Nailed timber coffin. Adult. sex uncertain. Only lower leg and some foot bones remain, in fair condition.



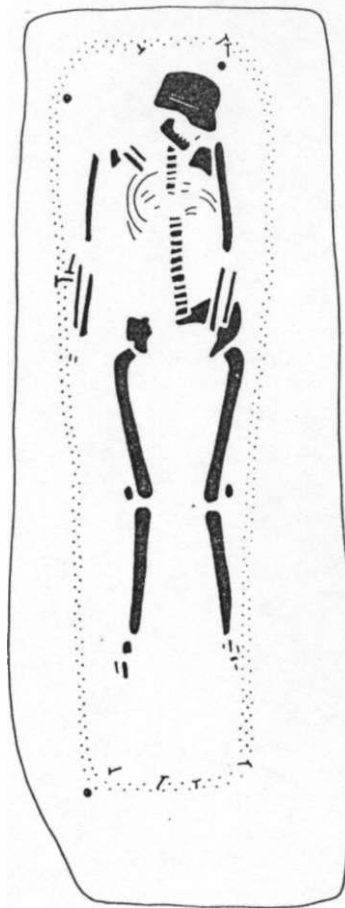
Grave 202 E-W (head to W). Cuts Period 2 G221. Cut by Period 2 G211. Relationship to Period 2 G196 uncertain. Nailed timber coffin. Elderly male. Skeleton supine. Bones in fair condition.

G 203 (and F 163)



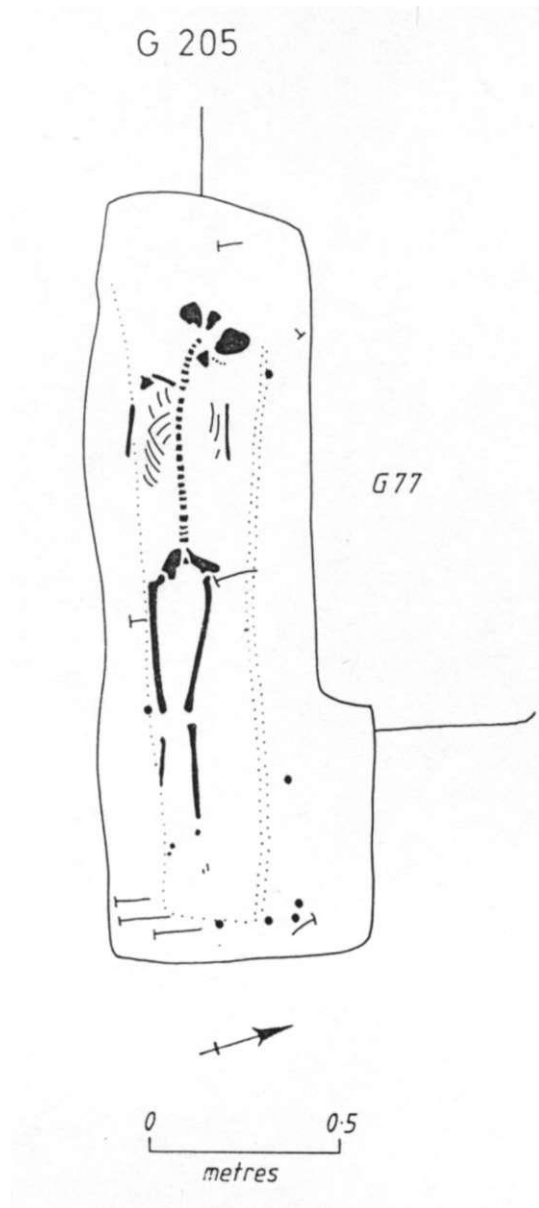
Grave 203 E-W (head to W). Earliest of two burials in Period 2 timber vault BF163. Sealed by later burial G191. BF163 cuts Period 2 G208. G203 cuts Period 1 or 2 E-W ditch BF167. Nailed timber coffin. Adult, sex uncertain. Only skull and shafts of femora remain, in poor condition.

G 204

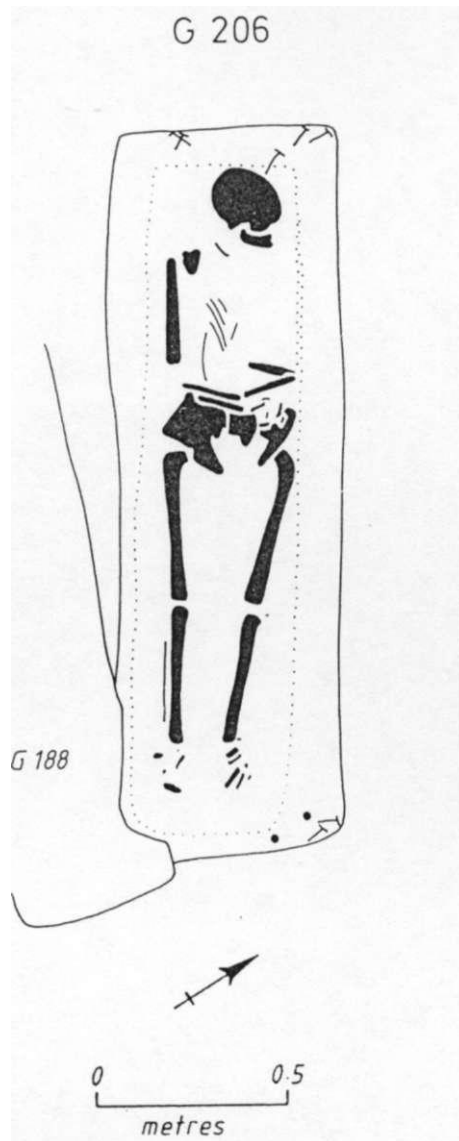


0 0.5
metres

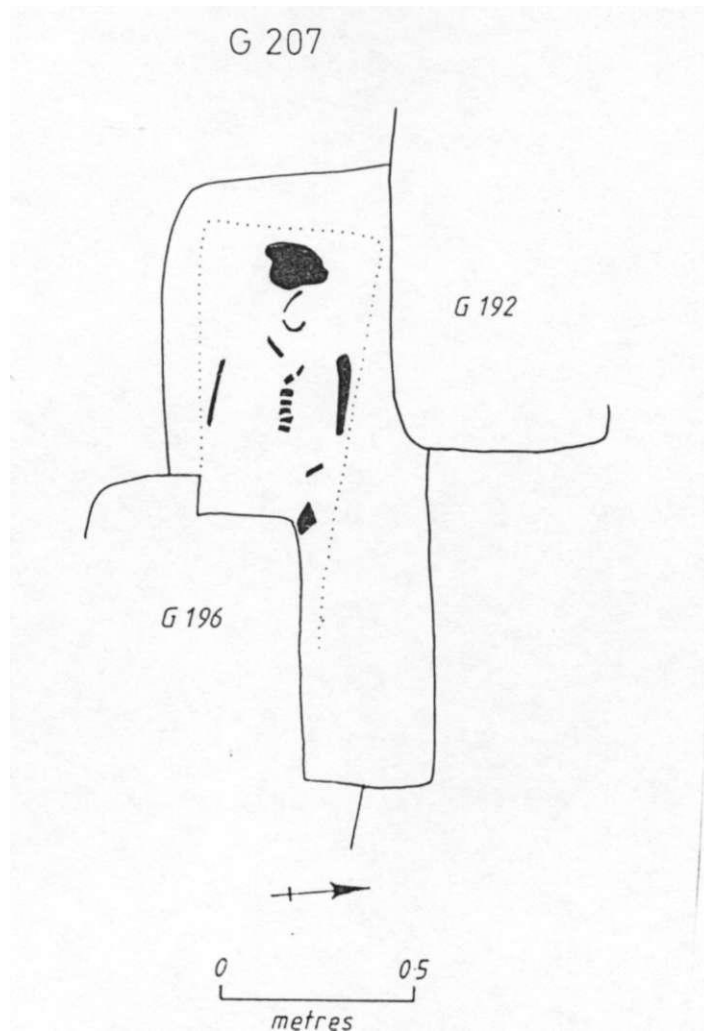
Grave 204 E-W (head to W). Cuts Period 1 or 2 N-S ditch BF165. Isolated grave. Cut by modern pipe trench BF126. Nailed timber coffin. Young adult male. Skeleton supine. Surviving bones in good condition.



Grave 205 E-W (head to W). Cuts Period 1 G223. Period 1 or 2 N-S ditch BF165. Probably cut by Period 2 G77. Relationship to Period 2 G65 uncertain. Nailed timber coffin. Middle-aged male. Skeleton supine. Surviving bones in poor condition.

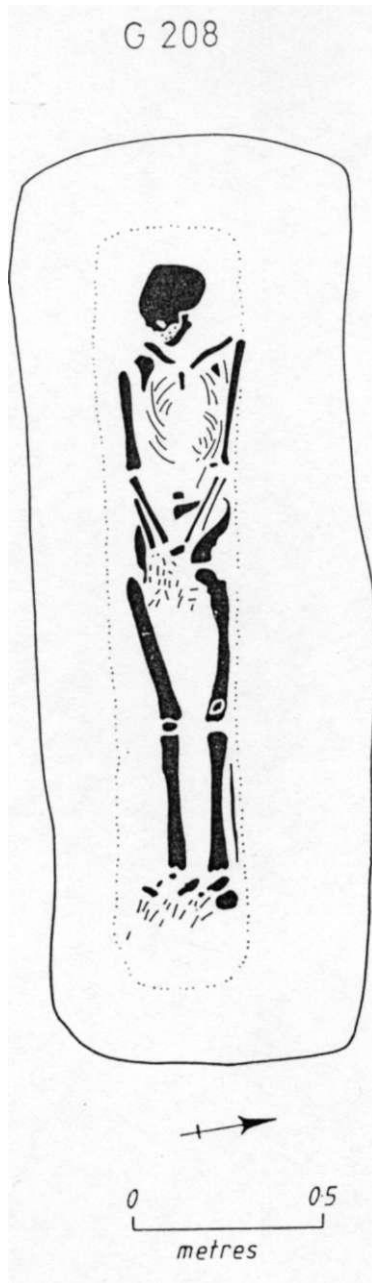


Grave 206 E-W (head to W). Cuts Period 1 G119. Cut by Period 2 G91. G188. G194. Relationship to Period 2 G219 uncertain. Nailed timber coffin. Elderly male. Skeleton supine. Surviving bones in good condition.

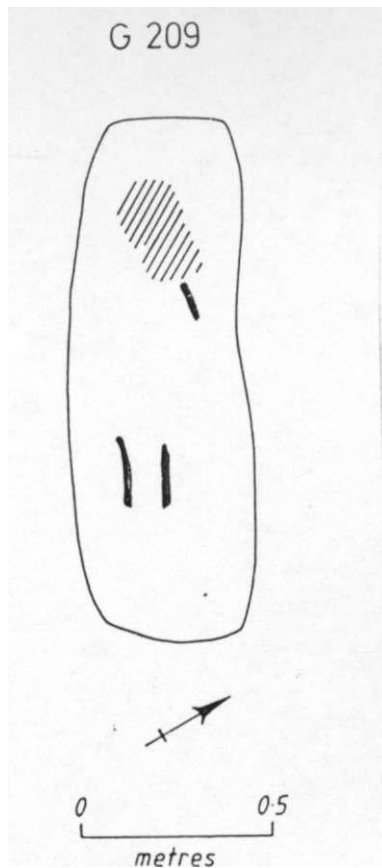


Grave 207 E-W (head to W). Cuts Period 1 or 2 N-S ditch BF165. Cut by Period 2 G192. G193. G196. E half destroyed by G196. Timber coffin (no nails recovered). Adult. sex uncertain. Skeleton supine. Surviving bones in poor condition.

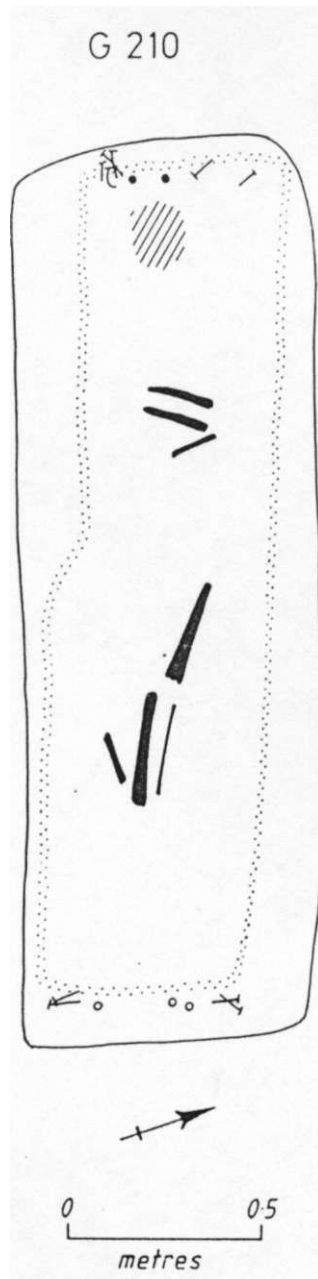
G 208



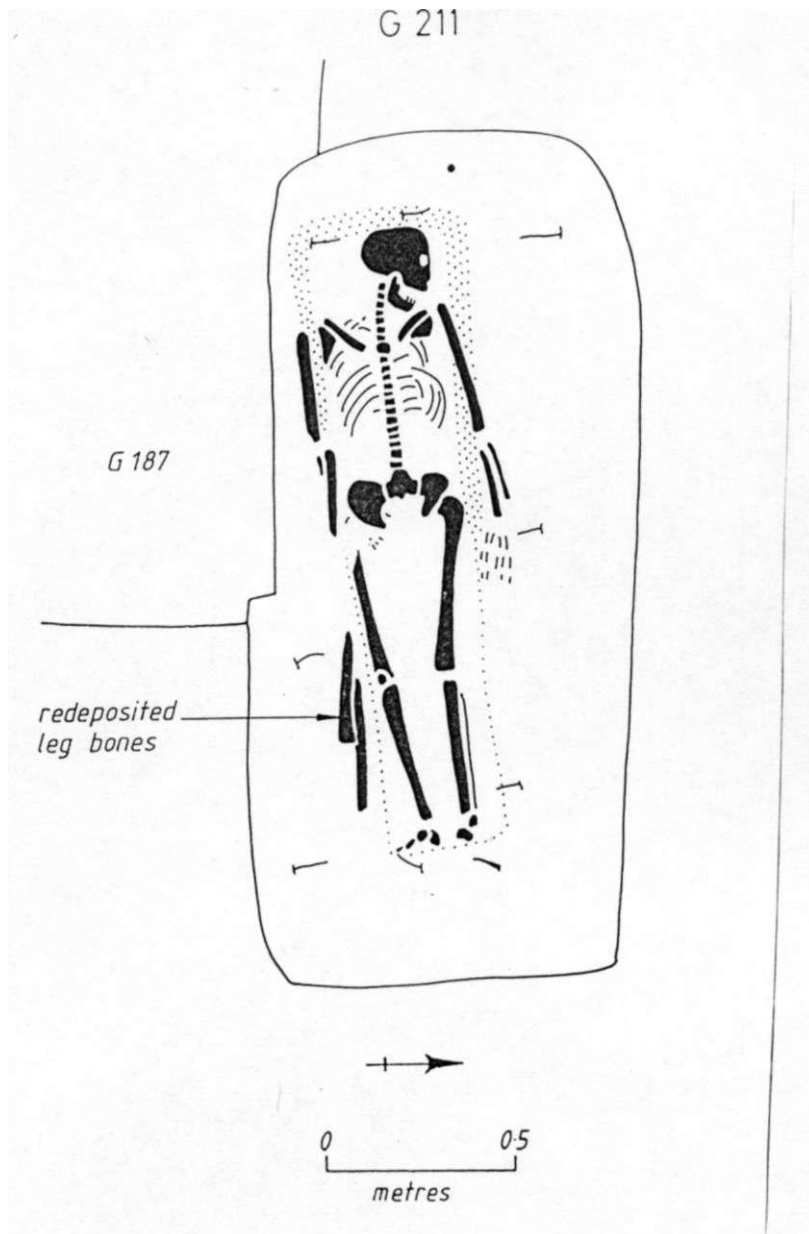
Grave 208 E-W (head to W). Cuts Period 1 or 2 E-W ditch BF167. Cut by Period 2 timber vault BF163. Timber coffin (no nails recovered). Middle-aged male. Skeleton supine. Bones in good condition.



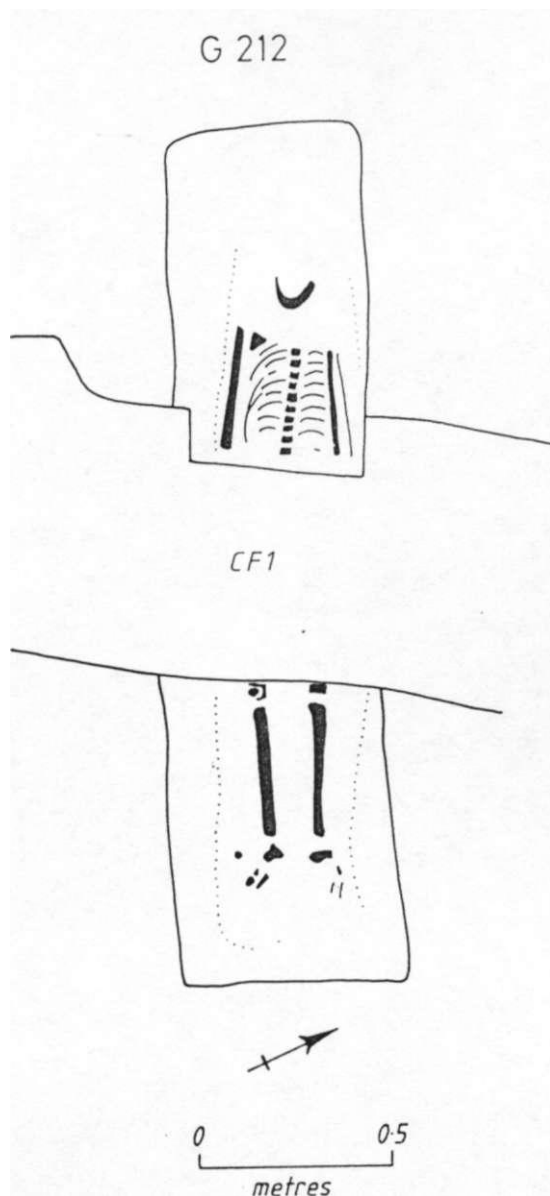
Grave 209 E-W (head to W). Cuts Period 2 G214. G255. Very shallow grave, length 1.36 m. width 0.44 m. No nails or timber stain located. Only fragments of bone recovered. Age and sex uncertain. Position of skull shown by patch of stained soil. Grave size indicates child.



Grave 210 E-W (head to W). Cuts Period 1 G273. Isolated grave. Cut by modern pipe trench CF1. Nailed timber coffin. Lid of coffin cracked in centre and fallen inwards. Young adult male. Position of skull shown by patch of stained soil. Only shafts of some long bones remain, in fair condition.

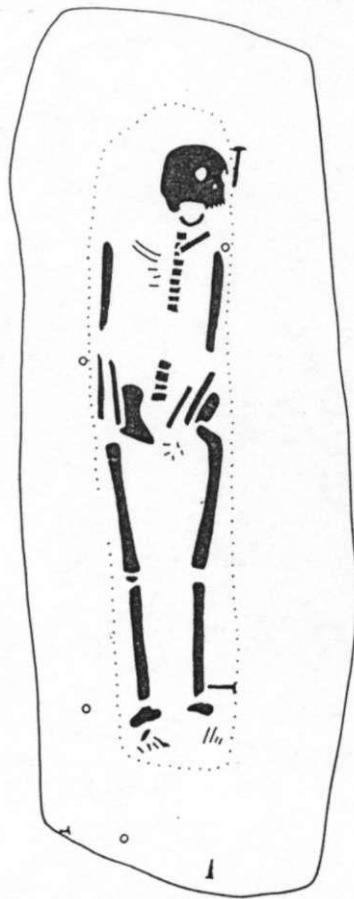


Grave 211 E-W (head to W). Cuts Period 2 G196. G202. Cut by Period 2 G187. modern pipe trench BF126. Nailed timber coffin. Elderly male. Skeleton supine. Bones in good condition. Bones of arms sealed by inward collapse of both sides of coffin. Two redeposited leg bones lay outside coffin close to S side.



Grave 212 E-W (head to W). Cuts Period 1 G273. Period 2 G240. G248. G252. G257. G259. Centre of grave removed by modern pipe trench CF1. Timber coffin (no nails recovered). Adult, sex uncertain. Surviving bones in fair condition.

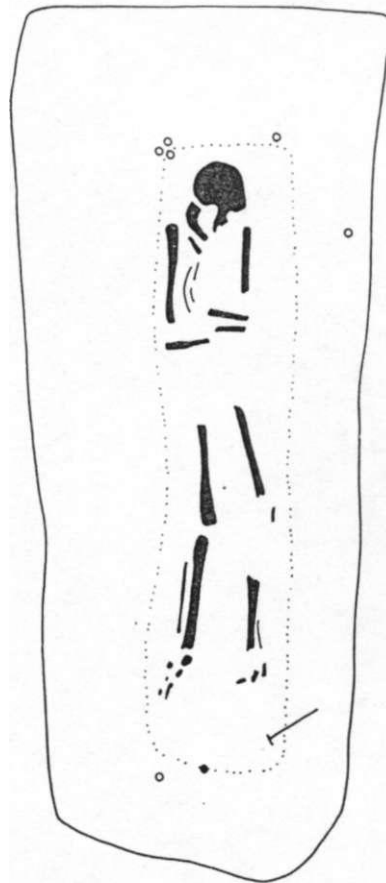
G 213



0 0.5
metres

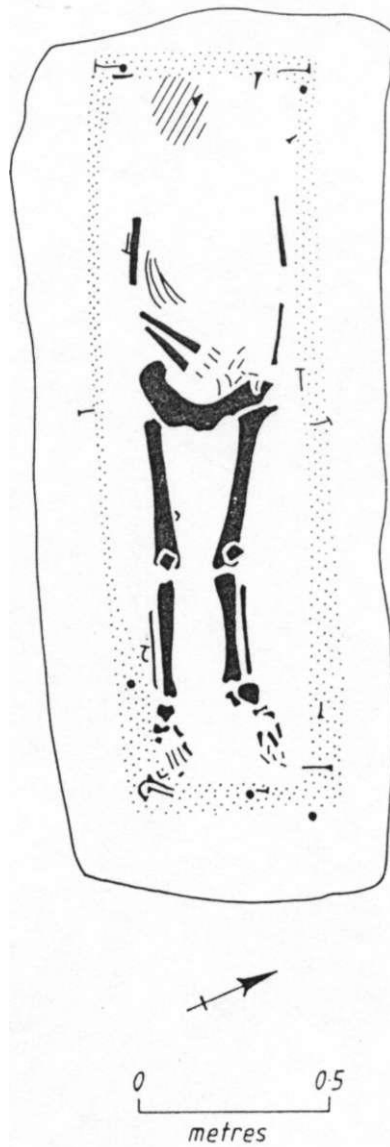
Grave 213 E-W (head to W). Cuts Period 1 G312. Period 1 or 2 N-S ditch BF165. Period 2 G224. Nailed timber coffin. Elderly male. Skeleton supine. Surviving bones in fair condition.

G 215



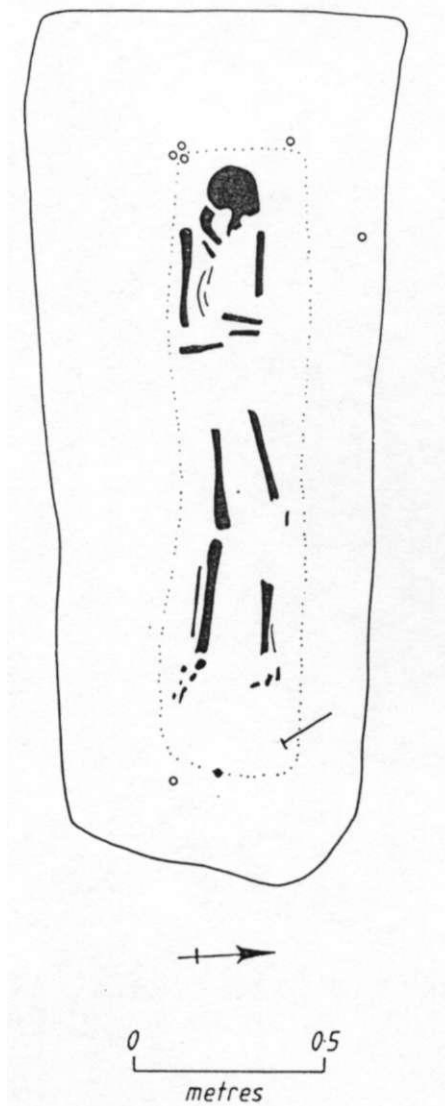
Grave 215 E-W (head to W). Cuts Period 2 G216. G217. timber vault G225. Nailed timber coffin. Adolescent. aged 14 to 16 years. Skeleton supine. Skull. ribs and spine, apparently still articulated, lay at slightly lower level than coffin stain due to subsidence within underlying timber vault G225.

G 214

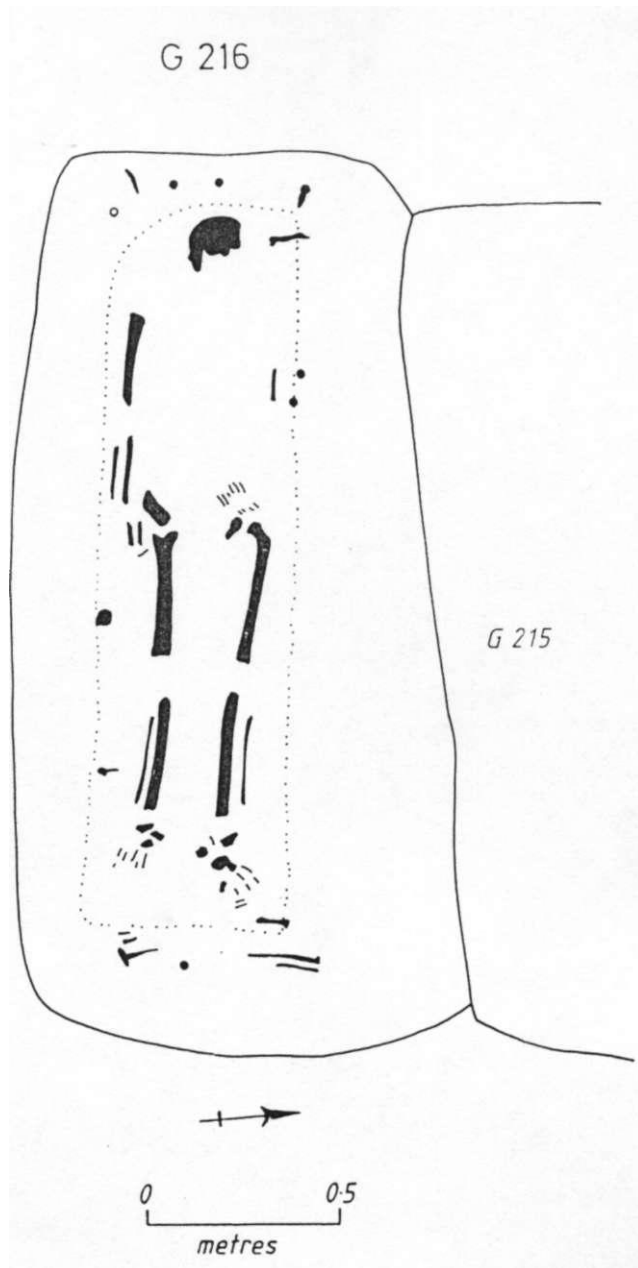


Grave 214 E-W (head to w). Cuts Period 1 G274. Period 2 G255. Cut by Period 2 G209. G218. G231. modern pipe trenches CF1. CF2. Relationship to Period 2 G235 uncertain. Nailed timber coffin. Middle-aged male. Skeleton supine. Lower post-cranial skeleton well preserved, very little remains of upper, or of skull.

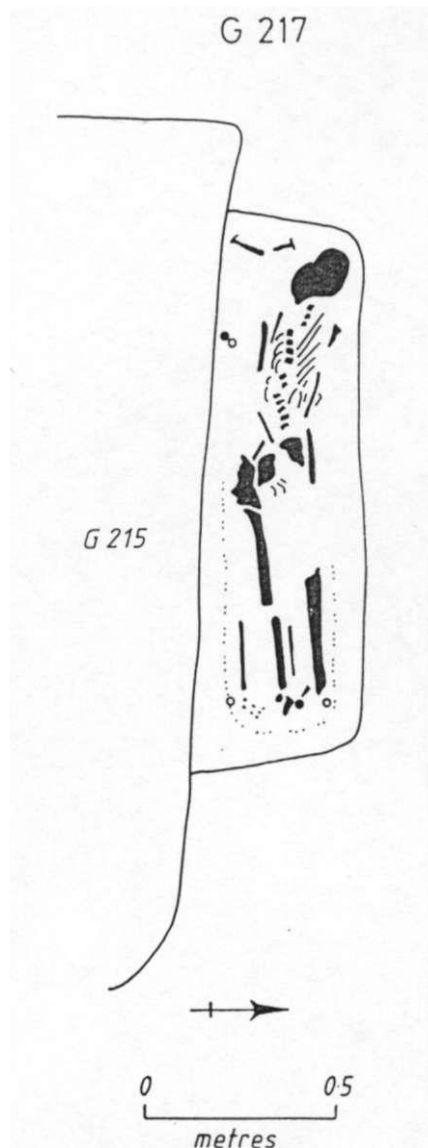
G 215



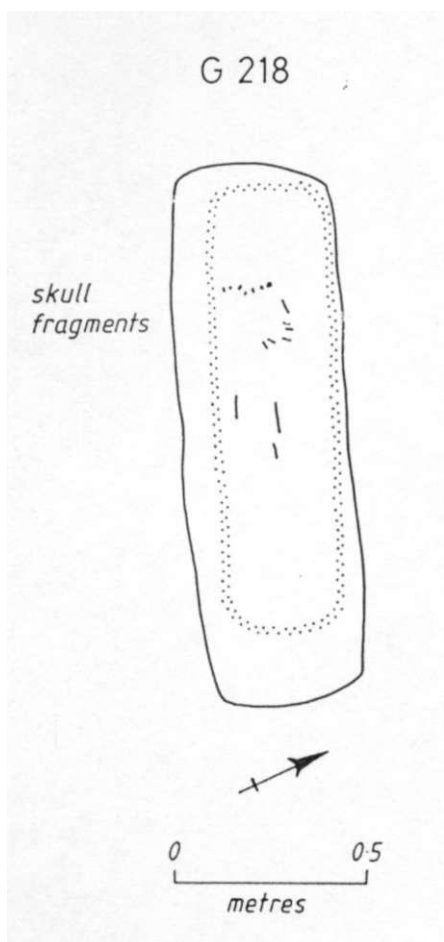
Grave 215 E-W (head to W). Cuts Period 2 G216. G217. timber vault G225. Nailed timber coffin. Adolescent. aged 14 to 16 years. Skeleton supine. Skull. ribs and spine, apparently still articulated, lay at slightly lower level than coffin stain due to subsidence within underlying timber vault G225.



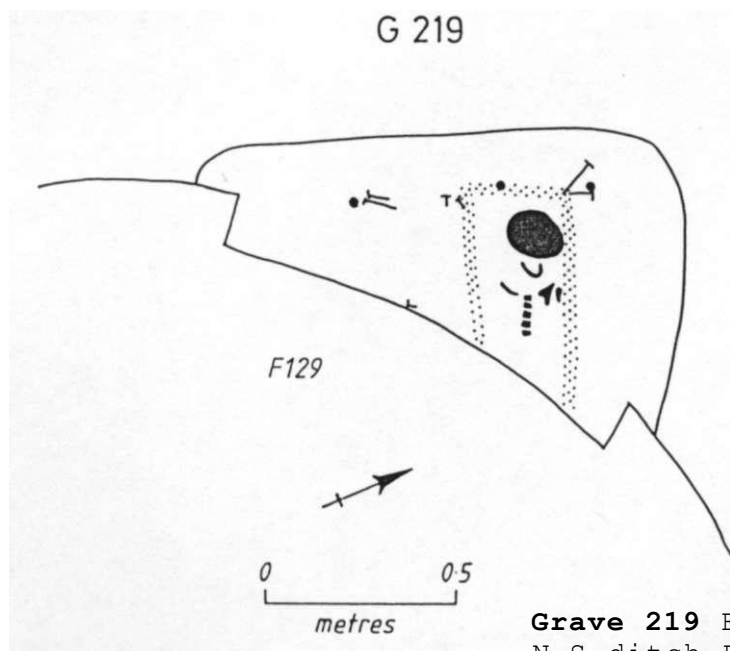
Grave 216 E-W (head to W). Cuts Period 2 timber vault G225. G228. Cut by Period 2 G215. Nailed timber coffin. Adult male. Skeleton supine. Skull and surviving bones of upper post-cranial skeleton in very poor condition, lower better preserved.



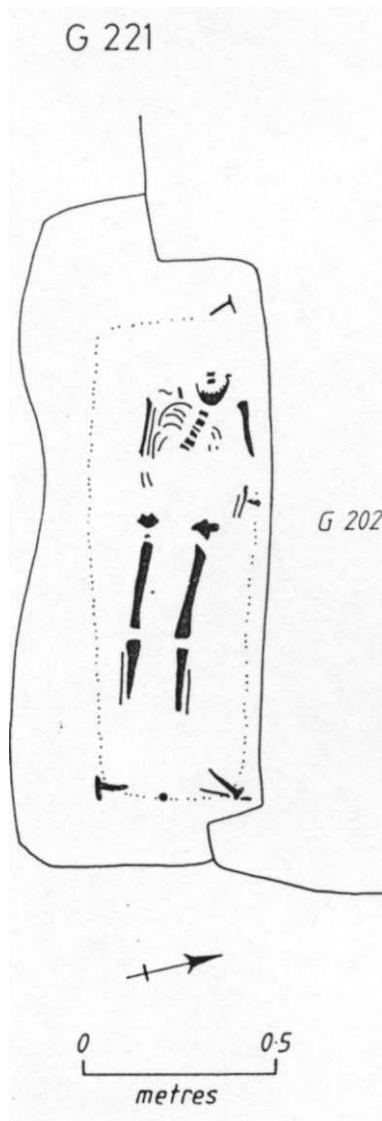
Grave 217 E-W (head to W). Cuts Period 2 timber vault G225. Period 1 E-W ditch CF35. Cut by G215. Nailed timber coffin. Child, aged 8 years. Skeleton supine. Bones in good condition. Most of right side of skeleton slipped. partly disarticulated. into G215. Slippage could have been aggravated by settlement within underlying timber vault G225.



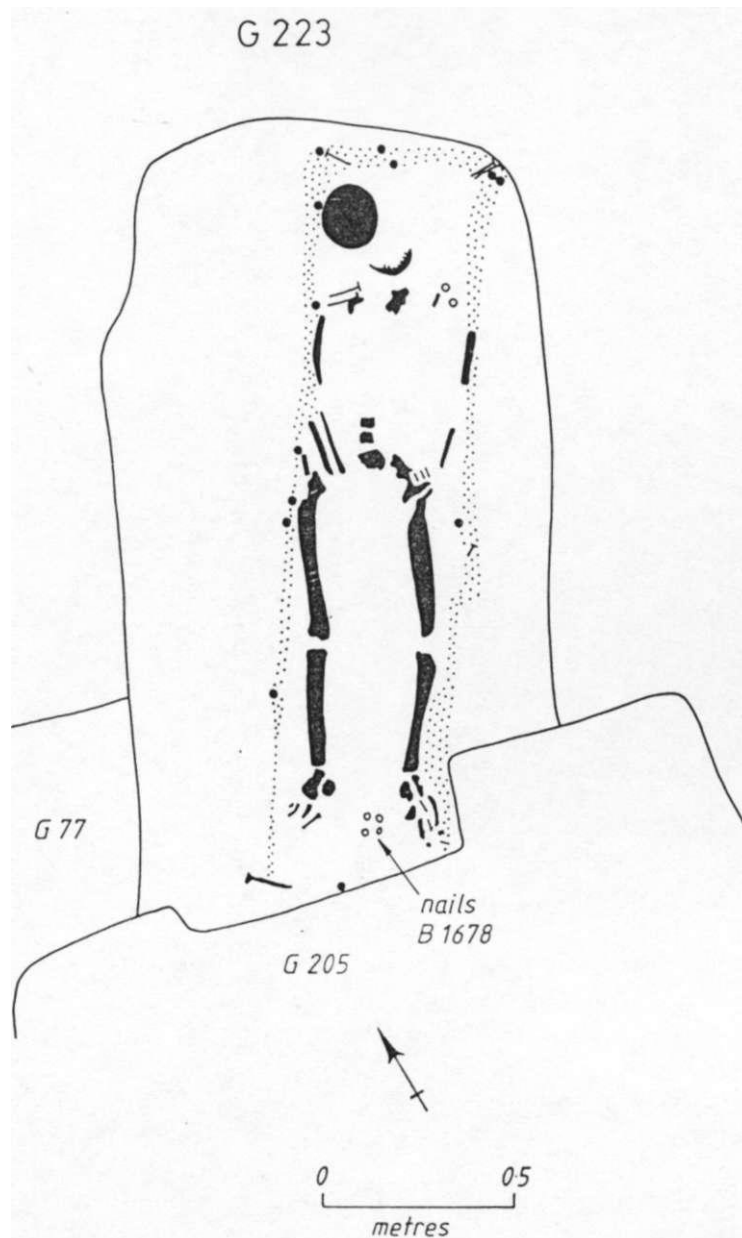
Grave 218 E-W (head to W). Cuts Period 2 G214. G255. Coffin a segment of hollowed tree trunk. Child. Only fragments of skull and some long bones remain. in very poor condition.



Grave 219 E-W (head to W). Cuts Period 1 or 2 N-S ditch BF165. Cut and largely destroyed by modern soakaway BF127. Relationships to Period 2 G188 and G206 uncertain. W end only survives. Nailed timber coffin. Middle-aged male. Skeleton supine. Surviving bones in good condition. Imbrex (BF155) found in almost vertical position in cemetery topsoil above head of grave.

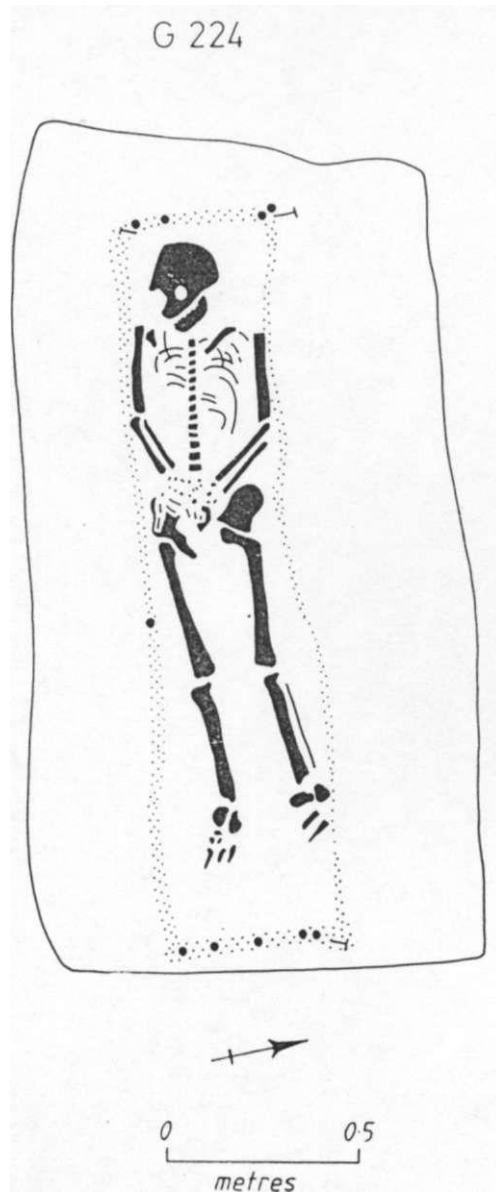


Grave 221 E-W (head to W). Cut by Period 2 G202. Nailed timber coffin. Child. aged 8 years. Skeleton supine. Surviving bones in poor condition.



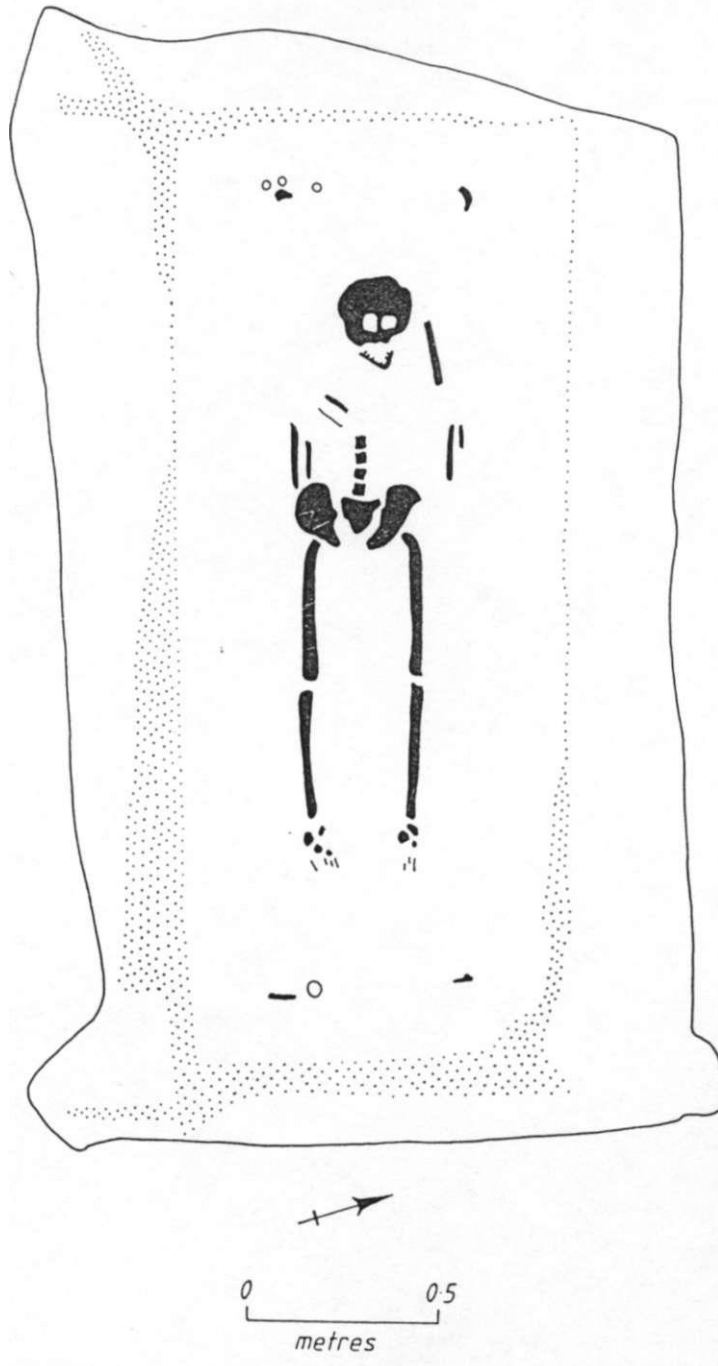
Grave **223** N-S (head to N). Isolated grave. Cut by Period 2 G74. G77. G88. G195 and G205. Nailed timber coffin. At bottom of coffin near left foot were four downward-pointing nails (B1678). Not clear if these represent part of structure or object within coffin. Adult. sex uncertain. Skeleton supine. Surviving bones in fair condition. A jar of black-burnished ware (BB1) found broken and dispersed in backfill of G77. was probably a grave deposit from G223.

G 224

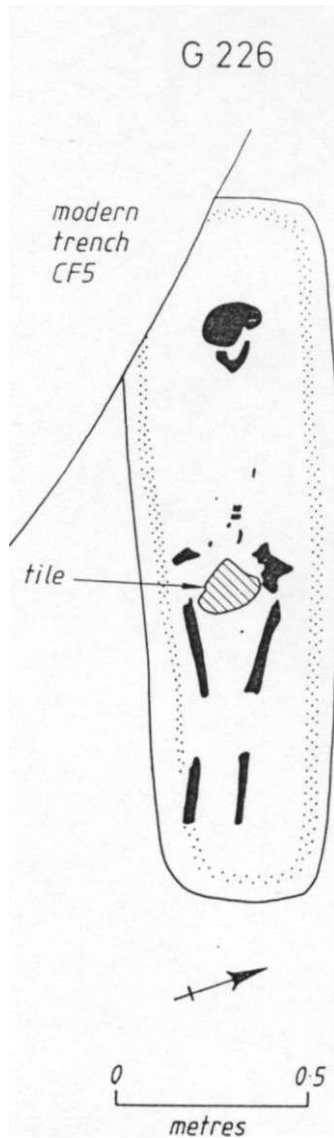


Grave 224 E-W (head to W). Cuts Period 1 G312. Period 1 or 2 N-S ditch BF165. Cut by Period 2 G213. G262. Nailed timber coffin. Middle-aged female. Skeleton supine. Bones in good condition.

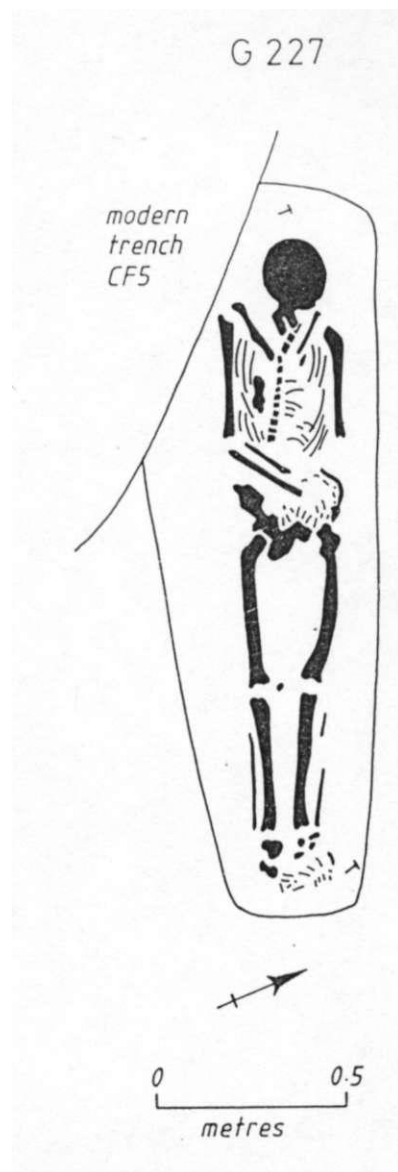
G 225



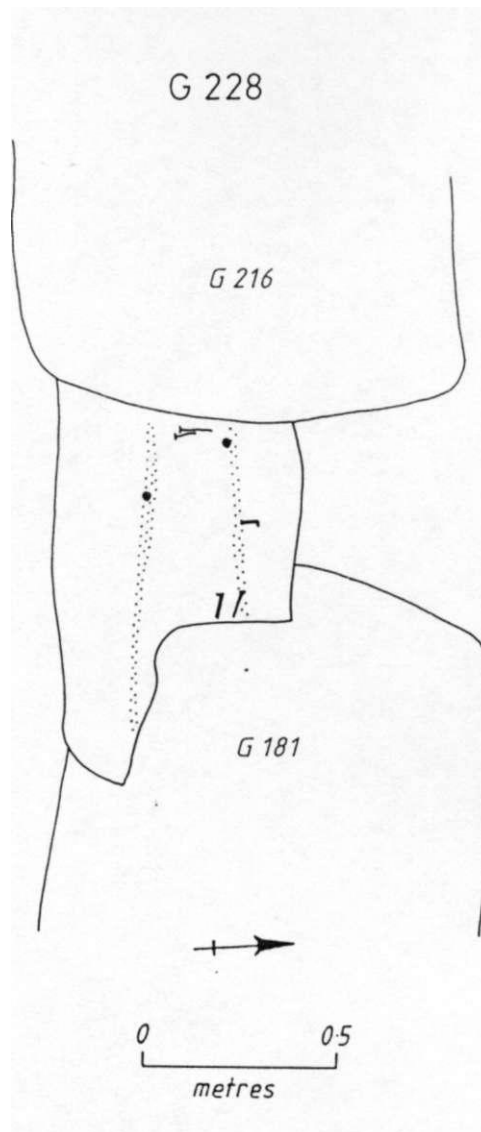
Grave 225 E-W (head to W). Cut by Period 2 G215. G216. G217. Relationship to Period 2 G228 and G263 uncertain. Timber vault containing single nailed timber coffin. Middle-aged male. Skeleton supine. Surviving bones in fair condition.



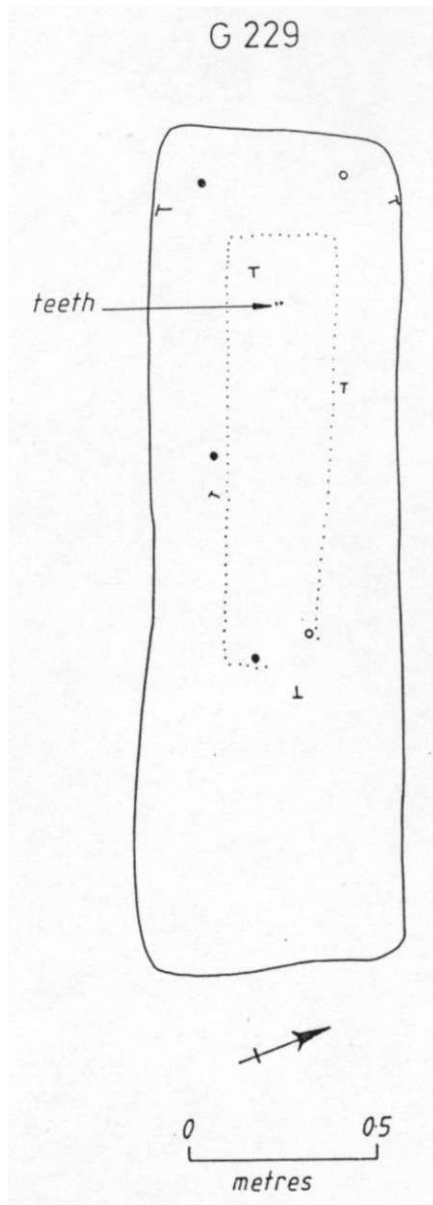
Grave 226 E-W (head to W). Cuts Period 2 G227. Cut by Period 2 post-pit CF13. modern pipe trench CF5. Relationship to Period 2 G233 uncertain. Timber coffin (no nails recovered). Adult. sex uncertain. Skeleton supine. Very few bones remain. in poor condition. Large fragment of tile, perhaps originally lain on lid of coffin. found resting on pelvis. Either deliberately deposited above coffin as marker or residually present in grave fill. Above E end of grave was an oblong post-pit (CF13) containing three post-holes which cut the uppermost surviving level of the grave fill. Pit contained no finds and cannot be accurately dated due to modern surface disturbance. However, orientation corresponds exactly with that of G226. and. if genuinely associated with grave, probably represents marker.



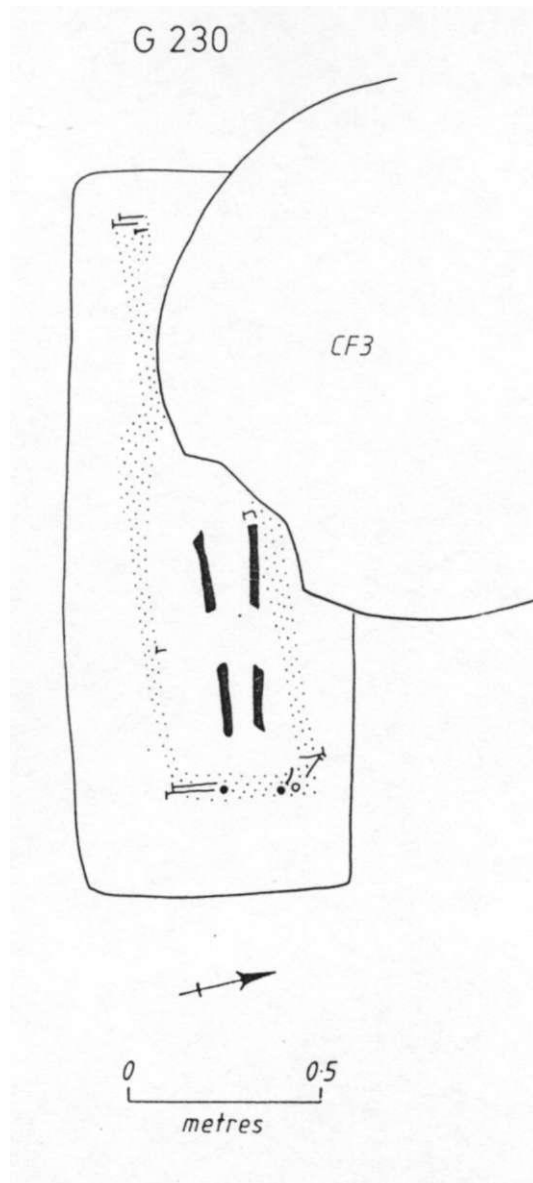
Grave 227 E-W (head to W). Cut by Period 2 G226. modern pipe trench CF5. Nailed coffin (one nail recovered at each end. no timber stain located). Elderly male. Skeleton supine. Bones in good condition.



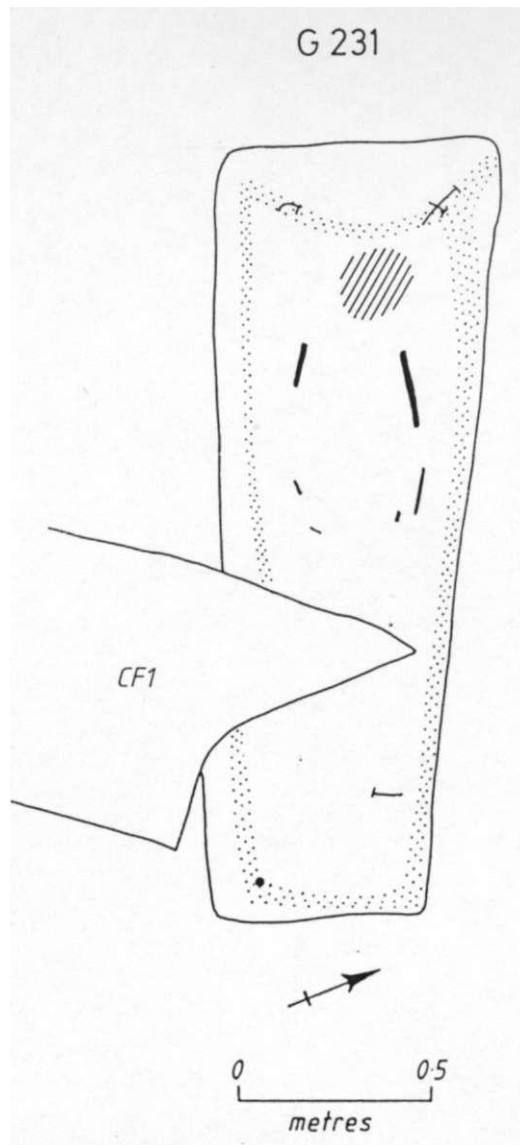
Grave 228 E-W. Cut by Period 2 G181. G216. Relationship to Period 2 timber vault G225 uncertain. Ends of grave destroyed by later burials. Nailed timber coffin. W end may be indicated by two nails lying across coffin. Surviving length 0.82 m. width 0.24 m. No skeletal material. Possibly child's grave.



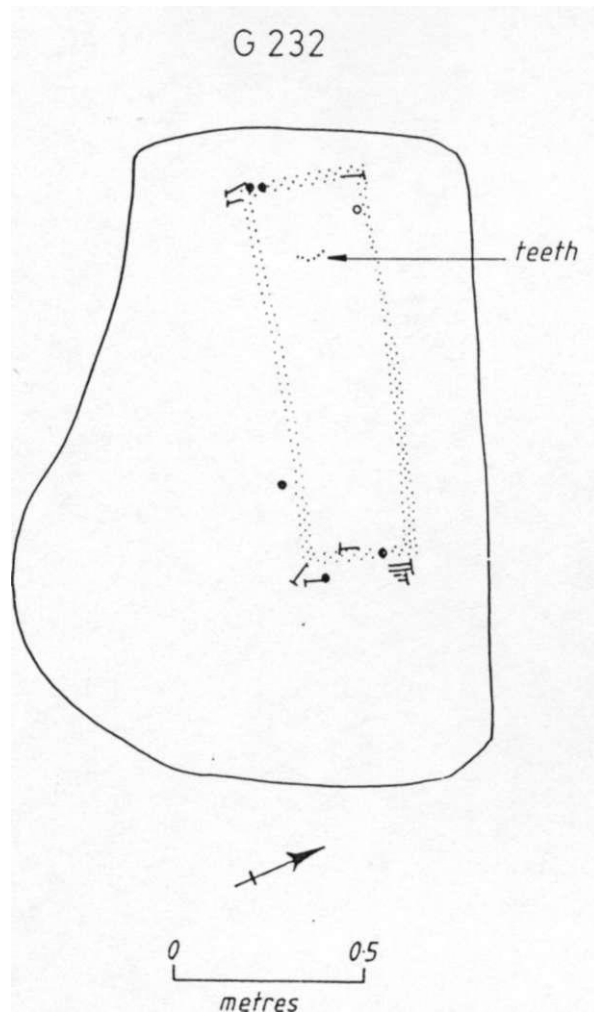
Grave 229 E-W (head to W). Cuts Period 1 G277. G291. Isolated grave. Nailed timber coffin. length 1.12 m. width 0.26 m. No skeletal material. Coffin size indicates child. Impressions of several teeth near W end.



Grave 230 E-W (head to W). Cuts Period 2 G234. Cut and W end partly destroyed by modern soakaway CF3. Relationship to Period 2 G239 uncertain. Nailed timber coffin, length 1.42 m. width 0.32 m. Age and sex uncertain. Only fragments of leg bones survive. in poor condition.

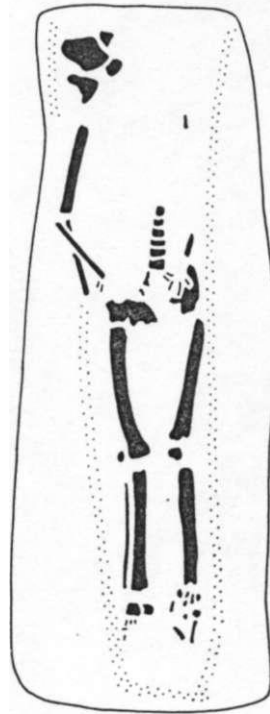


Grave 231 E-W (head to W). Cuts Period 1 G274. G290. Period 2 G214. G269. Cut by modern pipe trench CF1. Relationship to Period 2 G248 uncertain. Nailed timber coffin. W end buckled inwards. length approximately 1.88 m. width 0.5 m. Age and sex uncertain. Coffin size indicates adult. Fragments of some long bones only remain. in very poor condition. Position of skull marked as dark patch of soil.



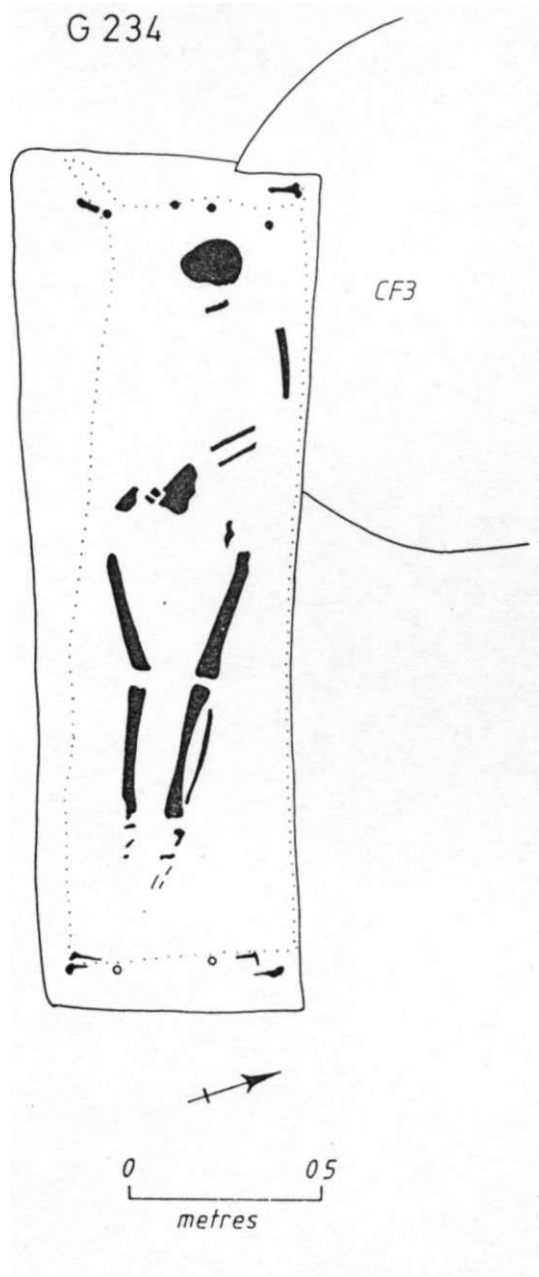
Grave 232 E-W (head to W). Cuts Period 1 G278. G291. Isolated grave. Nailed timber coffin. length 0.84 m. width 0.26 m. No skeletal material. Coffin size indicates small child. Impressions of some teeth in soil near W end. S side of grave appears to have collapsed in antiquity.

G 233

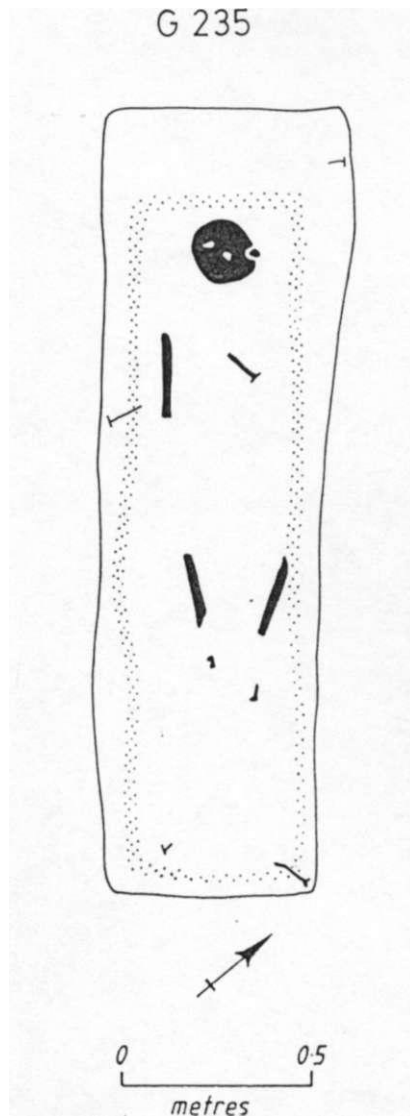


0 0.5
metres

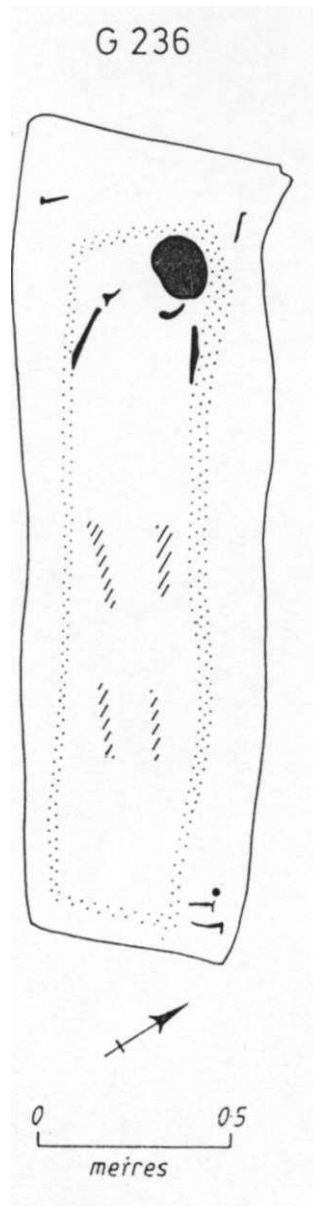
Grave 233 E-W (head to W). Cuts Period 1 G277. Period 2 G253. Relationship to Period 2 G226 uncertain. Timber coffin (no nails recovered). Adult female. Skeleton supine. Surviving bones in fair condition.



Grave 234 E-W (head to W). Cut by Period 2 G230. modern soakaway CF3. Relationships to Period 2 G239 and G258 uncertain. Nailed timber coffin. Adult. sex uncertain. Skeleton supine. Surviving bones in fair condition.

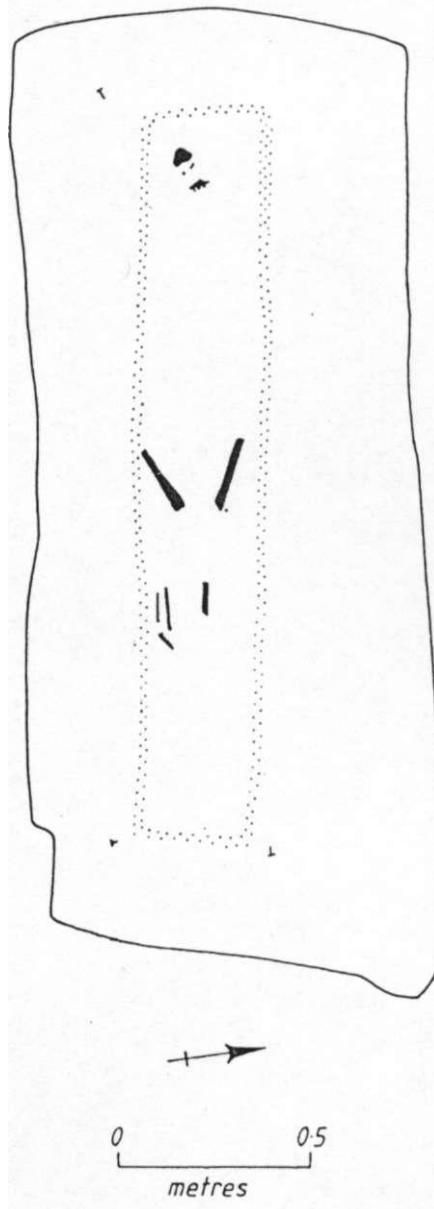


Grave 235 E-W (head to W). Cuts Period 1 G274. Period 2 G245. G269. G454. Cut by modern pipe trench CF1. Relationships to Period 1 G275 and Period 2 G214 uncertain. Nailed timber coffin. Adult female. Skeleton supine. Only skull and shafts of some long bones remain, in poor condition.

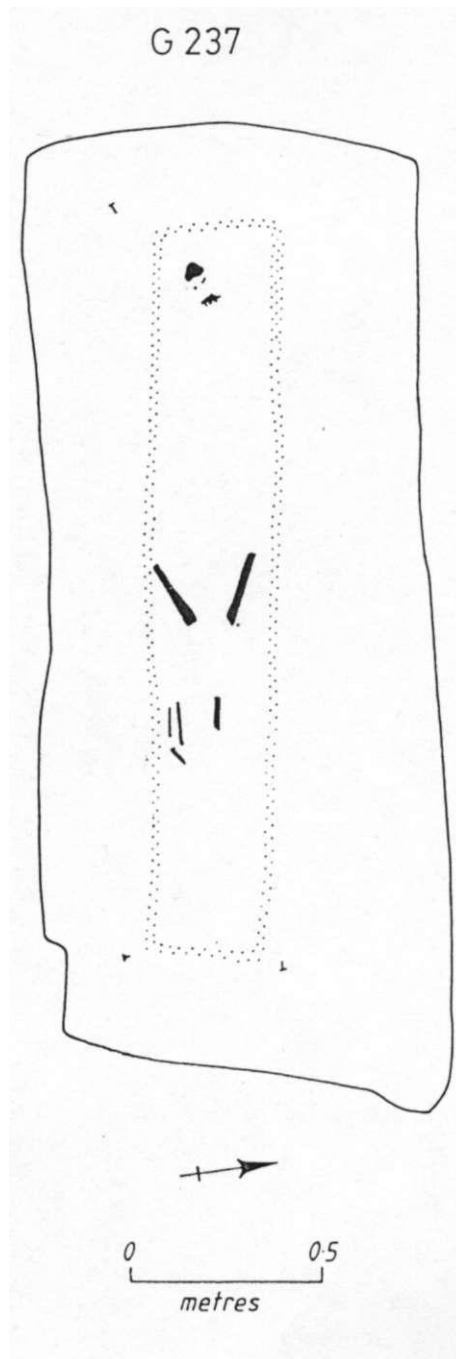


Grave 236 E-W (head to W). Cuts Period 2 G251. Cut by modern features CF1. CF3. Nailed timber coffin. length 1.74 m. width 0.3 m. Age and sex uncertain. Coffin size indicates adult. Only fragments of skull and humeri remain, coated with black substance.

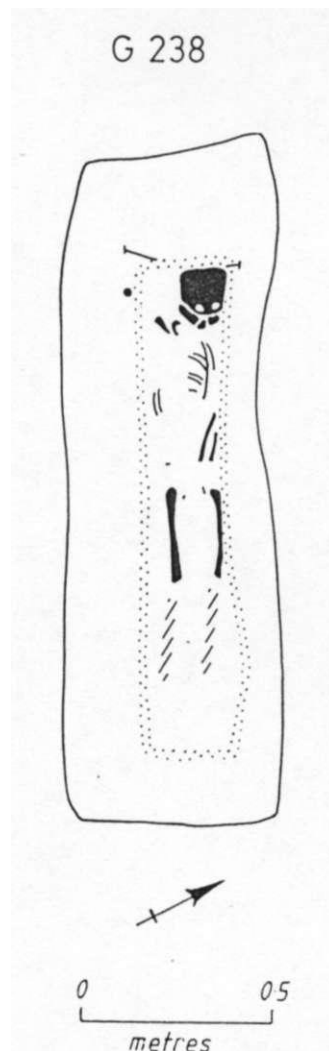
G 237



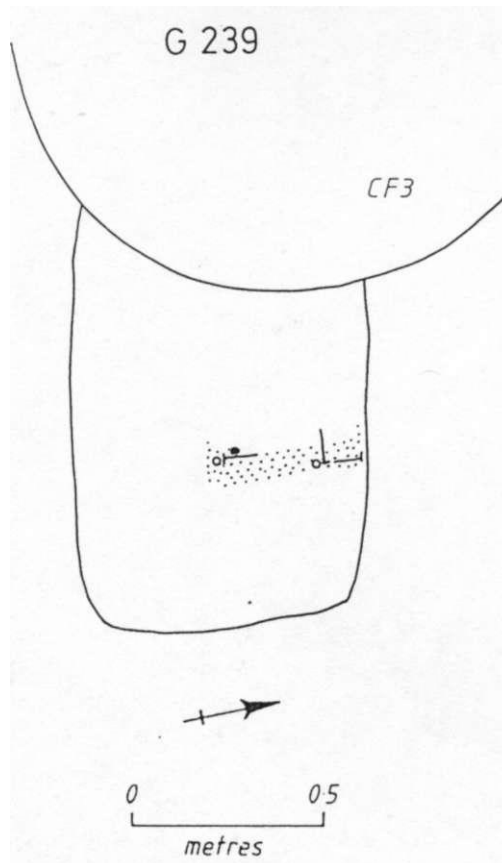
Grave 237 E-W (head to W) . Cuts Period 2 G292 . Cut by modern pit CF6 . Nailed



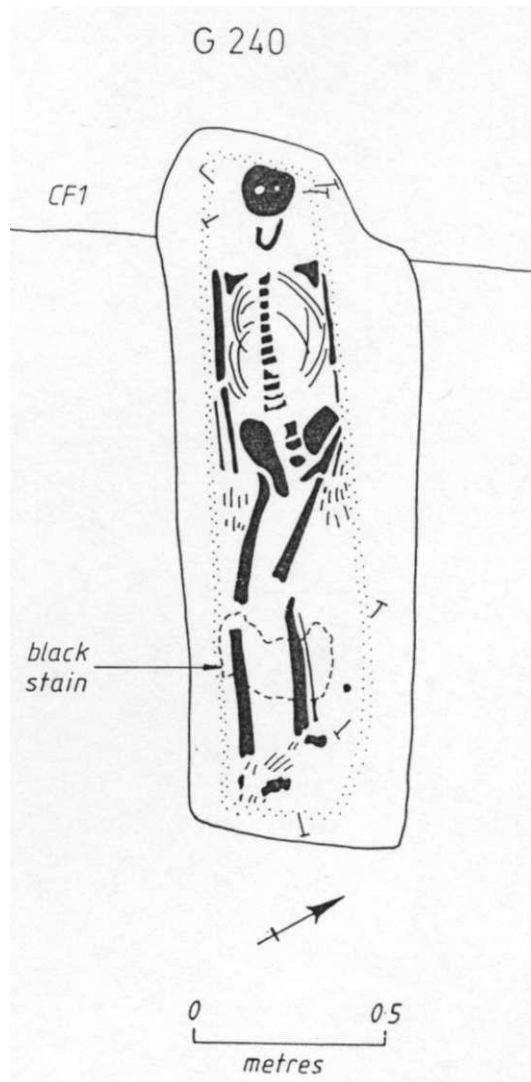
Grave 237 E-W (head to W). Cuts Period 2 G244, G292. Cut by modern pit CF6. N timber coffin. Adult, sex uncertain. Only fragments of skull and leg bones survive.



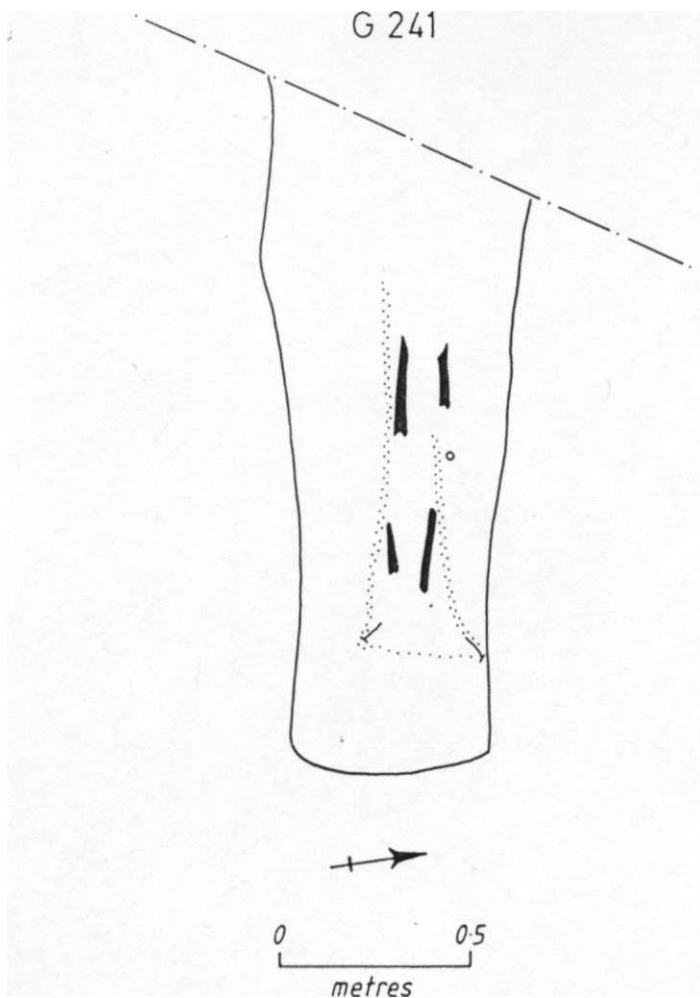
Grave 238 E-W (head to W). Cuts Period 2 G247. G296. G299. Nailed timber coffin. Child. aged 10 to 12 years. Skeleton supine. Surviving bones in fair condition.



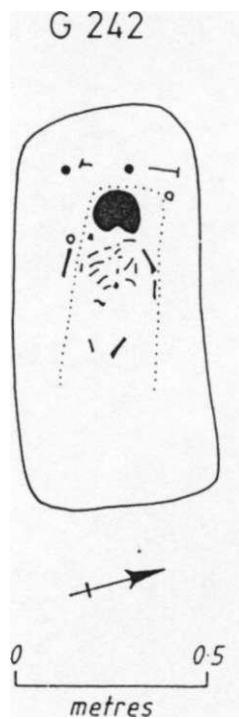
Grave 239 E-W. Cuts Period 1 Q297. Cut and largely destroyed by modern soakaway CF3. Relationships to Period 2 G230 and G234 uncertain. E end only survived. Nailed timber coffin. No skeletal material.



Grave 240 E-W (head to W). Cut by Period 2 G212. modern pipe trench CF1. Relationship to Period 1 G273 uncertain. Nailed timber coffin. Adult. sex uncertain. Skeleton supine. with legs slightly bent. knees to S. This slight flexion of the legs appears to be caused by placing the corpse in too small a coffin. Most bones survive. but in poor condition. Area of black staining across bottom of coffin beneath lower legs.

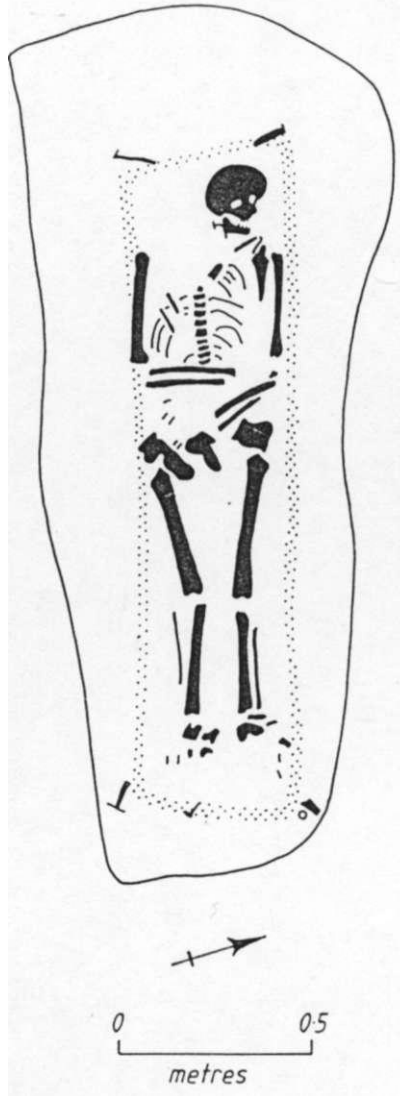


Grave 241 E-W (head to W). Cuts Period 1 G99. Cut by Period 2 G86. Relationship to Period 2 G64 uncertain. W end not excavated in Phase 1 but observed during watching brief in Phase 2. Nailed timber coffin. Adult. sex uncertain. Only shafts of leg long bones remain. in poor condition.



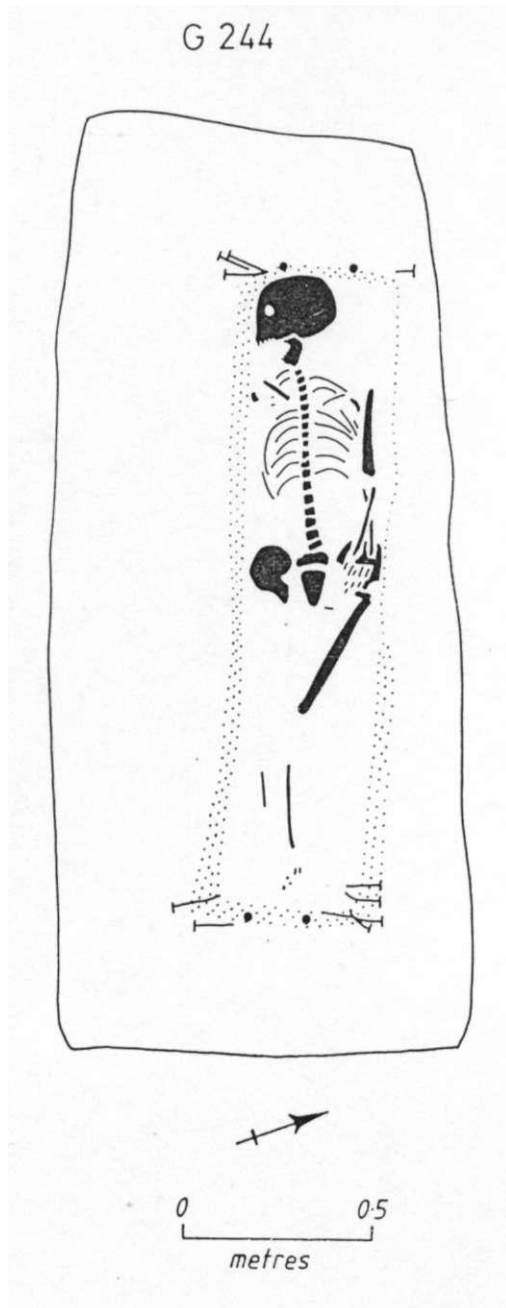
Grave 242 E-W (head to W). Cuts Period 1 G305. Isolated grave. Nailed timber coffin. Infant. Skeleton supine. Surviving bones in good condition.

G 243

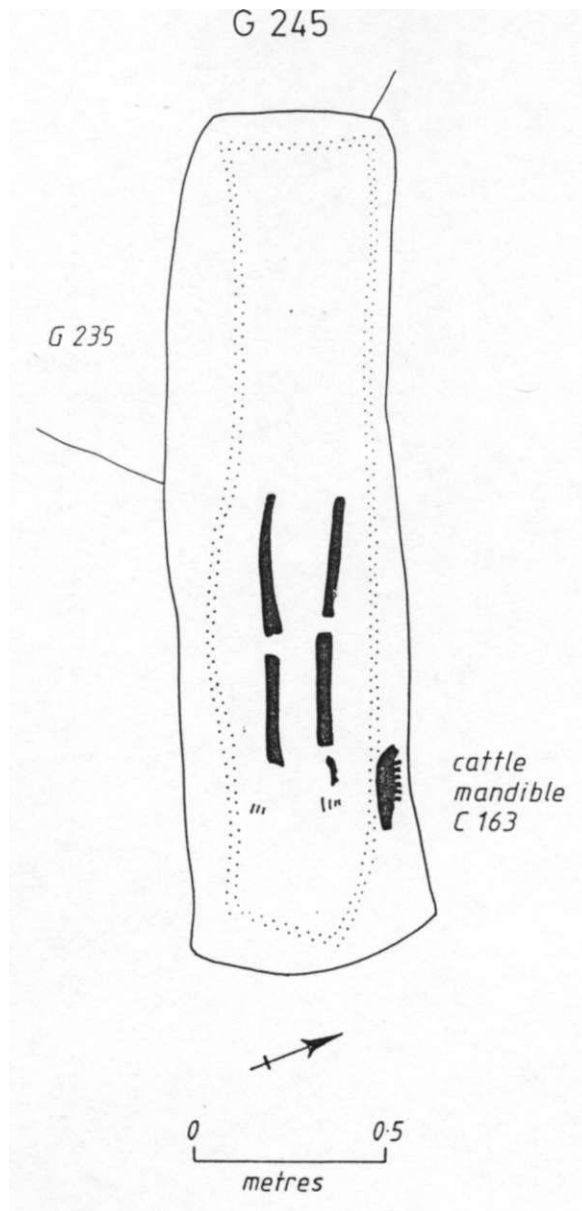


Grave 243 E-W (head to W). Cuts ?Period 2 ?inhumation G289. Relationships to Period 2 G286 and G445 uncertain. Nailed timber coffin. Middle-aged male. Skeleton supine. Bones in good condition.

G 244

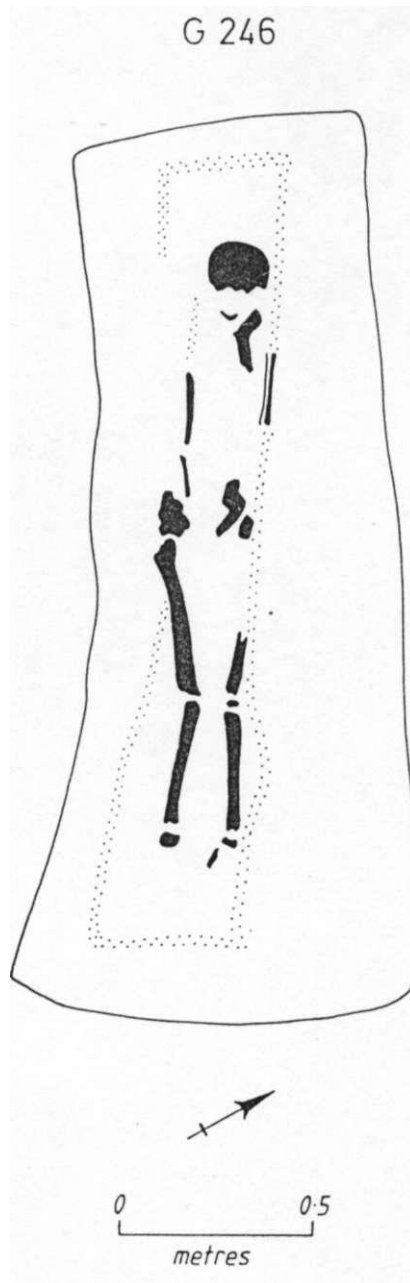


Grave 244 E-W (head to W). Cuts Period 1 G305. Cut by Period 2 G237. Nailed timber coffin. Young adult female. Skeleton supine. with legs slightly flexed. knees bent to S. Skull and upper post-cranial skeleton well preserved, lower in poor condition with surviving leg long bones stained black. Three rows of shovel marks across bottom of grave made by blade approximately 240 mm wide.



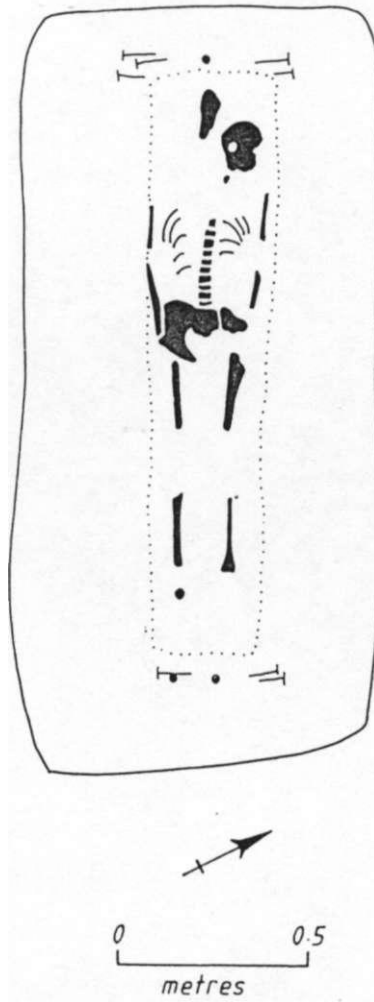
Grave 245 E-W (head to W). Cuts Period 1 G274. G282. Cut by Period 2 G235. Relationship to Period 1 G275 uncertain. Timber coffin (no nails recovered). Adult. sex uncertain. Only blackened fragments of leg and foot bones survive. in very poor condition.

G 246

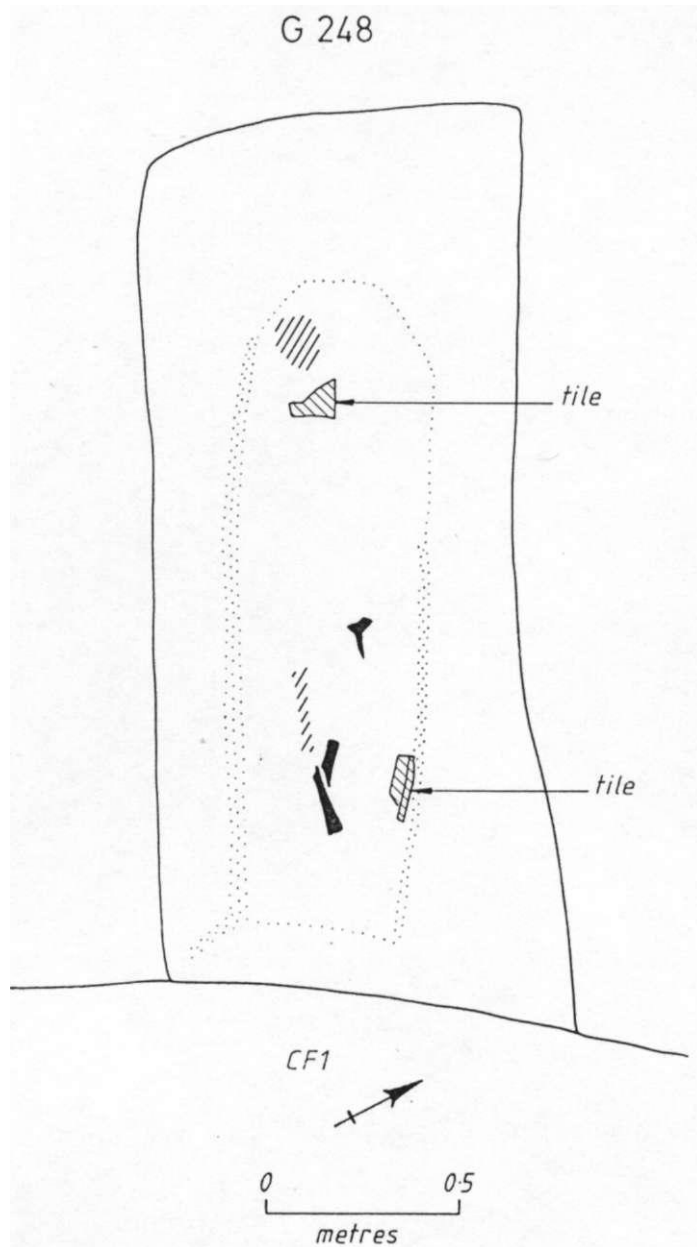


Grave 246 E-W (head to W). Cuts Period 1 G297. Period 2 G253. G294. Seals, directly overlies. and almost certainly cuts Period 2 G272. No sinkage noted in G246 which could be attributed to decay of coffin in G272. Timber coffin (no nails recovered). Adult male. Skeleton supine. Surviving bones in fair condition.

G 247

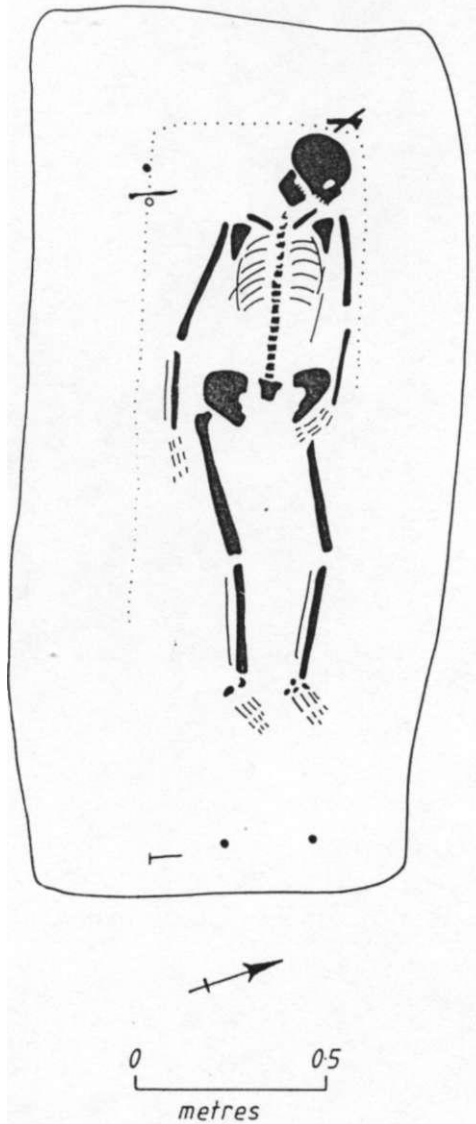


Grave 247 E-W (head to W). Cuts Period 2 G265. G299. Cut by Period 2 G238. Nailed timber coffin. Adolescent. Skeleton supine. Surviving bones in poor condition. with pelvis. spine. ribs. skull and right arm bones stained black.

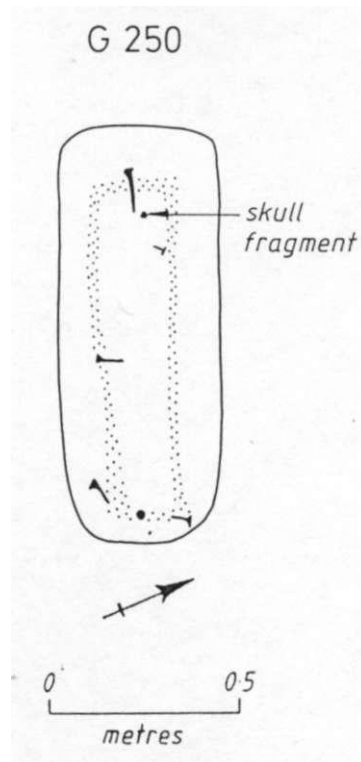


Grave 248 E-W (head to W). Cuts Period 1 G273. G290. ?Period 1 ?inhumation G458. Period 2 G252. Q257. G457. Cut by Period 2 G212. modern pipe trench CF1. Relationship to Period 2 G231 uncertain. Nailed timber coffin (nails not illustrated). W end distorted due to collapse of timber. Adult, sex uncertain. Position of skull marked as stain in soil. Only fragments of tibiae(?) remain, in very poor condition. Appeared to have been crossed. but left may have been disturbed. Large tile fragment on edge against inner face of timber stain on N side of coffin near lower legs. Another horizontally on bottom of coffin immediately E of skull. These fragments are small and may be residual in the grave fill.

G 249

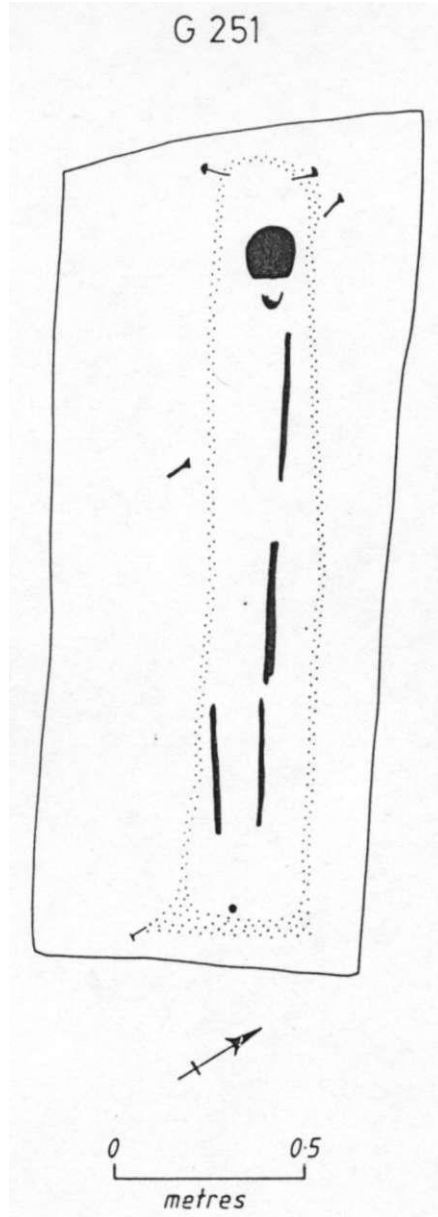


Grave 249 E-W (head to W). Cuts Period 1 or 2 N-S ditch BF165. Relationship to Period 2 G286 uncertain. Nailed timber coffin. Middle-aged male. Skeleton supine. knees slightly bent to N. Bones very well preserved.



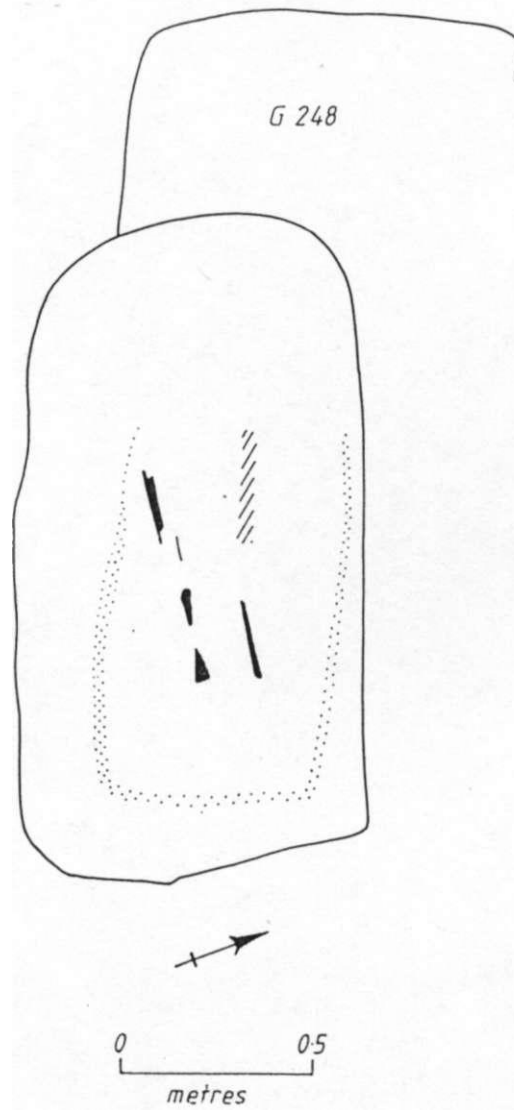
Grave 250 E-W (head to W). Cuts Period 2 G256. A shallow grave. Nailed timber coffin, length 0.84 m. width 0.16 m. Only one small skull fragment remains. Coffin size indicates infant or small child.

G 251



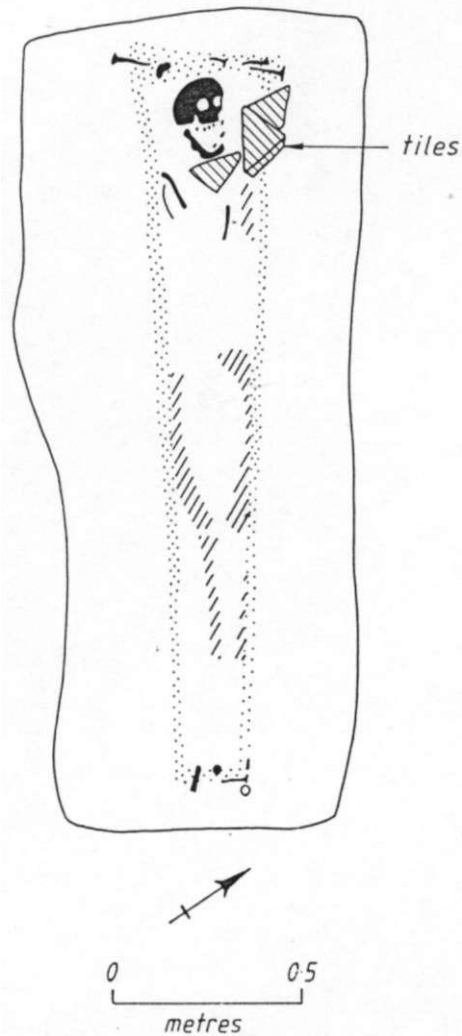
Grave 251 E-W (head to W). Cuts Period 1 G276. Cut by Period 2 G236. G256. Nailed timber coffin. Adult male. Skeleton supine. Only skull and badly decomposed fragments of some limb long bones remain.

G 252

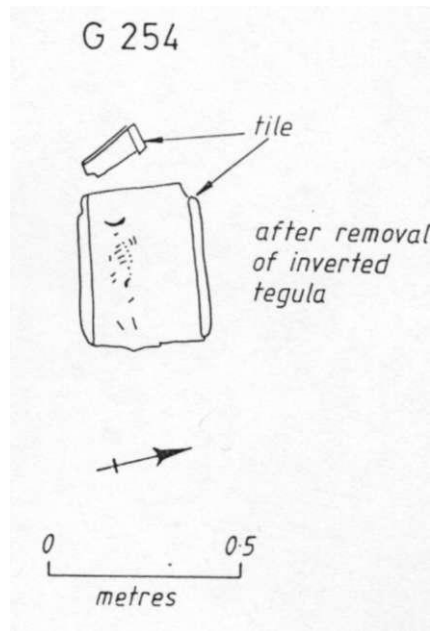


Grave 252 E-W (head to W). Cuts Period 1 G273. G290. Period 2 G257. G457. Cut by Period 2 G212. Cut and sealed by Period 2 G248. Only E half remains. but poorly preserved. Timber coffin (no nails recovered). maximum surviving length 0.96 m. width 0.56 m. Age and sex uncertain. Coffin size indicates adult. Only fragments of some leg long bones remain. in very poor condition.

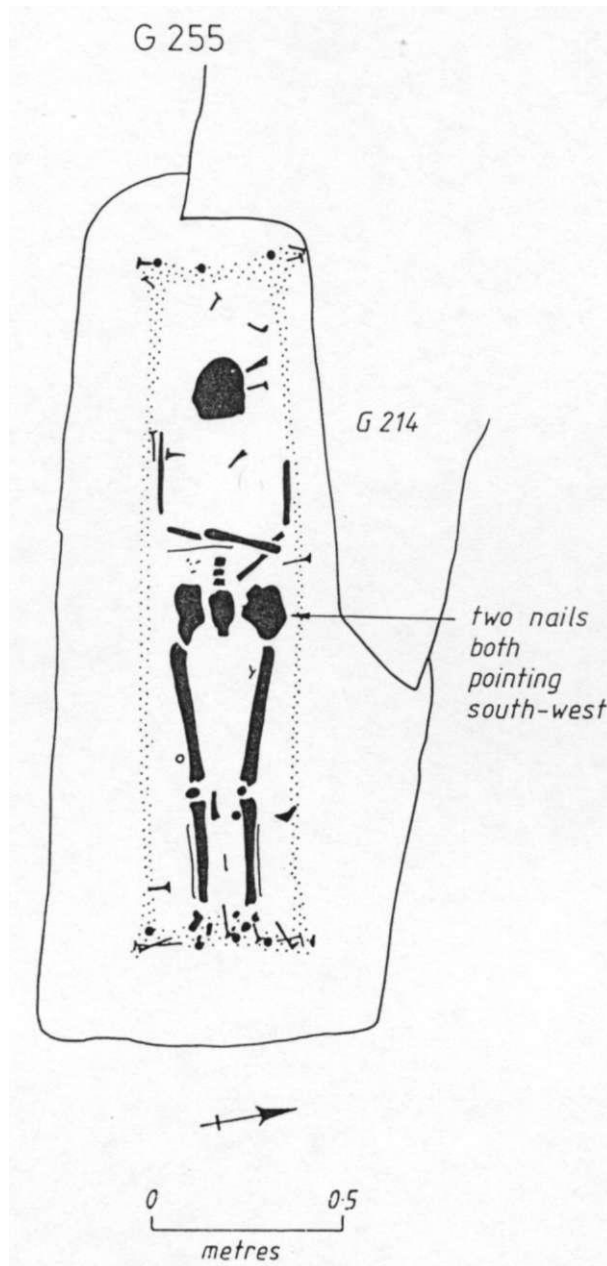
G 253



Grave 253 E-W (head to W). Cut by Period 2 G233. G246. Relationship to Period 2 G272 uncertain. Nailed timber coffin. Middle-aged male. Skeleton supine. Only skull and few upper post-cranial bones survive. in fair condition. Shafts of leg long bones remain as very soft patches in coffin fill. Three tile fragments close to coffin stain near skull. May originally have been on top of coffin, or lined part of interior. However. six more tile fragments found scattered randomly at various levels in grave fill. so probably residual.

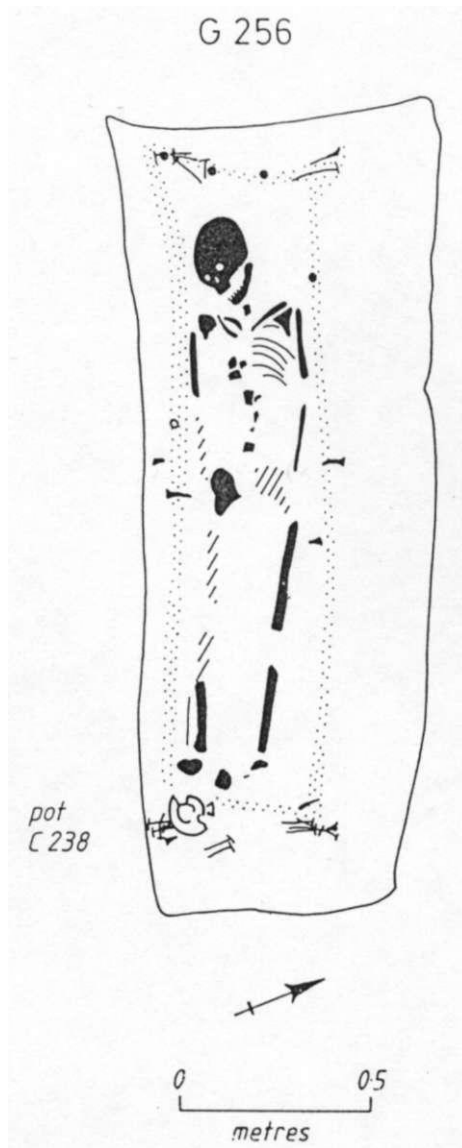


Grave 254 E-W (head to W). ?Isolated grave. No relationships could be determined (see Period 2 G258). though G254 is close to and possibly associated with Period 2 G695. an infant/small child burial. Very shallow burial. no grave cut or other edges were found. Tile coffin formed of two horizontal tegulae. upper inverted. Infant. Skeleton lying on right side. legs bent. Surviving bones in fair condition. Fragment of third tile placed vertically at W (head) end.

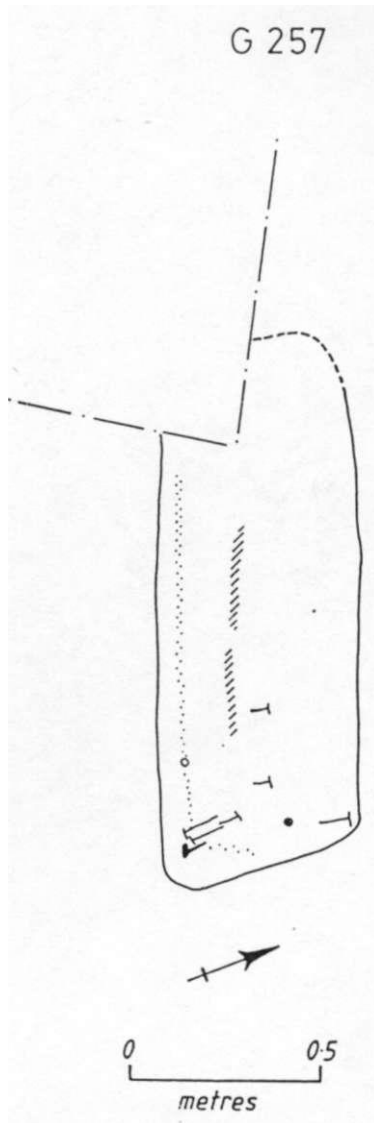


Grave 255 E-W (head to W). Cuts Period 2 G280. Cut by Period 2 G209. G214. G218. Nailed timber coffin. Elderly female. Skeleton supine. Surviving bones in good condition.

G 256

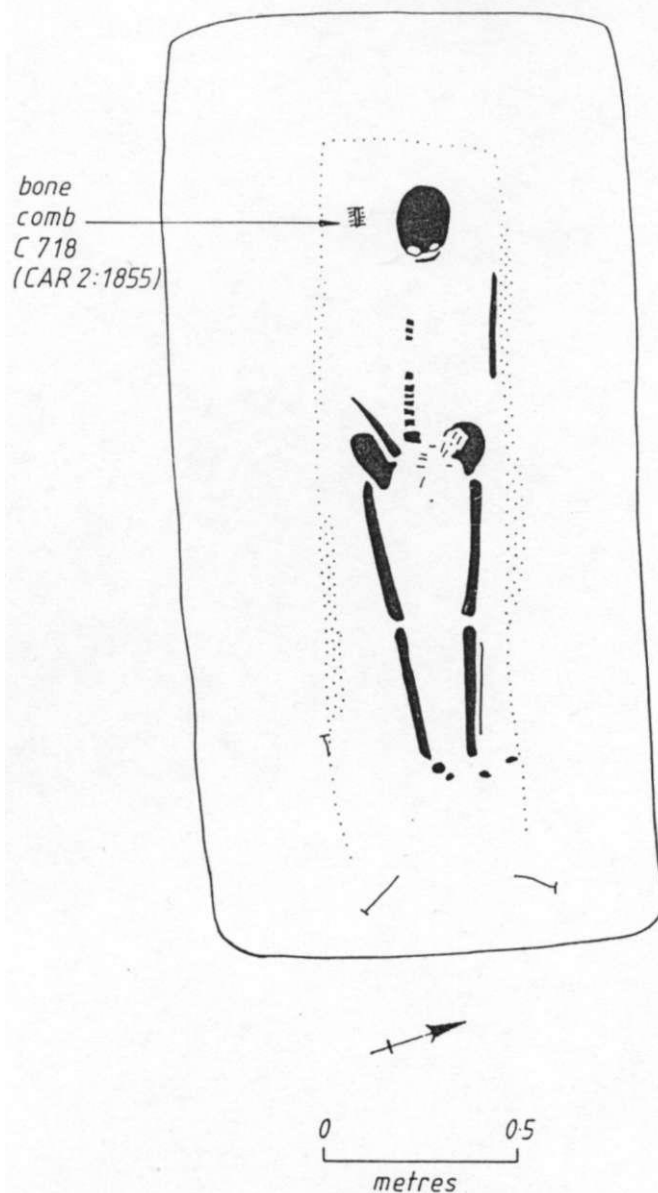


Grave 256E-W (head to W) . Cuts Period 1 G276 . Period 2 G251 . G282 . Cut by Peri

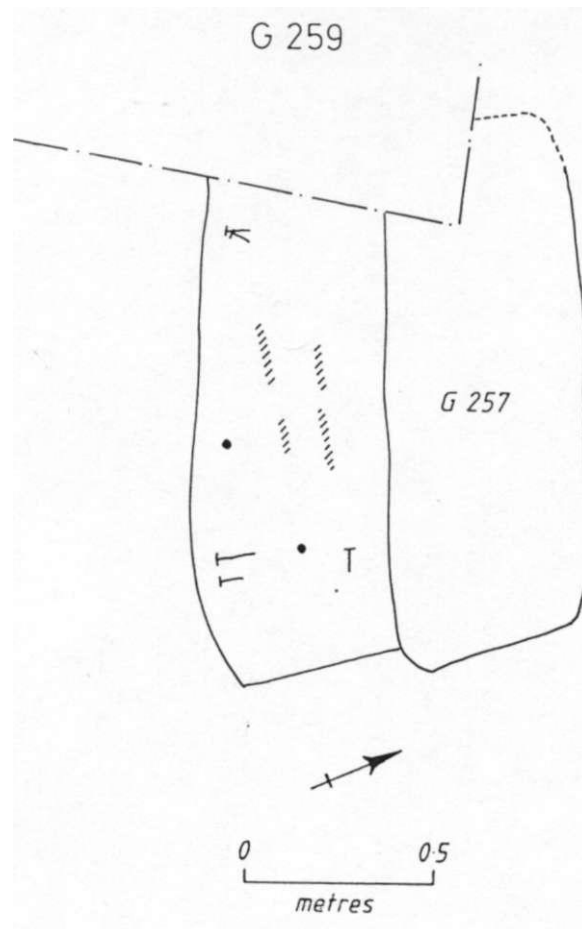


Grave 257 E-W (head to W). Cut by Period 2 G212. G248. G252. G259. SW corner not excavated. Nailed timber coffin. length approximately 1.2 m. width 0.4 m. Only impressions of right femur and tibia remained in soil. Coffin size indicates child.

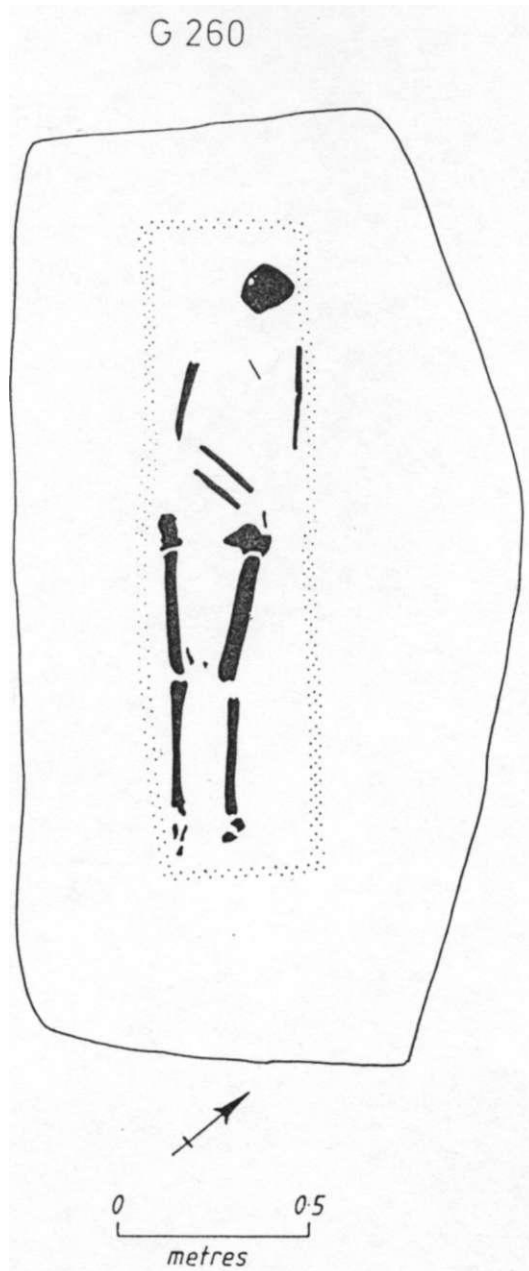
G 258



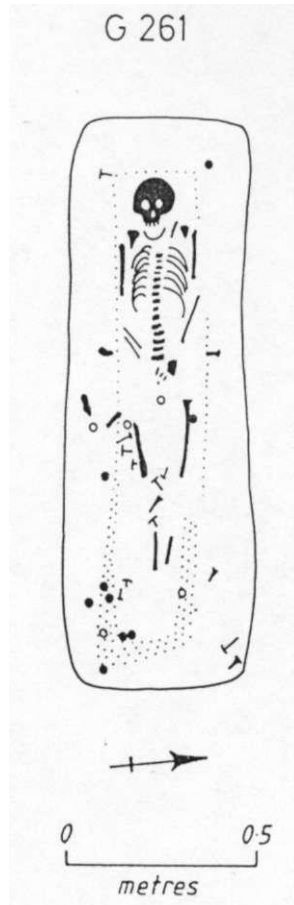
Grave 258 E-W (head to W). Cute Period 2 G284. G288. Cut by Period 2 G695. Relationships with Period 2 G234 and G254 uncertain. Nailed timber coffin. Male. age uncertain. Skeleton supine. surviving bones in poor condition. Antler comb inside coffin between S side and skull.



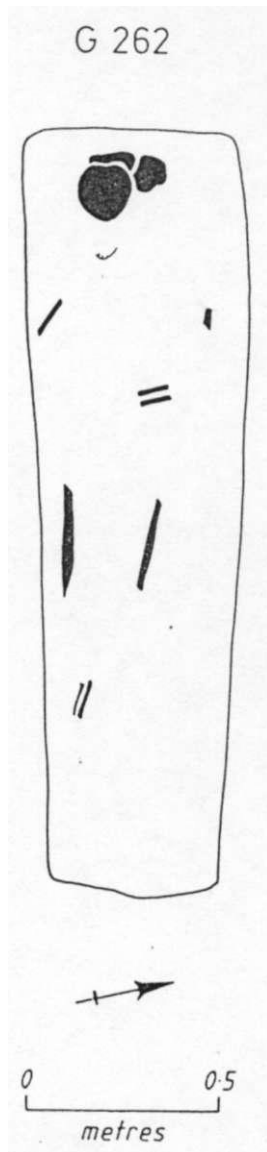
Grave 259 E-W (head to W). Cuts Period 1 G273. ?Period 1 ?inhumation G458. Period 2 G257. Cut by Period 2 G212. W end not excavated. Nailed timber coffin (no timber stain located). No skeletal material survives. only impressions of leg long bones remained in soil.



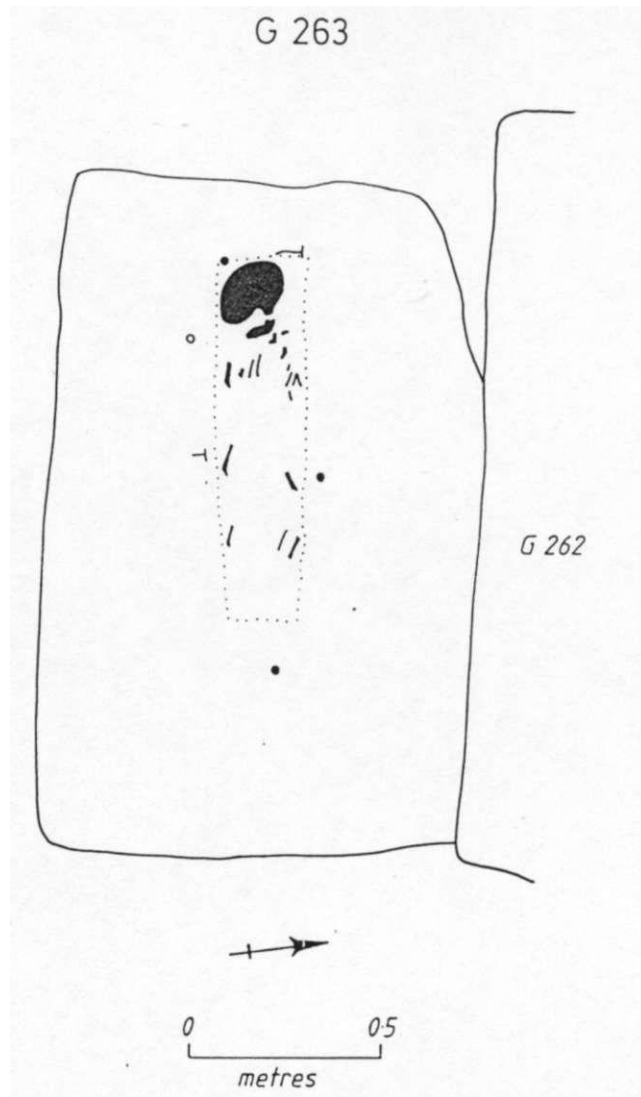
Grave 260 E-W (head to w). Cuts Period 2 G294. Relationship to Period 2 G279 uncertain. Nailed timber coffin (nails not illustrated). Sides of coffin remained vertical. approximately 300 mm deep. Adult male. Skeleton supine. Skull crushed and. with upper post-cranial skeleton. in poor condition: legs and some foot bones well preserved.



Grave 261 E-W (head to W). Isolated grave. Shallow grave. Nailed timber coffin. with traces of lid sealing skeleton. Coffin length 1.22 m. width 0.22 m. Child, aged 8 years. Skeleton supine. Surviving bones in poor condition. Coffin size indicates child.

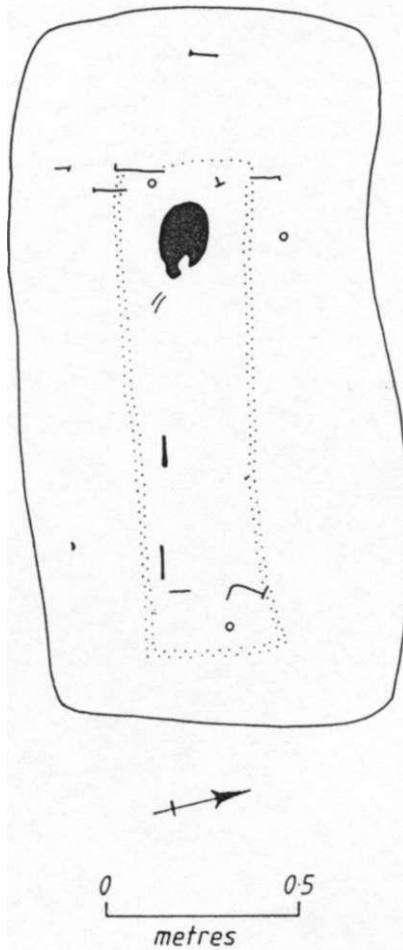


Grave 262 E-W (head to W). Cuts Period 2 G224. G263. G437. Nailed timber coffin (not illustrated). Adult. sex uncertain. Only skull (crushed) and fragments of shafts of long bones remain, in very poor condition.

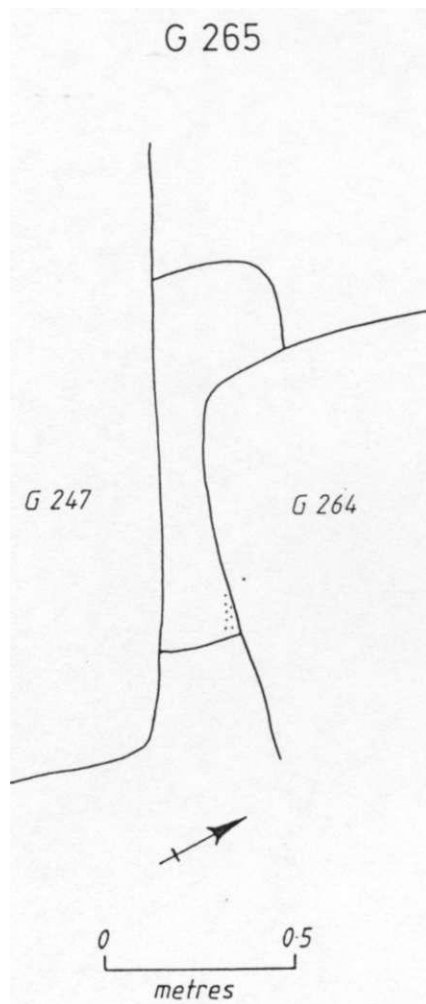


Grave 263 E-W (head to W). Cuts Period 1 E-W ditch CF35. Cut by Period 2 G262. Relationship to Period 2 timber vault G225 uncertain. Nailed timber coffin in very broad grave. Grave length 1.78 m. width 1.12 m (appears to be even wider at E end but cut by G262). Child, aged 3 years. Skeleton supine. Surviving bones in fair condition.

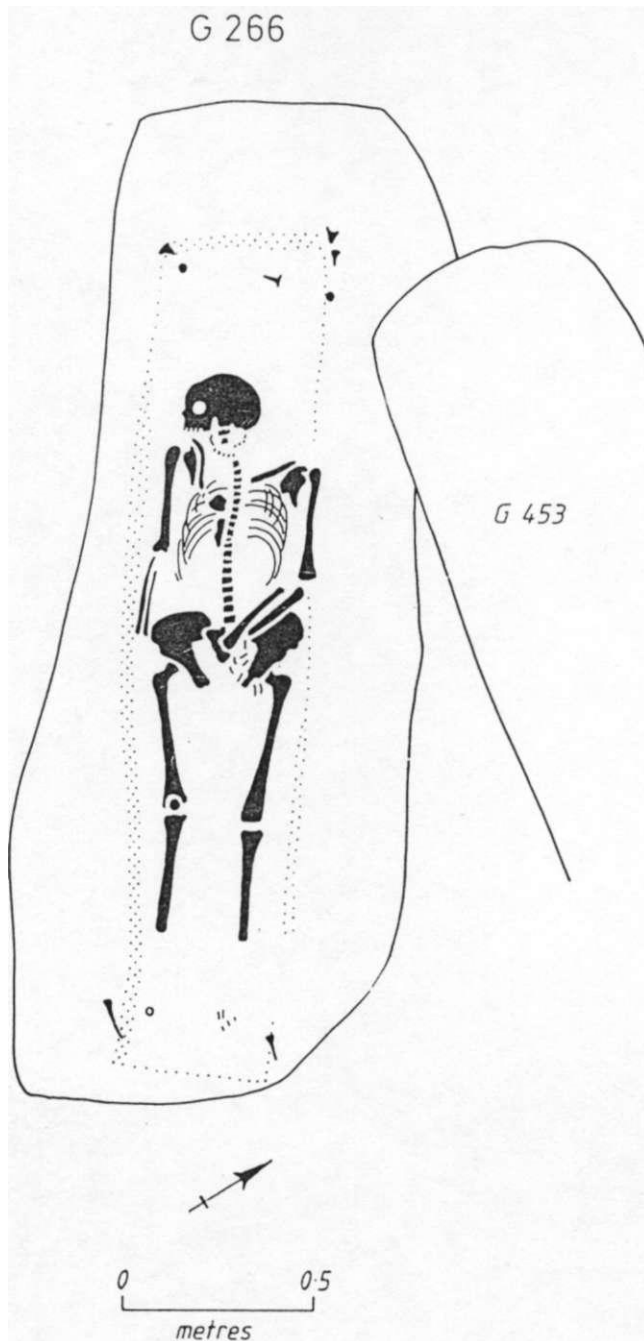
G 264



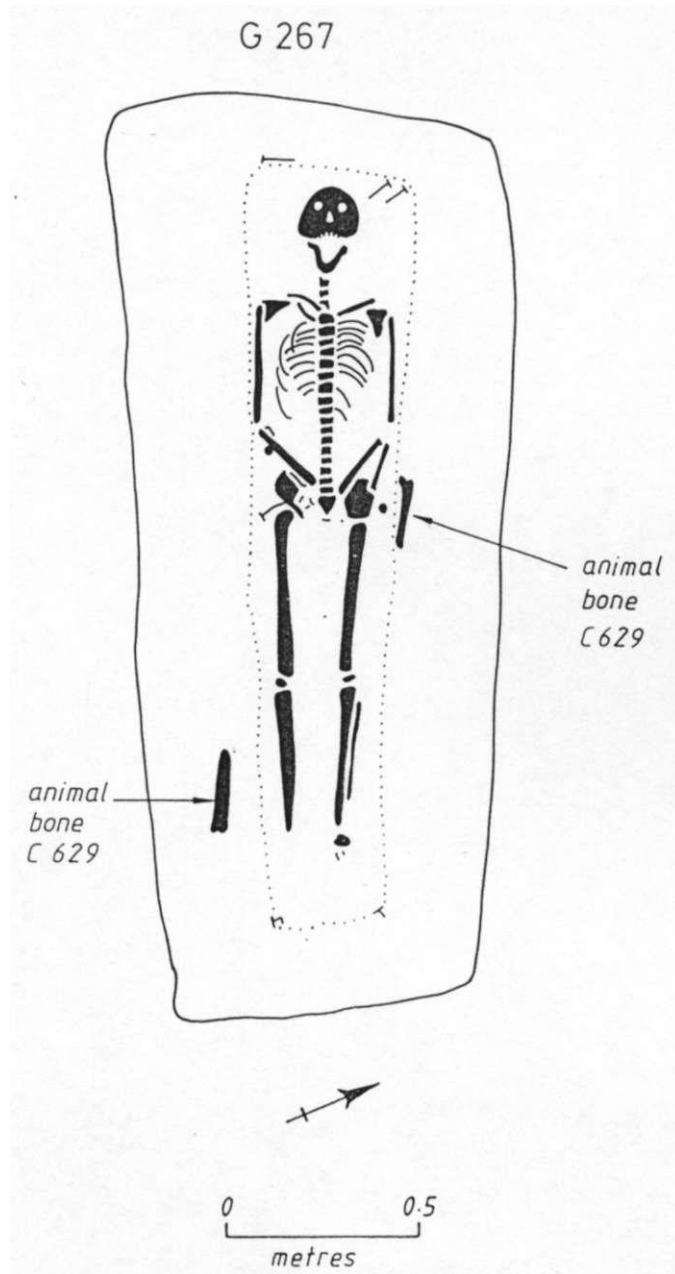
Grave 264 E-W (head to W). Cuts Period 2 G265. G295. Nailed timber coffin. Child, aged 5 years. Only skull and few post-cranial bones remain, in fair condition.



Grave 265 E-W. Cut by Period 2 G247. G264. Largely destroyed by G264. Grave length 1.0 m. surviving width 0.34 m. Timber coffin indicated by a small patch of timber stain running E-W (no nails recovered). Timber stain very close to E edge of grave. No skeletal material survived. Grave length indicates child. though proximity of coffin side to grave end may suggest that full length of grave not excavated.

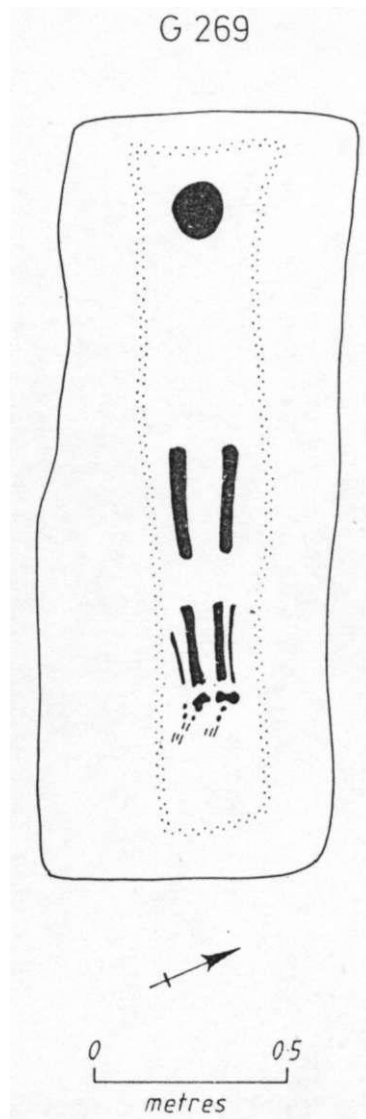


Grave 266 E-W (head to W). Cuts Period 1 G275. G456. Period 2 G455. Cut by Period 2 G454. Relationship to Period 2 G453 uncertain. Upper part of S side of grave irregular and enlarged. probably result of collapse when originally excavated. A thickness of approximately 0.2 m of fill between base of coffin and bottom of grave was probably loose material from collapse, spread and levelled to receive coffin. Nailed timber coffin, about 2.15 m long. Young adult male. Skeleton supine. Bones in good condition. Space of about 0.3 m between top of skull and W end of coffin.

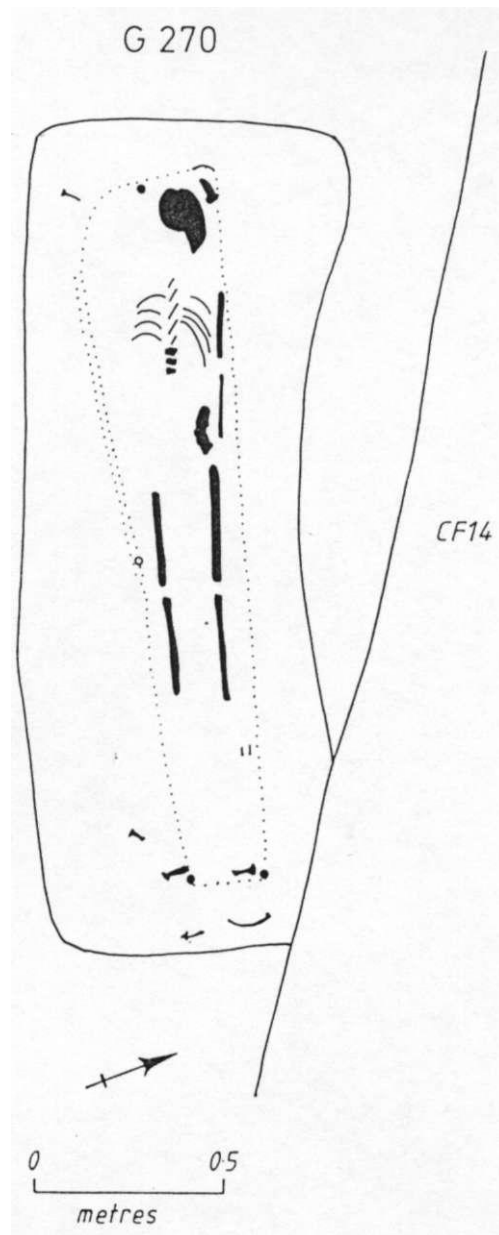


Grave 267 E-W (head to W). Cuts Period 2 G293. Relationship to Period 2 G331 uncertain. Nailed timber coffin. Middle-aged male. Skeleton supine. Bones in good condition.

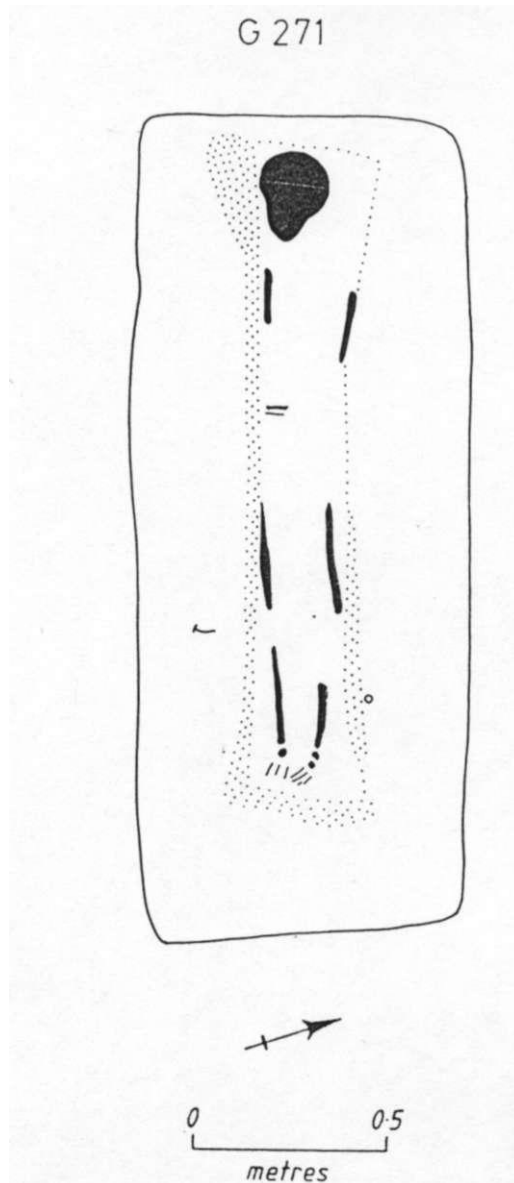
G 269



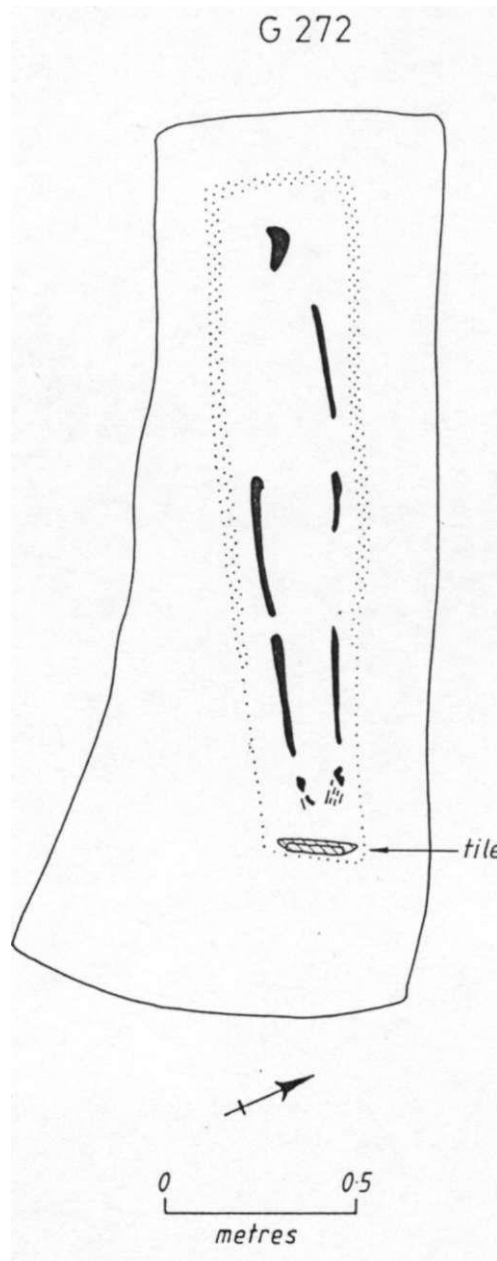
grave 269 E-W (head to W). Cut by Period 2 G231. G235. G449. G454. Nailed timber coffin (nails not illustrated). Timber stain noted above skeleton. from lid or. more likely, collapsed sides. Adult male. Skeleton supine. Only skull and leg and foot bones remain, in fair condition.



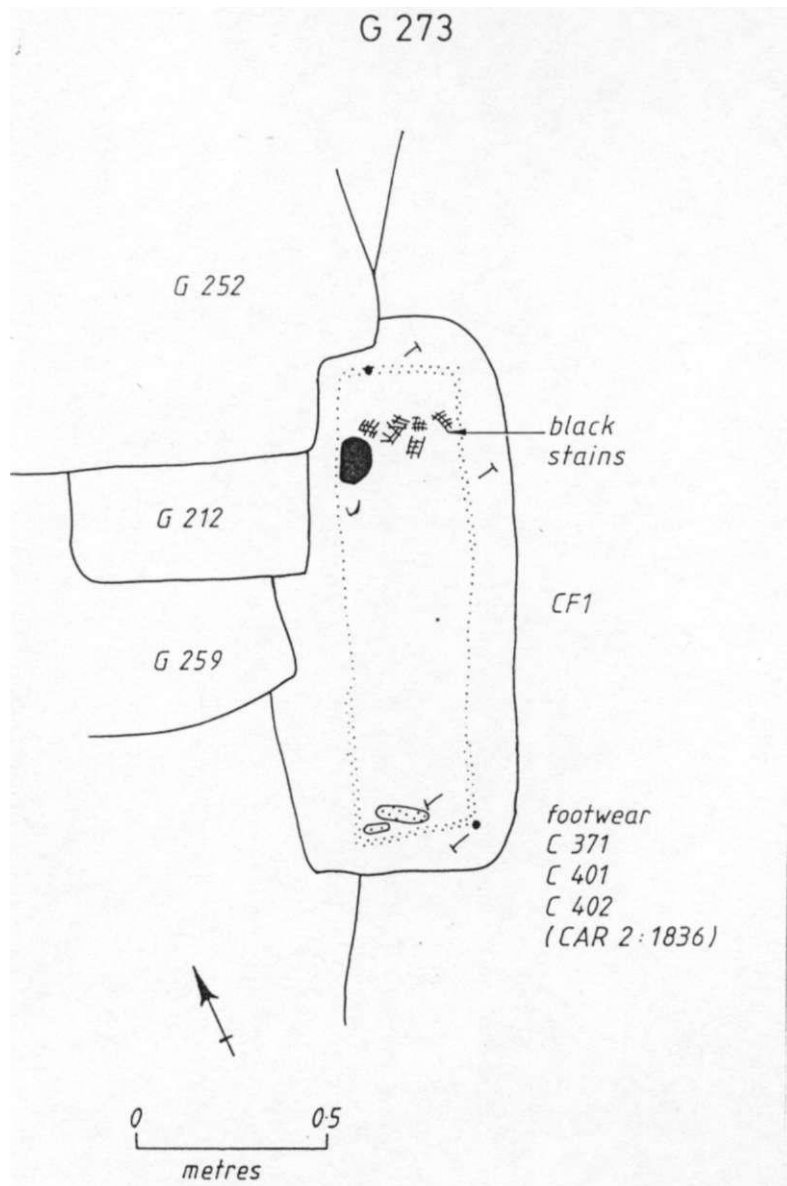
Grace 270 E-W (head to W). Cuts Period 2 G295. Cut by modern construction trench CF14. Relationship to Period 2 G298 uncertain (G270 may cut it). Nailed timber coffin. Young adult female. Skeleton supine. Surviving bones in poor condition.



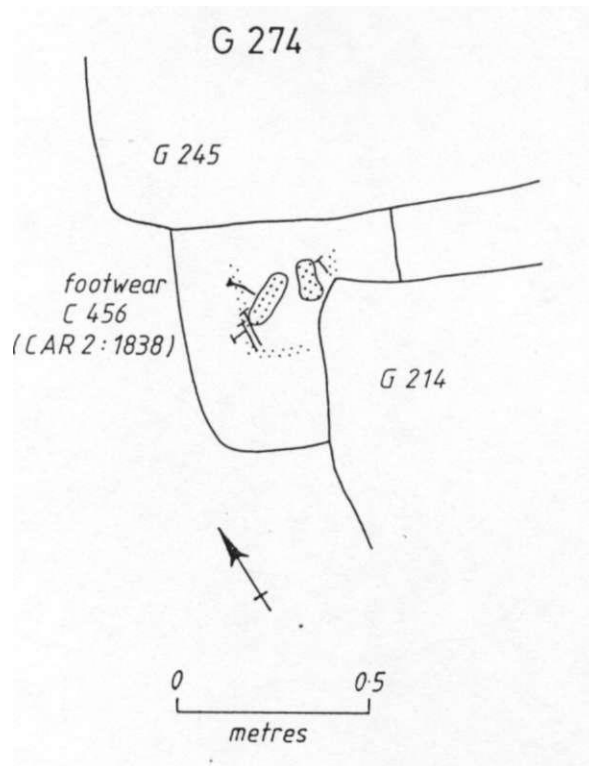
Grave 271 E-W (head to W). Cuts Period 1 G305. Period 2 G296. Cut by Period 2 trench CF11. Nailed timber coffin. Adult, sex uncertain. Skeleton supine. Only skull, some shafts of limb long bones. and foot bones remain, in fair condition.



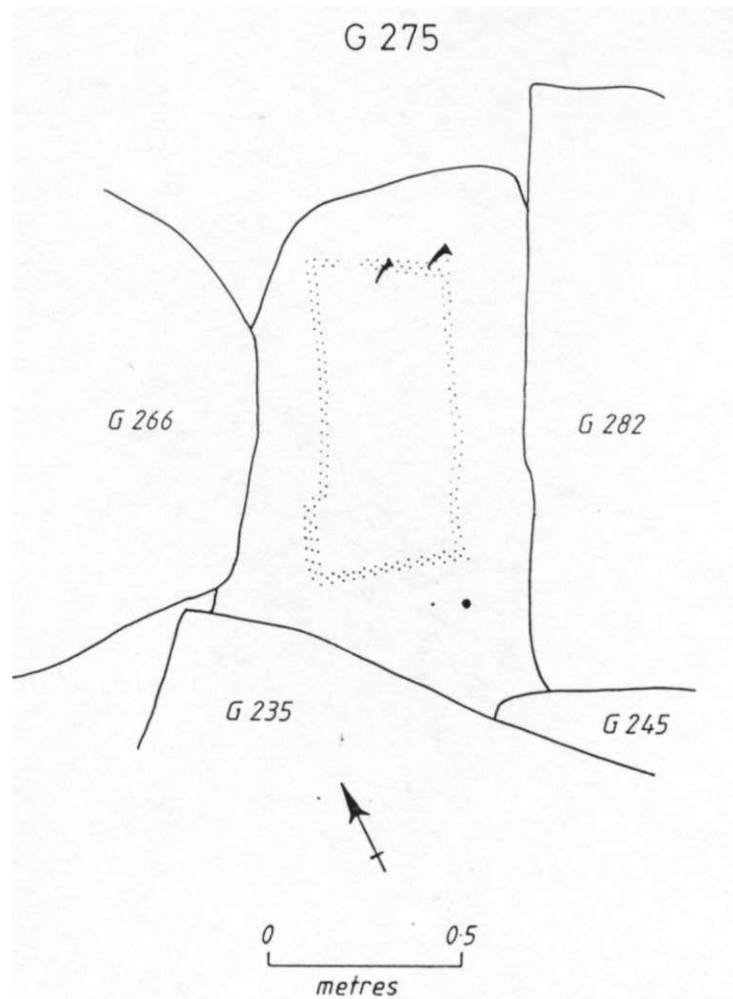
Grave 272 E-W (head to W). Cuts Period 1 G297. Period 2 G294. Cut. overlain. and sealed by Period 2 G246. Relationship with Period 2 G253 uncertain. Timber coffin (no nails located). Tile fragment on edge inside E end of coffin up against timber stain. Adult. sex uncertain. Skeleton supine. Skull and some limb long bones remain, in very poor condition. Most foot bones also remain, well preserved.



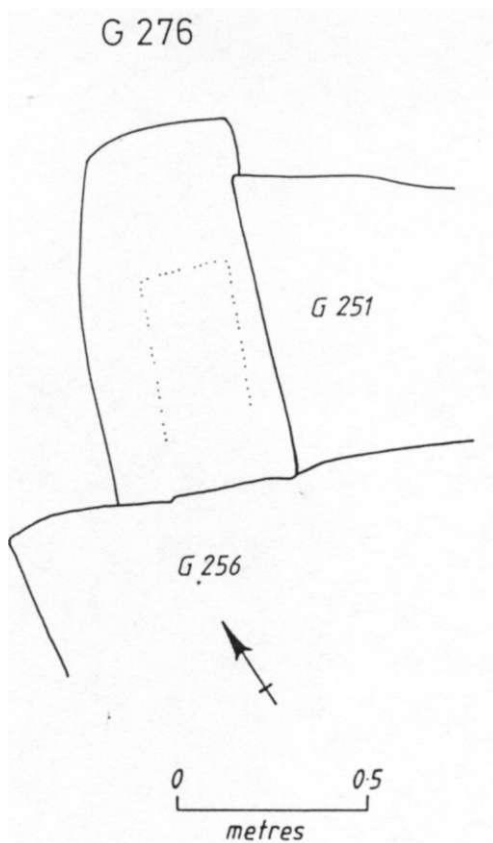
grave 273 N-S (head to N). Isolated grave. Cut by Period 2 G210. G212. G248. G252. G259. Relationship to Period 2 G240 uncertain. Nailed timber coffin. length 1.2 m. width 0.3m. Coffin size indicates child. Only fragments of skull remain. in very poor condition. Inside coffin at S end a pair of hobnailed shoes lay on their sides.



Grave 274 N-S (head probably to N). Isolated grave. Cut and largely destroyed by Period 2 G214. G231. G235. G245. Extreme S end only remained. though probably length not exceeding 1.16 m (no trace of N end in area beyond G245). Nailed timber coffin. No skeletal material. Grave size indicates child. Pair of hobnailed shoes inside S end of coffin. These suggest head to N.

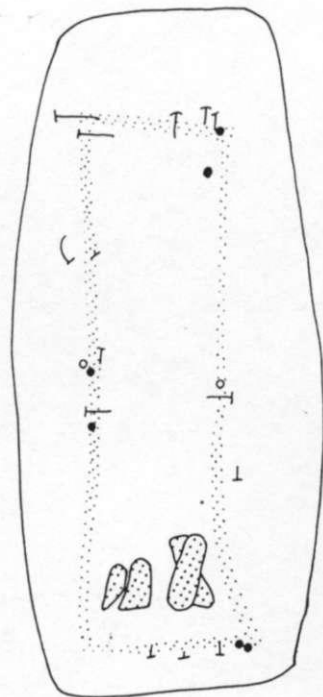


Grave 275 N-S. Probably isolated grave. Cut by Period 2 G266. Relationships to Period 1 G282 and Period 2 G235. G245 uncertain. Grave cut of G275 appears to respect coffin of G282. Nailed timber coffin. length 0.8 m. width 0.3 m. No skeletal material. Coffin size indicates child.



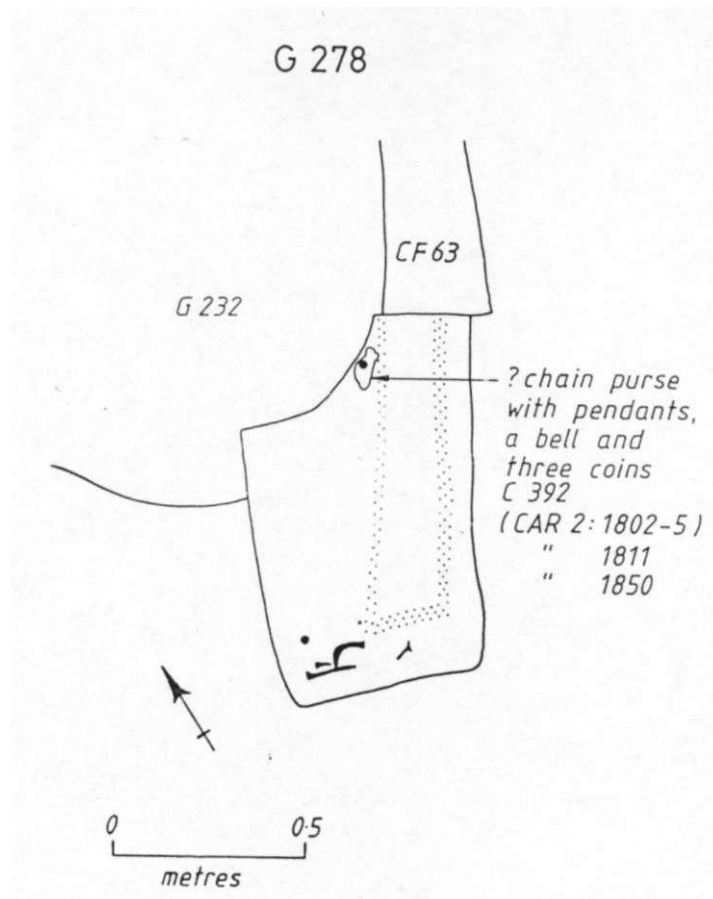
Grave 276 N-S (head to N). Isolated grave. Cut by Period 2 G251. G256. S end probably destroyed by G256. Poorly preserved grave. Timber coffin (no nails recovered), length <0.4 m. width 0.22 m. Age and sex uncertain. Coffin and grave sizes indicate child. Fragment of leg bone only remains, in very poor condition.

G 277

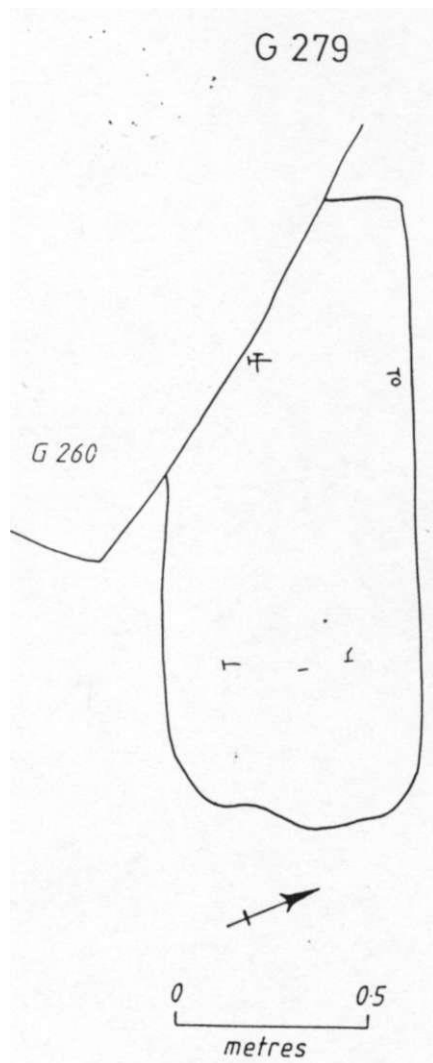


footwear-
2 pairs
C 438
C 439
(CAR 2:1837)

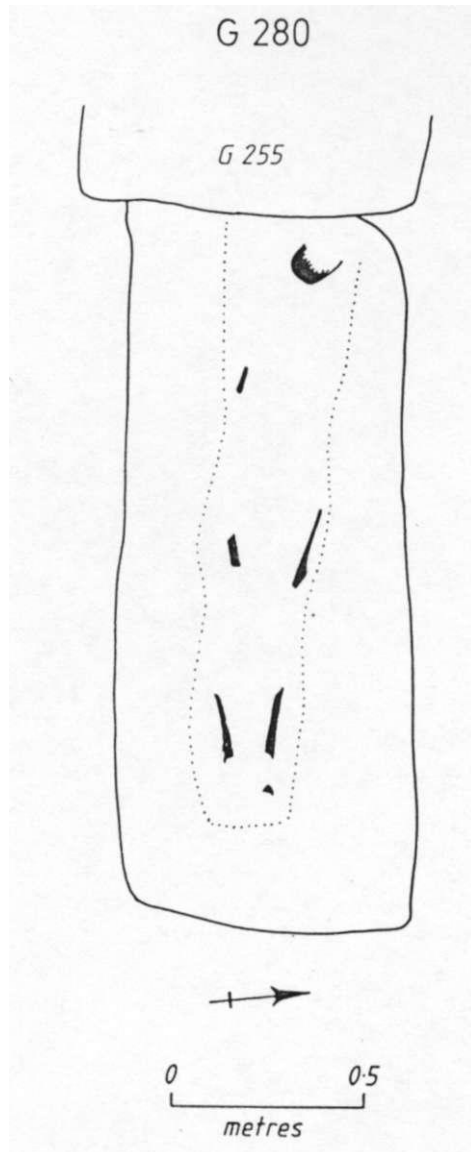
Grave 277 N-S (head to N). Cut by Period 1 G291. Period 2 G229. G233. Nailed timber coffin. length 1.42 m. width 0.32 m. Coffin size indicates older child or small adult. Only fragments of some teeth survived at N end (not illustrated). Inside coffin at S end lay two pairs of hobnailed shoes. one pair crossed. other pair less well-preserved and exact position uncertain.



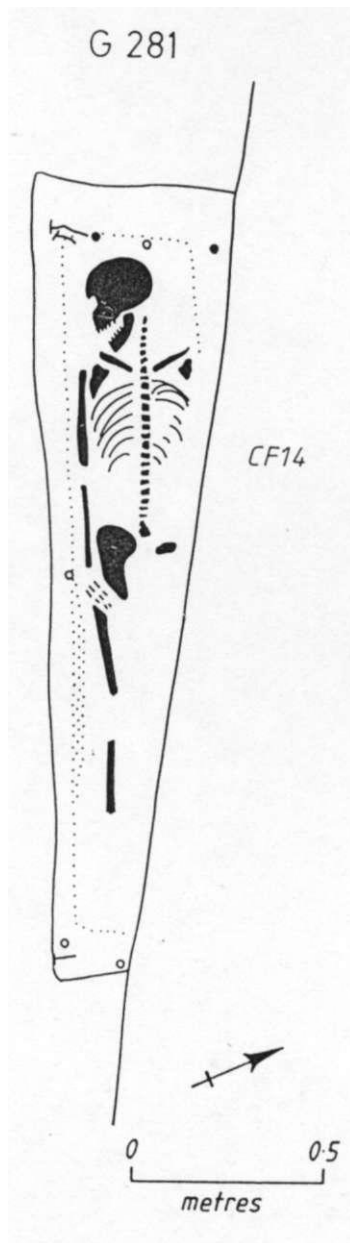
Grave 278 N-S. Isolated grave. Cut by Period 2 G232. modern pit CF63. N end destroyed by later activity. though probably length not exceeding 1.6 m (no trace of N end in the area beyond G232 and CF63). Nailed timber coffin. surviving length 0.76 m. width 0.16 m. No skeletal material. Coffin size may indicate child. Chain ?purse sealed by collapsed W side of coffin. Contained amulets of amber. tooth, and copper-alloy, including three coins. two pierced (Claudius I. AD 43-64. Julia Maesa. AD 218-25). and one mounted for suspension (Hadrian. AD 117-38).



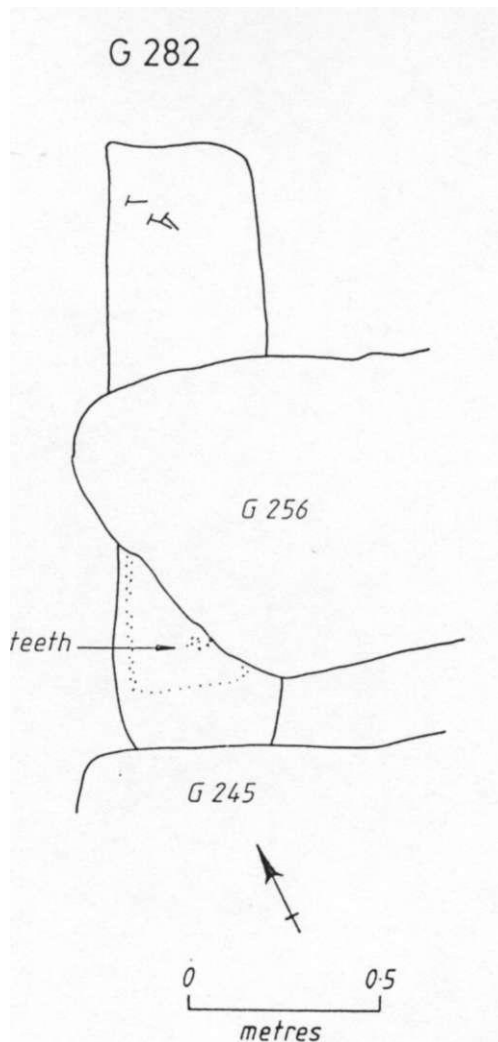
Grave 279 E-W. Relationship to Period 2 G260 uncertain. Nailed timber coffin (timber stain not illustrated), length approximately 0.8 m. width 0.34 m. No skeletal material. Coffin size indicates small child.



Grave 280 E-W (head to W). Cuts Period 1 or 2 N-S ditch CF32. ?Period 2 ?inhumation G289. Cut by Period 2 G255. Grave poorly preserved. Timber coffin (no nails recovered). Adult, sex uncertain. Skeleton supine. Only skull and shafts of some limb long bones remain, in very poor condition.

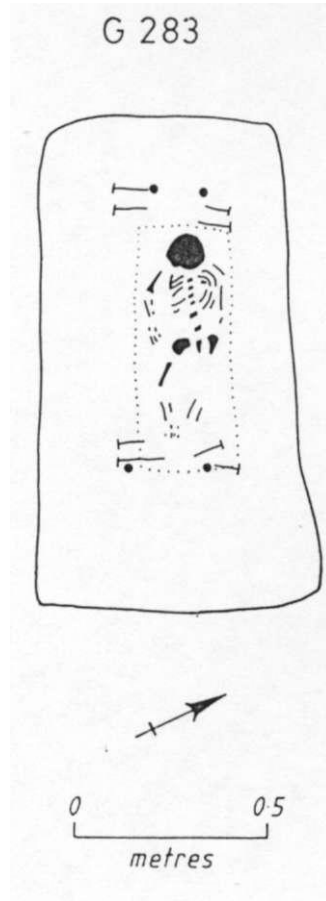


Grave 281 E-W (head to W). Cut and partly destroyed by modern construction trench CF14. Relationship to Period 2 G295 uncertain. Nailed timber coffin. Young adult female. Skeleton supine. Surviving bones in good condition.

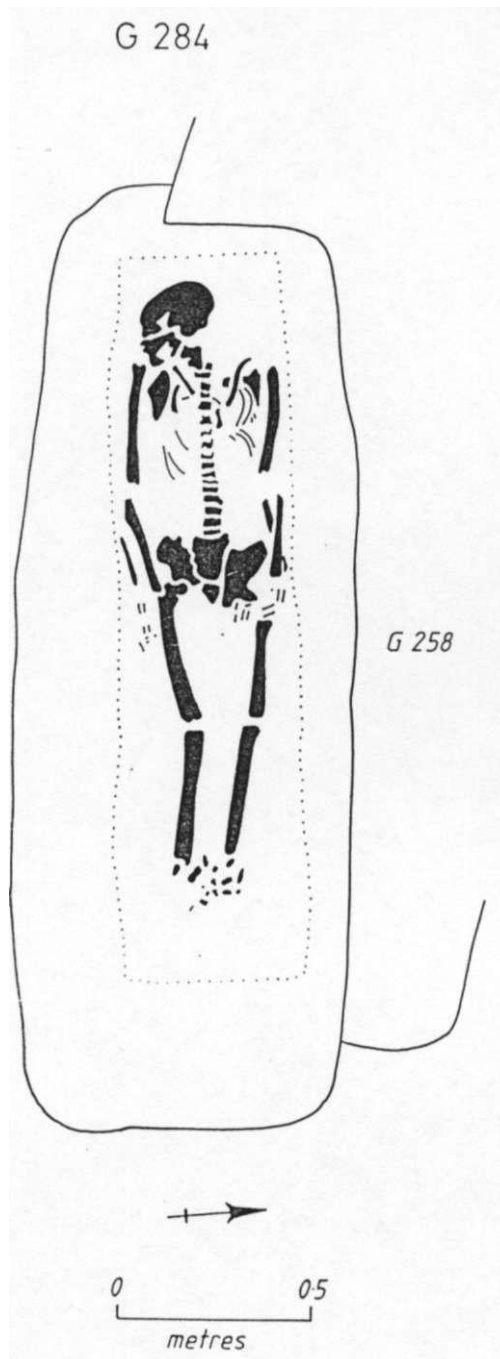


Grave 282 N-S (head to S). Cut by Period 2 G245. G256. Relationship to Period 1 G275 uncertain. Nailed timber coffin. length approximately 1.3 m. width 0.28 m. Only teeth remain. at S end. No pathological report. Coffin size indicates child.

G 283

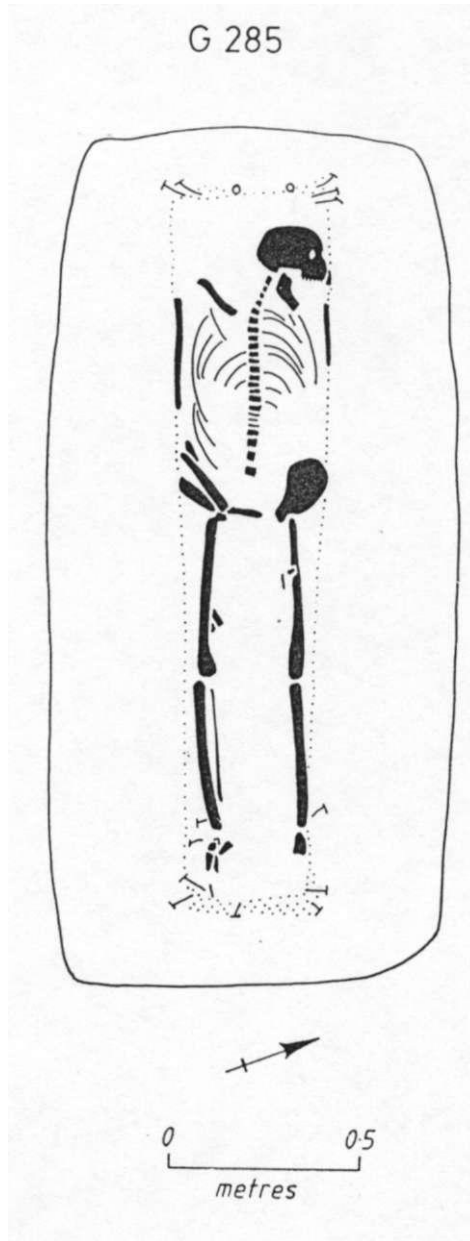


Grave 283 E-W (head to W). Cuts Period 2
G298. G369. Nailed timber coffin. Neonate.
Skeleton supine, one foot on the other.
Surviving bones in good condition.



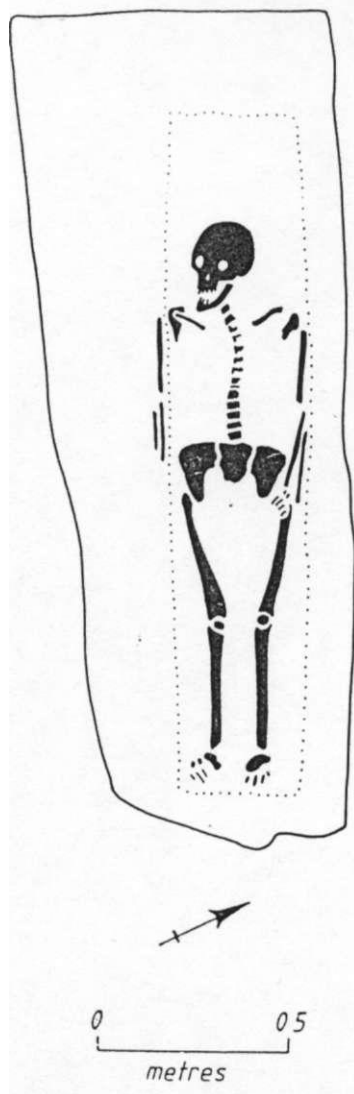
Grave 284 E-W (head to W). Cut by Period 2 G258. G288. G695. Timber coffin (no nails recovered). Middle-aged male Skeleton supine. Bones in good condition.

G 285

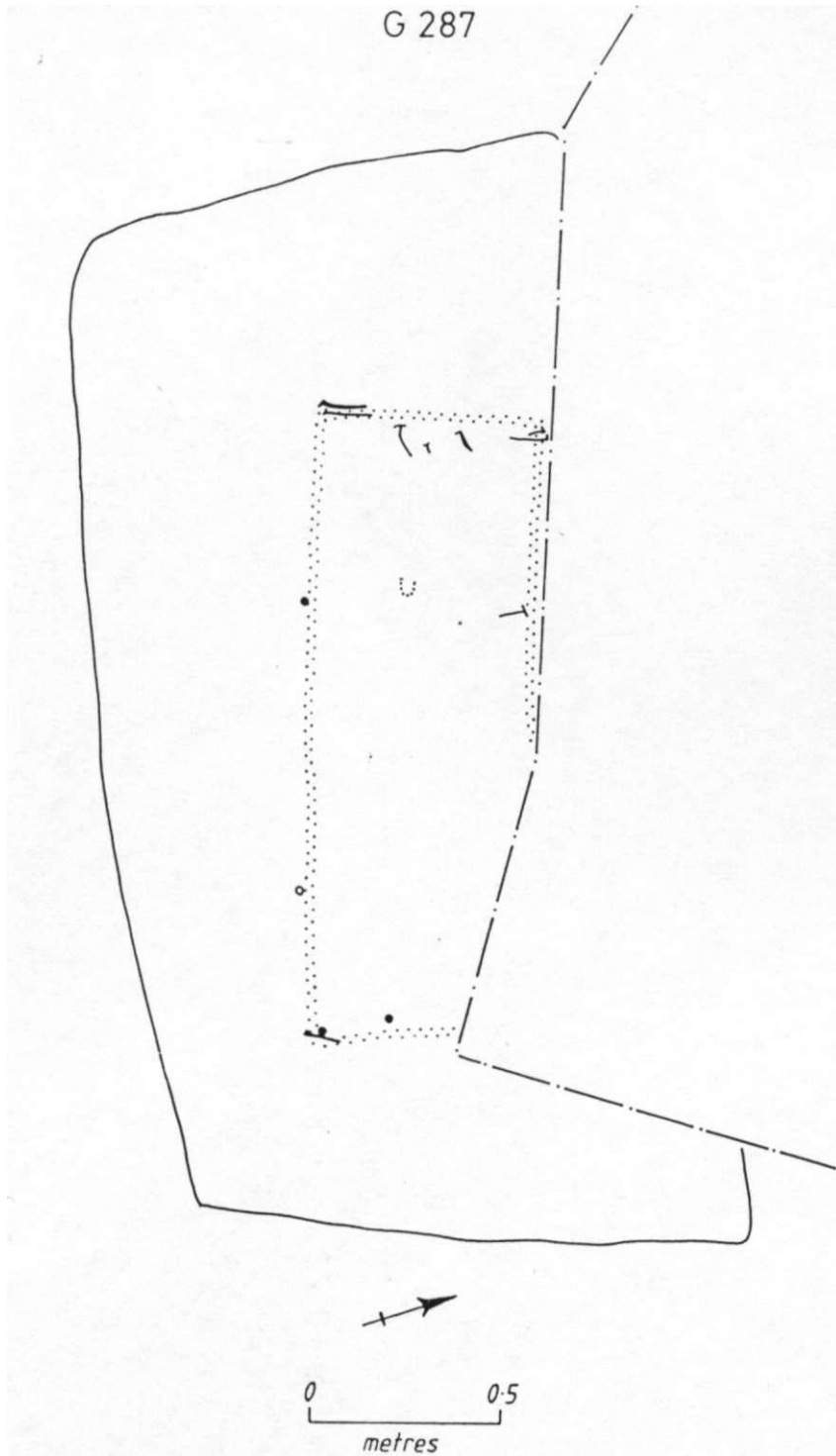


Grave 285 E-W (head to W). Isolated grave. Nailed timber coffin. length 1.84 m. width 0.38 m. Middle-aged male. Skeleton supine. Surviving bones in poor condition.

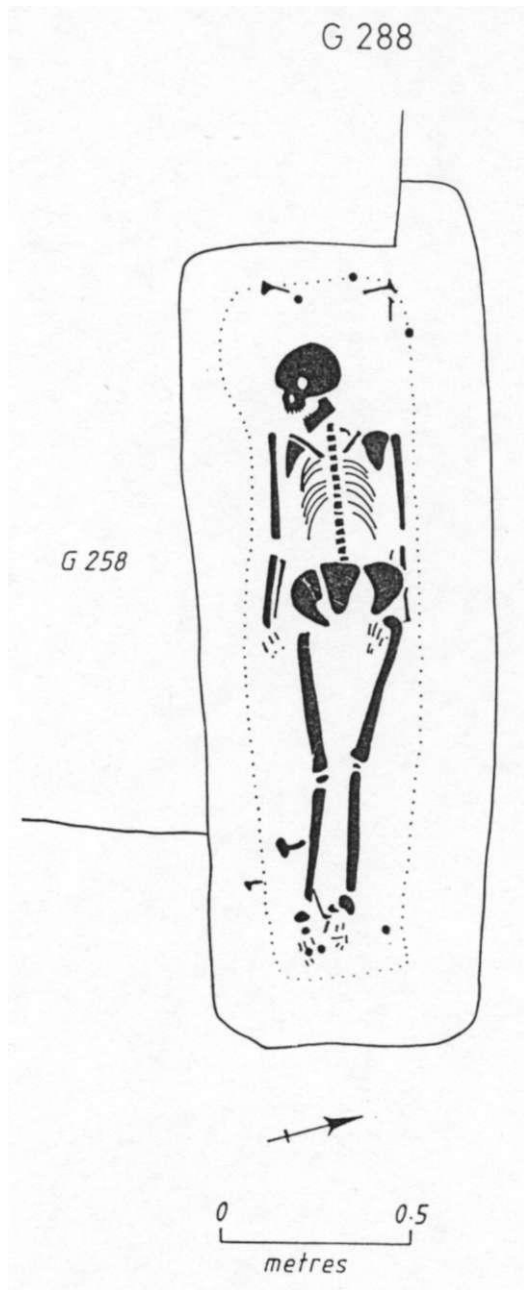
G 286



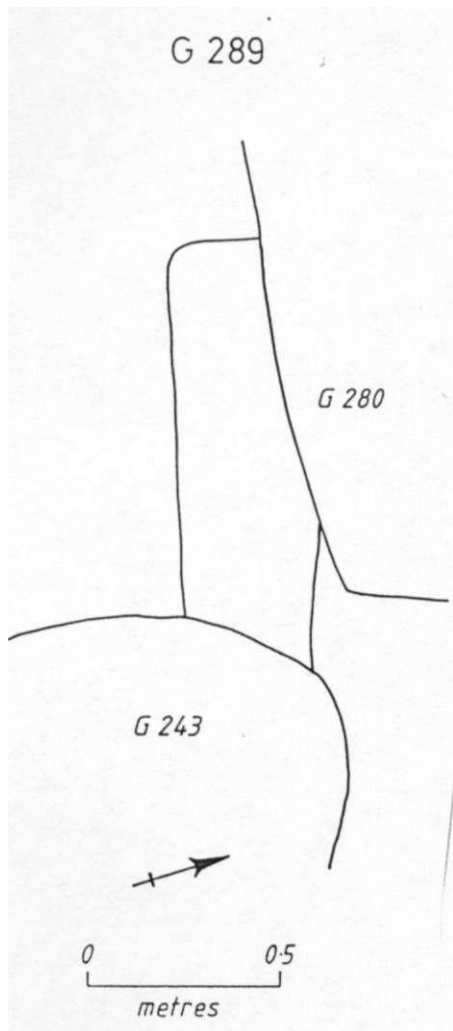
Grave 286 E-W (head to W). Cuts Period 1 or 2 N-S ditch CF32. Relationships to Period 2 G243 and G249 uncertain. Nailed timber coffin (nails not illustrated). Young adult female. Skeleton supine. Surviving bones in good condition. Gap of 0.28 m between top of skull and W end of coffin.



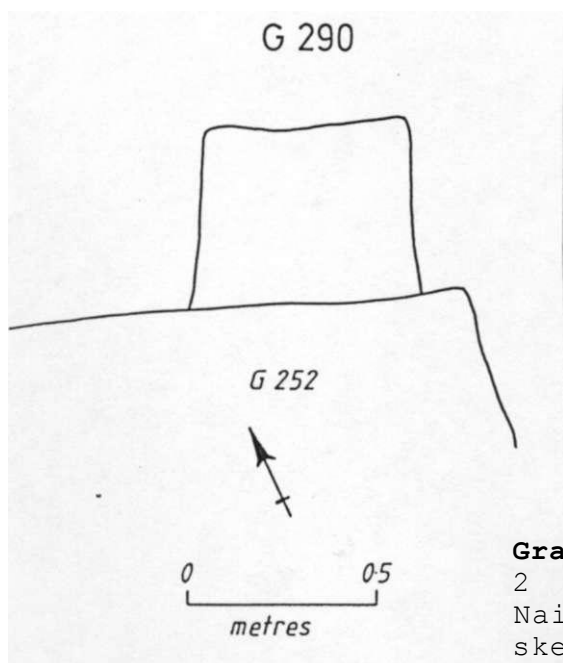
Grave 287 E-W (head to W). Isolated grave, maximum length 2.94 m. maximum width 1.46 m. Part of N side of both grave and coffin not excavated. Nailed timber coffin. 1.62 m long. 0.54 m wide, only 100 mm difference in level between highest lid nail and lowest base nail. timber stain consistently shallow all round coffin. Coffin either extremely compressed on decay or exceptionally shallow. Child. aged 2 to 3 years. Teeth only remained. 0.42 m from W end. Generously-sized grave pit for coffin. and generously-sized coffin for small child.



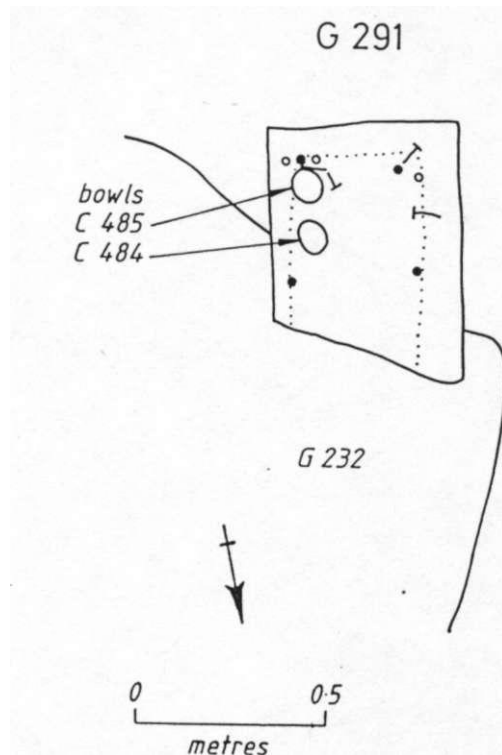
Grave 288 E-W (head to W) . Cuts Period 2 G 284 . Cut by Period 2 G 258 . G 293



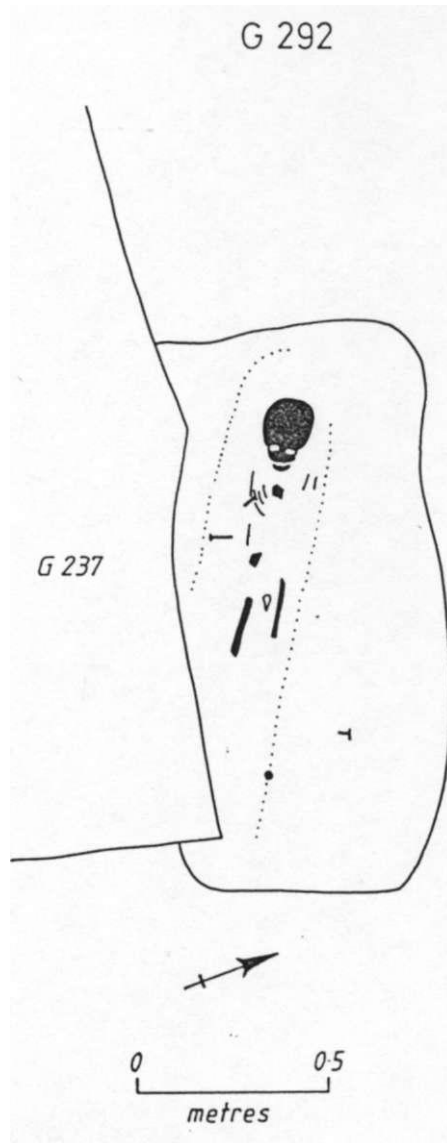
Grave 289 ?E-W. Cuts Period 1 or 2 N-S ditch CF32. Cut by Period 2 G243. G280. Rectangular feature. maximum surviving length 1.12 m. width 0.36 m. Probably an unused grave pit. No trace of coffin or skeletal material. Stratigraphy and form suggest E-W grave.



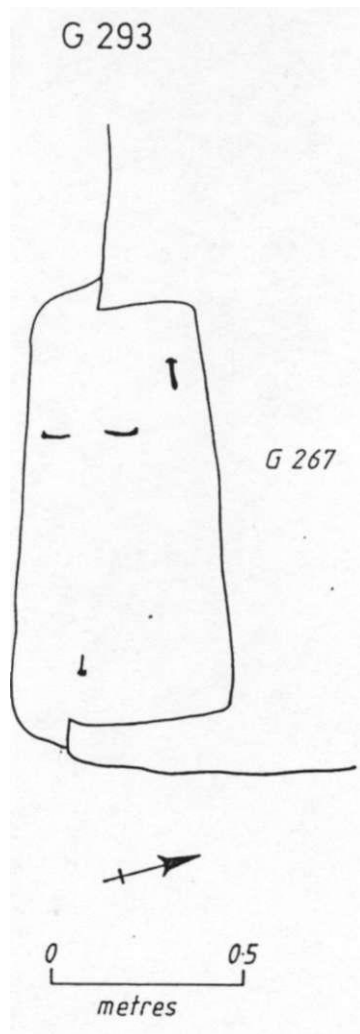
Grave 290 N-S. Isolated grave. Cut by Period 2 G231. G248. G252. N end only remains. Nailed timber coffin (not illustrated). No skeletal material.



Grave 291 N-S. Cuts Period 1 G277. Cut by Period 2 G229. G232. N end only remains. Nailed timber coffin. surviving length 0.56 m. width 0.34 m. No skeletal material. Two pottery bowls found resting against inside edge of stain on E side. tilted at angle. Probably originally placed on coffin lid and fell in when it collapsed. One of black-burnished ware (BB2), one of terra sigillata. Dragendorff Form 38. Directly beneath them lay a bead armband. Although armband may have been originally placed inside coffin, proximity to bowls may suggest that it, too, might have lain on coffin lid. Third bowl (BB1; not illustrated) also almost certainly from this grave. recovered **during initial clearance of the area.**

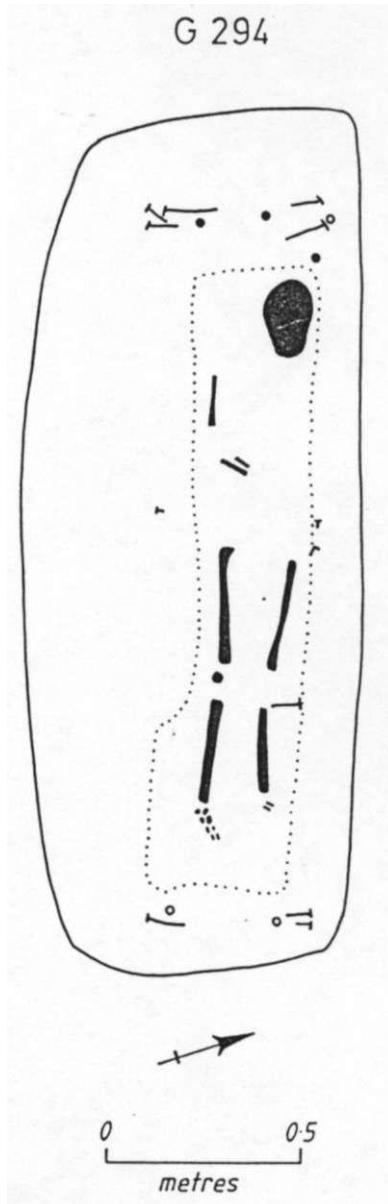


Grave 292 E-W (head to W). Cuts Period 2 G296. Cut by Period 2 G237. Nailed timber coffin. Child, aged 5 years. Skeleton supine. Skull in good condition. other surviving bones poorly preserved.

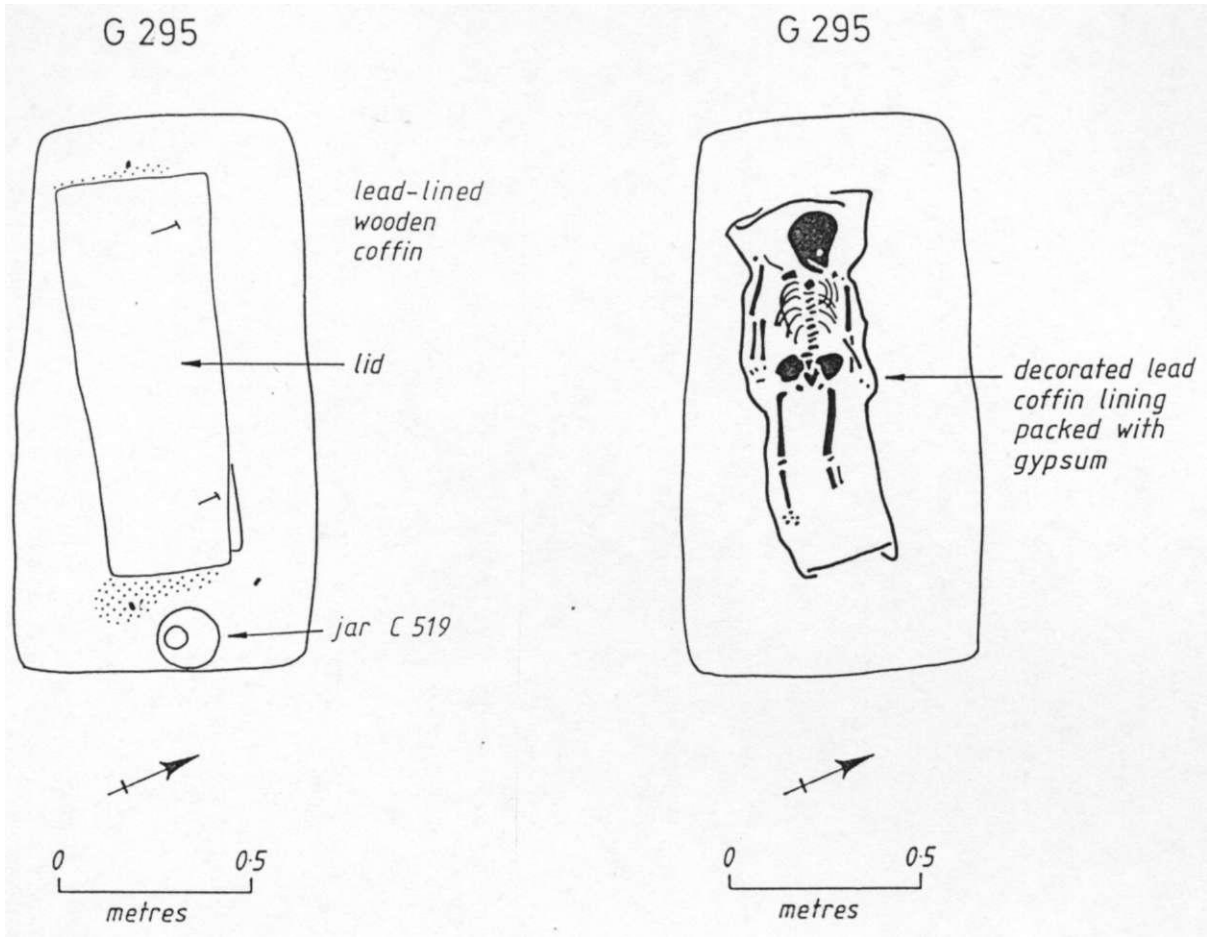


Grave 293 E-W. Cuts Period 2 G288. Cut by Period 2 G267. Nailed coffin (no timber stain located), maximum length approximately 0.8 m. width 0.3 m. No skeletal material. Coffin size indicates small child.

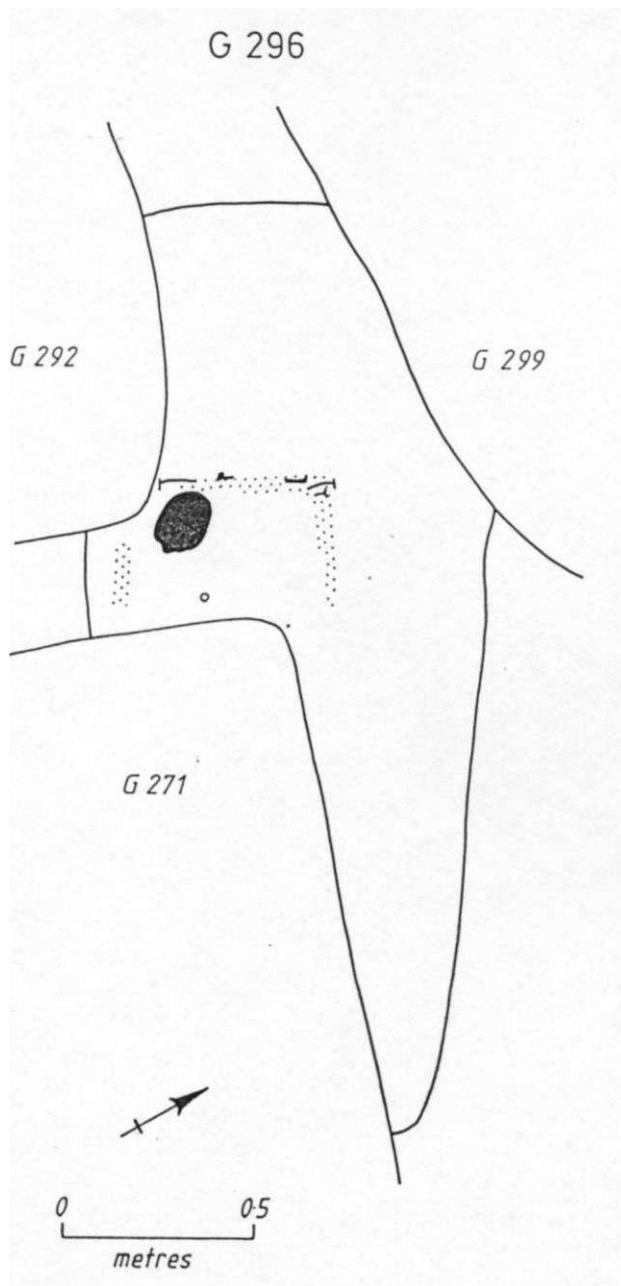
G 294



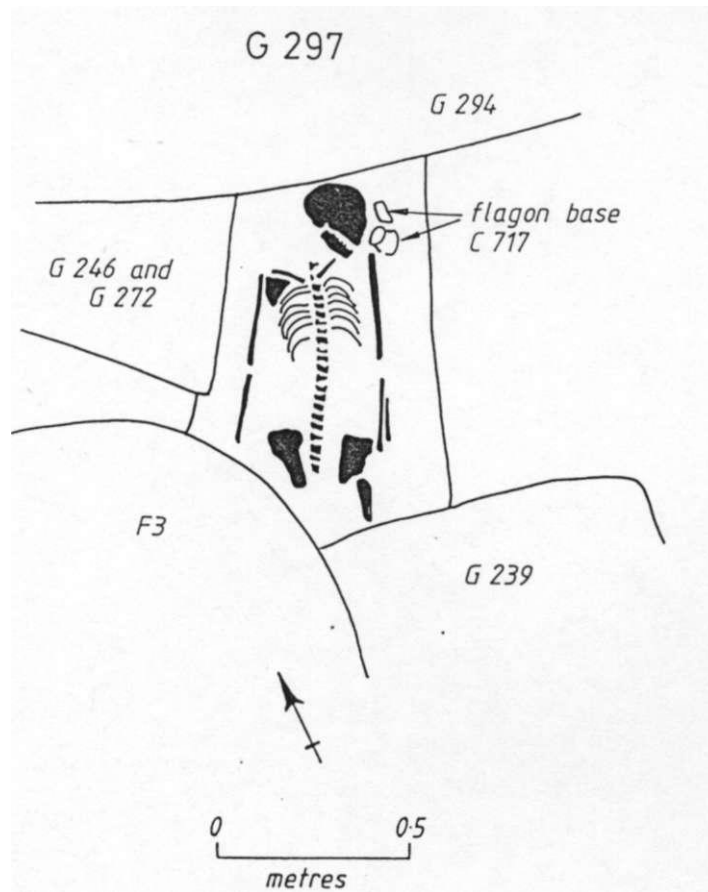
Grave 294 E-W (head to W). Cuts Period 1 G297. Cut by Period 2 G246. G260. G272. Nailed timber coffin. Adult. sex uncertain. Skeleton supine. Skull, some limb long bones, and foot bones survive, in poor condition.



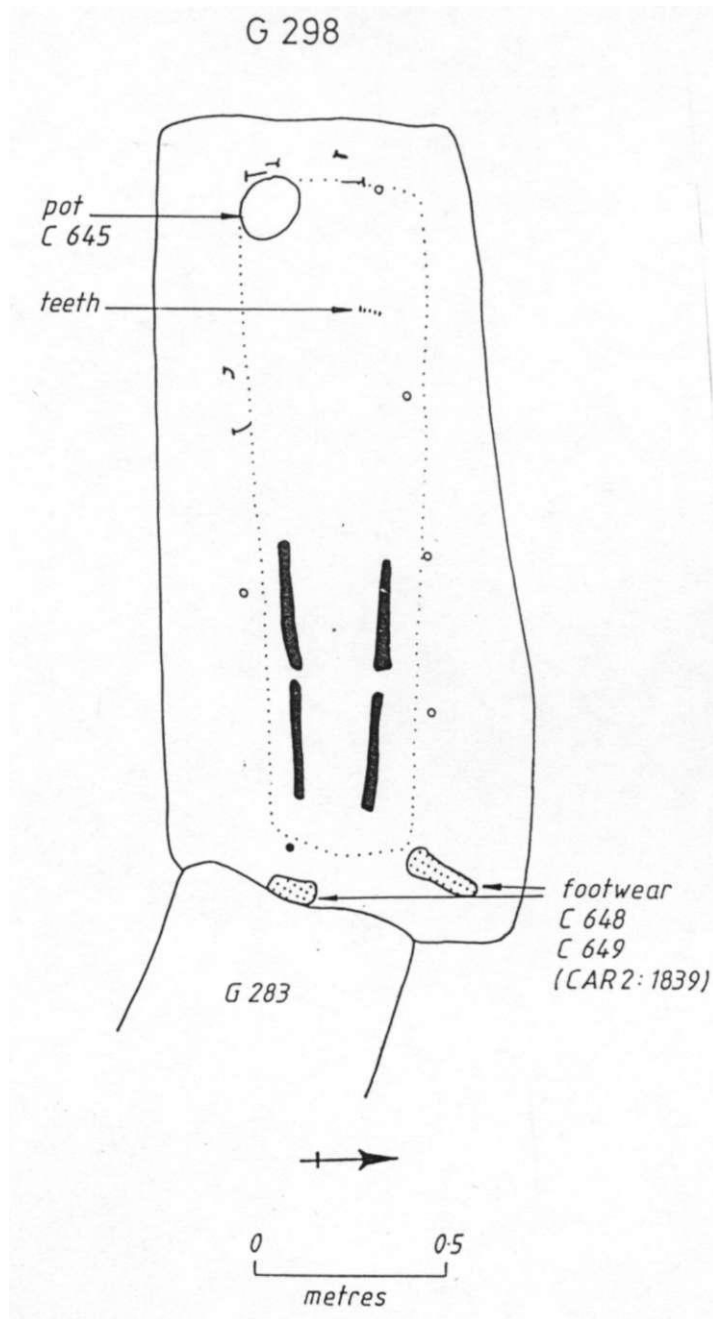
Grave 295 E-W (head to W). Cut by Period 2 G264. G270. Relationship to Period 2 G281 uncertain. Nailed timber coffin containing lead inner decorated coffin. packed with plaster (gypsum). Child. aged 2 years. Skeleton supine. Surviving bones in good condition. Fragments of textile. and impression of textile. found in gypsum to right of lumbar vertebrae. Outside coffin at E end lay small narrow-mouthed and narrow-necked coarse grey ware jar.



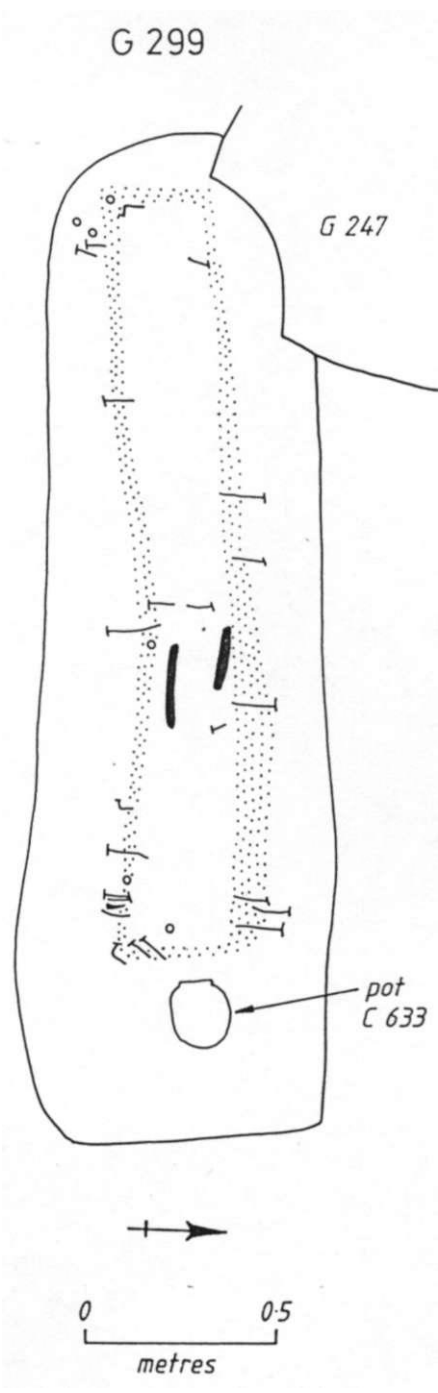
Grave 296 E-W (head to W). Cut by Period 2
 G238. G271. G292. Largely destroyed by G271. Relationship to G299 uncertain



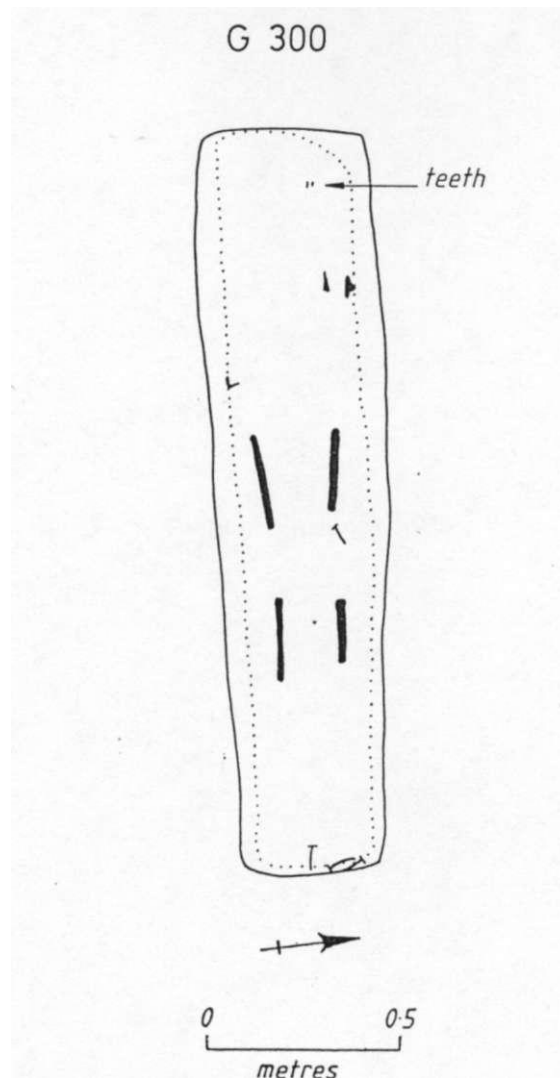
Grave 297 N-S (head to N) . Isolated grave . Cut by Period 2 G 239 . G 246 . G 27



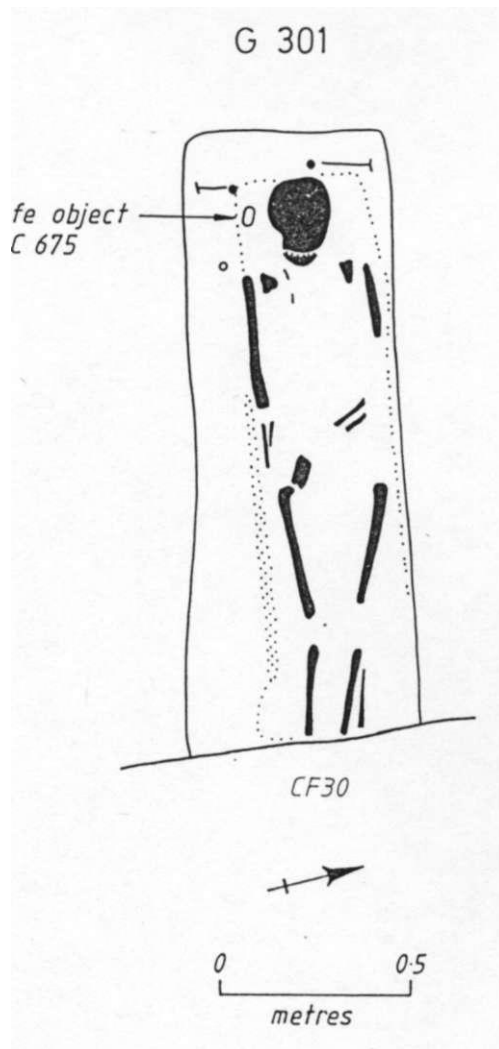
Grave 298 E-W (head to W). Cut by Period 2 G283. Possibly cut by Period 2 G270. Nailed timber coffin. Adult, sex uncertain. Skeleton supine. Only some teeth and shafts of leg long bones remain, in poor condition. Outside coffin at W end. on SW corner of lid. lay fragmented but complete grey ware jar (most sherds later stolen: identified from site photos as CAM 268. Outside coffin at E end, level with lid. lay a pair of hobnailed shoes, one near NE corner. one near SE corner.



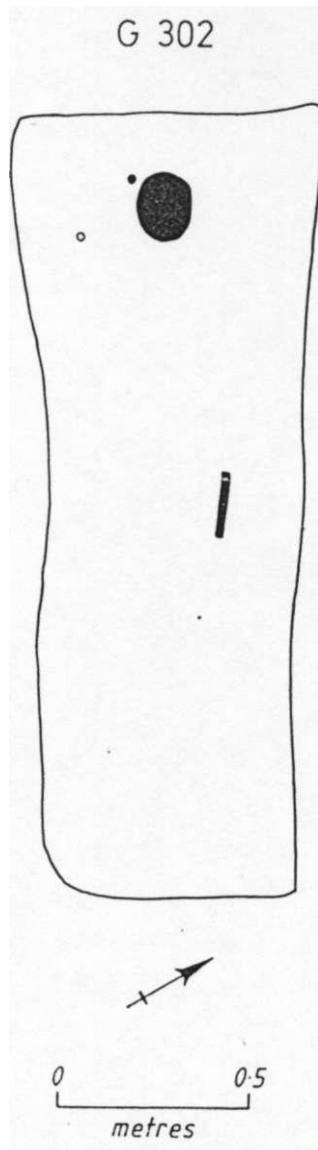
Grave 299 E-W (head to W). Cuts Period 1 or 2 N-S ditch CF32. Cut by Period 2 G238. G247. Relationship to Period 2 G296 uncertain. Nailed timber coffin. Adult. sex uncertain. Only fragments of shafts of femora remain, in very poor condition. Coarse grey ware jar (CAM 268). lay on its side outside coffin at E end.



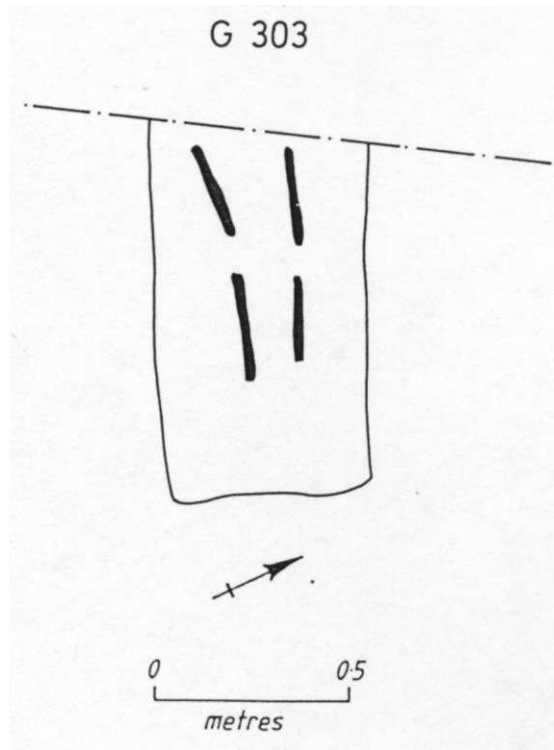
Grave 300 E-W (head to W). Cuts Period 2
 G320. Relationship to Period 2 G310
 uncertain. Nailed timber coffin. Adult, sex
 uncertain. Only a few teeth. arm bone
 fragments and leg long bone shaft fragments
 remain, in very poor condition.



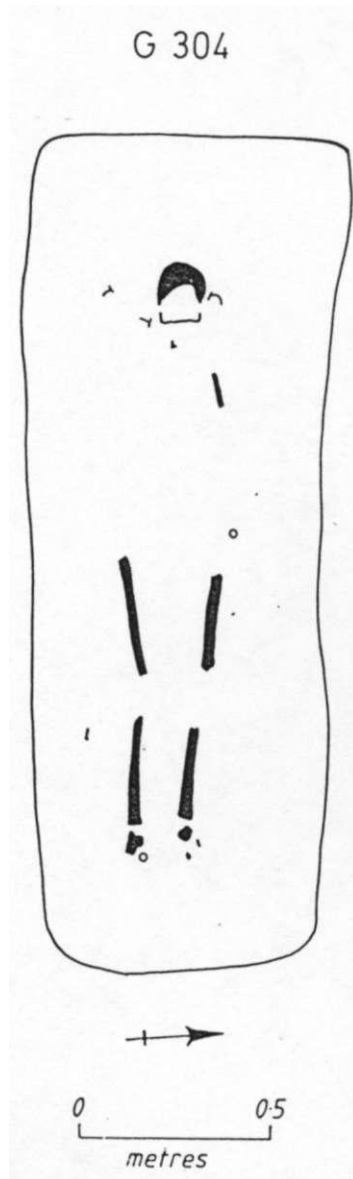
Grave 301 E-W (head to W). Cuts Period 1 G327. Period 2 G309. Cut by modern pit CF30. Shallow grave. Mailed timber coffin. Middle-aged female. Skeleton supine. Skull well preserved, other surviving bones in poor condition. Iron object. possibly coffin fitting, found in timber stain S of skull.



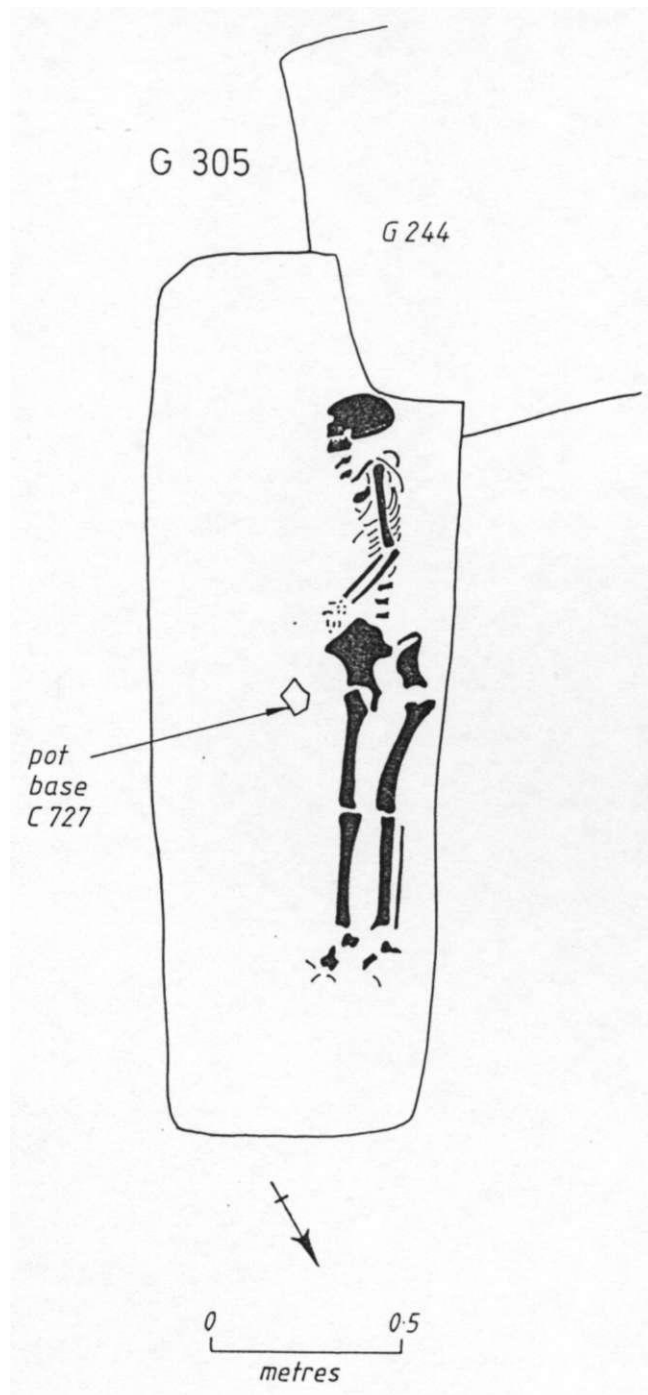
Grave 302 E-W (head to W). Cuts Period 2
G306. G313. G434. Nailed timber coffin (no
timber stain located). Adult, sex uncertain.
Only skull and shaft of left femur remain, in
poor condition.



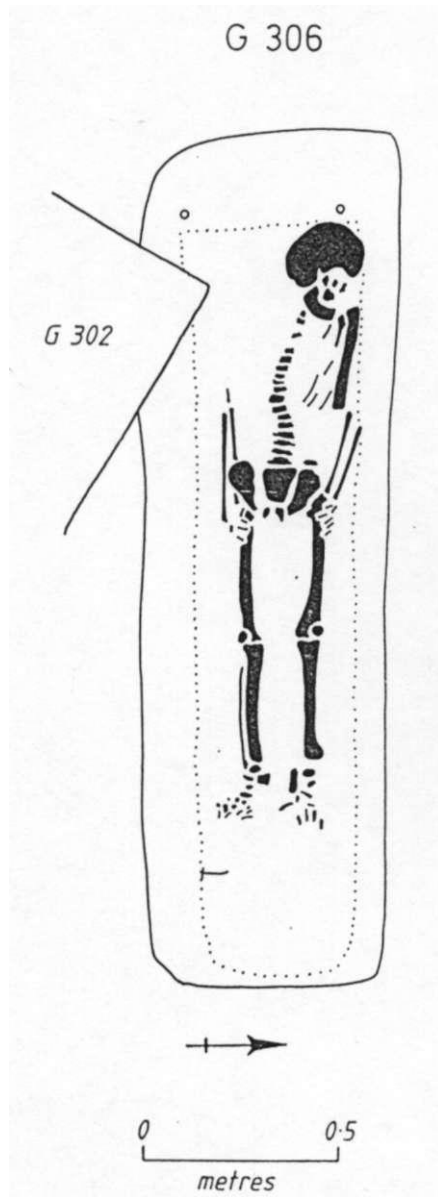
Grave 303 E-W (head to W). Cuts Period 2 G311. W end not excavated. Timber coffin (no nails recovered). Adult. sex uncertain. Shafts of leg bones only remain. in poor condition.



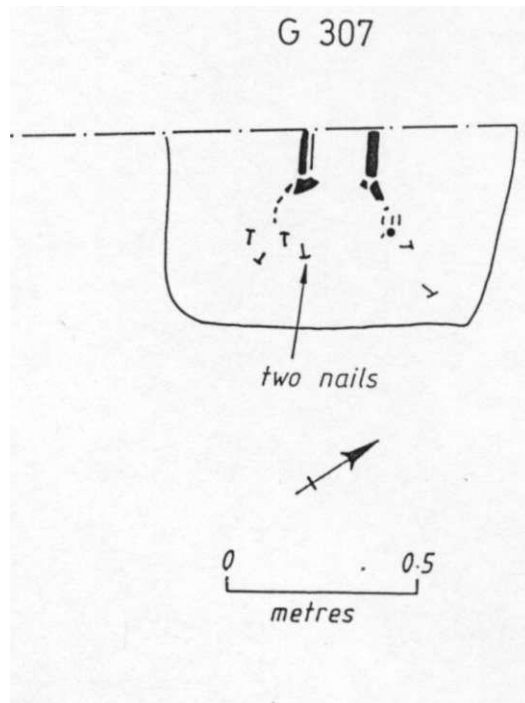
Grave 304 E-W (head to W). Cut by Period 2 G323. G337. Relationships to Period 2 G325 and G328 uncertain. Nailed timber coffin (no timber stain located). Adult, sex uncertain. Skeleton supine. Skull crushed, few other bones remain, in poor condition.



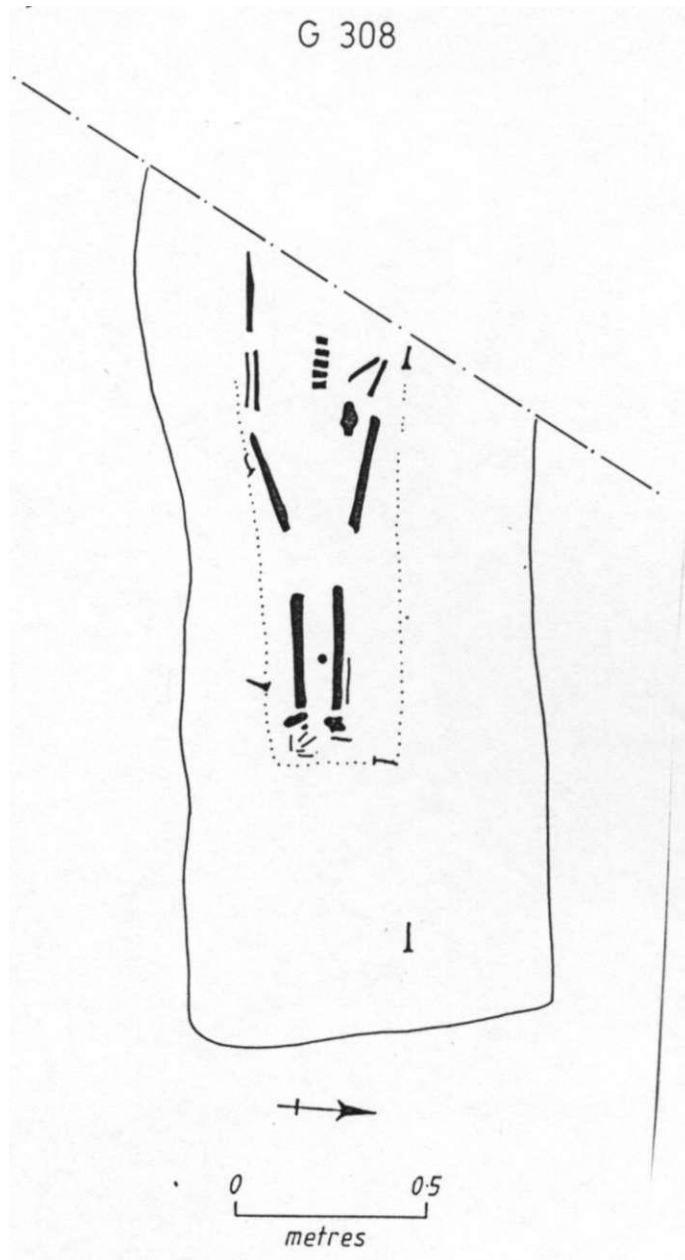
Grave 305 N-S (head to S). Cut by Period 2 G242. G244. G271. No coffin (no timber stain or nails recovered). Pale grey discolouration in sand directly beneath skeleton might indicate corpse wrapping or product of decomposition. Young adult male. Upper part of skeleton on right side. facing E. pelvis and legs only slightly twisted to right. Bones in very good condition. Base of coarse grey ware jar lay on its side near right pelvis/femur.



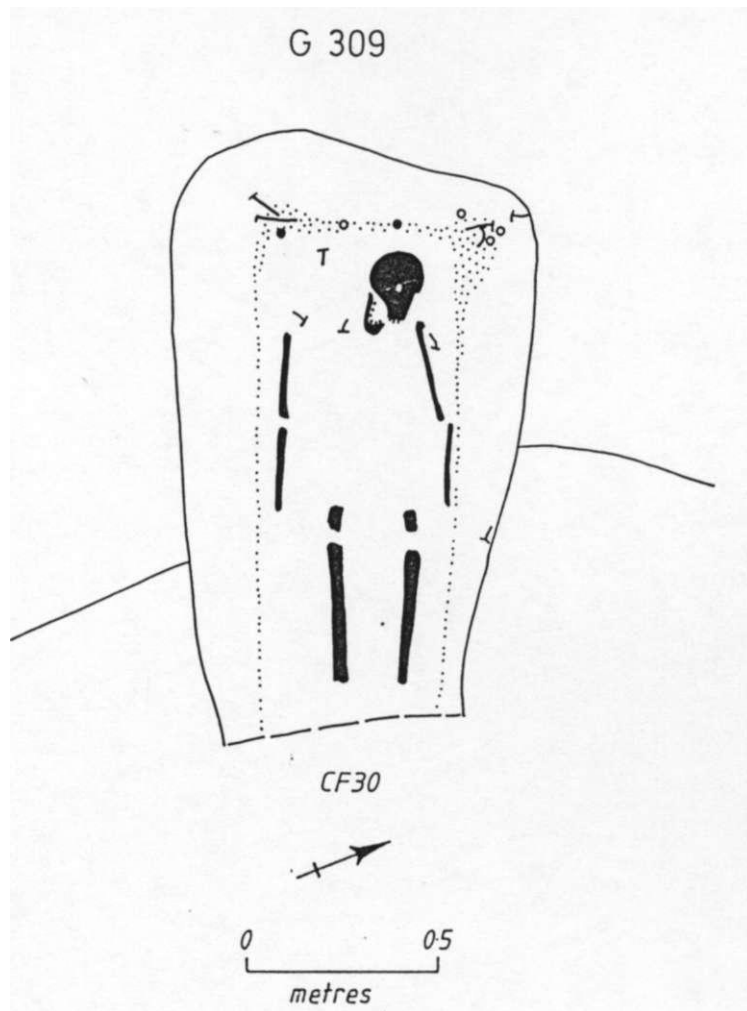
Grave 306 E-W (head to W). Cuts Period 2 G313. Cut by Period 2 G302. Nailed timber coffin. Middle-aged male. Skeleton supine. Skull against W end of coffin. gap of 0.38 m between toe bones and E end. Surviving bones in good condition.



Grave 307 E-W (head to W). Cuts Period 2 G329. Relationship to Period 2 G591 uncertain. Only extreme E end excavated. Nailed timber coffin (no timber stain located). Adult, sex uncertain. Surviving bones in good condition.

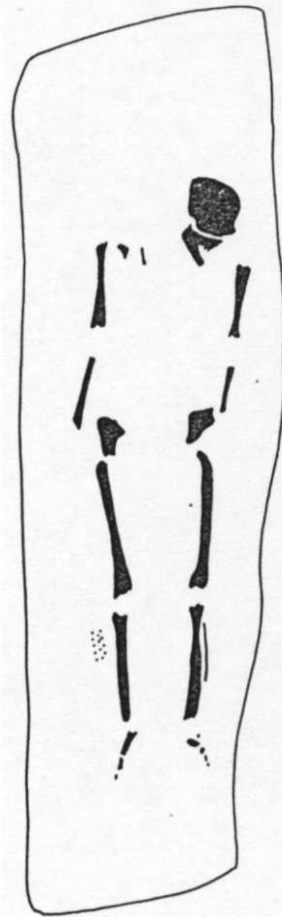


Grave 308 E-W (head to W) . Cuts Period 1 G324 . G327 . Relationship to Period 2



Grave 309 E-W (head to W). Cuts Period 1 G327. Period 2 G321. Cut by Period 2 G301. modern pit CF30. E end destroyed by CF30. Nailed timber coffin. Young adult. sex uncertain. Skeleton supine. Skull, shafts of arm long bones and femora. and fragments of pelvis remain, in poor condition.

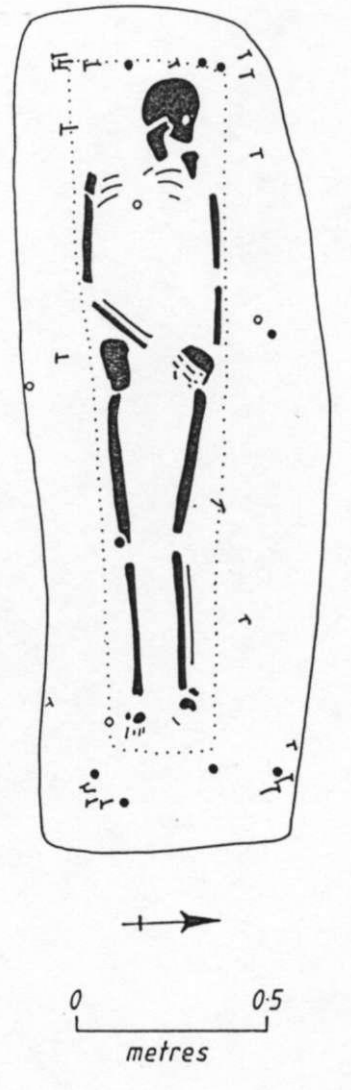
G 310



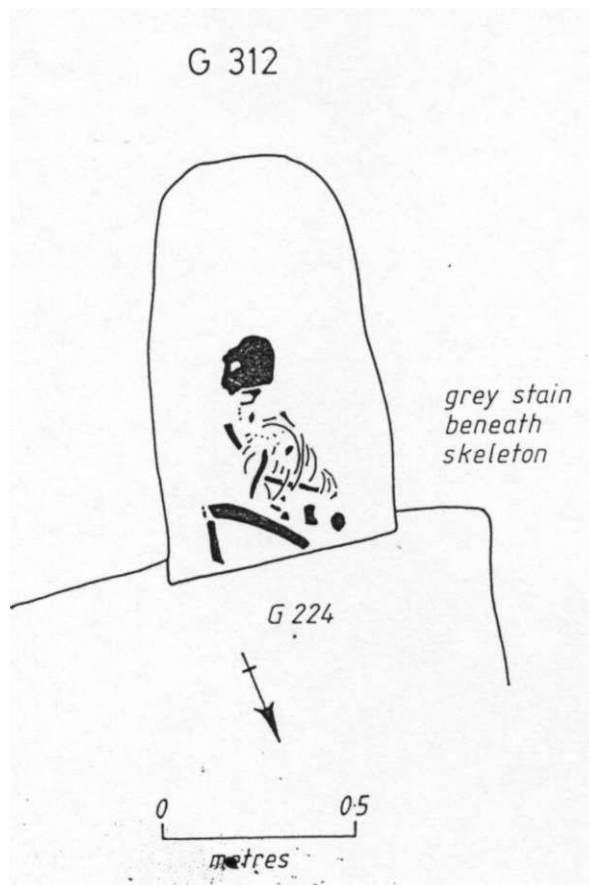
0 0.5
metres

Grave 310 E-W (head to W). Cuts Period 2 G315. G316, G320. Relationship to Period 2 0300 uncertain. Timber coffin. only small patch of timber stain remained (no nails recovered). Middle-aged adult, sex uncertain. Skeleton supine. Surviving bones in poor condition.

G 311

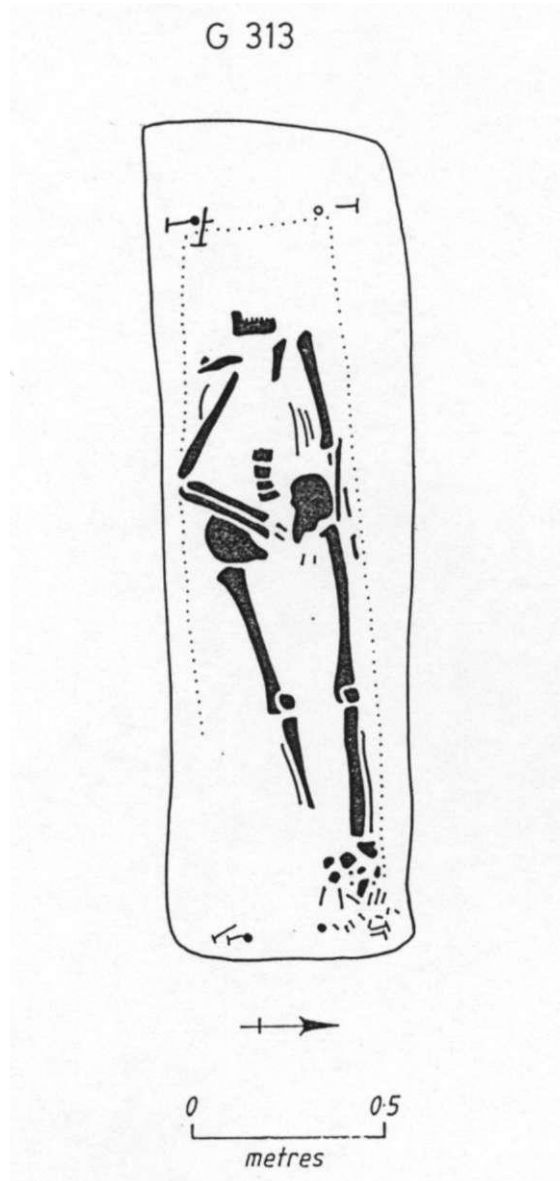


grave 311 E-W (head to W). Cuts Period 2 G330. Cut by Period 2 G303. Nailed timber coffin. Middle-aged male. Skeleton supine. Surviving bones in good condition.



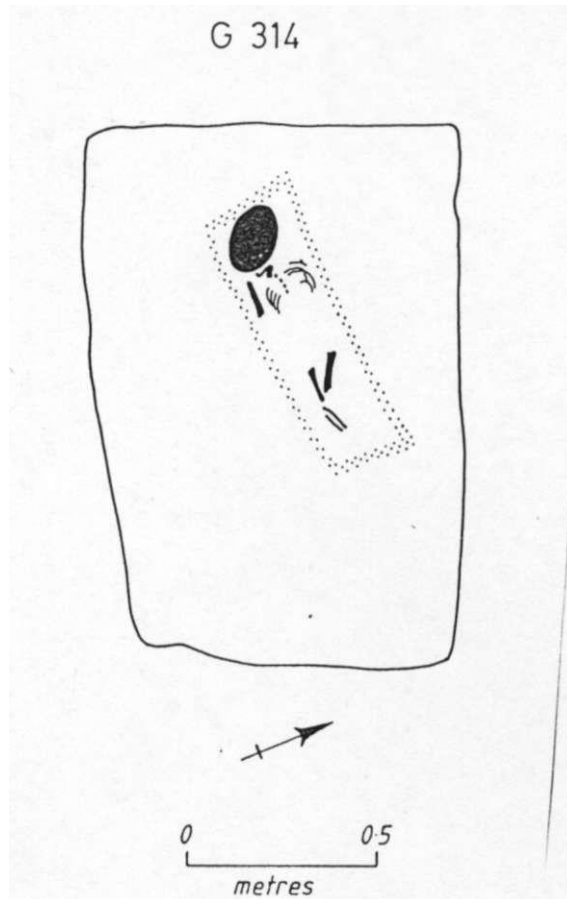
Grave 312 N-S (head to S). Isolated grave. Cut by Period 1 or 2 N-S ditch BF165. Cut by Period 2 G213. G224. N end of grave destroyed by G224. No coffin. Grey discolouration in sand beneath skeleton may indicate corpse wrapping or product of decomposition. Child, aged 12 to 13 years. Crouched burial, facing E. Surviving bones well preserved.

G 313

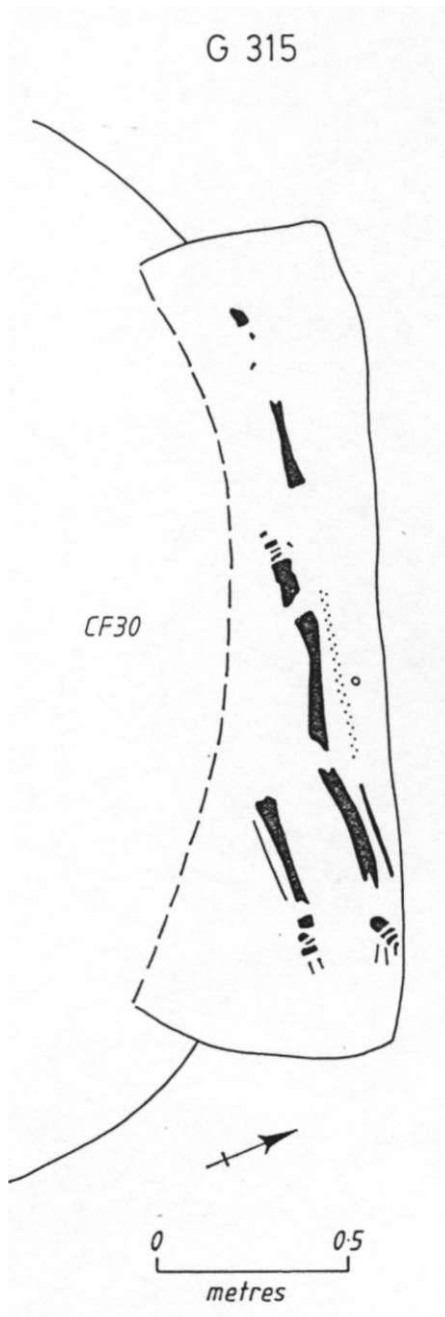


Grave 313 E-W (head to W). Cut by Period 2 G302. G306. Nailed timber coffin. Middle-aged male. Skeleton supine. Surviving bones in good condition. Skull found redeposited in fill of G302.

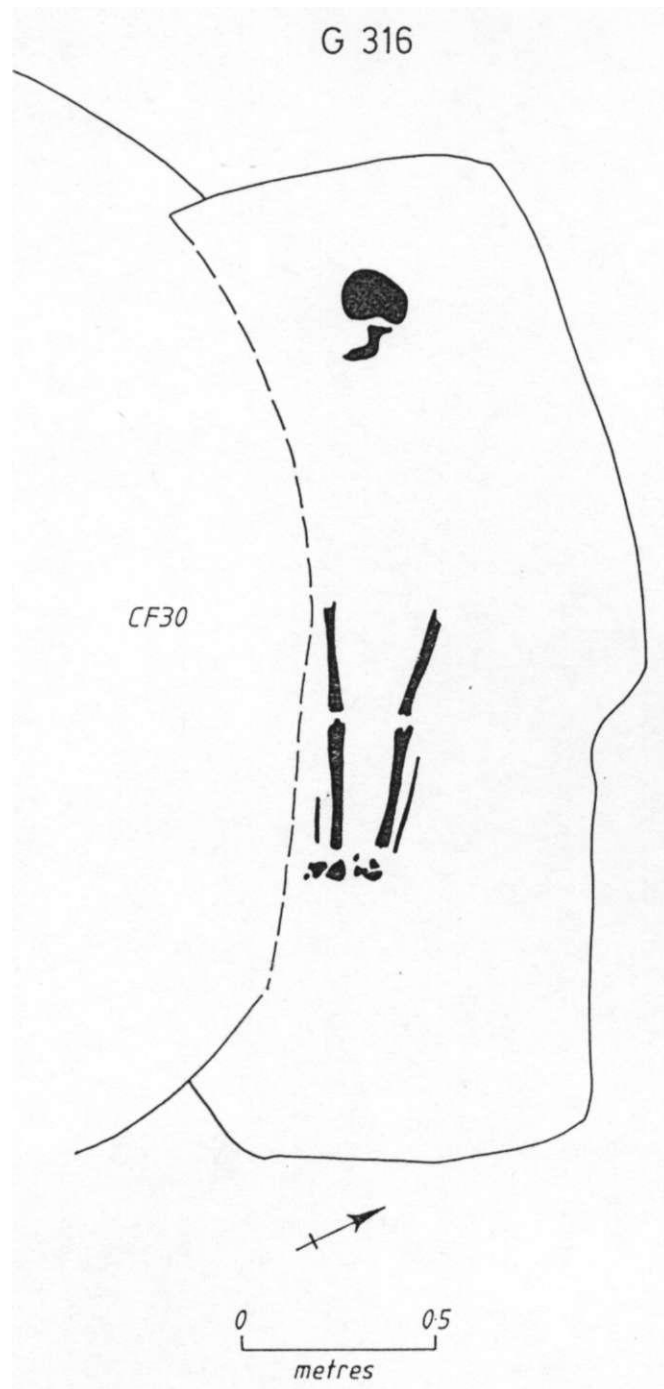
G 314



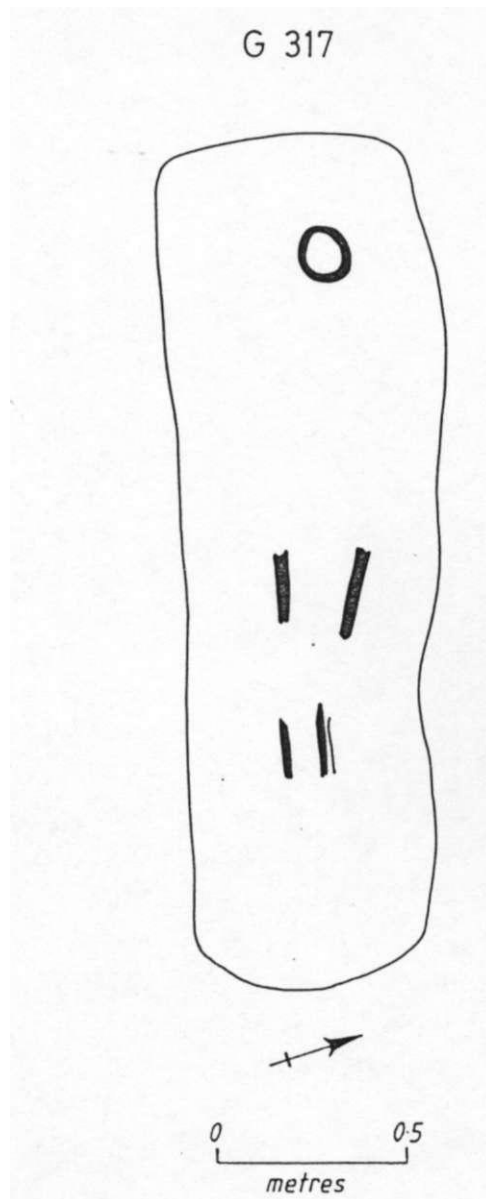
Grave 314 E-W (head to W). Cuts Period 2 G322. G333. Timber coffin (no nails recovered). Child, aged 18 months to 2 years. Skeleton supine. Surviving bones in fair condition.



Grave 315 E-W (head to W). Cuts Period 2 G316. Cut by Period 2 G310. modern pit CF30. Fairly shallow Grave. Large part of skeleton removed by CF30. Nailed timber coffin (timber stain indistinct in places). Adult, sex uncertain. Skeleton supine. Surviving bones in fair condition.

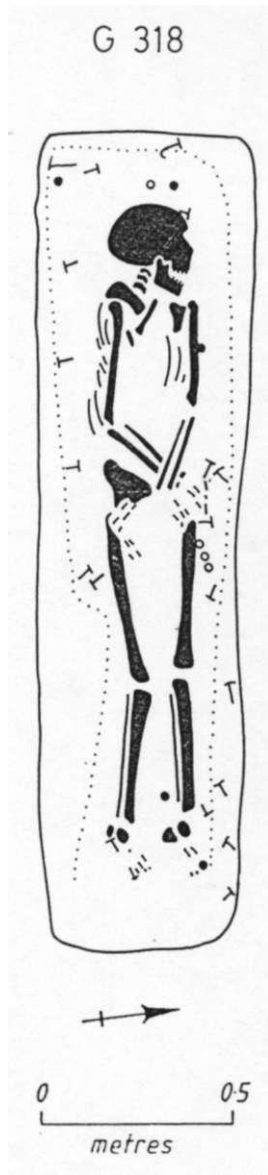


Grave 316 E-W (head to W). Cut by Period 2 G310. G315. modern pit CF30. Relationship to Period 2 G351 uncertain. ?Nailed timber coffin (only one nail recovered, timber stain not located). Middle-aged female. Skeleton supine. Only skull and some leg bones survive, in poor condition.



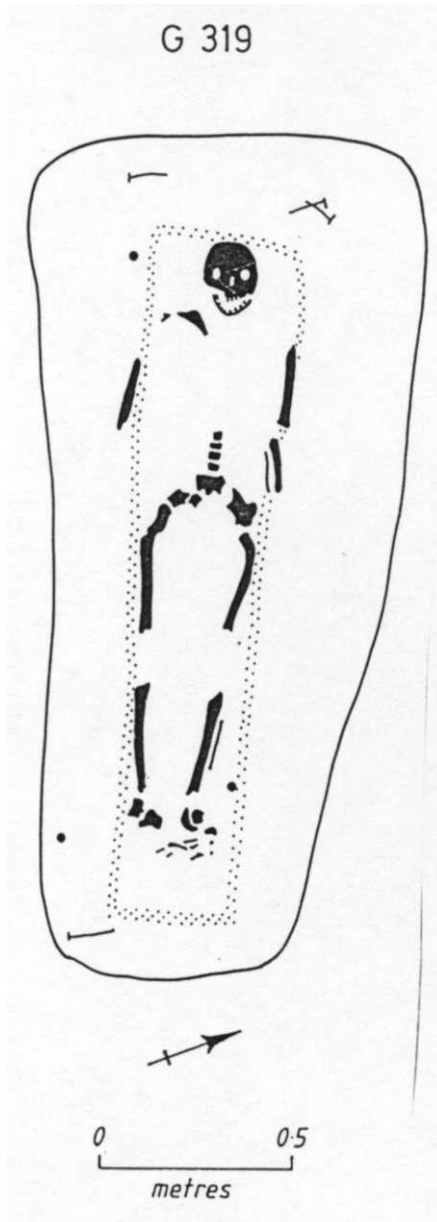
Grave 317 E-W (head to W). Cuts Period 2 G325. G328. G335. No nails or timber stain located. Adult. sex uncertain. Skeleton supine. Only part of skull and fragments of leg long bones remain, in poor condition.

G 318

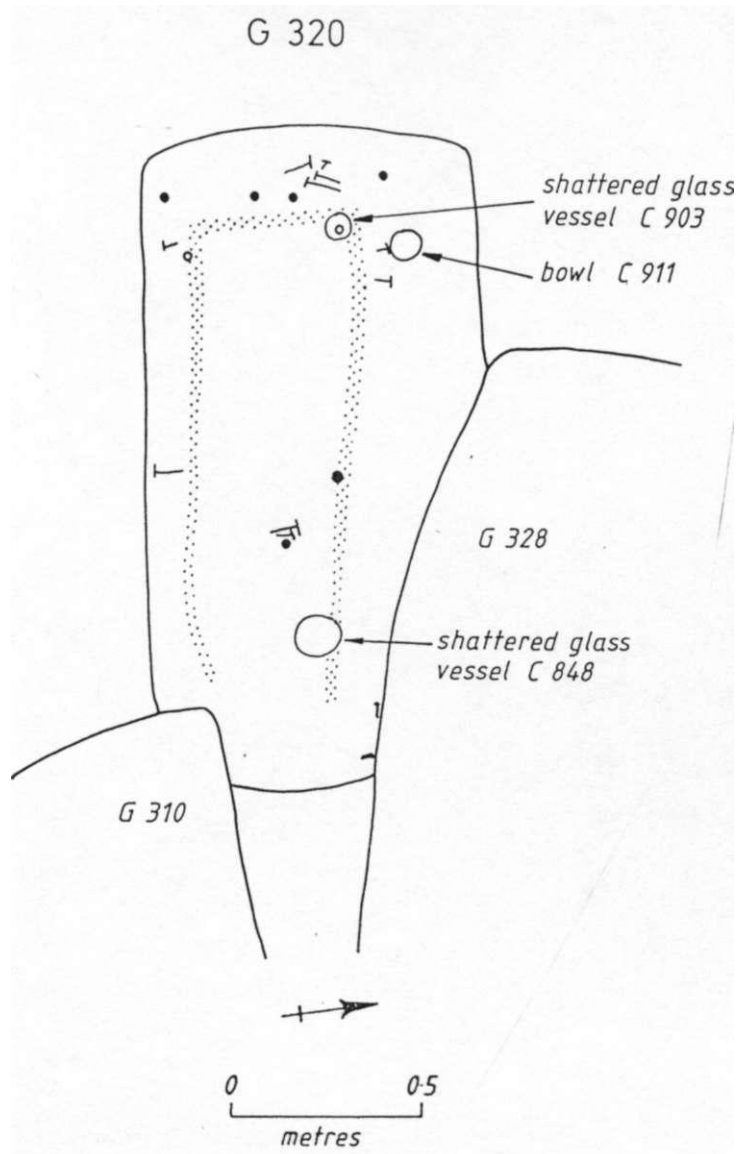


Grave 318 E-W (head to W) . Cuts Period 2 G323 . G337 . G353 . Nailed timber coffin

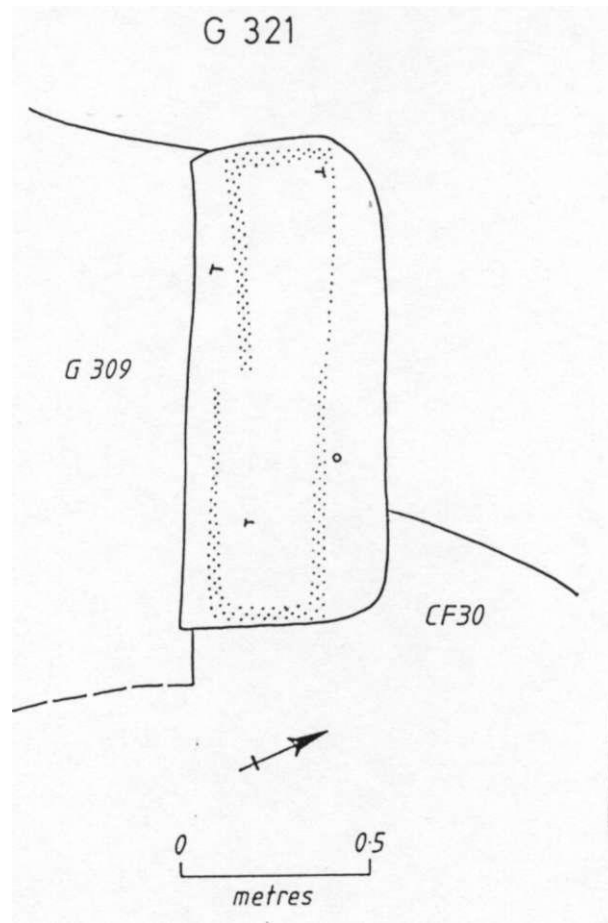
G 319



Grave 319 E-W (head to W) . Cuts Period 2 G322 . G326 . G329 . Nailed timber coffin

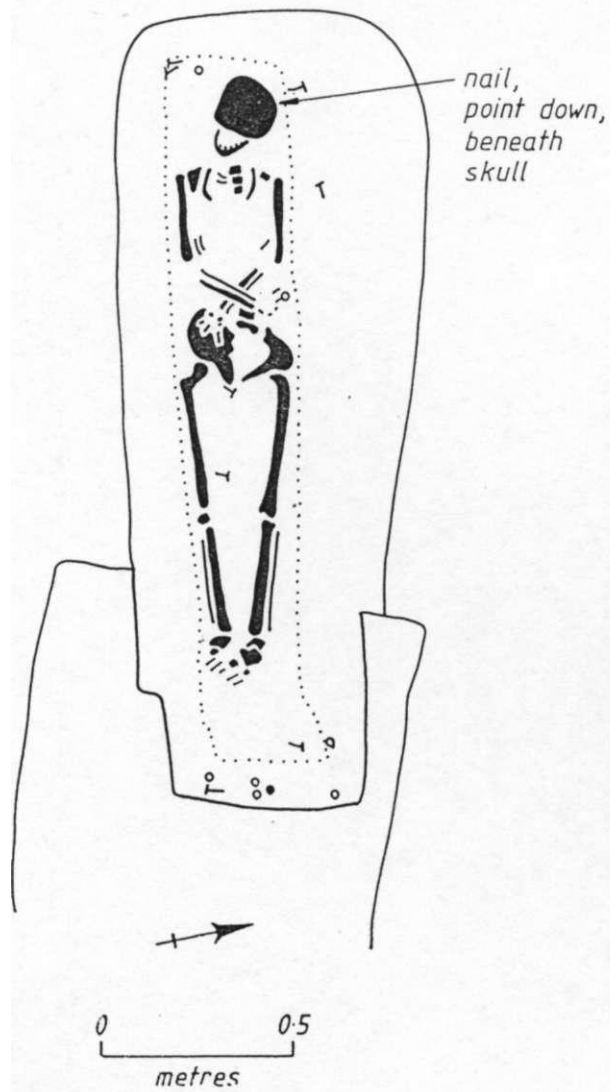


Grave 230 E-W. Cut by Period 2 G300. G310. G328. Nailed timber coffin. length approximately 1.4 m. width 0.42 m. No skeletal material. Length of coffin suggests older child, width suggests adult. Inside coffin. in NW corner. lay shattered glass vessel. of folded. but otherwise unidentifiable. form. Second glass vess

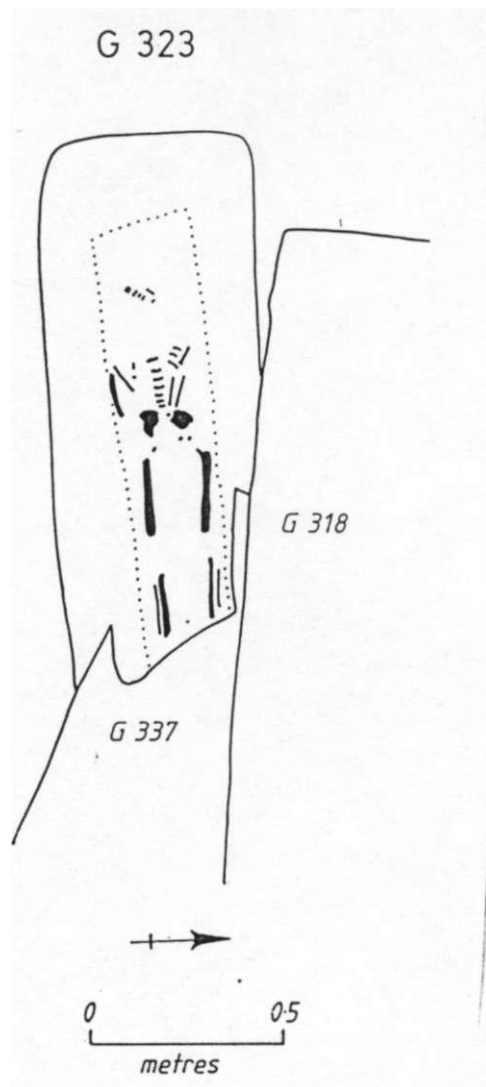


Grave 321 E-W. Cuts Period 1 G324, G327. Cut by Period 2 G309. Relationship to Period 2 G308 uncertain. Nailed timber coffin, length 1.2 m. width 0.24 m. No skeletal material. Coffin size indicates child.

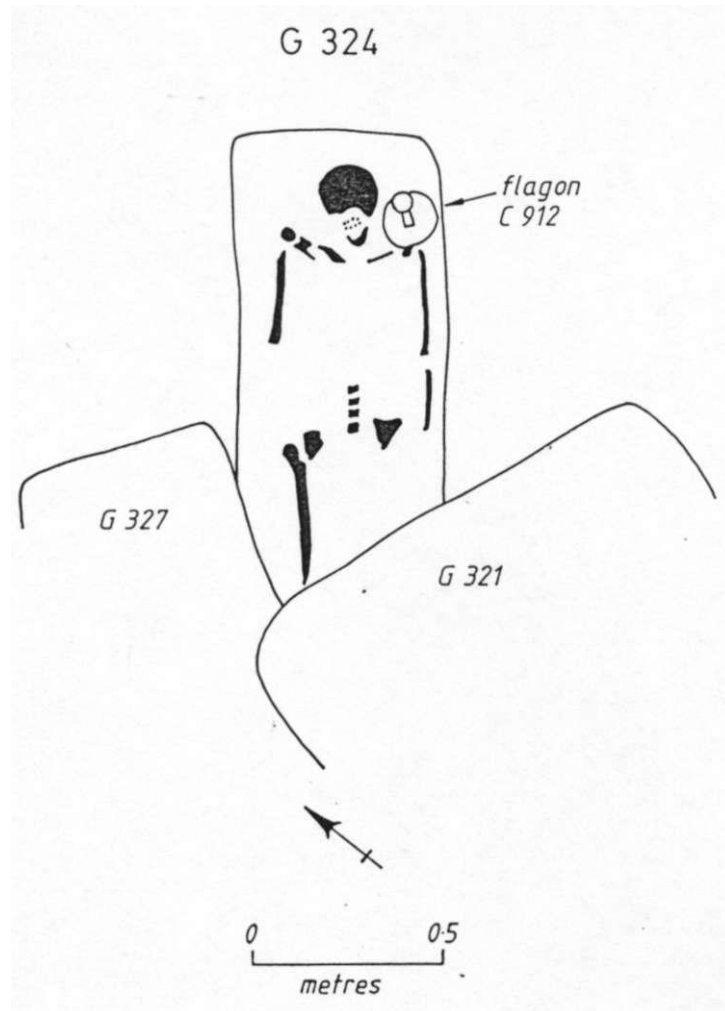
G 322



Grave 322 E-W (head to W). Cuts Period 2 G333. Cut by Period 2 G314. G319. Nailed timber coffin. Middle-aged male. Skeleton supine. Surviving bone in fair condition.

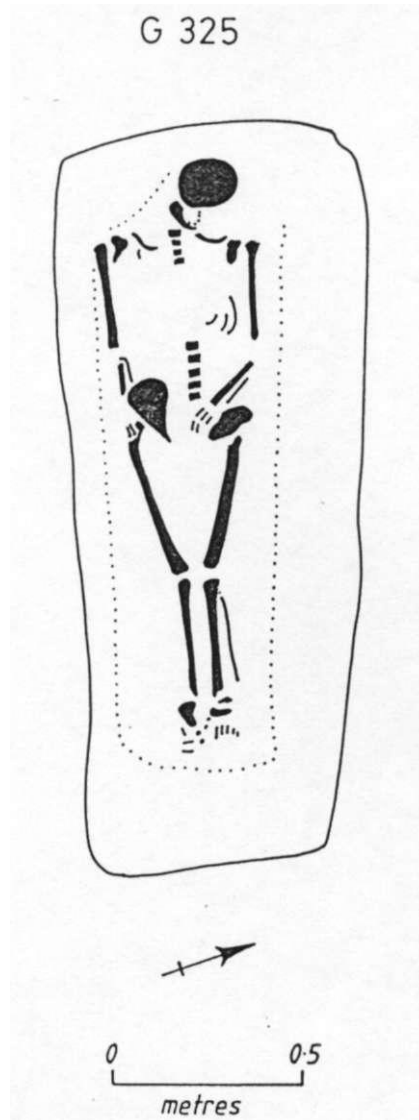


Grave 323 E-W (head to W). Cuts Period 2 G30&, G325. Cut by Period 2 G318. G337. E end destroyed by G337. Nailed timber coffin. Child. aged 5 to 6 years. Skeleton supine. Surviving bones in fair condition.

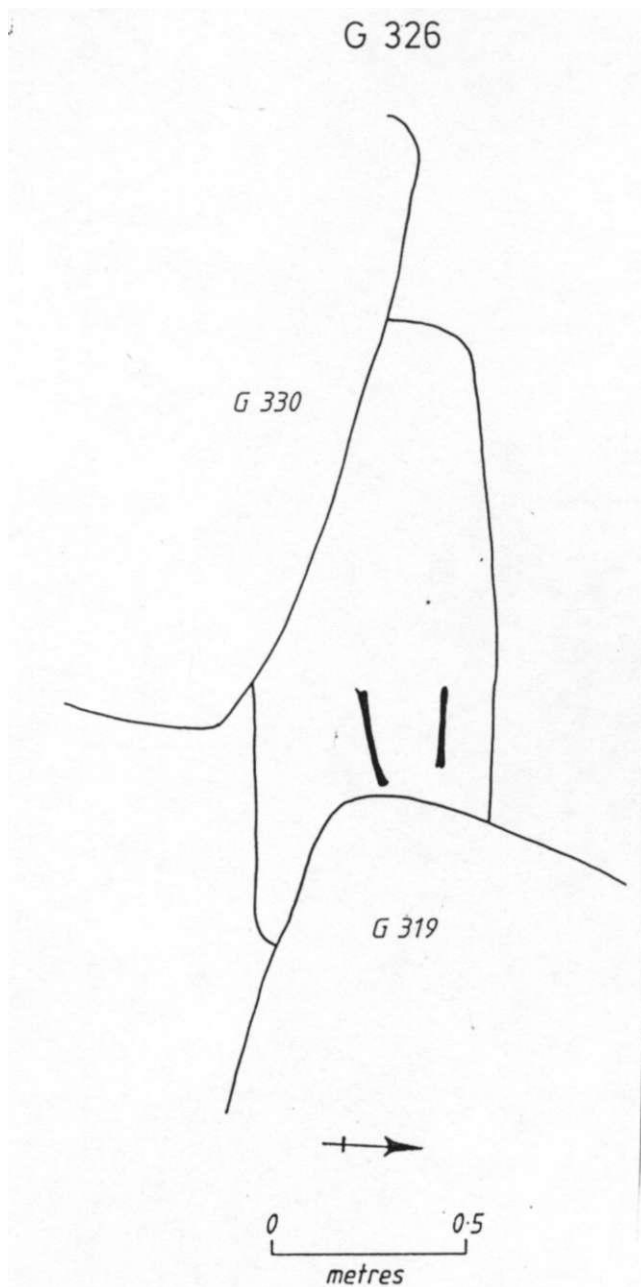


Grave 324 N-S (head to N). Cut by Period 1 G327. Period 2 G308. Q321. S end destroyed by G327 and G321. No coffin. Middle-aged adult, sex uncertain. Skeleton supine. Surviving bones in poor condition. Articulated foot from G324 found in fill of G327. Complete flagon of unslipped coarse buff set upright to left of skull.

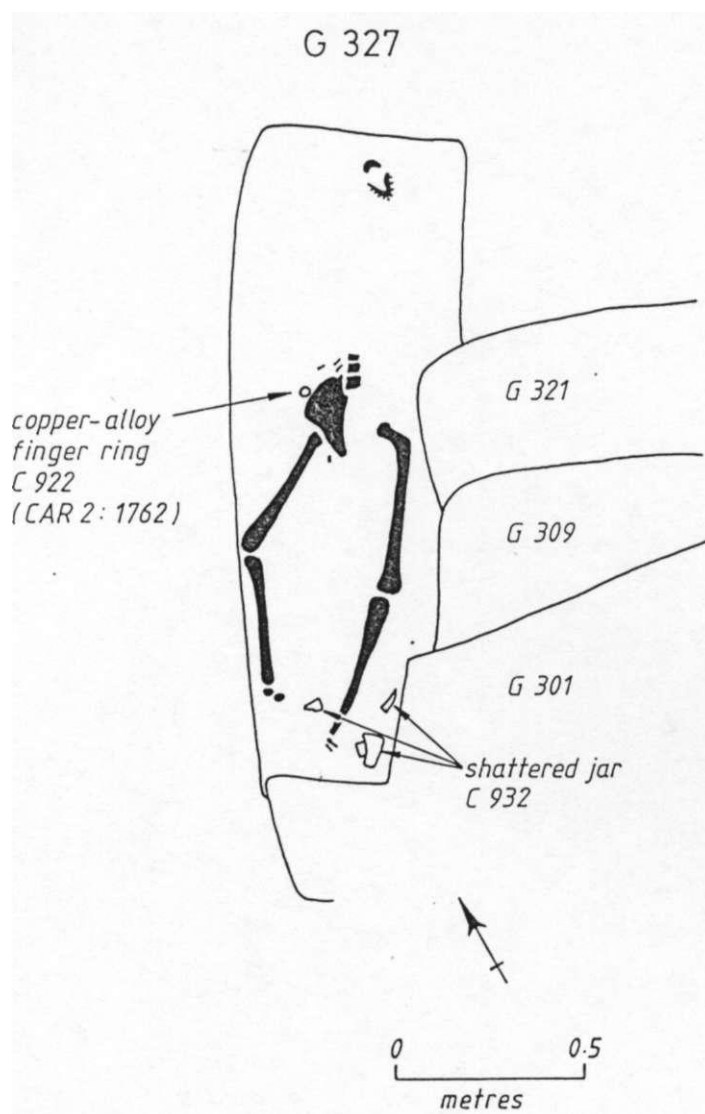
G 325



Grave 325 E-W (head to W). Cuts Period
G328. G335. Cut by Period 2 G317. G323
Relationship to Period 2 G304 uncertain
Nailed timber coffin (nails not illustrated)
Middle-aged female. Skeleton supine Surviving bones in good condition.

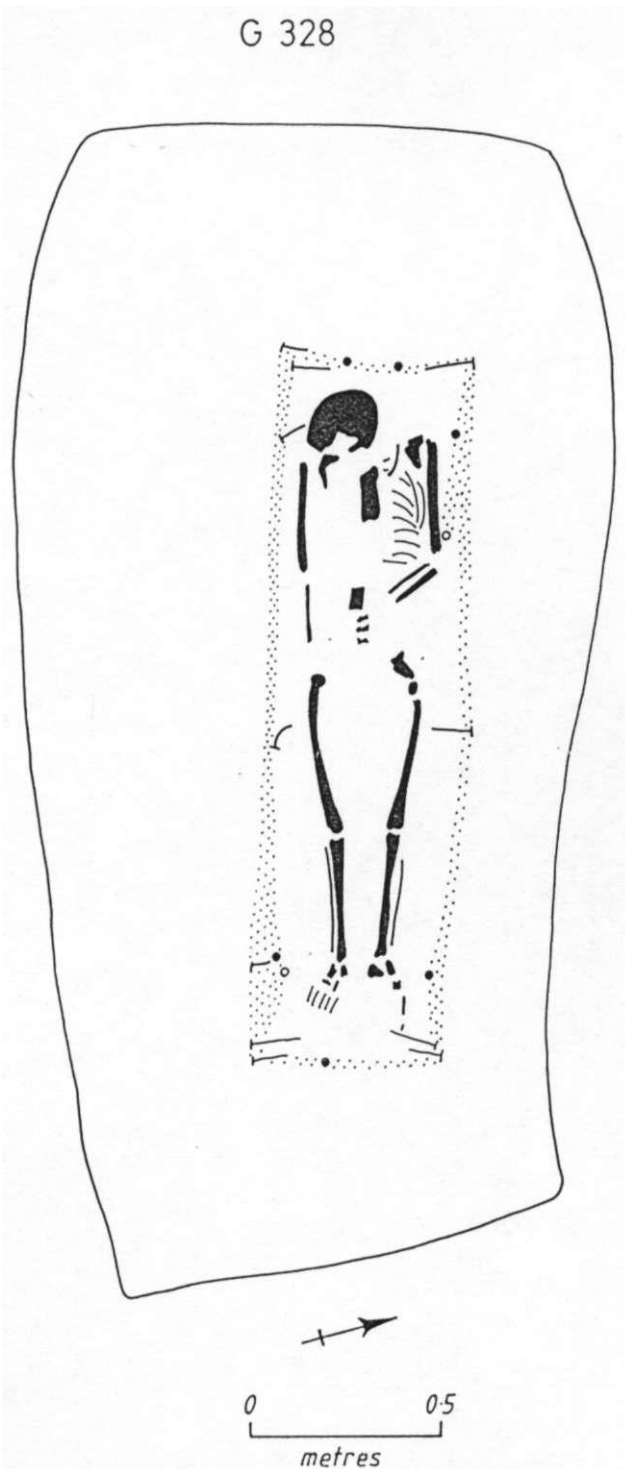


Grave 326 E-W (head to W). Cut by Period 2 G319. Relationship to Period 2 G330 uncertain. No clear edges to grave. Timber coffin, sides not located. Only two fragments of leg long bones and an indeterminate fragment remain. in poor condition. No pathological report. Grave size suggests adult.



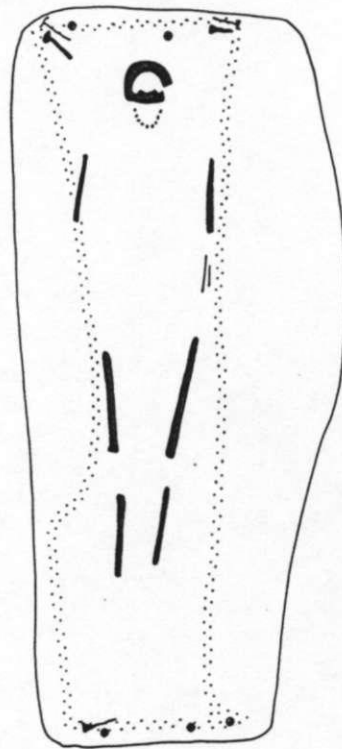
Grave 327 N-S (head to N). Cuts Period 1 G324. Cut by Period 2 G301. G30B. G309. G321. Nailed timber coffin (nails and timber stain not illustrated). Elderly adult. sex uncertain. Skeleton supine. Surviving bones in very poor condition. Copper-alloy finger-ring found among hand bones. and sherds of fragmented coarse grey ware jar lay between lower legs and to E of left foot.

G 328



Grave 328 E-W (head to W). Cuts Period 2 G320. Cut by Period 2 G317. G325. Relationship to Period 2 G335 uncertain. Long and wide grave pit, though S edge shows signs of collapse on original excavation. Nailed timber coffin. Adult female. Skeleton supine. Surviving bones in fair condition.

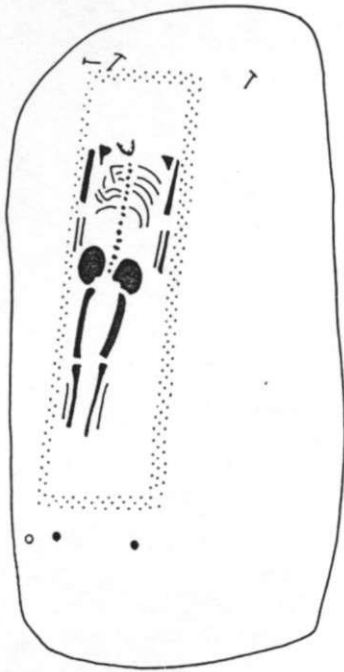
G 329



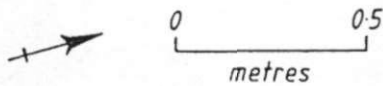
0 0.5
metres

Grave 329 E-W (head to W). Cut by Period 2 G307. G319. Nailed timber coffin. timber stain on S side irregular. Young adult female. Skeleton supine. Only skull and fragments of some long bones survive, in very poor condition.

G 330



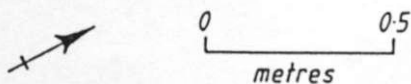
Grave 330 E-W (head to W). Cut by Period 2 G311. Relationship to Period 2 G326 uncertain. Nailed timber coffin. Child, aged 4 to 5 years. Skeleton supine. Bones in good condition. Skull found in fill of G311.

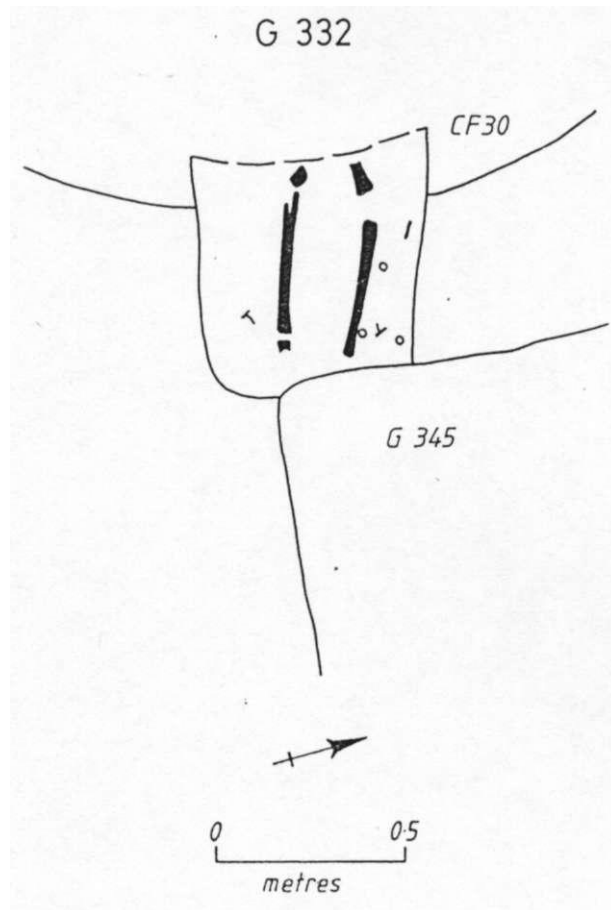


G 331



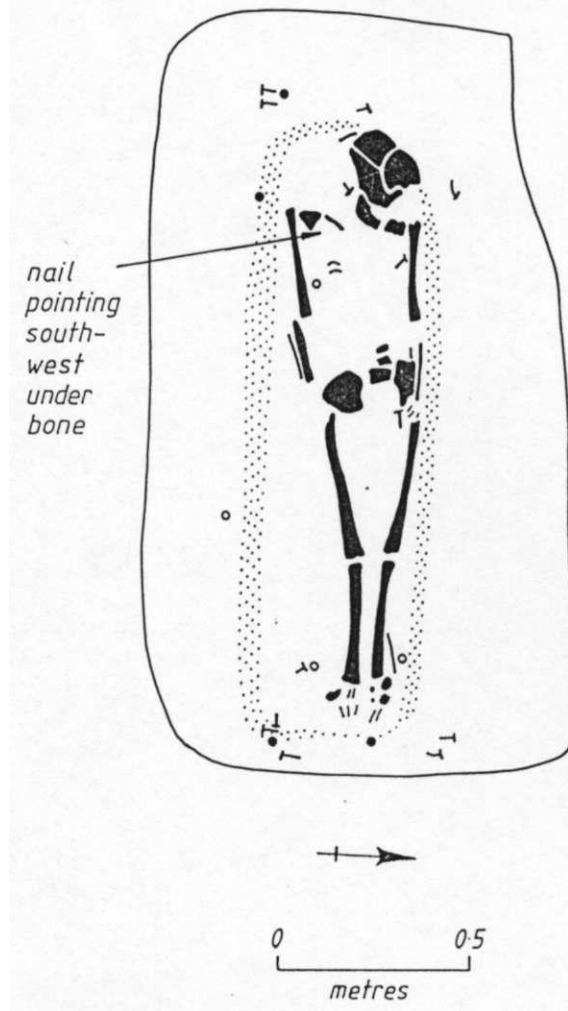
Grave 331 E-W (head to W). Relationship to Period 2 G267 uncertain. Nailed timber coffin. Child, aged 18 months to 2 years. Skeleton supine. Surviving bones in poor condition.





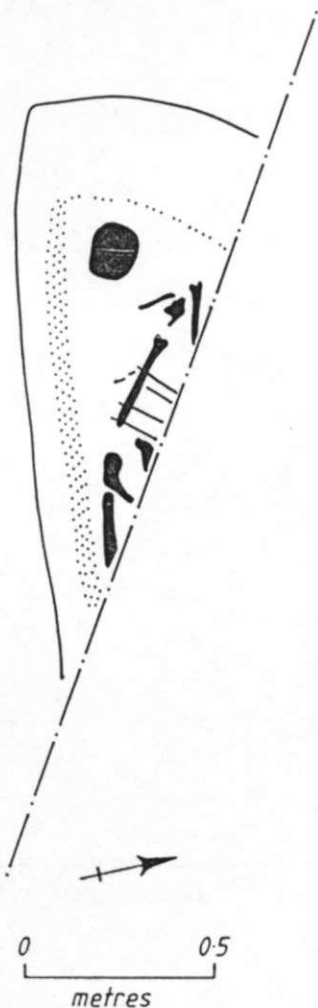
Grave 332 E-W (head to W). Cut by Period 2 G3&5. modern pit CF30. Shallow grave. mostly destroyed by CF30. Nailed timber coffin, (timber stain not planned). Lea long bones only remained. but probably did not survive lifting.

G 333



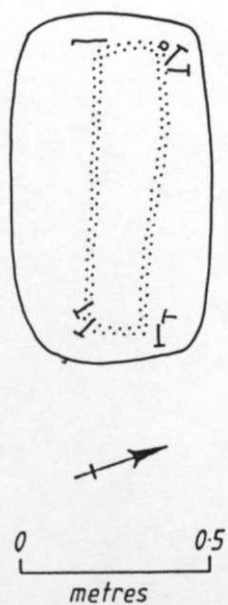
Grave 333 E-W (head to W). Cut by Period 2 G314. G322. Nailed timber coffin. Young adult female. Skeleton supine. Bones in poor condition.

G 334



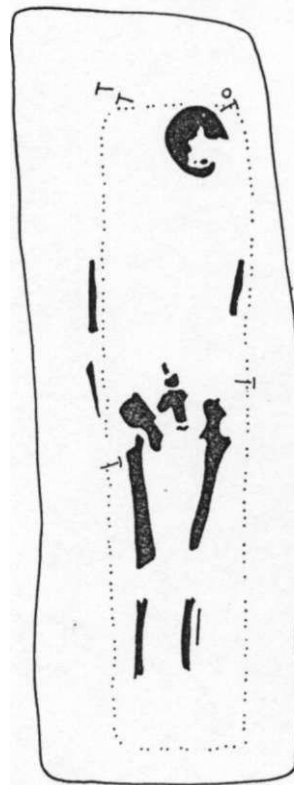
Grave 334 E-W (head to W). Isolated grave. SW half only excavated. Nailed timber coffin (nails not illustrated). Middle aged female. Skeleton supine. Bones in fair condition.

G 335



Grave 334 E-W. Cut by Period 2 G317. G325. Relationship to Period 2 G328 uncertain. Nailed timber coffin. length 0.74 m. width 0.16 m. No skeletal material. Coffin size indicates infant or small child.

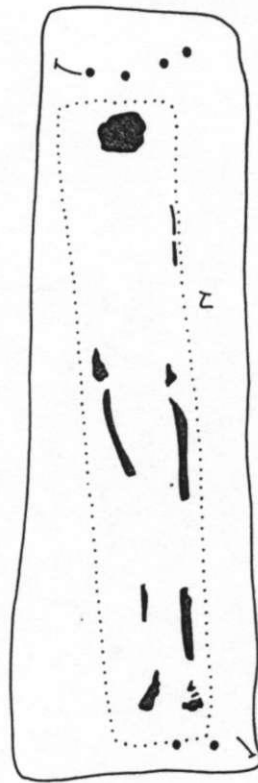
G 336



0 0.5
metres

Grave 336 E-W (head to W). Cuts Period 2 G375. G390, G391. Nailed timber coffin. Young adult male. Skeleton supine. Surviving bones in very poor condition.

G 337



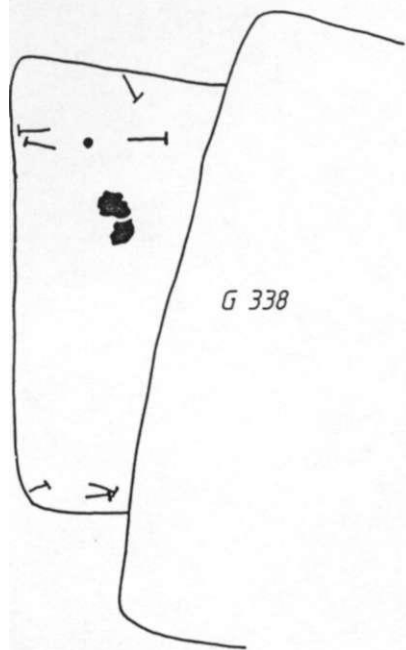
0 0.5
metres

Grave 337 E-W (head to W). Cuts Period 2 G304. G323. Cut by Period 2 G318. Nailed timber coffin. Adult, sex uncertain. Skeleton supine. Surviving bone in very poor condition.



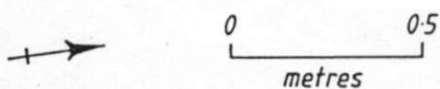
Grave 338 E-W (head to W). Cuts Period 2 G339. G347. G353. Timber coffin (no nails recovered). Young adult female. Skeleton supine. Surviving bones in good condition. Skull stolen.

G 339

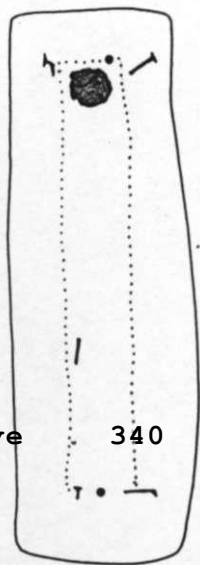


G 338

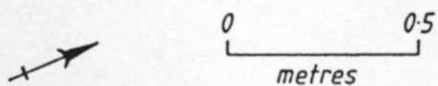
Grave 339 E-W (head to W). Cut by Period 2 G338. Nailed timber coffin (timber stain not illustrated). length 0.9 m. width 0.36 m. Fragments only of skull survive. No pathological report, bones missing. may not have survived lifting. Coffin size indicates child.

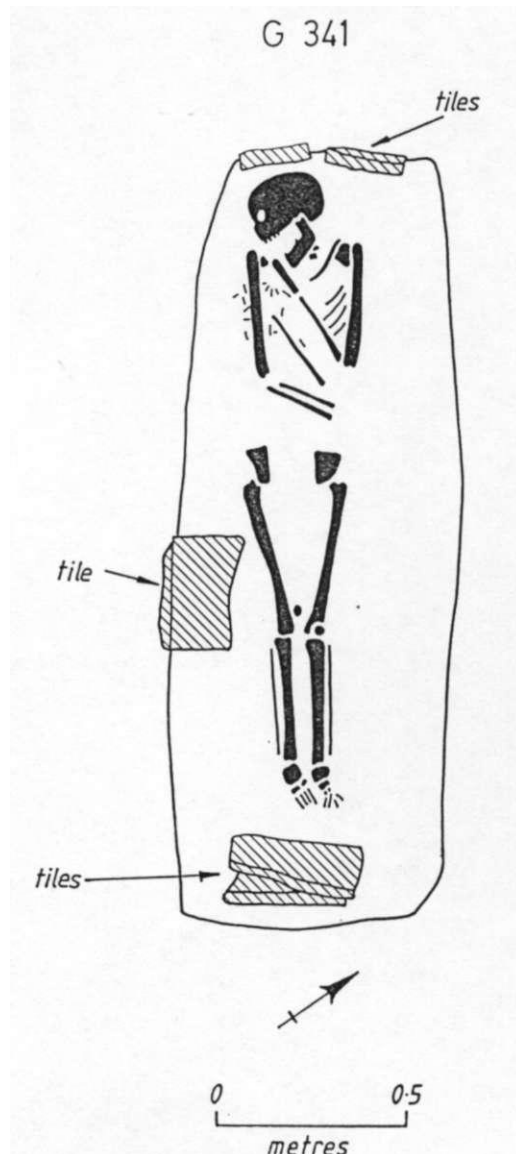


G 340

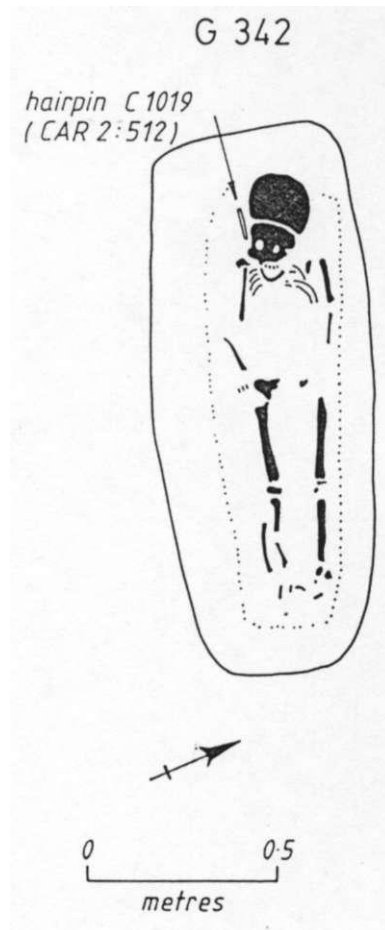


Grave 340 E-W (head to W). Isolated grave. Nailed timber coffin Child. aged 3 to 4 years. Fragments only

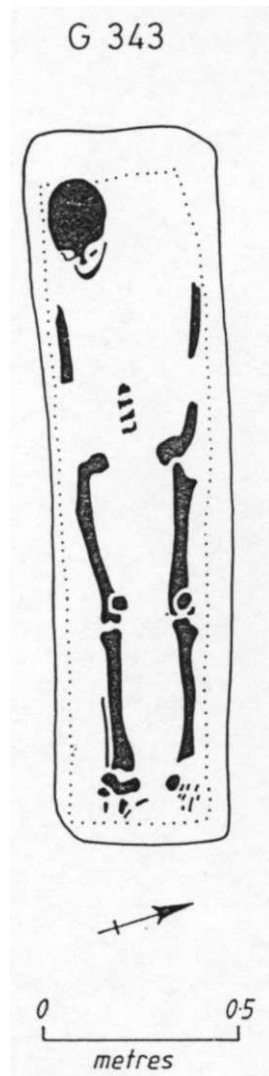




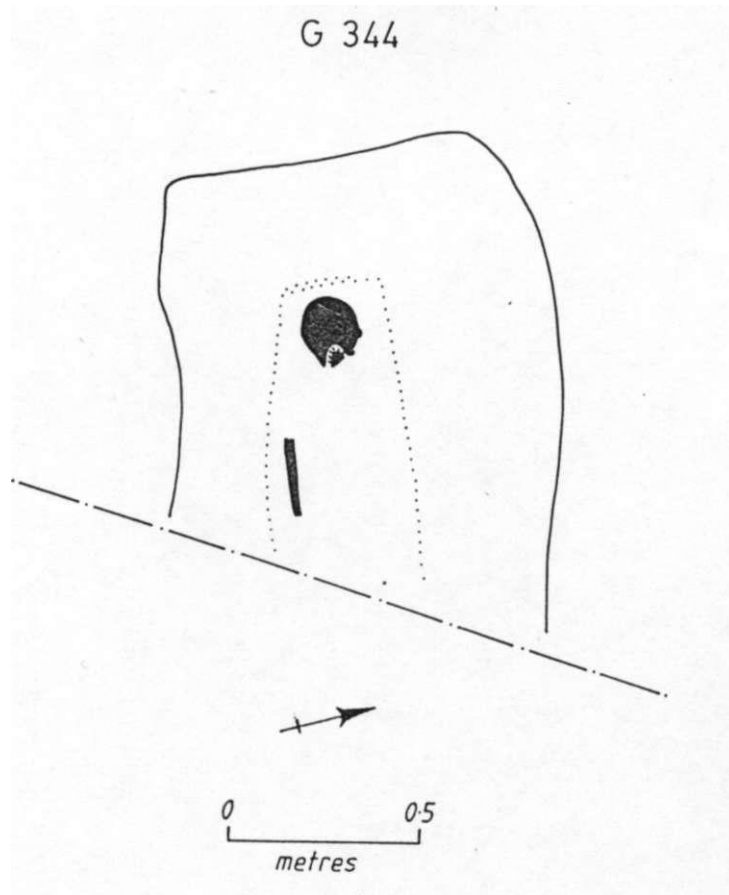
Grave 341 E-W (head to W). Cuts Period 2 G375. G390. No coffin. Two large rectangular tile fragments were set on edge side by side at W end of grave. and two more set on edge but face to face at E end. Fifth fragment placed on edge just to E of centre on S side of grave. Middle-aged male. Skeleton supine. Surviving bone in good condition. Skeleton appears to be compressed as if deposited in grave tightly wrapped: legs close together, shoulders raised slightly and pushed inwards, left hand touching right shoulder, right hand towards left elbow or hip.



Grave 342 E-W (head to W). Cuts Period 2
G354. Cut by modern pipe trench **CF16**.
Relationship with Period 2 **G363** uncertain.
?Nailed timber coffin (one nail only
recovered). Child. aged 7 years. Skeleton
supine. Bones in good condition. Silver
hairpin found on skull.

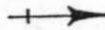
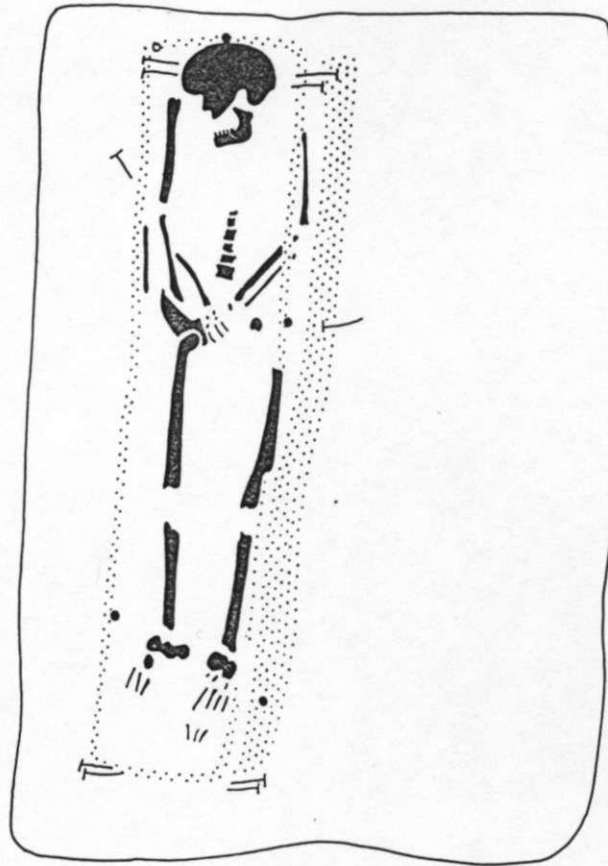


Grave 343 E-W (head to W) . Cuts Period 2 G352 . Timber coffin (non nail



Grave 344 E-W (head to W). Cute Period 1 pit CF53. Period 2 G374. W half only excavated. Timber coffin (no nails recovered). Middle-aged male. Skeleton supine. Skull and right humerus only survive, in poor condition.

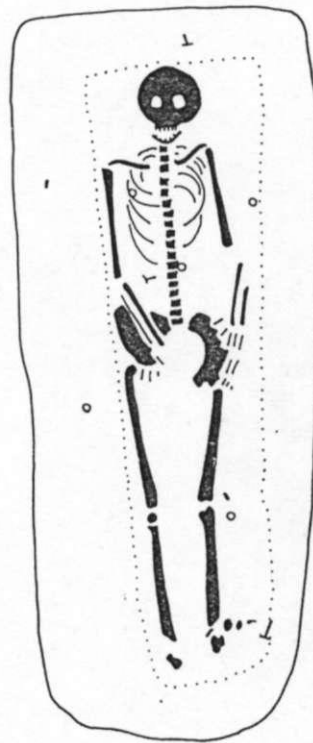
G 345



0 0.5
metres

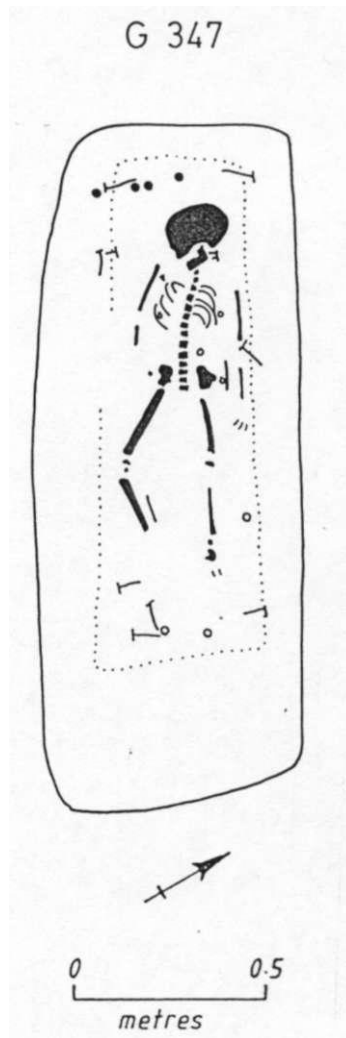
Grave 345 E-W (head to W). Cuts Period 2 G332. G351. Relationship with Period 2 G373 uncertain. Grave pit very wide. 1.56 m. Nailed timber coffin. Middle-aged female. Skeleton supine. Surviving bones in good condition.

G 346

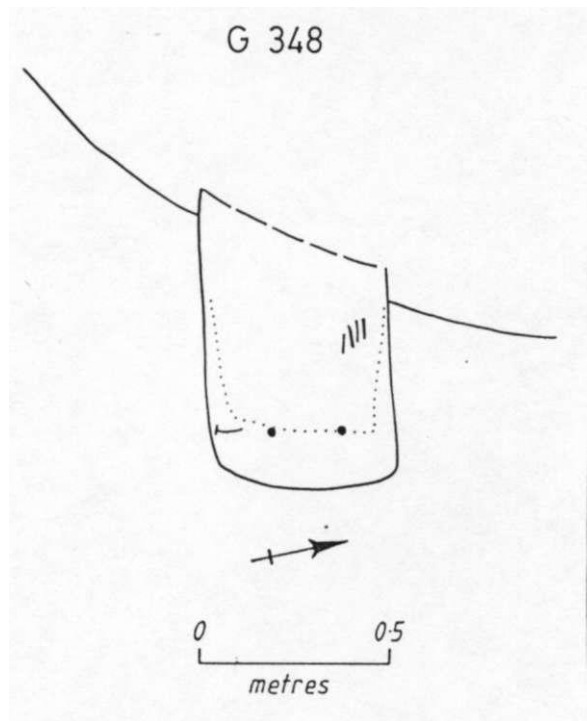


0 0.5
metres

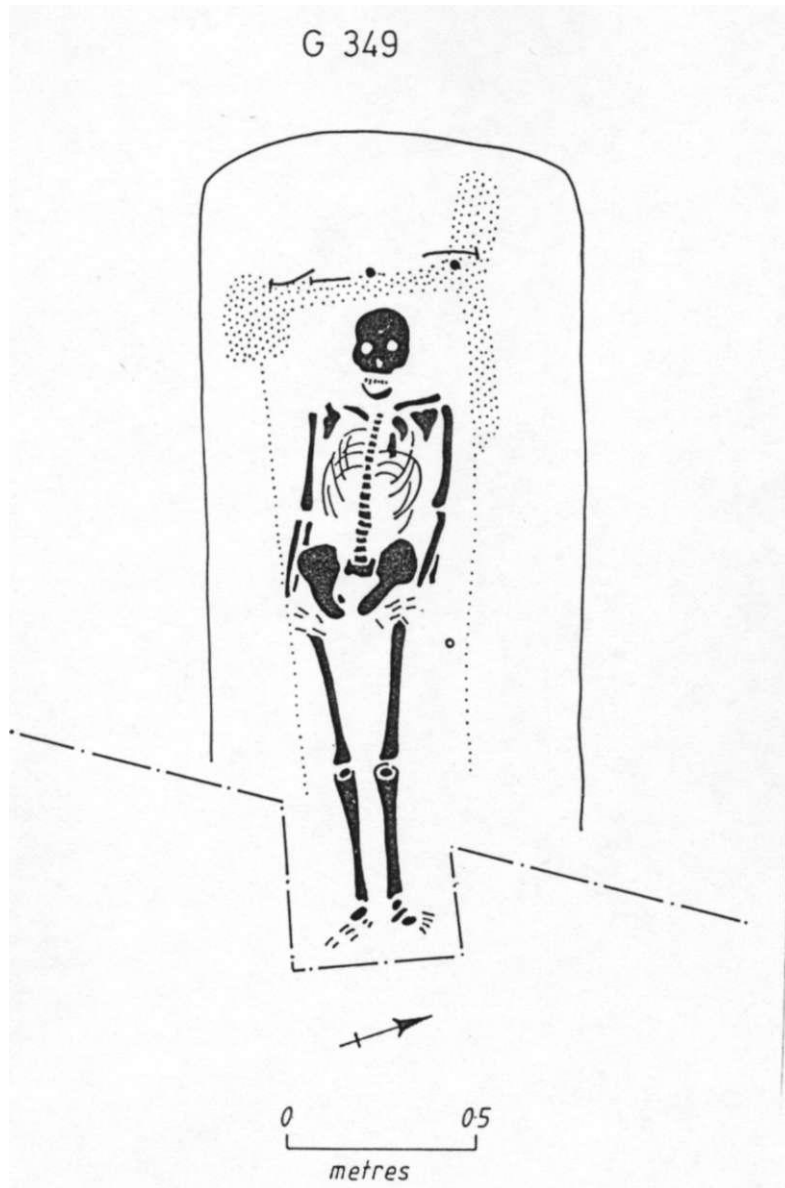
Grave 346 E-W (head to W). cuts Period 2
G366, G368. G376. G382. G386. Nailed timber
coffin. Young adult female. Skeleton supine.
Bones in very good condition.



Grave 347 E-W (head to W). Cut by Period 2 G338. Cuts Period 2 G384. Relationship to Period 2 G385 uncertain. Nailed timber coffin. Child, aged 4 years. Skeleton supine. Right leg slightly bent. Surviving bones in good condition. Three groups of unidentifiable pieces of copper alloy were

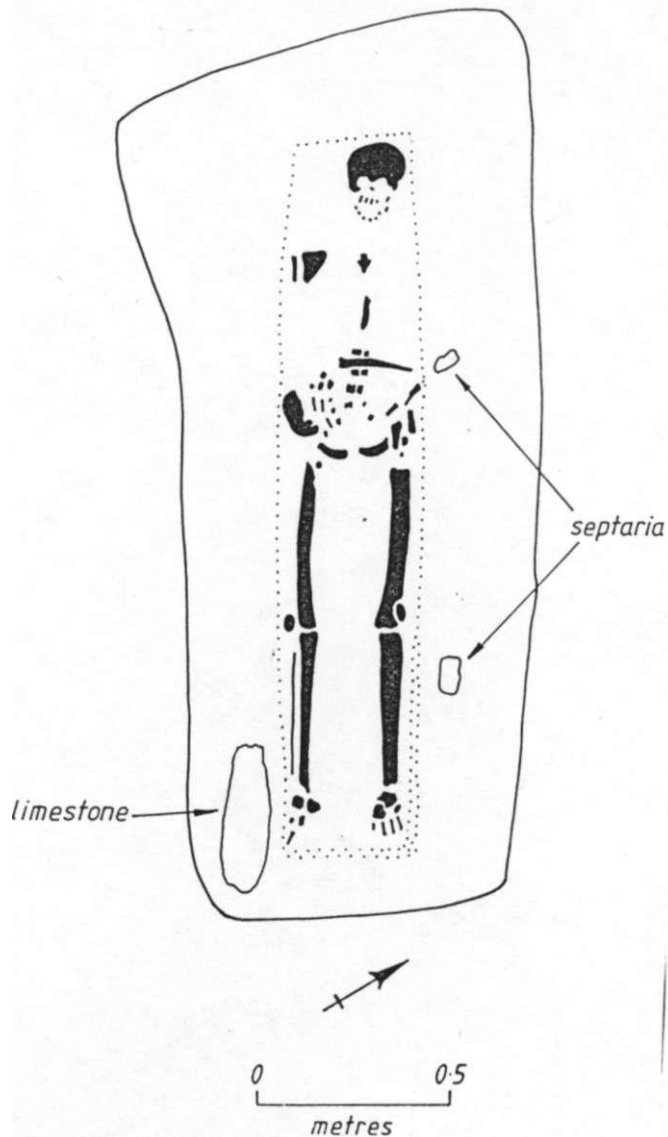


Grave 348 E-W (head to W). Isolated grave. Cut by modern pit CF30. E end only survives. Nailed timber coffin. Only left foot bones remained. but probably did not survive lifting.



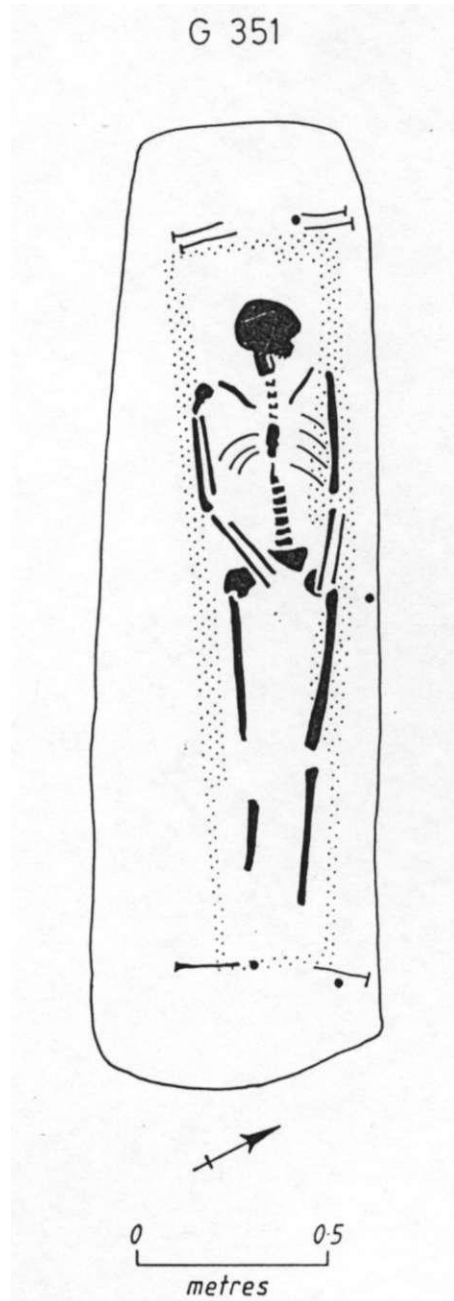
Grave 349 E-W (head to W). Cuts Period 2 G360, G374. Nailed timber coffin. Timber stain thick and irregular at w end of coffin. Perhaps collapsed projecting lid? Middle-aged male. Skeleton supine. Bones in very good condition.

G 350

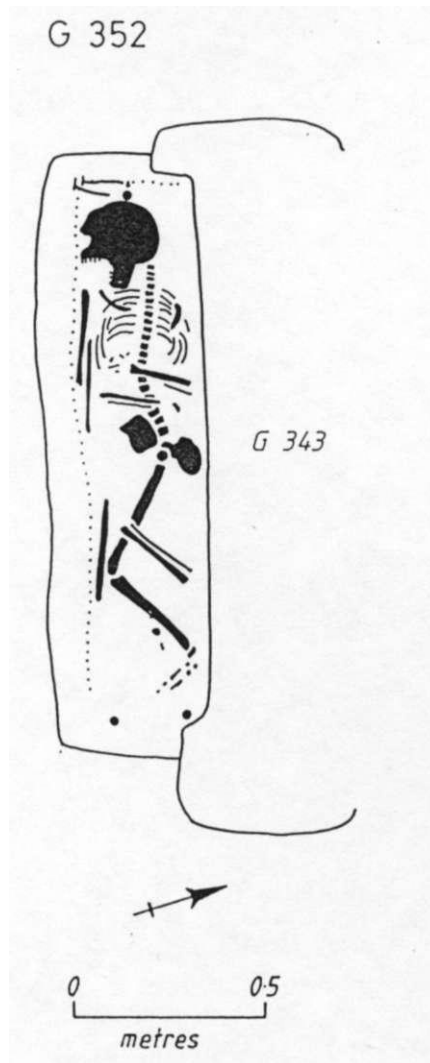


Grave 350 E-W (head to W). Cuts Period 2 G361. G369. timber vault CF55 (G395/G396). Relationship to Period 2 G391 uncertain. Timber coffin (no nails recovered). Large piece of roughly-cut limestone lay in SE corner of grave. in fill about 0.2-0.3 m up from grave bottom. Compare with adjacent G361. Two small pieces of septaria lay on bottom of grave on N side of coffin. one about 0.3 m from W end. other about 0.25 m from E end. Middle-aged male. Skeleton supine. Skull damaged. Surviving bones fairly well-preserved.

G 351



Grave 351 E-W (head to W). Cut by Period 2 G345. Relationship to Period 2 G316 uncertain. Nailed timber coffin. Middle-aged male. Skeleton supine. Surviving bones in poor condition, apart from skull. which is damaged but well preserved.



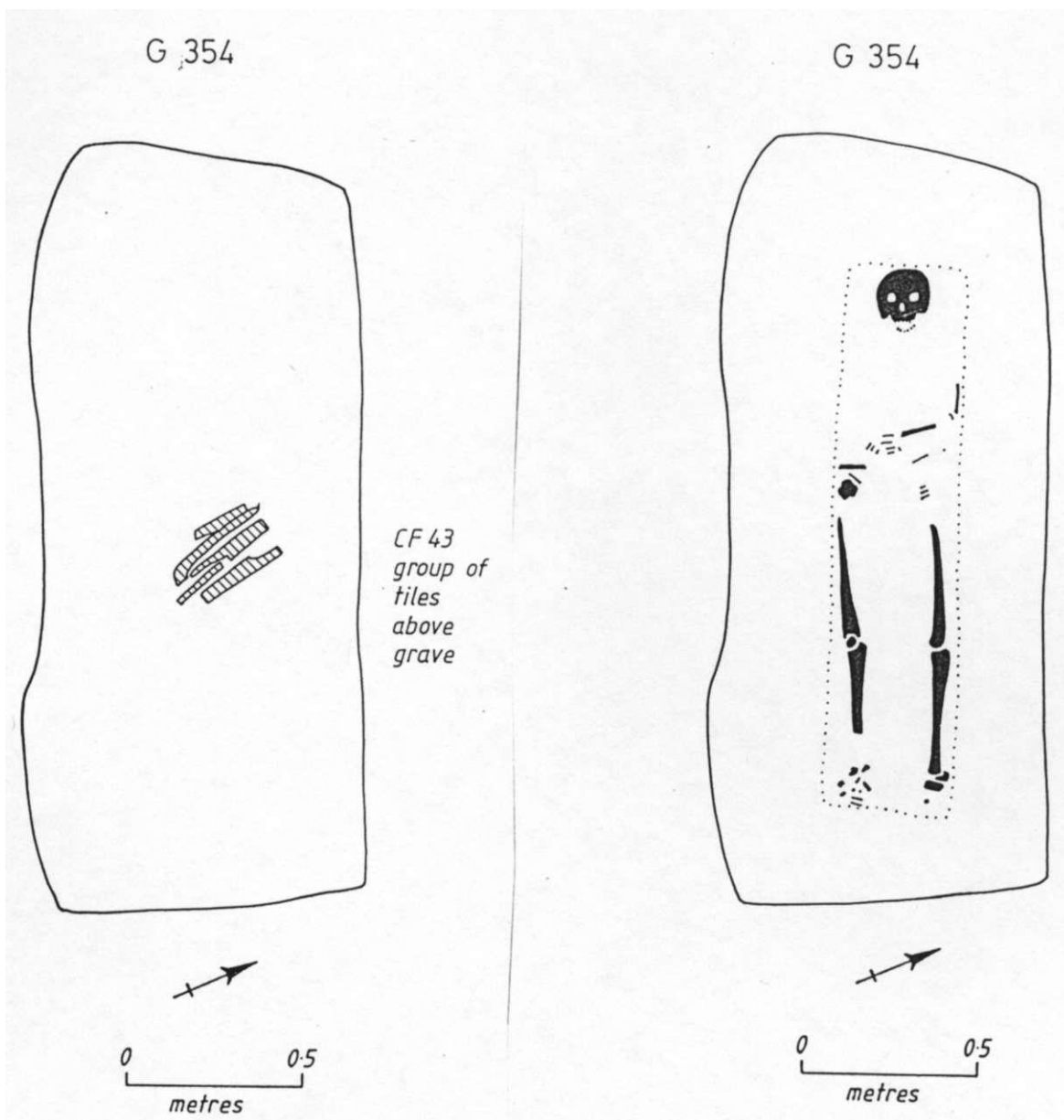
Grave 352 E-W (head to W). Cut by Period 2 G343. Nailed timber coffin. Child, aged 13 to 15 years. Skeleton supine. but lower arms lain across chest with upper right arm crushed against S wall of coffin and both legs bent so that knees touch S wall. Almost certainly result of forcing body into too short a coffin. Bones in good condition.

G 353



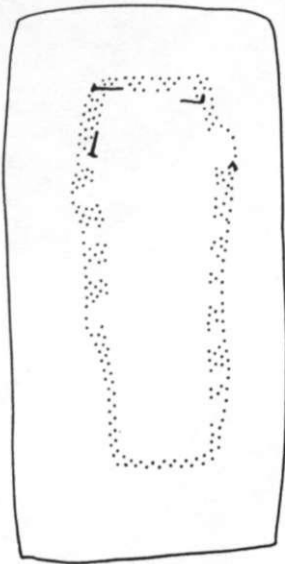
0 0.5
metres

Grave 333 E-W (head to W). Cut by Period 2 G318. G338. Nailed timber coffin (timber stain not illustrated). Young adult male. Skeleton supine. Bones in very good condition.



Grave 354 E-W (head to W). Cuts Period 1 E-W ditch CF59. Period 2 G362, G376. Cut by Period 2 G342. tile feature CF43. Relationship with Period 2 G362. Nailed timber coffin (nails not plotted or illustrated). Group (CP43) of tile fragments, at least three identifiable as tegulae. were set on edge above centre of grave more or less on Roman ground surface. Group not aligned with either axis of grave. but may have served as a surface marker. Middle-aged, sex uncertain. Skeleton supine. Surviving bones in poor condition.

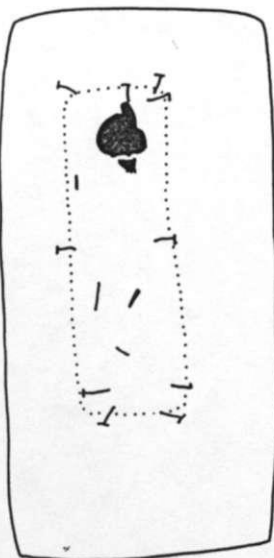
G 355



0 0.5
metres

Grave 355 E-W. Cuts and seals Period 2 G356. Cuts Period 2 G399. Nailed timber coffin, length 0.94 m. width 0.28 m. No skeletal material. Coffin size indicates child.

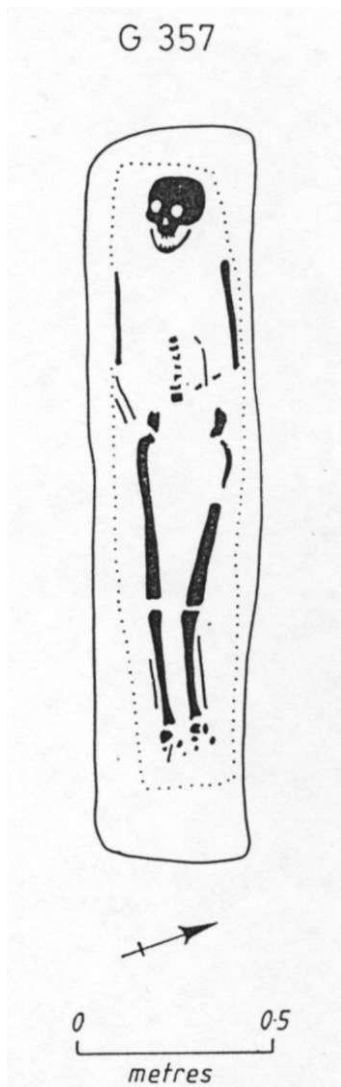
G 356



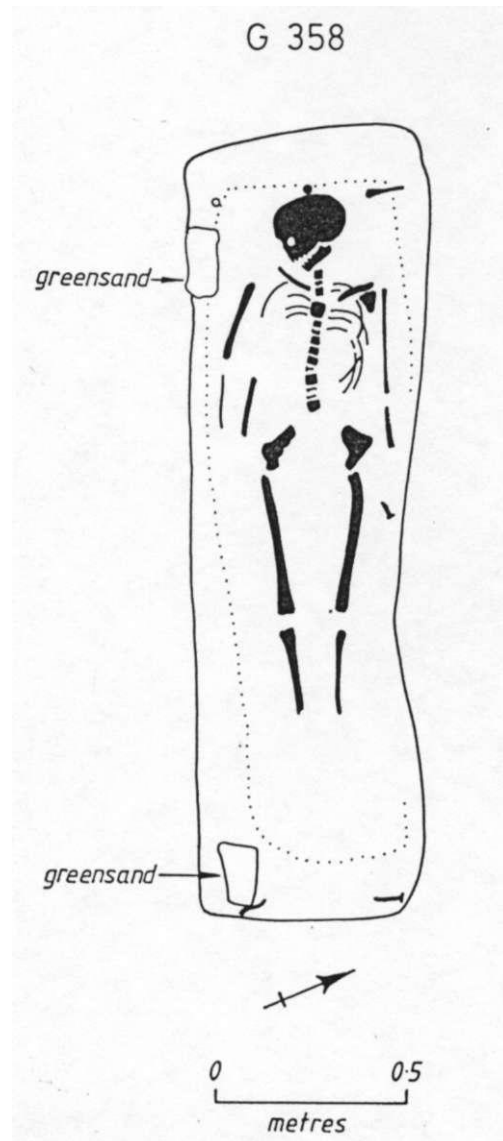
0 0.5
metres

Grave 356 E-W (head to W). Cuts Period 2 G399. Cut and sealed by Period 2 G355. Nailed timber coffin. Child, aged 2 years. Skeleton supine. legs flexed to right. Only skull and fragments of some leg long bones survive. in poor condition.

G 357

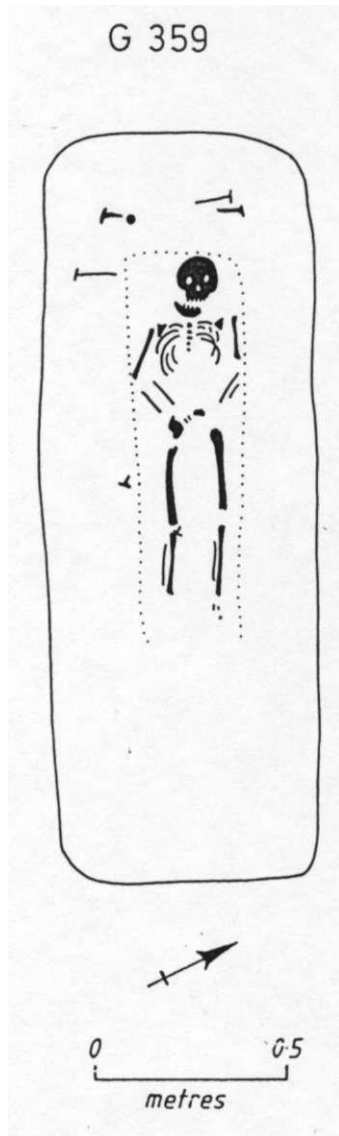


Grave 357 E-W (head to W). Cuts Period 2 G370, G382. G386. G388. Coffin directly overlies that of Period 2 G370. Timber coffin (no nails recovered). Middle-aged male. Skeleton supine. Surviving bones in poor condition.



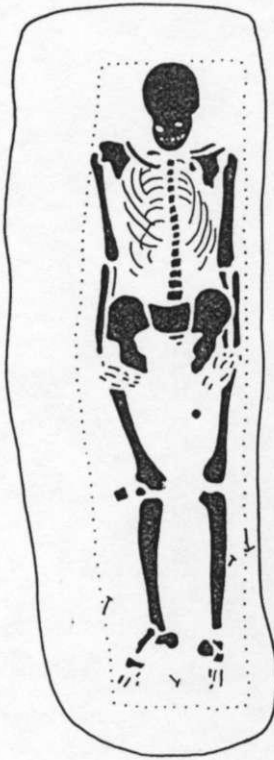
Grave 358 E-W (head to W). Cuts Period 2 timber vault G366, coffin placed directly over vault. Nailed timber coffin. Two lumps of greensand found within grave fill. close to SW and SE corners of coffin and more or less at height of lid. Young adult female. Skeleton supine. Surviving bones in good condition.

G 359



Grave 359 E-W (head to W). Relationship to
Period 2 0373 uncertain. Nailed timber coffin. Child, aged 6 years

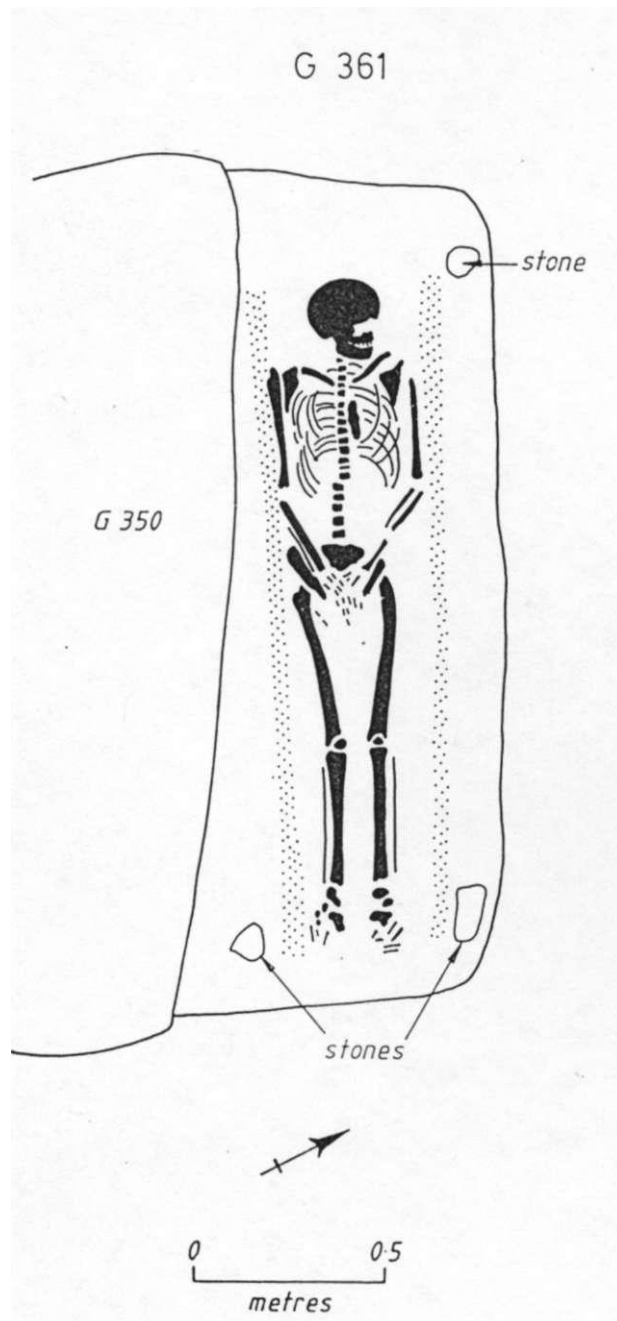
G 360



0 0.5
metres

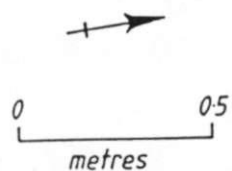
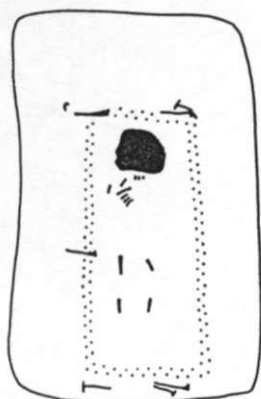
Grave 360 head to W). Cut by Period 2

G349. Mailed timber coffin. Middle-aged female. Skeleton supine. Bones i



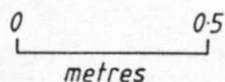
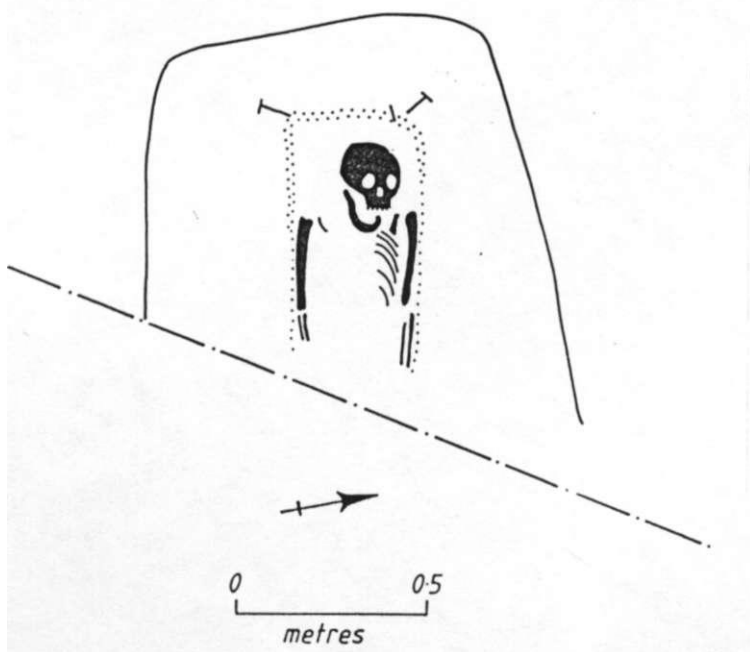
Grave 361 E-W (head to W). Cuts Period 2 G390. G391. timber vault CF55 (G395/G396). Cut by Period 2 G350. Coffin probably a hollowed log. Three lumps of unidentified stone lay in fill of grave, about 0.3 m above bottom. Each was set at a corner (NW. NE. SE) of coffin. probably level with top. Compare with G350. Middle-aged male. Skeleton supine. Bones in very good condition.

G 362



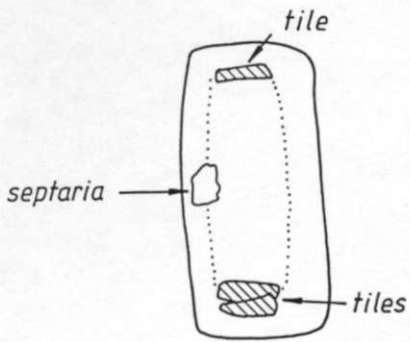
Grave 362 E-W (head to W). Cuts Period 1 E-W ditch CF59. Cut by Period 2 G354. Nailed timber coffin. Neonate. Skeleton supine. Surviving bones in poor condition. Skull crushed.

G 363

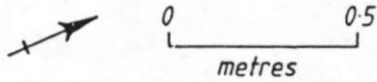


Grave 363 E-W (head to W). Relationships to Period 2 G3412 and G354 uncertain. Very deep grave. bottom about 2 m below level of site surface. W end only excavated. Nailed timber coffin. Middle-aged female. Skeleton supine. Surviving bones in fair condition.

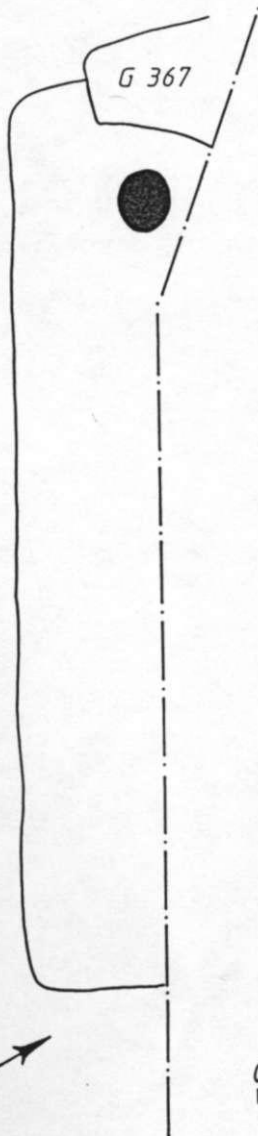
G 364



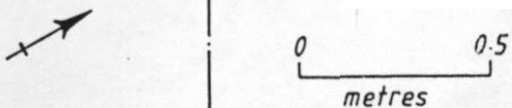
Grave 364 E-W. Cuts Period 2 G378. G379. Grave cut not defined. Timber coffin (no nails recovered). One fragment of tile set on edge outside W end of coffin, and two outside E end. Length of coffin between tiles 0.5 m. width 0.2 m. A piece of septaria lay midway along S side of coffin. No skeletal material. Coffin size indicates infant.



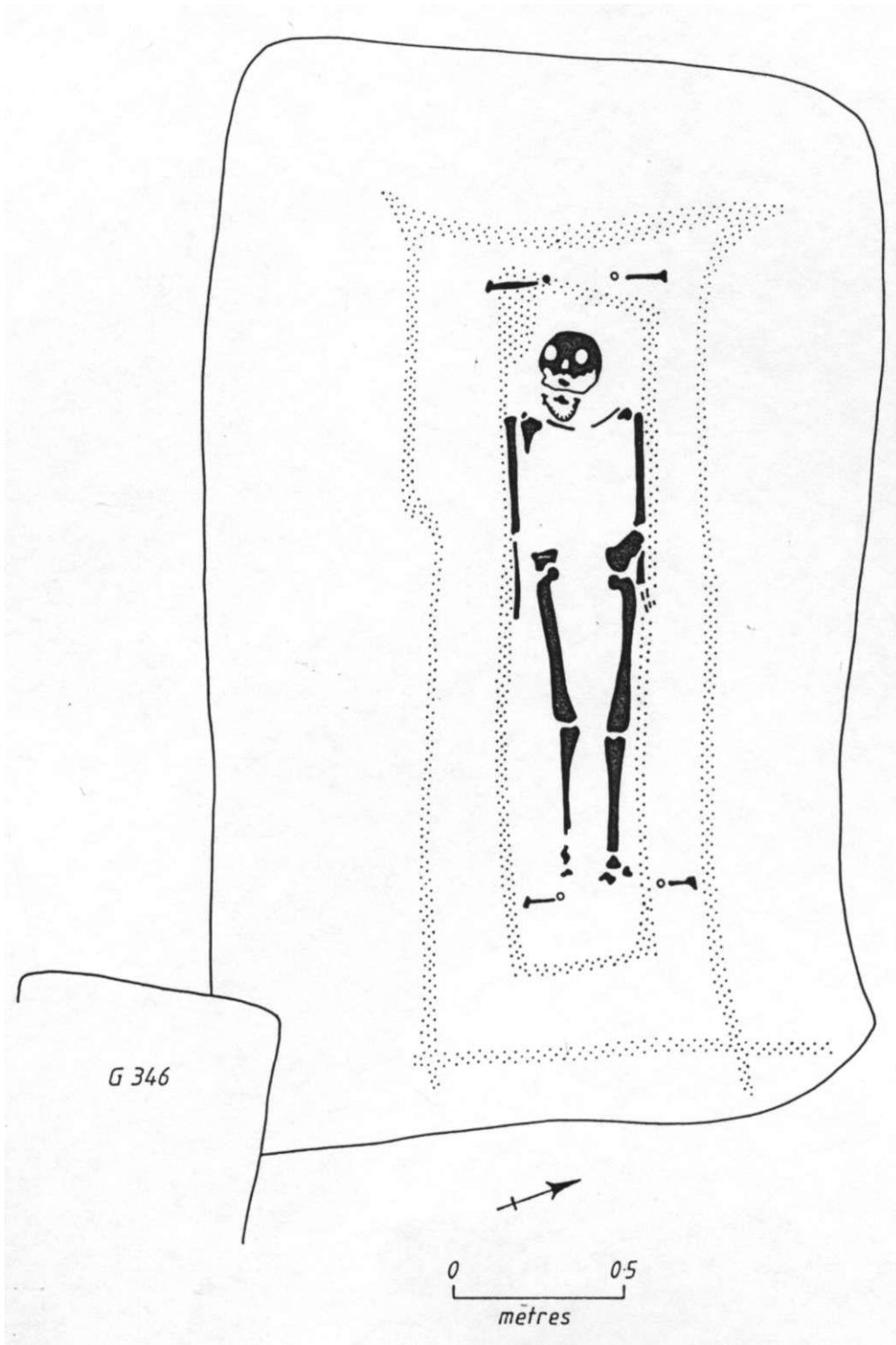
G 365



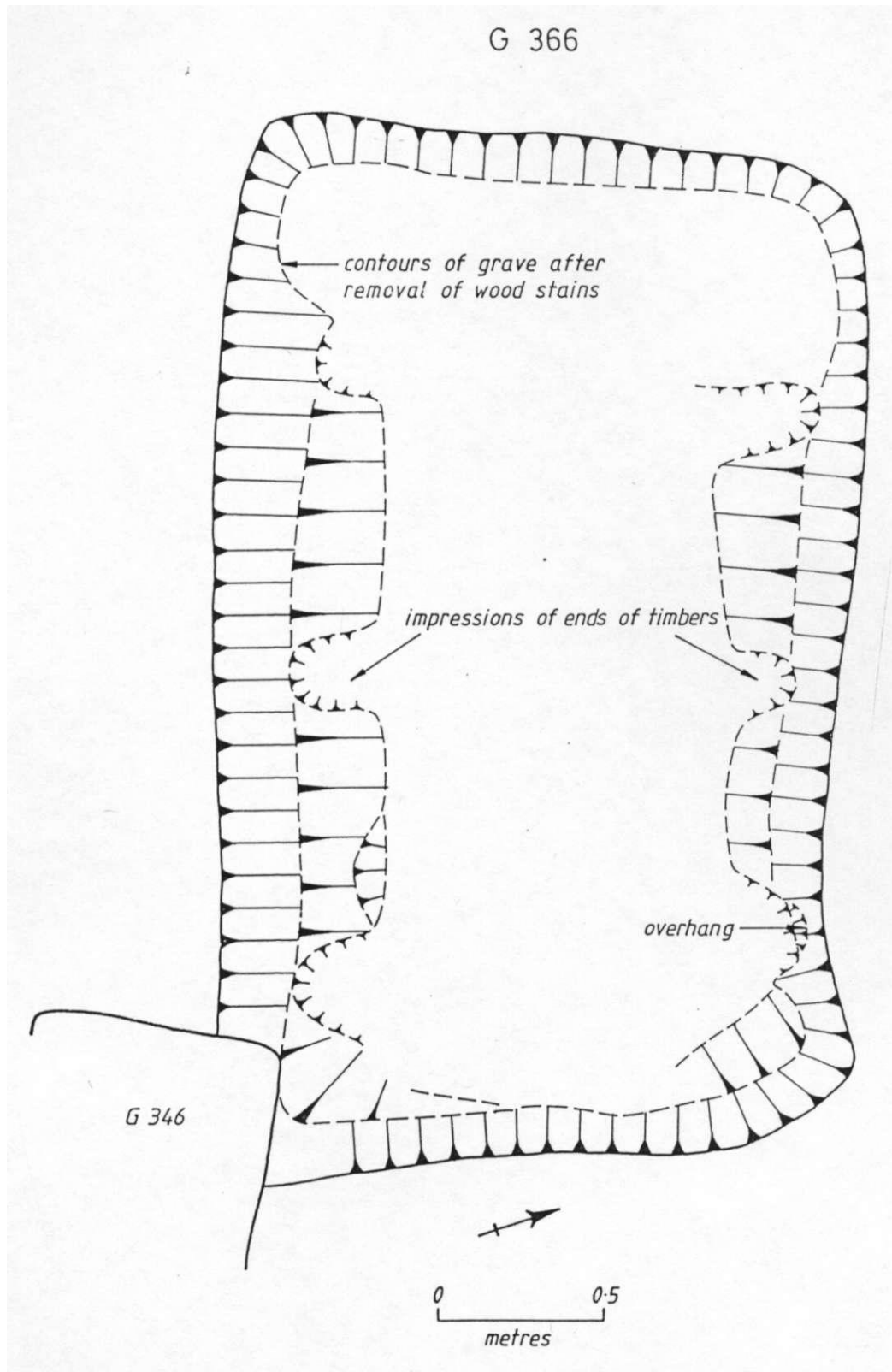
Grave 363 E-W (head to W). Cut by Period 2 G367. In N section of site. grave itself sectioned along E-W axis. Interment not fully excavated. but nailed timber coffin located and skull exposed.



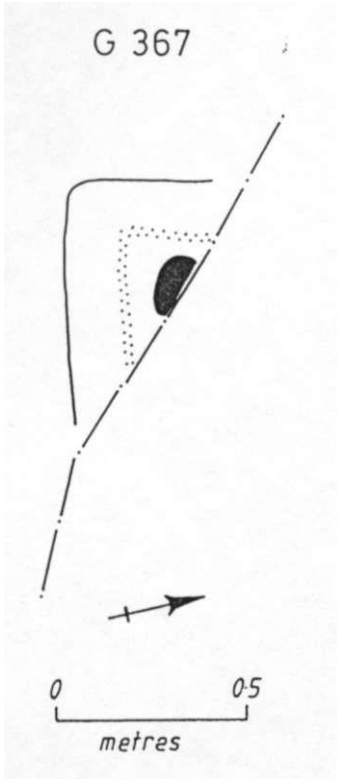
G 366



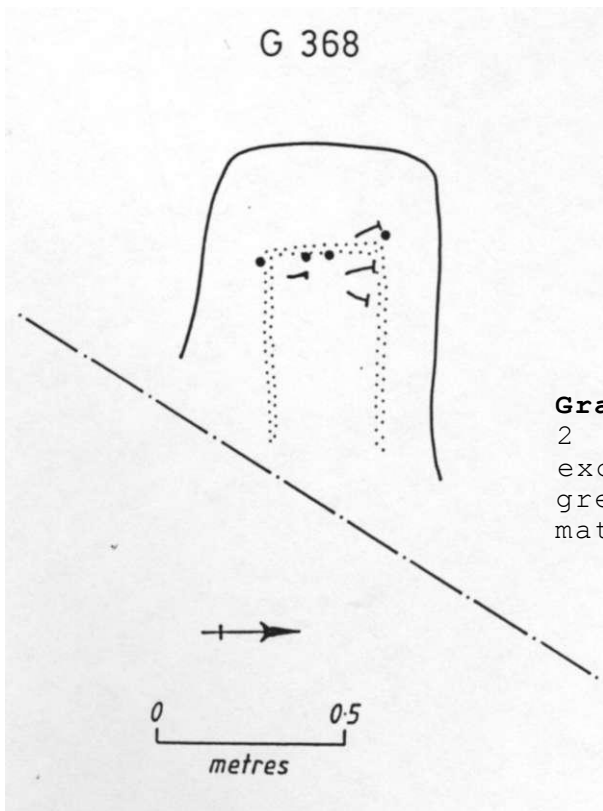
G 366



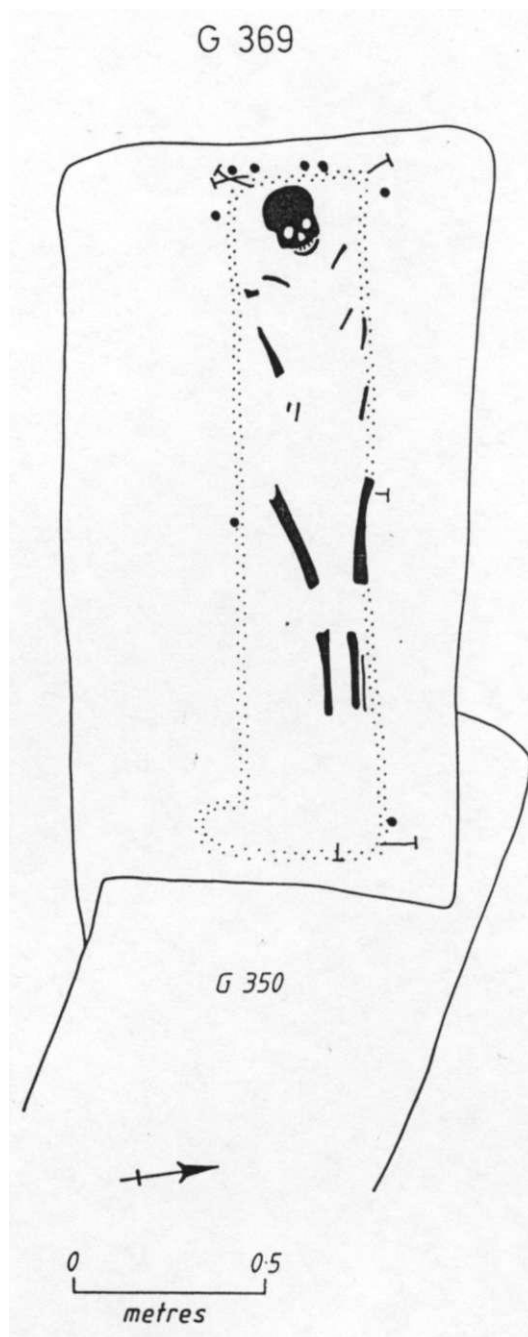
Grave 366 E-W (head to W). Cuts Period 2 G370. G372. G374. G377. G382. G386. Cut by Period 2 G3H6. G358. Nailed timber coffin within single-sized timber vault. Row of three depressions on both N and S sides of grave probably indicates positions of basal cross beams. Middle-aged male. Skeleton supine. Surviving bones in poor condition.



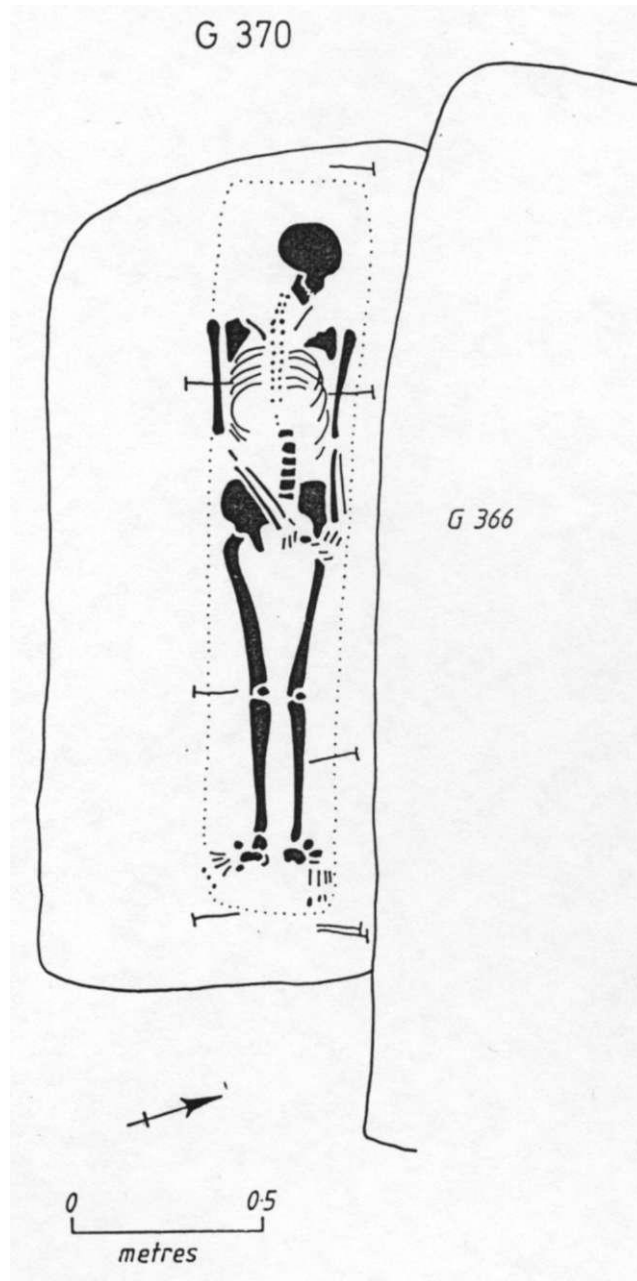
Grave 367 E-W (head to W). Cuts Period 2 G365. In N section of s grave only excavated. Nailed timber coffin (nails not plotted). Middle-aged female. Skull only exposed and lifted. in good condition.



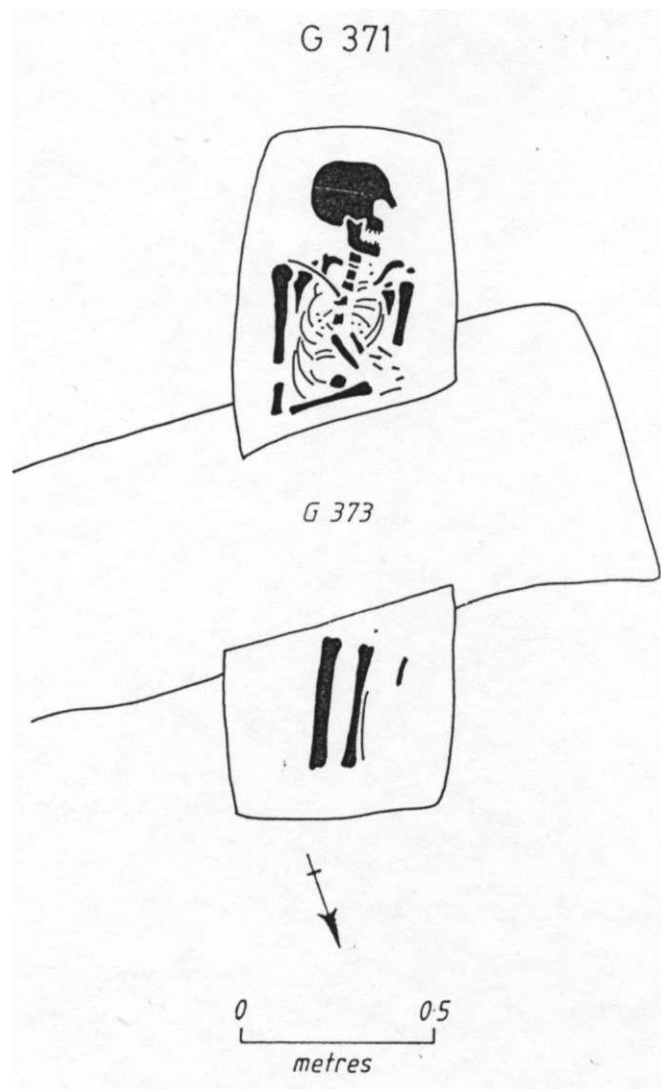
Grave 368 E-W. Cuts Period 1 pit CF53. Period 2 G376. Cut by Period 2 G346. W end only excavated. Nailed timber coffin. length greater than 0.5 m. width 0.26 m. No skeletal material. Width of coffin may indicate child.



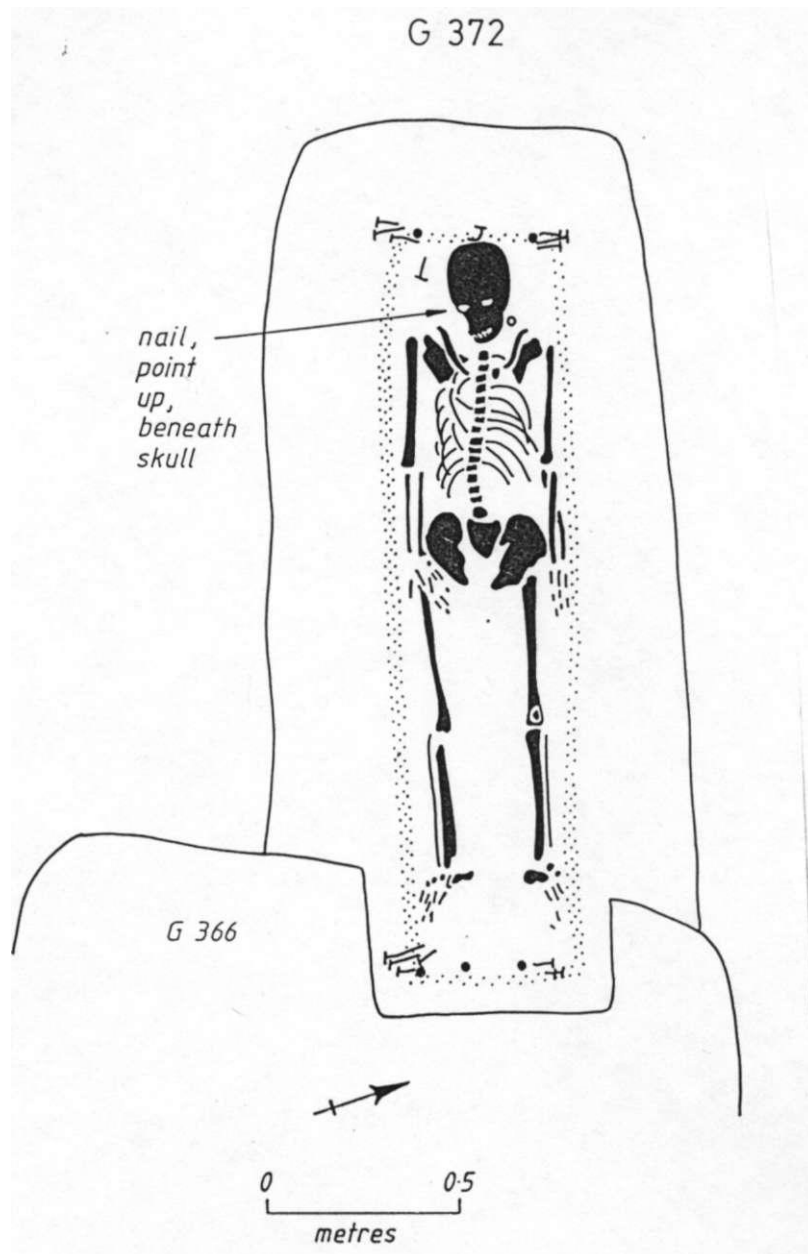
Grave 369 E-W (head to W). Cut by Period 2 G283. G350. Nailed timber coffin. Young adult female. Skeleton supine. Few bones survive, all in poor condition.



grave 370 E-W (head to W). Cute Period 1 E-W ditch CF59. Period 2 G382. G386. G388. G433. timber vault CF55 (G395/G396). Cut by Period 2 timber vault G366. Cut and sealed by Period 2 G357. Nailed timber coffin. Young adult male. Skeleton supine. Bones in good condition.

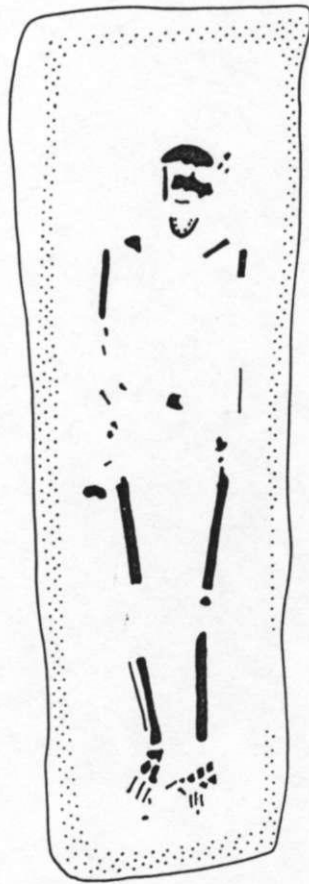


Grave 371 N-S (head to S). Cuts Period 1 N-S/E-W ditch CF58. Cut and middle part destroyed by Period 2 G373. No coffin. Middle-aged adult. sex uncertain. Skeleton supine. Right forearm across stomach. left across chest. Surviving bones in poor condition.



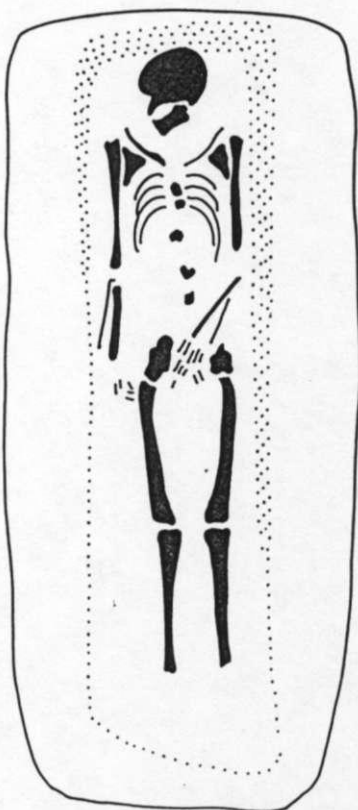
Grave 372 E-W (head to W). Cut by Period 2 timber vault G366. G377. Nailed timber coffin. Middle-aged male. Skeleton supine. Bones in very good condition.

G 373



Grave 373 E-W (head to W). Cuts Period 1 G371. Relationship to Period 2 G345 and G359 uncertain. Timber coffin (no nails recovered). Young adult male. Skeleton supine. Bones in very poor condition apart from those of lower legs and feet.

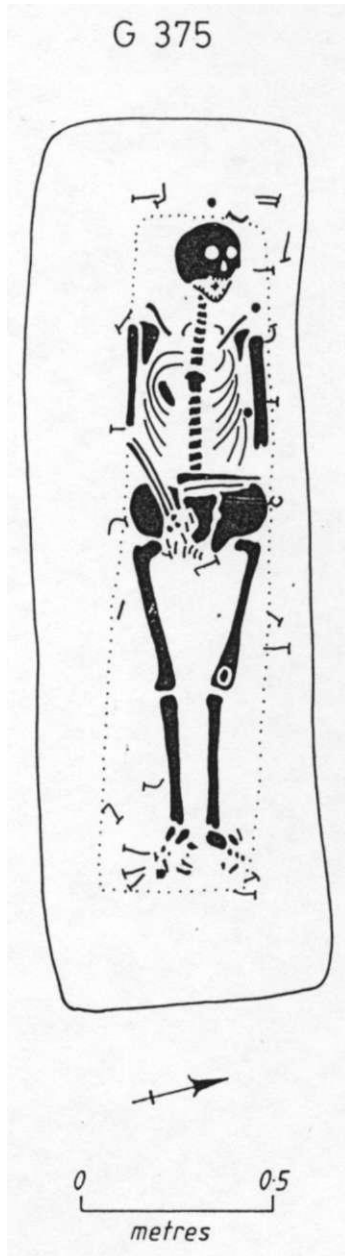
G 374



0 0.5
metres

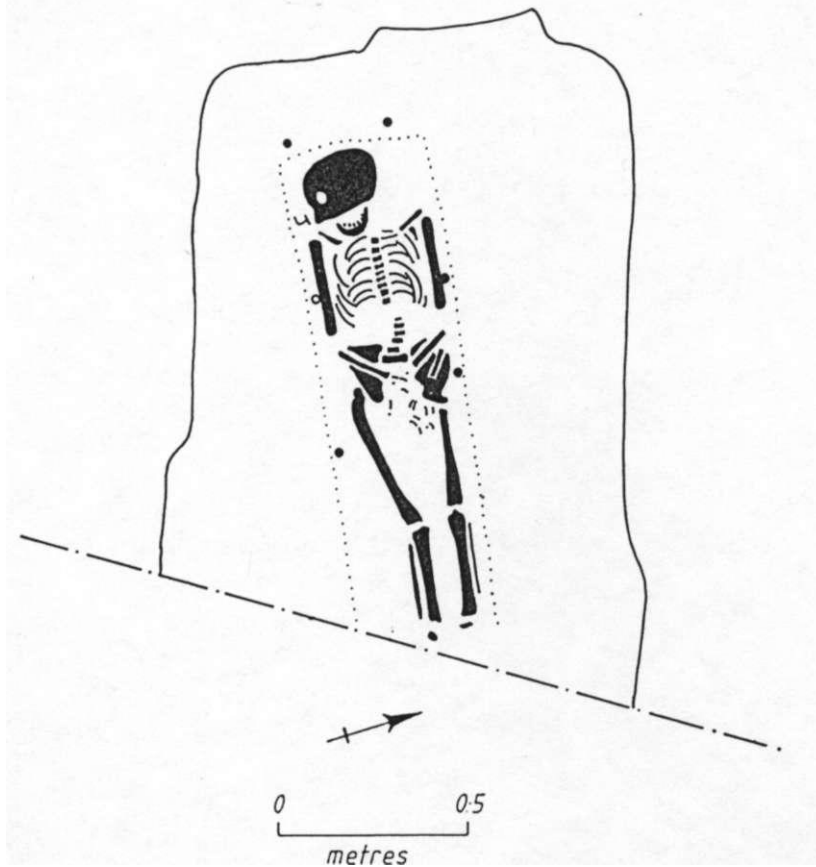
Grave 374 E-W (head to W). Cut by Period 2 G344. G349. timber vault G366. Nailed timber coffin (nails not illustrated). Young adult male. Skeleton supine. Surviving bones in good condition.

G 375

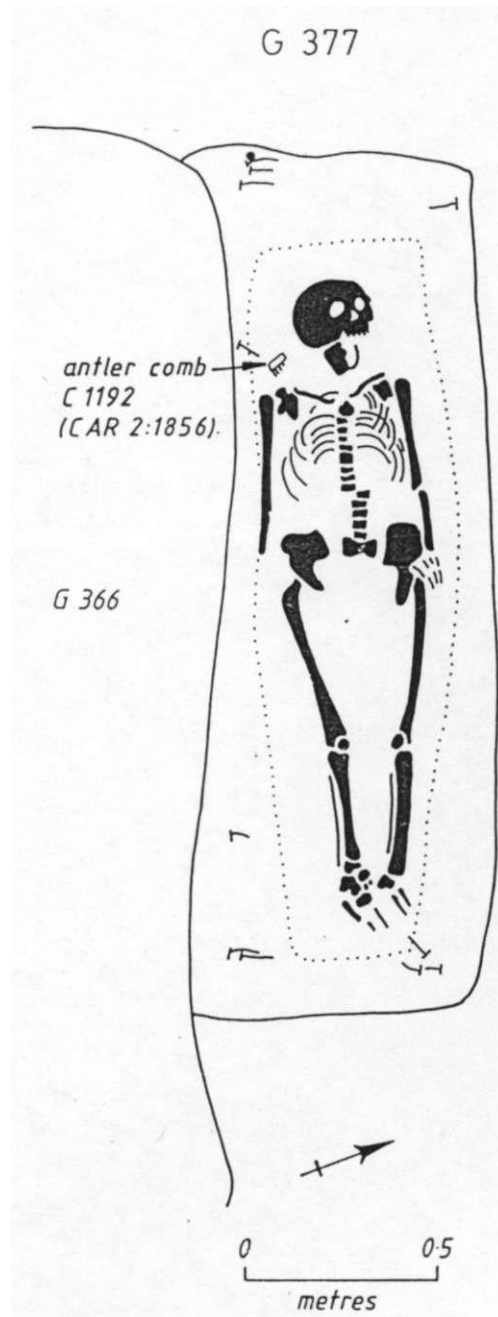


Grave 373 E-W (head to W). Cuts Period 2 G390. G391. Cut by Period 2 G336. G341. Nailed timber coffin. Middle-aged male. Skeleton supine. Bones in very good condition.

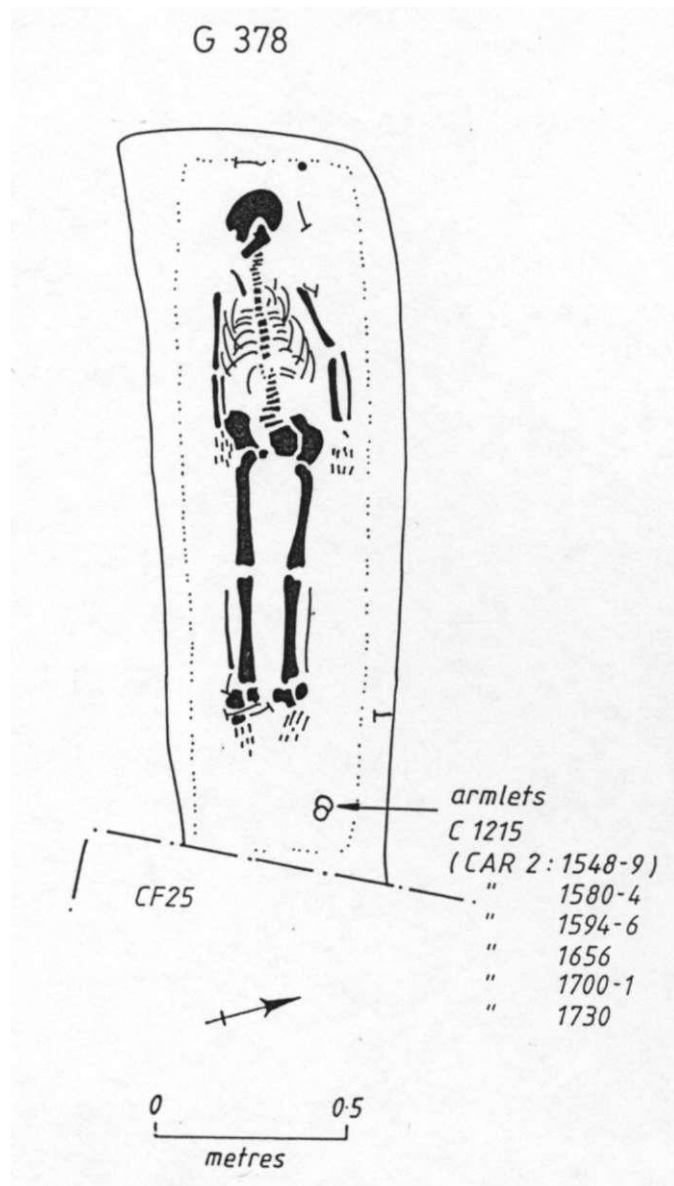
G 376



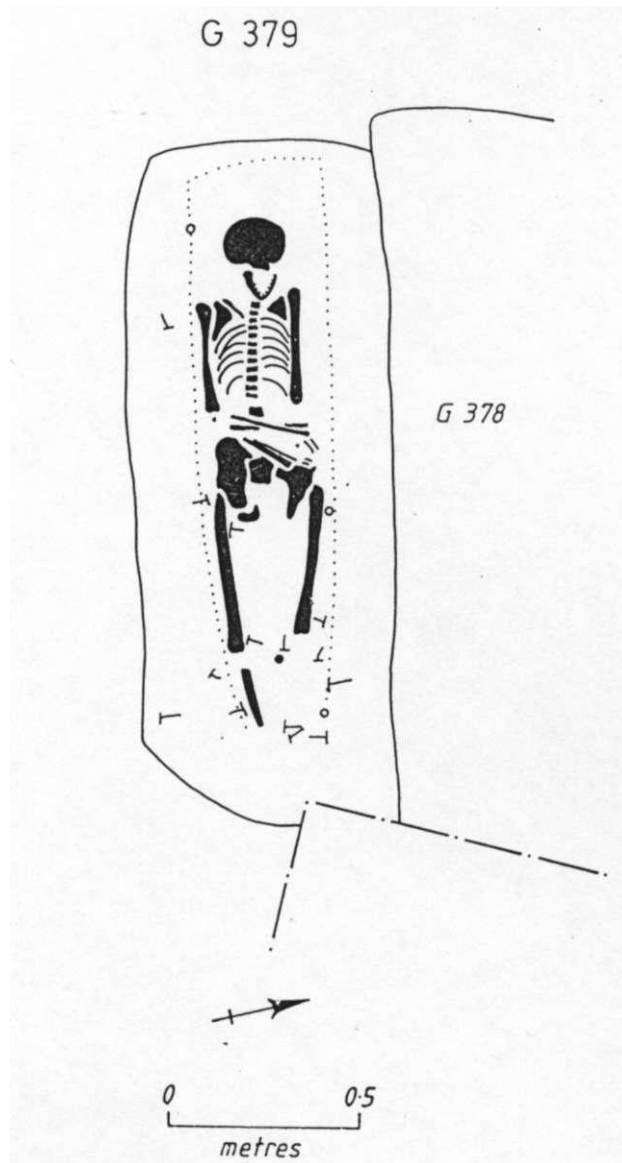
Grave 376 E-W (head to W). Cuts Period 1 pit CF53. E-W ditch CF59. Cut by Period 2 G346. G354. G368. Nailed timber coffin. Child, aged 13 to 14 years. Skeleton supine. Bones in good condition.



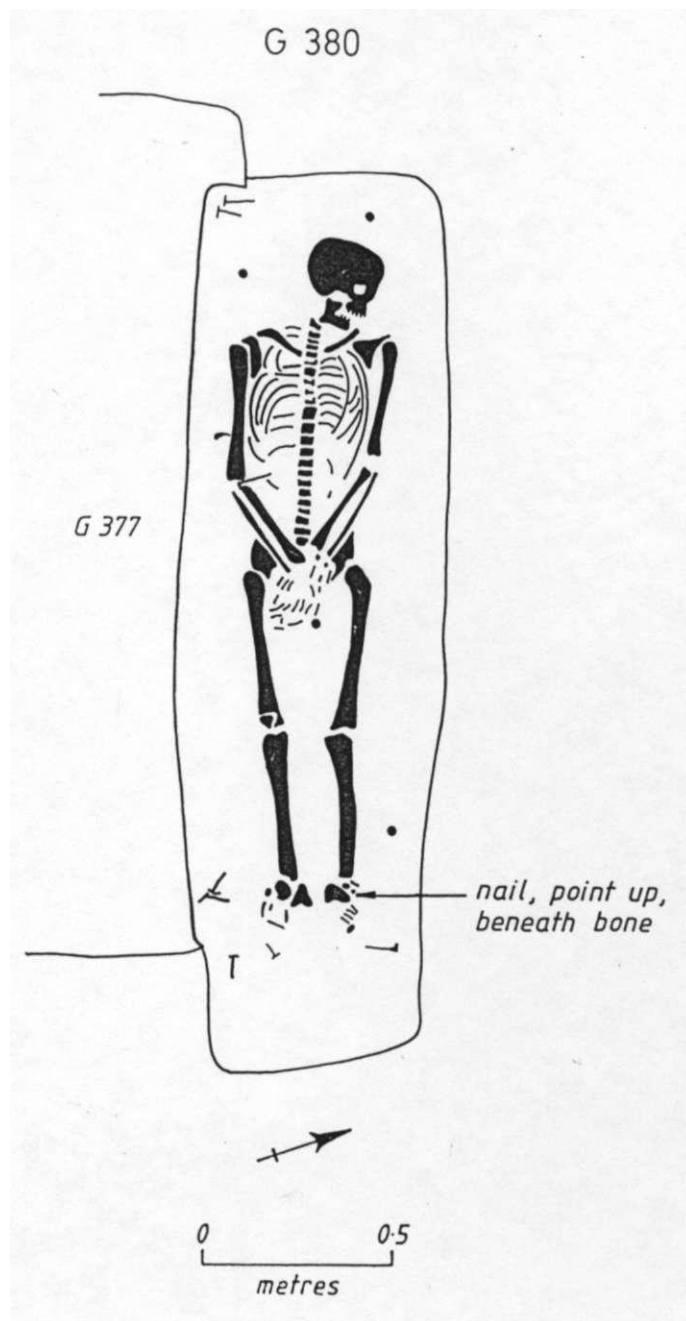
Grave 377 E-W (head to W). Cuts Period 2 G372, G380. Cut by Period 2 timber vault G366. Probably cut by Period 2 pit CF41. Nailed timber coffin. Young adult female. Skeleton supine. Bones in very good condition. Poorly preserved antler comb lay on bottom of coffin about 40 mm S of skull and just W of right shoulder.



Grave 378 E-W (head to W). Cuts Period 2 G379. G384. Cut by Period 2 G364. modern cellar CF25. Mailed timber coffin. Child, aged 12 years. Skeleton supine. Bones in good condition. Group of armlets (bone, shale, and copper-alloy) lay in NE corner of coffin, contained within patch of dark staining.

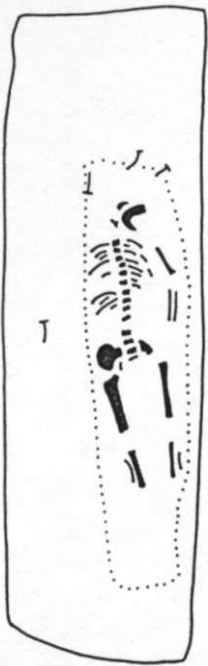


Grave 379 E-W (head to W). Cut by Period 2 G364. G378, modern cellar CF25. Nailed timber coffin. Middle-aged male. Skeleton supine. Surviving bones in good condition.



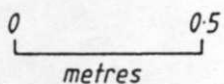
Grave 380 E-w (head to W). Cut by Period 2 G377. Nailed timber coffin (timber stain indistinct. not illustrated). Middle-aged male. Skeleton supine. Bones in very good condition.

G 382

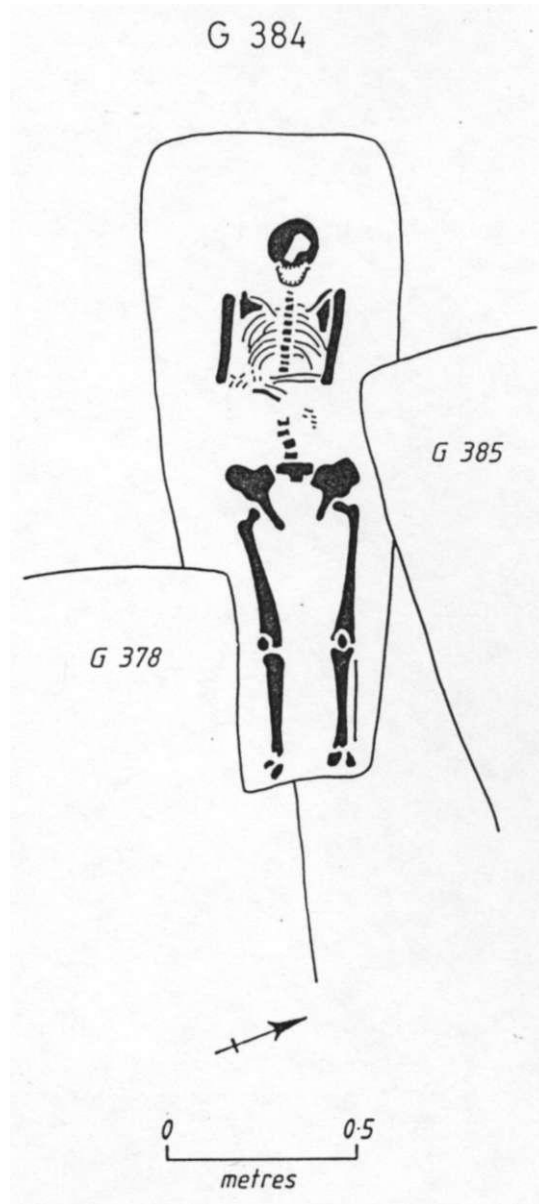


Grave 382 E-W (head to W). Cuts Period 2 G386. Cut by Period 2 G346. G357. timber vault G366. G370. Nailed timber coffin. Child. aged 18 months to 2 years. Skeleton supine. Surviving bones in fair condition, though skull missing. either decomposed or removed by later activity.

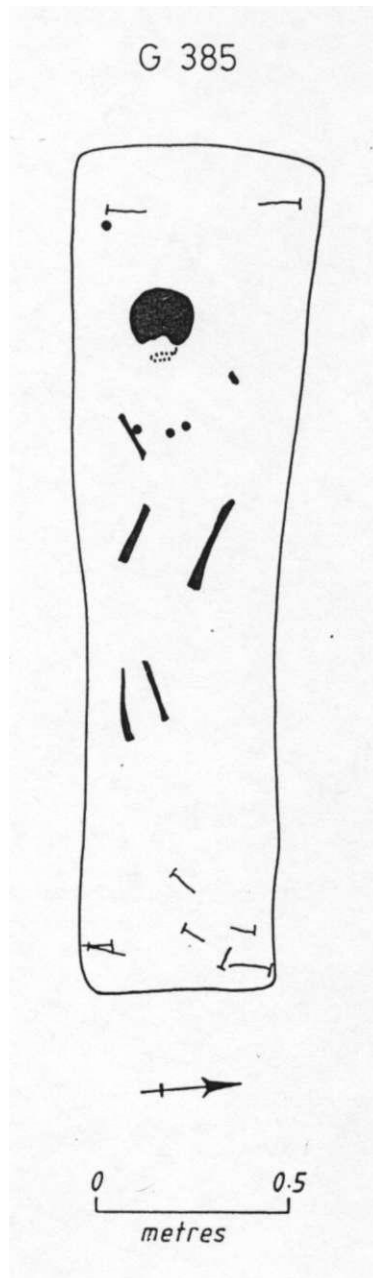
G 383



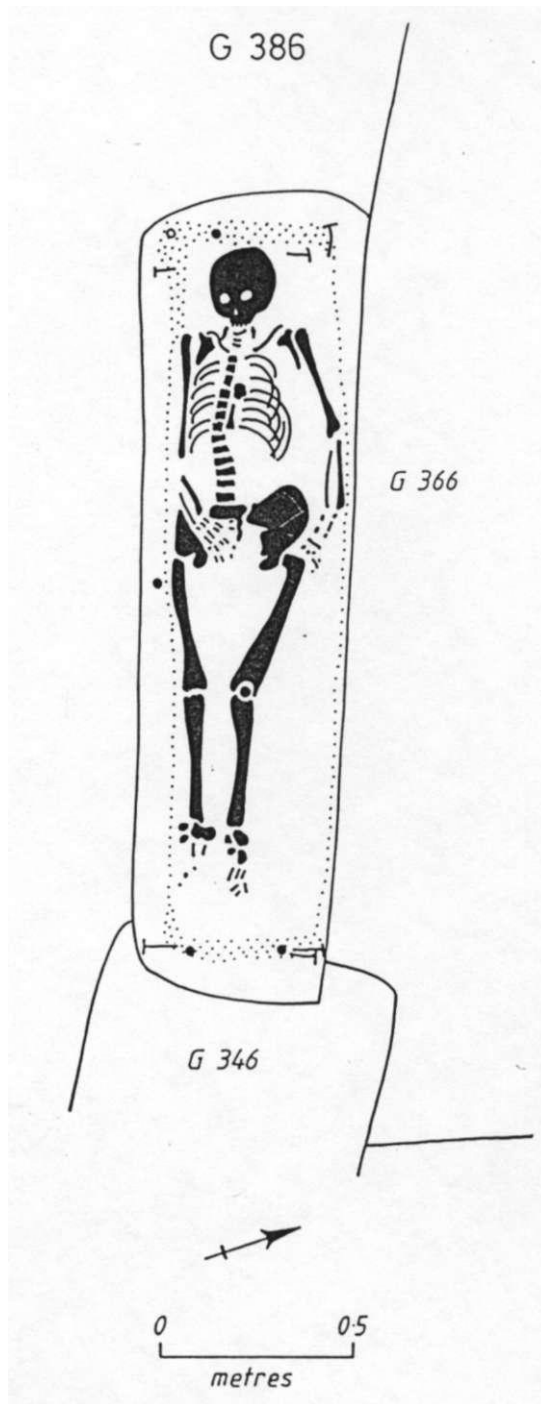
Grave 383 E-W (head to W). Relationship to Period 2 G393 and G405 uncertain. Probably no coffin (no timber stain or nails located). Grave length 1.24 m, width 0.6 m. Leg bones only remained. No pathological report. Bones probably did not survive lifting. Grave size indicates older child.



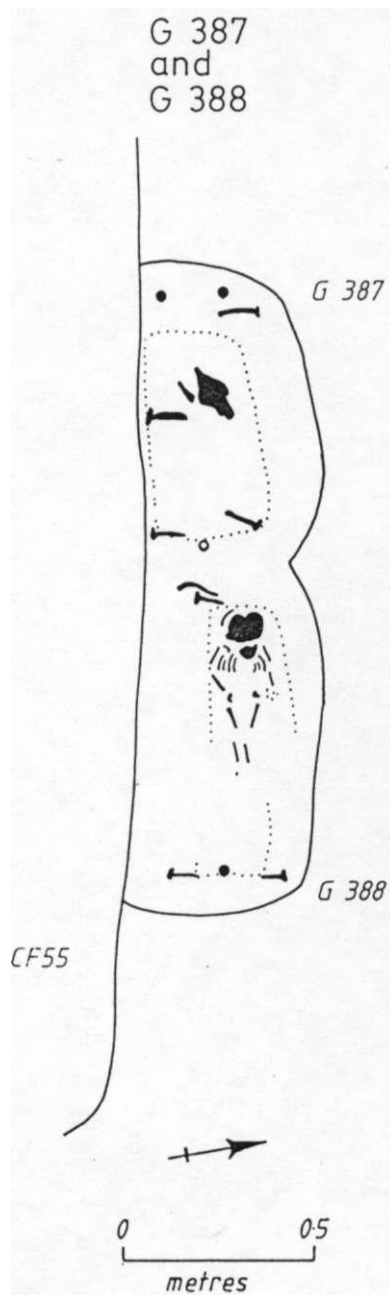
Grave 384 E-W (head to w). Cut by Period 2 G347. G376, G385. Timber(?) stain only located beneath skeleton (not illustrated). Possibly a plank burial, or stain may be from corpse alone. Middle-aged female. Skeleton supine. Bones in fair condition.



Grave 385 E-W (head to W). Cute Period 2 G384. Relationship to Period 2 G347 uncertain. Nailed timber coffin (timber stain not located). Middle-aged adult. sex uncertain. Skeleton supine. Surviving bones in very poor condition.

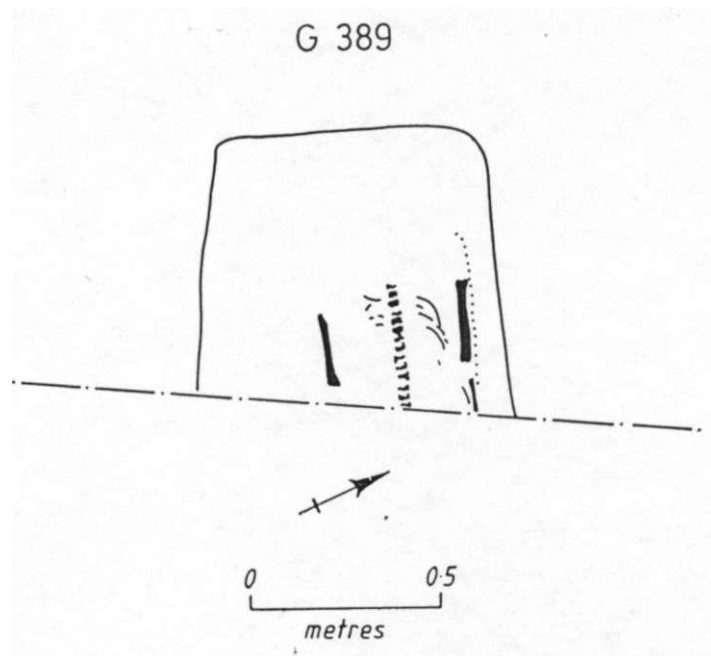


Grave 386 E-W (head to W). Cut by Period 2 G346. G357. timber vault G366. G370. G382. Nailed timber coffin. Young adult female. Skeleton supine. Bones in very good condition.

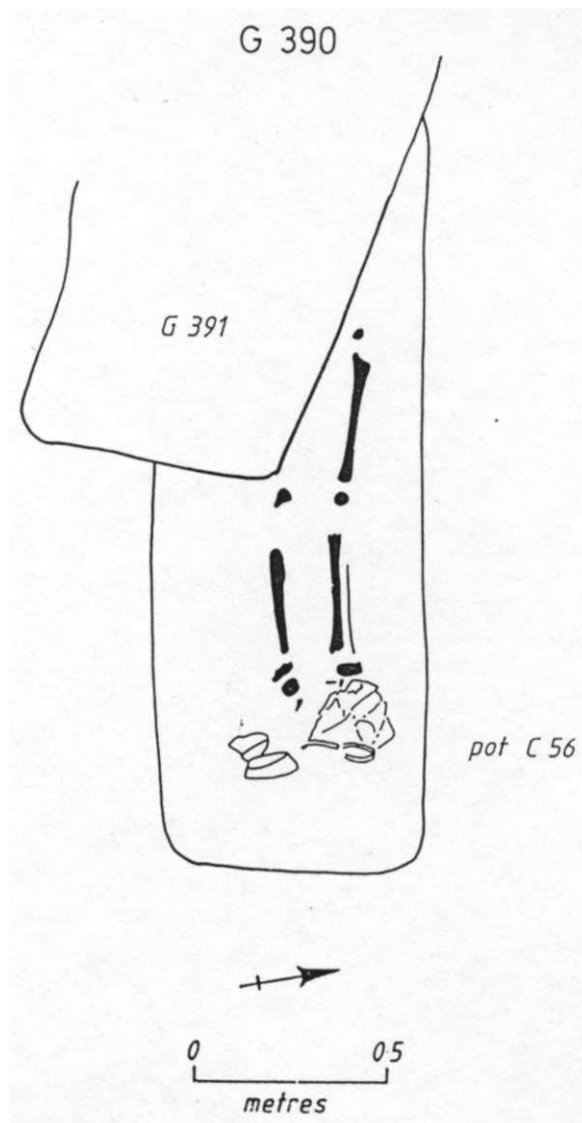


Grave 387 E-W. Cuts Period 2 G433. Cut by Period 2 timber vault CF55 (G395/G396). Relationship to Period 2 G388 uncertain. Nailed timber coffin. Only lump of bone remained, ?skull. No pathological report, bone missing. probably did not survive lifting. Coffin size and association with G388 suggests this grave too is of a neonate, possibly a twin of G388.

Grave 388 E-W (head to W). Cuts Period 2 G433. Cut by Period 2 G357. G370. timber vault CF55 (G395/G396). Relationship to Period 2 G387 uncertain. Nailed timber coffin. Neonate. Skeleton supine. Surviving bones in good condition. Possibly twin of G387.

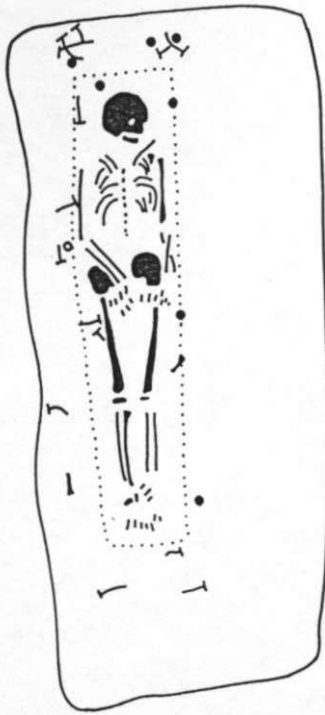


Grave 389 E-W (head to W). Isolated grave, on edge of site. W end only excavated. Timber coffin (stain indistinct. no nails recovered). Age and sex uncertain. Skeleton supine. Surviving bones in very poor condition.



Grave 390 E-W (head to W). Cut by Period 2 G336. G341. G361. G375. G391. W end destroyed by G391. Probably no coffin (no timber stain or nails located). Adult. sex uncertain. Skeleton supine. Surviving bones in fair condition. Fragmented coarse grey ware jar. CAM 268. lay close to the feet.

G 391

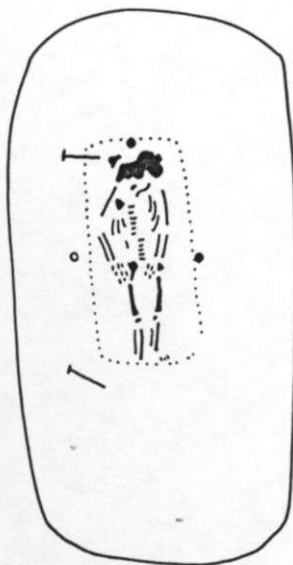


Grave 391 E-W (head to W). Cuts Period 2 G390. Cut by Period 2 G336. G361, G375. Relationship to Period 2 G350 uncertain. Nailed timber coffin. Child. aged 7 years. Skeleton supine. Bones in very good condition.



0 0.5
metres

G 392

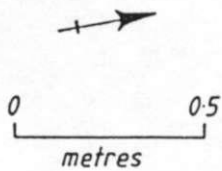
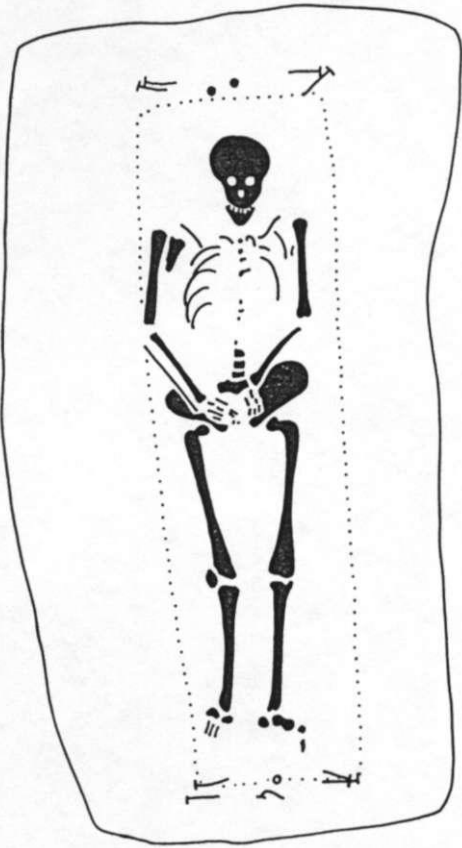


Grave 392 E-W (head to W). Cuts Period 2 timber vault CF55 (G395/G396). Nailed timber coffin. Neonate. Skeleton supine. Bones in very good condition.



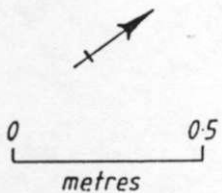
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metres

G 393



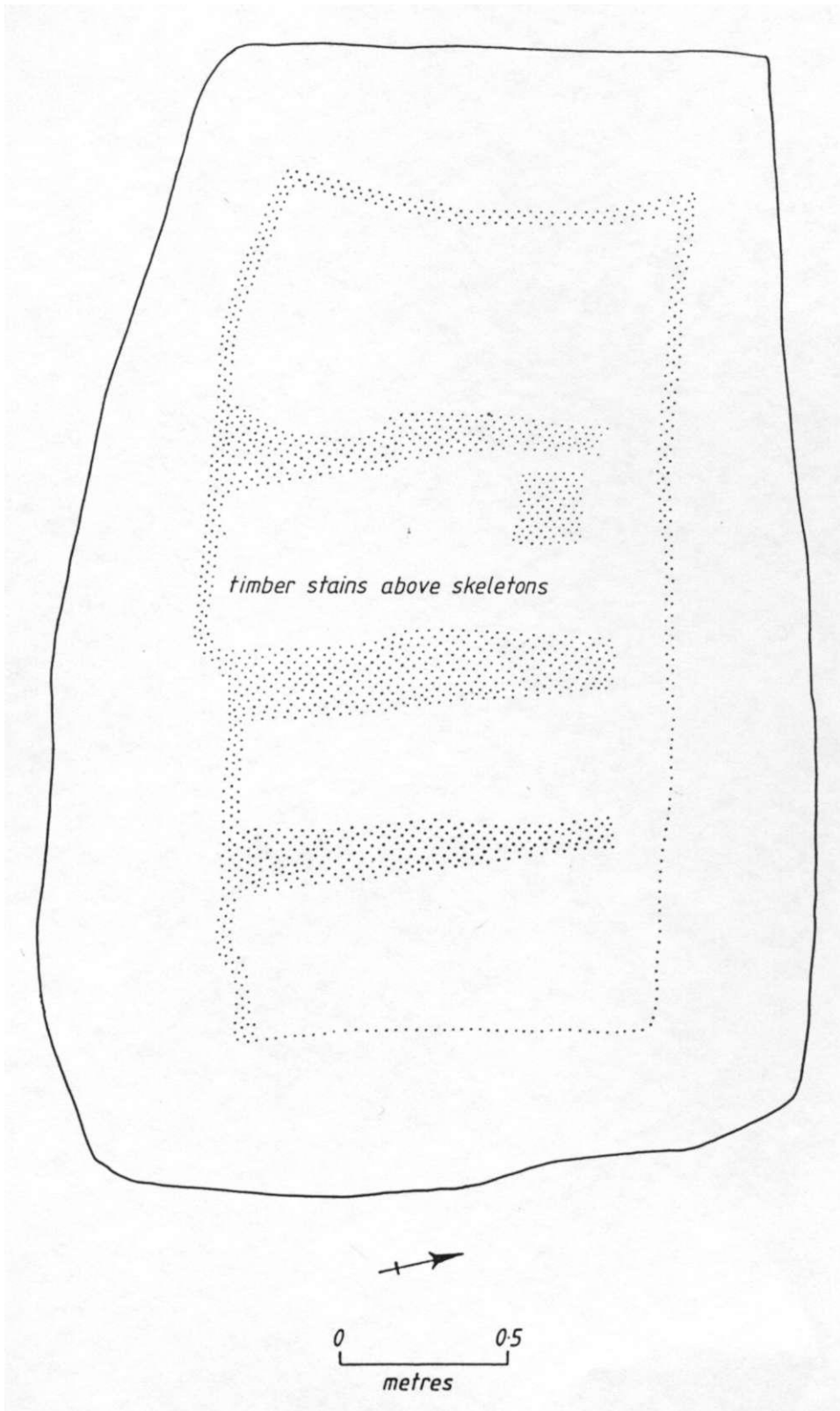
Grave 393 E-W (head to W). Cuts Period 2 G405. G407. Relationship with Period 2 G383 uncertain. Mailed timber coffin. Young adult male. Skeleton supine. Bones in very good condition.

G 394

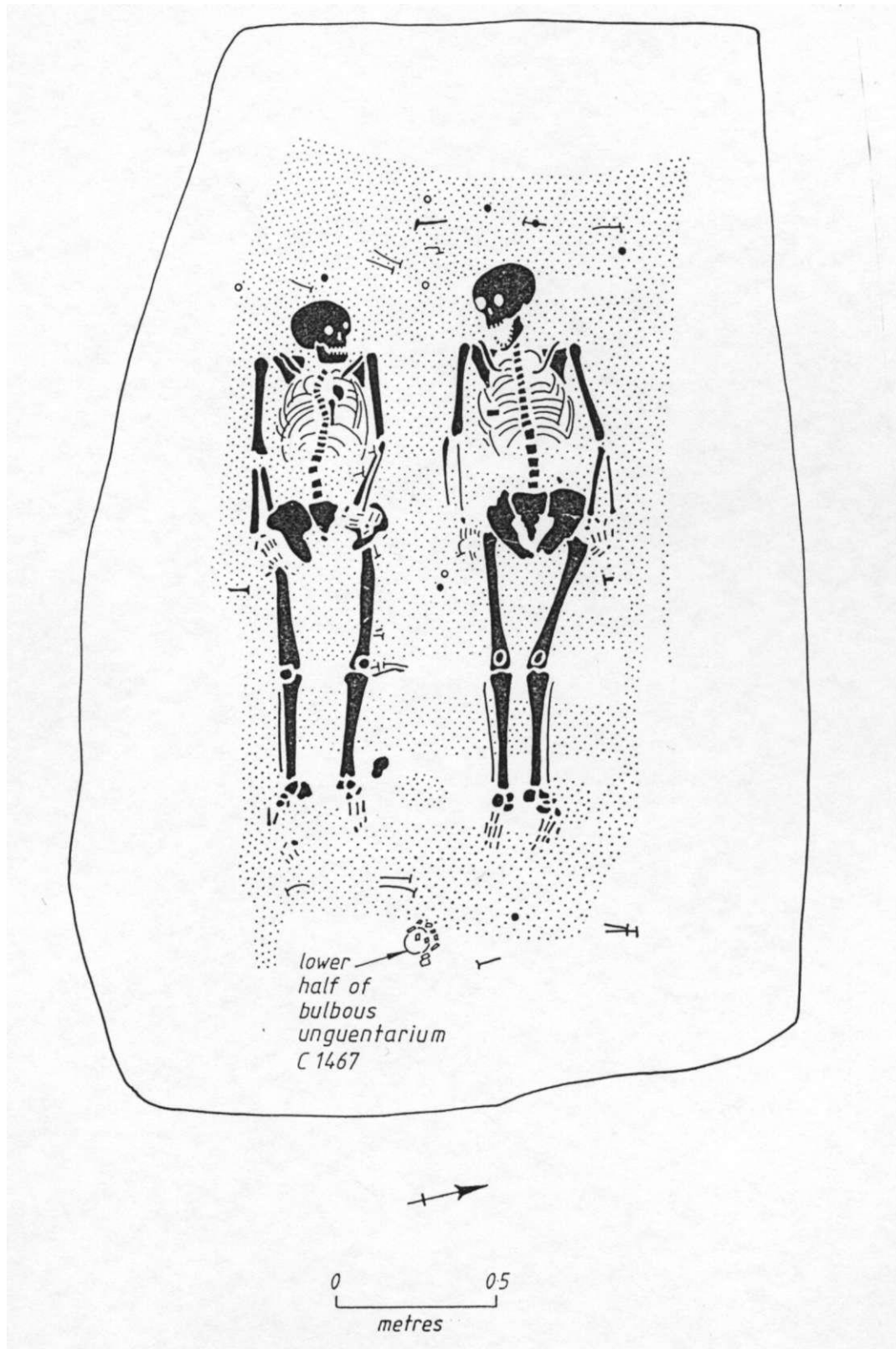


Grave 394 E-W (head to W). Cuts Period 2 G423. Timber coffin (no nails recovered). Tiny Infant (probably neonate). Skeleton supine. Bones in very good condition.

G395 and G396

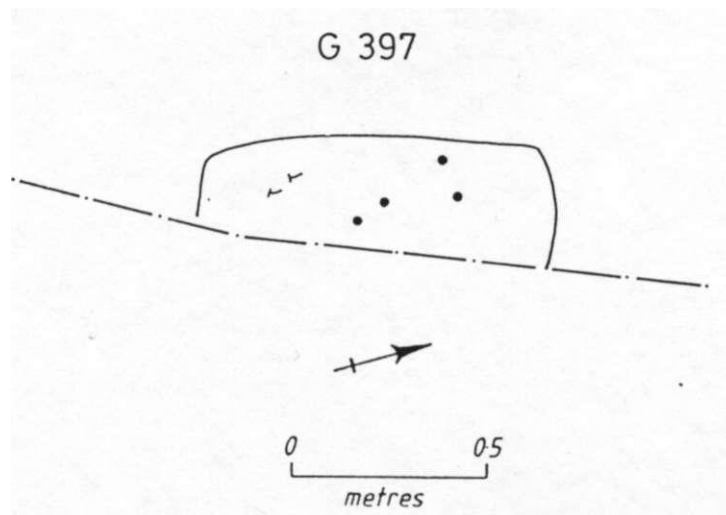


G 395 and G 396



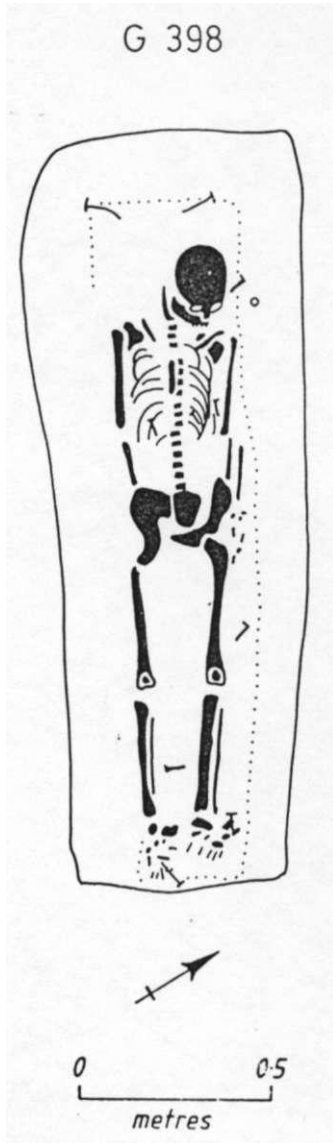
Grave 395 E-W (head to W). One of two burials (with G396) within Period 2 timber vault CF55. Cuts Period 1 E-W ditch CF59. Period 2 G387. G388. Cut by Period 2 G350. G361. G370. G392. Nailed timber coffin. Traces of lime plaster lay beneath ribs and left leg. Middle-aged male. Skeleton supine. Bones in very good condition.

Grave 396 E-W (head to W). One of two burials (with G395) within Period 2 timber vault CF55. Cuts Period 1 ditch E-W CF59. Period 2 G387. G388. Cut by Period 2 G350. G361. G370. G392. Nailed timber coffin. Traces of lime plaster lay beneath ribs. Middle-aged female. Skeleton supine. Bones in very good condition. White ware unguentarium lay within vault close to NE corner of G396 and SE corner of G395.



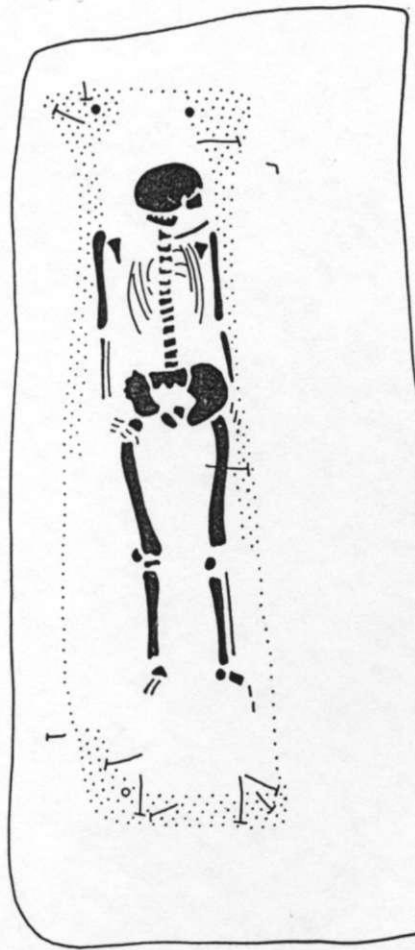
Grave 397 E-w. Isolated grave (edge of site). Extreme W end only excavated. Nailed timber coffin (timber stain not located). No skeletal material.

G 398



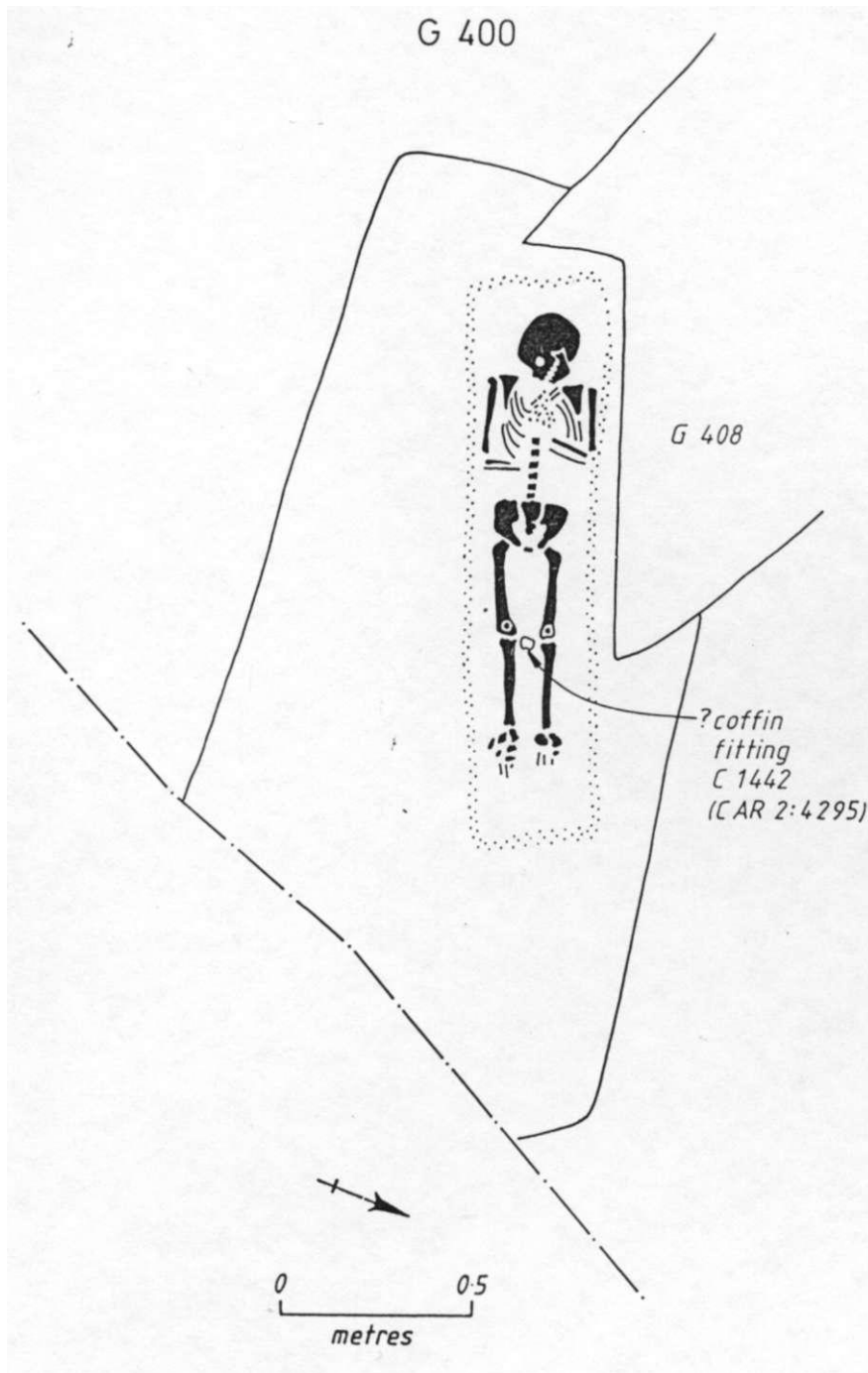
Grave 398 E-W (head to w). Cuts Period 2 G414. G423. G425. Nailed timber coffin. Young adult female. Skeleton supine. Bones in very good condition.

G 399

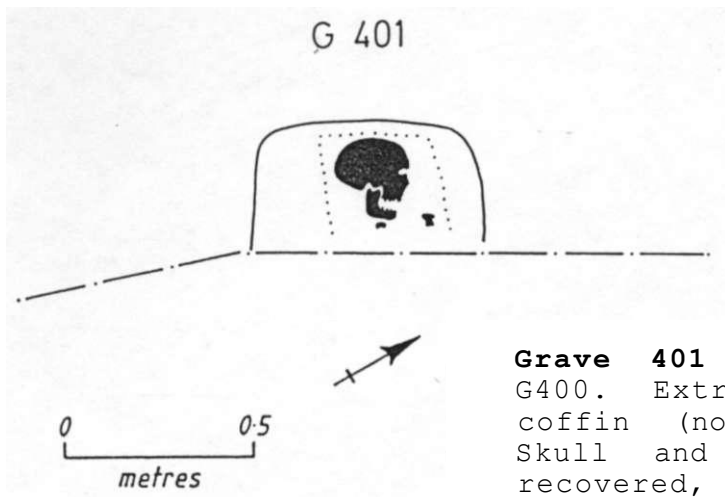


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metres

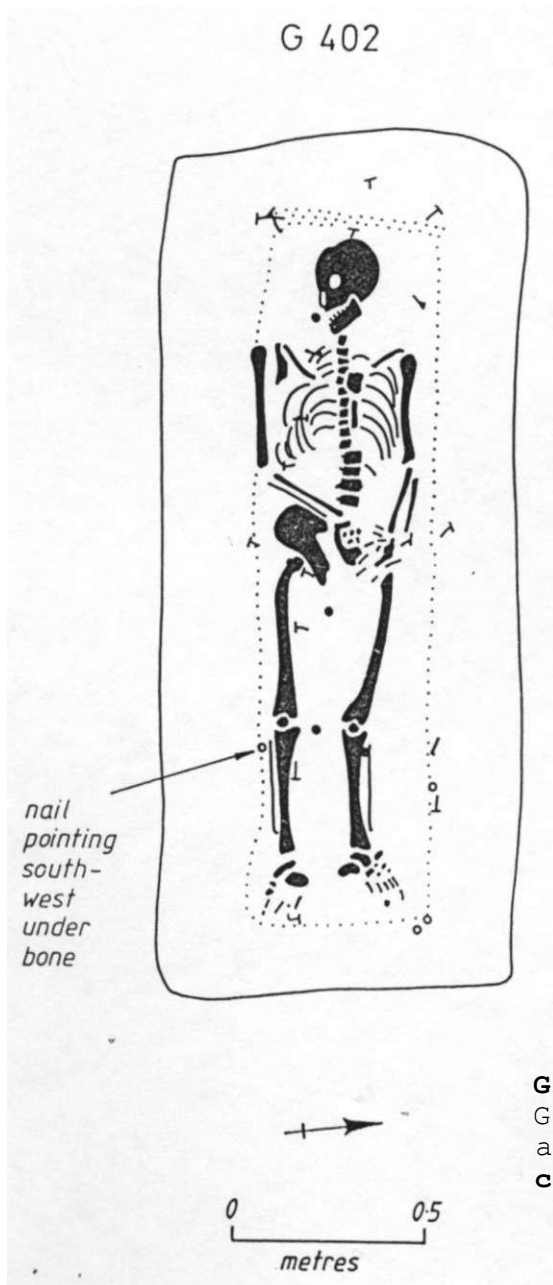
Grave 399 E-W (head to W). Cuts Period 2 G402. Cut by Period 2 G355. G356. Nailed timber coffin. Middle-aged female. Skeleton supine. Bones in very good condition.



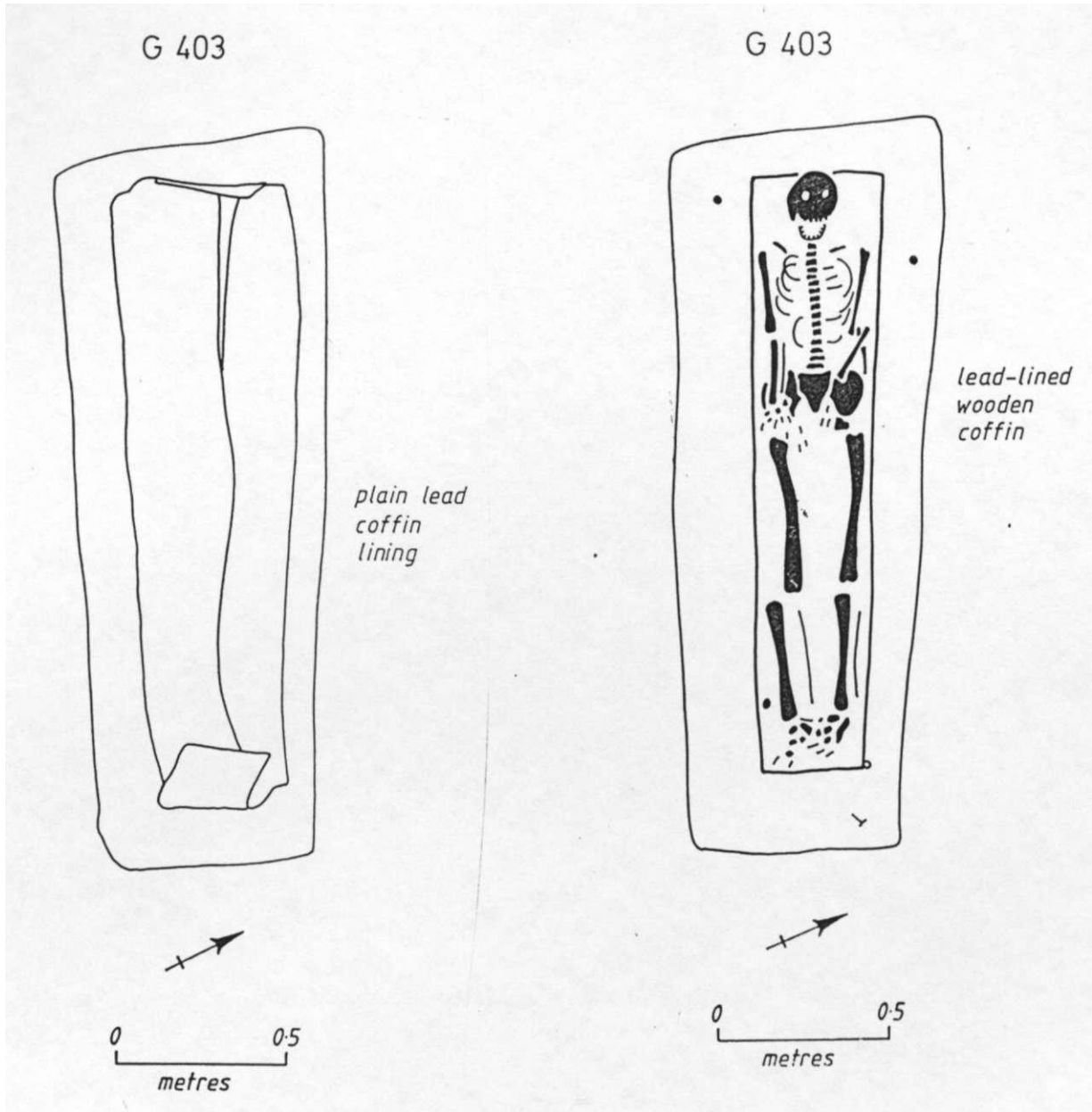
Grave 400 E-W (head to W). Cut by Period 2 G401. G408. Timber coffin (no nails recovered). Child. aged 14 years. Skeleton supine. Surviving bones in very good condition. Between knees lay damaged iron subrectangular plate. possibly coffin fitting.



Grave 401 E-W (head to W). Cuts Period 2 G400. Extreme W end only excavated. Timber coffin (no nails recovered). Adult male. Skull and some upper post-cranial bones recovered, in good condition.

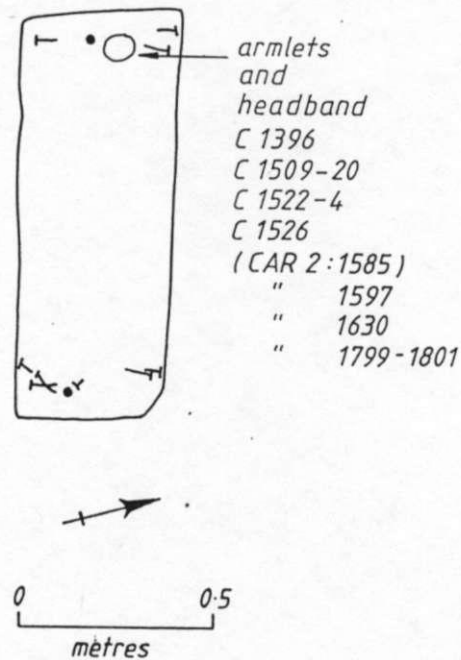


Grave 402 E-W (head to W). Cut by Period 2 G399. G406. G423. Nailed timber coffin. Young adult male. **Skeleton supine. Bones in good condition.**

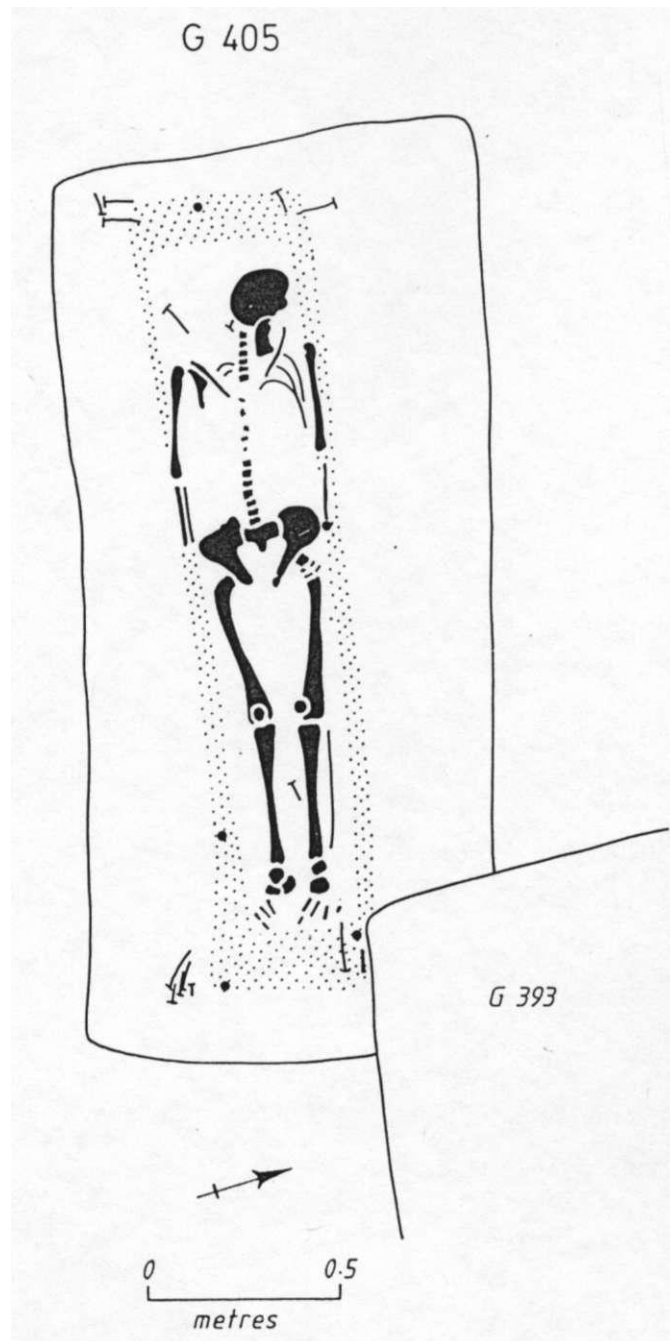


Grave 403 E-W (head to W). Isolated grave. Nailed timber coffin with lining of plain sheet lead. Middle-aged female. Skeleton supine. Bones in very good condition.

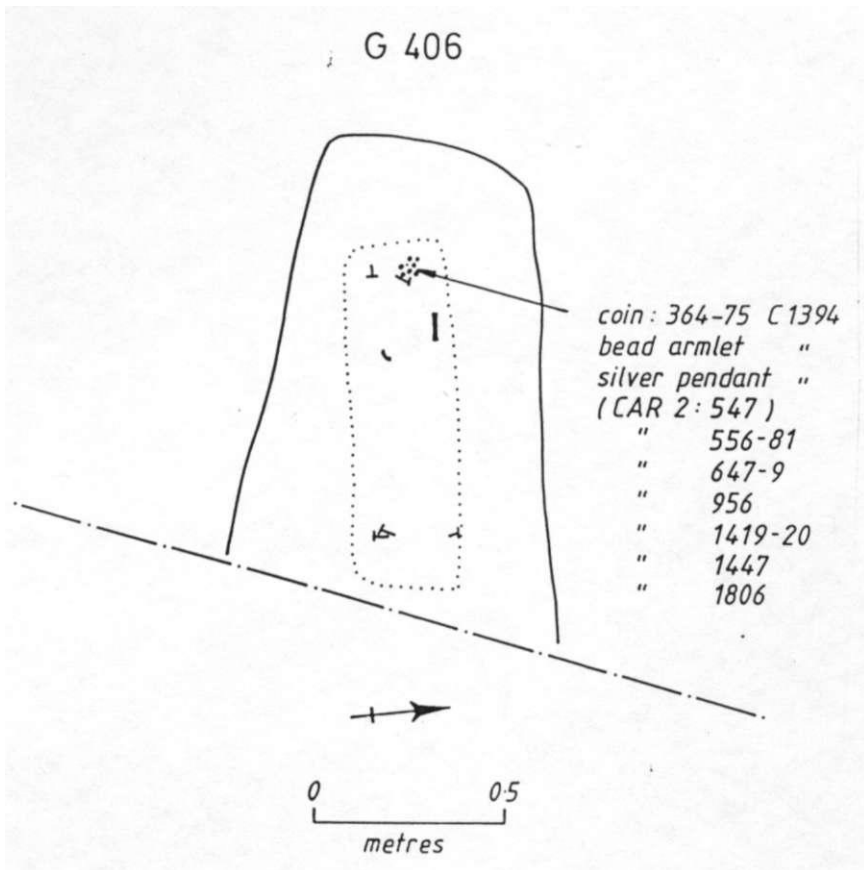
G 404



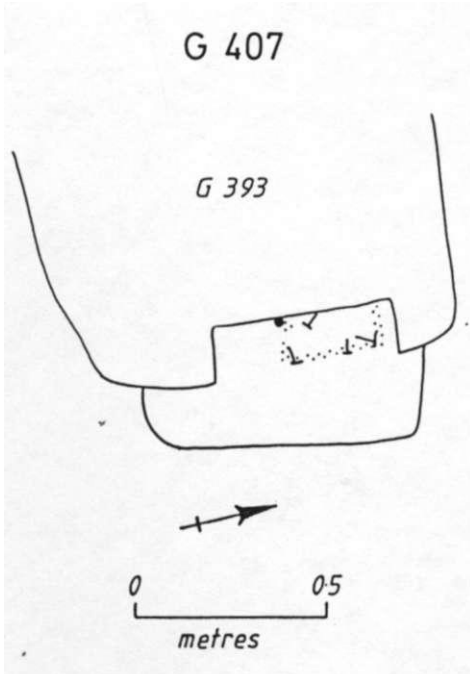
Grave 404 E-W. Relationship to Period 2 G409 uncertain. Nailed timber coffin (timber stain not located). length 0.9 m, width 0.3 m. Positions of nails show that coffin almost filled grave. No skeletal material. Coffin length indicates child. Inside coffin at W end lay three armbands (bone and copper-alloy), and three plaques (gilt copper-alloy sheet enclosing glass) from a decorated headband. Two fragments of textile found associated with grave-goods. preserved by contact with metal. All these pieces lay within an area of dark staining.



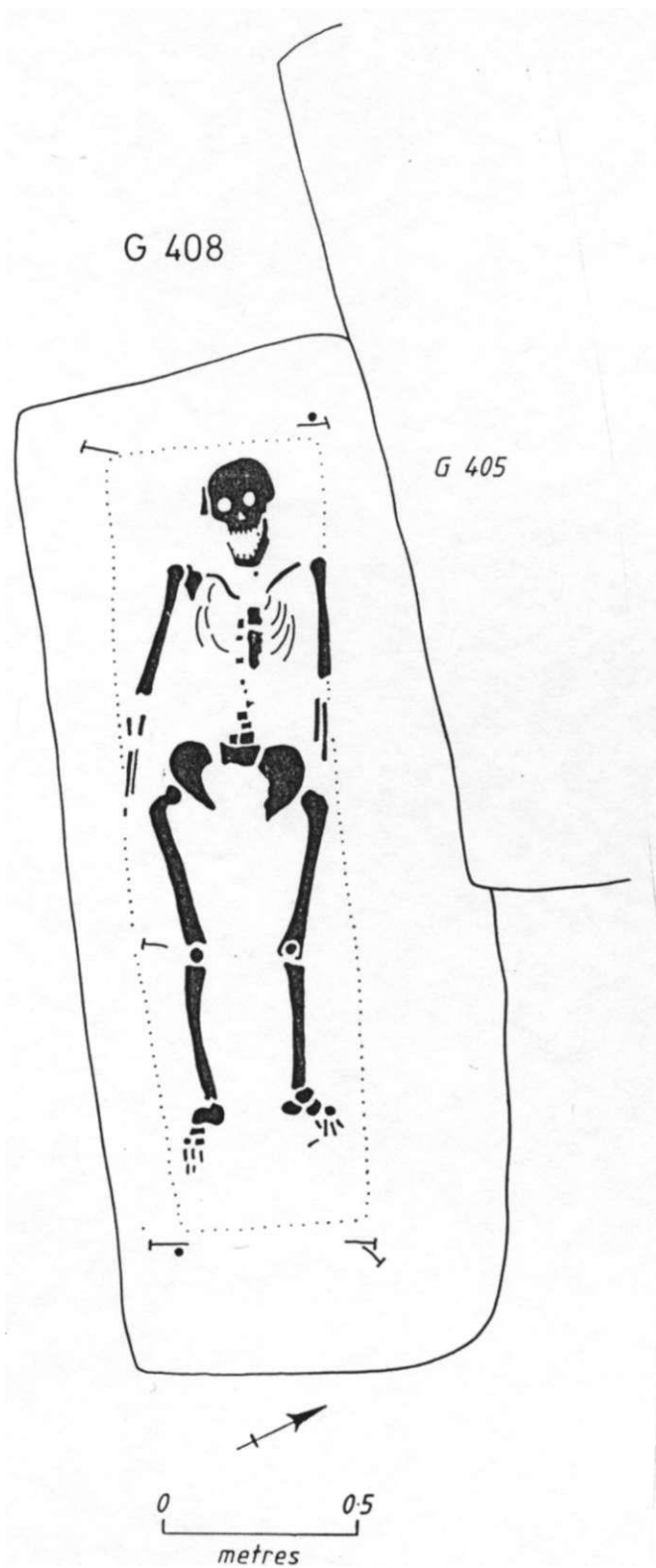
Grave 405 E-W (head to W). Cuts Period 2
 G408. Cut by Period 2 G393. Relationship to
 Period 2 G383 uncertain. Nailed timber coffin. Middle-aged male.



Grave 406 E-W. Cuts Period 2 G402. Nailed timber coffin. length 0.66 m. width 0.2 m. Only fragments of possible human skeletal material survive. Coffin size indicates infant/small child. Inside coffin at W end lay an armet/necklace consisting of pierced coin (Valens. AD 367-75). silver amulet, and glass, jet and amber beads.



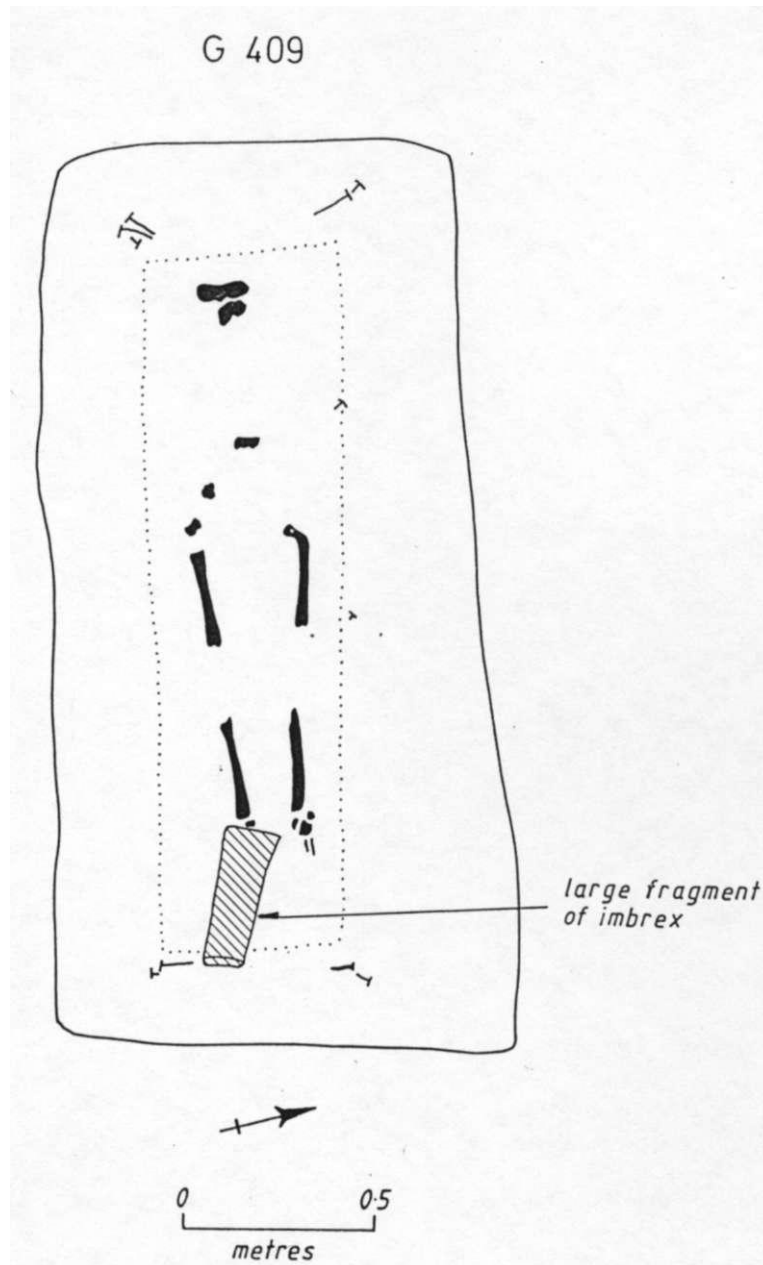
Grave 407 E-W. Cut by Period 2 G393. Only extreme E end remains. rest destroyed by 0393. Nailed timber coffin. width 0.2 m. No skeletal material. Coffin width indicates infant/child.



Grave 406

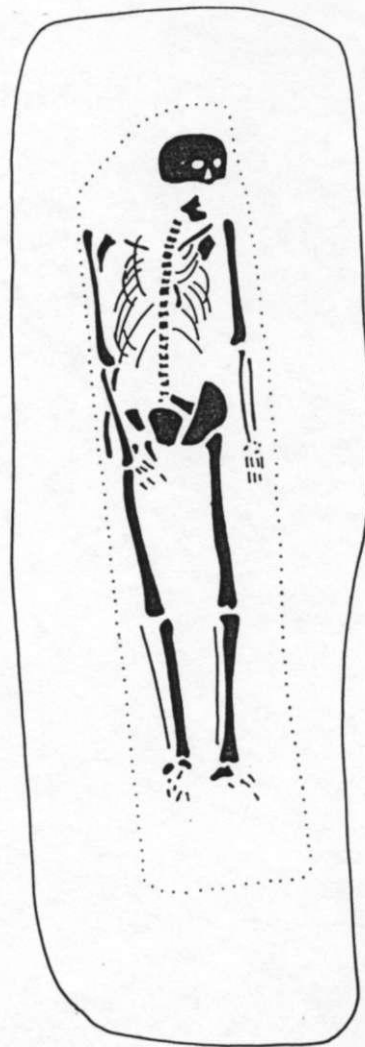
E-W (head to W). Cuts Period 2 G400. Cut by Period 2 Q405. Nailed timber coffin. Middle-aged adult, sex uncertain. Skeleton supine. Bone in good condition.

G 409

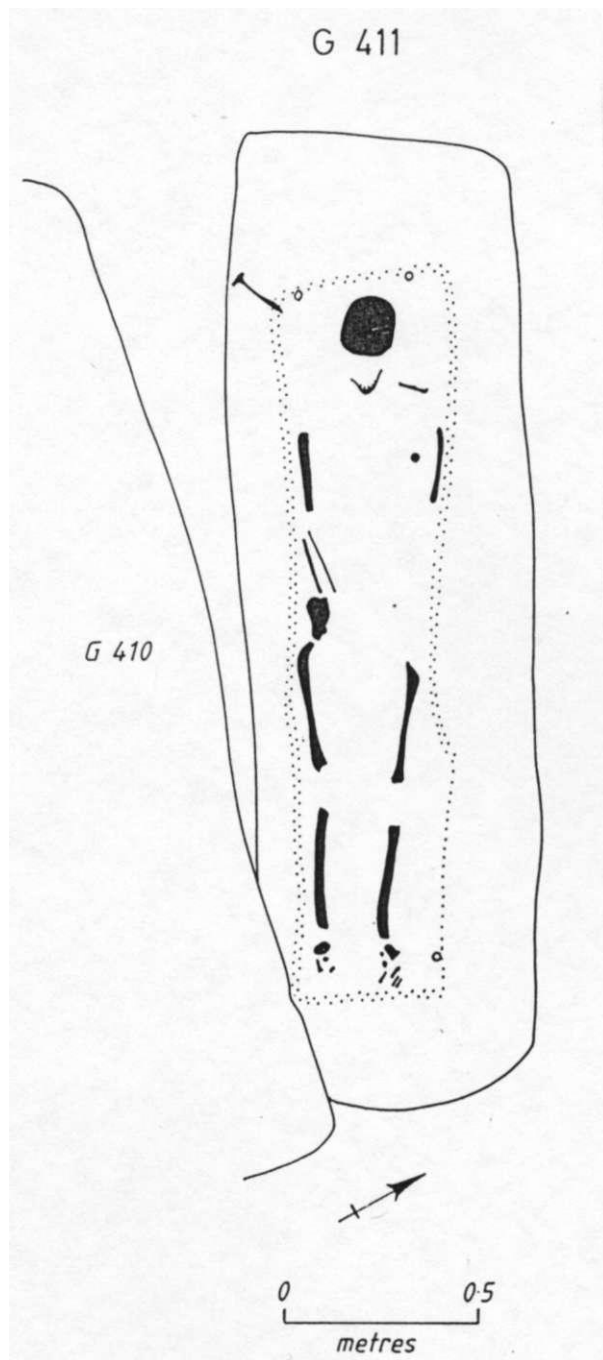


Grave 309 E-W (head to W). Cuts Period 2 G416. Relationship to Period 2 G404 uncertain. Nailed timber coffin. Adult, sex uncertain. Skeleton supine. Only skull (crushed). some upper post-cranial. leg and foot bones survive. in poor condition. Large fragment of imbrex lay slanting down into E end of coffin. It may originally have been placed deliberately on coffin foot.

G 410

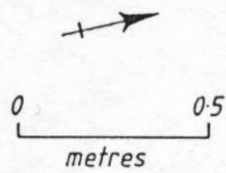
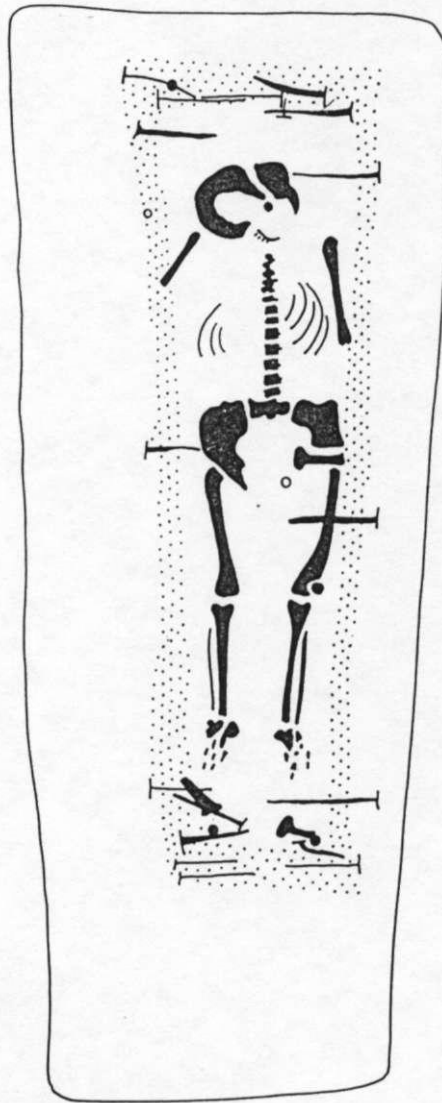


Grave 410 E-W (head to W). Cuts Period 2
G411. G412. Timber coffin (no nails
recovered). Adult male. Skeleton supine.
Bones in good condition.

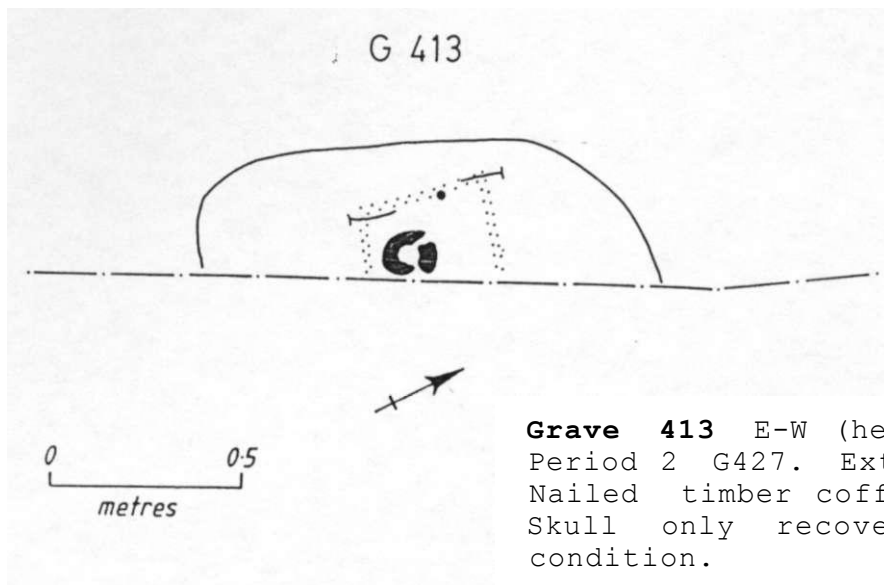


Grave 411 E-W (head to W). Cut by Period 2 G410. Nailed timber coffin. Middle-aged female. Skeleton supine. Surviving bones in poor condition.

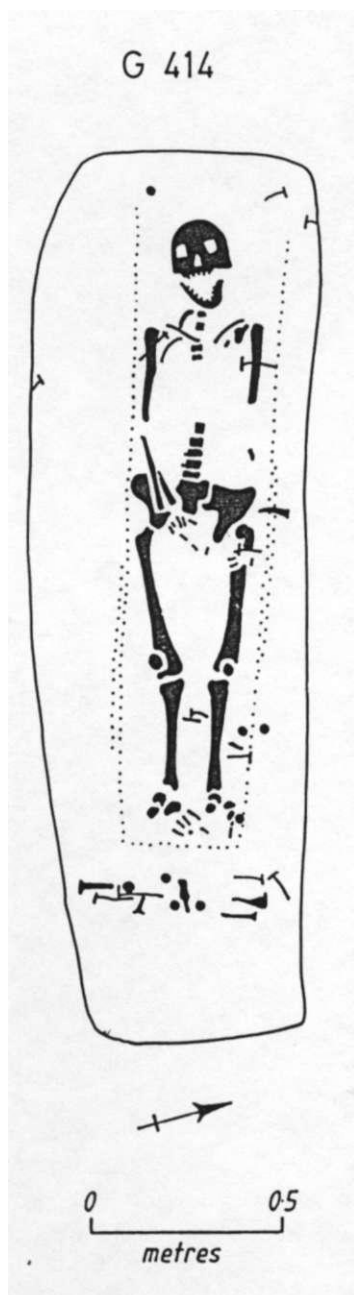
G 412



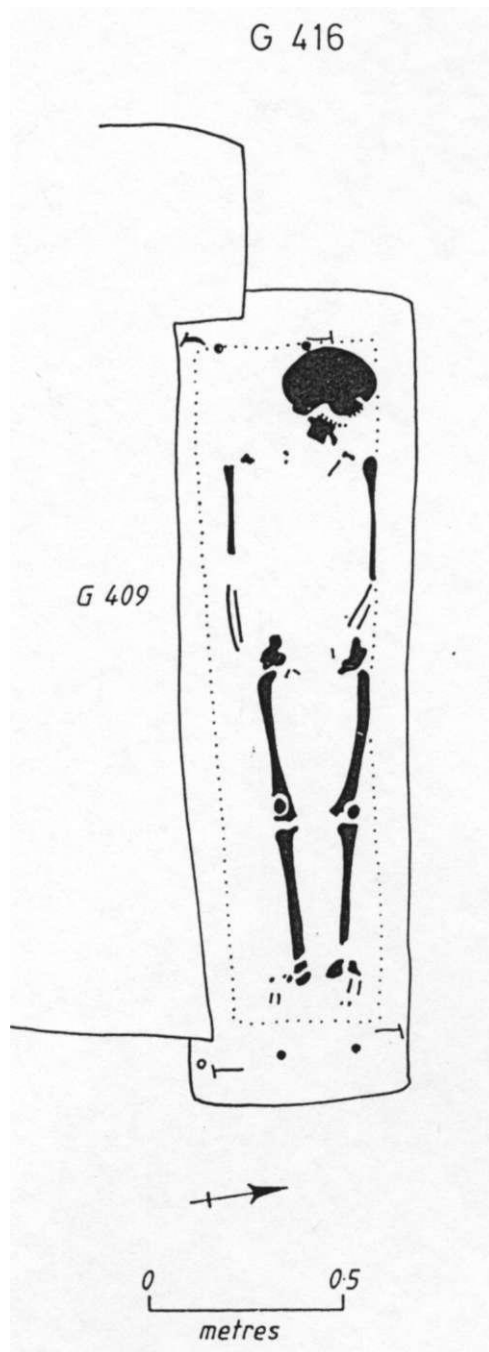
Grave 412 E-W (head to W). Cut by Period 2 G410. Nailed timber coffin. Middle-aged female. Skeleton supine. Surviving bones in good condition.



Grave 413 E-W (head to W). Probably cuts Period 2 G427. Extreme W end only excavated. Nailed timber coffin. Young adult female. Skull only recovered. crushed and in poor condition.

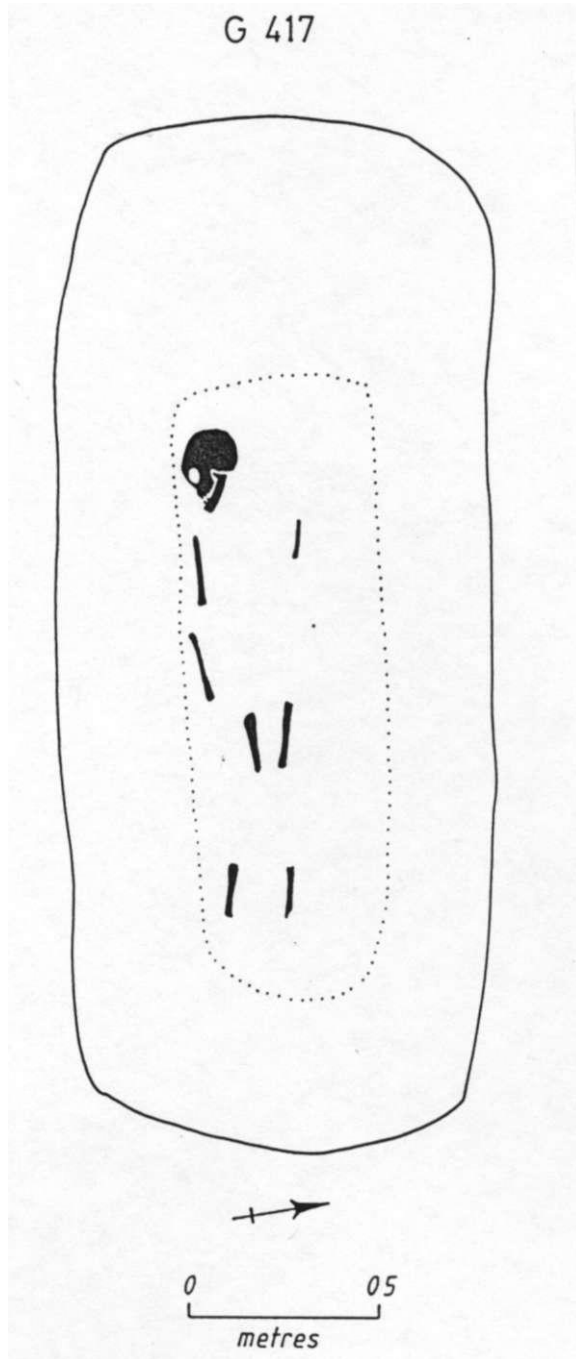


Grave 414 E-W (head to W). Cuts Period 2 G423. G425. Cut by Period 2 G398. Nailed timber coffin. Middle-aged female. Skeleton supine. Bones in fair condition.

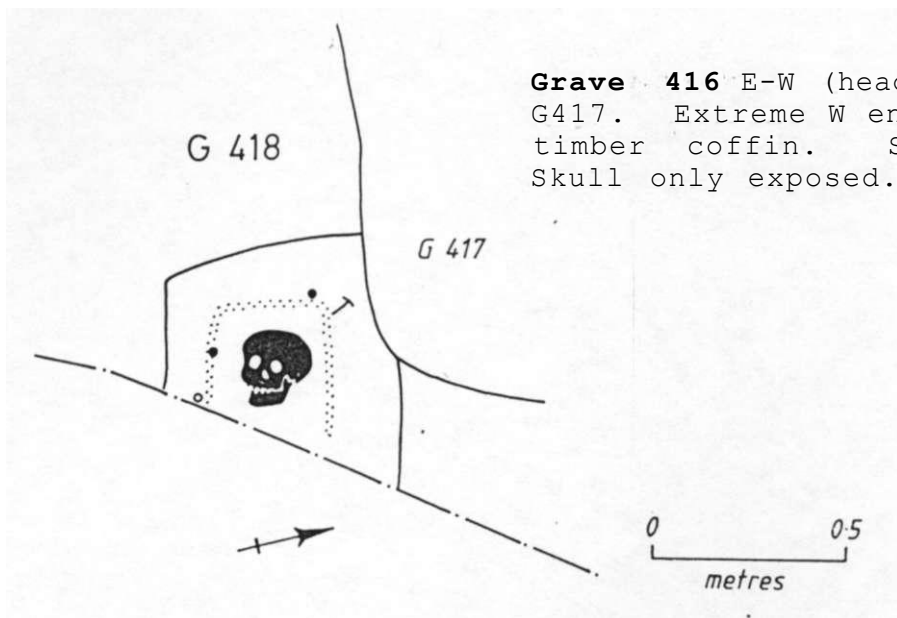


Grave 416 E-W (head to W). Cut by Period 2 G409. Nailed timber coffin. Middle-aged male. Skeleton supine. Skull crushed. upper post-cranial skeleton in poor condition. lower in fair condition.

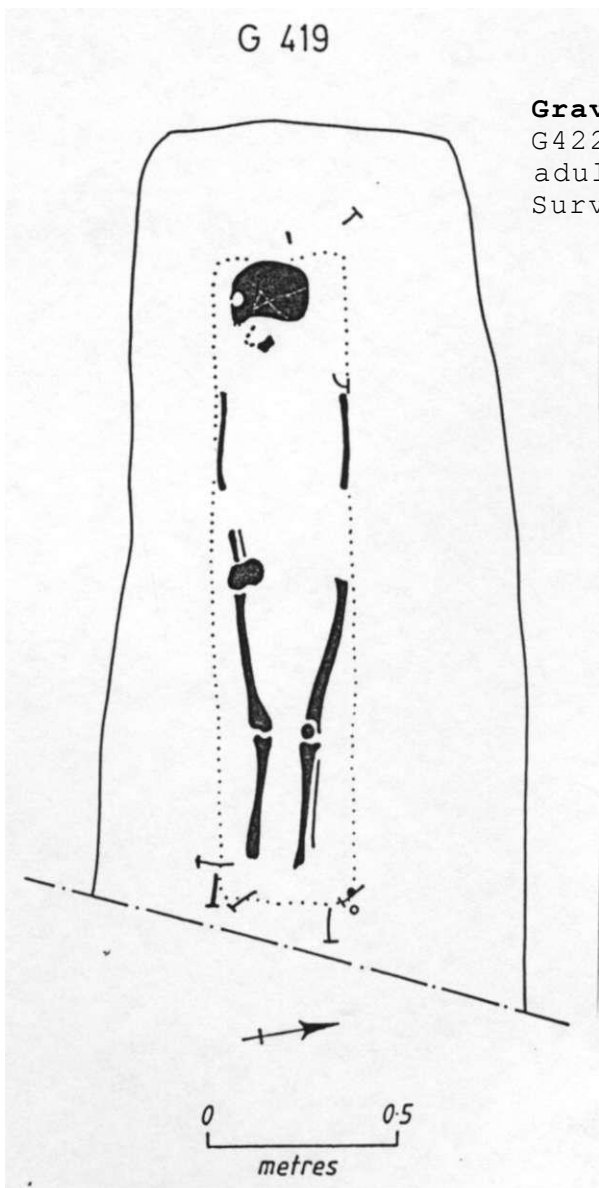
G 417



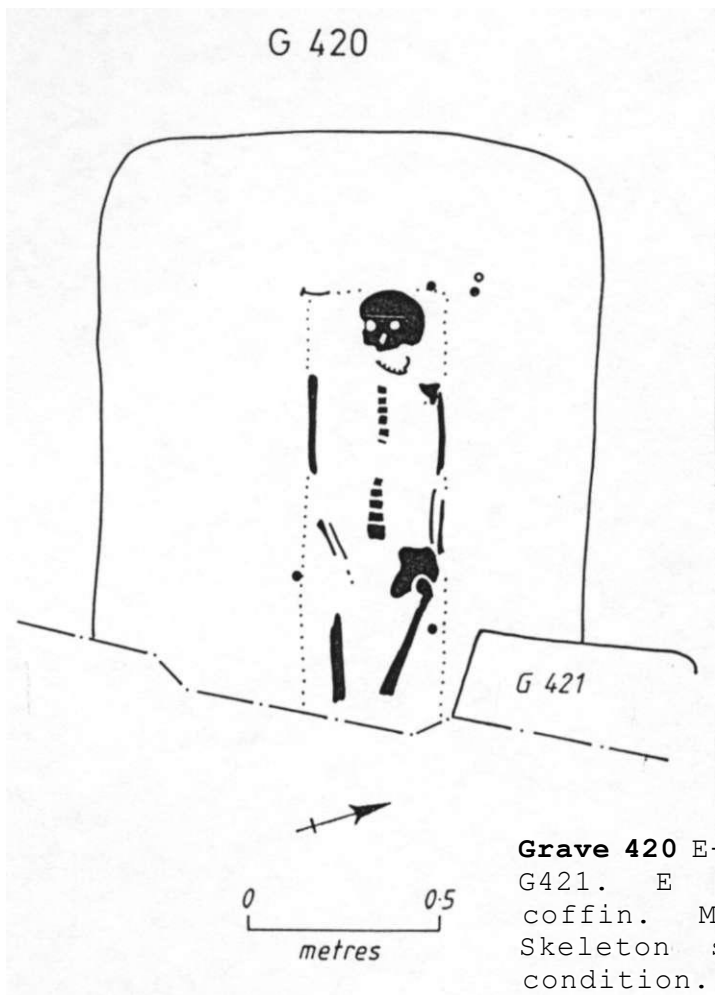
Grave 417 E-W (head to W). Cuts Period 2 G418. G427. Cuts and seals Period 2 G424. Timber coffin (no nails recovered). Young adult female. Skeleton supine. Skull and shafts of most long bones only remain. in very poor condition.



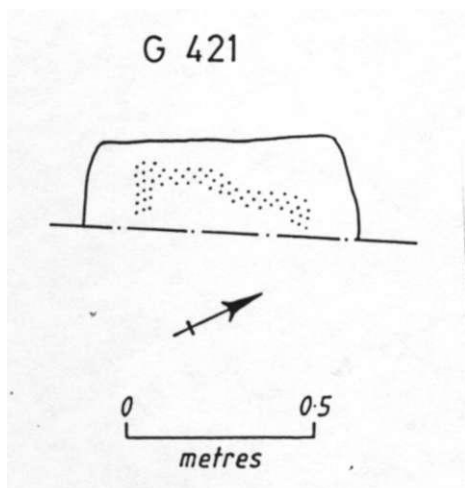
Grave 416 E-W (head to W). Cut by Period 2 G417. Extreme W end only excavated. Nailed timber coffin. Skeleton probably supine. Skull only exposed.



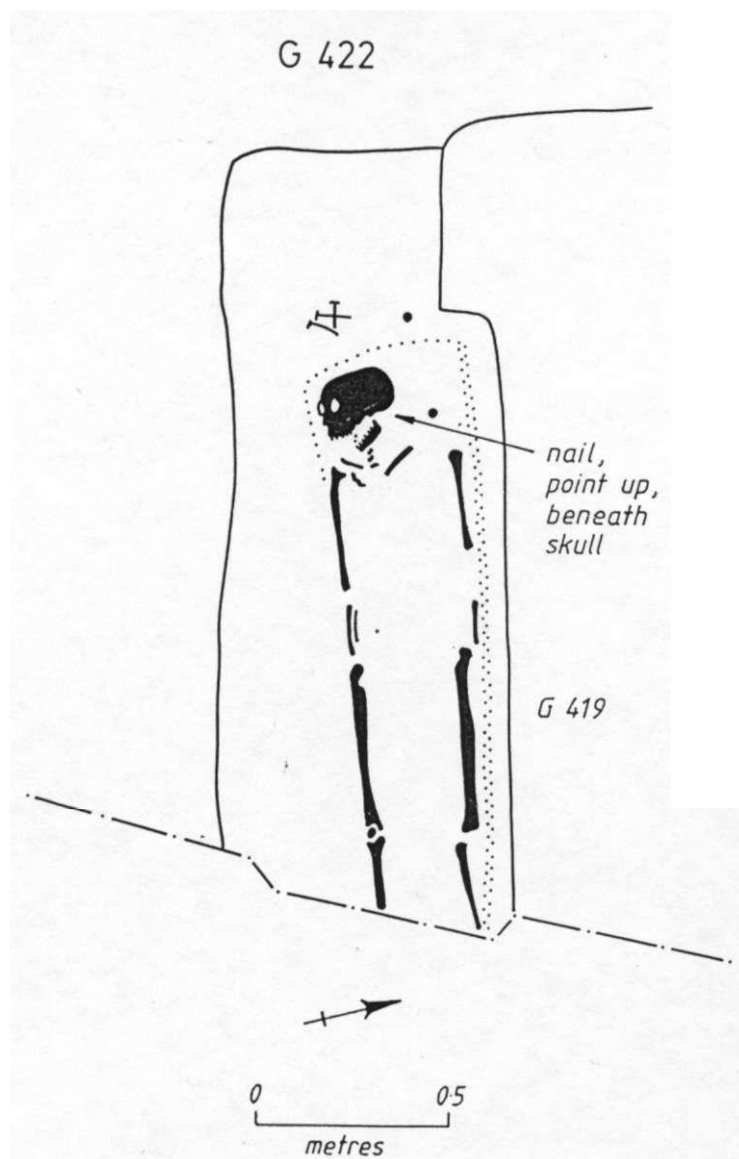
Grave 419 E-W (head to W). Cuts Period 2 G422. Nailed timber coffin. Middle-aged adult, sex uncertain. Skeleton supine. Surviving bones in poor condition.



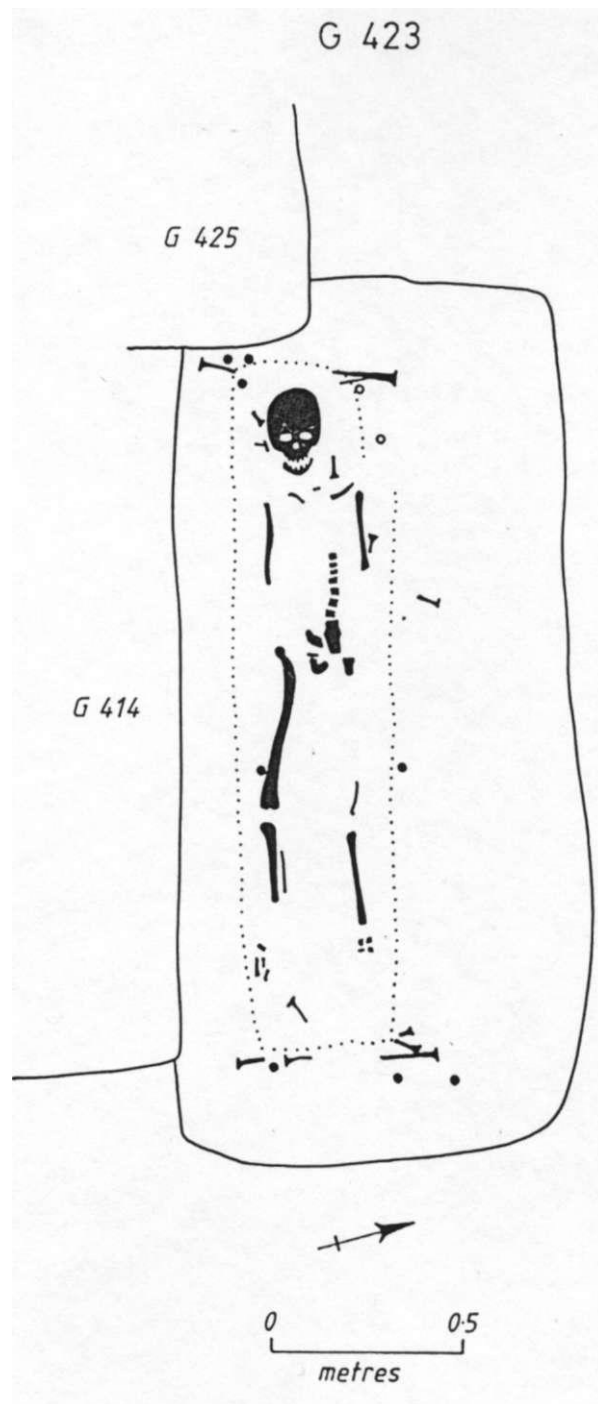
Grave 420 E-W (head to W). Cut by Period 2 G421. E end not excavated. Nailed timber coffin. Middle-aged adult. sex uncertain. Skeleton supine. Surviving bones in poor condition.



Grave 421 E-W. Cuts Period 2 G420. Extreme W end only excavated. Timber coffin (no nails recovered). No skeletal material.

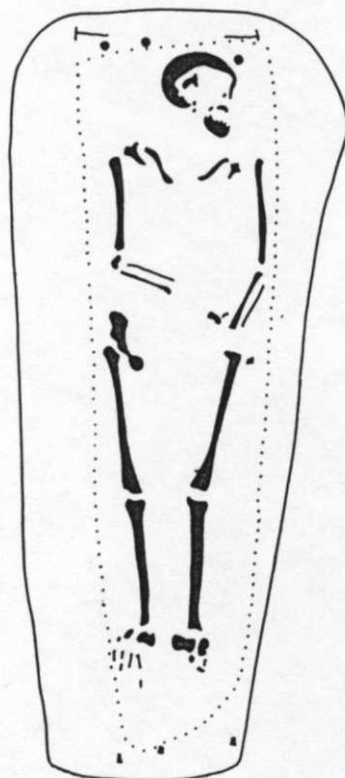


Grave 422 E-W (head to W). Cuts Period 2 G442. Cut by Period 2 G419. Extreme E end not excavated. Mailed timber coffin. Middle-aged male. Skeleton supine. Surviving bones in very poor condition.



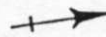
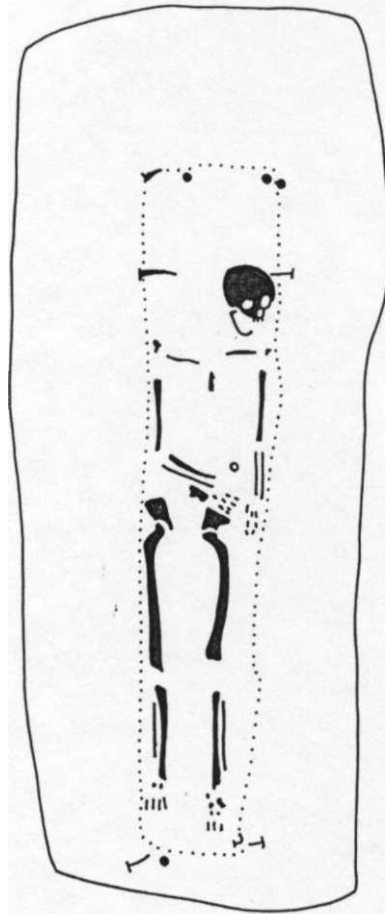
Grave 423 E-W (head to W). Cuts Period 2 G402. G432. Cut by Period 2 G394. G398. G414. G425. Nailed timber coffin. Young adult, sex uncertain. Skeleton supine. Surviving bones in poor condition. Grave fill contained skull attributed to G432.

G 424



Grave 424 E-W (head to W). Cut and sealed by Period 2 G417. Nailed timber coffin. Middle-aged male. Skeleton supine. Surviving bones in poor condition.

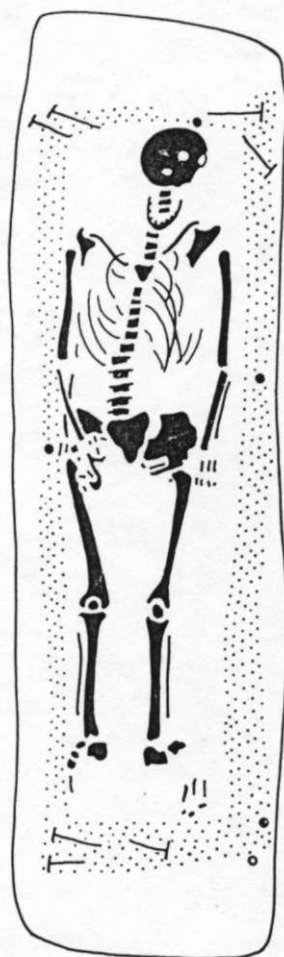
G 425



0 0.5
metres

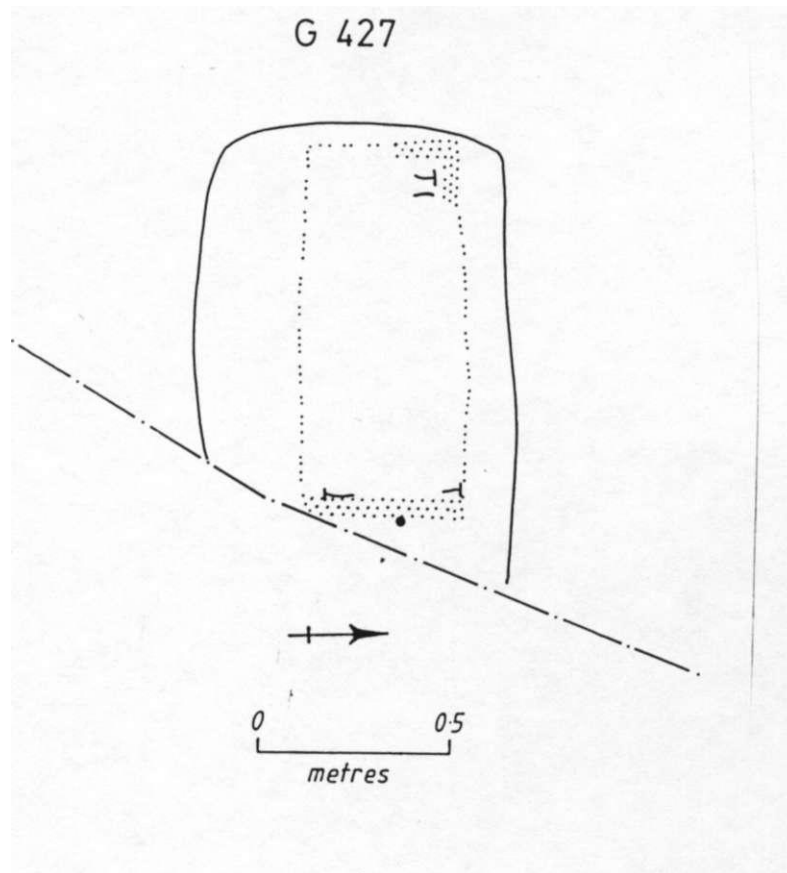
Grave 423 E-W (head to W). Cuts Period 2 G423. Cut by Period 2 G398. G414. Nailed timber coffin. Young adult female. Skeleton supine. Surviving bones in fair condition.

G 426

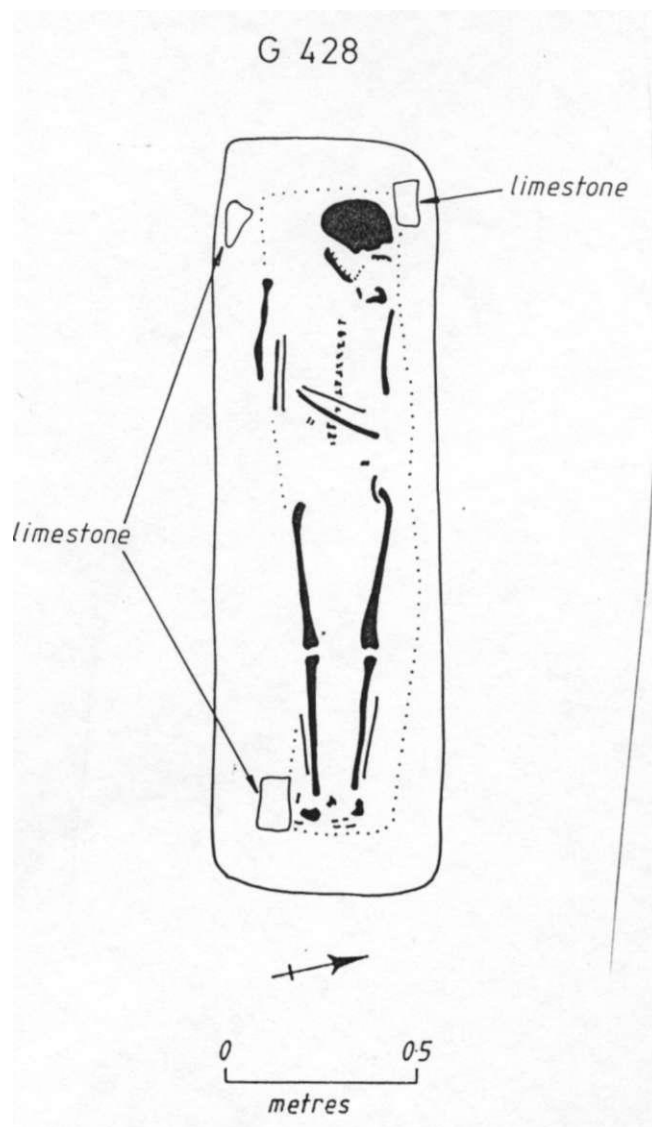


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metres

Grave 426 E-W (head to W). Cute Period 2
G445. Cuts and partly seals Period 2 G439.
G441. Nailed timber coffin. Middle-aged male.
Skeleton supine. Bones in good condition.

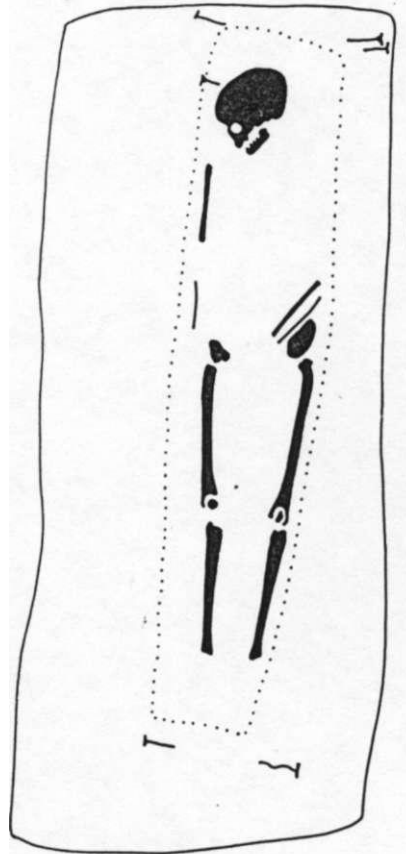


Grave 327 E-W. Cut by Period 2 G417. Probably cut by Period 2 G413. Nailed timber coffin, length approximately 0.88 m. width 0.4 m. No skeletal material. Coffin size indicates child.



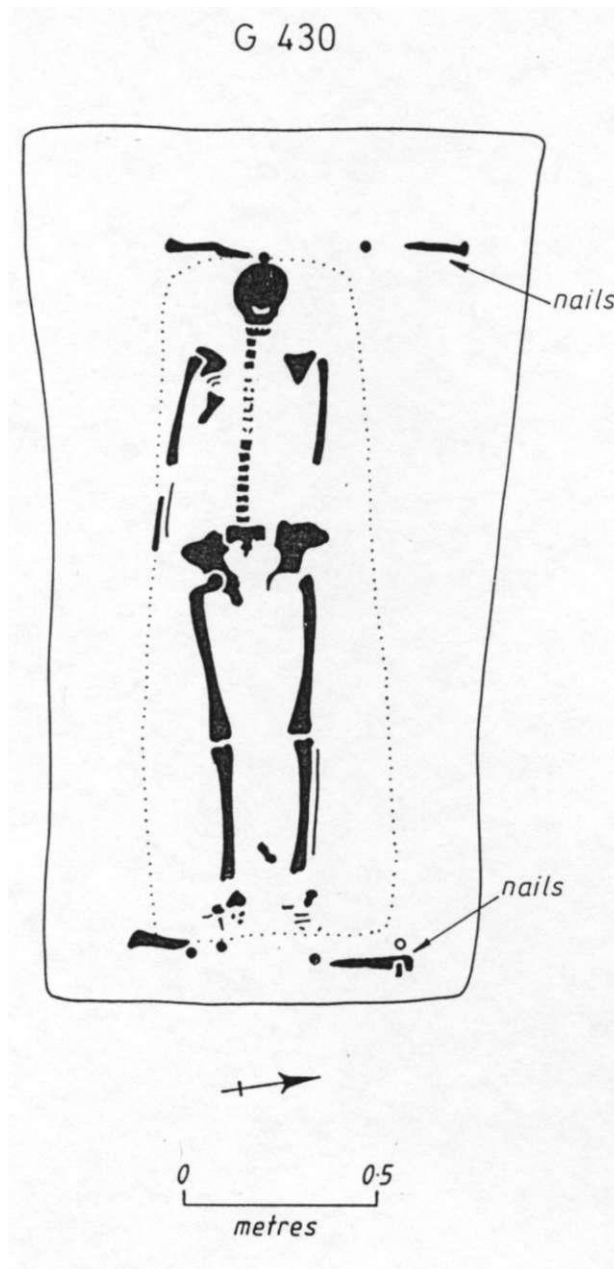
Grave 428 E-W (head to W). Cuts Period 2
 G443 Timber coffin (no nails recovered). At each of three corners of coffin (NW. SW. SE), and level with its top. lay three lumps of limestone. ME corner not disturbed by later activity. thus no fourth marker existed. Middle-aged male. Skeleton supine. Surviving bones in poor condition. Right arm doubled over so that right hand would have lain by right shoulder. Left arm folded across body so that left hand would have been on right arm just above elbow.

G 429



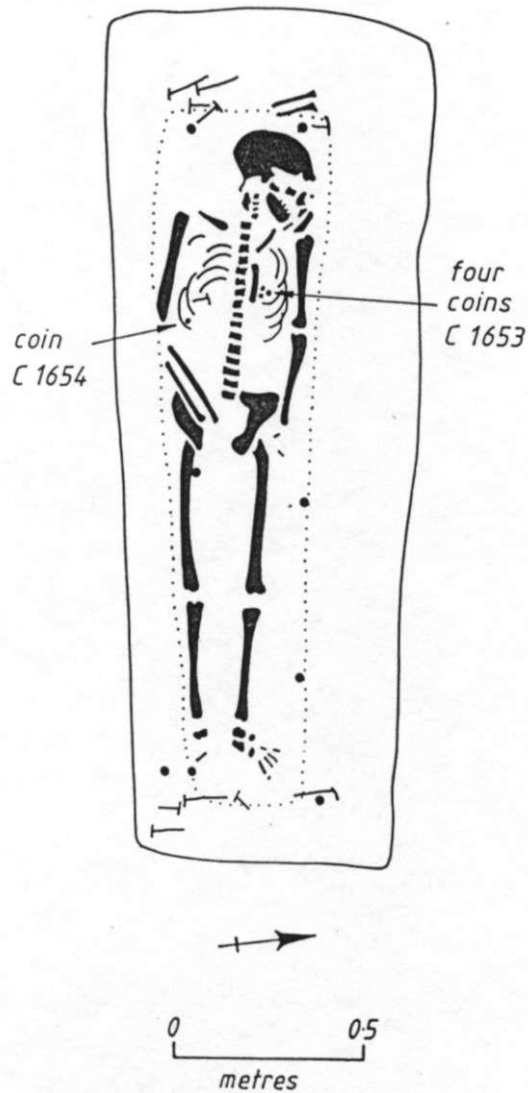
0 0.5
metres

Grave 429 E-W (head to W) . Cuts Period 1 G447 . Period 2 G436 . Nailed

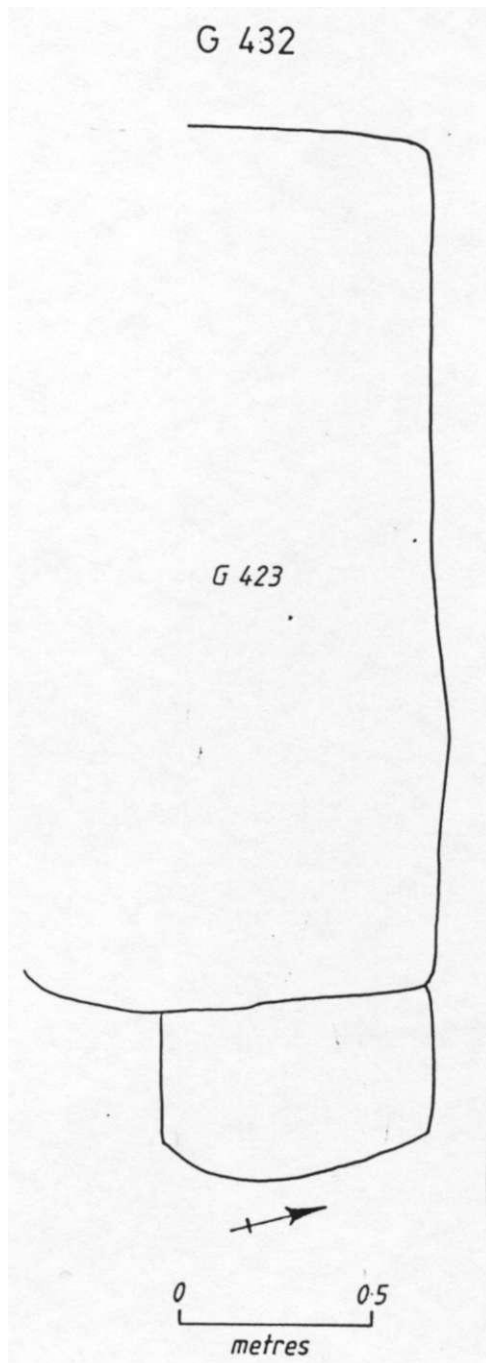


Grave 430 E-W (head to W). Cuts Period 2 G434. G438. Nailed timber coffin, very wide, increasing from 0.5 m at W end to 0.62 m at E end. Young adult female. Skeleton supine. Skull crushed, upper post-cranial skeleton in poor condition. lower well preserved. Grave fill contained skull, possibly that of G434.

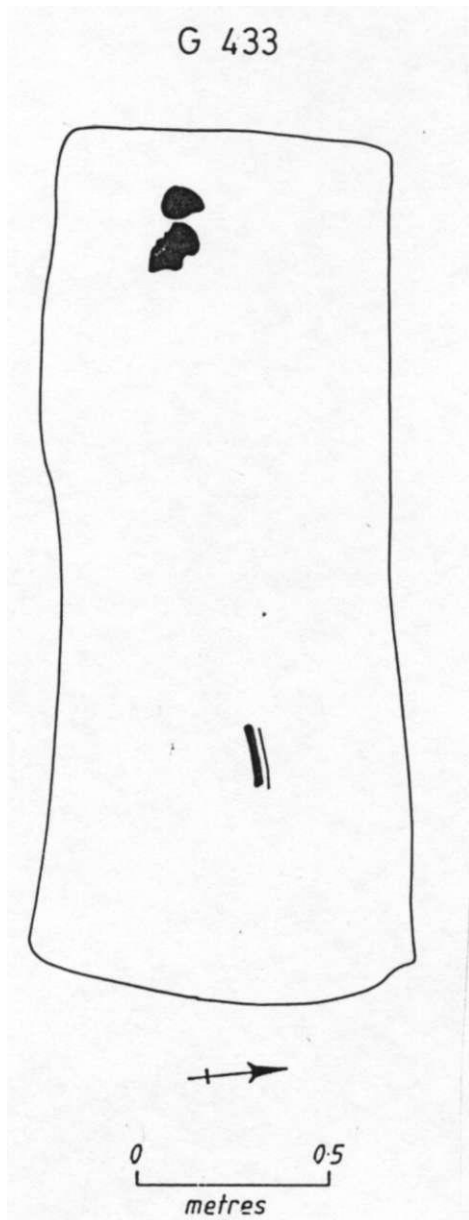
G 431



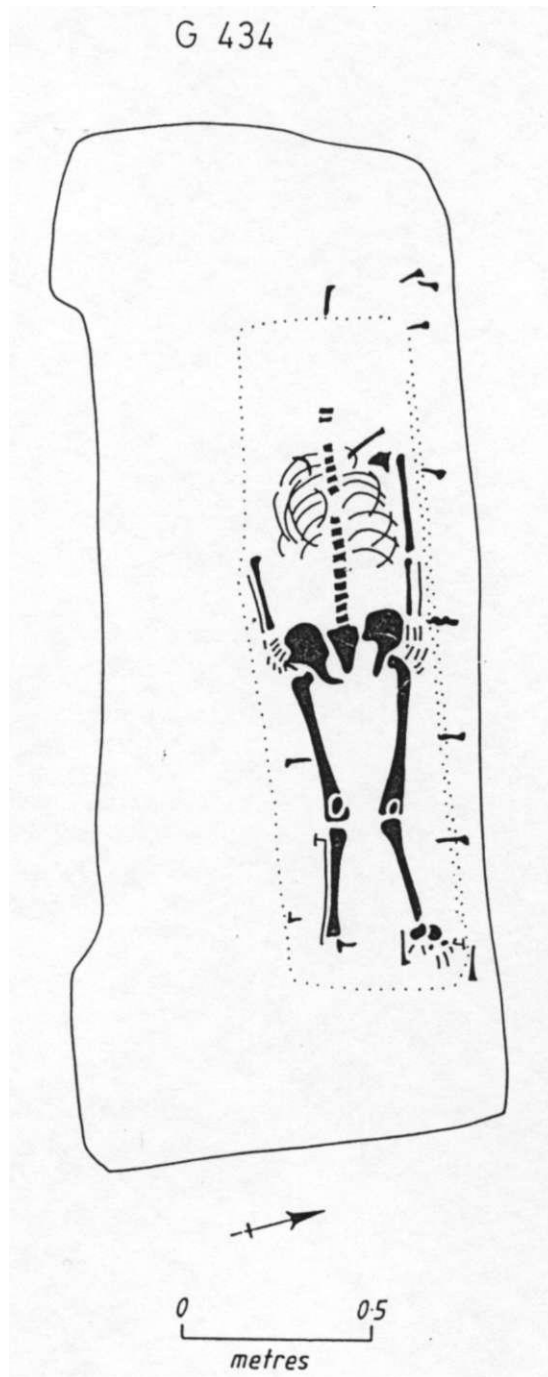
Grave 431 E-W (head to W). Cuts Period 1 E-W ditch CF62. Isolated grave in Period 2. Nailed timber coffin. Middle-aged male. Skeleton supine. Skull crushed but other bones in good condition. Four coins lay on left ribs, one beneath ribs, and one on right ribs. All six date to AD 350-60.



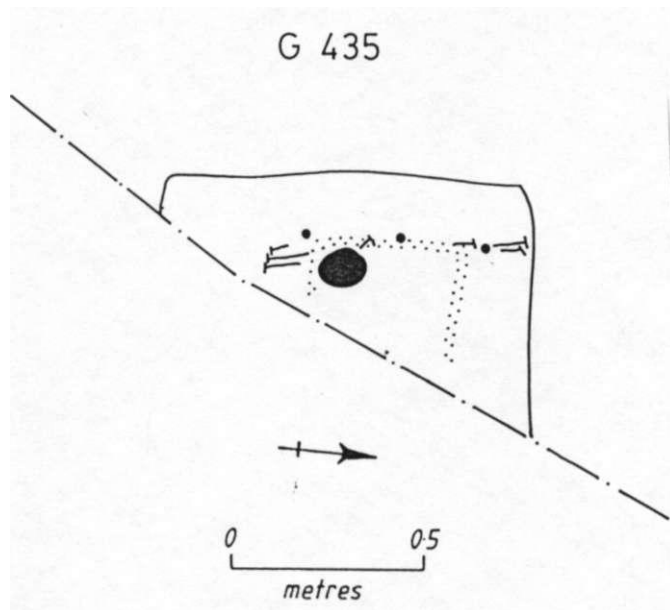
Grave 432 E-W. Cut by Period 2 G423. Extreme E end only excavated. No coffin or skeletal material recovered. Redeposited skull found in fill of G423 probably belongs to G432. Child, aged 2 to 3 years.



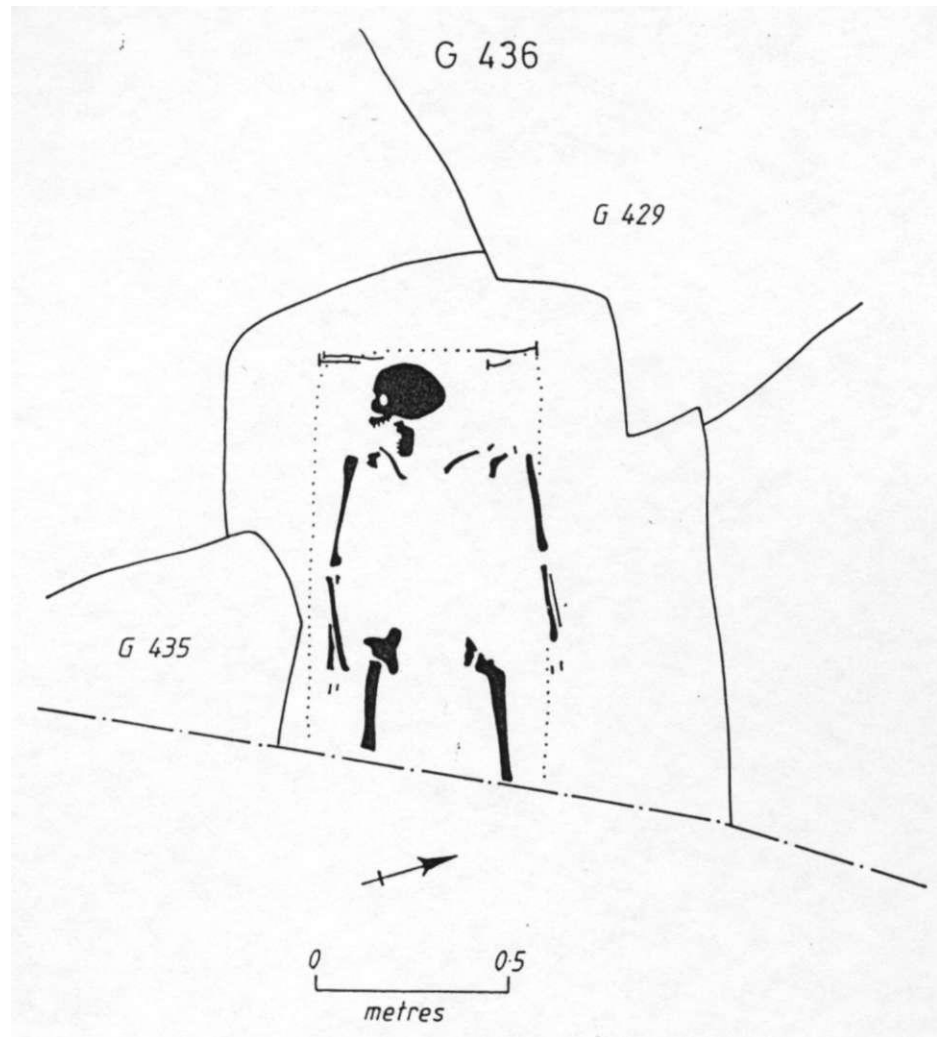
Grave 433 E-W (head to W). Cuts Period 1 E-W ditch CF59. N-S/E-W ditch CF58. Cut by Period 2 G370. G387. G388. Relationships to Period 2 G361. timber vault G366. timber vault CF55 (G395/G396) uncertain. No timber stain or nails located. Adult. sex uncertain. Only fragments of skull. left tibia. and fibula remain.



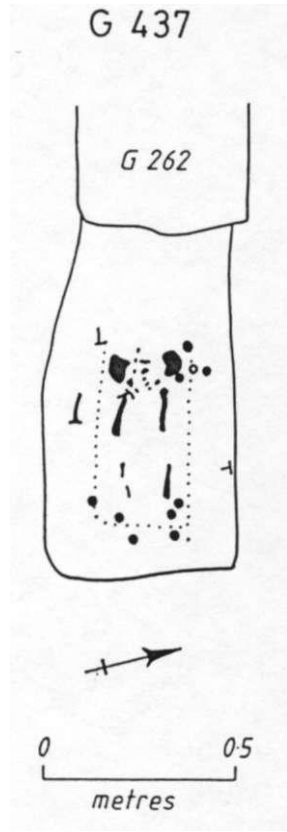
Grave 434 E-W (head to W). Cut by Period 2 G302. G430. Relationship, if any. to Period 2 G438 obscured by G430. Nailed timber coffin. Young adult female. Skeleton supine. Bones in good condition. Skull missing, possibly that found redeposited in fill of G430.



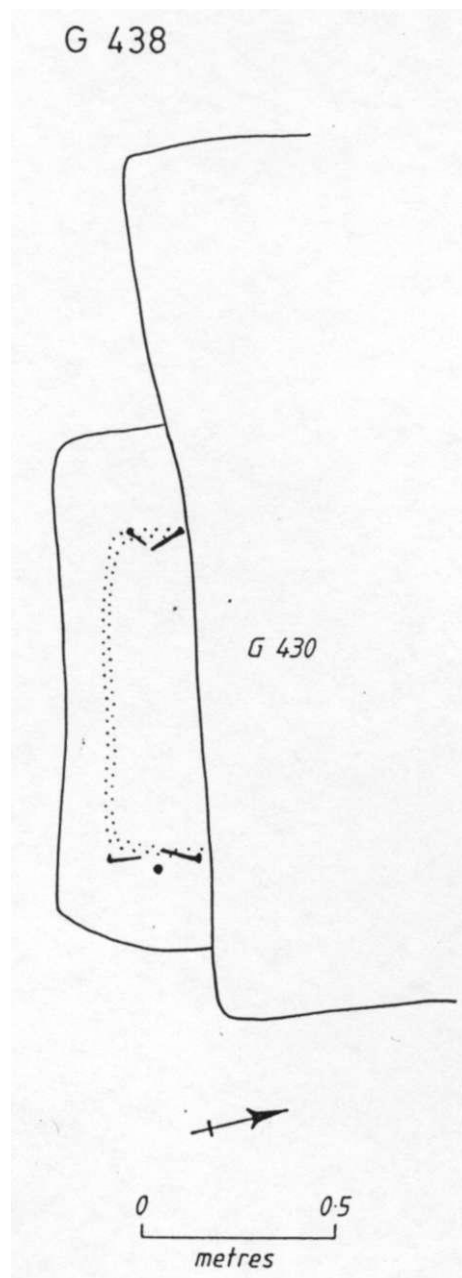
Grave 435 E-W (head to W). Cute Period 2 G436. Extreme W end only excavated. Nailed timber coffin. Fragment of skull only recovered.



Grave 436 E-W (head to W). Cut by Period 2 G429. G435. E end not excavated. Nailed timber coffin. Young adult male. Skeleton supine. Surviving bones in poor condition.

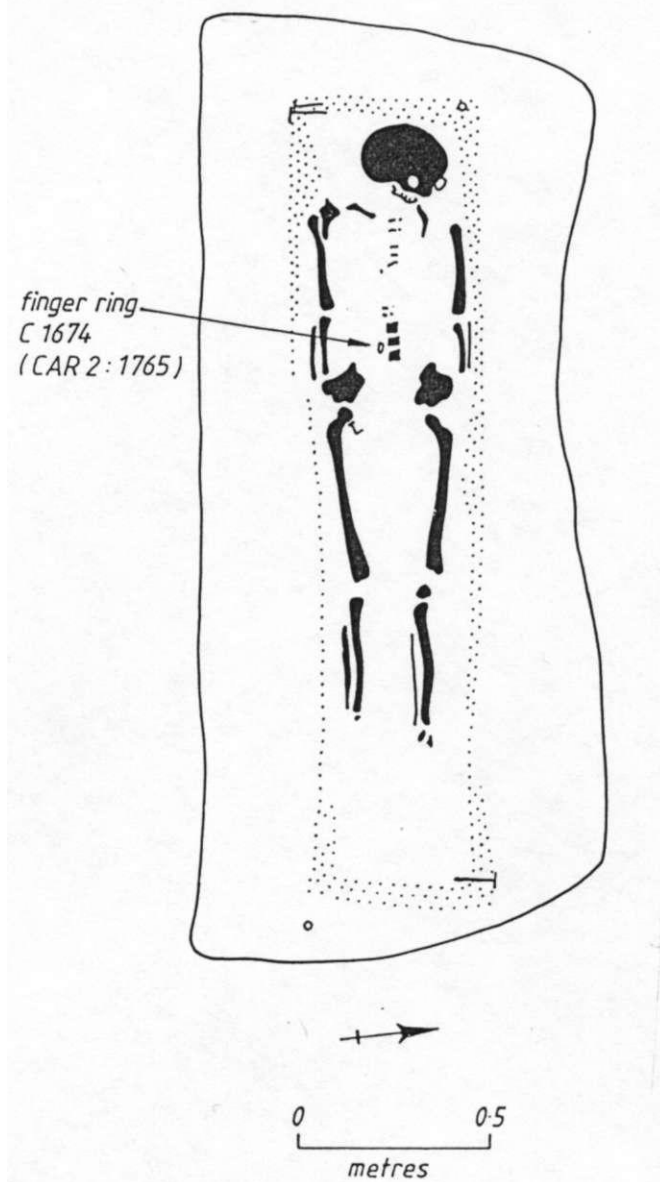


Grave 437 E-W (head to W) . Cut and W end destroyed by Period 2 G262 . Nailed to

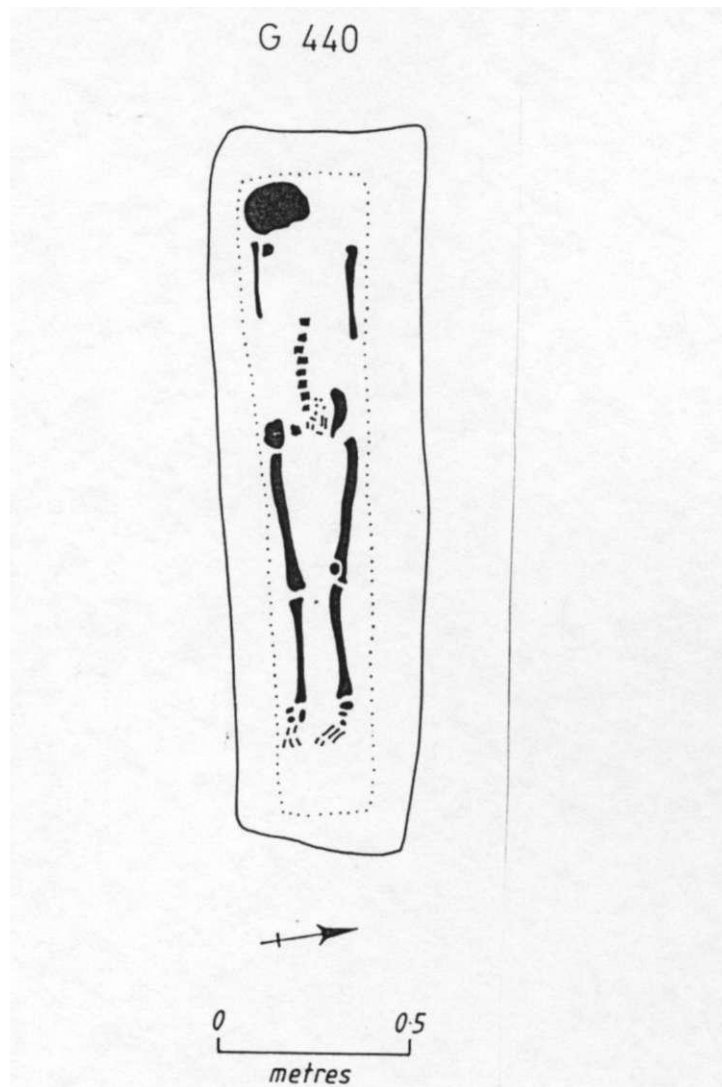


Grave 438 E-W. Cut and M side destroyed by Period 2 G430. Relationship. if any. with G434 obscured by G430. Nailed timber coffin, length 0.8 m: nails suggest width approximately 0.24 m. No skeletal material. Coffin size indicates child.

G 439

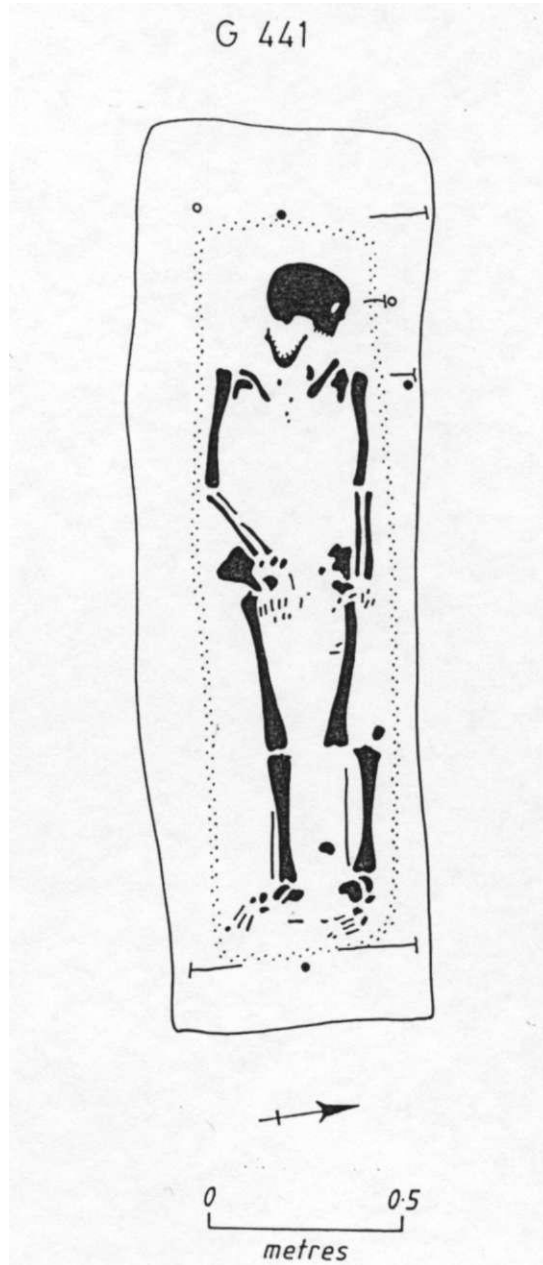


Grave 439 E-W (head to W). Cute Period 2 G445. Possibly cuts Period 2 G441. Relationship to Period 2 unclear, possibly cuts it. Cut and partly sealed by Period 2 G426. Nailed timber coffin. Young adult male. Skeleton supine. Surviving bones in poor condition. Copper-alloy finger-ring lay to right of lumbar vertebrae.



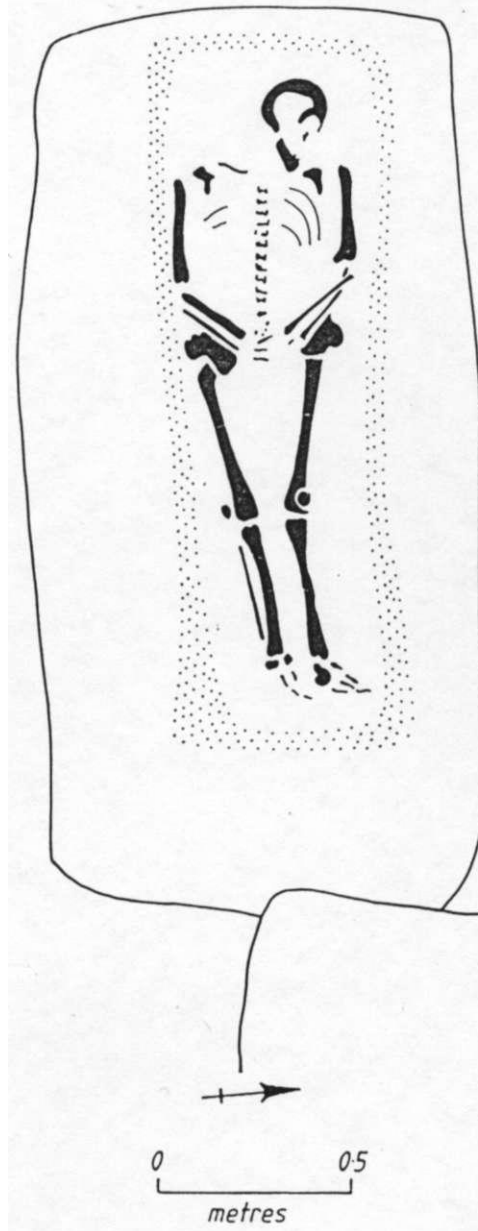
Grave 440 E-W (head to w). Isolated grave. Timber coffin (no nails recovered). Middle-aged female. Skeleton supine. Surviving bones in fair condition.

G 441



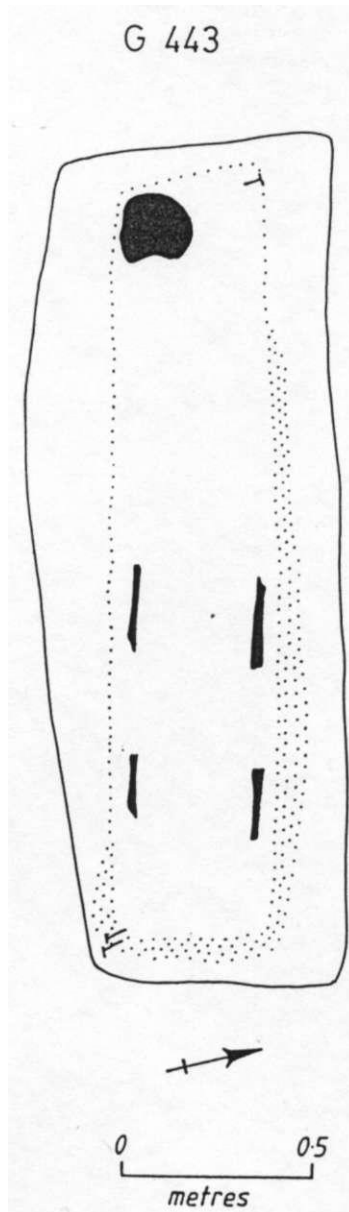
Grave 441 E-W (head to W). Cut and partly sealed by Period 2 G426. Relationship to Period 2 G439 unclear. possibly cut by it. Nailed timber coffin. Middle-aged male. Skeleton supine. Surviving bones well preserved.

G 442

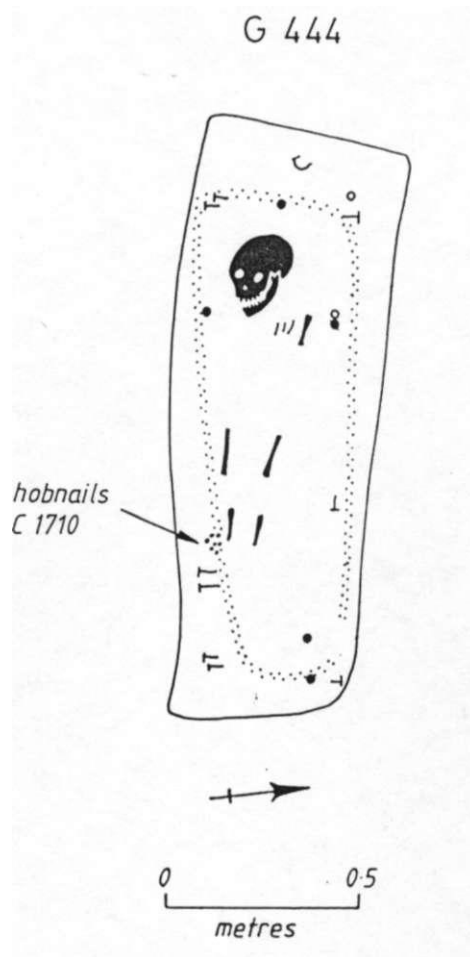


Grave 442 E-W (head to W). Cut by Period 2 G422. Timber coffin (no nails recovered). Middle-aged male. Skeleton supine. Skull crushed. other surviving bones in fair condition.

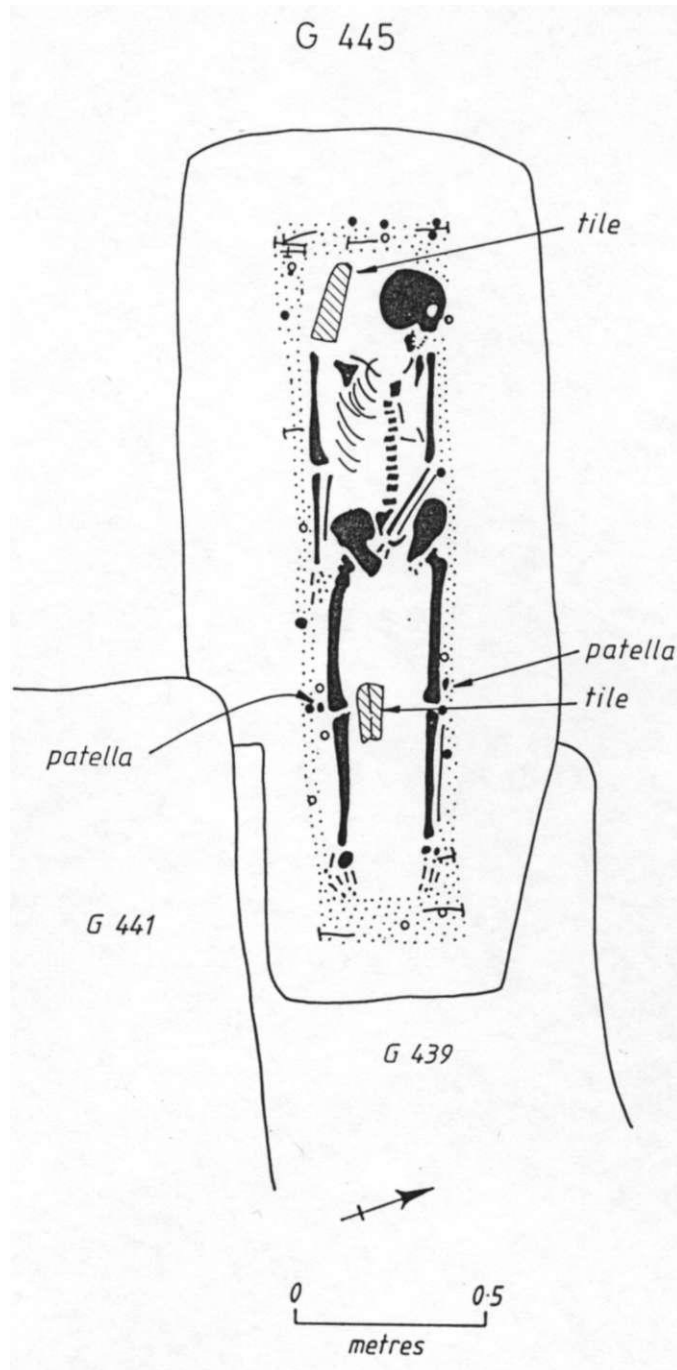
G 443



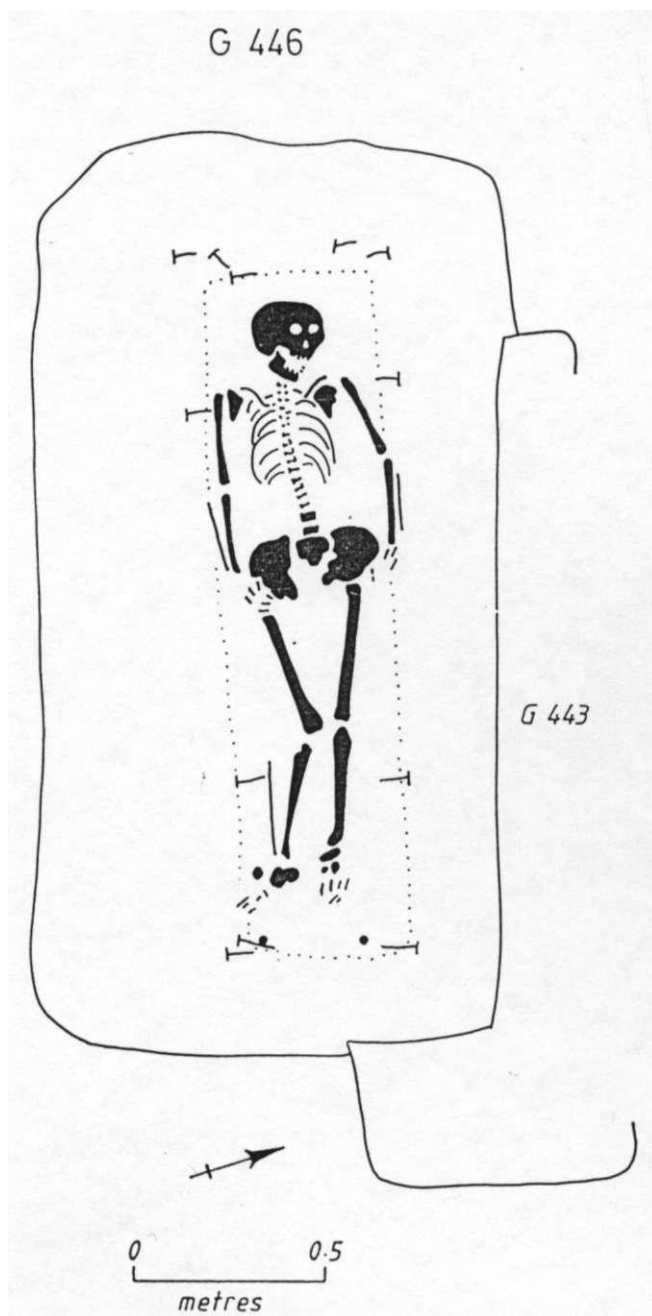
Grave 443 E-W (head to W). Cuts Period 1 G447. Period 2 QA46. Cut by Period 2 G428. Relationship to Period 2 O182 uncertain. Nailed timber coffin. Adult. sex uncertain. Skeleton supine. Only skull (crushed) and shafts of leg long bones survive. in poor condition.



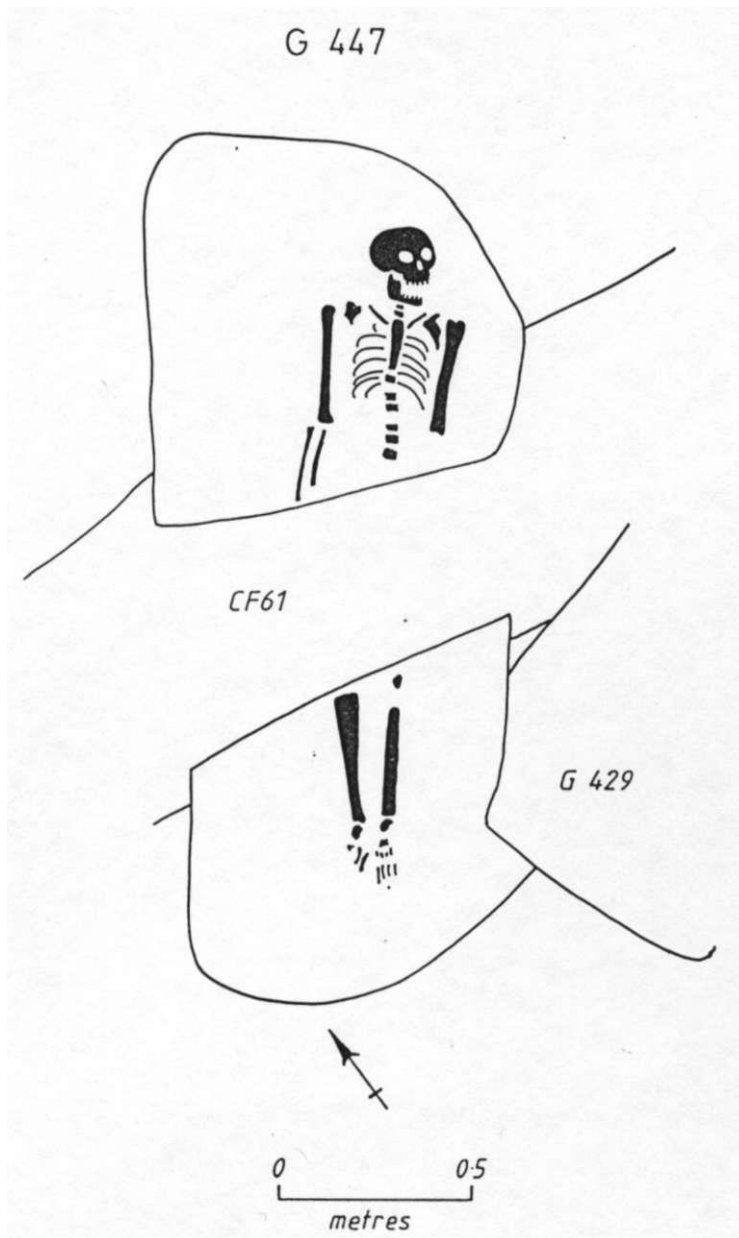
Grave 444 E-W (head to W). Relationship to Period 2 G439 uncertain. possibly cut by it. Nailed timber coffin. Child. aged 6 years. Skeleton supine. Only skull. shafts of some long bones. and some other fragments remain, in poor condition. Iron hobnails from footwear lay by right foot. In fill outside coffin to SE end lay large fragment of jet here, probably not grave deposit.



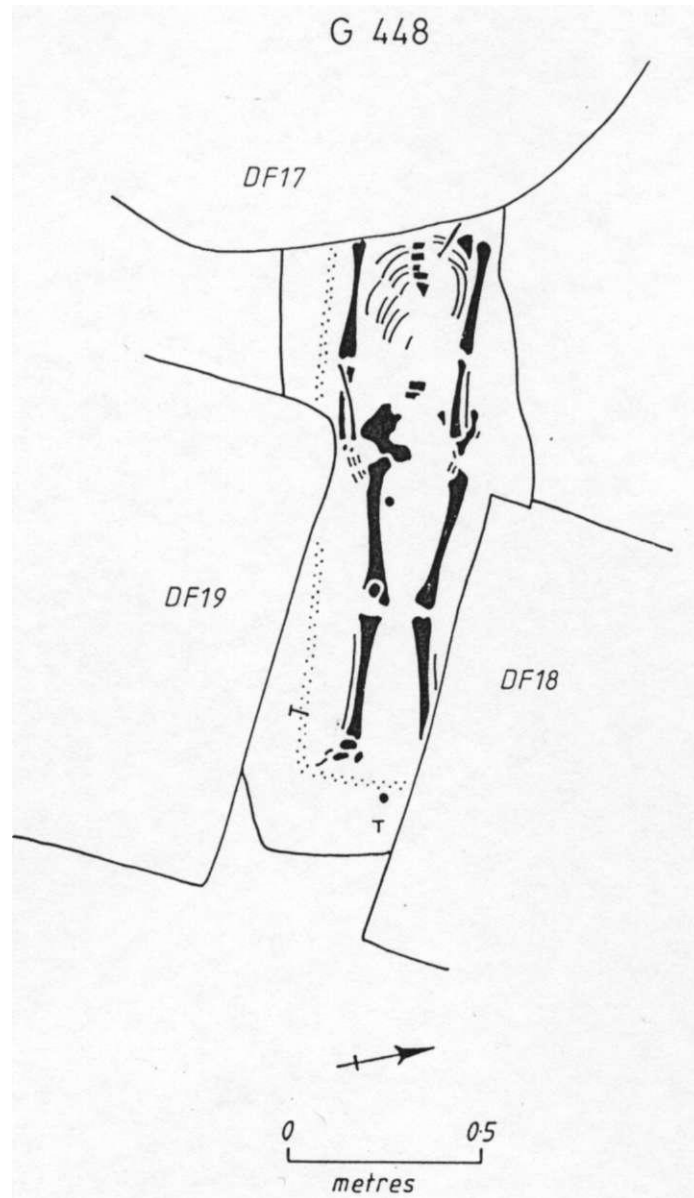
Grave 445 E-W (head to W). Cut by Period 2 G426. G439. Relationship to Period 2 G243 uncertain. Nailed timber coffin. Three fragments of tile lay horizontally in SW corner of coffin. resting on skeleton. They may originally have been on top of coffin, or placed inside it upright against S side. Fourth fragment lay between legs touching right knee. and position of this piece suggests that on top of coffin was most likely original location for others. Young adult female. Skeleton supine. Bones well preserved.



Grave 446 E-W (head to W). Possibly cuts Period 1 G447. Cut by Period 2 G182. G443. Nailed timber coffin. Middle-aged female. Skeleton supine. Bones in good condition.

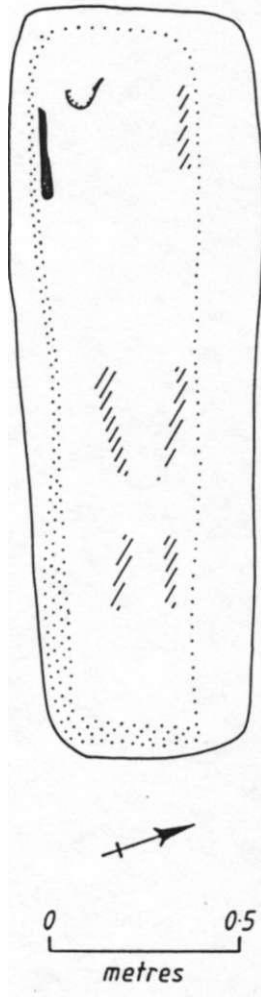


Grave 447 N-S (head to M). Isolated grave. Cut by Period 1 N-S ditch CF60. N-S ditch CF61. Period 2 G429. G443. Possibly cut by Period 2 G4R6. Centre of grave destroyed by CF61. No coffin. Middle-aged adult, sex uncertain. Skeleton supine. Surviving bones in fair condition. Dark stain noted around skeleton, possibly indicating decayed organic material (?shroud) encasing corpse.

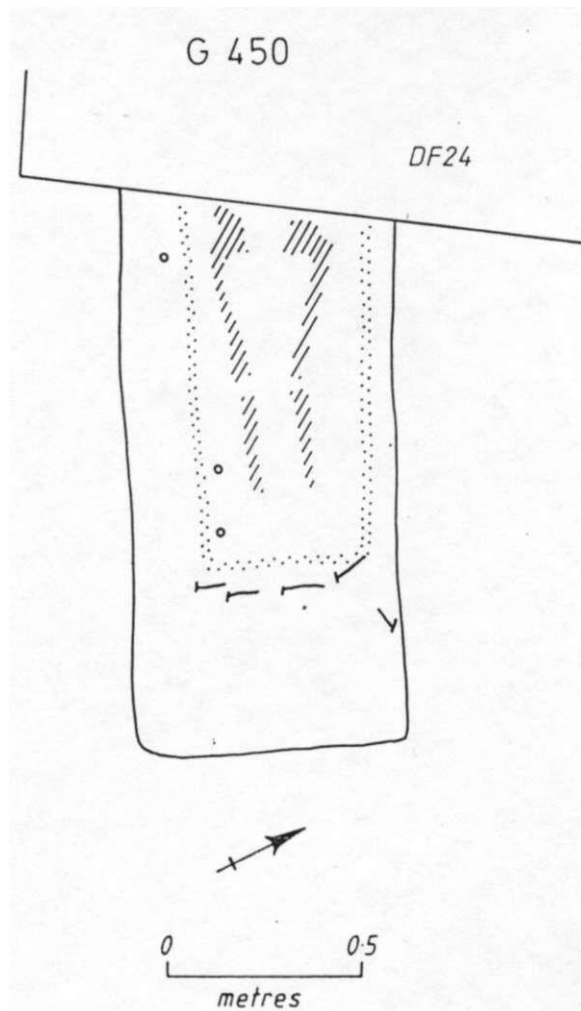


Grave 448 E-W (head to W). Isolated grave (In area of post-medieval terracing). Cut by modern pits DF17. DF18. DF19. W end of grave destroyed by DF17. Nailed timber coffin. Adult. sex uncertain. Skeleton supine. Surviving bones in fair condition.

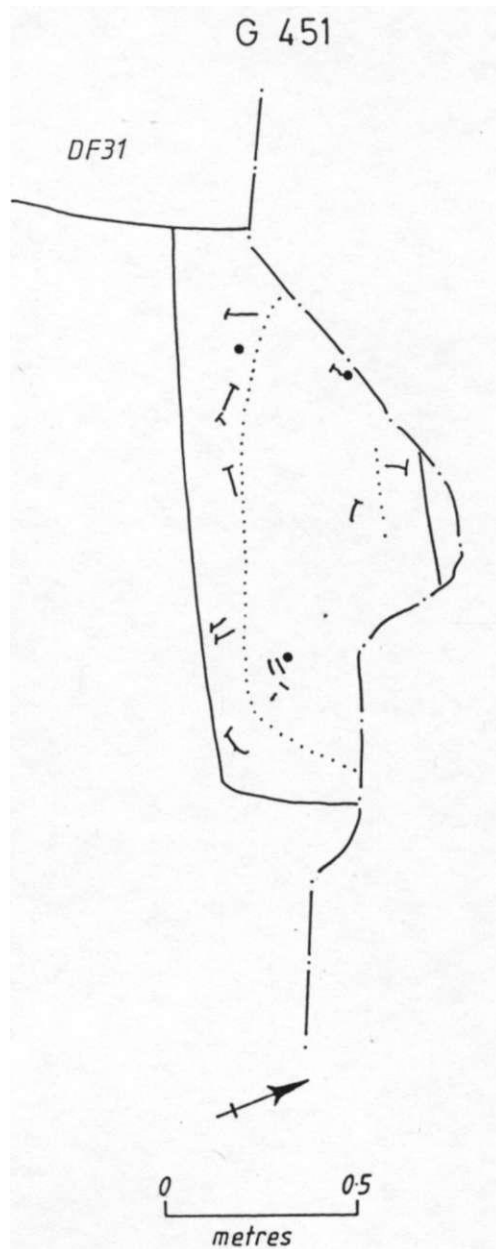
G 449



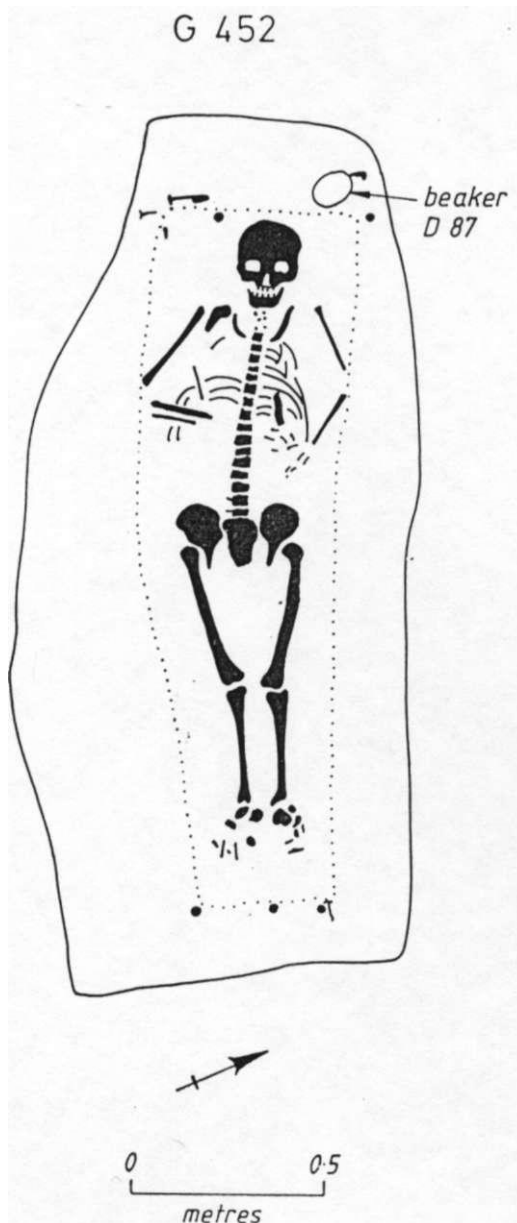
Grave 449 E-W (head to W). Cuts Period 2 G248. G269. G457. Timber coffin (no nails recovered). Only mandible and shaft of right humerus survive. in very poor condition. Other long bones indicated by stains in soil. No pathological report. Bone stains and coffin size indicate adult.



Grave 450 E-W (head to W). Isolated grave (in area of post-medieval terracing). Cut and W half destroyed by modern cellar DF24. Mailed timber coffin. surviving length 1.0 m. width 0.4 m. No skeletal material. Positions of pelvis and leg bones shown by stains in soil. Stain and coffin sizes indicate adult.

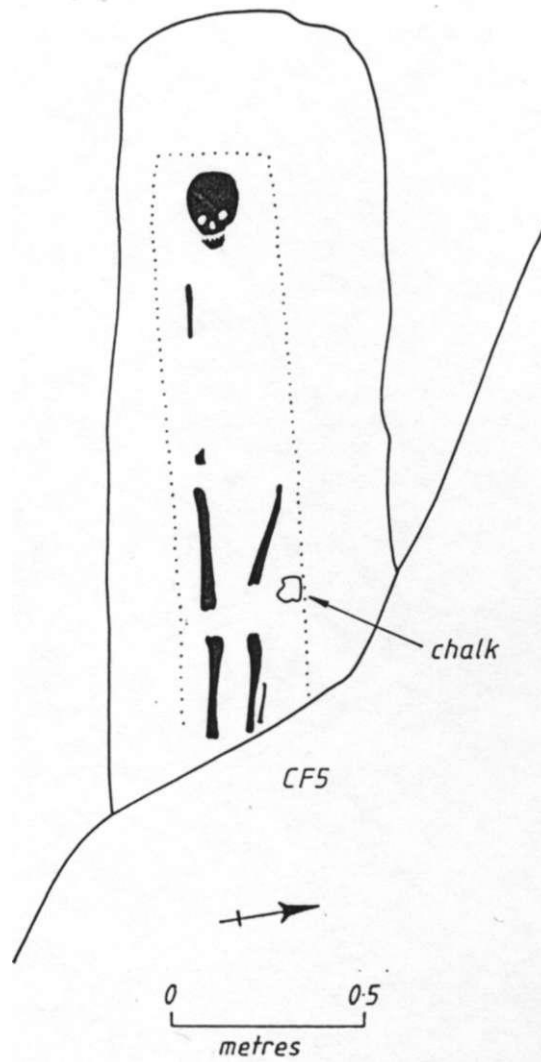


Grave 451 E-W (head to W). Isolated grave (in area of post-medieval terracing). Cut by post-medieval pits DF23. DF31. W end and part of N side not excavated. Nailed timber coffin. surviving length between 1.10 and 1.20 m. width 0.34 m. Some right foot bones only remained, now missing.

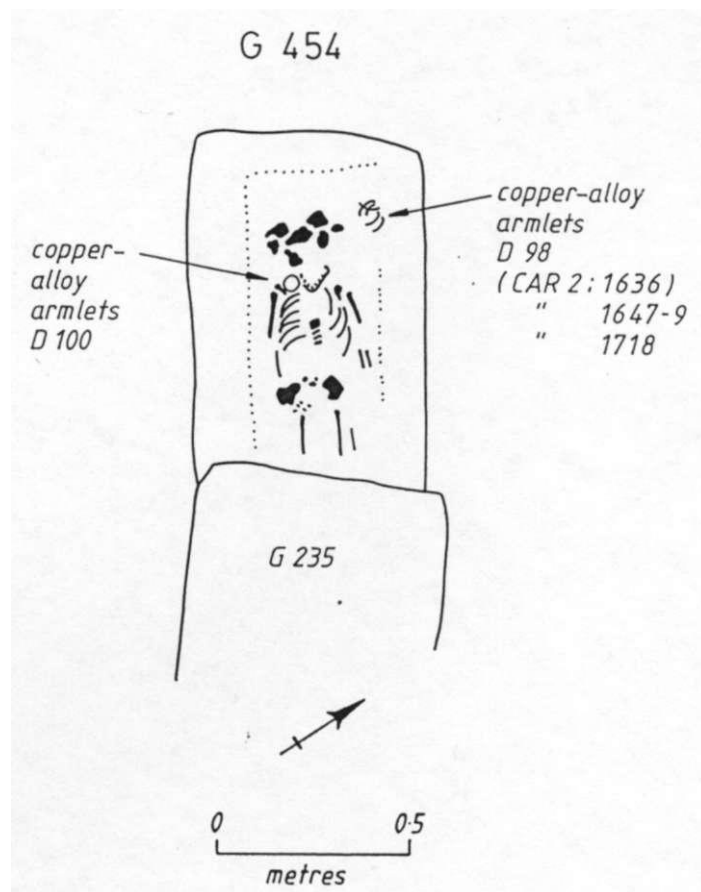


Grave 452 E-W (head to W). Isolated grave. Cut by modern pipe trench DF20. Nailed timber coffin. Young adult female. Skeleton supine, arms bent so that hands lay near bottom of rib cage. Surviving bones in good condition. Small plain bag-shaped shoulderless beaker of Colchester colour-coated ware at W end outside NW corner of coffin. Grave fill contained several sherds of coarse grey ware vessel and much burnt human bone (age and sex uncertain). This must be a disturbed (unnumbered) cremation.

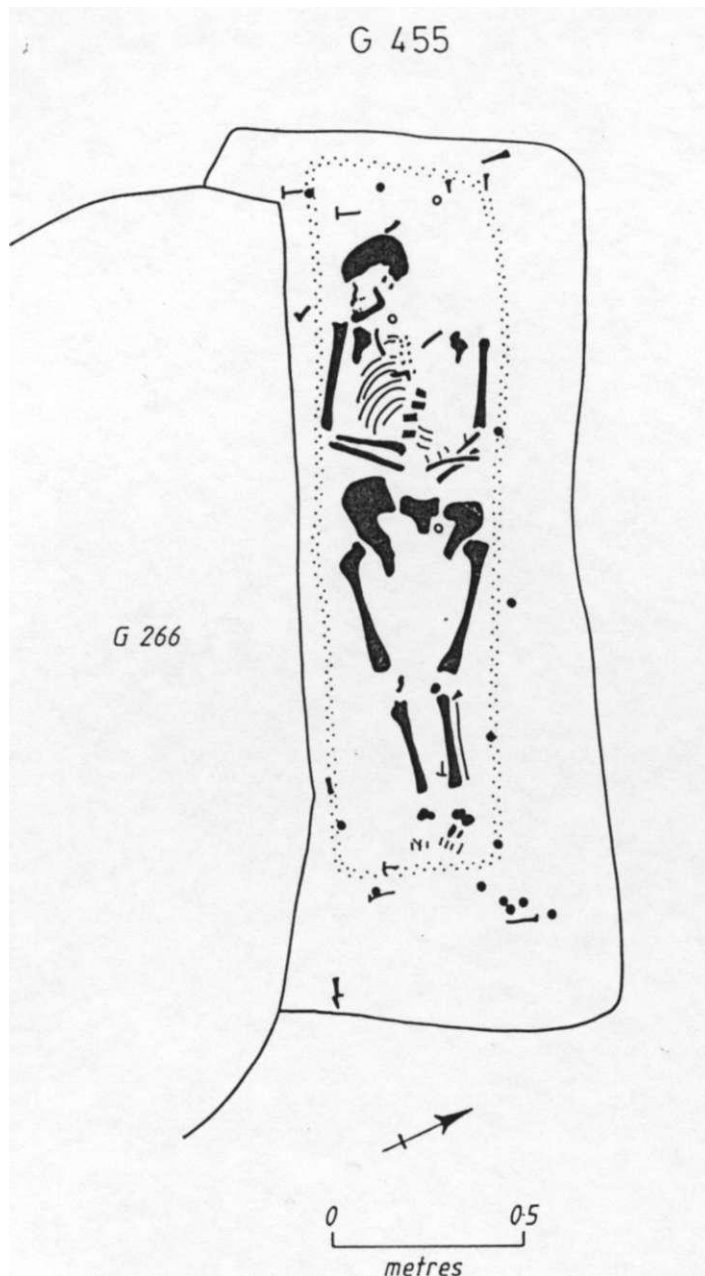
G 453



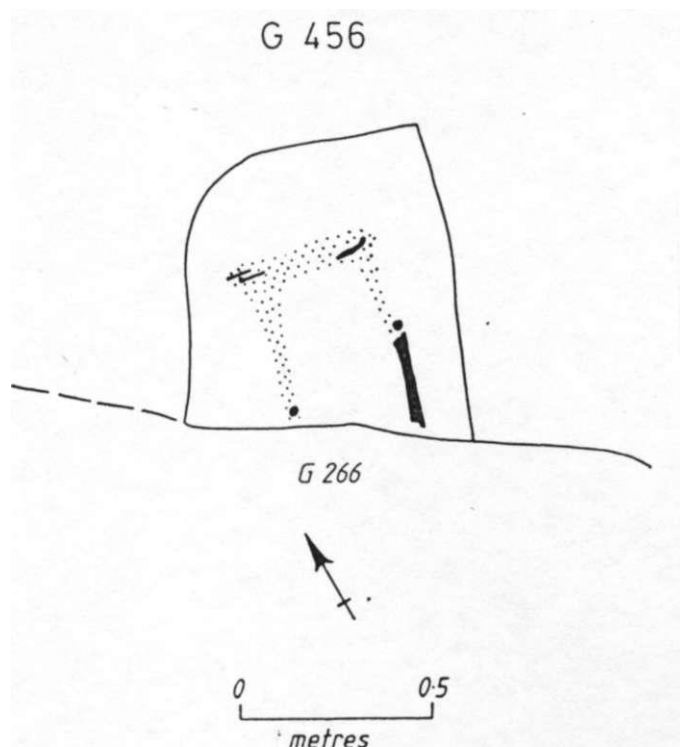
Grave 433 E-W (head to W). Cuts Period 2 G455. Cut by modern pipe trench CF5/DF20. Relationship to Period 2 G266 uncertain. Extreme E end not excavated. Timber coffin (no nails recovered). Young adult. sex uncertain. Skeleton supine. Only skull, one small pelvis fragment, and shafts of right humerus and leg long bones remain. in poor condition. Small lump of chalk inside coffin against timber stain of N side near left knee. Probably part of fill though chalk not found elsewhere on site.



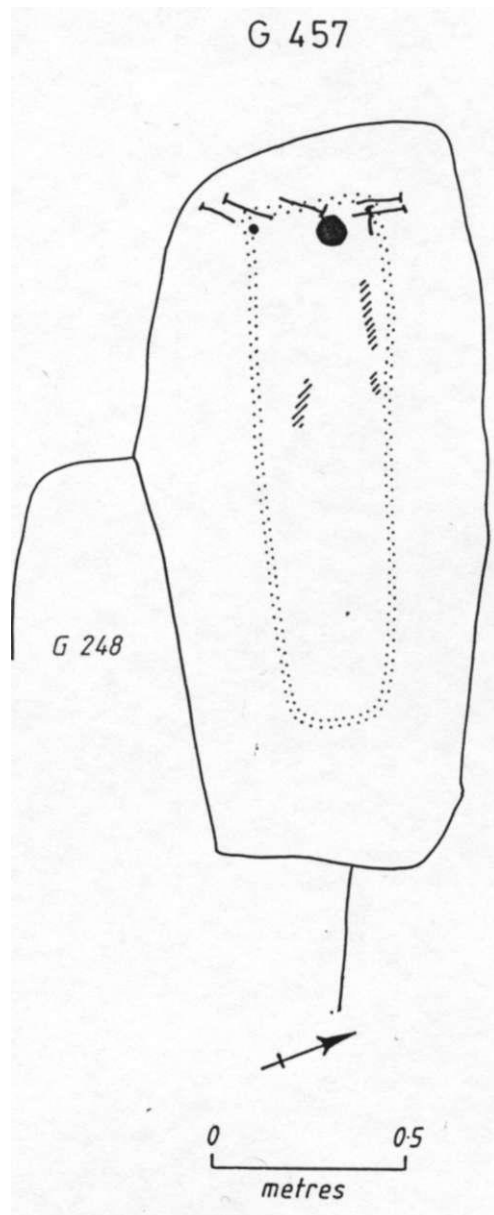
Grave 454 E-W (head to W). Cuts Period 2 G266. G269. Cut and E end destroyed by Period 2 G235. Timber coffin (no nails plotted). Child. aged 5 years. Skeleton supine. Skull crushed. other surviving bones in fair condition. Inside coffin near right shoulder lay two copper-alloy armlets (D100; CAR 2. 1648-9). three more against N side of coffin level with top of skull (D98: CAR 2. 1636. 1647. 1718). Three (1636. 1649. 1718) are incomplete. All possibly originally on top of coffin.



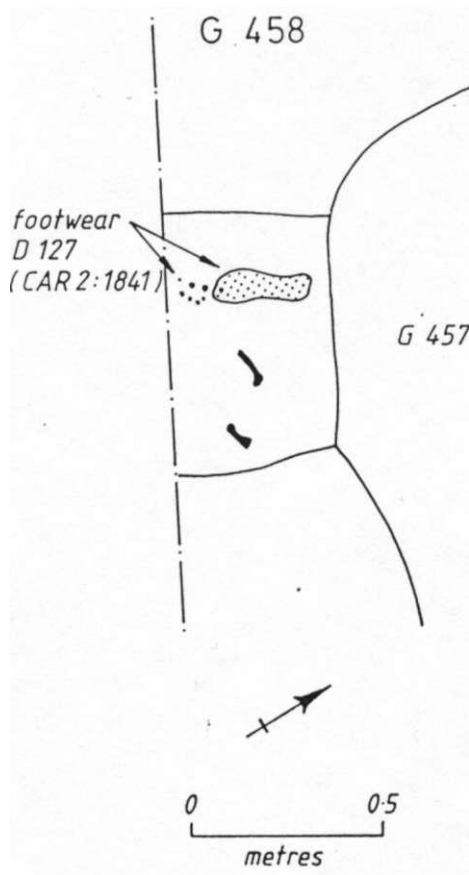
Grave 455 E-W (head to W). Cuts and seals Period 1 G&56. Cut by Period 2 G266. G453. Nailed timber coffin. Middle-aged female. Skeleton supine. Surviving bones in good condition.



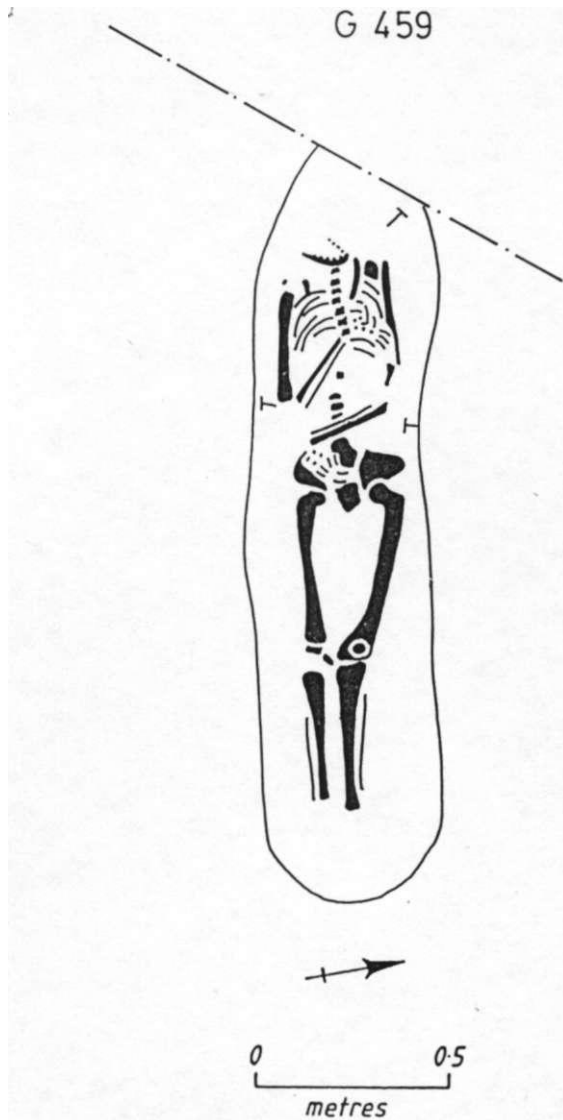
Grave 456 N-S. Isolated grave. Cut by Period 2 G266. Cut and sealed by Period 2 G355. N end only remains. Nailed timber coffin. Only one shaft of long bone survives (not illustrated), in poor condition.



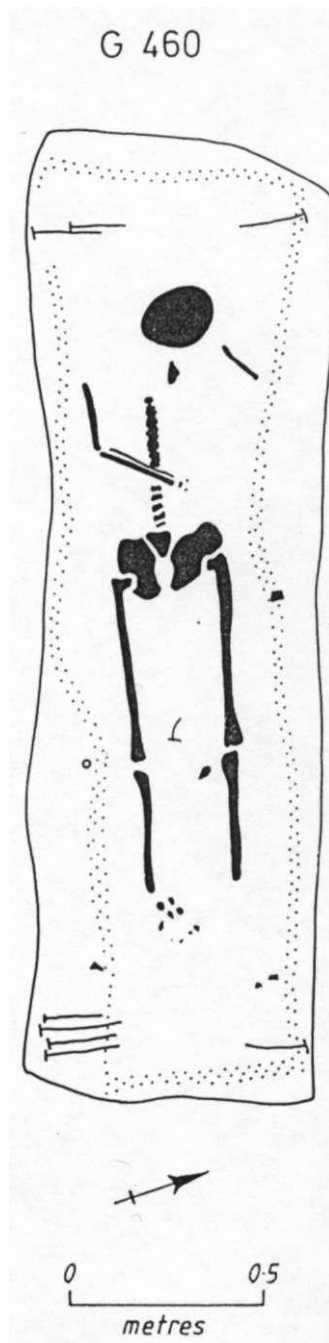
Grave 457 E-W (head to W). Cuts ?Period 1 ?inhumation G458. Cut by Period 2 G248. G252. G449. Nailed timber coffin. No surviving skeletal material. Skull remained in very poor condition. proved impossible to lift. Other bones indicated by stains in soil.



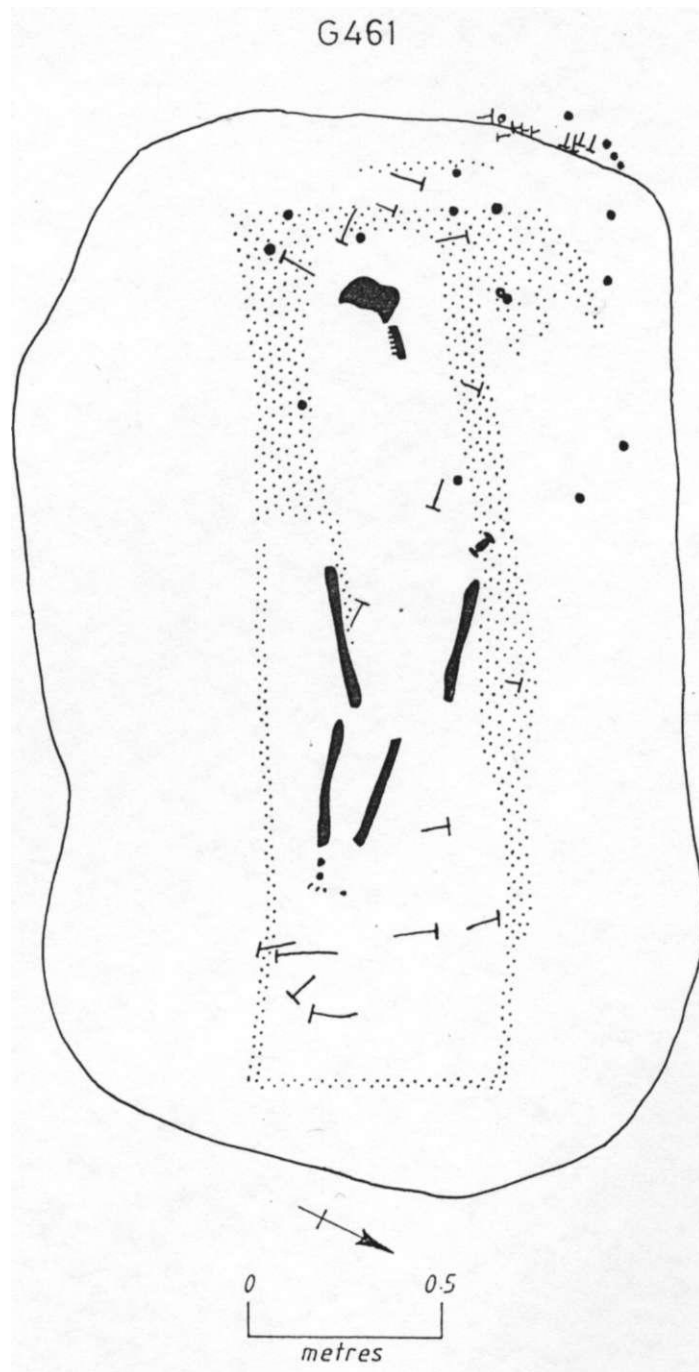
Grave 458 N-S. Inhumation. Cut by Period 2 G2&8. G259. G457. Small part only excavated, partly destroyed and on edge of site. Mailed coffin (two nails recovered. no timber stain located). No skeletal material. Hobnails from at least one shoe. possibly two. Complete shoe aligned NE-SW (heel-toe), inside coffin.



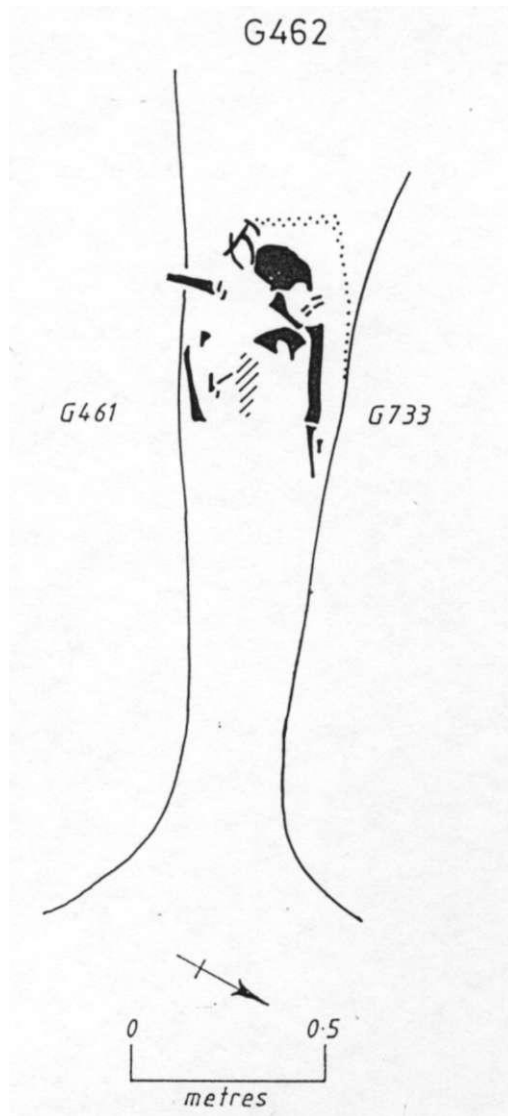
Grave 459 E-W (head to w). Possibly an isolated grave, relationship to Site J Period 2 **G696** uncertain. Nailed timber coffin (timber stain not illustrated). Vertical coffin planks **2.06** m long. 0.43 m wide. and 20 mm thick. Young adult, sex uncertain. Skeleton supine. Bones fairly well preserved. Skull present but later stolen apart from mandible.



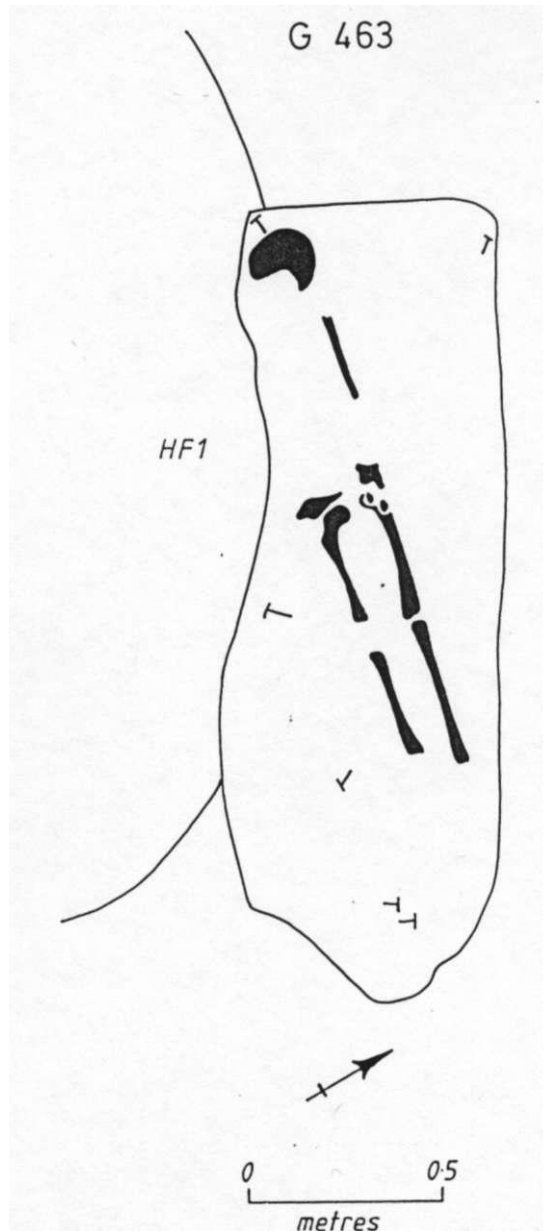
Grave 460 E-W (head to W). Cuts Period 2 G466. G474, and G482. Relationship to Period 2 G484 uncertain. Nailed timber coffin. Flank thickness 30-50 mm. Young adult female. Skeleton supine. Upper part in poor condition, lower well preserved.



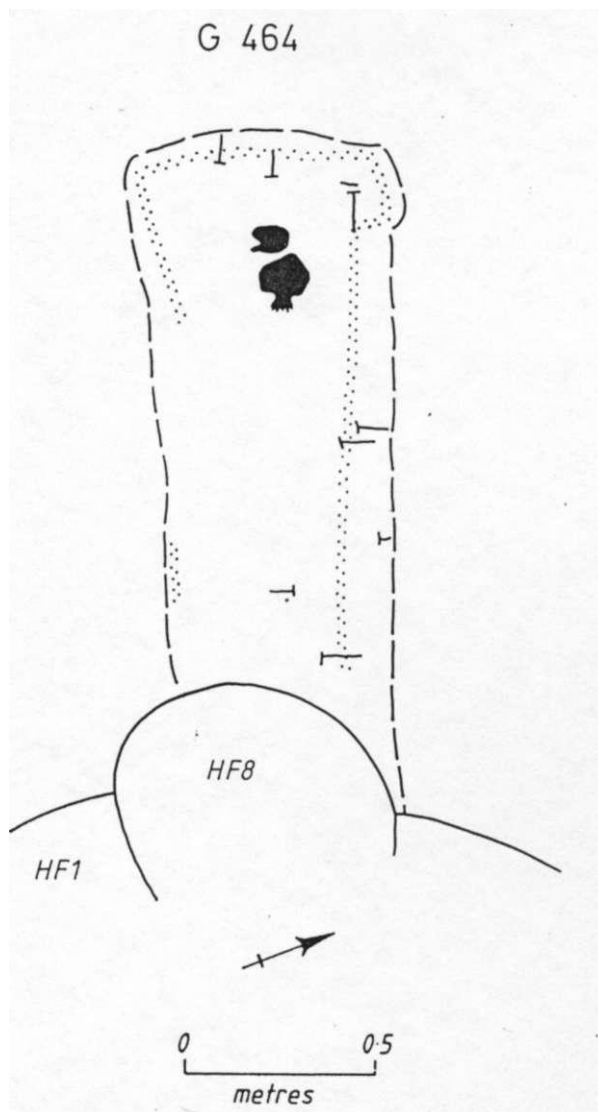
Grave 461 E-W (head to **W**). Cuts Period 2 G462. G472. G479. G736. Cut **by** Period 2 G702. Nailed timber coffin. Adult, sex uncertain. Skeleton supine. Skull and leg bones survive, in poor condition.



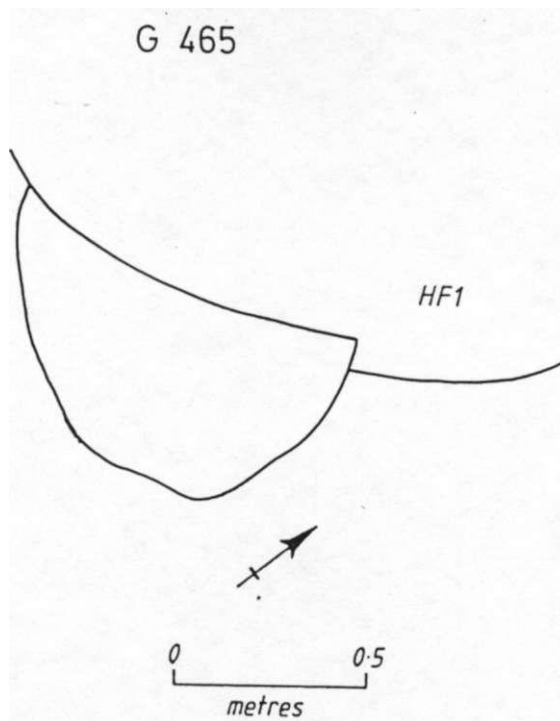
Grave 462 E-w (head to W). Cuts Period 2 G472. G733. G736. Cut by Period 2 G461. Nailed timber coffin. Adult female. Skeleton supine. Skull and some upper post-cranial bones only remain, in poor condition.



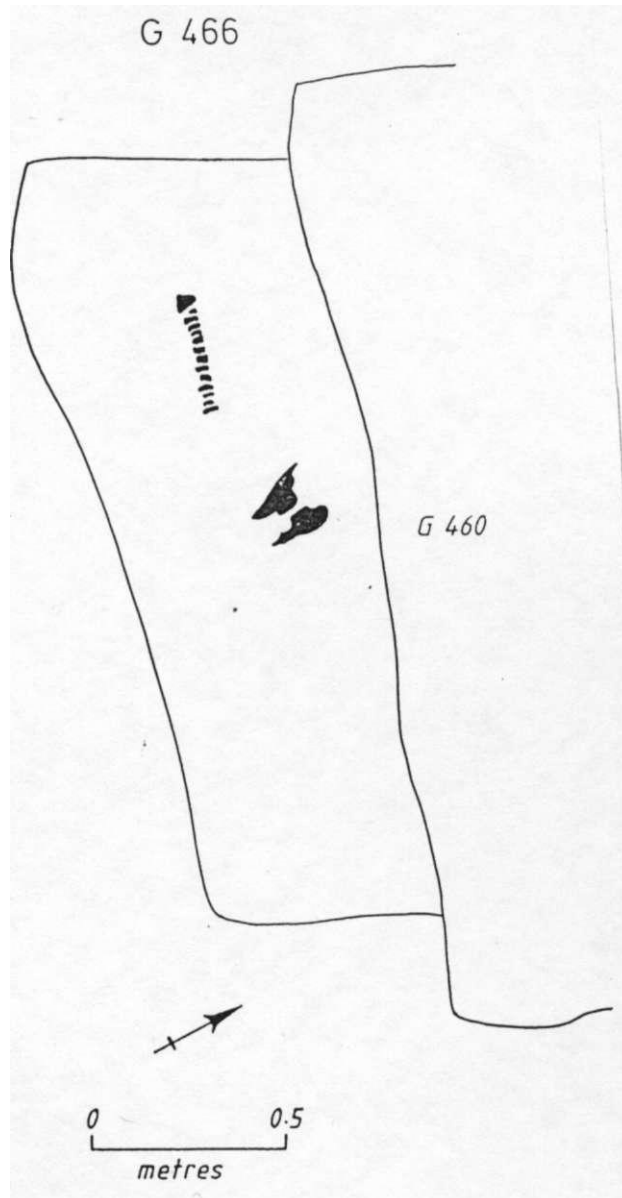
Grave 463 E-W (head to W). Cuts Period 2 G488. Cut by Period 2 G470. modern pit HF1. Relationship to Period 2 G524. uncertain. Nailed timber coffin. Age. and sex uncertain. Skeleton supine. Bones in poor condition.



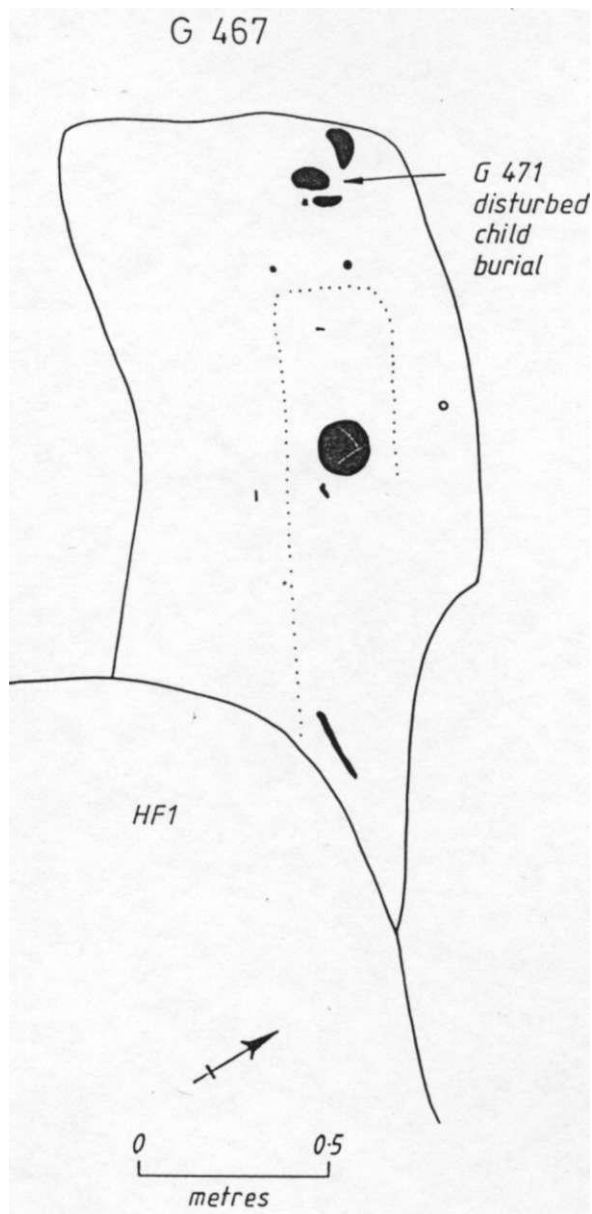
Grave 464 E-W (head to W). Cut by Period 2 G478. Nailed timber coffin. Timber stain pronounced, with lid showing at W end. Child, aged 2 years. Only skull fragments survive.



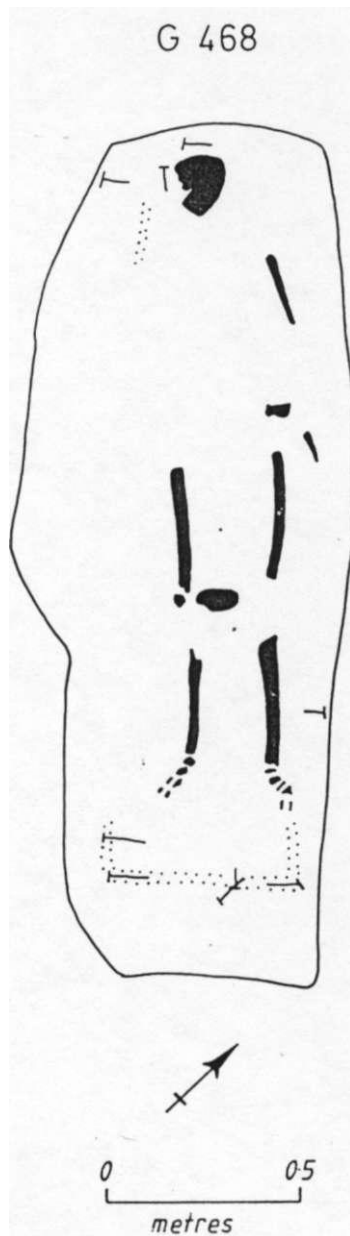
Grave 465 E-w. Cut by Period 2 G468. modern pit HF1. E end of grave only in section of modern pit HF1. No trace of coffin or skeletal material.



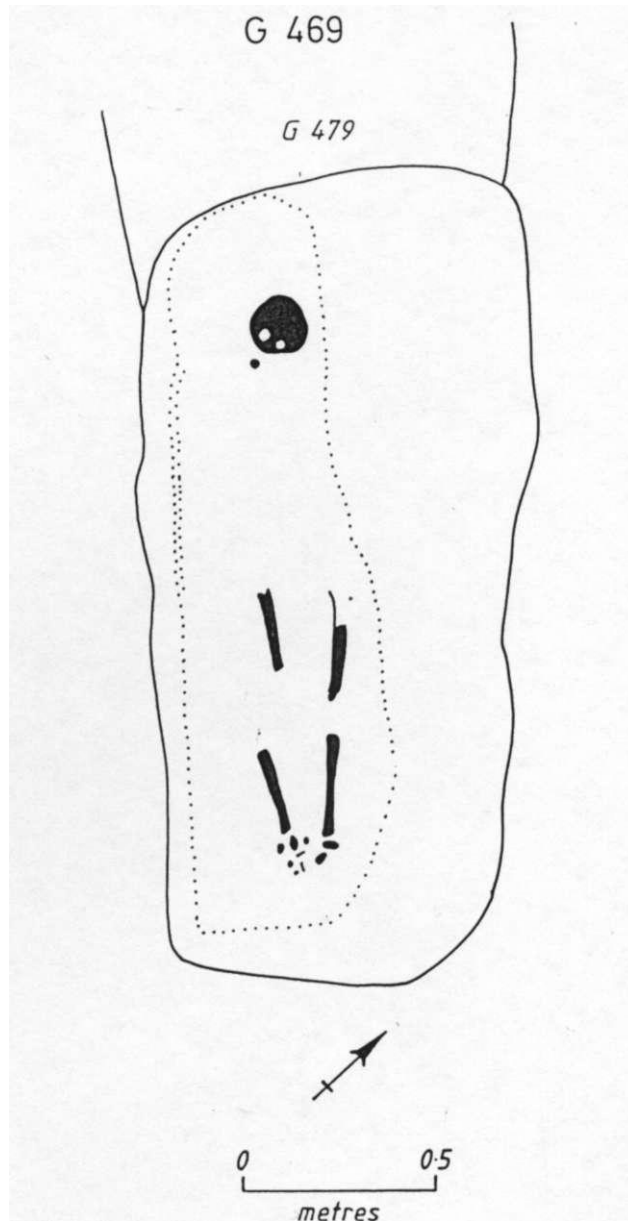
Grave 466 E-W (head to W). Cuts Period 2 G482. Cut by Period 2 G460. modern sand pit HF5. Nailed timber coffin. Adult. sex uncertain. Only vertebrae remain, in poor condition.



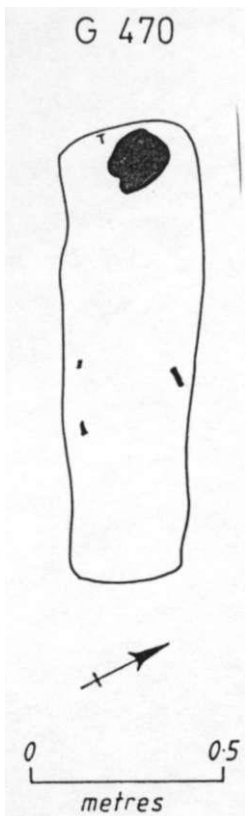
Grave 467 E-W (head to w). Cuts Period 2 G471. G489. G493. and possibly Period 2 G501. Cut by modern pit HF1. Nailed timber coffin (only one nail). Vertical planks 20-40 mm thick. Adult. sex uncertain. Only back of skull. some teeth, and one fragment of leg long bone survive, in very poor condition.



Grave 468 E-W (head to W). Cuts Period 2 G465. Cut by modern features HF10. HF12. HF20. Nailed timber coffin. Adult. sex uncertain. Skeleton supine. Only skull and some long bones survive, in poor condition.



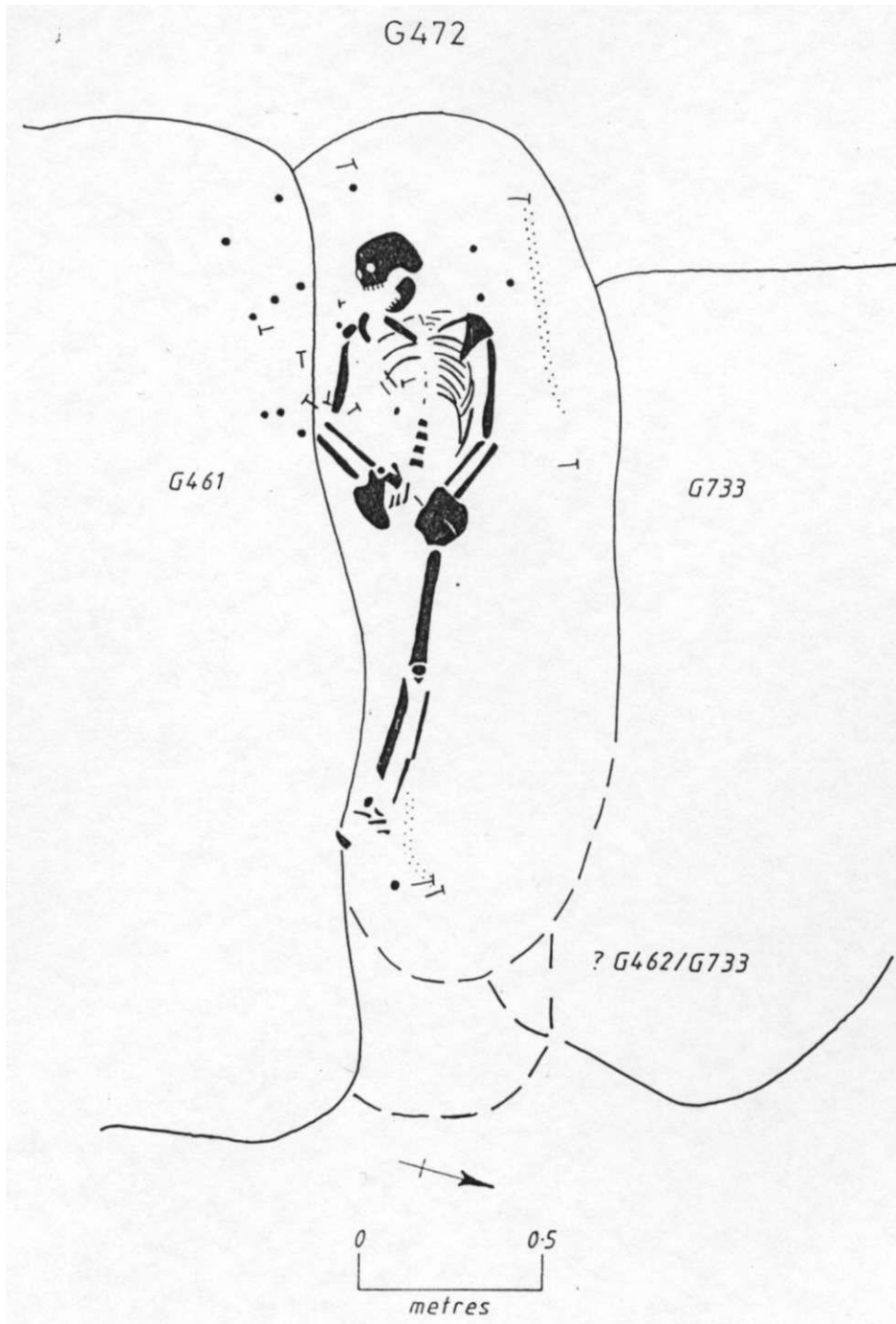
Grave 469 E-W (head to W). Cuts Period 2 G491. G502. Cut by Period 2 G479. Nailed timber coffin (only one nail shaft). Adult, sex uncertain. Skeleton supine. Only skull and fragments of leg and foot bones remain, in poor condition.



Grave 470 E-W (head to W). Cuts Period 2 G463. G509. Relationship to Period 2 G524 uncertain. Nailed timber coffin (timber stain not illustrated). Skeleton supine. Only skull and fragments of leg bones survive.

G471 see G467

Grave 471 E-W (head to W). Cuts Period 2 G489. G493. G501. Cut by Period 2 G467. Disturbed burial. no nails or timber stain located. Child. aged 18 months. Only skull and upper ribs remain.



Grave 472 E-W (head to W). Probably cuts Period 2 G736. Cut by Pe

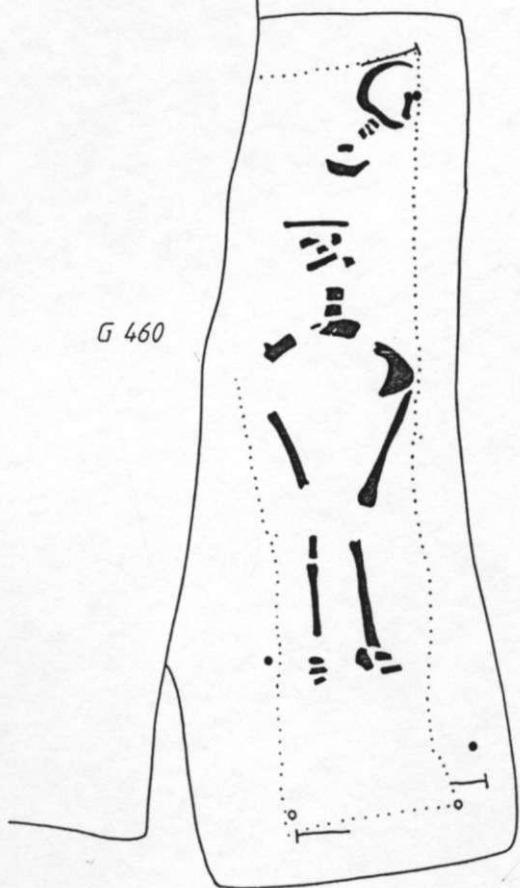
G 473



0 0.5
metres

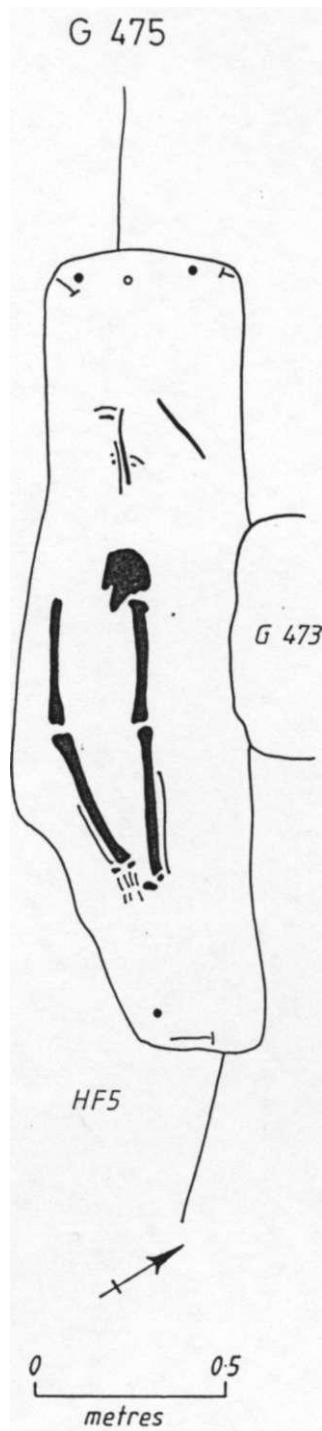
Grave 473 E-w (head to W). Cuts Period 1 G485. Cut by Period 2 G475. Very small grave. 0.62 m long. 0.28 m wide. No trace of coffin or skeletal material. Grave size indicates infant.

G 474

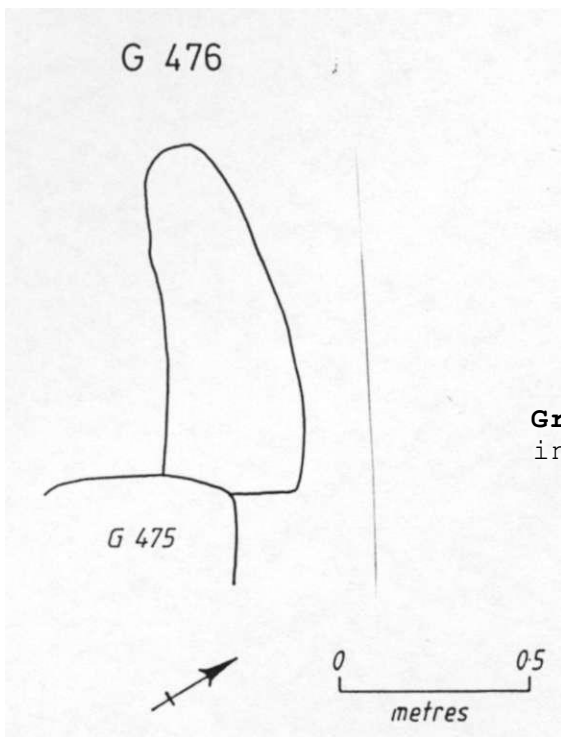


0 0.5
metres

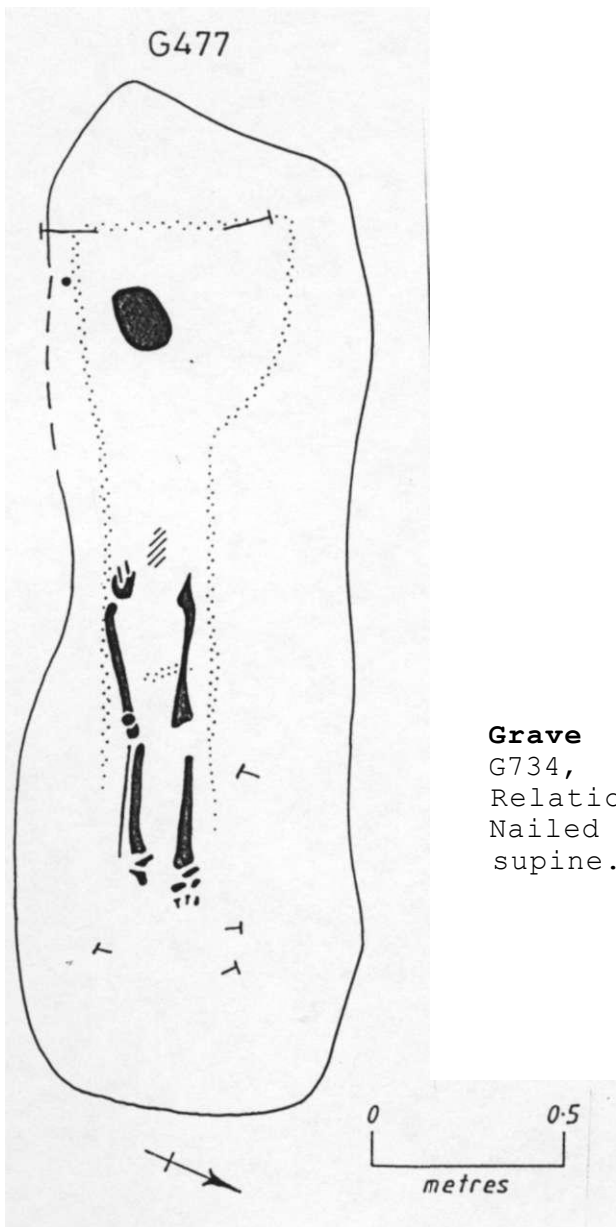
Grave 474 E-W (head to W). Cut by Period 2 G460. G502, and possibly Period 2 G484. Nailed timber coffin. Adult female. Skeleton supine. Bones in poor condition.



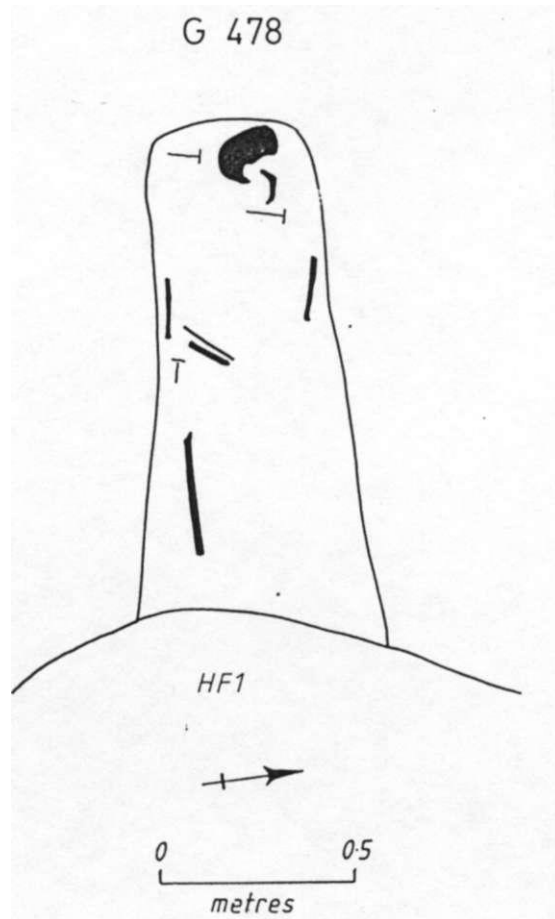
Grave 475 E-w (head to w). Cuts Period 1 G485. Period 2 Cut by Period 2 G497. modern features HF5. HF10. coffin (timber stain not illustrated). Young adult male. Skeleton supine. Upper part removed apart from arm long bone and some ribs. Lower part Quite well preserved.



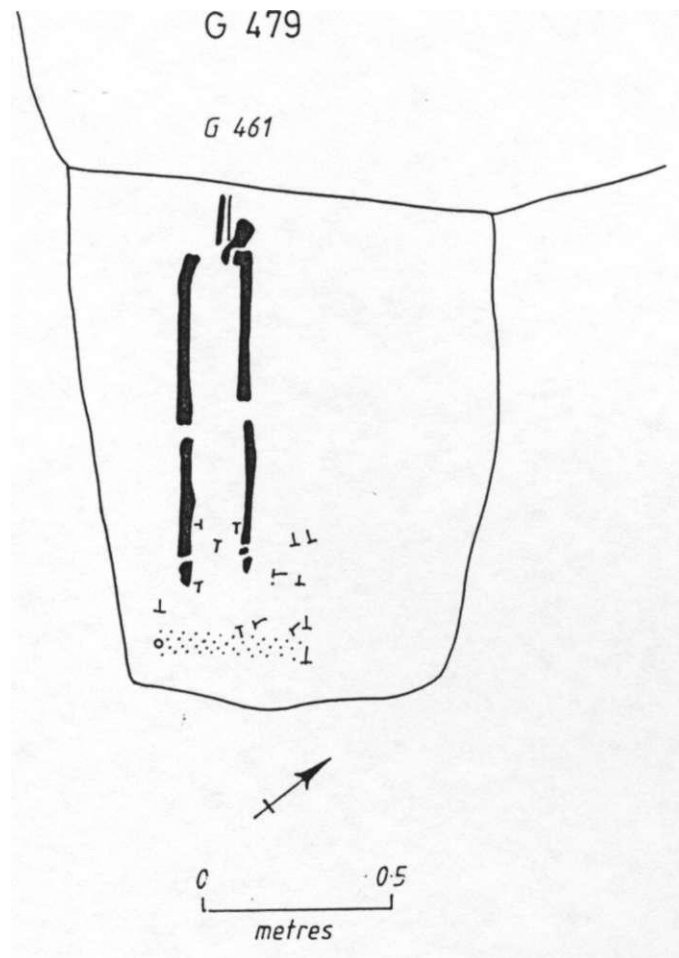
Grave 476 E-W. Isolated grave. Small and shallow, indicates infant or small child.



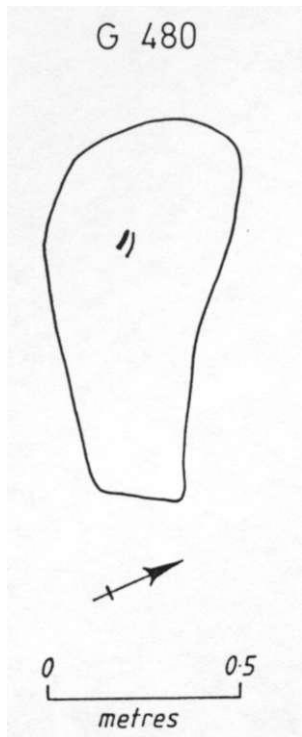
Grave 477 E-w (head to W). Cuts Period 2 G734, and possibly Period 2 G721. Relationship to Period 2 G492 uncertain. Nailed timber coffin. Adult male. Skeleton supine. Bones in poor condition.



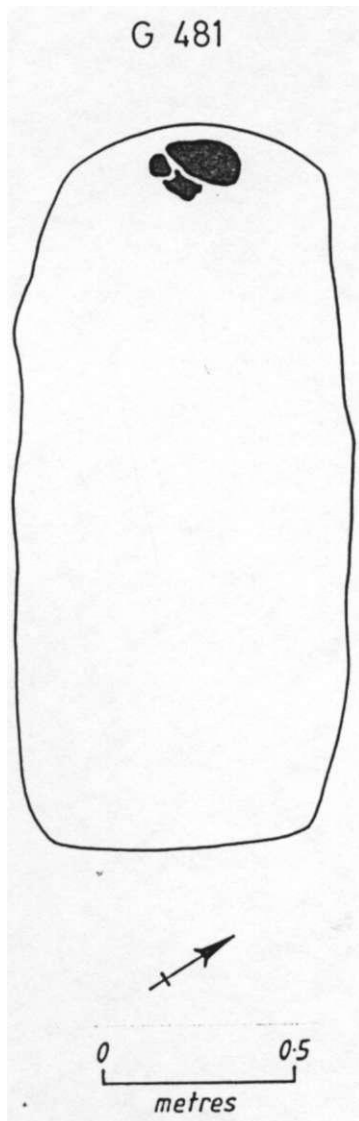
Grave 478 E-W (head to w). Cuts Period 2 G464. G491. Cut by modern pit HF1. post-Roman pit HF8. Nailed timber coffin (timber stain not illustrated). Adult. sex uncertain. Skeleton supine. Skull and some long bones only remain, in poor condition.



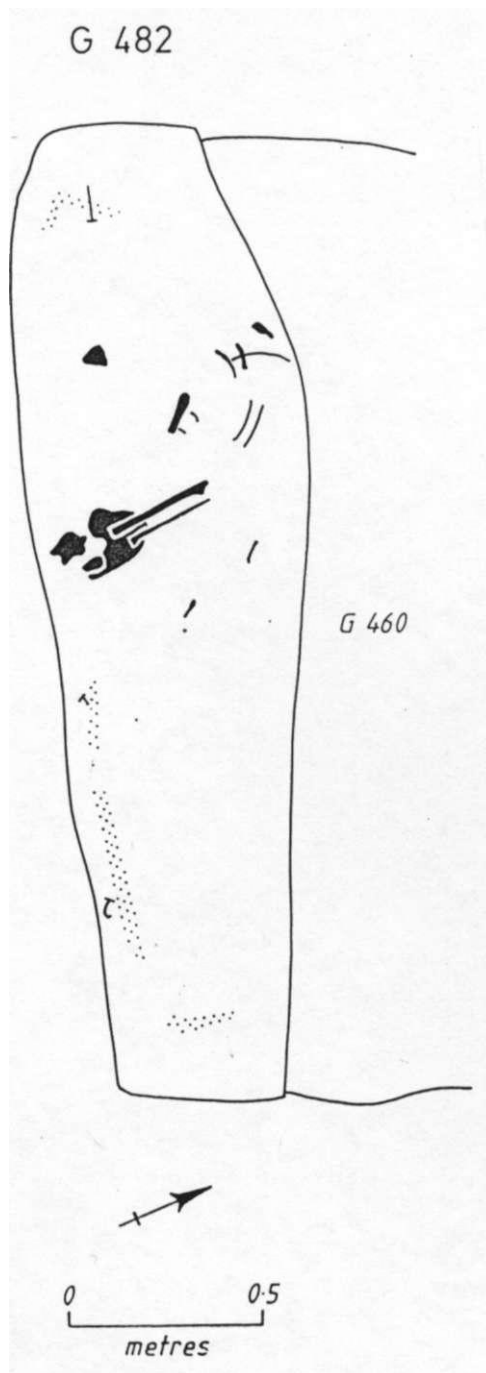
Grave 479 E-W (head to W). Cuts Period 2 G469. Cut and partly destroyed by Period 2 G461. Nailed timber coffin. Young adult male. Skeleton supine. Surviving bones in fair-condition.



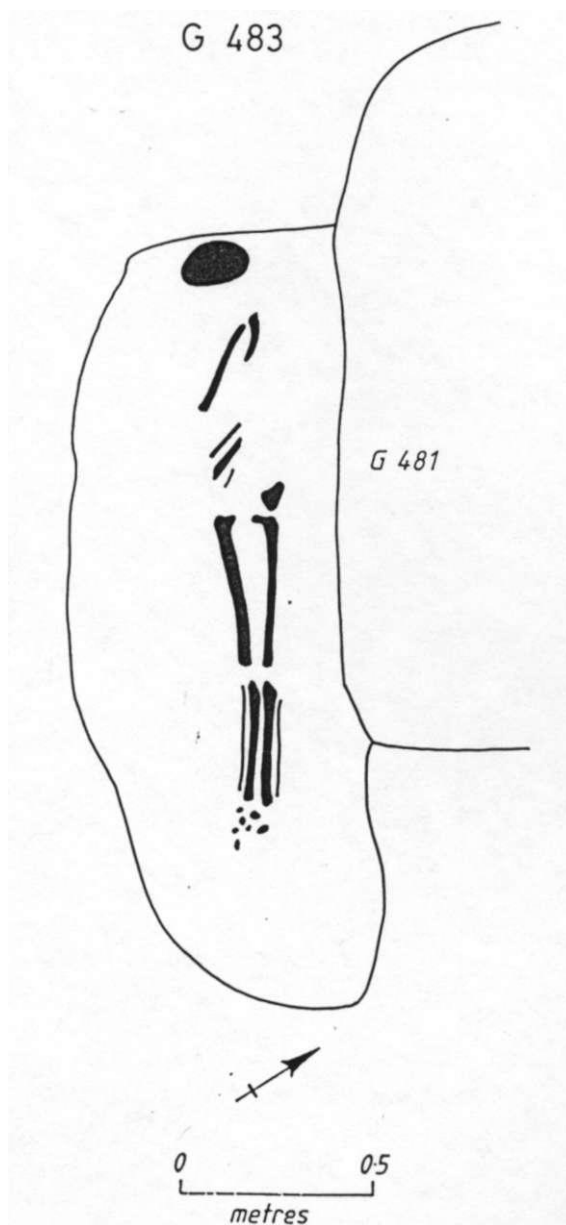
Grave 480 E-W (head to W). Relationships to Period 2 G489. G493. and G501 uncertain. Very shallow burial, no edges for grave pit discernible. length 1 m, maximum width 0.48 m. No traces of coffin located. Two bone fragments only survive. Grave size indicates infant.



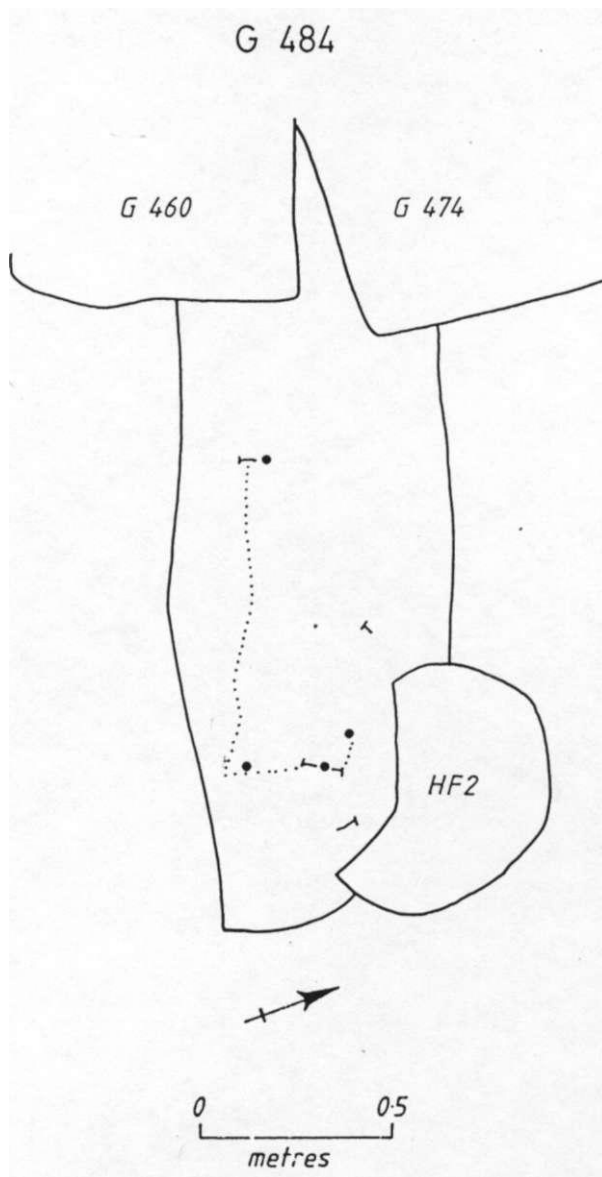
Grave 481 E-W (head to W). Cuts Period 2 G483. Relationship to Period 2 G494 uncertain. Nailed timber coffin (nails and timber stain not illustrated). Young child. Fragments of skull only remain.



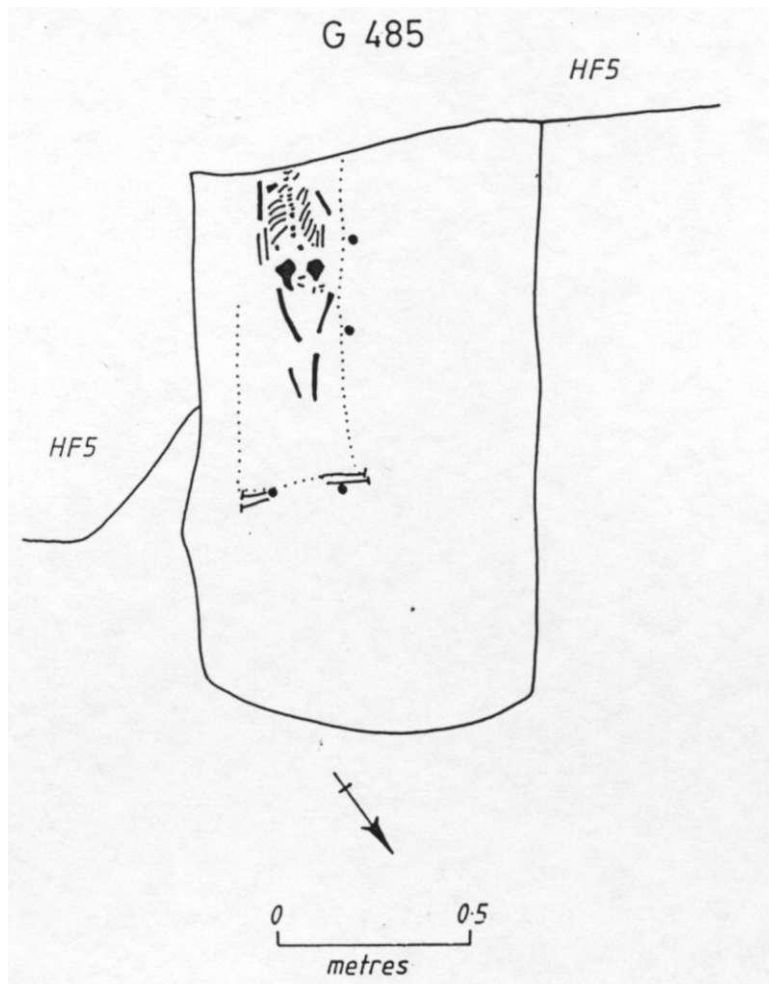
Grave 482 E-W (head to W) . Cut by Period 2 G460 . G466 . Nailed timber coffin .



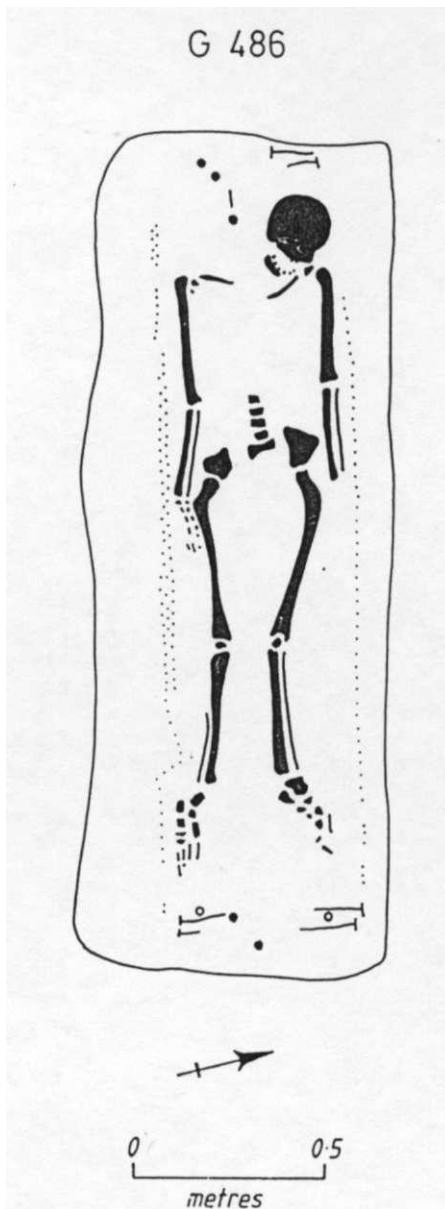
Grave 483 E-W (head to W). Cut by Period 2 G481. Nailed timber coffin (timber stain not illustrated). Young adult female. Skeleton supine. Bones of upper skeleton badly preserved.



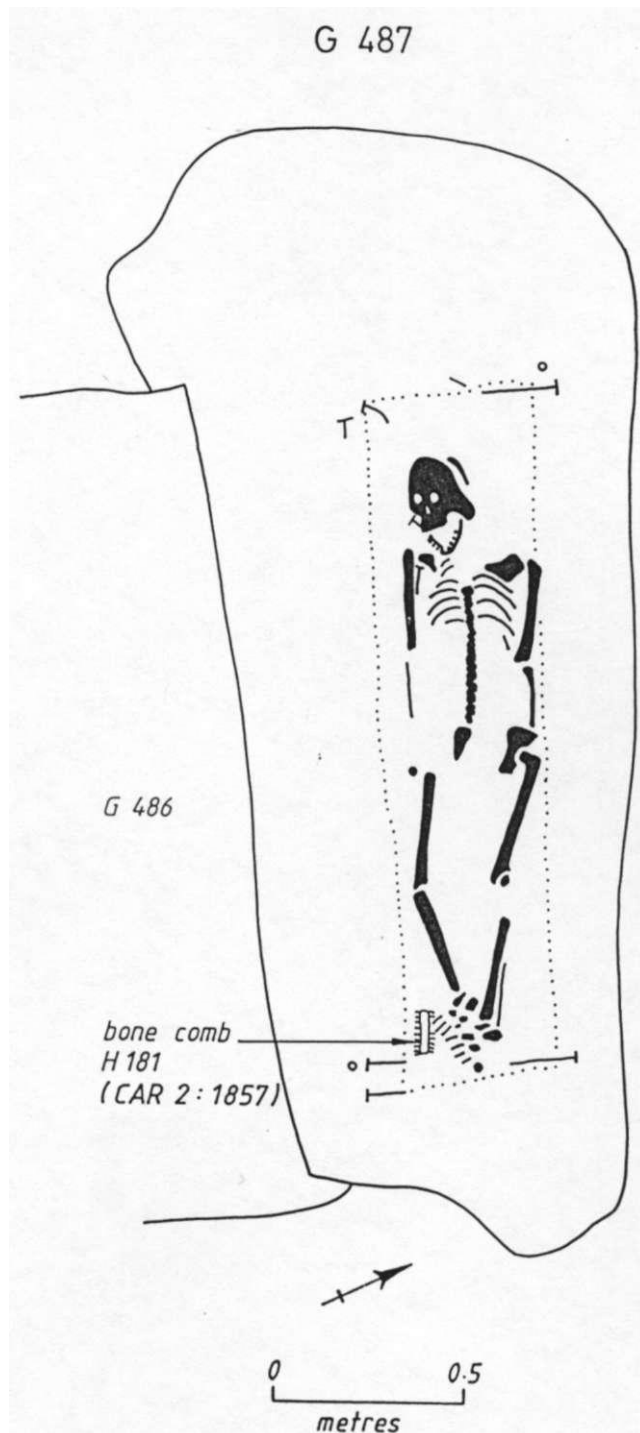
Grave 484 E-W. Possibly cuts **G474**. Relationship to **G460** uncertain.
 0.8 m. width 0.3 m. No skeletal material.
 Coffin size indicates small child.



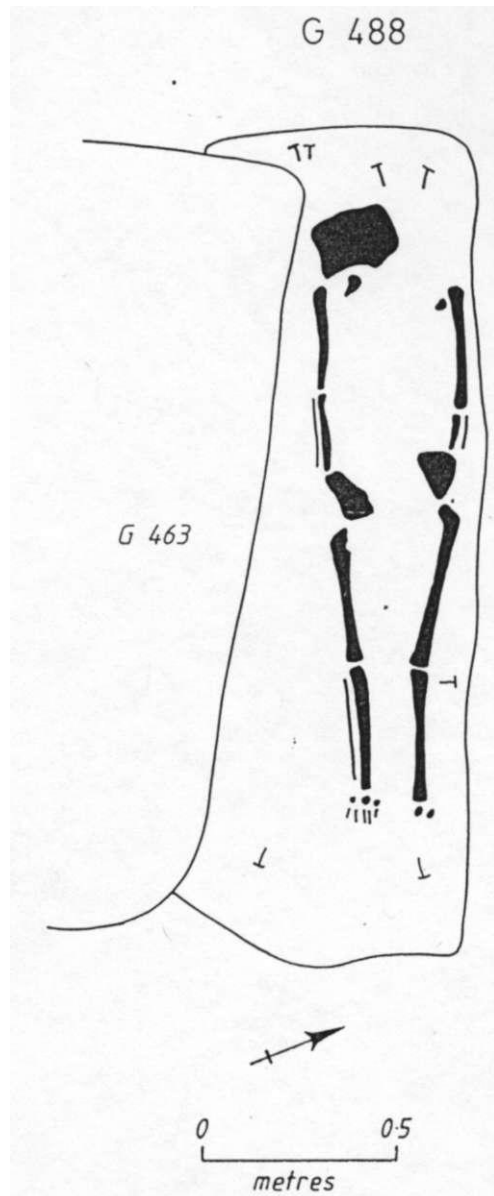
Grave 485 N-S (head to S). Isolated grave. Cut by Period 2 G473. G475. modern sand pit HF5. Nailed timber coffin. Step in W side of grave. Spurt of coffin with skull removed by HF5. Child, aged 2 to 3 years. S. supine. Bones in fair condition.



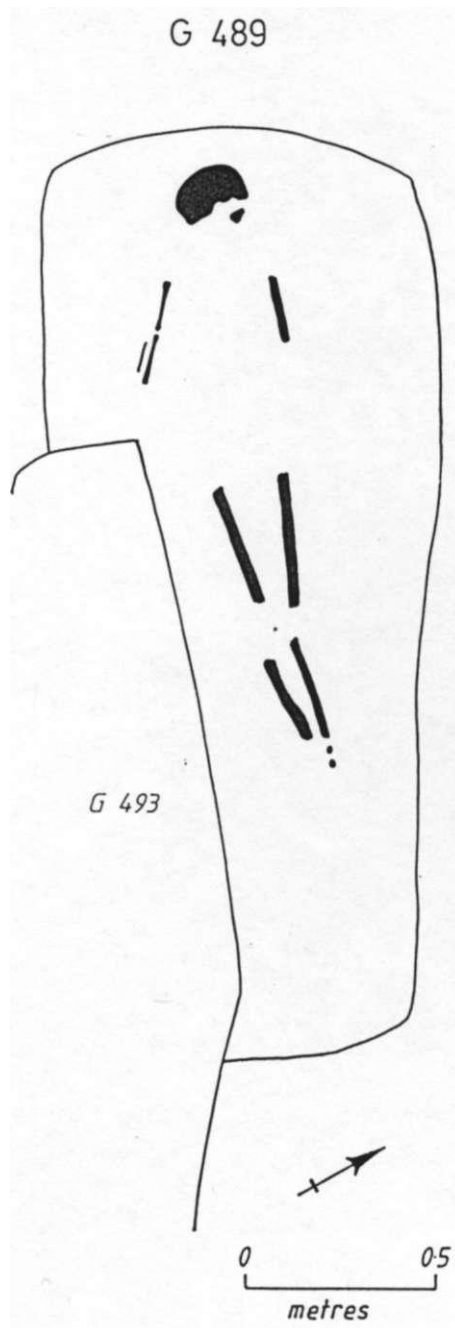
Grave 486 E-W (head to w). Cuts Period 2 G496. G499. G505. Cut by Period 2 G487. modern pit HF14. Nailed timber coffin. Middle-aged female. Skeleton supine. Bones well preserved but skull crushed.



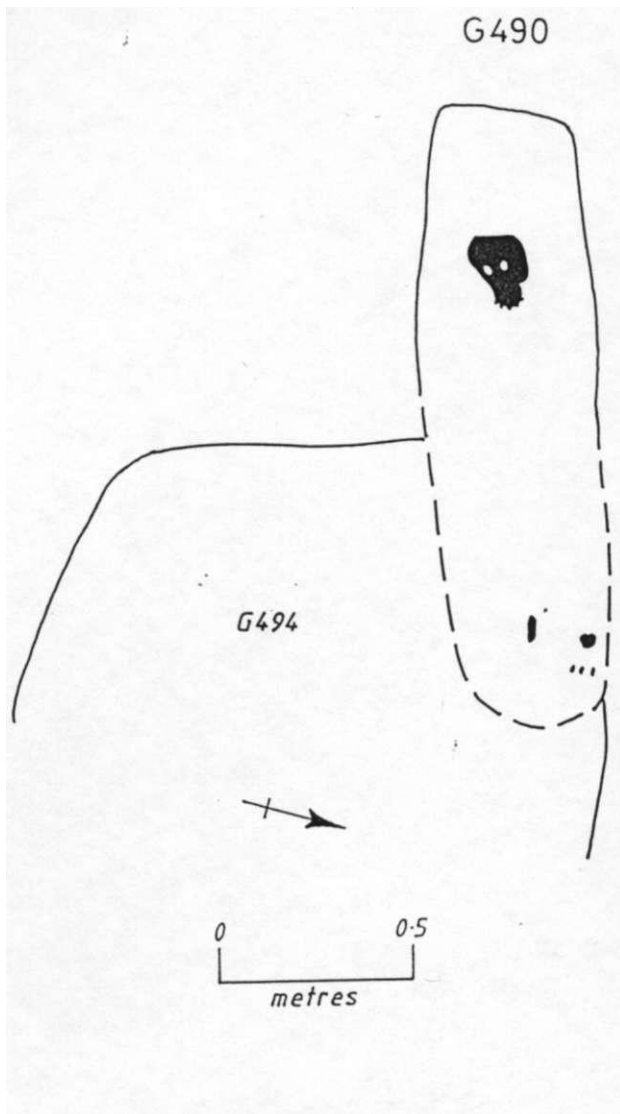
Grave 487 E-W (head to W). Cuts Period 2 G486. G496. Cuts and directly overlies G499. Relationship to Period 2 G495 uncertain. Nailed timber coffin. Middle-aged adult, sex uncertain. Skeleton supine. Bones poorly preserved. Antler comb found under right foot, in poor condition.



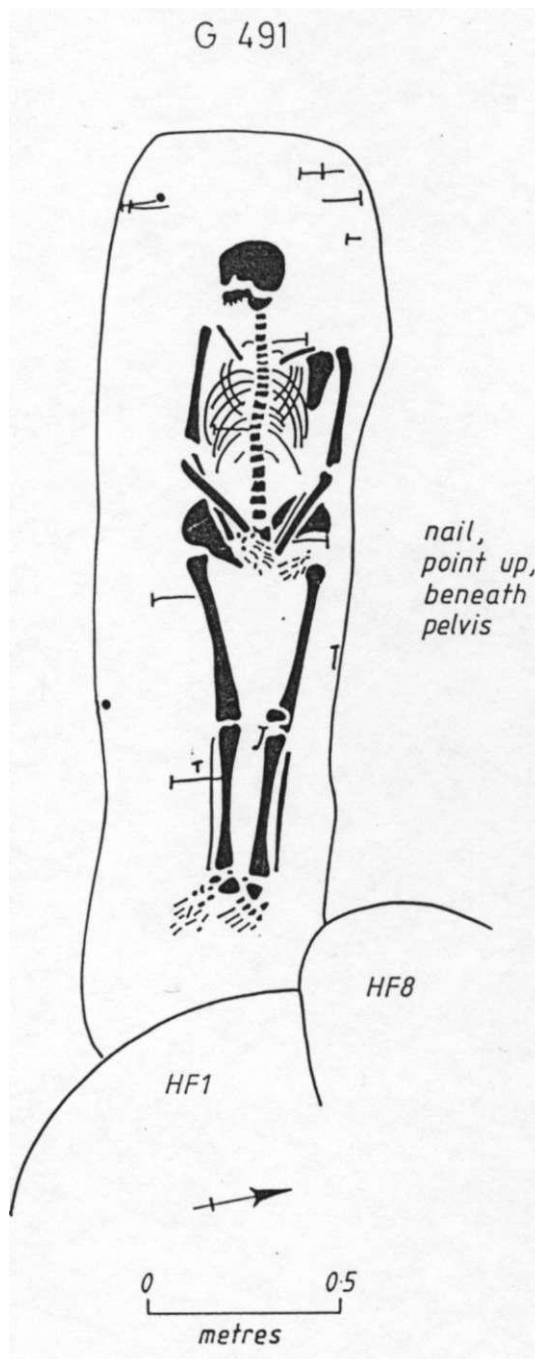
Grave 488 E-W (head to W) . Cuts Period 2 G 524 . Cut by Period 2 G 463 . Relations coffin . Middle-aged male . Skeleton supine . Surviving bones in poor condi



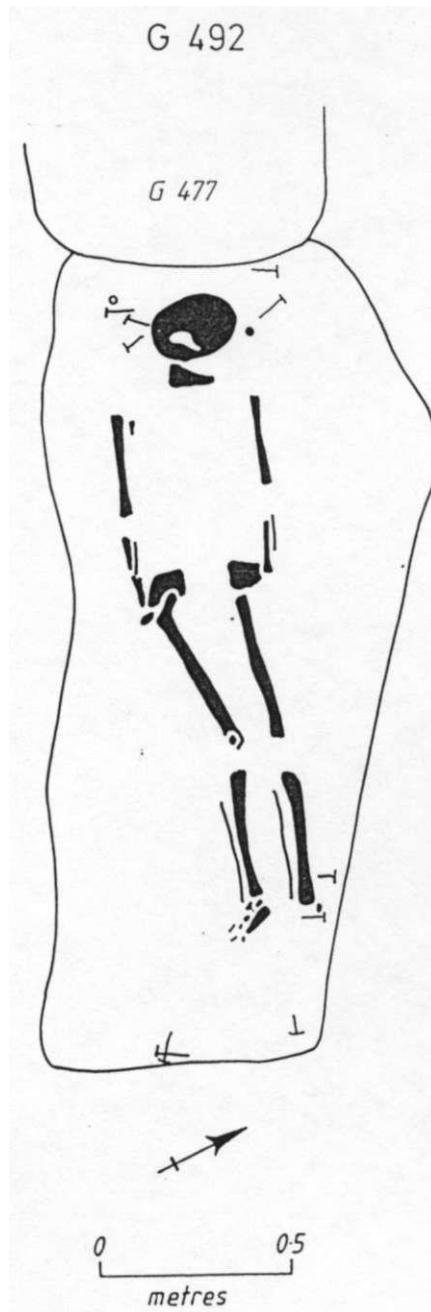
Grave 489 E-W (head to W). Cuts Period 2 G493. G501. G503. Cut by Period 2 G467. G471. Relationship to Period 2 G480 uncertain. Probably no coffin (no timber stain and only one nail recovered: latter probably belonged to G467). Adult, sex uncertain. Skeleton supine. Only poorly-preserved skull and fragments of long bone survive.



Grave **490** E-W (head to W) . Cuts Period 2 G494 . No coffin stain or nails recovered on site J.

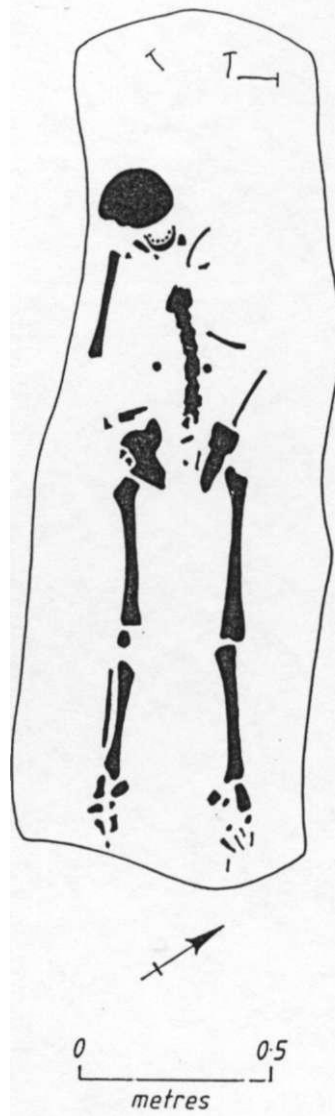


Grave 491 E-w (head to W) . Cuts Period 2 G502 . Cut by Period 2 G469 . G478 . po

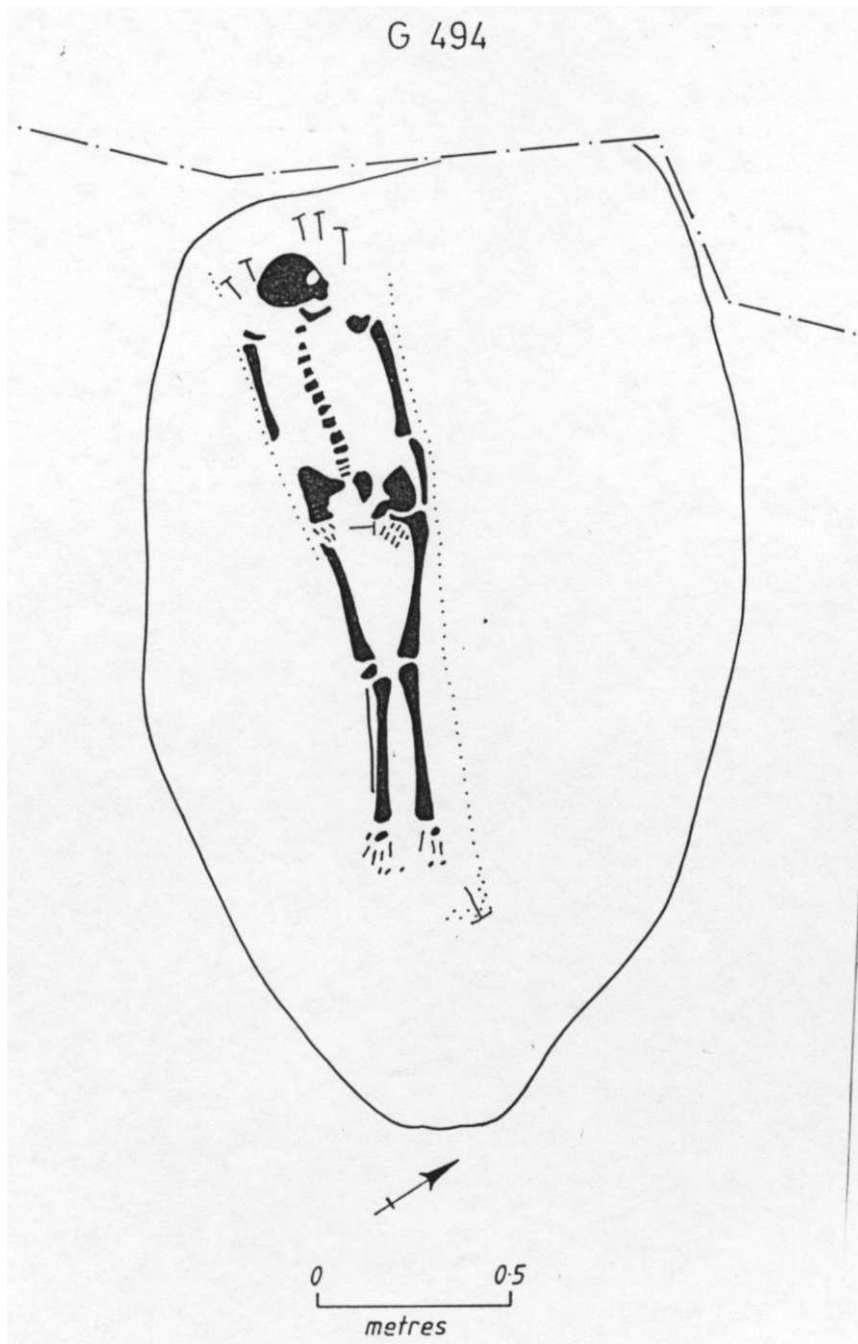


Grave 492 E-W (head to W). Relationship to G477 uncertain. Grave pit partly filled up (0.37 m) before coffin inserted. Nailed timber coffin (timber stain not planned). Young adult male. Skeleton supine. Skull, long bones and part of pelvis only remain, in poor condition.

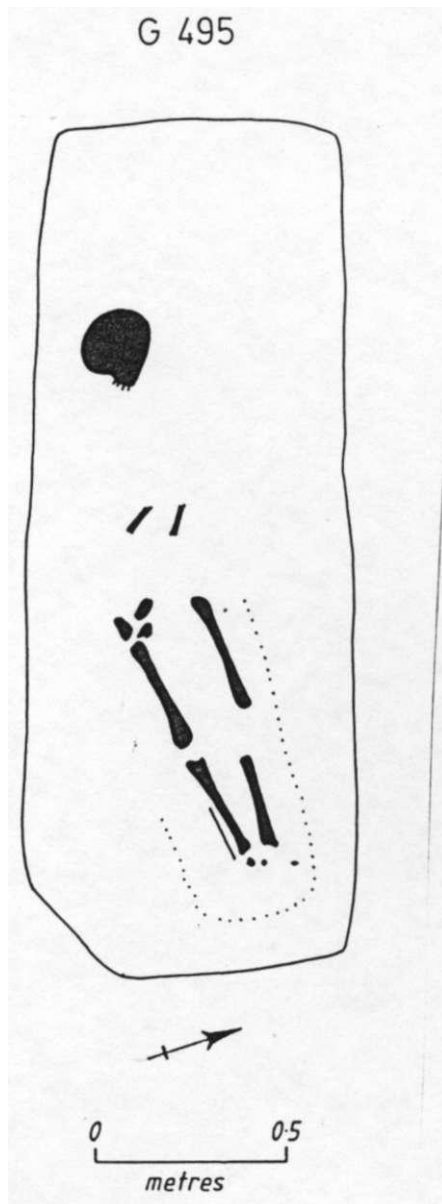
G 493



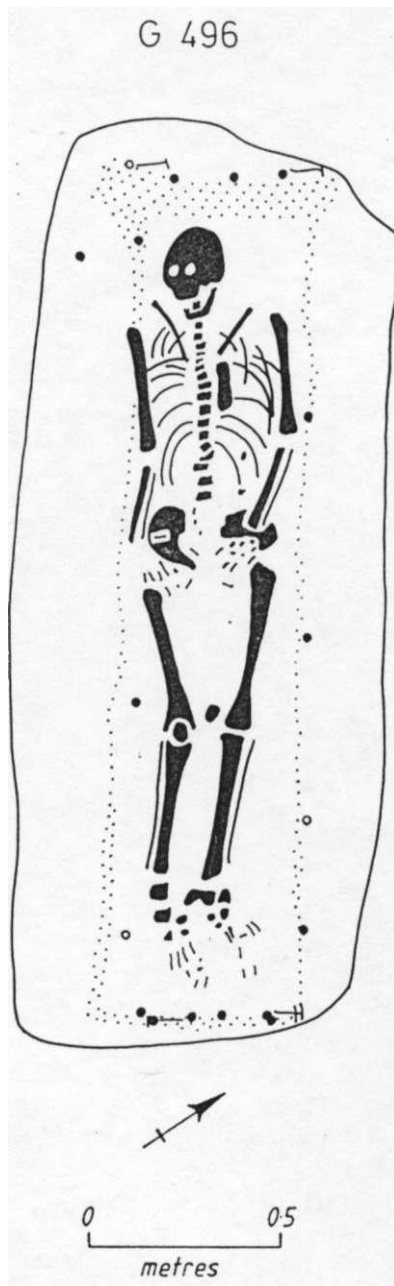
Grave 493 E-W (head to W). Cuts Period 2 G501. Cut by Period 2 G467. G471. G489. Relationship to Period 2 G480 uncertain. Nailed timber coffin (timber stain not illustrated). Adult female. Skeleton supine. Bones in poor condition.



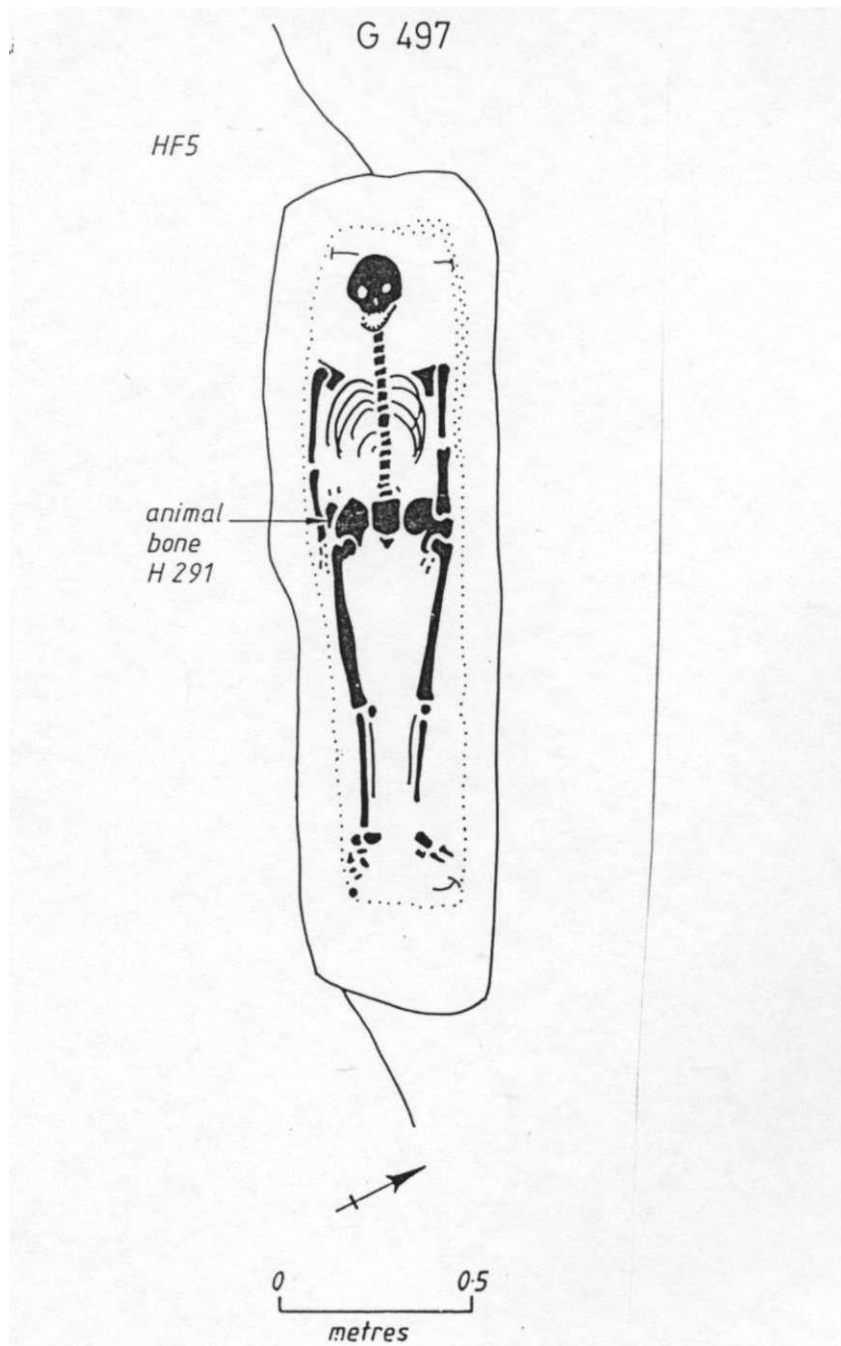
Grave 494 E-W (head to W). Cut by Period 2 G490. Relationship to Period 2 G481 uncertain. Nailed timber coffin. Middle-aged male. Skeleton supine. Bones fairly well preserved.



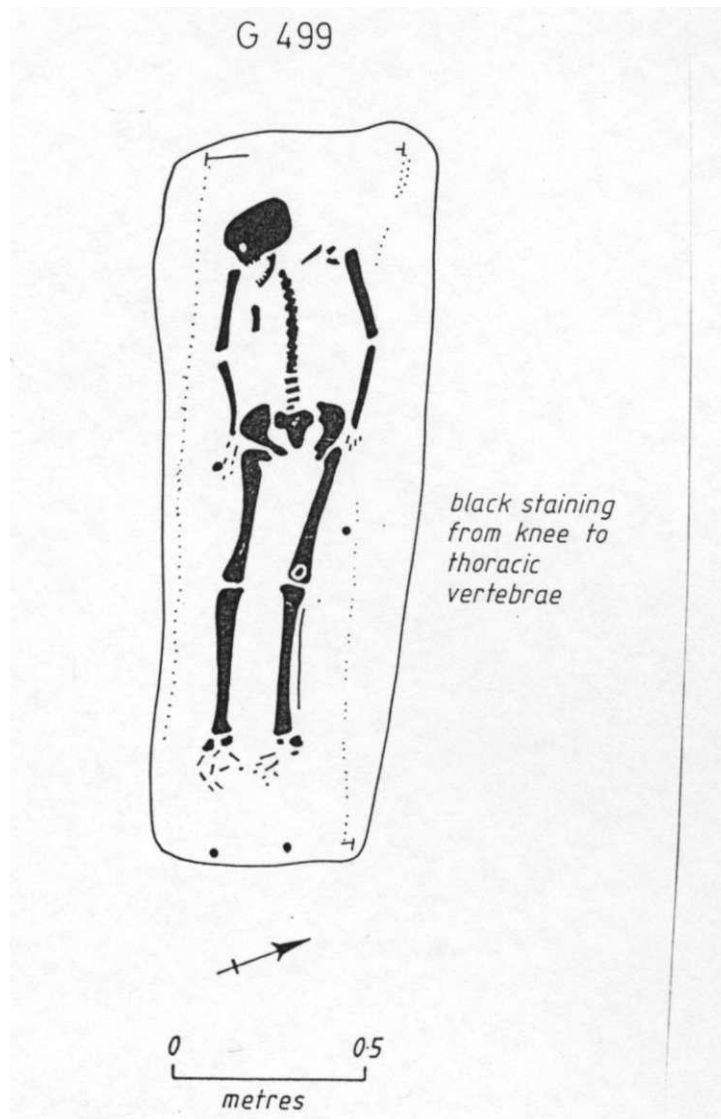
Grave 495 E-W (head to W). Cuts Period 2 G611. G622/G623. Relationship to Period 2 **G487** uncertain. Timber coffin in shallow grave. No nails recovered. Adult. sex uncertain. Skeleton supine. Skull stolen. Leg bones in fair condition. only fragments of arm bones remain.



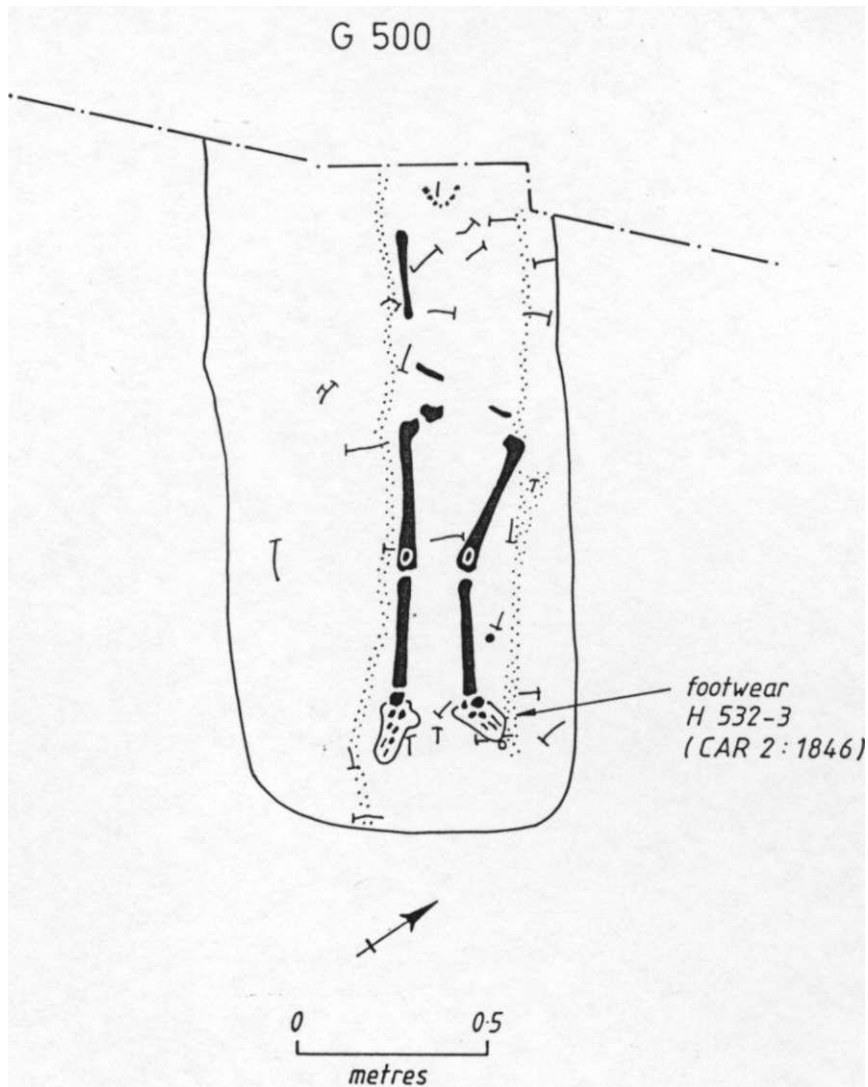
Grave 496 E-W (head to w). cut by Period 2 G486. G487, G612, G614. Nailed timber coffin. Timber stain at W end **much** wider (0.1 m) than rest of coffin. Young adult male. Skeleton supine. Bones well preserved.



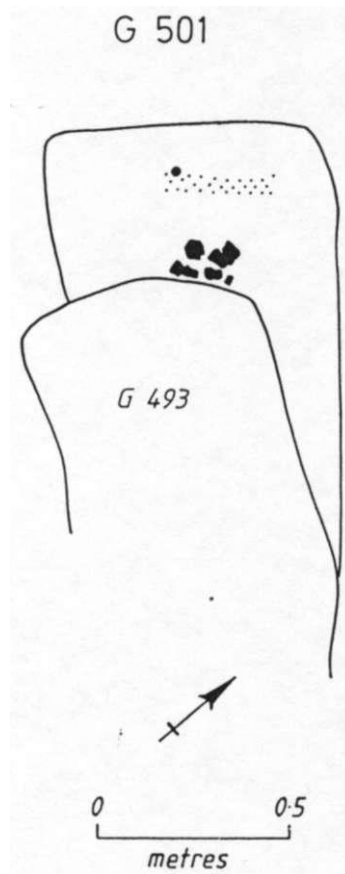
Grave 497 E-w (head to W). Cuts Period 2 G475. Cut by modern post-pits HF19. **HF26**. Nailed timber coffin. Adult. sex uncertain. Skeleton supine. Bones in fair condition. Cattle right radius under right pelvis, almost certainly residual.



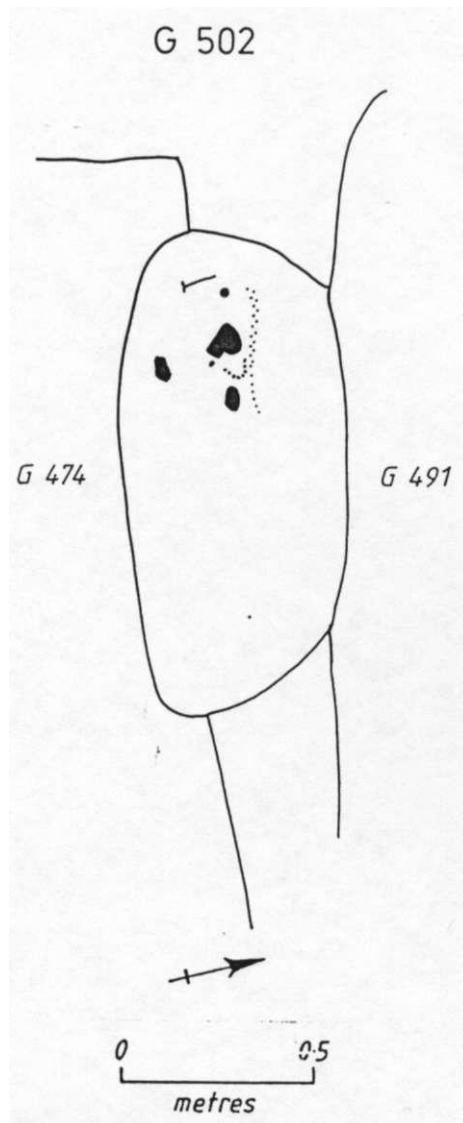
Grave 499 E-W (head to W). Cut by Period 2 G486. Cut and directly overlain by G487. Nailed timber coffin. Middle aged female. Skeleton supine. Bones in fair condition. Bones between knees and thoracic vertebrae stained black.



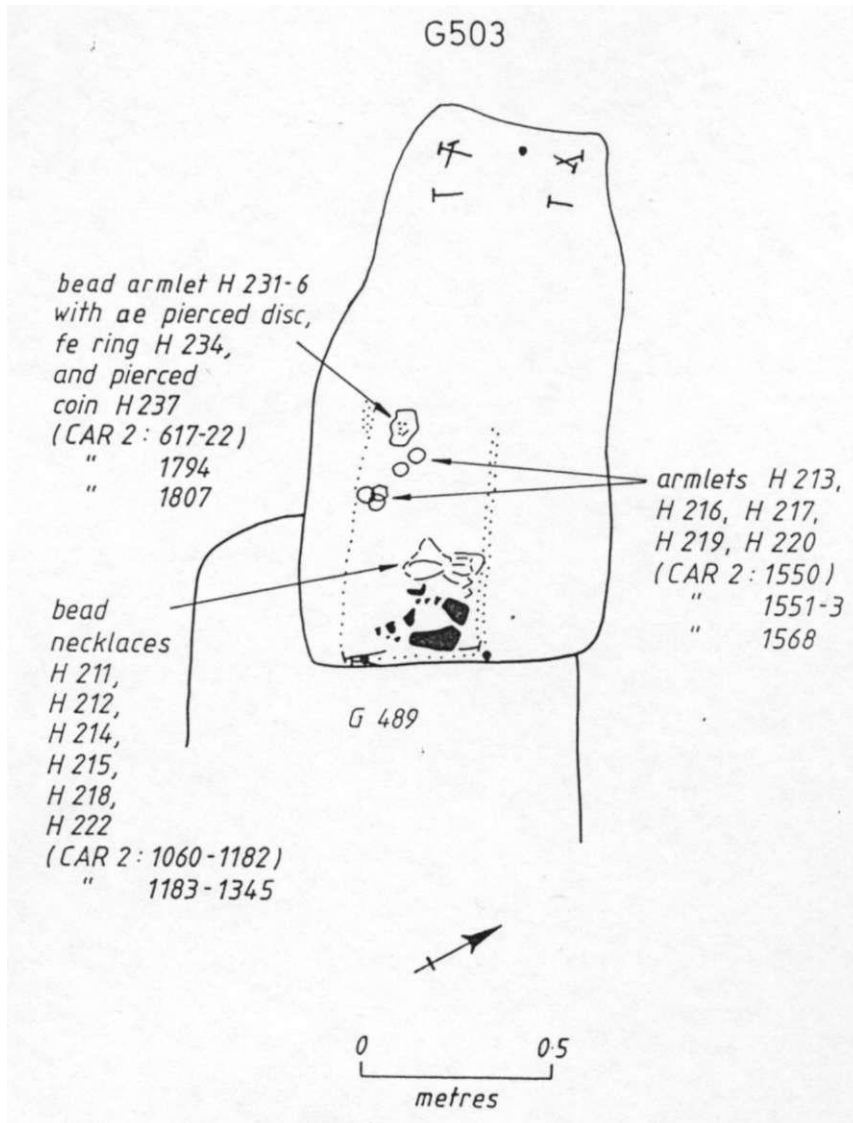
Grave 500 E-W (head to W). Cut by Period 2
G517.G520.G560.Nailed timber coffin.Young adult, sex uncertain.Skeleton



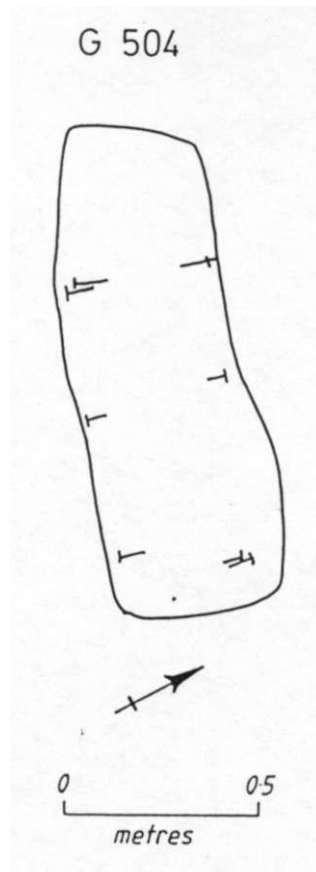
Grave 501 E-W (head to W). Cut by Period 2 G471. G489. GR93. and possibly G467. Relationship to Period 2 G480 uncertain. Extreme W end only survived. Nailed timber coffin. Child. Only a few skull fragments remain.



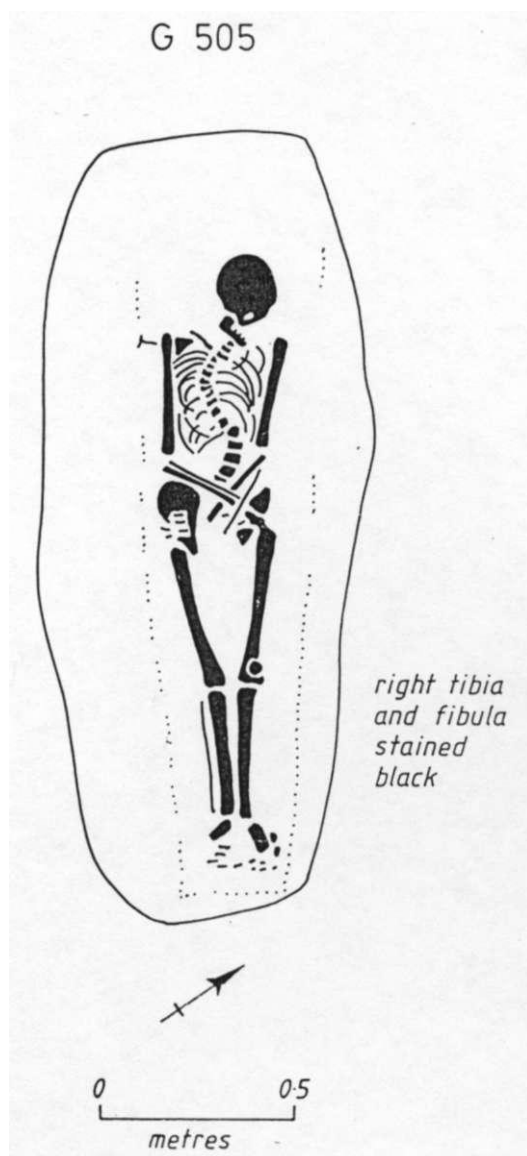
Grave 502 E-W (head to W). Cuts Period 2 G474. Cut by Period 2 G469. G491. Nailed timber coffin. Young infant. Only base of skull and some teeth remain.



Grave 503 E-W (head to E). Possibly cuts Period 2 G721. Cut by Period 2 G489. Nailed timber coffin. Young infant. Only fragments of skull and some teeth remain. Lying as if round neck on burial were necklaces of jet beads (or a single necklace with complicated stringing). Inside coffin on S side lay group of jet and shale armlets. probably worn on left arm. Those with largest internal diameter were placed as if on upper arm. smallest as if on lower arm. Immediately to SW of this group lay armband consisting of pierced plain copper-alloy disc. pierced copper-alloy coin of Diadumenlan (AD 217-18). Iron finger-ring. and jet beads. This armband lay in patch of dark soil.

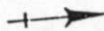


Grave 504 E-W. Possibly cuts Period 1 G541. Isolated grave. Cut by modern posthole HF23. Nailed timber coffin (no timber stain located), length 0.8 m. width 0.36 m. No skeletal material. Coffin size indicates small child.



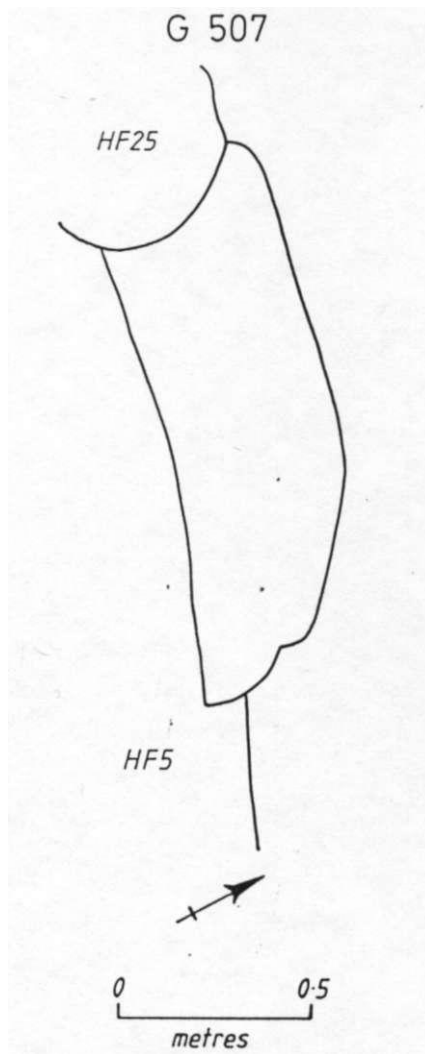
Grave 505. E-W (head to W). Cut by Period 2 G486. Nailed timber coffin. Middle-aged female. Skeleton supine. Bones in good condition. Right tibia and fibula stained black.

G 506

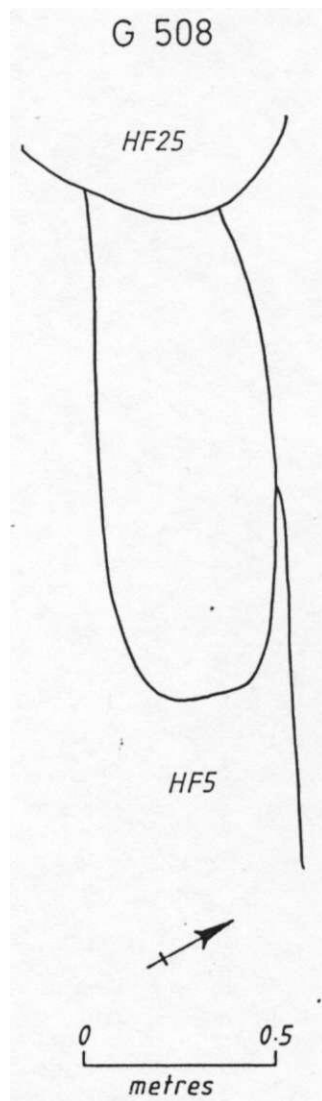


0 0.5
metres

Grave 506. E-W (head to W). Isolated grave. Cut by modern post-pit HF28. Timber coffin (no nails recovered. timber stain not planned). Middle-aged female. Skeleton supine. Surviving bones in fair condition. Leg bones stained black.

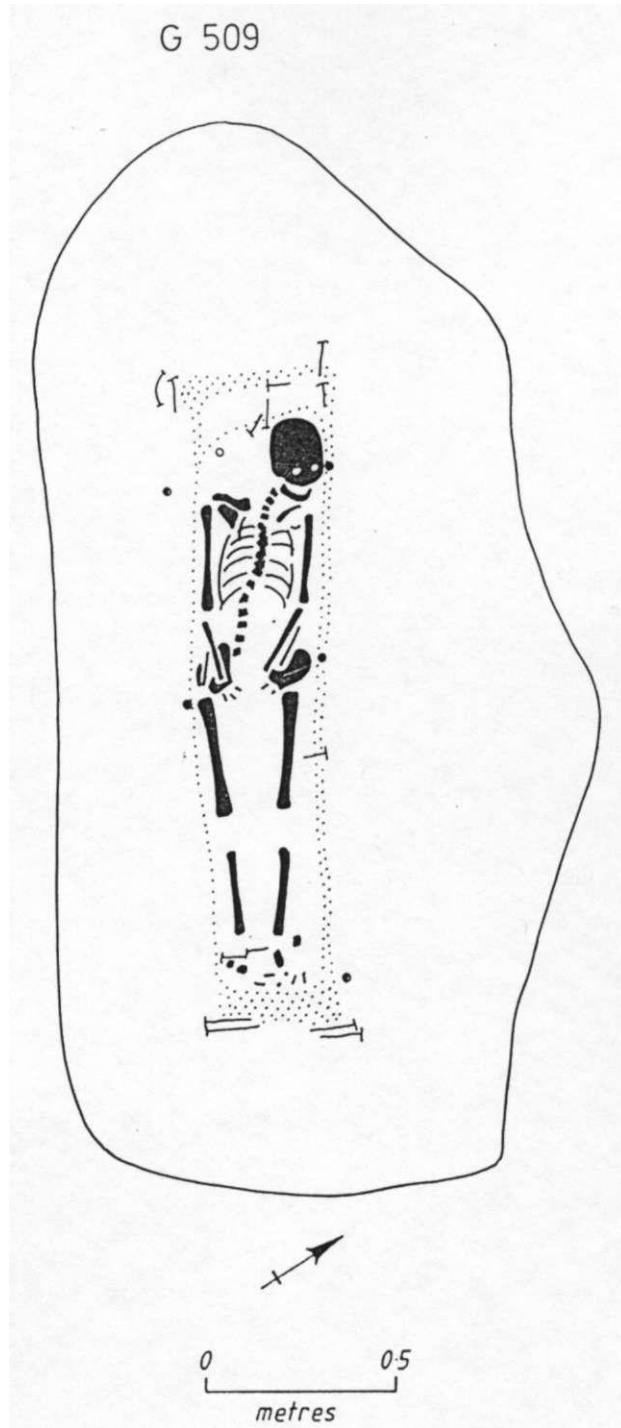


Grave 507 E-W. Cuts Period 1 G541. Period 2 G508. Cut by modern pits HF5. HF25. Mostly destroyed by HF5. Surviving length of grave 1.4 m. width 0.4 m. No timber stain, nails, or skeletal material found. Grave size probably indicates adult.

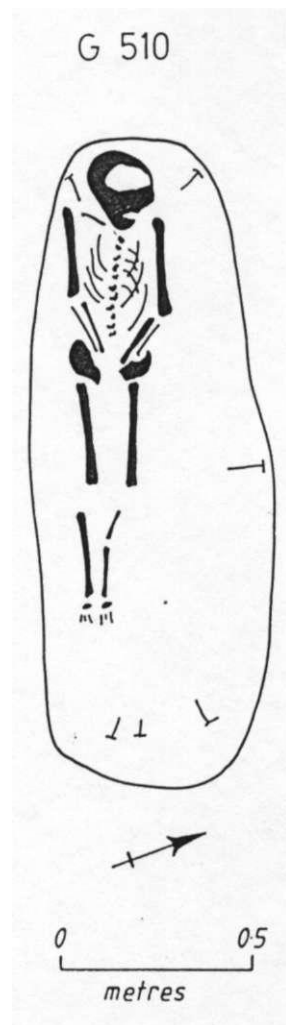


Grave 508 E-W. Cut by Period 2 G507. modern sand pit HF5. Surviving length of grave as planned 1.36 m. No timber stain located. Only one nail and two bone fragments recovered from side of grave. They do not necessarily belong to G508. Grave size may indicate adult.

G 509

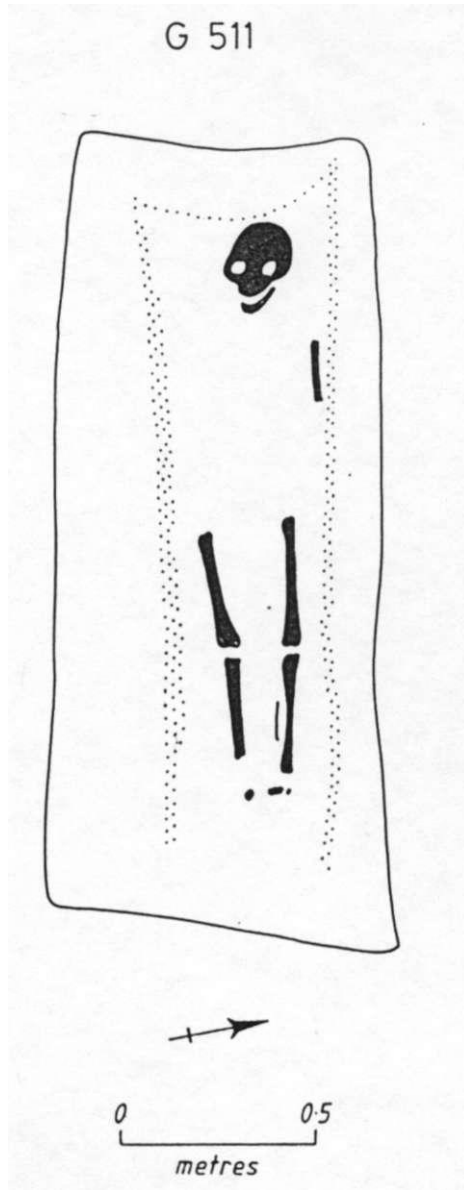


Grave 509 E-W (head to W). Cuts Period 2 G518. G524. G525- Cut by Period 2 G470. modern post-pit HF15. Nailed timber coffin. Young adult male. Skeleton supine. Bones well preserved.

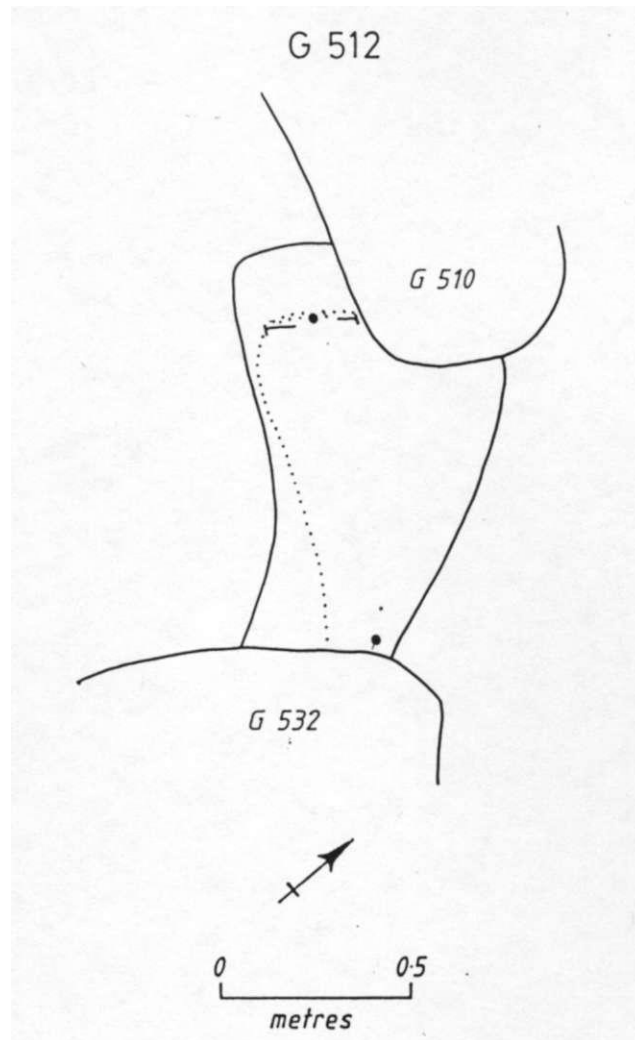


Grave 510 E-w (head to W). Cuts Period 1 G541. Period 2 G512. Nailed timber coffin. Child. aged 14 years. Skeleton supine. Bones well preserved.

G 511

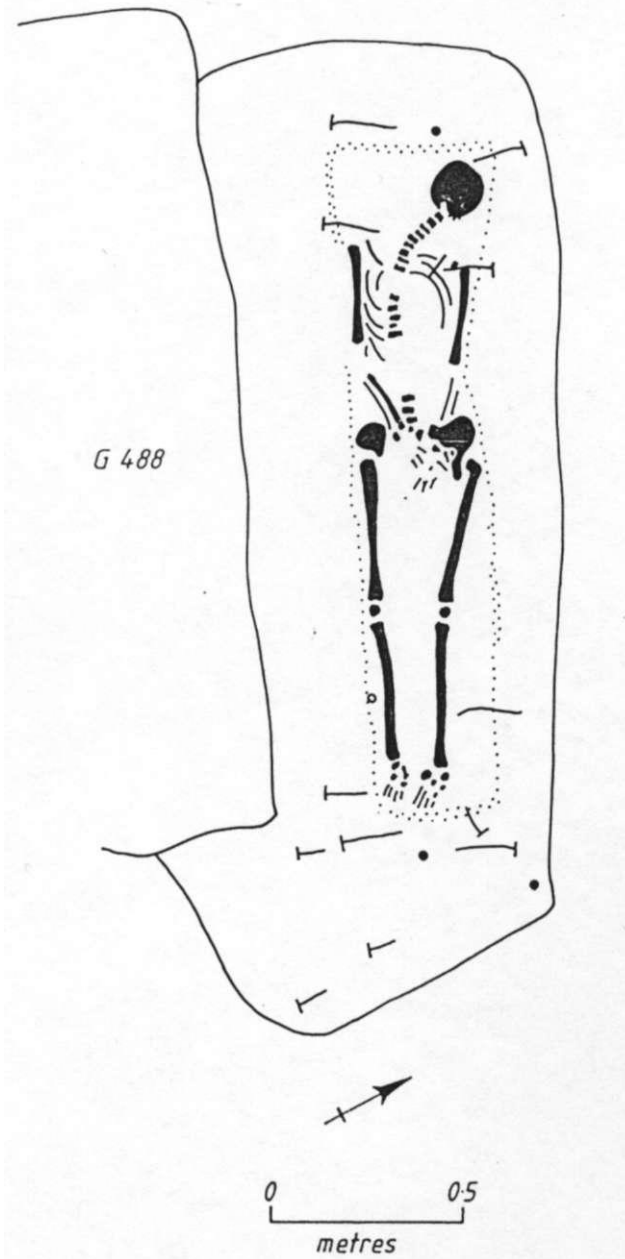


Grave 511 E-W (head to W). Cuts Period 1 G522. G533, G601. Period 2 G515. G568. Relationship to Period 2 G516 uncertain. Timber coffin, no nails recovered. Middle-aged female. Skeleton supine. Only skull, some long bones, and ankle bones survive, in poor condition.

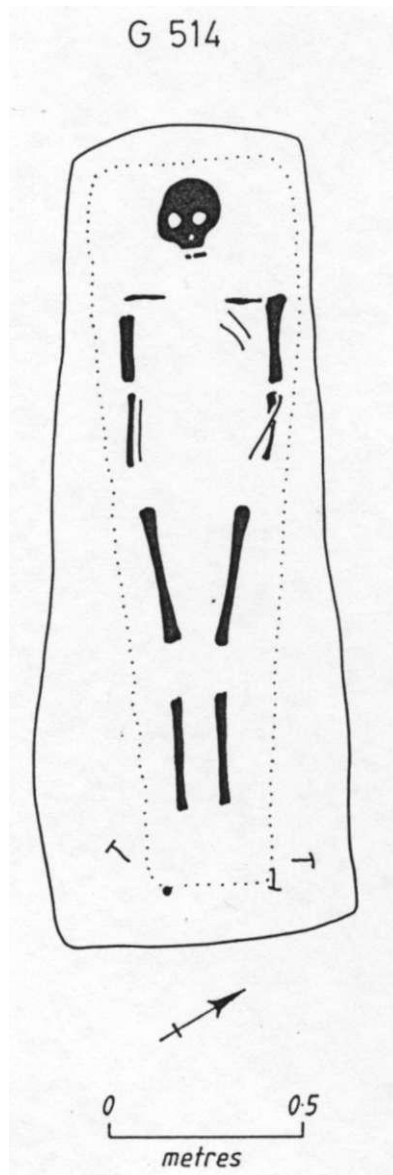


Grave 512 E-W. Cuts Period 1 G541. Cut by Period 2 G510. G532. Shallow grave. mostly destroyed by later graves. Nailed timber coffin. surviving length 0.84 m. No skeletal material.

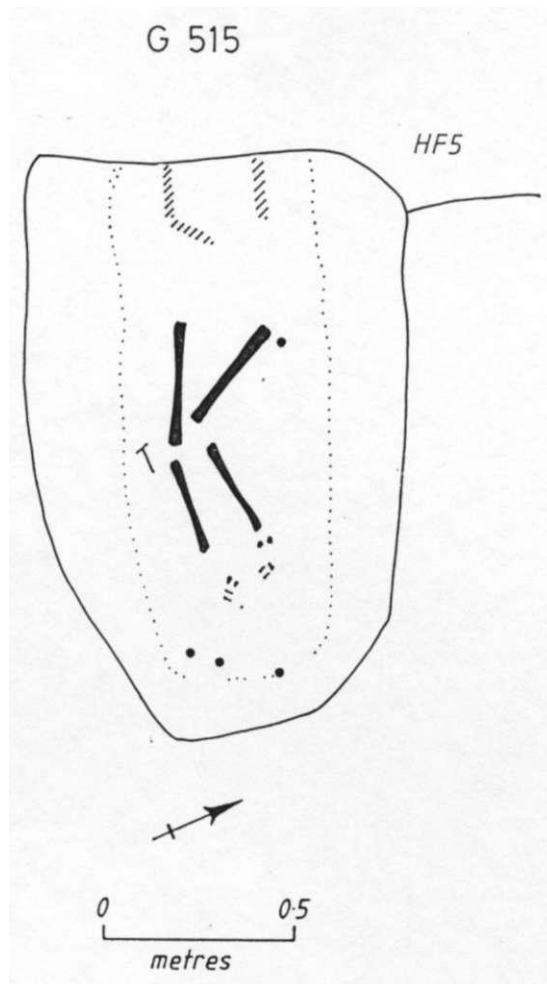
G 513



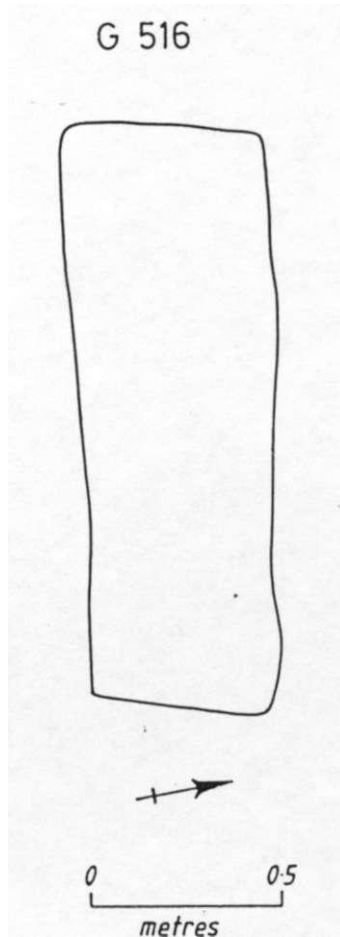
Grave 513 E-w (head to w). Cuts Period 2 G521. G524. G529. G536. Relationship to Period 2 G488 uncertain. Nailed timber coffin. Young adult female. Skeleton supine. Left hand and lower part of arm lay beneath pelvis. Bones well-preserved.



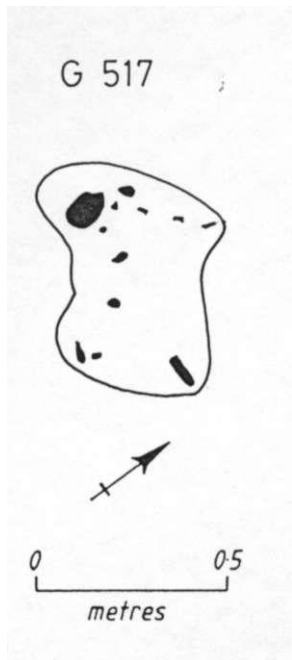
Grave 514 E-W (head to W). Cuts Period 2 G542. Nailed timber coffin. Young adult, sex uncertain. Skeleton supine. Surviving bones in poor condition.



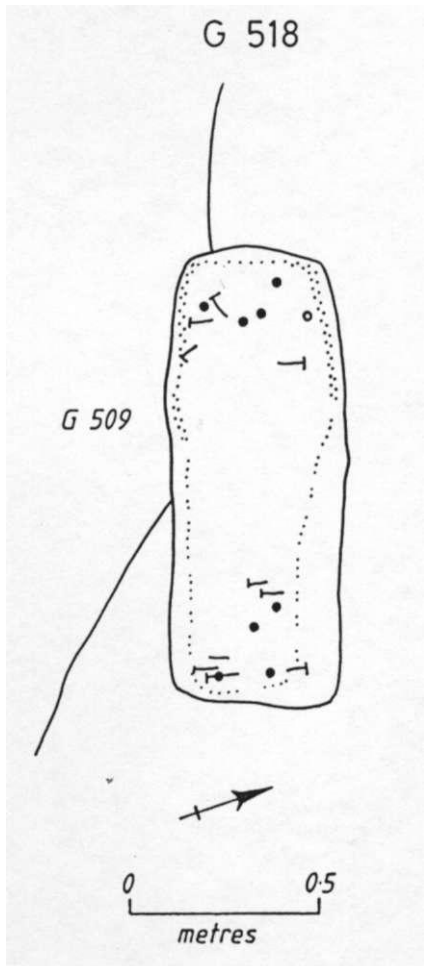
Grave 515 E-W (head to W). Cuts Period 1 G522. G533. Cut by Period 2 G511. modern sand pit HF5. Nailed timber coffin. W end destroyed by HF5. Adult, sex uncertain. Legs slightly bent, left more so than right. Bones in poor condition.



Grave 516 E-W. Cuts Period 1 G601 Period 2 G568. Relationship to Period 2 G511 uncertain. Grave length 1.52 m. width 0.44 m. No coffin or skeletal material recovered. Grave size indicates older child or adult.

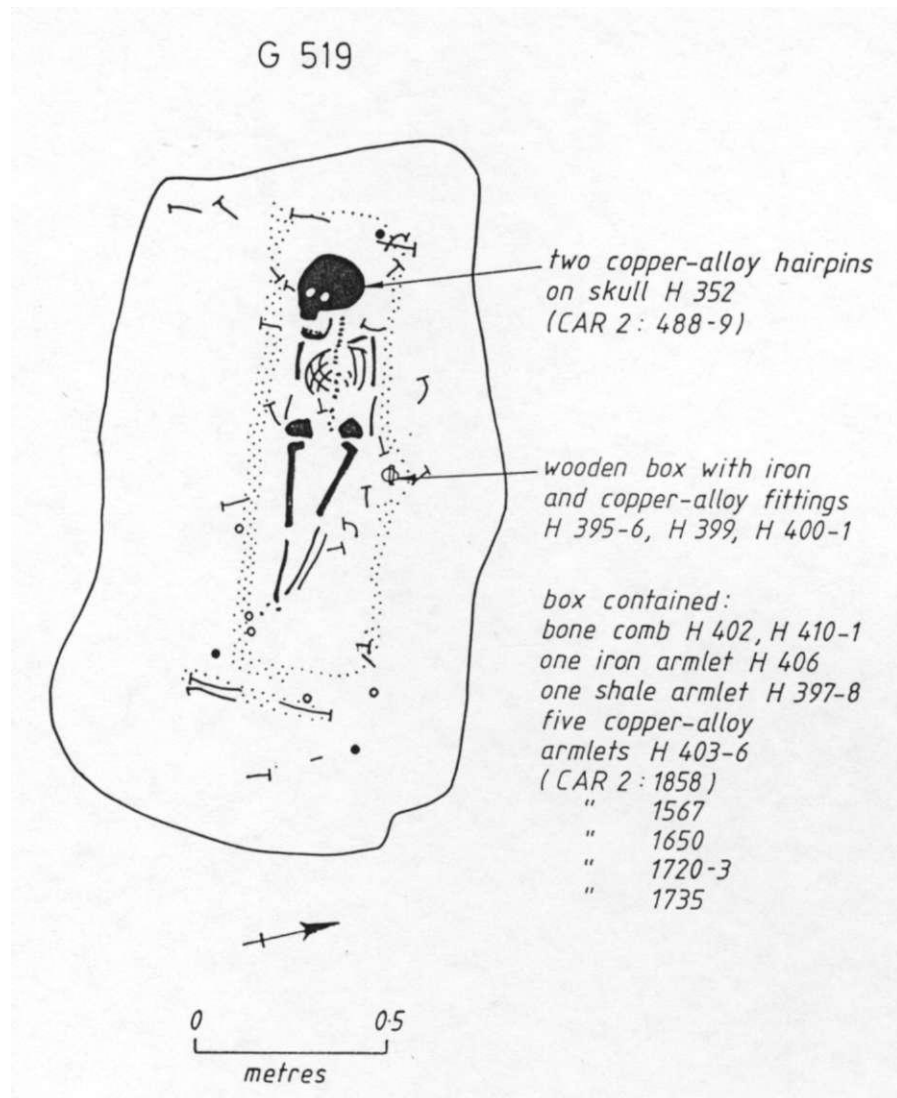


Grave 517 E-W (head to W). Cuts Period 2 G500, G560. No discernible grave cut or coffin. Infant. Bones fragmentary. in poor condition.

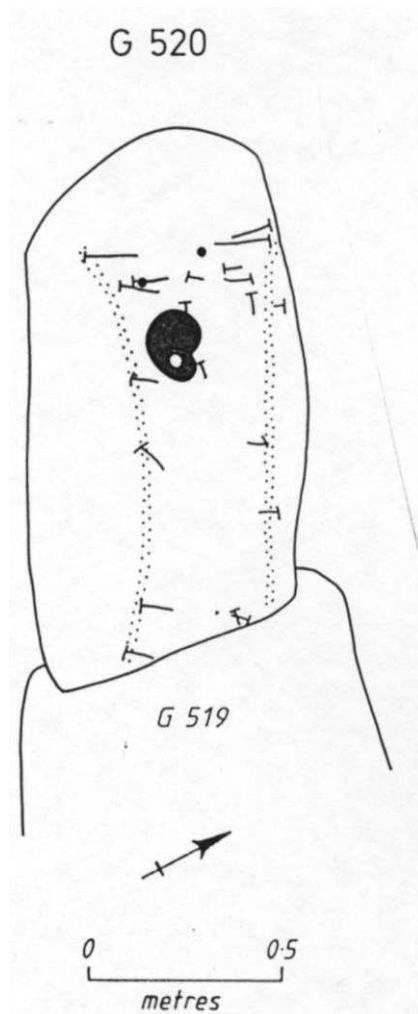


Grave 518 E-W. Cut by Period 2 G509. Nailed timber coffin. length 1.12 mm. average width 0.36 mm. No skeletal material. Coffin size indicates child.

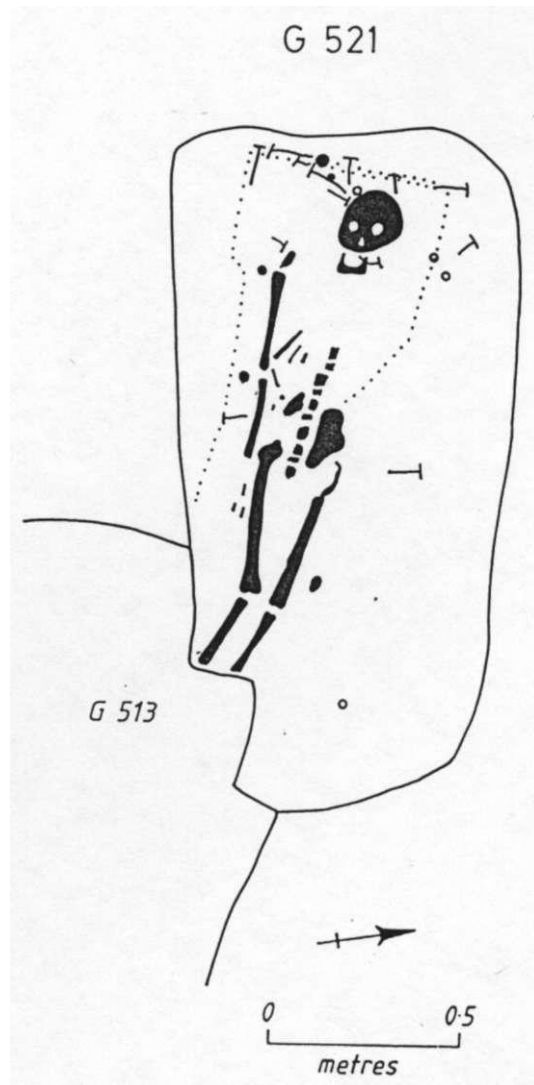
G 519



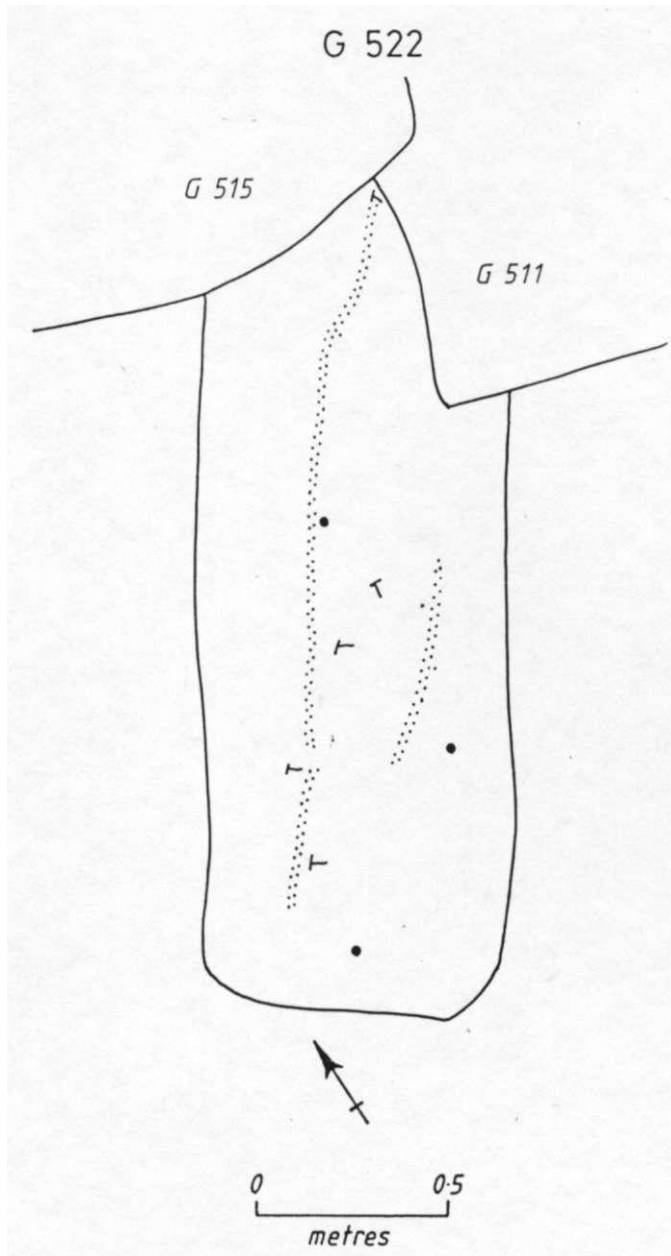
Grave 519 E-W (head to w). Cuts Period 2 G520. G610. Nailed timber coffin. Child, aged 7 years. Skeleton supine. Bones in good condition. On back of skull were two copper-alloy hairpins. Inside coffin on N side level with top of left femur. armlets of copper-alloy and shale and an antler comb lay within an area defined by box fittings of copper-alloy and iron.



Grave 520 E-W (head to W). Cuts Period 2 G500, G610. Cut by Period 2 G519. Nailed timber coffin. Child, aged 4 to 5 years. Only skull (broken) and possibly part of leg long bone survive. (Leg fragment may not belong to G520).

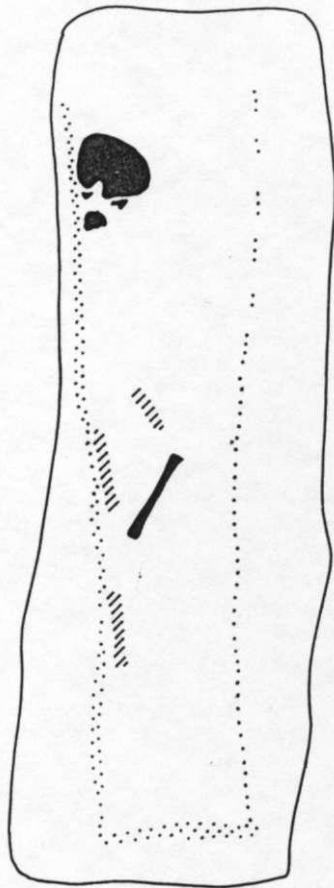


Grave 521 E-W (head to W). cut by Period 2 G513. Nailed timber coffin. Elderly male. Skeleton supine. Surviving bones in good condition.



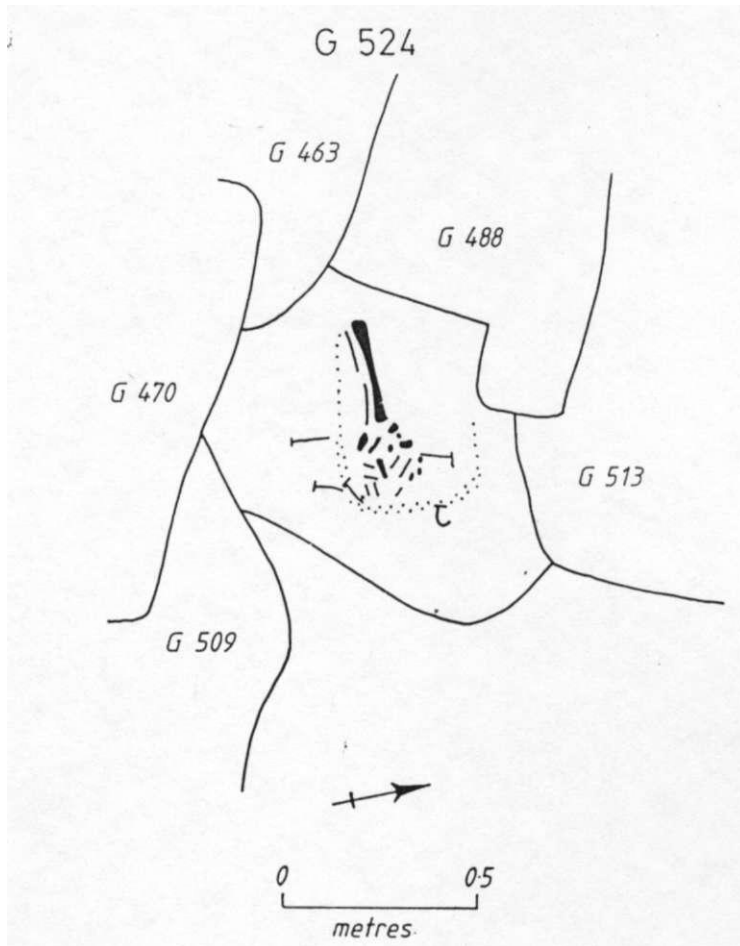
Grave 522 N-S. Isolated grave. Cut by Period 2 G511. G515. modern sand pit HF5. Nailed timber coffin. length (Incomplete) 1.92 m. width approximately 0.34 m. No skeletal material. Coffin size indicates adult.

G 523

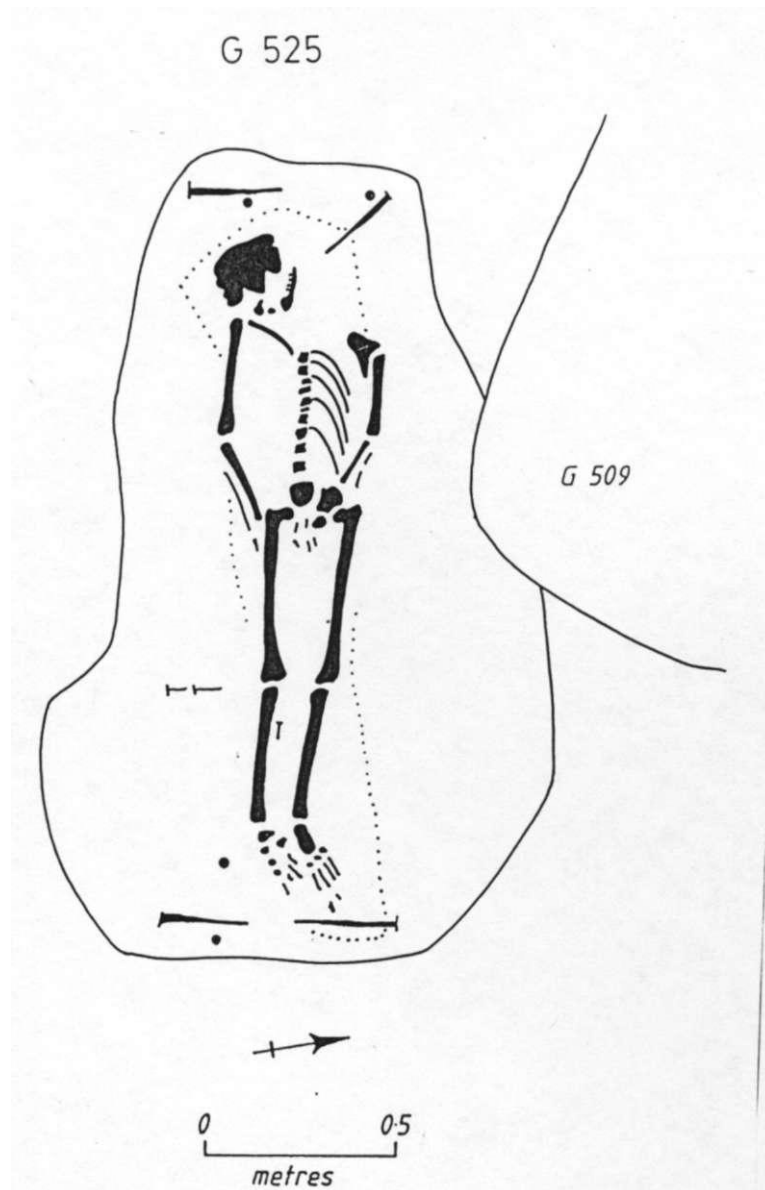


0 0.5
metres

Grave 523 E-W (head to W). Cuts Period 1 G533. Period 2 G532. Timber coffin (no nails recovered). Child, aged 12 years. Only skull and left femur remain. in poor condition. Left leg seems to have been bent. right (preserved as stains) straight. The skeleton is far shorter than the coffin (1.96 m).

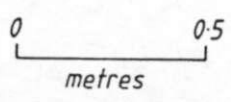
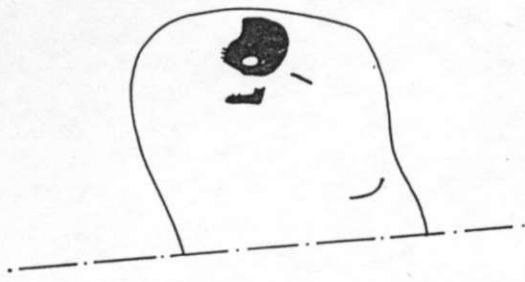


Grave 524 E-W (head to W). Cut by Period 2 G488. G509. G513. Relationship to Period 2 G463. G470. G536 uncertain. Nailed timber coffin, destroyed by later graves except at the east end (foot). Adult. sex uncertain. Only lower right leg and both feet remain, in good condition.



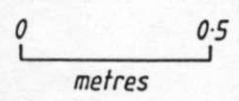
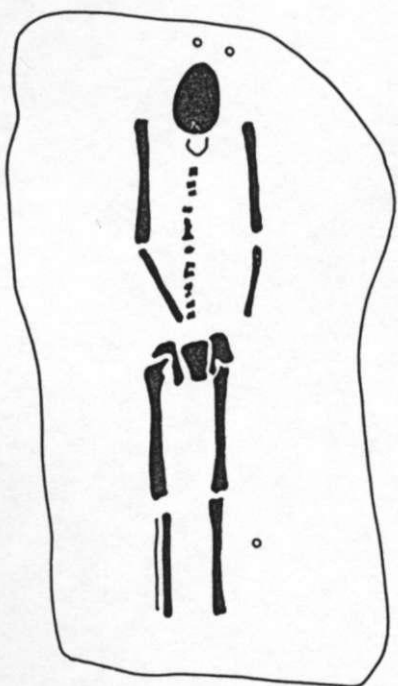
Grave 525 E-W (head to W). Cuts Period 1 G540. Cut by Period 2 G509. Nailed timber coffin. Timber stain very distorted at W end. Elderly male. Skeleton supine. Skull fragmentary, other bones in poor condition.

G 526



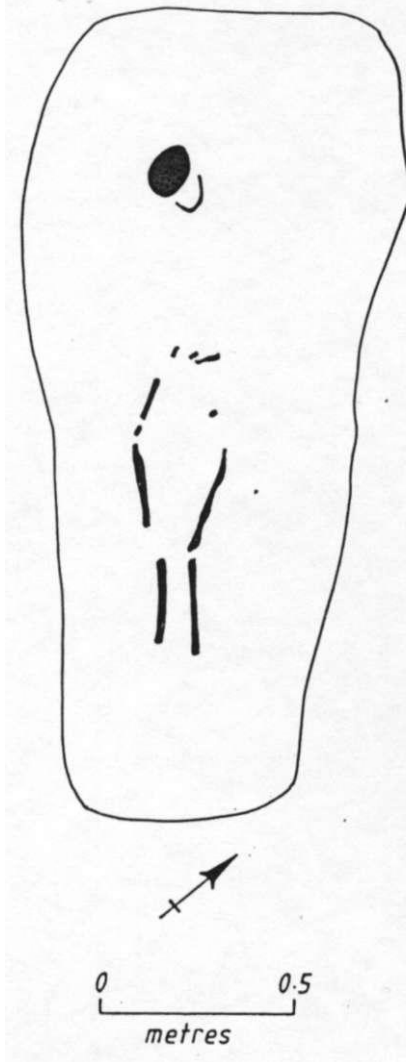
Grave 526 E-w (head to W). Seals Period 2 G537. Relationship to Period 1 N-S ditch HF31 uncertain. W end only excavated. No timber stain or nails located. Fragments of skull and ?ribs may have remained. now either missing, or not lifted.

G 527

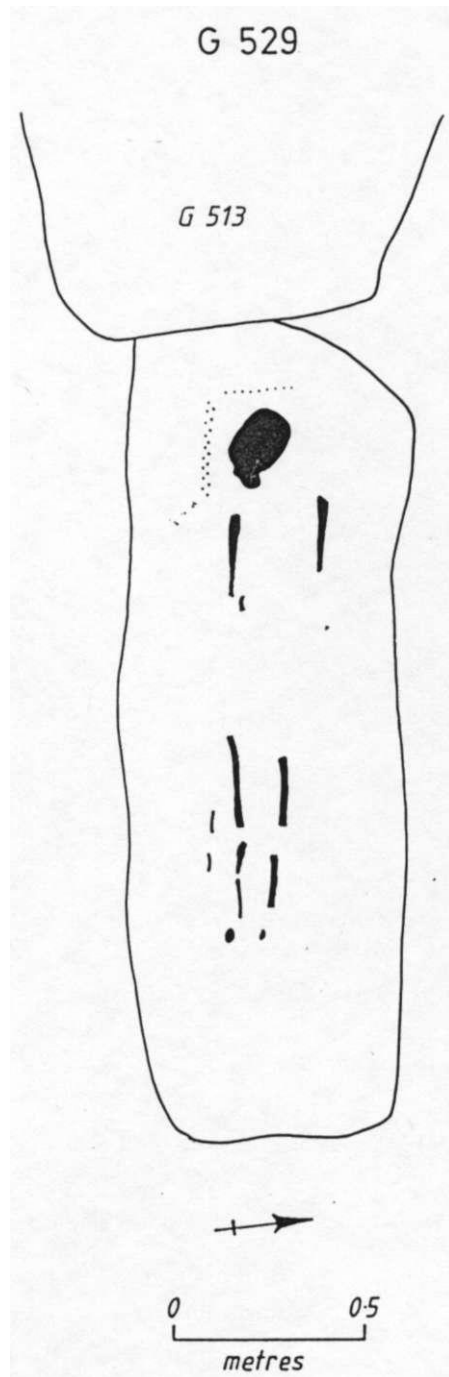


Grave 527 E-W (head to W). Cuts Period 1 G597. Period 2 G544. Nailed timber coffin (timber stain not planned). Elderly male. Skeleton supine. Skull fragmentary, other bones in fair condition.

G 528

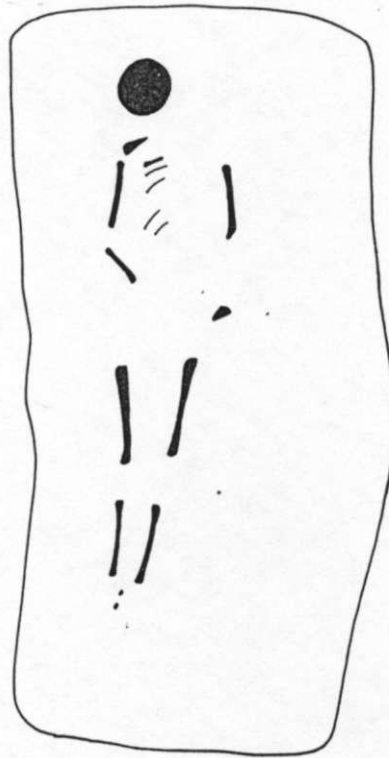


Grave 528 E-W (head to W) . Isolated grave . No timber stain or nails recovered



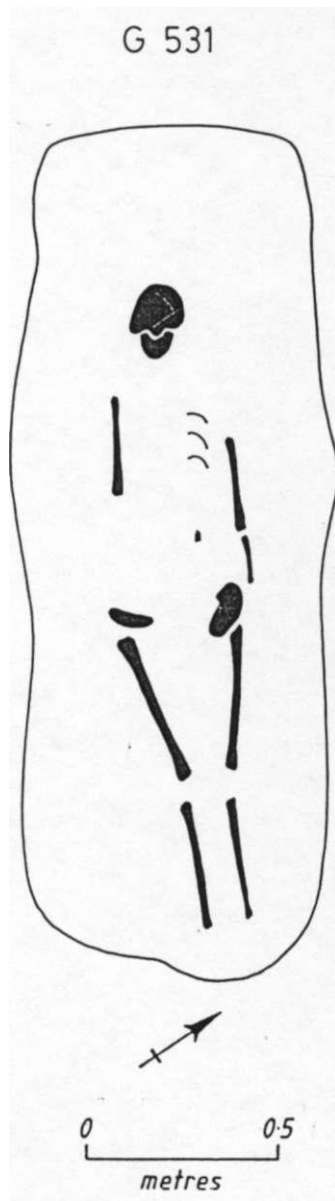
Grave 529 E-W (head to W). Cuts and seals Period 2 G536. Cut by Period 2 G513. Shallow grave. Timber coffin (stain faint and fragmentary. no nails recovered). Elderly adult, sex uncertain. Skeleton supine. Skull quite well-preserved. other surviving bones in poor condition.

G 530



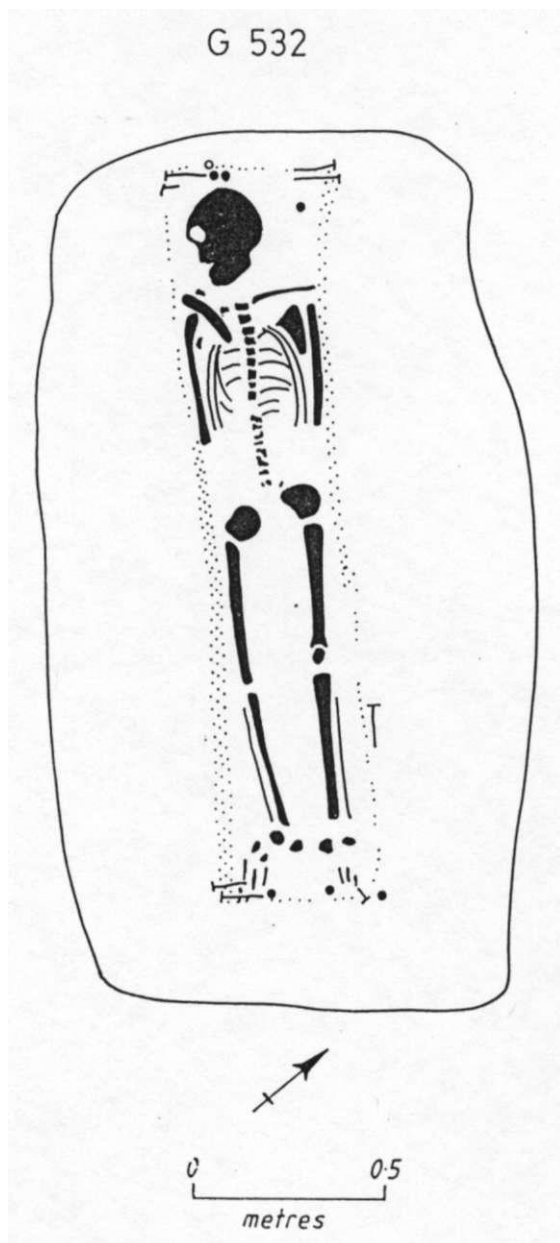
0 0.5
metres

Grave 530 E-W (head to W). Cuts Period 2 G543. G548. No timber stain or nails recovered. Adolescent female. Skeleton supine. Surviving bones in poor condition.

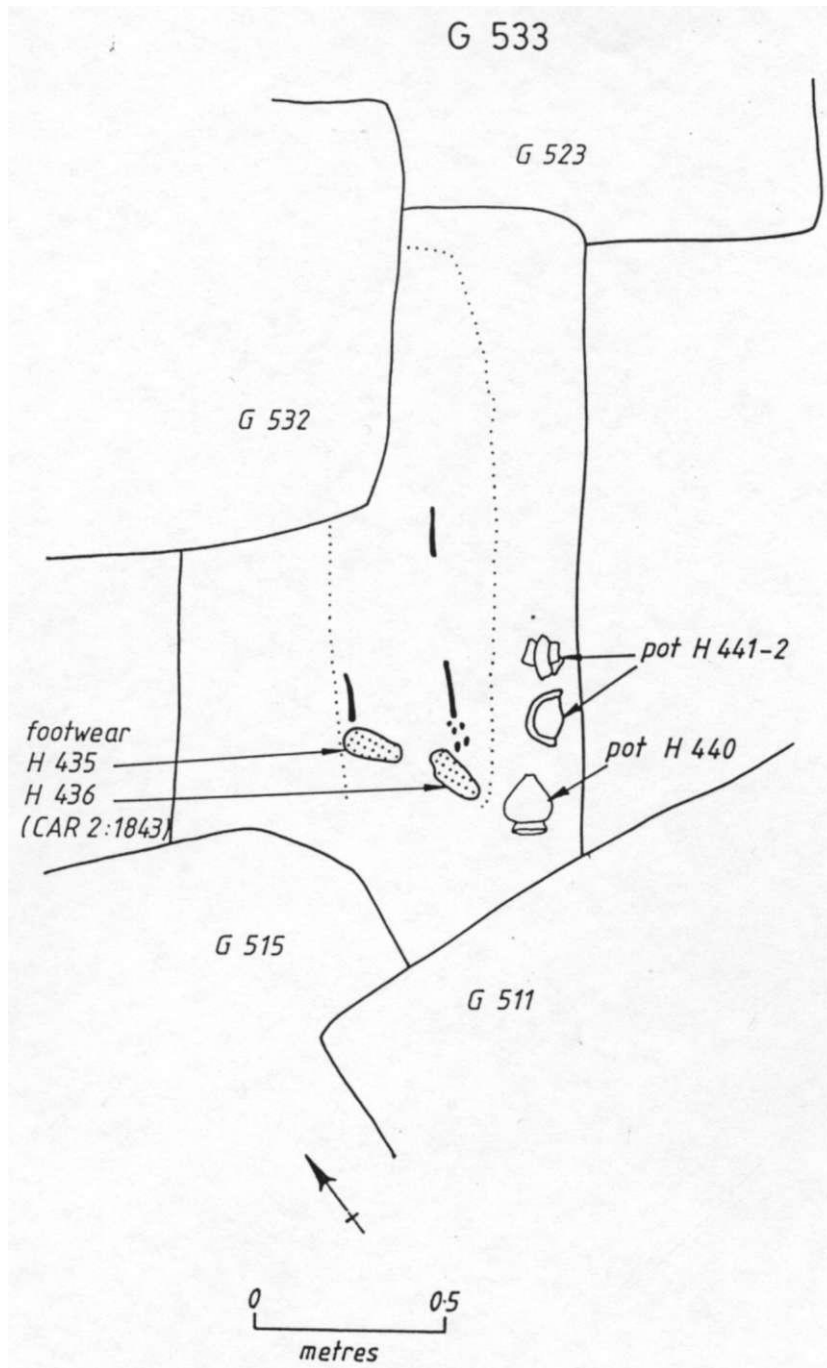


Grave 531 E-W (head to W). Cuts Period 1 G573. N-S ditch HF31. Period 2 G543. No timber stain or nails recovered. Elderly female. Skeleton supine. Surviving bones in poor condition.

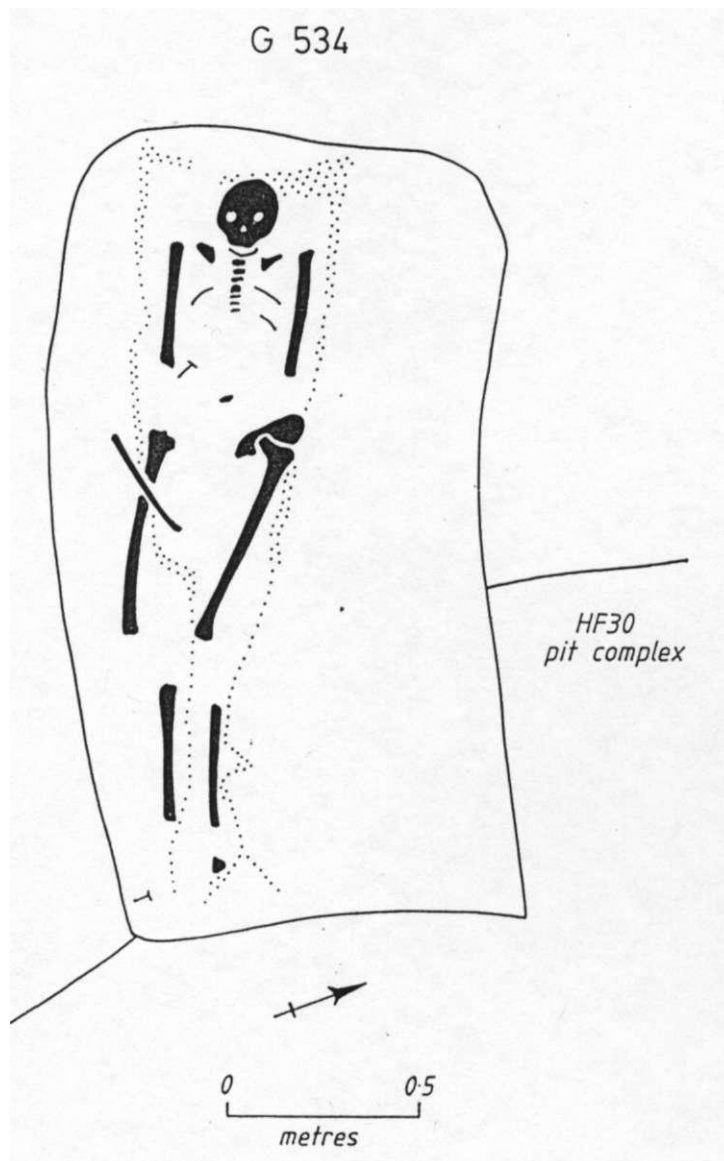
G 532



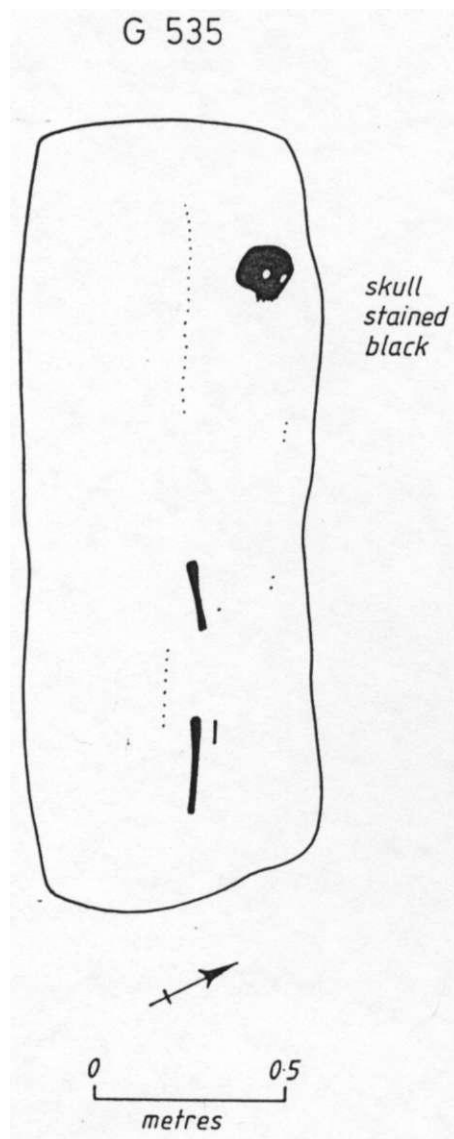
Grave 532 E-W (head to W). Cuts Period 1 G533. Period 2 G512. Cut by Period 2 G523. Nailed timber coffin. Middle-aged adult, sex uncertain. Skeleton supine. Upper post-cranial bones in poor condition. lower well preserved.



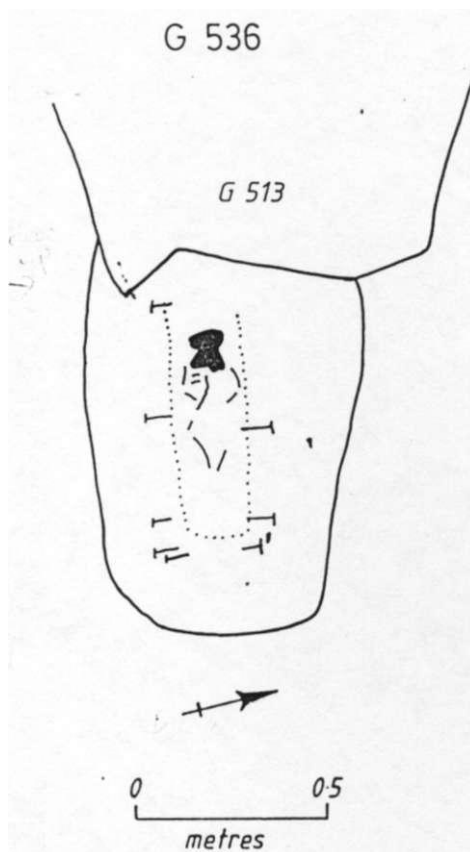
Grave 533 N-S (head to N). Isolated grave. Cut by Period 2 G511. G515. G523. G532. Nailed timber coffin. length approximately 1.48 m. width 0.42 m. Age and sex uncertain. Coffin size suggests older child or small adult. Skeleton probably supine. Only left femur and tibia. right tibia. and some foot bones survive. in poor condition. Foot bones encased in remains of hobnailed shoes. Outside coffin on E side towards S end was fragmented but complete coarse grey ware **jar**. CAM 268. and black-burnished ware (BB2) dish.



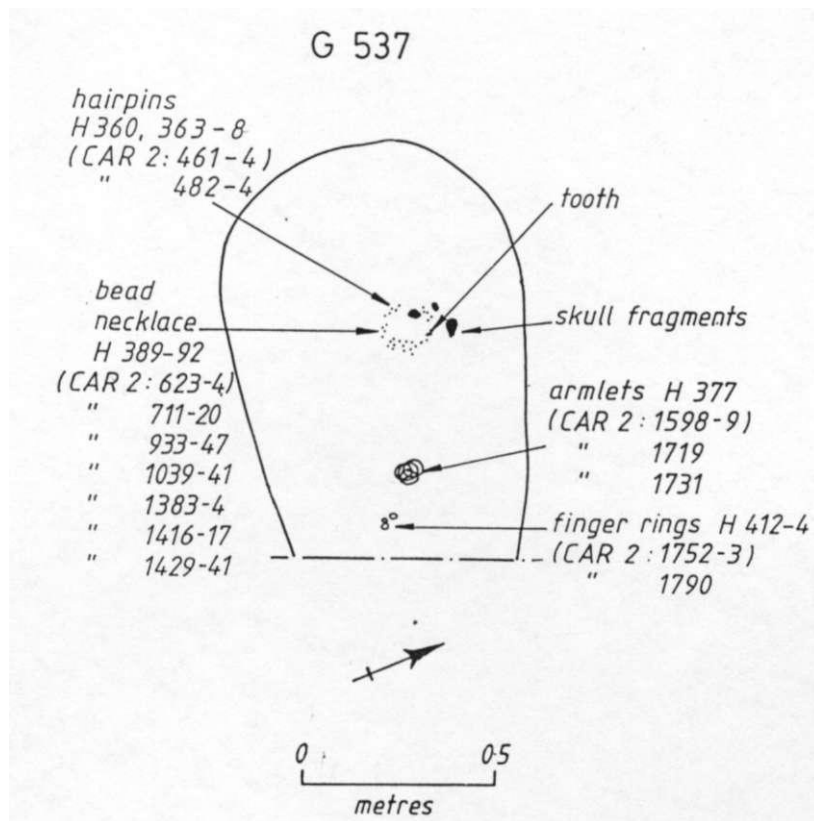
Grave 534 E-w (head to W). Cuts Period 2 G578. Cut by modern pit complex HF30. Nailed timber coffin. Timber stain patchy and distorted at E end. Elderly male. Skeleton supine. Bones in poor condition.



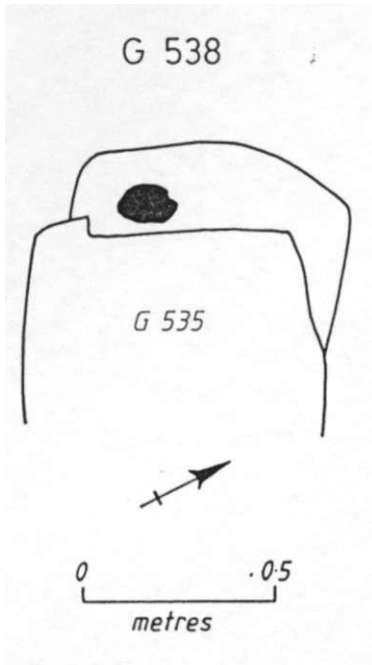
Grave 535 E-W (head to W). Cuts Period 1 G554. Period 2 G538. G539. G547. Timber coffin (nails recovered). Adolescent, aged 18 years. sex uncertain. S



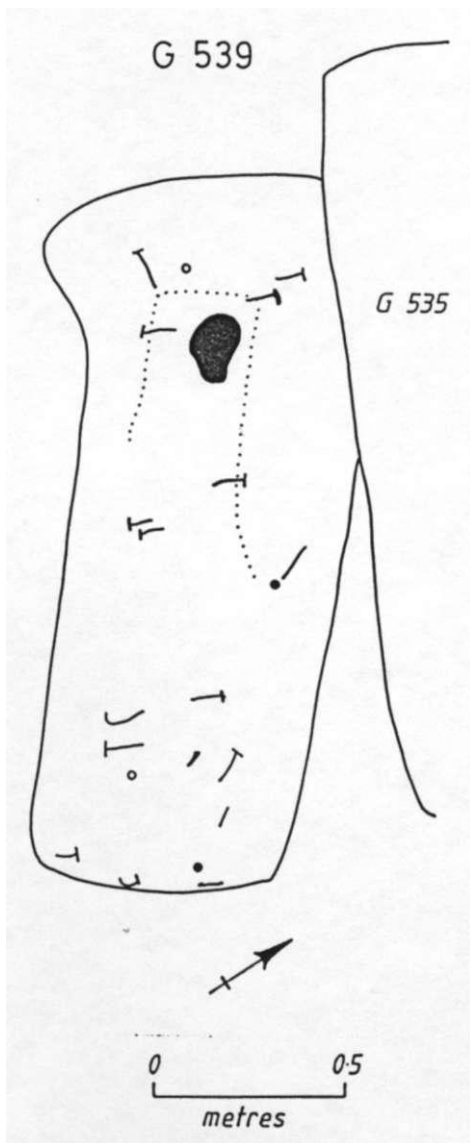
Grave 536 E-W (head to W). Cut by Period 2 G513. Cut and sealed by Period 2 G529. Relationship to Period 2 G524 uncertain. Nailed timber coffin. Infant. Skeleton supine. Skull fragmentary. other bones in fair condition.



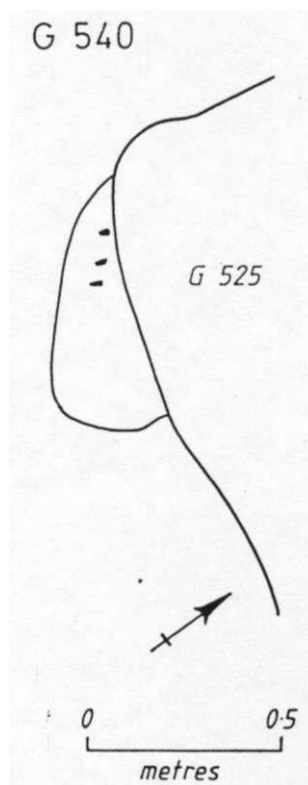
Grave 537 E-W (head to W). Sealed by Period 2 G526. No timber stain or nails recovered. Extreme E end not excavated. Adult. sex uncertain. Only fragments of skull remained, in poor condition. Grave-goods indicate female. Positions of grave goods indicate worn by corpse on interment. Seven hairpins (four glass. one silver. one copper-alloy, one silver and ?gilt copper-alloy) lay as if on skull. necklace of glass beads as if around neck. four copper-alloy armlets as if around left wrist or lower arm. and three finger-rings (two copper-alloy and one white-metal) as if on fingers of le



Grave 538 E-W (head to W). Cut and largely destroyed by Period 2 **G535**. Fairly shallow grave. no timber stain or nails recovered. Age and sex uncertain. Only part of skull remains.

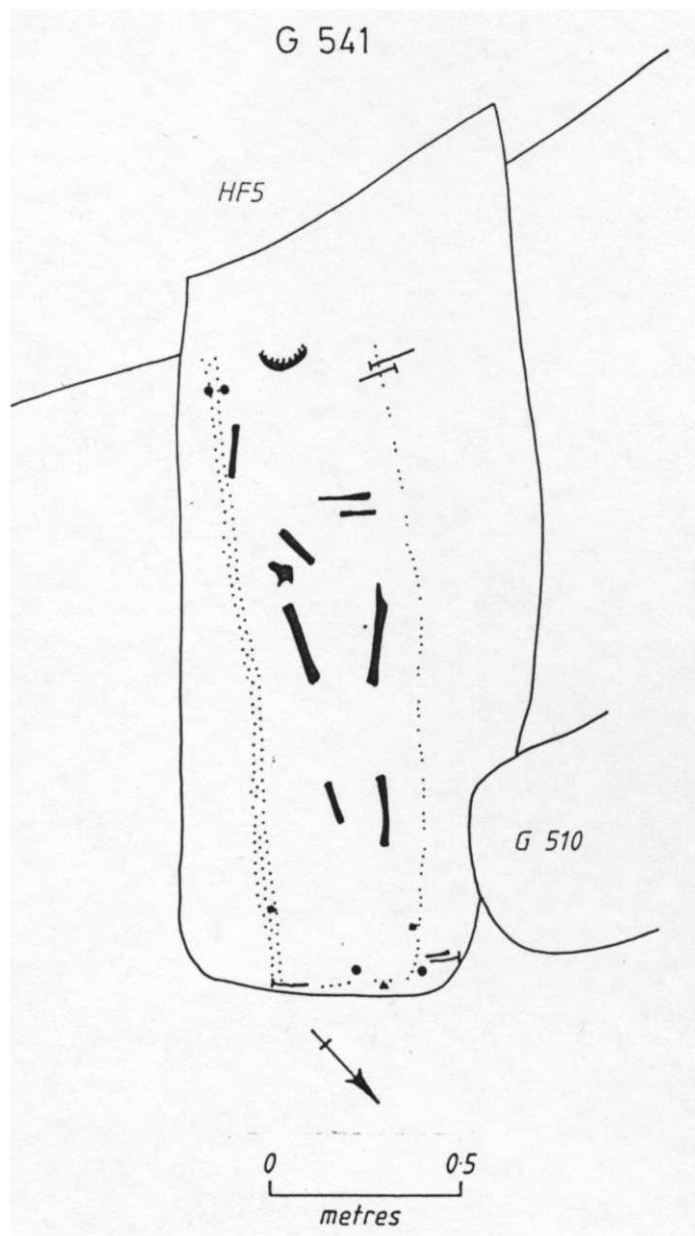


Grave 539 E-W (head to W). Cuts Period 1 G554. Seals Period 2 G547 (directly above it and of similar plan). Cut by Period 2 0535. Fairly shallow grave. Nailed timber coffin. Child. Skull in poor condition and only part remains. No other bones survive.

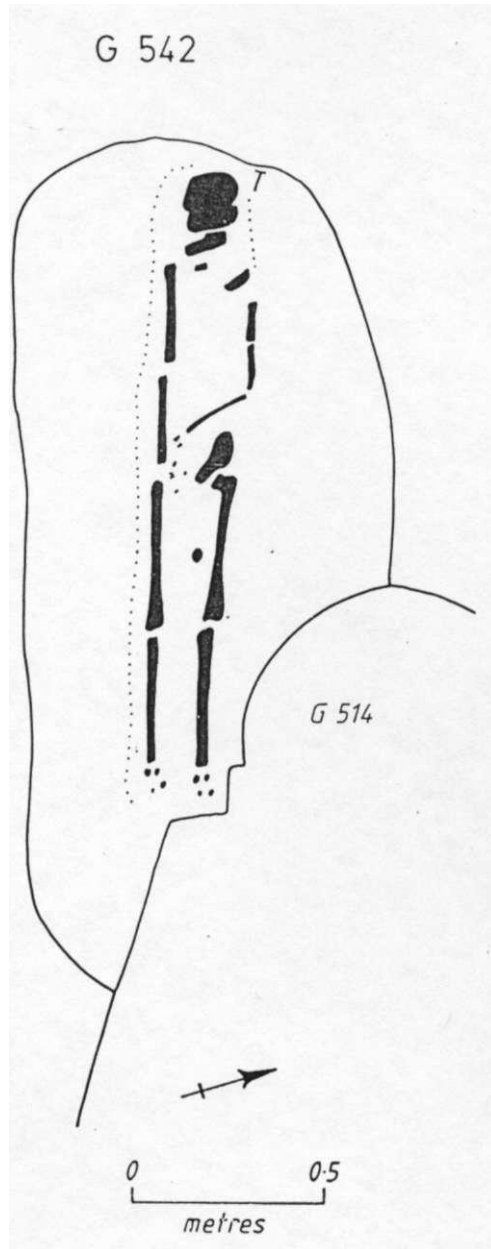


Grave 540 N-S. Cut and largely destroyed by Period 2 G525. Timber coffin. no nails recovered. No skeletal material found in situ.

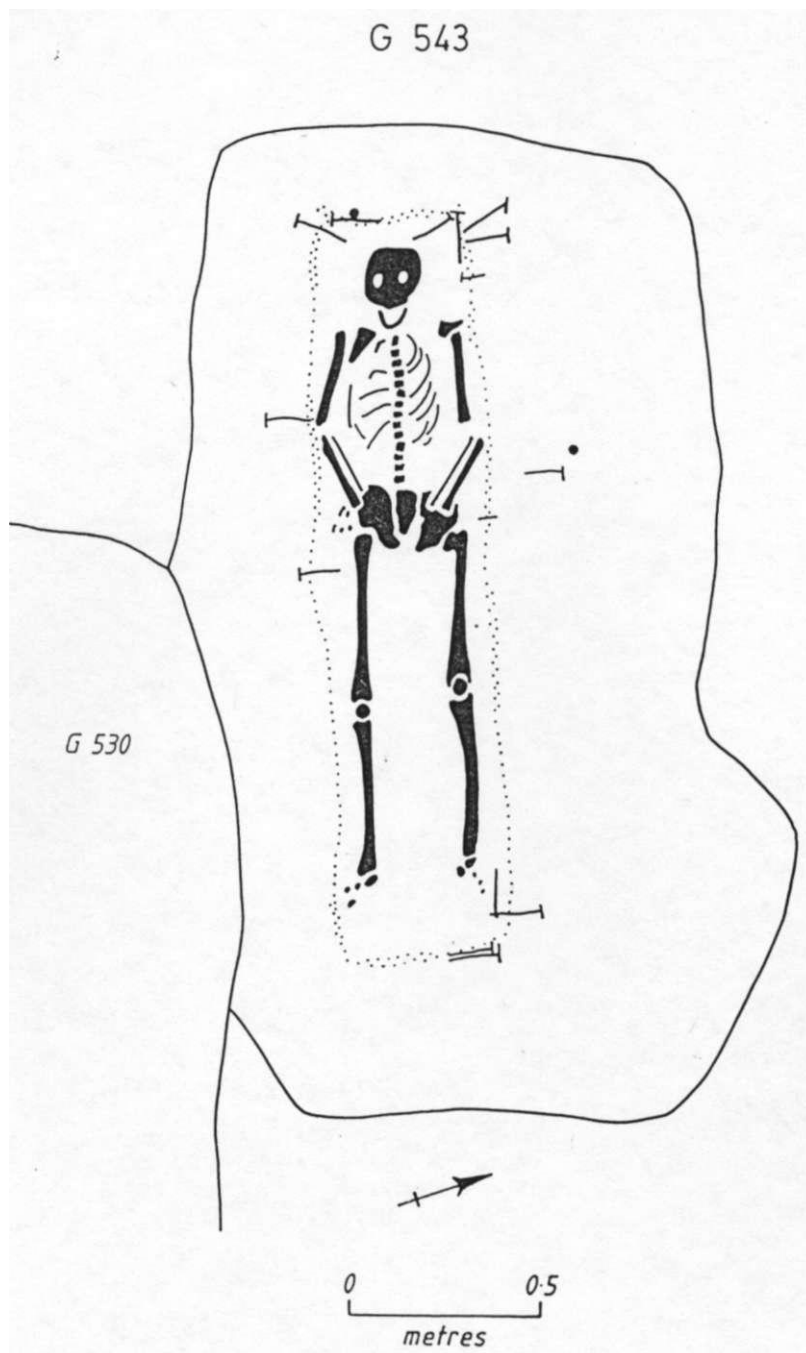
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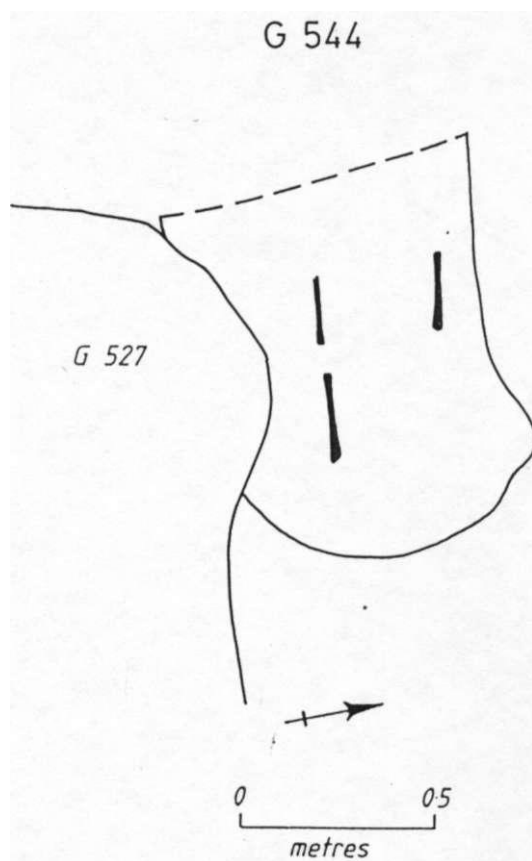
Grave 541 N-S (head to S). Cuts Period 1 G554. Cut by Period 2 G507. G510. G512. modern sand pit HF5. and possibly by Period 2 G504. Nailed timber coffin. Older child. Skeleton supine. Skull fragmentary, other bones in poor condition.



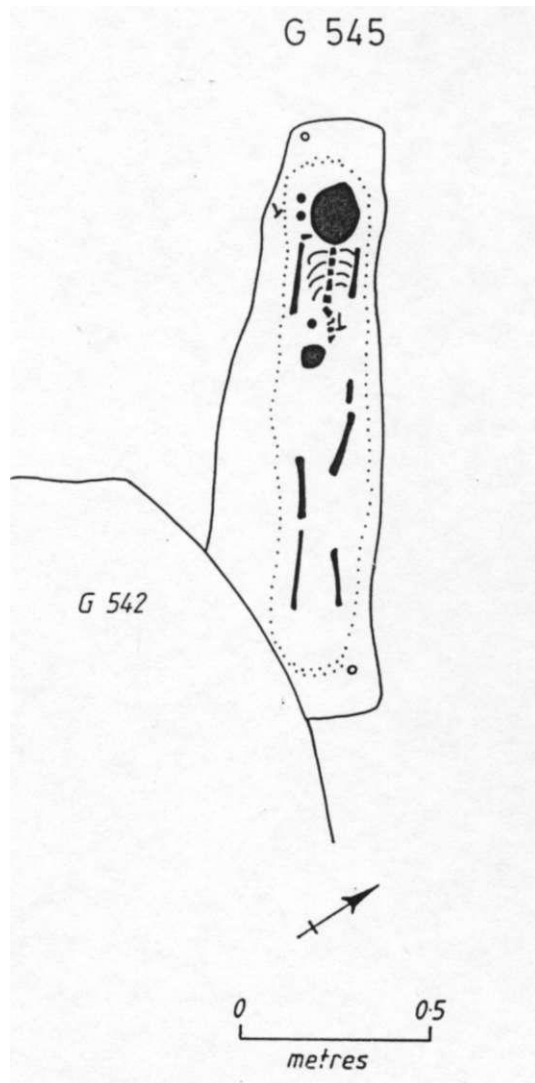
Grave 542 E-W (head to W). Cuts Period 2 G559. Cut by Period 2 G514, G545. Nailed timber coffin. Adult, sex uncertain. Skeleton supine. Bones in fair condition. Right leg bones stained black.



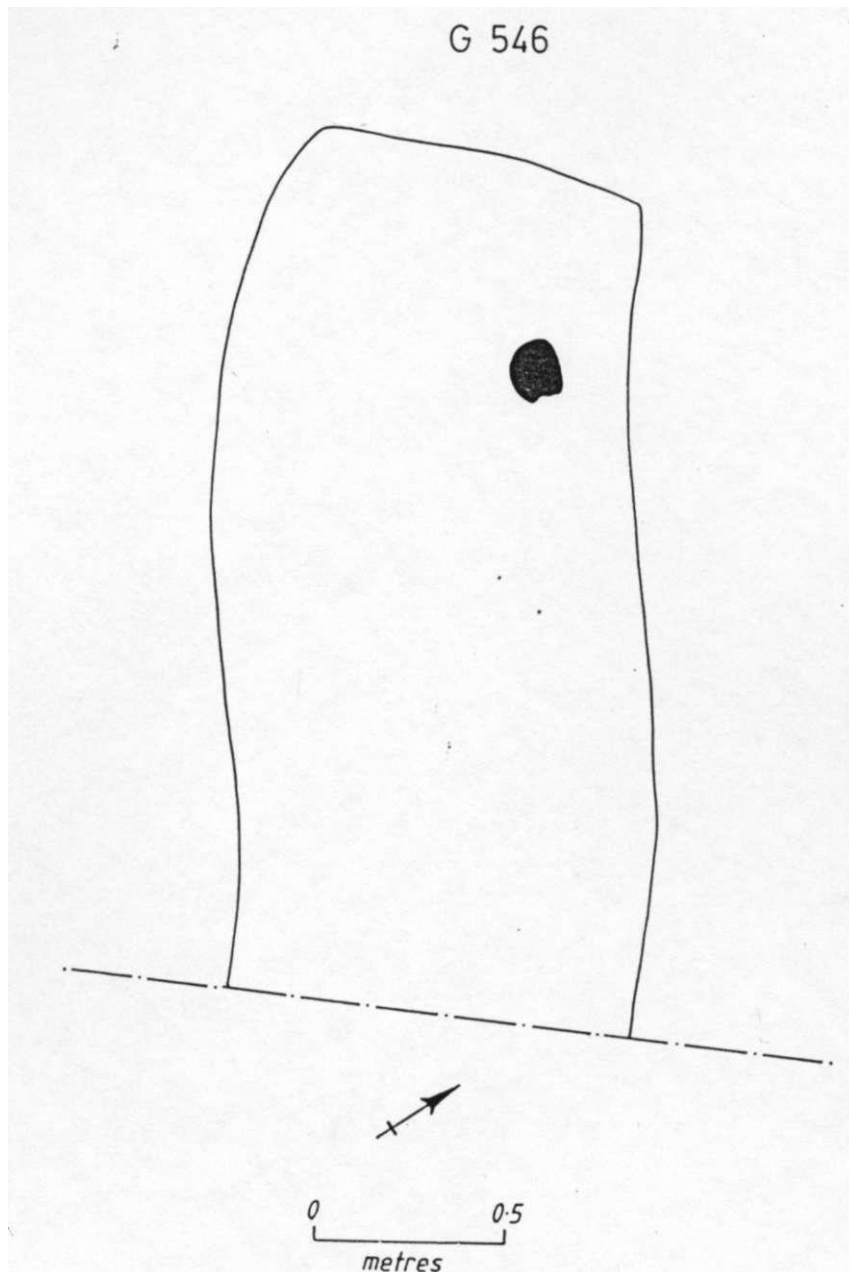
Grave 543 E-W (head to W). Cuts Period 1 G573. Cut by Period 2 G530. G531. G548. G551. Nailed timber coffin. bottom covered with layer of lime plaster. Lime plaster also on skull and parts of post-cranial skeleton. Young adult male. Skeleton supine. Bones in very good condition.



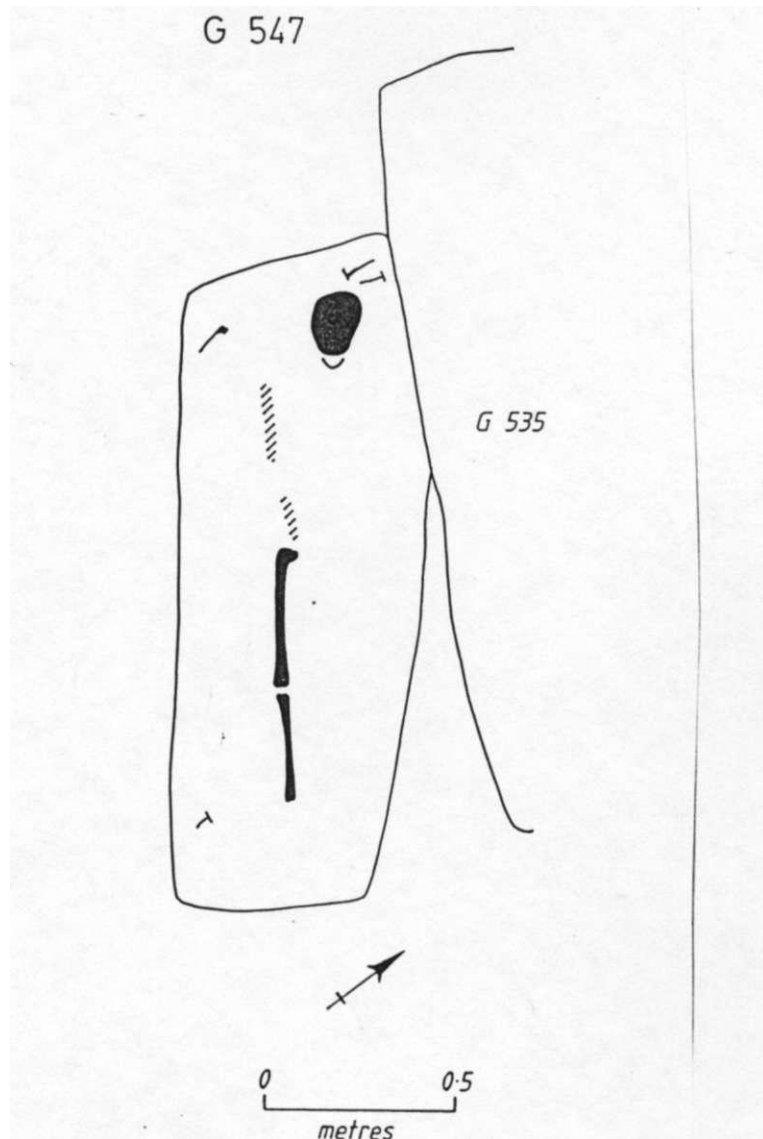
Grave 544 E-W (head to W). Probably cuts Period 1 G597. Cut by Period 2 G527. Very shallow grave. almost totally destroyed by G527 and later surface disturbance. No timber stain or nails recovered. Adult, sex uncertain. Only some of leg long bones survive. Bones in poor condition.



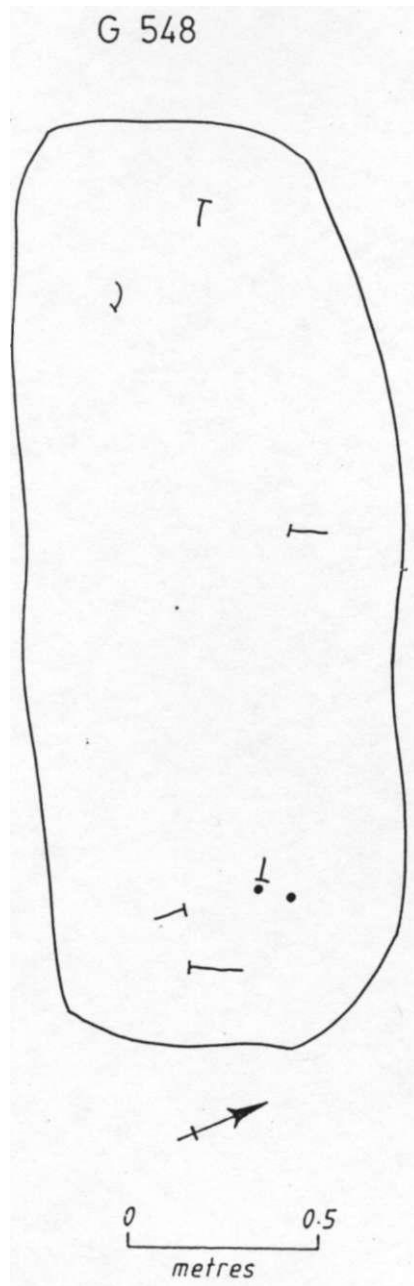
Grave 545 E-W (head to W). Cuts Period 1 G604. Period 2 G542. G561. Nailed timber coffin. Child. aged 6 to 7 years. Skeleton supine. Bones in poor condition.



Grave 546 E-W (head to W). Cuts Period 2 G665. Cut by Period 2 G557. Fairly shallow grave. No timber stain or nails recovered. Only skull remained. now either missing or not lifted.

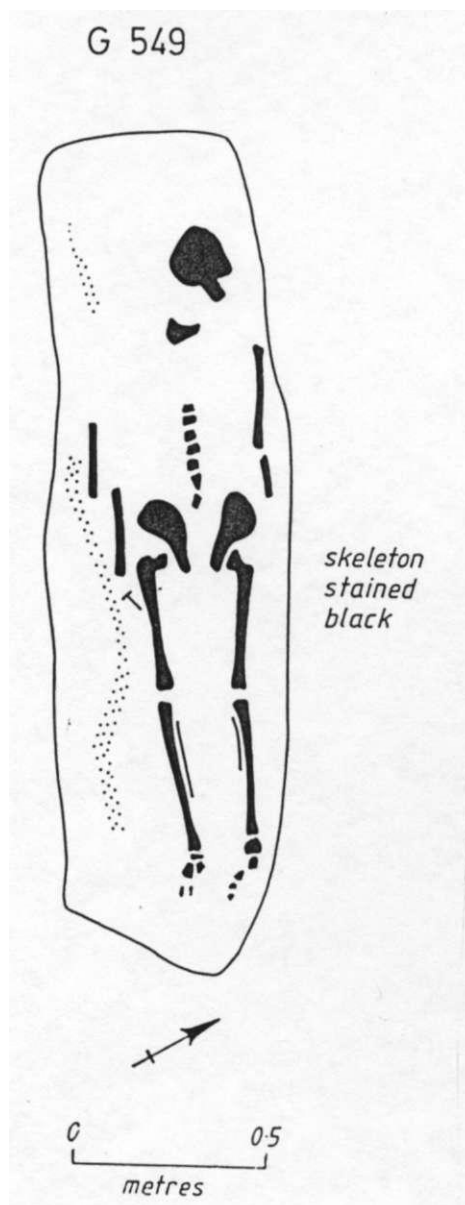


Grave 547 E-W (head to W). Cuts Period 1 G554. Cut by Period 2 G535. Sealed by Period 2 G539. which is directly above and of similar plan to G547. Nailed timber coffin* Adult. sex uncertain. Skeleton supine. Only skull and long bones of right leg survive, in very poor condition and stained black. Long bones of left leg and both humeri remain as stains in soil.

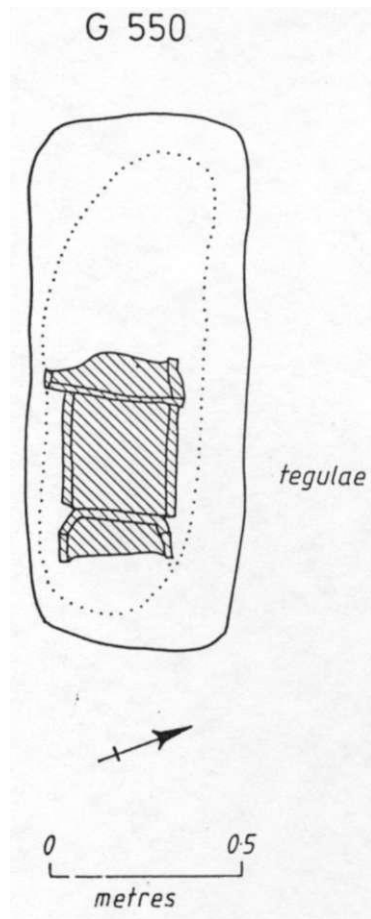


Grave 548 E-W. Cuts Period 2 G543. Cut by Period 2 G530. Nailed timber coffin (timber stain not planned). approximately 2.02 m long. 0.4m wide. No skeletal material. Coffin size indicates adult.

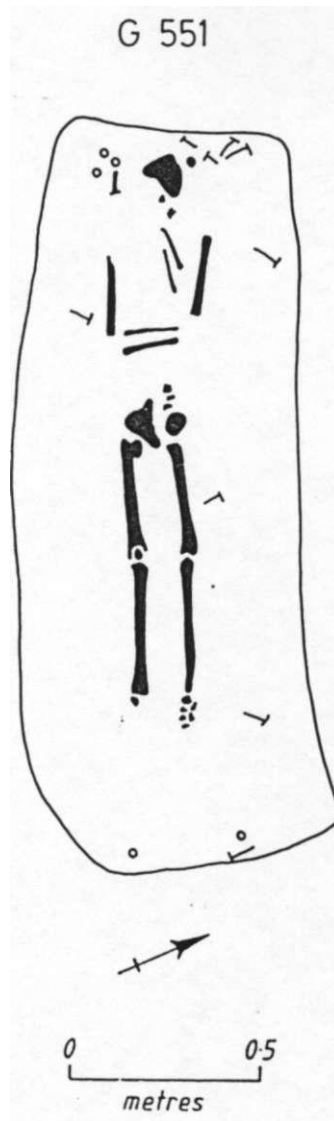
G 549



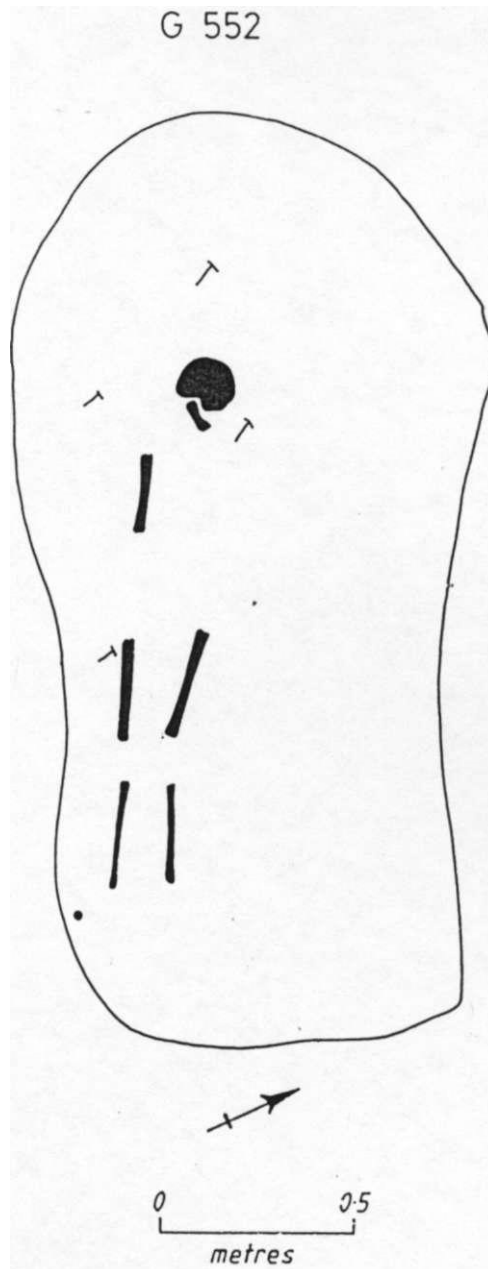
Grave 549 E-W (head to w). Cuts Period 1 G573. Period 2 G563. G574. Nailed timber coffin. Adult female. Skeleton supine. Surviving bones in poor condition. all stained black.



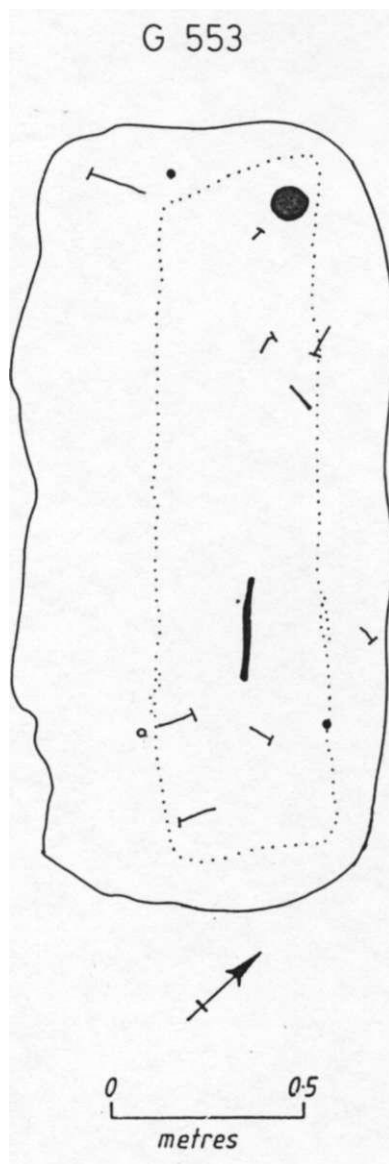
Grave 550 E-W. Cuts Period 2 G688. Grave destroyed by vandals. Initial excavation revealed timber coffin stain (no nails) within which were three tegulae. laid to cover small area at E end at bottom of feature. Coffin length 1.2 m. width 0.4 m. Probably infant burial within coffin of size more suited to older child.



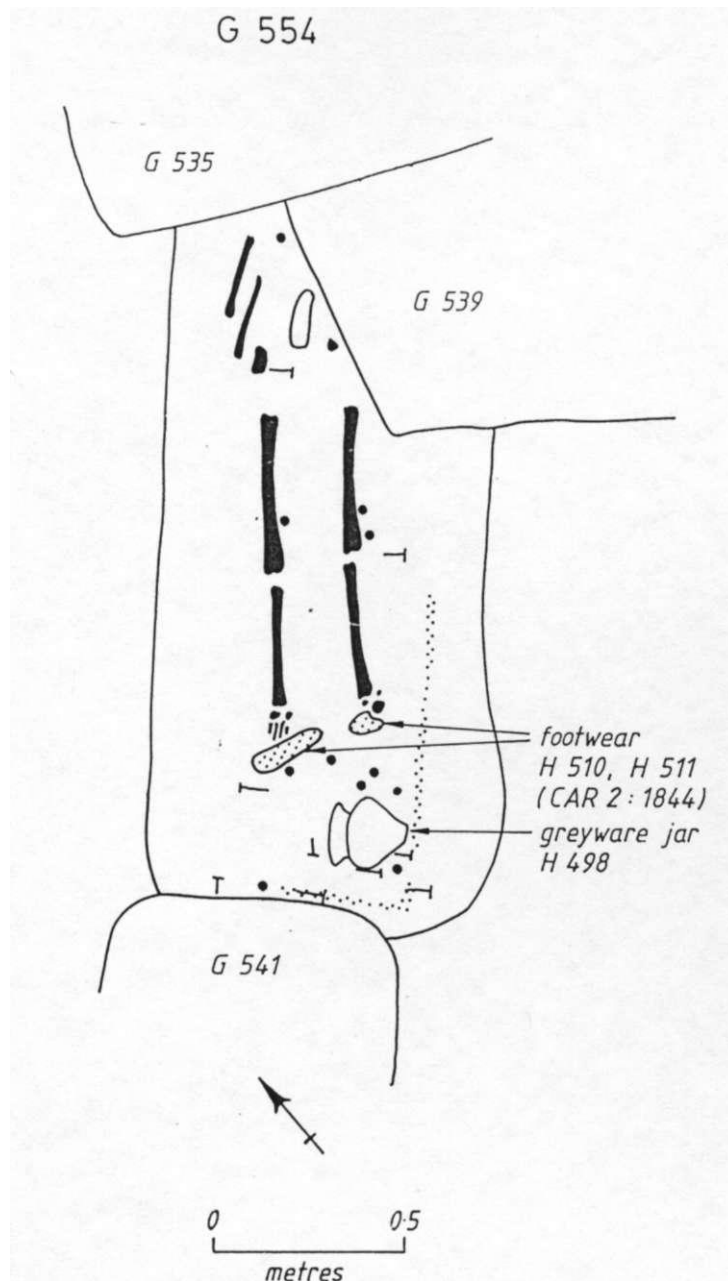
Grave 551 E-W (head to W). Cuts Period 2
G543. G561. Nailed timber coffin (timber
stain not illustrated). Adult, sex uncertain. Skeleton supine. with right



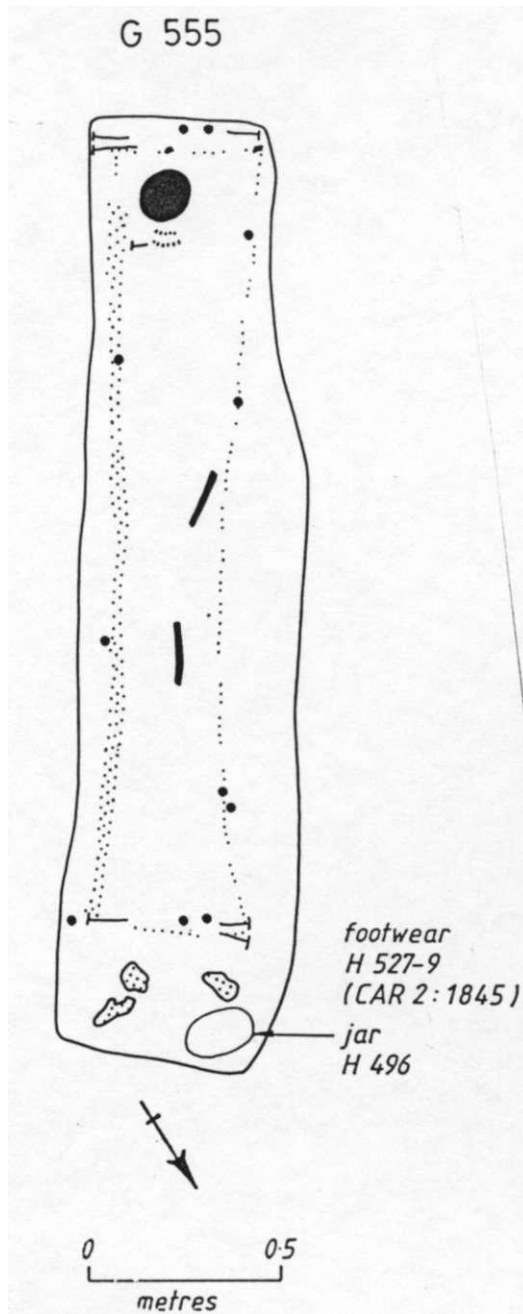
Grave 552 E-W (head to W). Cuts Period 1 G687, Period 2 G556. G567. G608. Nailed timber coffin, but no timber stain found. Middle-aged female. Skeleton supine. Surviving bones in poor co



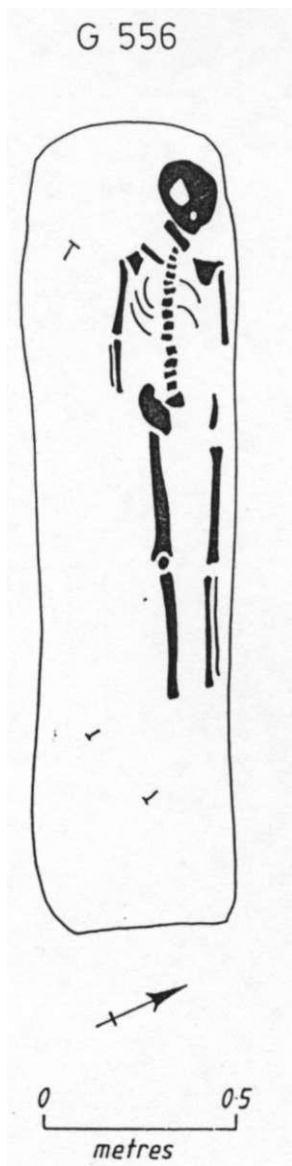
Grave 553 E-W (head to W). Isolated grave. Nailed timber coffin. Age and sex uncertain. Skull planned but stolen before being lifted. Only right leg long bone (tibia only planned), in poor condition.



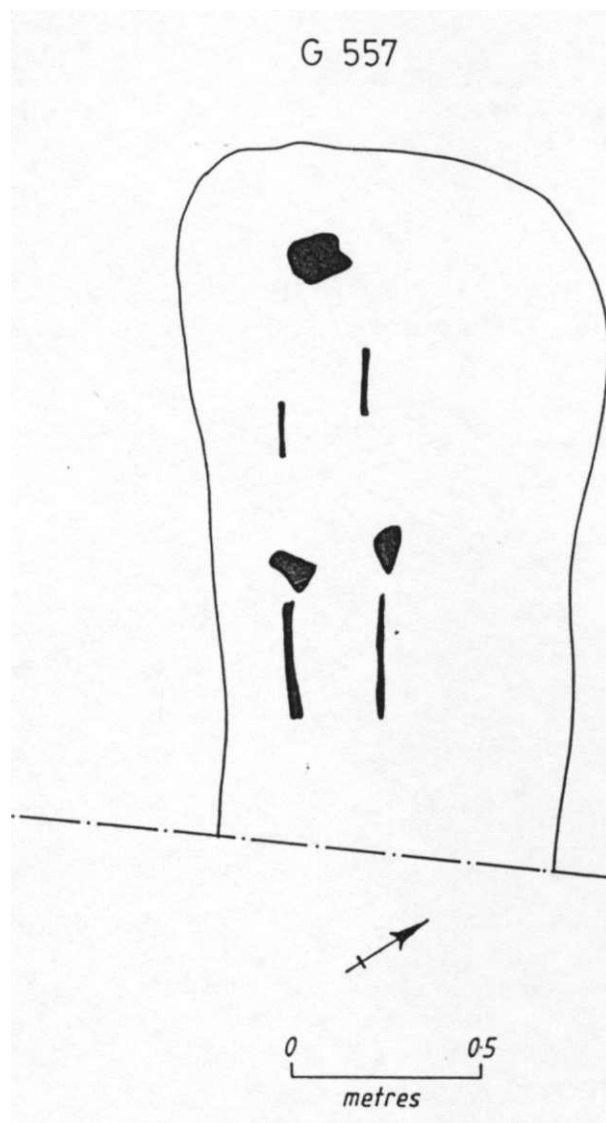
Grave 554 N-S (head to N). Cut by Period 1 G541. Period 2 G535. G539. G547. modern pit HF22. Fairly shallow grave, N end largely destroyed by later graves. Nailed timber coffin. Adult. sex uncertain. Skeleton supine. Surviving bones in poor condition. Some foot bones survive, encased in hobnailed shoes. Inside coffin close to feet lay coarse grey ware jar. CAM 268.



Grave 555 N-S (head to S). Isolated grave. Nailed timber coffin. length 2.02 m. width 0.32 m. Coffin too long for body. gap of about 0.5 m from position of feet (conjectured from tibiae) to N end. Older child. Skeleton supine. Only skull (fragmentary), and parts of leg long bones (right leg not planned) survive. in poor condition. Outside coffin at N end coarse greyware jar. CAM 268. and hob

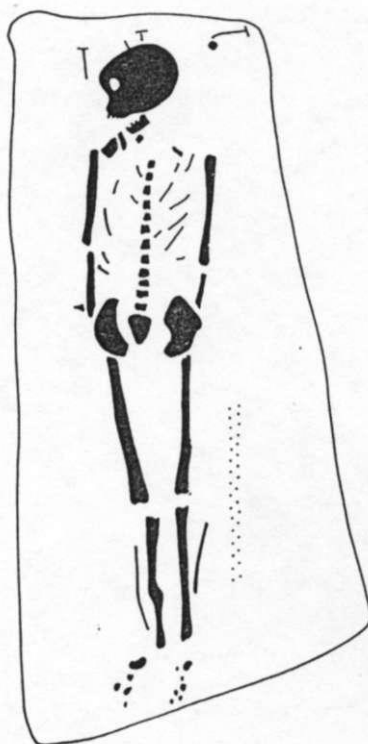


Grave 556 E-W (head to W). Cut by Period 2
G552. Shallow grave. Nailed timber coffin (no timber stain located). Young



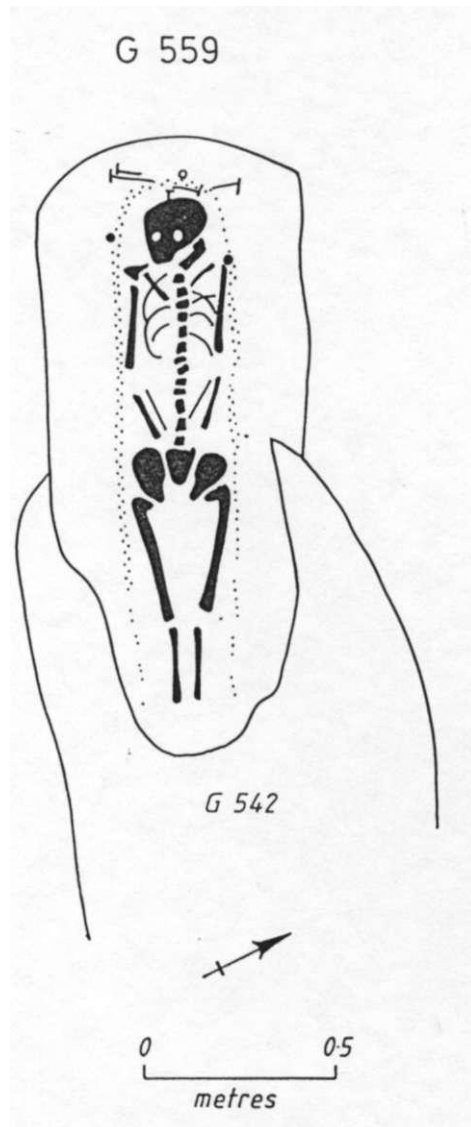
Grave 557 E-W (head to W). Cuts Period 2 G546. No timber stain or nails recovered, but very slight colour change in grave fill indicated position of timber coffin. Adult female. Skeleton supine. Skull in fair condition, most other surviving bones in poor condition.

G 558

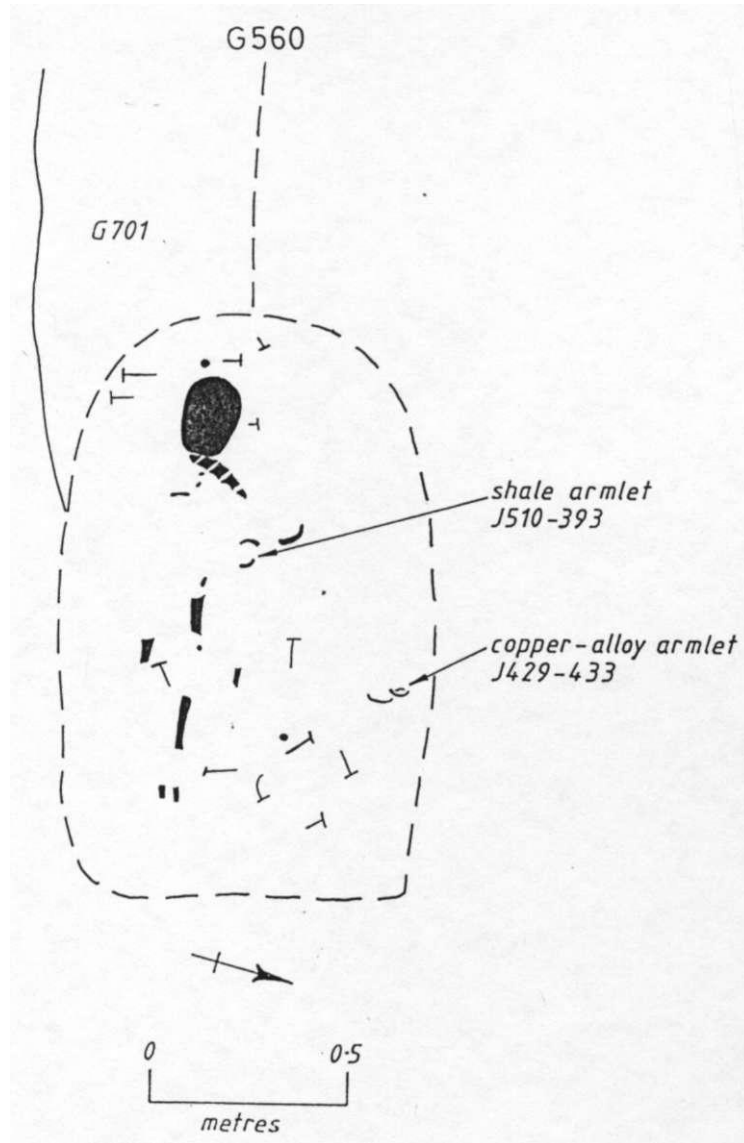


0 0.5
metres

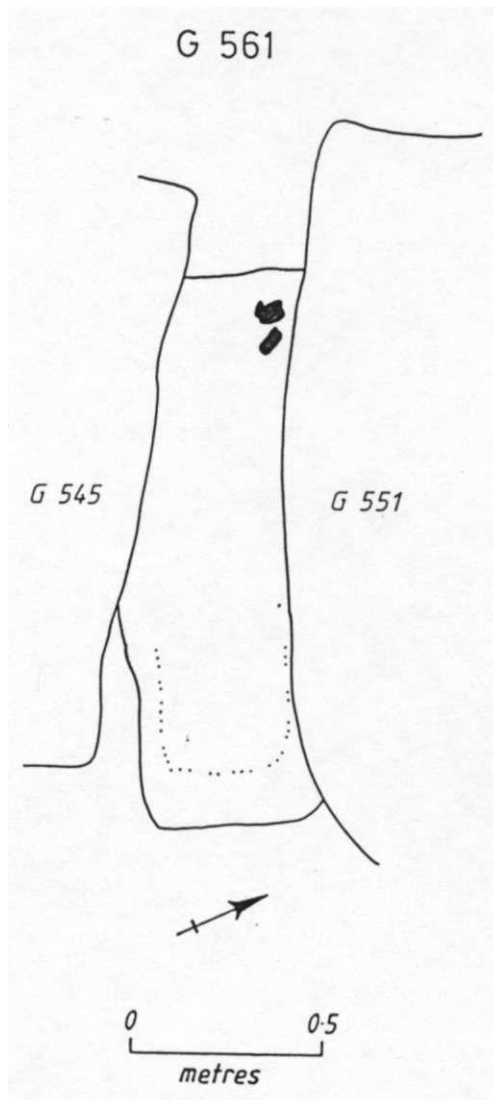
Grave 558 E-W (head to W). Cuts Period 1 G604. Period 2 G559. G595. Relationship to Period 2 G586 uncertain. Fairly shallow grave. Nailed timber coffin. Middle-aged male. Skeleton supine. Bones in good condition.



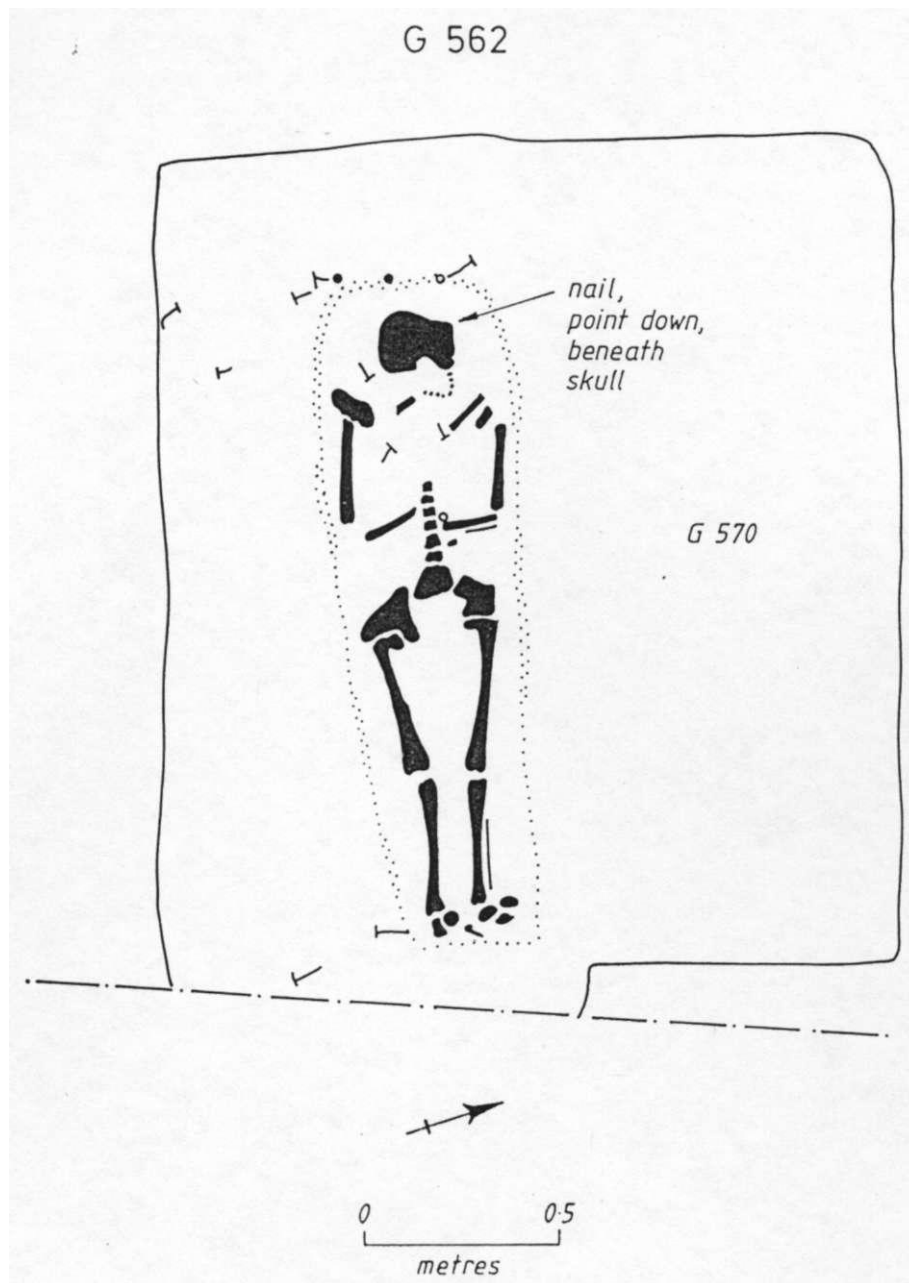
Grave 559 E-W (head to W). Cuts Period 1 G604. Cut by Period 2 G542. G558. Fairly shallow grave. Nailed timber coffin. Young adult female. Skeleton supine. Bones in good condition.



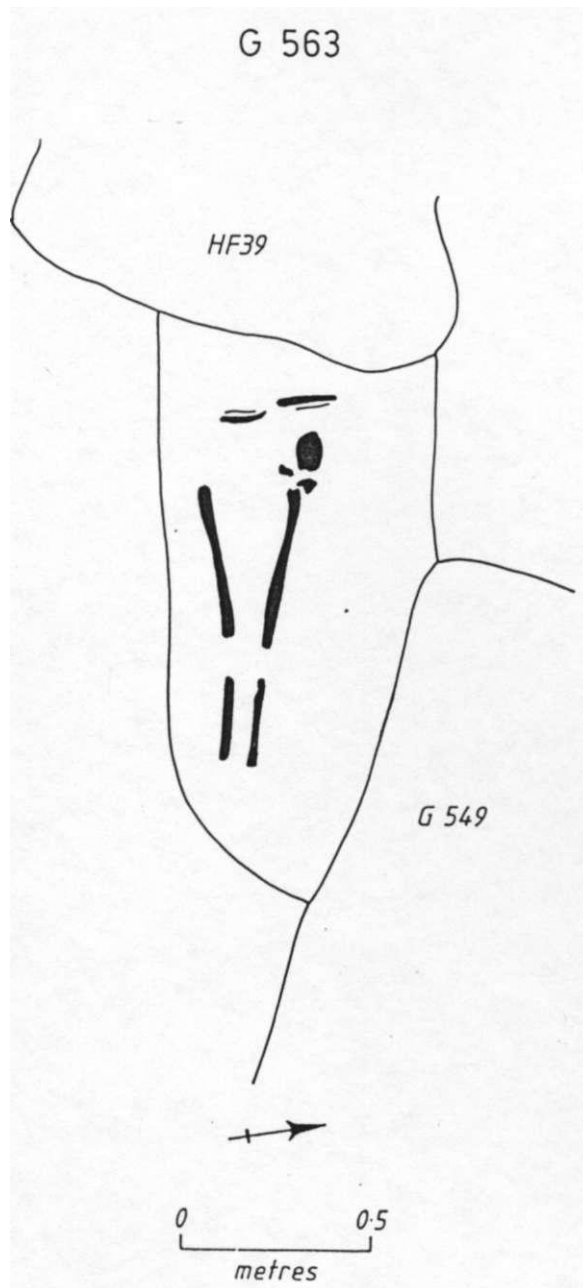
Grave 560 E-W (head to W). Cuts Period 2 G500. and possibly G701. Cut by Period 2 G517. E end excavated on Site H. W end on Site J. Nailed timber coffin. Child, aged 2.5 to 3 years. Skeleton supine. Bones fragmentary.



Grave 561 E-W (head to W). Cut by Period 2 G545. G551. Shallow grave, partly destroyed by later graves. Timber coffin (no nails recovered). Child. Fragments of skull only survive.

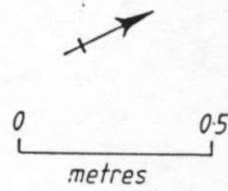
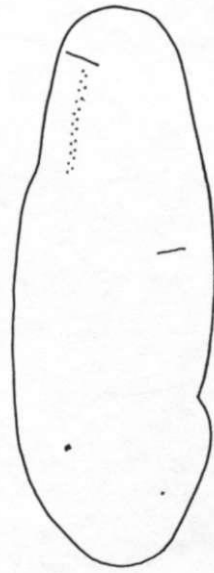


Grave 562 E-W (head to W). Cuts, and In same grave pit as. Period 2 G570. Relationship to Period 2 G672 uncertain. Nailed timber coffin. Middle-aged female. Skeleton supine. Bones in fragile condition.

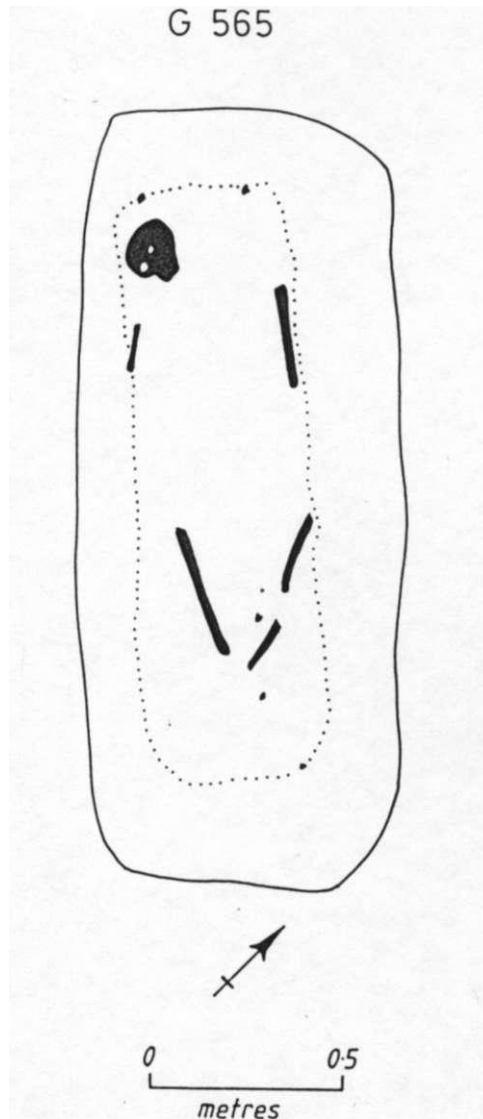


Grave 563 E-W (head to W). Cut by Period 2 G549. modern pit HF39. Shallow grave. W end destroyed by HF39. No timber stain or nails found in situ, though some nails found in grave fill. Adult male. Skeleton supine. Surviving bones in poor condition.

G 564

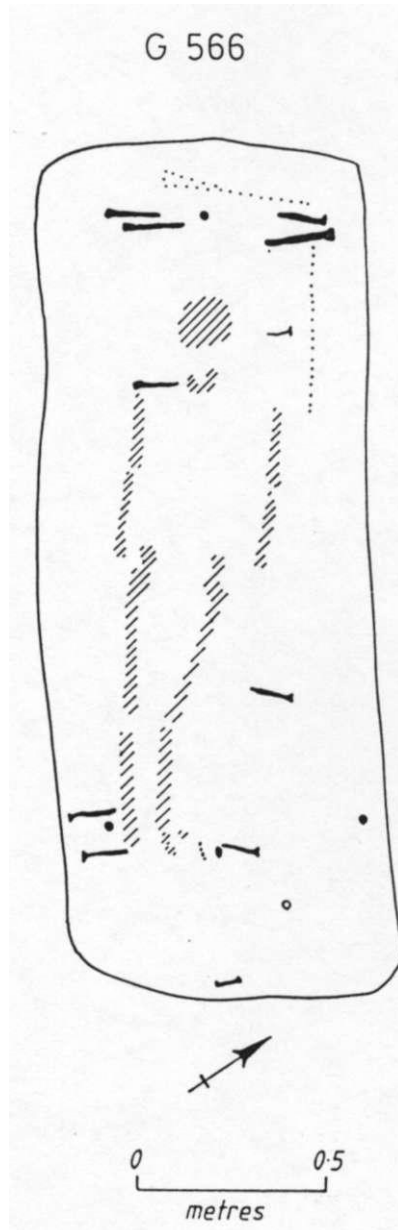


Grave 564 E-W. Isolated grave, very shallow. Nailed timber coffin, length 1 m. No skeletal material. Coffin length indicates child.



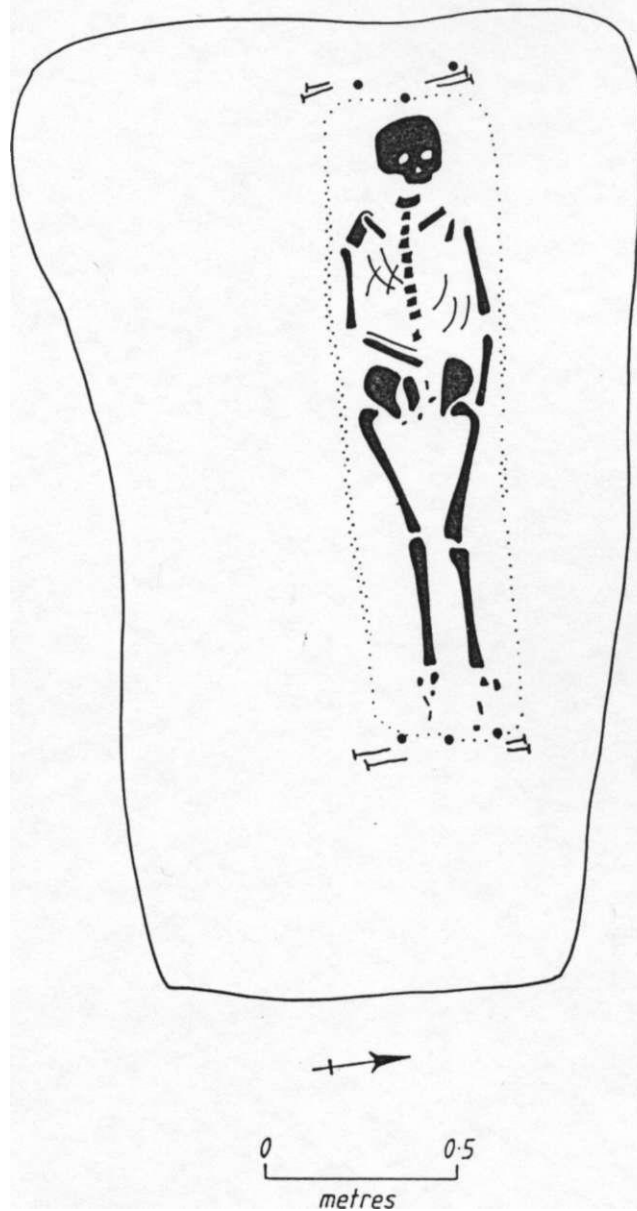
Grave 565 E-W (head to W). Cuts Period 1 G686. Period 2 G644. post-pit HF52. Very shallow grave. Nailed timber coffin. Adult, sex uncertain. Skeleton supine. Surviving bones in poor condition.

G 566

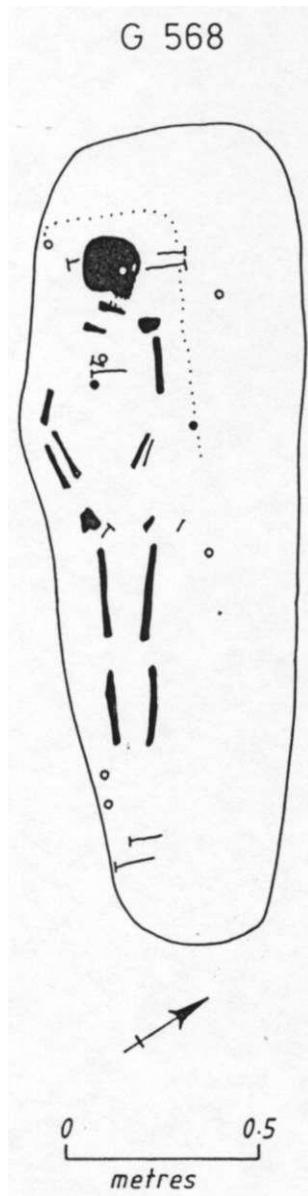


Grave 566 E-w (head to W). cuts Period 2 G608, G625. Fairly shallow grave. Nailed timber coffin. Age and sex uncertain. Skeleton supine. Lower leg bones and some foot bones only survive. in poor condition. Other limb bones and skull remain as stains in soil.

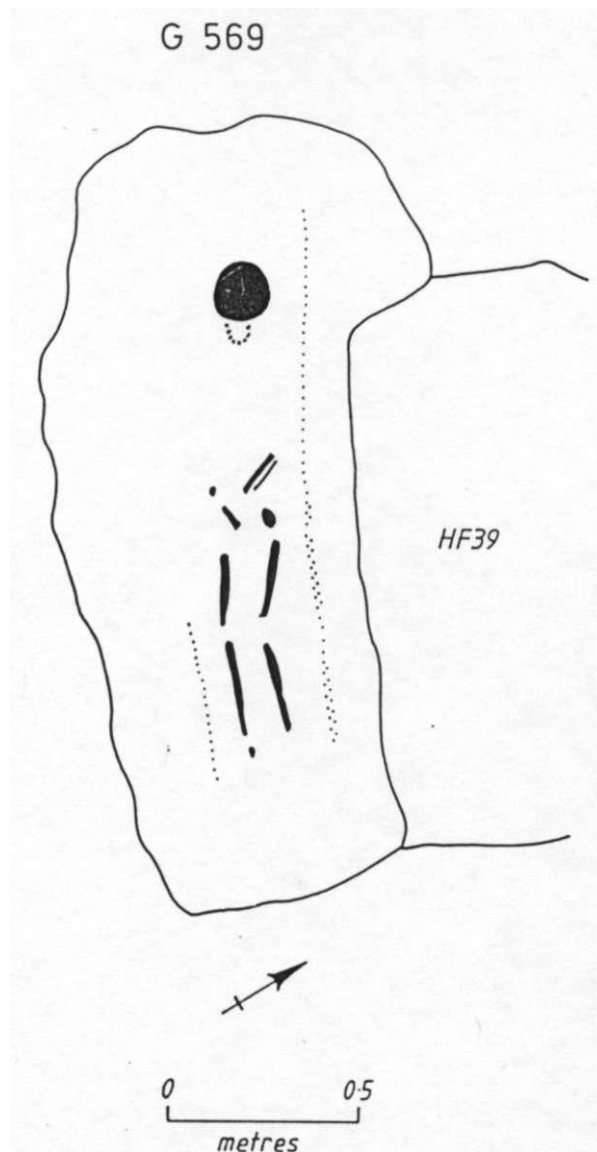
G 567



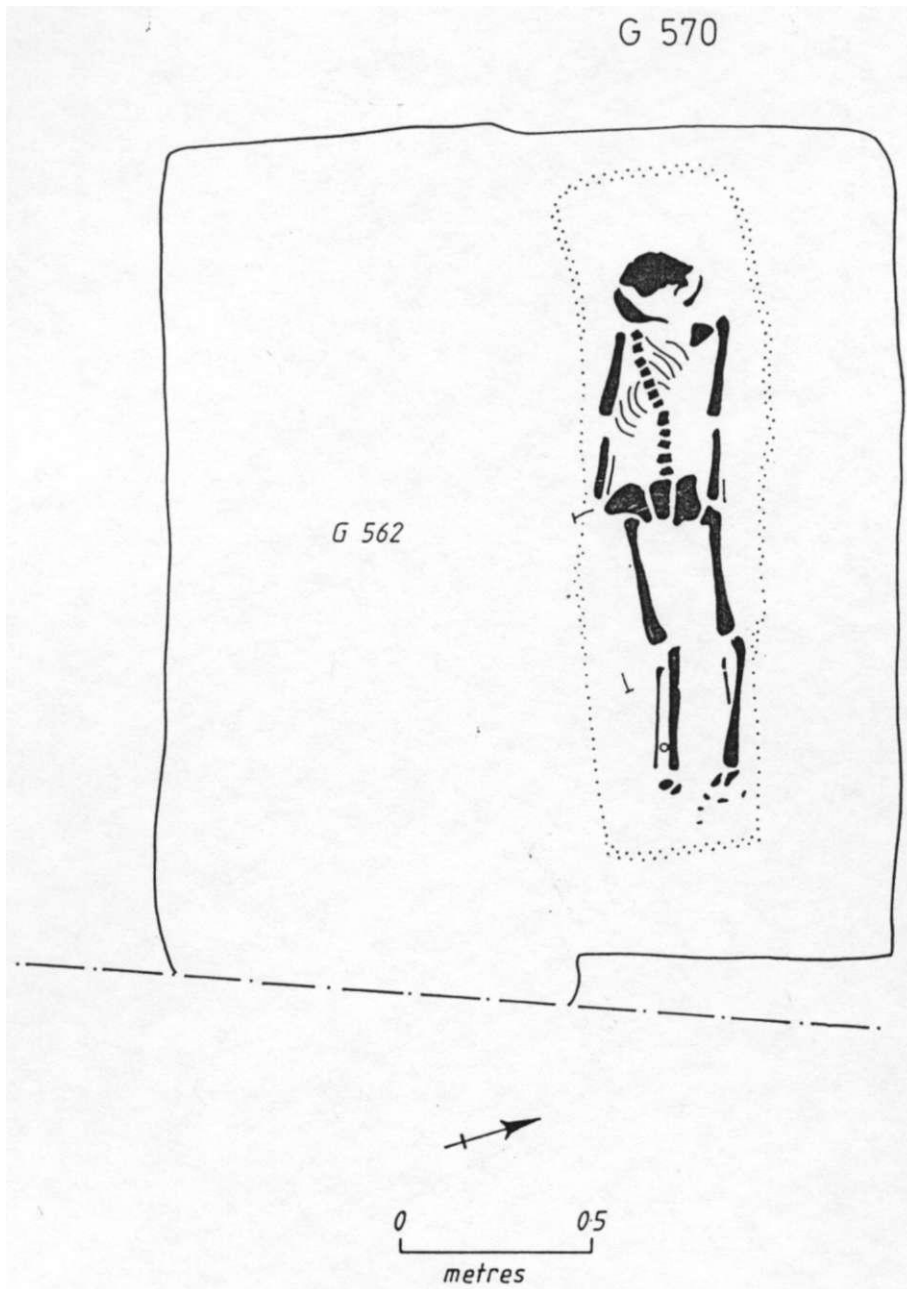
Grave 567 E-W (head to W). Cuts Period 1 **G687**. Period 2 **G658**. Cut by Period 2 **G552**. Nailed timber coffin. Middle-aged female. Skeleton supine. Bones in good condition.



Grave 568 E-w (head to W). Cuts Period 1 G601. Period 2 G586. Cut by Period 2 G511. G516. modern pit HF/40. Nailed timber coffin. Age and sex uncertain. Skeleton supine. Bones in very poor condition.

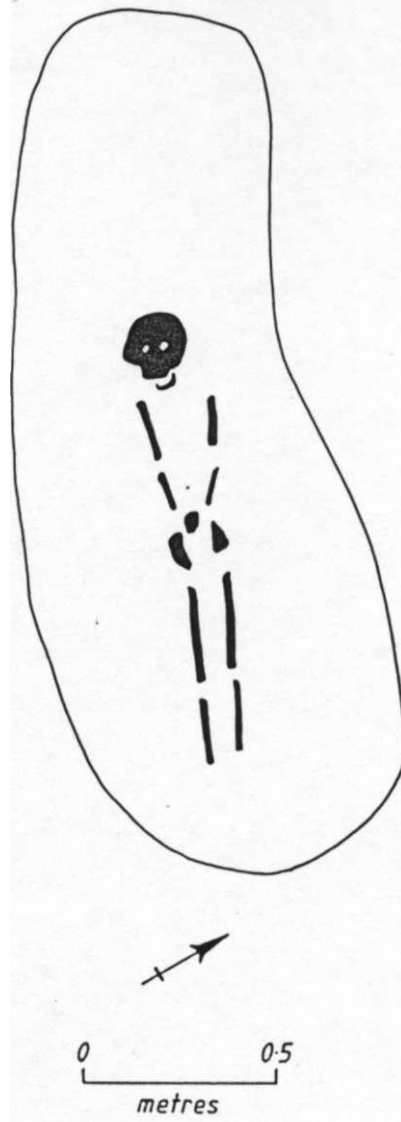


Grave 569 E-W (head to W). Isolated grave. Cut by modern pit HF39. Fairly shallow grave. Nailed timber coffin. Adolescent, aged 14 to 15 years. Skeleton supine. Surviving bones in poor condition.

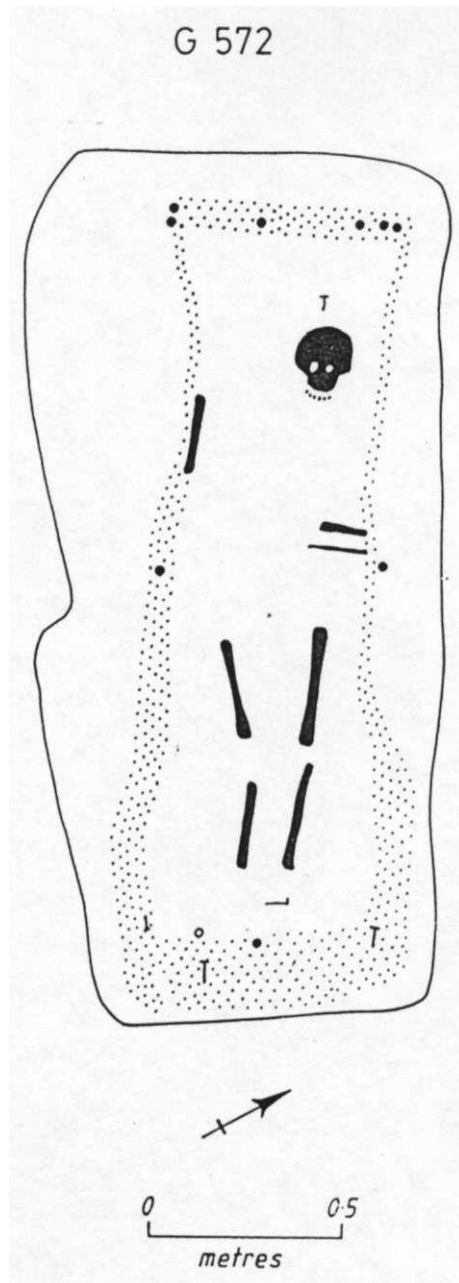


Grave 570 E-W (head to W). cut by. and in same grave pit as. Period 2 G562. Nailed timber coffin. Adolescent male, aged 15 to 16 years. Skeleton supine. Bones in good condition.

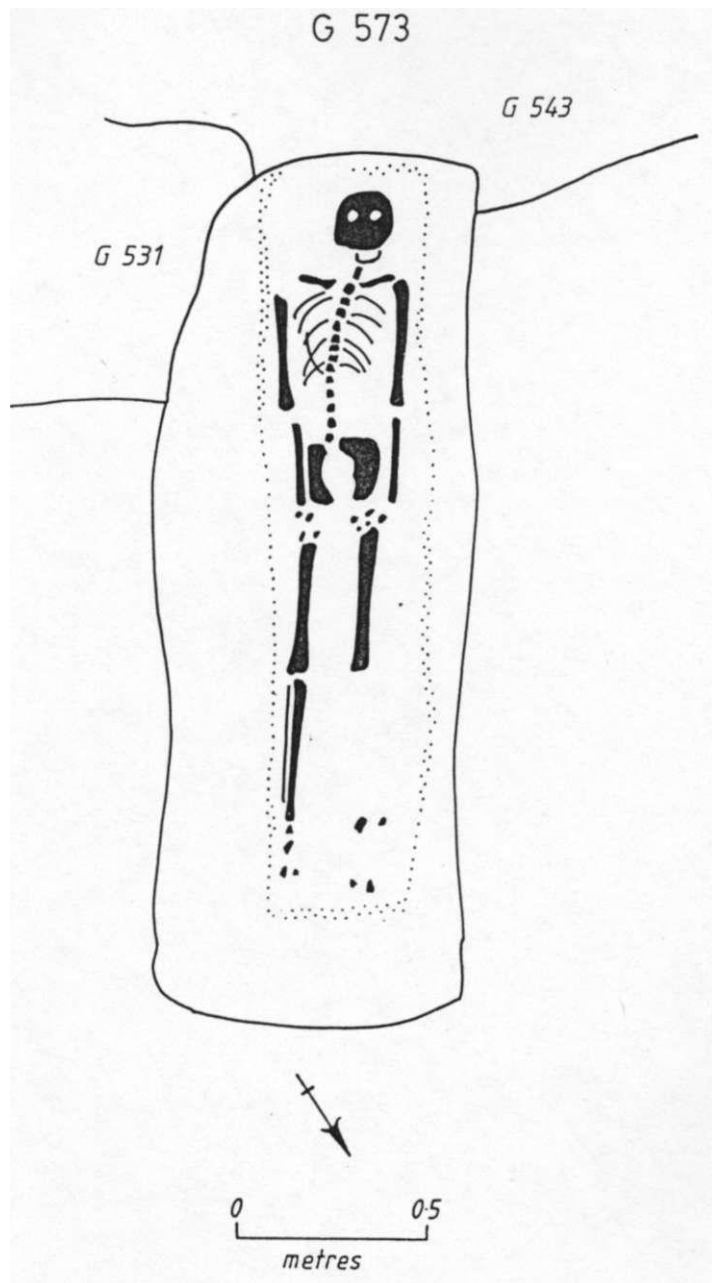
G 571



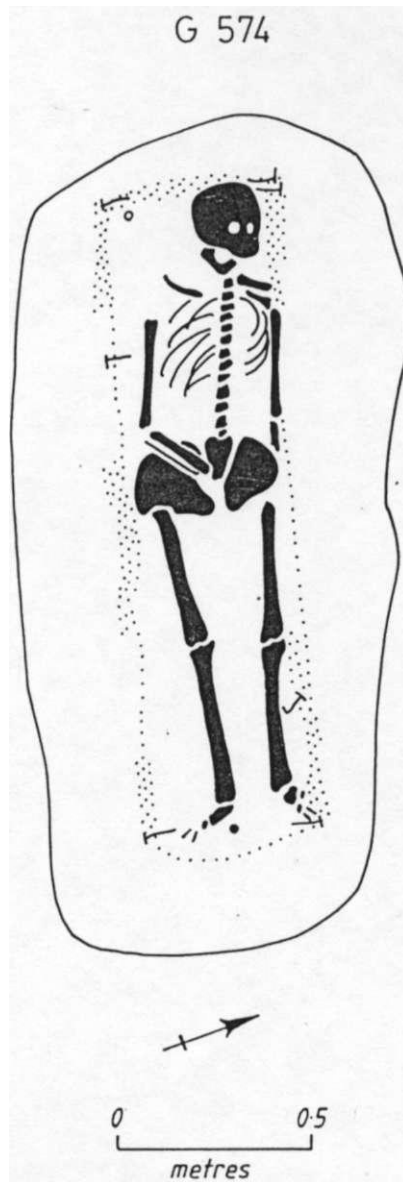
Grave 571 E-W (head to W). Cuts Period 2 G582, G591. Very shallow grave. No clear timber stain or nails. though some ?timber staining around skeleton. Middle-aged female. Skeleton supine. Surviving bones in good condition.



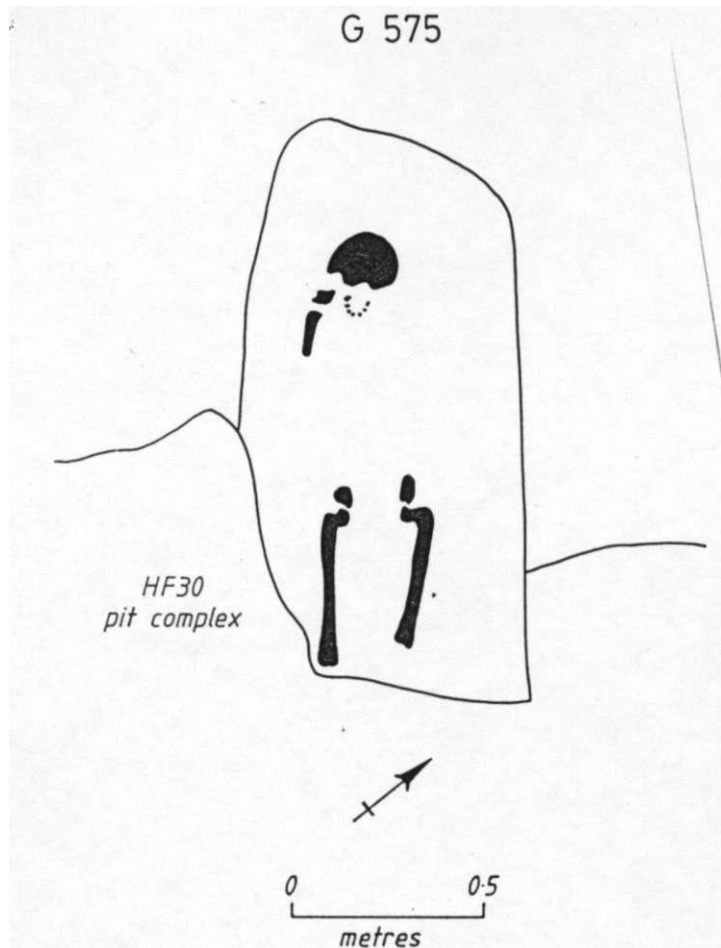
Grave 572 E-W (head to W). Cute Period 2 G592. Nailed timber coffin, unusually wide in places. up to a maximum of 0.58 m. Around most of coffin. particularly at foot, timber stain is very thick. Elderly adult, sex uncertain. Surviving bones in poor condition.



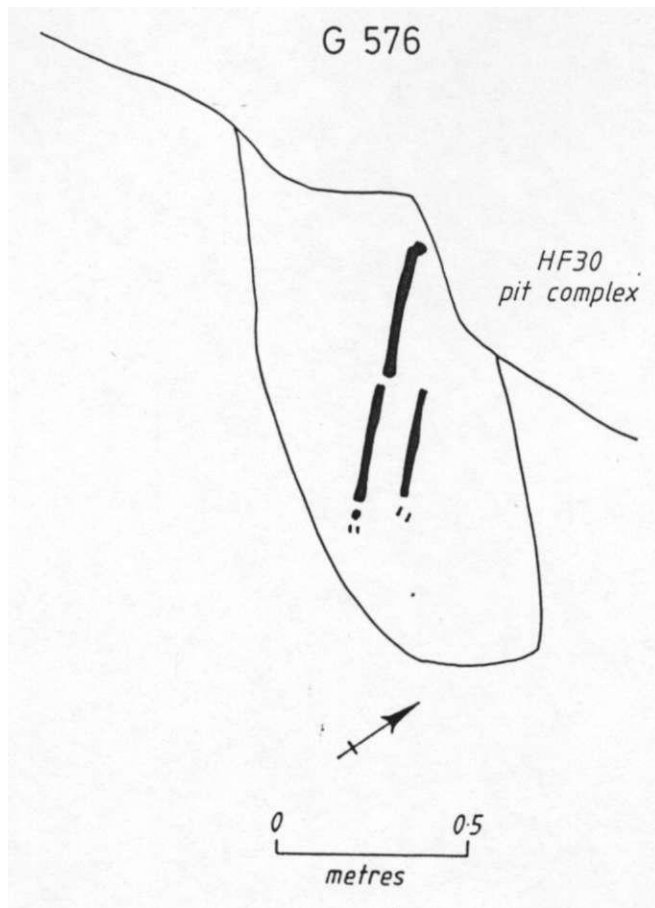
Grave 573 N-S (head to S). Isolated grave. Cut by Period 2 G531. G543. G549. G574. Timber coffin. no nails recovered. Middle-aged male. Skeleton supine. Bones in good condition. Left leg bones removed by cutting of G574.



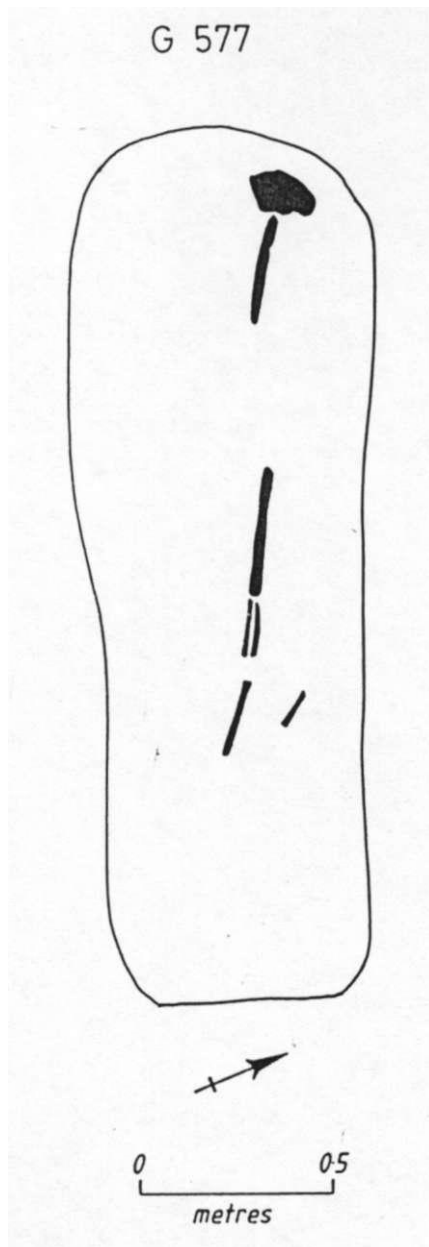
Grave 574 E-W (head to W). Cuts Period 1 G573. Cut by Period 2 G549. Nailed timber coffin. Middle-aged male. Skeleton supine. Bones in good condition.



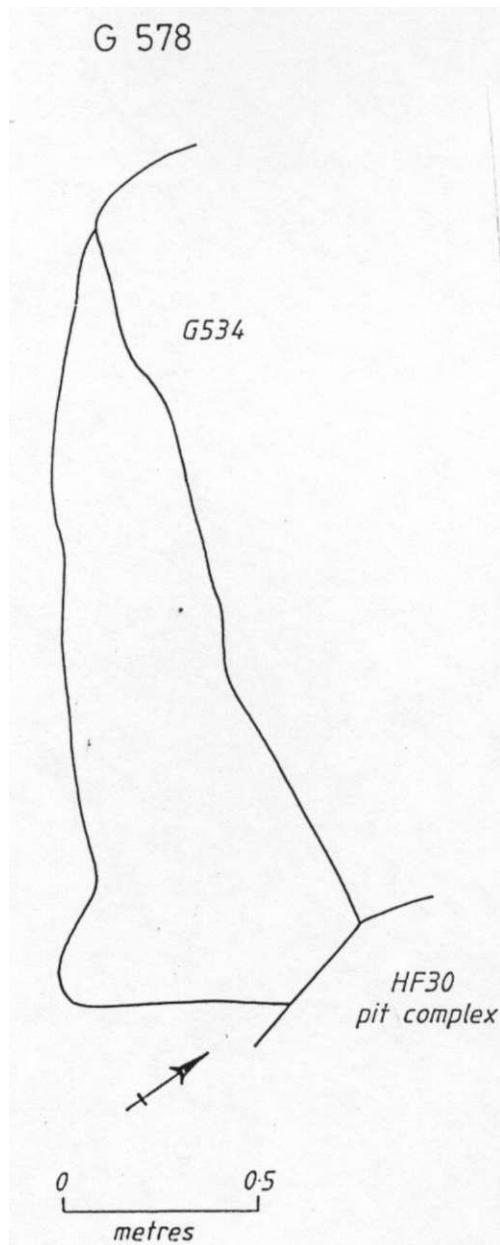
Grave 575 E-W (head to W). Isolated grave. Cut by modern pit complex HF30. No timber stain or nails recovered. Young adult male. Skeleton supine. Surviving bones in good condition.



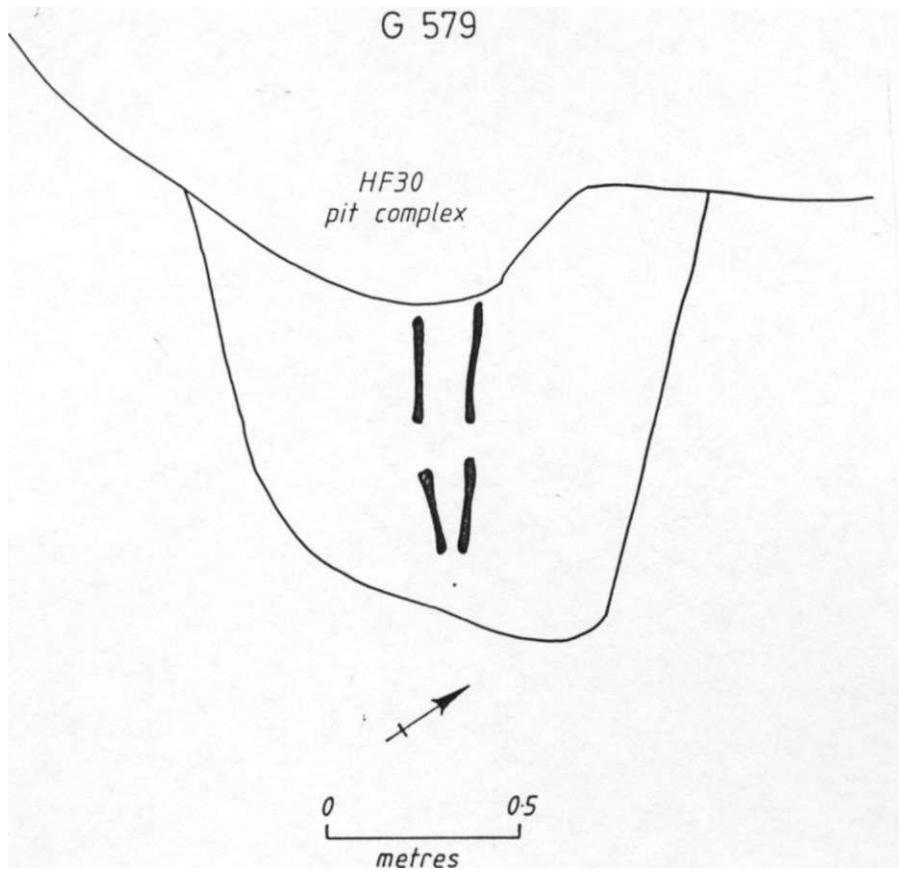
Grave 576 E-W (head to W). Cuts and seals Period 2 G579. Cut and largely destroyed by modern pit complex HF30. Very shallow grave. No timber stain or nails recovered. Adult, sex uncertain. Leg bones only remain, in poor condition.



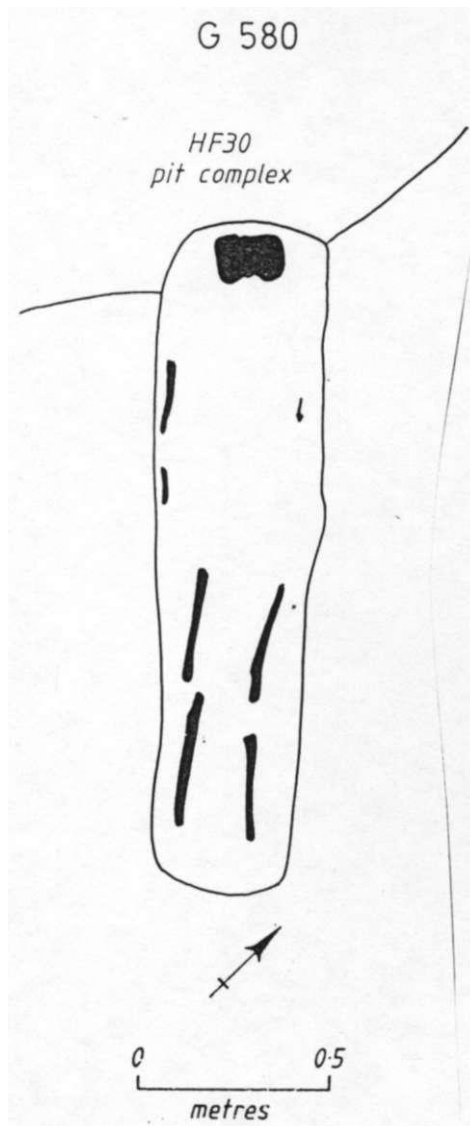
Grave 577 E-w (head to W). Cuts Period 2 G589. Cut by Period 2 G581. modern pit complex HF30. Very shallow grave. No timber stain or nails recovered. Adult. sex uncertain. Surviving bones in poor condition.



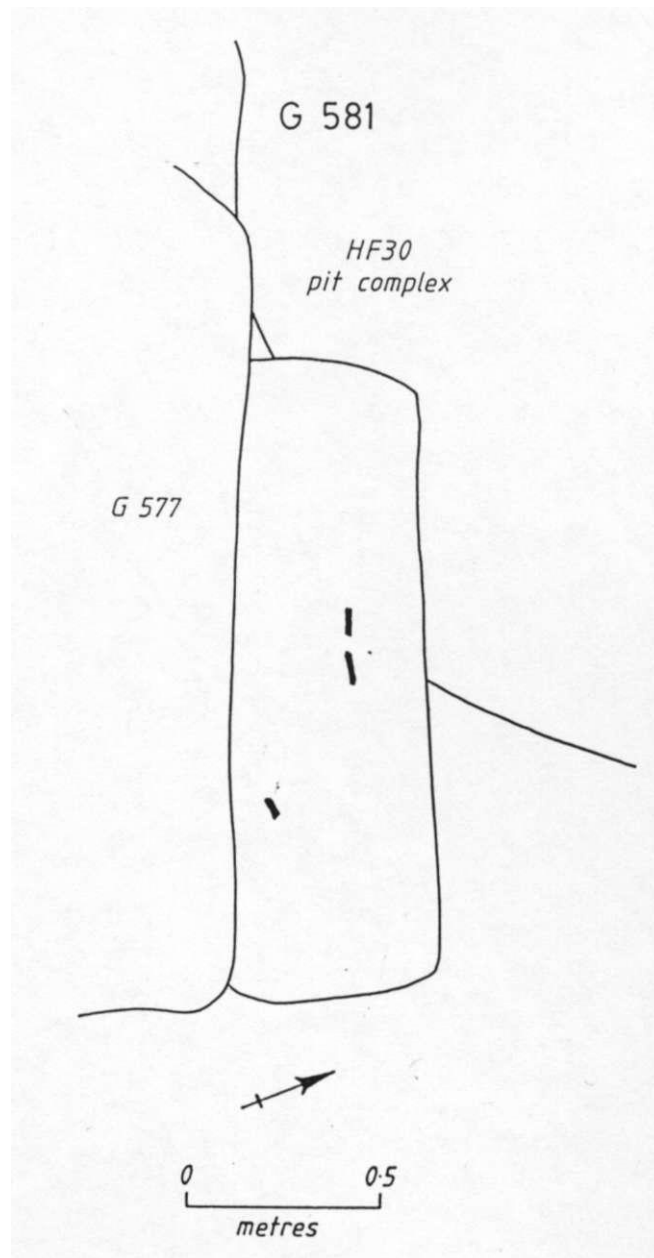
Grave 578 E-W (head to W). Cut by Period 2 G534. modern pit complex HF30. Nailed timber coffin (no timber stain located). Foot bones shown on site photograph. not planned or apparently recovered.



Grave 579 E-W (head to W). Possibly cuts Period 2 G653. Cut and sealed by Period 2 G576. Cut and largely destroyed by modern pit complex HF30. Nailed timber coffin (timber stain not located. only a few nails in situ (not planned)). Adult. sex uncertain. Leg bones only remain, in poor condition.

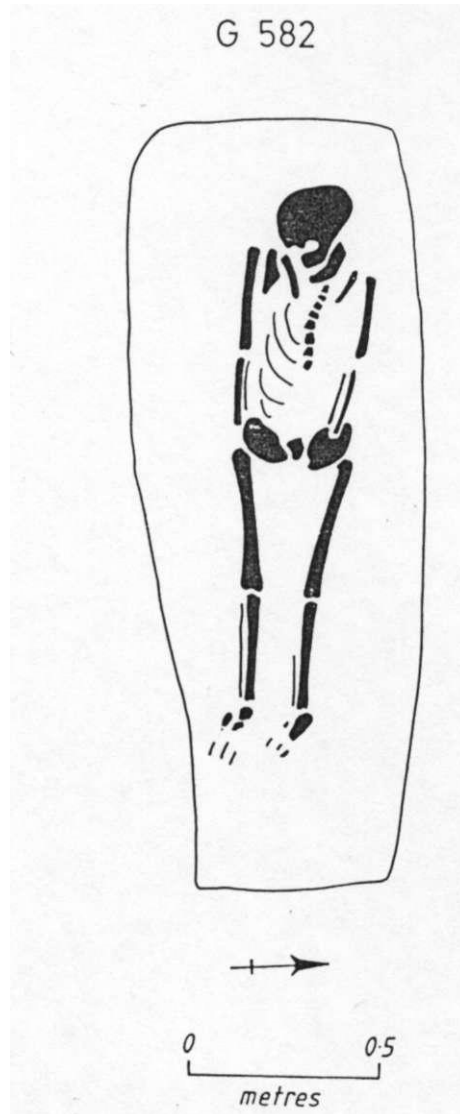


Grave 580 E-W (head to W). Cuts Period 2 G653. Relationship to Period 1 G686 uncertain. Nailed timber coffin (timber stain and nails not planned). Adult, sex uncertain. Skeleton supine. Only skull and some long bones survive, in poor condition.

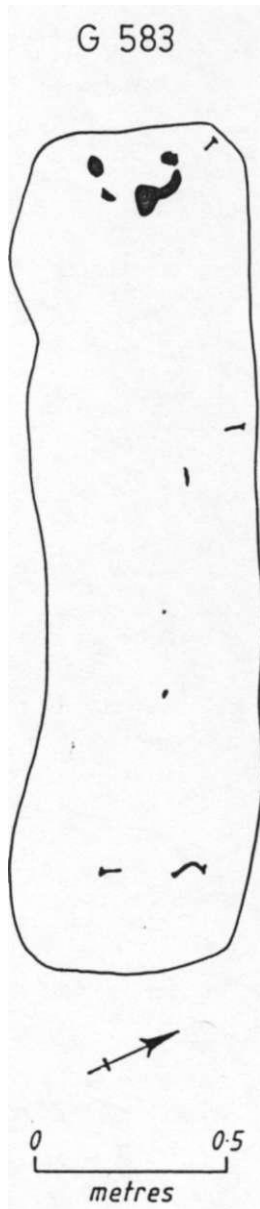


Grave 581 E-W. Cuts Period 2 G577. G598. Grave length 1.7 m. minimum width 0.46 m. No timber stain or nails recovered. Age and sex uncertain. Fragments only of arm bones and skull, the latter not in situ. Grave size indicates adult.

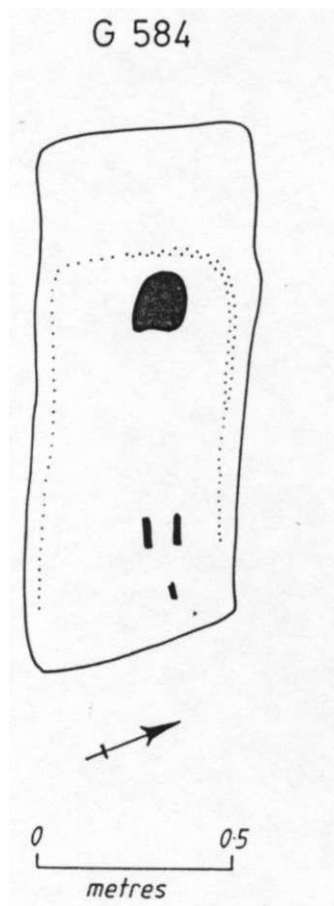
G 582



Grave 582 E-W (head to W). Cuts Period 2 G584. Cut by Period 2 G571. Nailed timber coffin (timber stain not located, nails not plotted). Middle-aged male. Skeleton supine. Bones well-preserved.

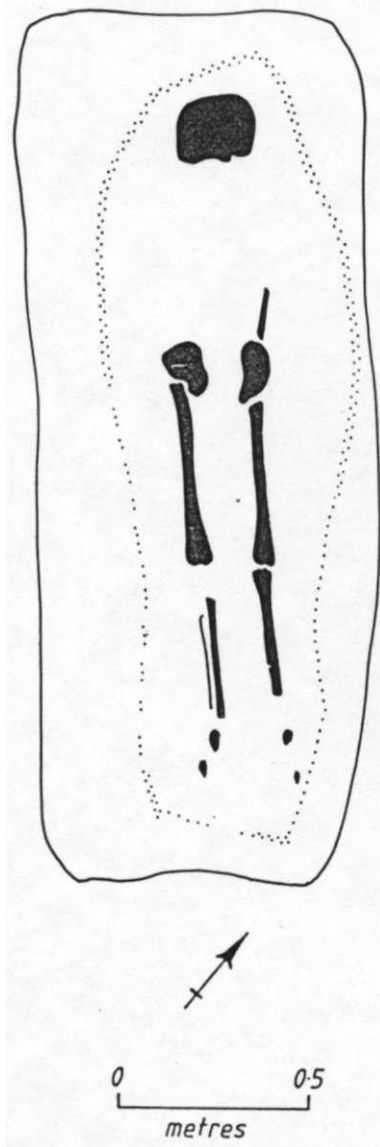


Grave 583 E-W (head to W). Isolated grave. Shallow grave. Nailed timber coffin (timber stain not located). approximately 1.94 m long, 0.4m wide. Skull fragments only remain. Coffin size indicates adult

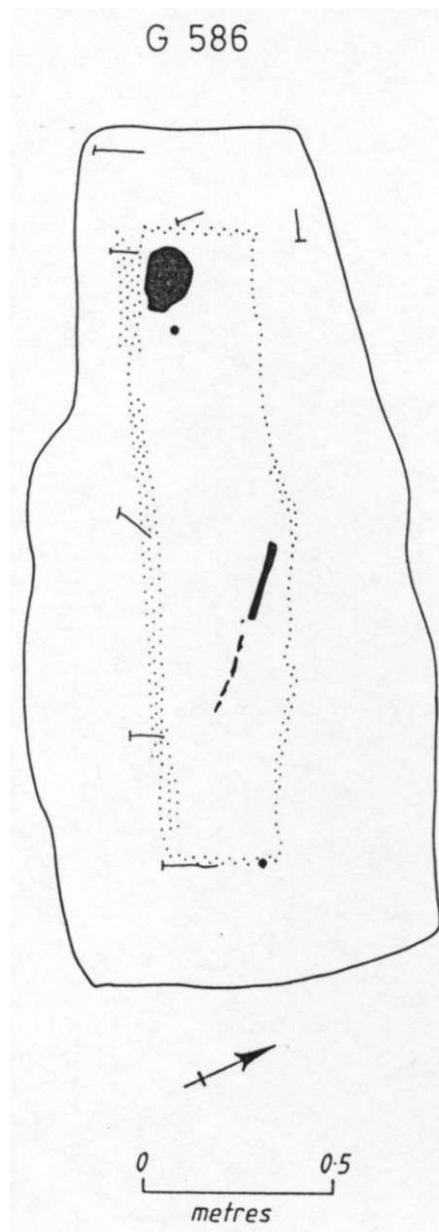


Grave 584 E-W (head to W). Cuts Period 1 G597. Cut by Period 2 G582. Timber coffin (no nails recovered). Fragments of skull and some leg long bones only remained. but did not survive lifting. Skeletal length indicates child.

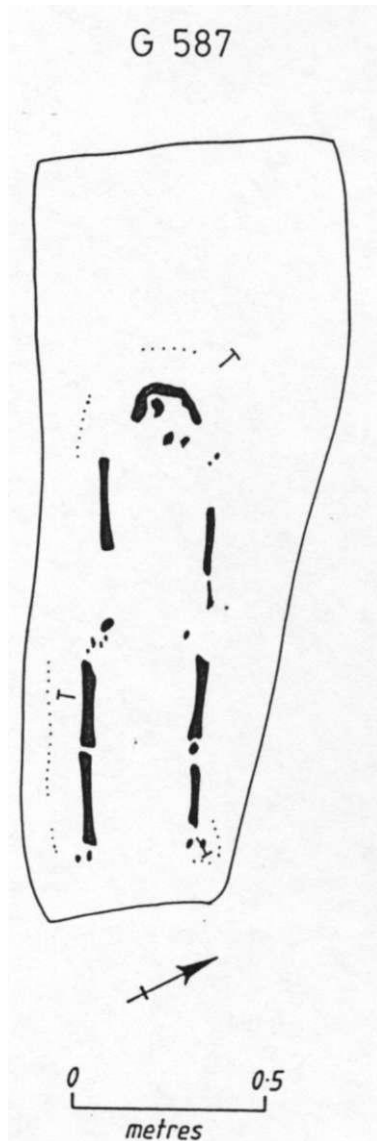
G 585



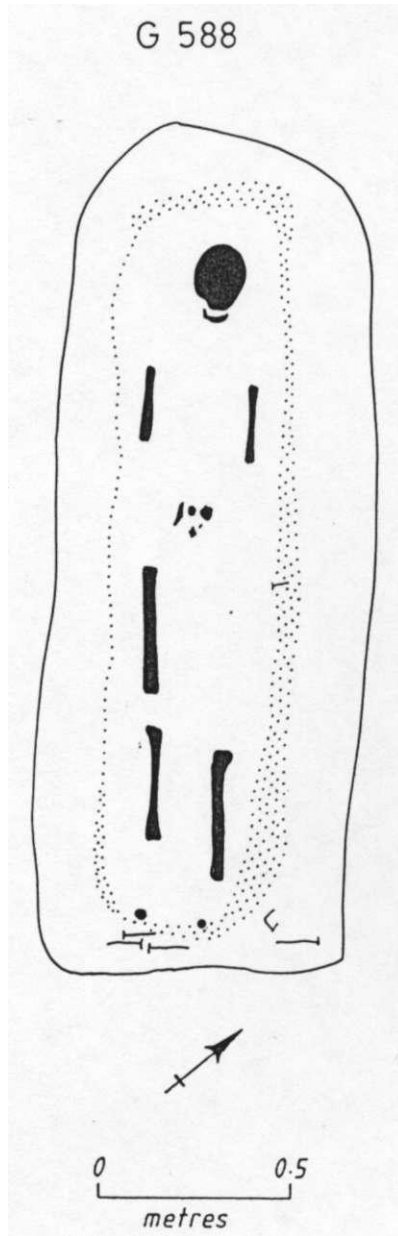
Grave 585 E-W (head to W). Cuts Period 2 G599. G600. Cut by post-medieval pit HF43. Timber coffin (no nails recovered). Young adult. sex uncertain. Skeleton supine. Surviving bones in poor condition. skull damaged.



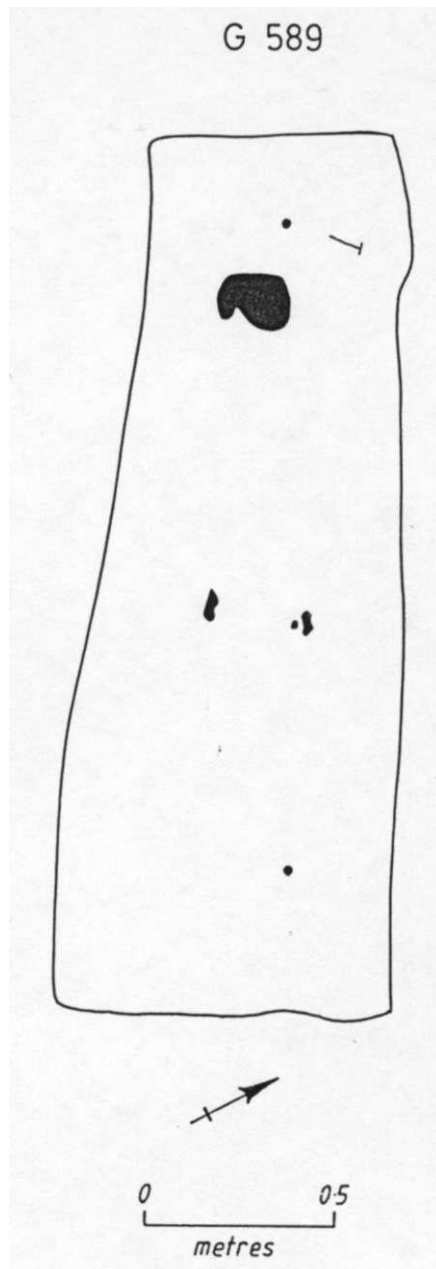
Grave 586 E-W (head to W). Cuts Period 1 G605. Period 2 G595. Cut by Period 2 G568. Relationship to Period 2 G558 uncertain. Nailed timber coffin. Young adult female. Skeleton supine. Skull and left leg bones only survive, all in poor condition.



Grave 587 E-W (head to W). In same grave pit as Period 2 G589. possibly deposited later. Nailed timber coffin. Elderly adult. sex uncertain. Skeleton supine. Skull (damaged) and lone bones only survive. all in poor condition.

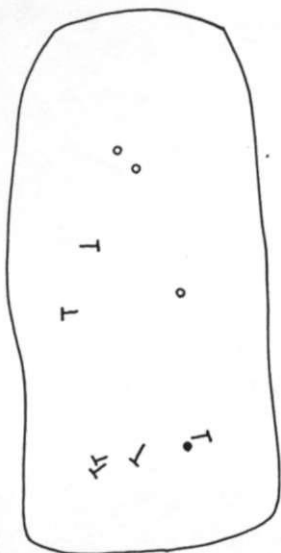


Grave 538 E-W (head to w). cuts Period 1 G601. G605. Isolated grave. Nailed timber coffin. Adult. sex uncertain. Skeleton supine. Surviving bones all in very poor condition.



Grave 589. E-W (head to W). In same grave pit as Period 2 G587. possibly deposited first. Cut by Period 2 G577. modern pit complex HF30. Nailed timber coffin. Adult, sex uncertain. Skull and fragments of long bones only survive, in poor condition.

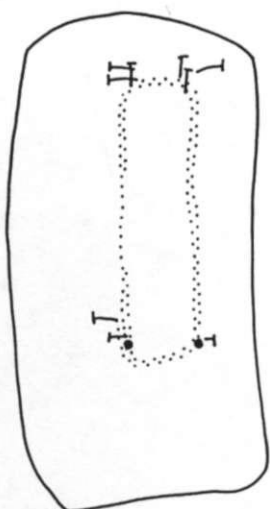
G 590



0 0.5
metres

Grave 590 E-W. Cuts Period 2 G593. Nailed timber coffin, approximately 0.8 by 0.3 m. No skeletal material. Coffin size indicates infant or small child.

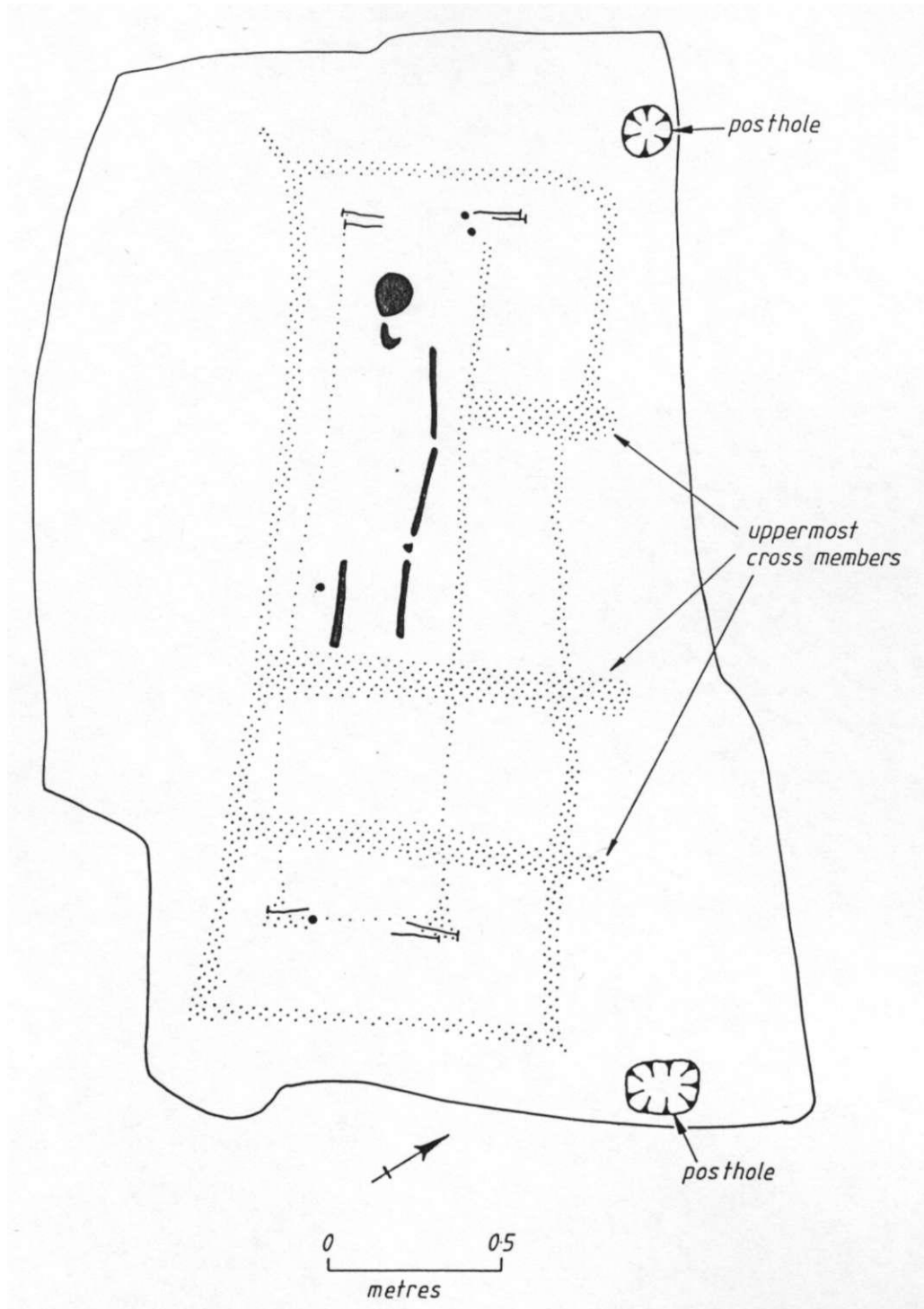
G 591



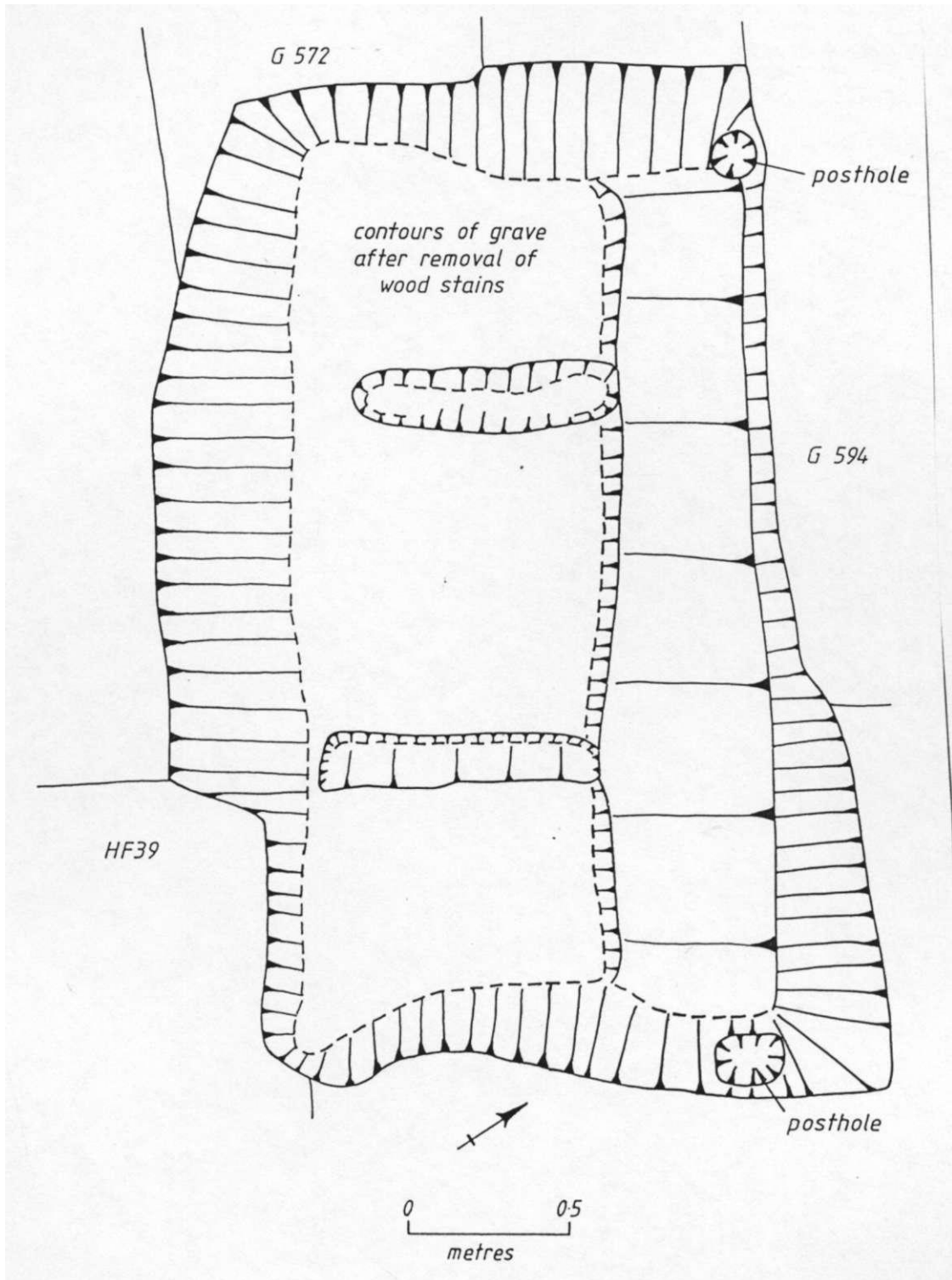
0 0.5
metres

Grave 591 E-W. cut by Period 2 G571. Relationship to Period 2 G307 uncertain. Nailed timber coffin. length 0.74 m. width 0.2 m. No skeletal material. Coffin size indicates infant or small child.

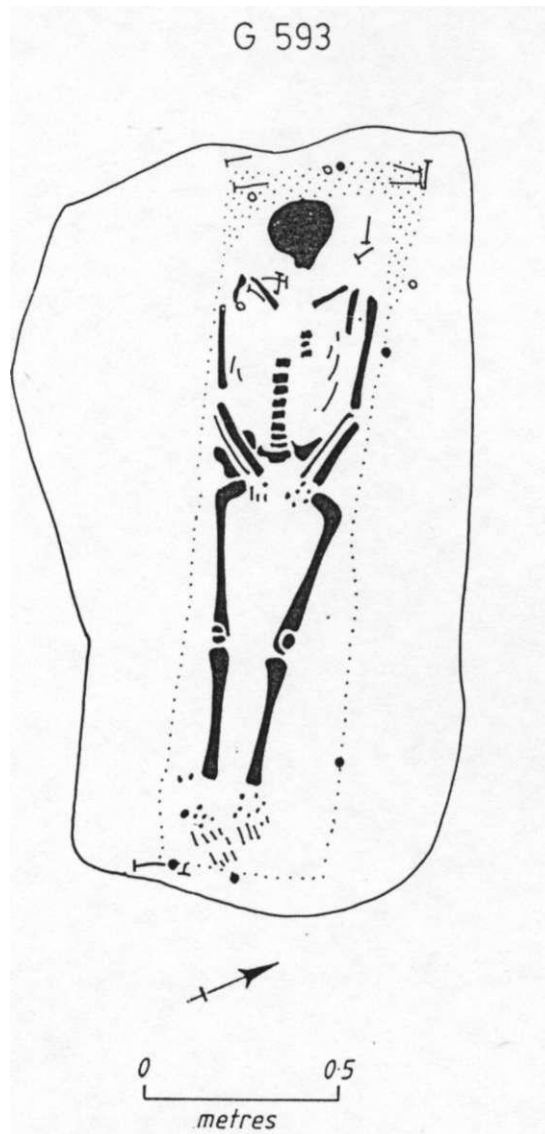
G 592



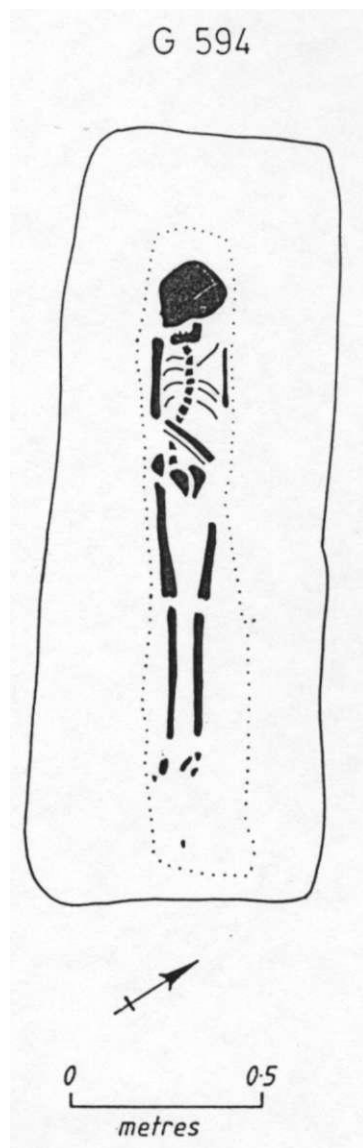
G 592



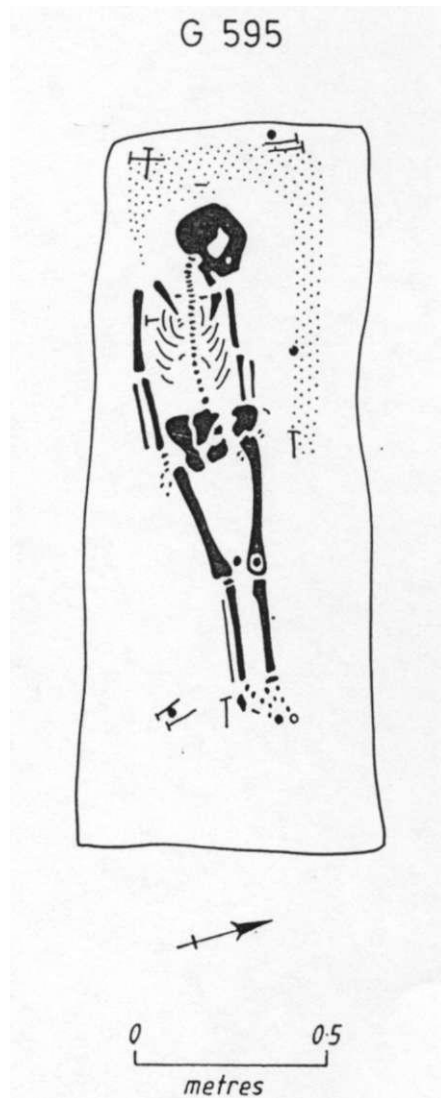
Grave 592 E-W (head to W). Cuts Period 2 G593. Cut by Period 2 G572. modern pit HF39. Relationship to Period 2 G594 uncertain. Narrow timber vault containing single nailed timber coffin. Approximately 0.7 m from grave bottom N side sloped inward to form step on which rested ends of uppermost cross beams. These beams (for vault lid) varied in width from 0.05 to 0.1 m. Two postholes cut into upper part of grave fill in NW and NE corners. Probably represent two of set of three or four grave markers (as postholes within Period 2 HF53. grave pit for G663/667/674). SW and SE corners destroyed by later features. Elderly adult, sex uncertain. Skeleton supine. Surviving bones in very poor condition.



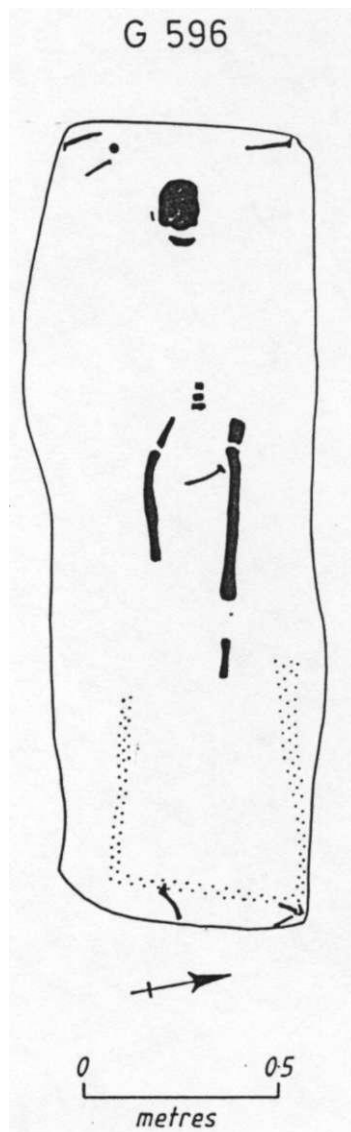
Grave 593 E-W (head to W). Cut by Period 2 G590. G592. Nailed timber coffin. Middle-aged adult, sex uncertain. Skeleton supine. Bones in good condition but skull badly damaged, probably result of collapse of coffin lid.



Grave 594 E-W (head to W). Relationship to Period 2 G592 uncertain. Nailed timber coffin (nails not planned). Middle



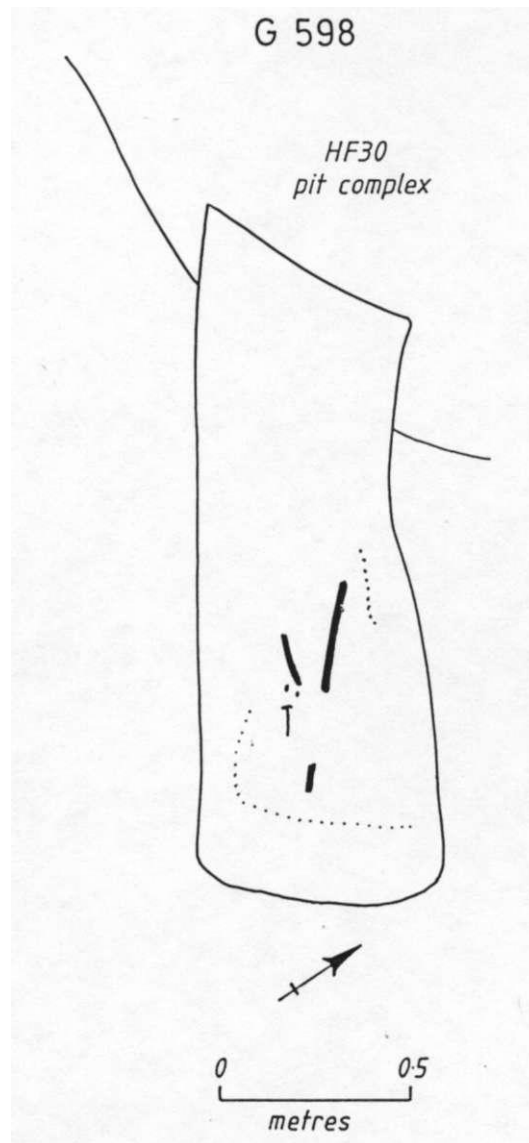
Grave 595 E-W (head to W). Cuts Period 1 G604. Cut by Period 2 G558. G586. Nailed timber coffin. Child. aged 12 to 13 years. Skeleton supine. Bones well preserved.



Grave 596 E-W (head to W). Isolated grave. Cut by modern post-pit HF28. Nailed timber coffin. Elderly adult. sex uncertain. Skeleton supine. Surviving bones in poor condition.

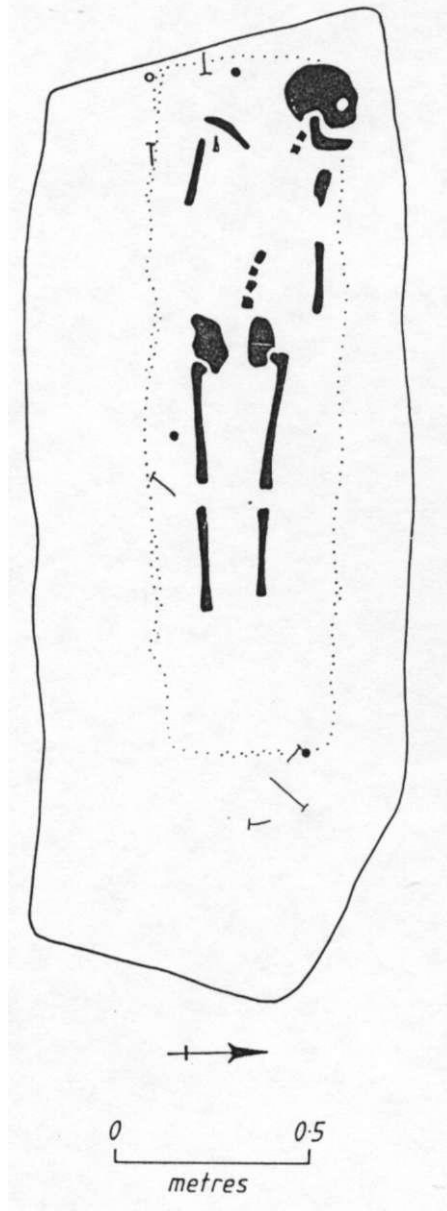


Grave 597 N-S (head to S). Isolated grave. Cut by Period 2 G527. G584. Probably cut by Period 2 G544. No coffin. Middle-aged female. Skeleton supine. upper part turned to W (left). lower to E (right). with left leg bent over right. Surviving bones in fair condition.

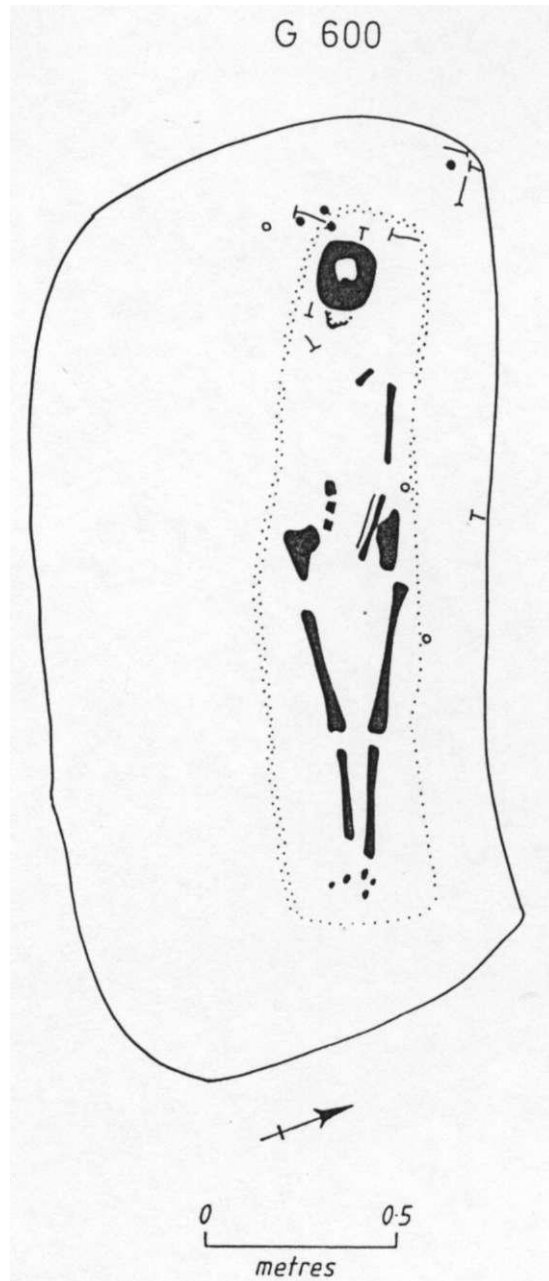


Grave 598 E-W (head to W). Cut by Period 2 G581, modern pit complex HF30. Upper part of grave destroyed by later features. Nailed timber coffin. Age and sex uncertain. Only fragments of some leg long bones survive.

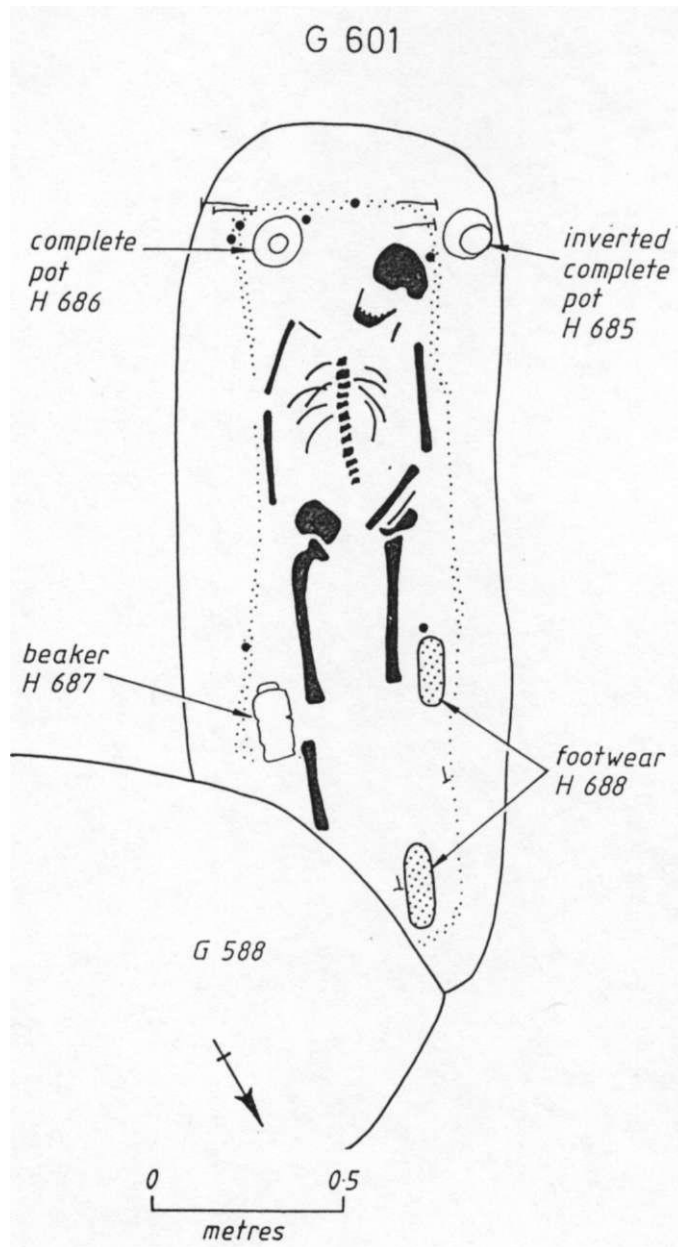
G 599



Grave 599 E-W (head to W). Cut by Period 2 G585. G600. Possibly cut by post-medieval pit HF43. Nailed timber coffin. Young adult female. Skeleton supine. Surviving bones in fair condition.

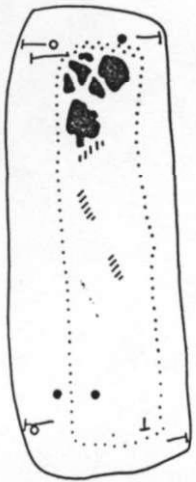


Grave 600 E-W (head to W). Cuts Period 2 G599. Cut by Period 2 G585. Nailed timber coffin. Elderly adult. sex uncertain. Skeleton supine. Surviving bones in fair condition.



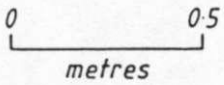
Grave 601 N-S (head to S). Cut by Period 2 G568. G588. Probably cut by Period 2 G511. G516. Nailed timber coffin. Middle-aged adult. sex uncertain. Skeleton supine. Surviving bones in poor condition. Two pottery vessels and remains of hobnailed shoes lay inside coffin: narrow-necked jar of painted Oxford ware upright in SE corner to right of skull; part of Colchester colour-coated ware beaker by right knee: one group of hobnails by left foot. another by left knee. Former group identified by excavator as shoe for left foot. latter that for right foot. Outside coffin, in SW corner of grave, lay inverted a coarse grey ware jar. CAM 268.

G 602

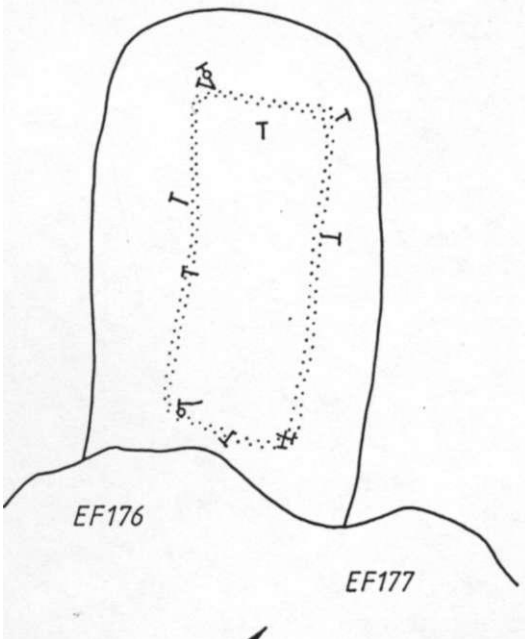


Grave 602 E-W

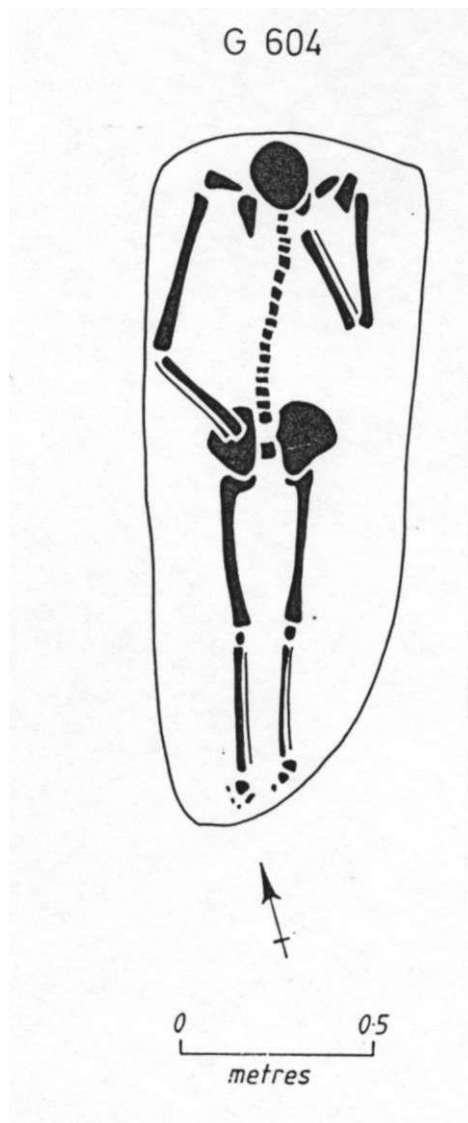
(head to W) . Isolated grave. Nailed timber coffin. One tooth only survives.



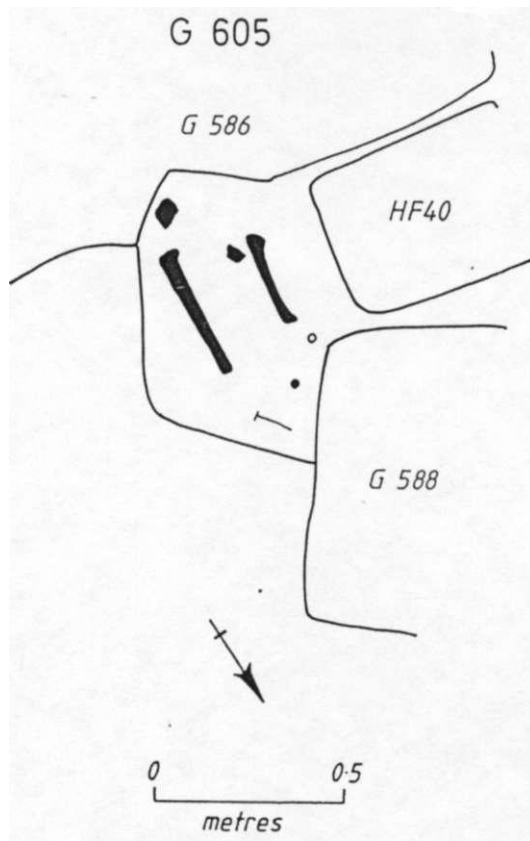
G 603



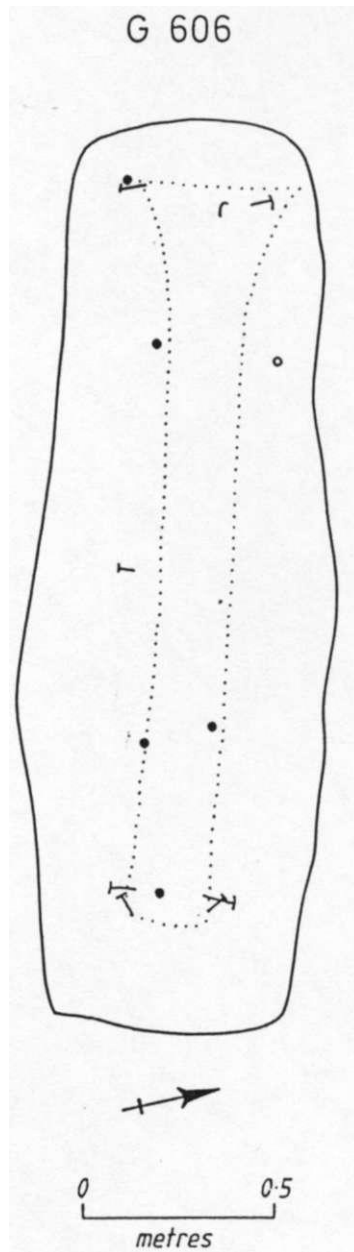
Grave 602 E-w (head to W). Isolated grave. Nailed timber coffin. length 0.86 m. width 0.34 m. One tooth only survives. at W end. Coffin size indicates infant or small child.



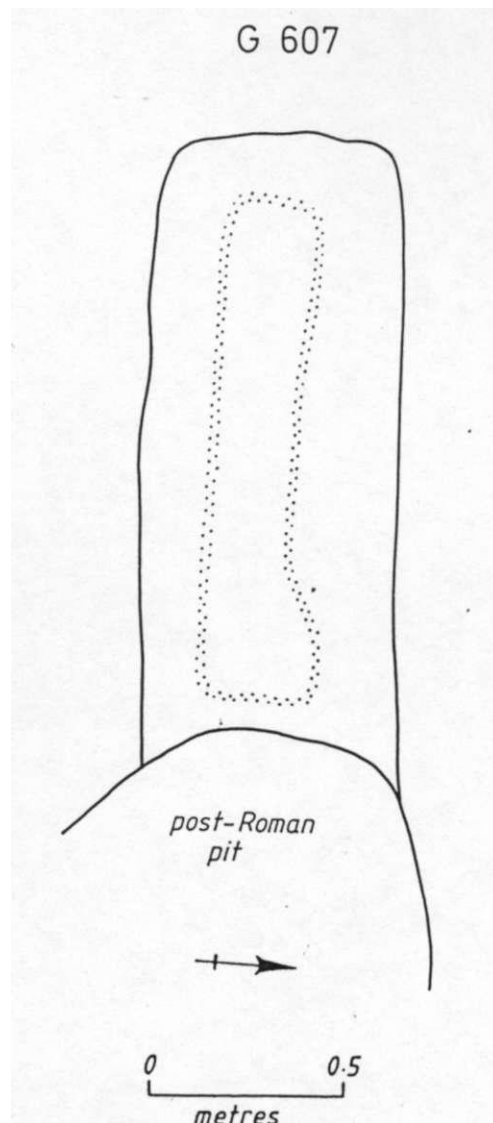
Grave 604 N-S (head to N) . Isolated grave . Cut by Period 2 G5R5 . G558 . G559 . C



Grave 605 N-S (head to S). Cut by Period 2 **G 586**, **G 588**. Nailed timber coffin (no stain located). N and S ends of grave destroyed by later features. Adult, sex uncertain. Only right femur, part of left femur, and part of pelvis remain, in poor condition.

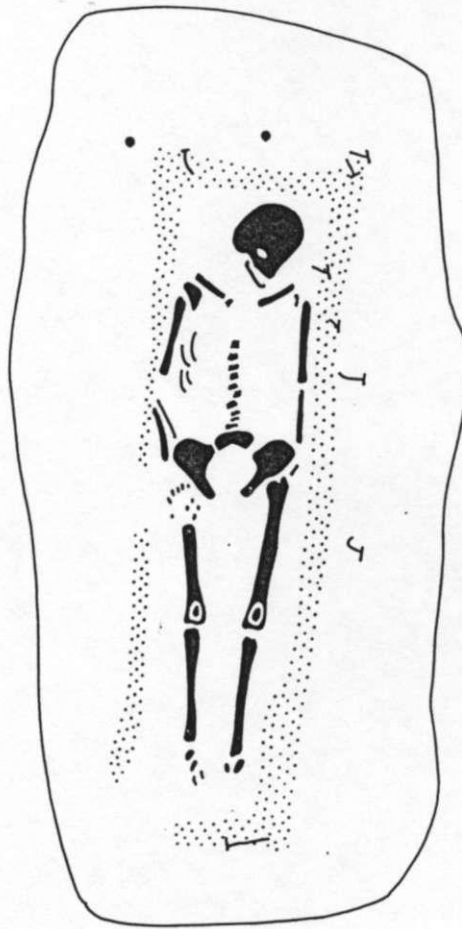


Grave 606 E-W (head to W). Cuts Period 2 G621. Fairly shallow grave. Nailed timber coffin. length 1.96 m. Coffin stain is unusual shape but symmetrical, and may not be result of compression of decaying timbers. No skeletal material. Faint stain in soil marked skull position. Coffin length indicates adult.



Grave 607 E-W (head to W). Cuts Period 2 G613. G621. Fairly shallow grave, disturbed at E end by modern activity. Timber coffin (no nails recovered). length 1.3 m. width about 0.36 m. Two teeth only found at W end. Coffin size indicates child.

G 608

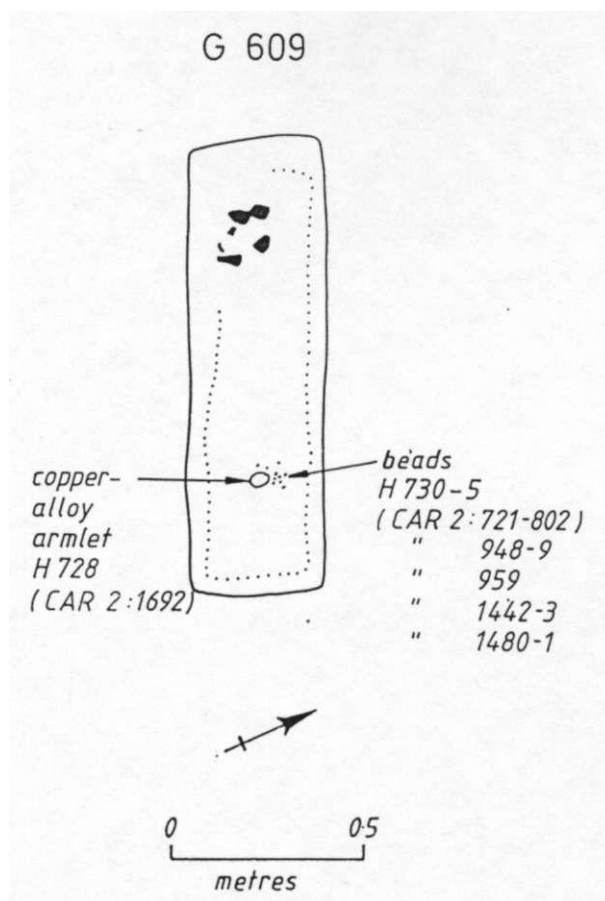


*skull and
left side
of skeleton
stained black*

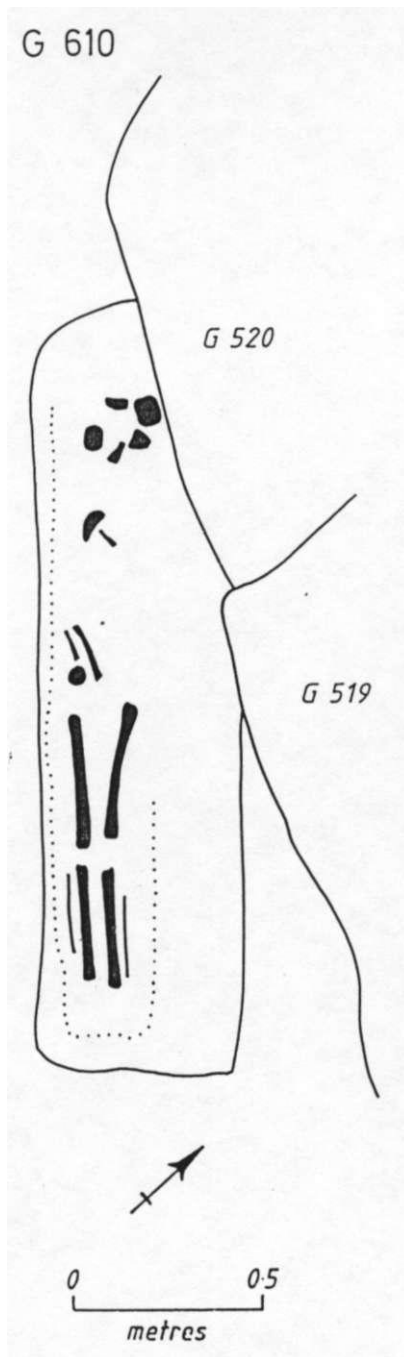


0 0.5
metres

Grave 608 E-W (head to W). Cut by Period 2 G552. G566. Nailed timber coffin, with thick timber stain. Adult female. Skeleton supine. Skull in poor condition. stained black. Leg bones well preserved. other bones in poor condition. Skull in very poor state and. together with bones on left side. stained black.

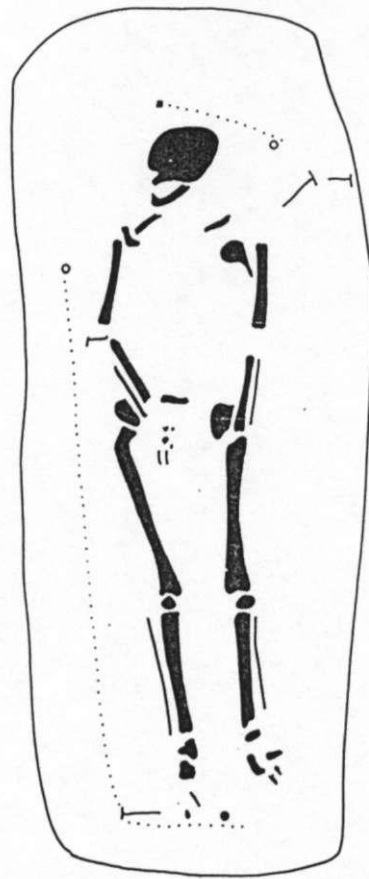


Grave 609 E-W (head to W). Isolated grave. Sealed by Period 2 oven HF27. Nailed timber coffin (nails not planned). Coffin length 1.06 m. width 0.24 m. Only fragments of skull and some teeth survive. Coffin size indicates child. Within coffin. 0.4 m from E end. lay a copper-alloy armband. and an armband/necklace of beads (glass apart from one jet and one amber). Both armbands lay in patch of dark soil.

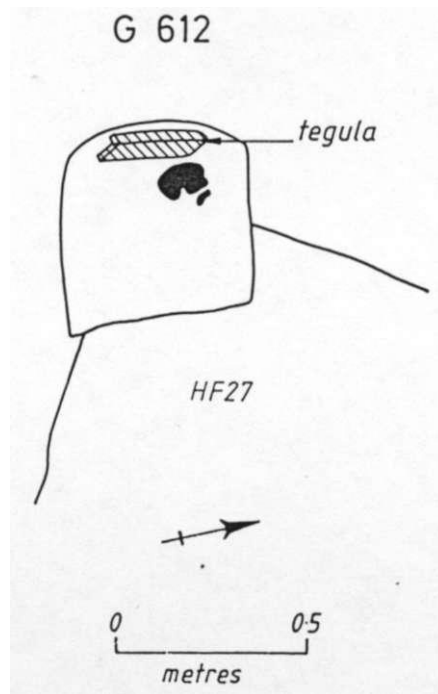


Grave 610 E-W (head to W). Cut by Period 2 G519. G520. Timber coffin (no nails recovered). Child. aged 13 to 14 years. Skeleton supine. Skull fragmented. Other surviving bones in poor condition. Outside coffin at E end lay large lump of septaria and one fragment of tegula.

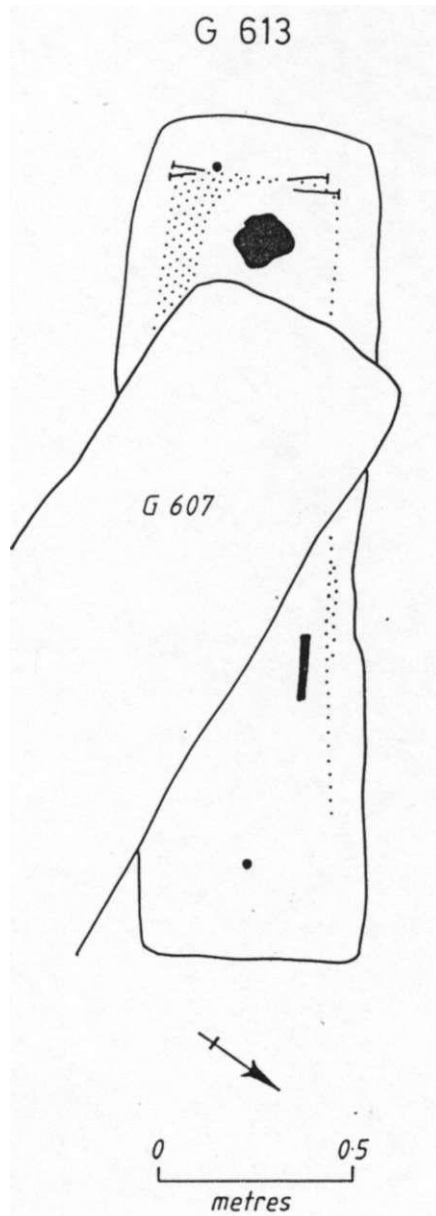
G 611



Grave 611 E-W (head to W). Cuts or overlies Period 1 G651. Cuts Period 2 G622/G623. Cut by Period 2 G495. G639. G643. Nailed timber coffin. Young adult male. Skeleton supine. Surviving bones in good condition.

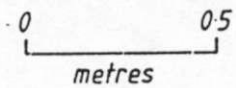
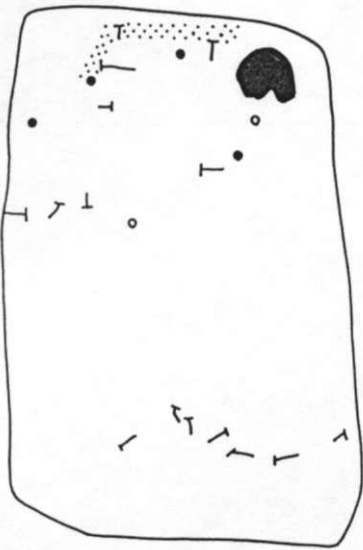


Grave 612 E-W (head to W). Cuts Period 2 G496. Sealed and largely destroyed by Period 2 oven HF27. Probably no coffin. No timber stain or nails recovered. Fragment of tegula set at W end of grave. with skull very close to it. Only fragments of skull and some teeth remain, former in very poor condition.



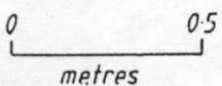
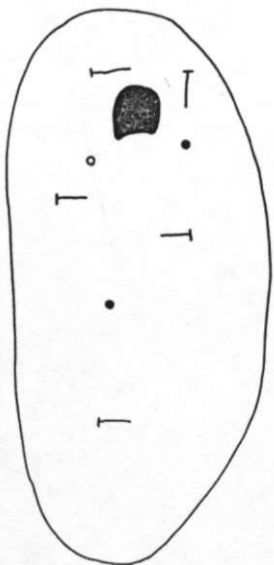
Grave 613 E-W (head to W). Cuts Period 2 G621. Cut by Period 2 G607. G617. Grave well off E-W axis. lying approximately SW-NE with head to SW. but must belong in Period 2 as it cuts Period 2 G621. Fairly shallow grave, central area destroyed by G607. Nailed timber coffin. length approximately 1.8 m, width 0.36 m. Wide timber stain on E side. Age and sex uncertain. Only part of skull and part of left femur survive. in very poor condition. Coffin length indicates adult. Group of hobnails from single shoe lay at NE end (not illustrated). Other shoe probably removed by G607.

G 614

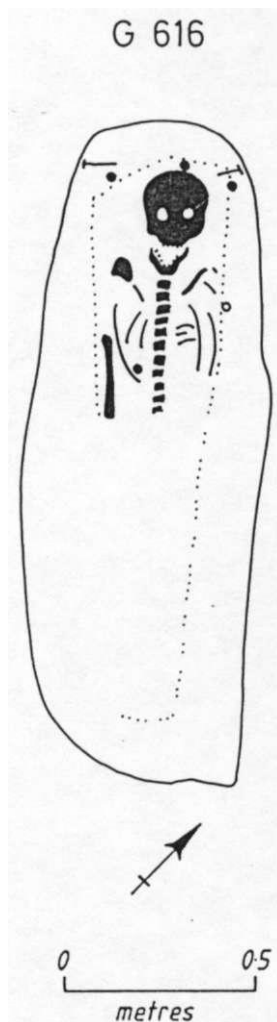


Grave 614 E-W (head to W). Cuts Period 2 G496. Nailed timber coffin. Young adult, sex uncertain. One fragment of skull only remains.

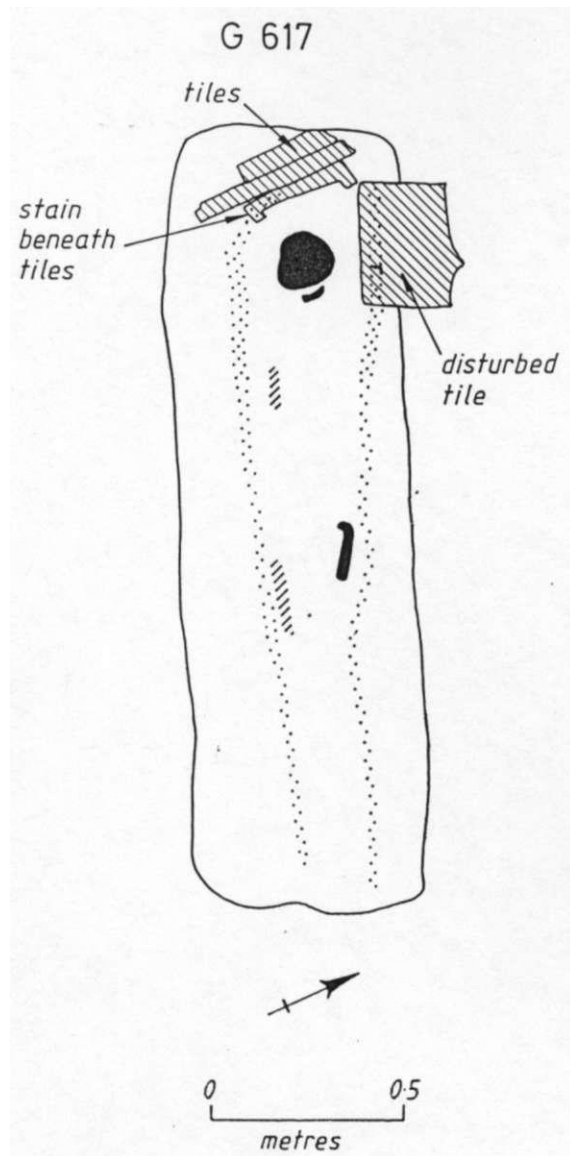
G 615



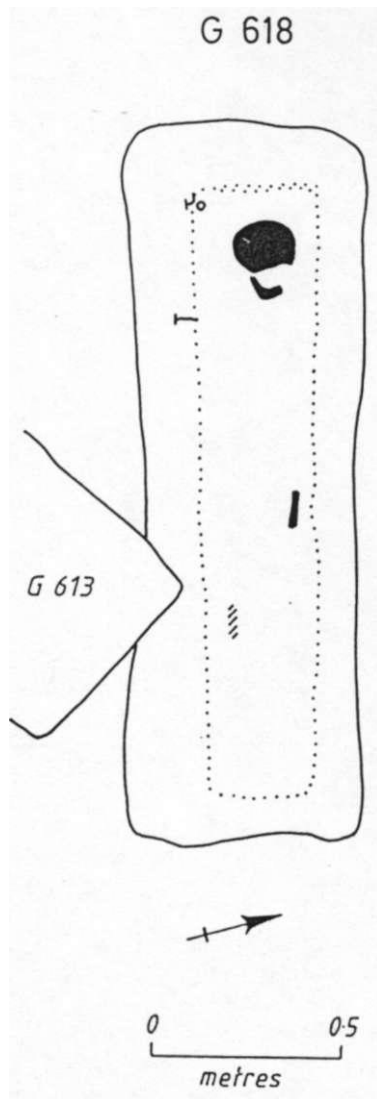
Grave 615 E-W (head to W). Cuts Period 2 G616. Nailed timber coffin (stain not planned), approximately 0.94 m long. 0.26 m wide. Age and sex uncertain. Skull only survives. poorly preserved. Coffin size indicates child.



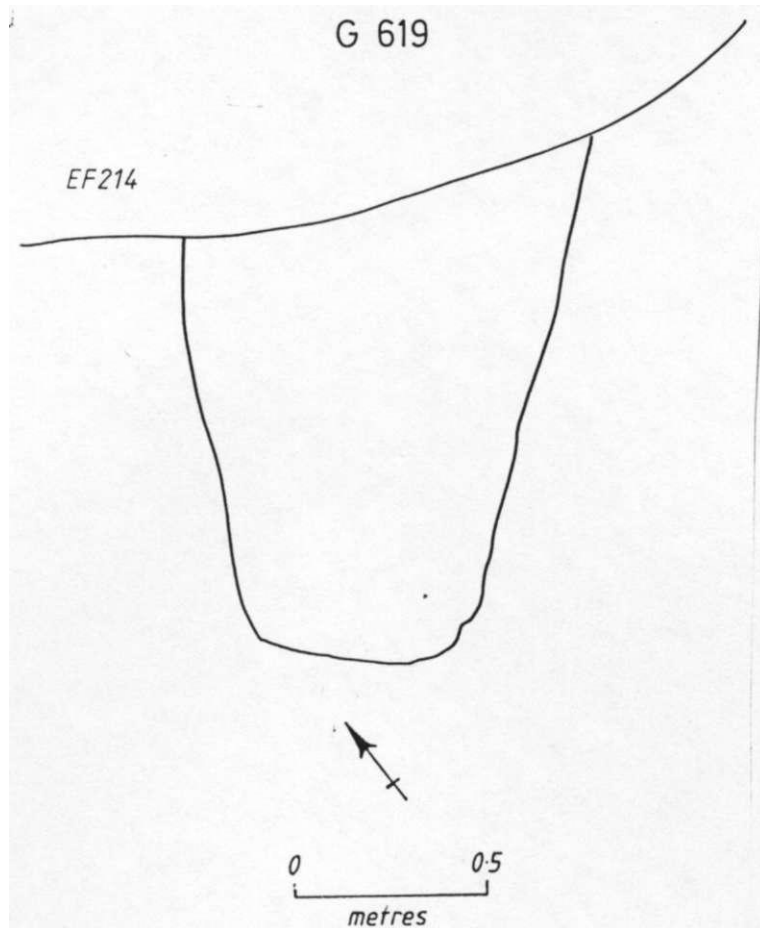
Grave 616 E-W (head to W). Cut by Period 2 G615. Nailed timber coffin. Adult. sex uncertain. Skeleton supine. Lower part of skeleton completely decayed. upper part in poor condition.



Grave 617 E-w (head to W). Cuts Period 2 G613. G618. Nailed timber coffin, length 1.94 m. width at W end 0.32 m. Age and sex uncertain. Part of skull and part of left femur only survive. Coffin length indicates adult. Three tile fragments. one a tegula. placed over coffin stain at W end. Fourth tile fragment lay horizontally (?displaced) over coffin stain at NW corner.

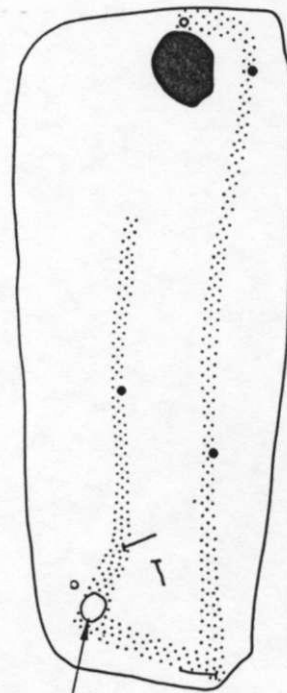


Grave 618 E-W (head to W). Cut by Period 2 G613. G617. Nailed timber coffin. Adolescent. Skull fragmentary, only other surviving bone a fragment of left radius. in very poor condition.



Grave 619 N-S. Isolated grave. Cut and partly destroyed by modern terracing EF214. Faint timber coffin stain on W side (no nails recovered). No skeletal material.

G 620

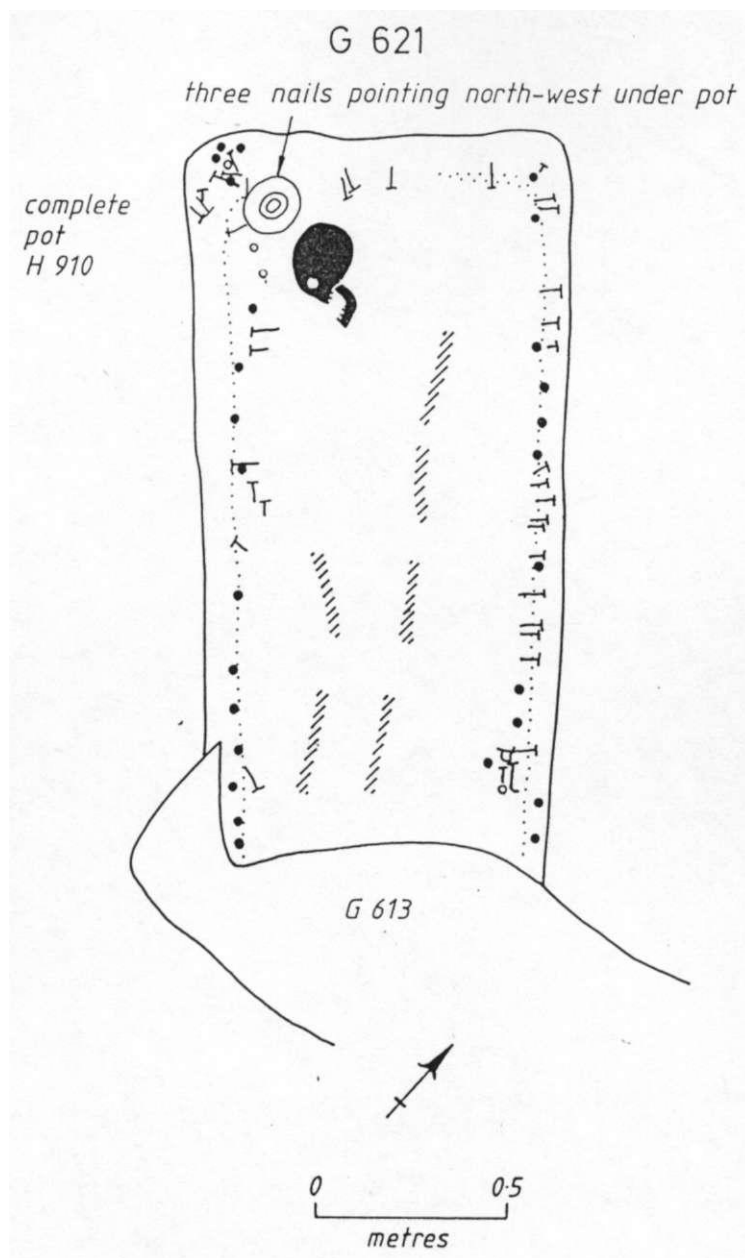


shattered
glass
vessel
H 763



0 0.5
metres

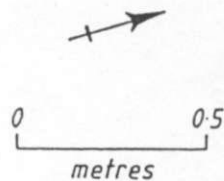
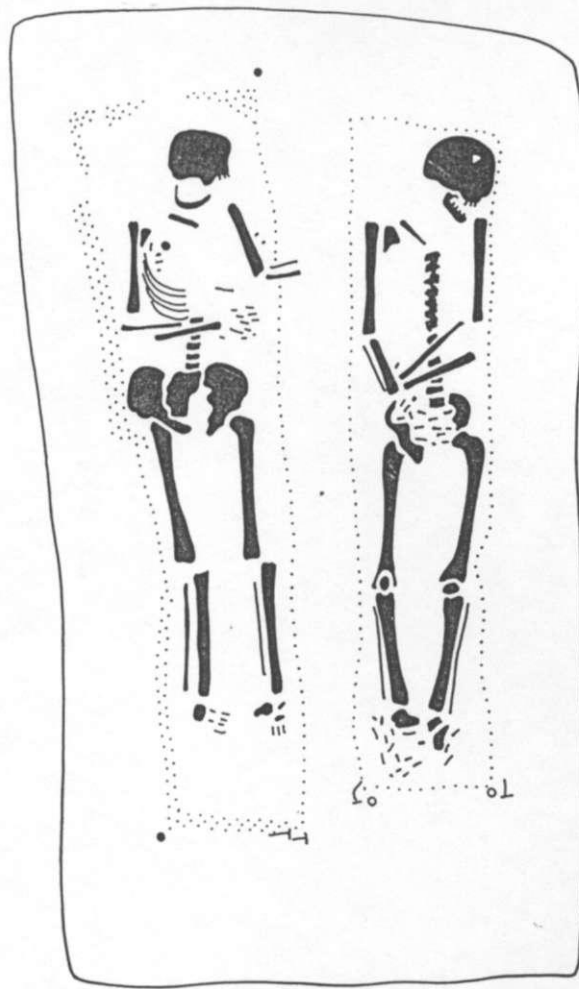
Grave 620 E-W (head to W). Isolated grave. Nailed timber coffin. Adult. sex uncertain. Only skull remains. Shattered glass vessel of unidentifiable form lay inside coffin in SE corner.



Grave 621 E-W (head to W). Possibly cuts Period 1 G624. Cut by Period 2 G606. G607. G613. Very wide nailed timber coffin, approximately 1.8 m long. 0.8 m wide. with very many nails along surviving three sides (E end missing. destroyed by G613). Stain on sides of coffin unusual red colour, lid and bottom stains more usual dark yellowish brown. Adult, sex uncertain. Skeleton supine. Surviving bones in very poor condition. Small narrow-mouthed jar of coarse grey ware in SW corner of coffin.

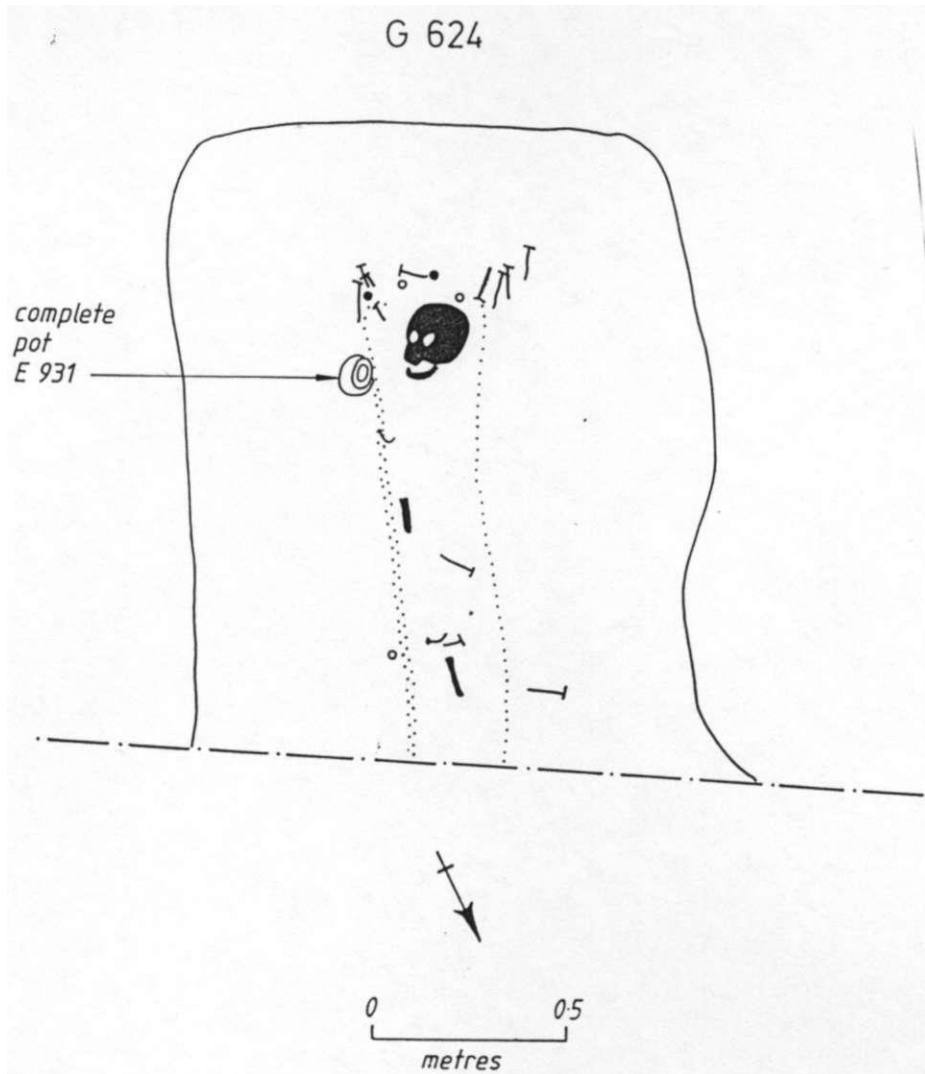
G 623

G 622

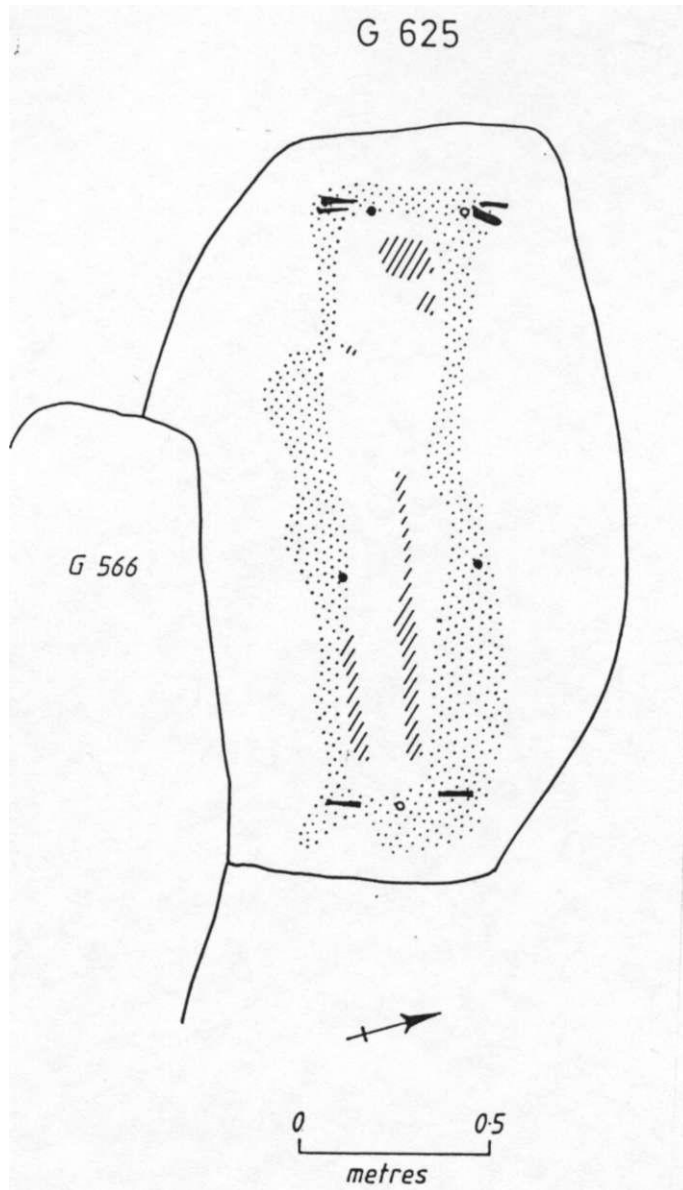


Grave 622 E-W (head to W). Possibly cuts Period 1 G651. Cut by Period 2 G495. G611. Sealed by Period 2 oven HF27. Buried in same grave pit as G623 at one interment. G622 is N coffin. Nailed timber coffin, with pale brown timber stain. in contrast to black timber stain of G623. Middle-aged male. Skeleton supine. Bones in fair condition.

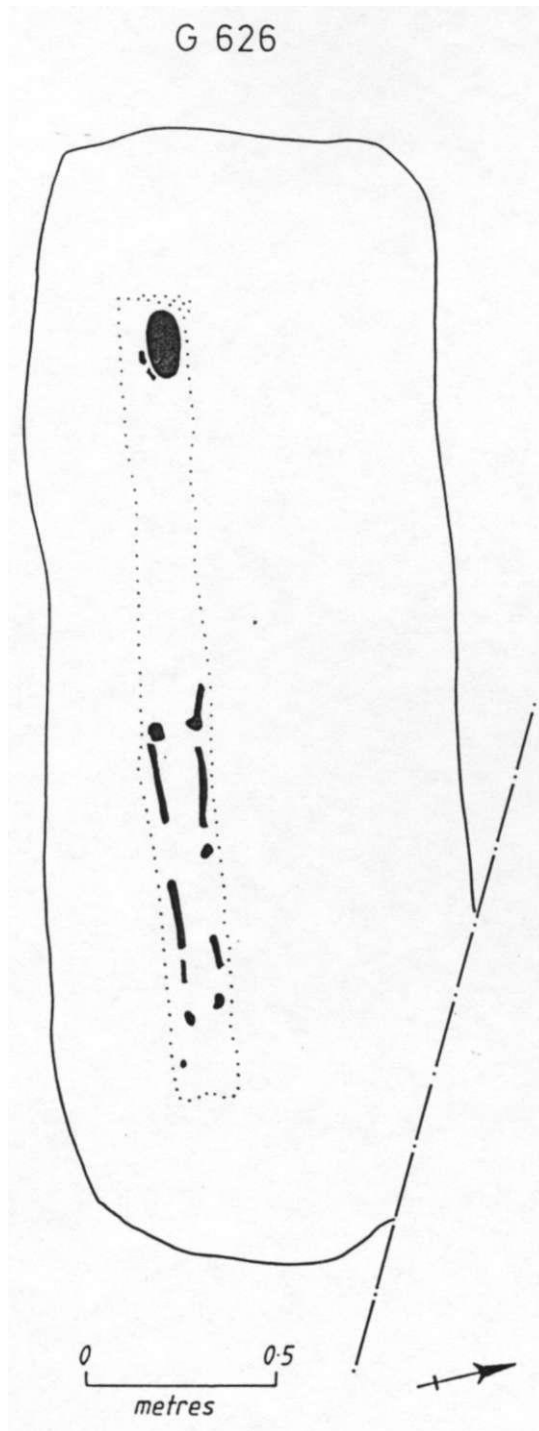
Grave 623 E-W (head to W). Possibly cuts Period 1 G651. Cut by Period 2 G495. G611. Sealed by Period 2 oven HF27. Buried In the same grave pit as G622 at one interment. G623 is S coffin. Nailed timber coffin, with black timber stain in contrast to pale brown timber stain of G622. Middle-aged female. Skeleton supine. Bones in fair condition.



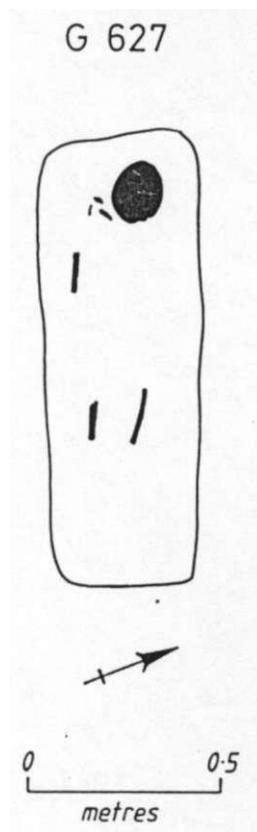
Grave 624 N-S (head to S). Cut by Period 2 G626. Possibly cut by Period 2 G621. Very shallow grave. N part unexcavated. rest badly disturbed by tree roots. Nailed timber coffin. Aged 18 to 20 years. sex uncertain. Skeleton supine. Only skull and fragments of right leg bones survive. former crushed and in poor condition. Outside coffin, on E side close to S end. lay a small coarse crey ware jar. a miniature form of CAM 268.



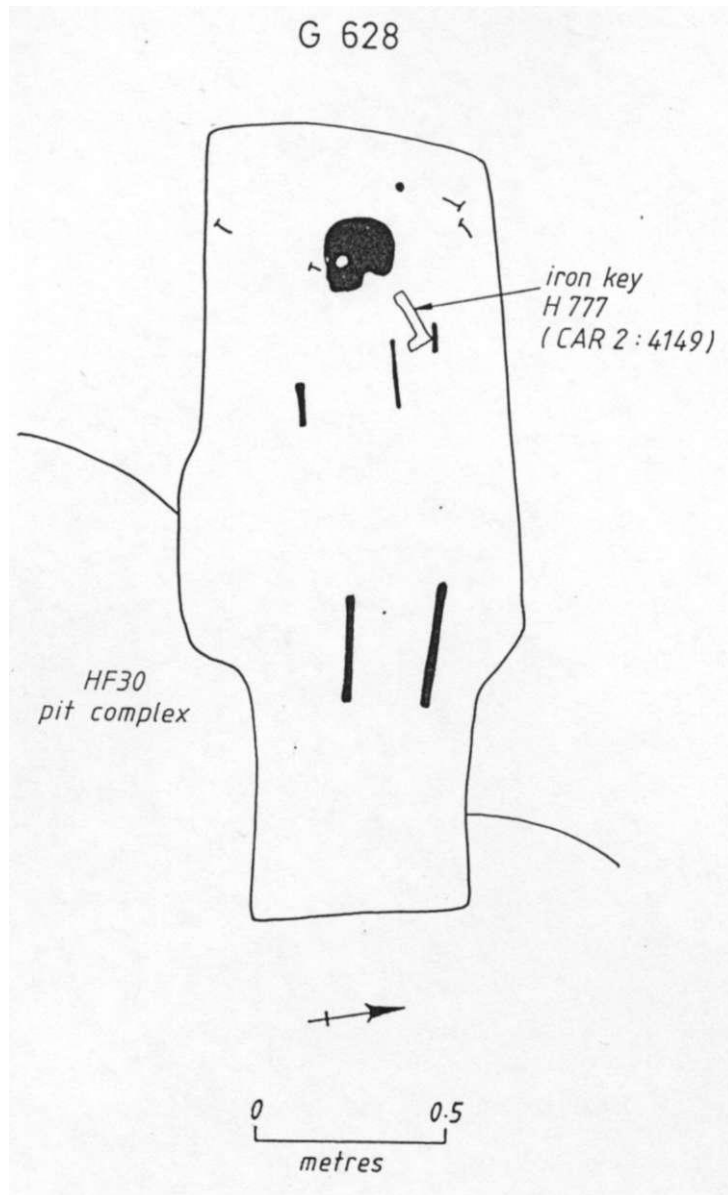
Grave 625 E-W (head to W). Cut by Period 2 G566. Nailed timber coffin (very wide timber stain). No skeletal material. but stains in soil indicate skull at w end.



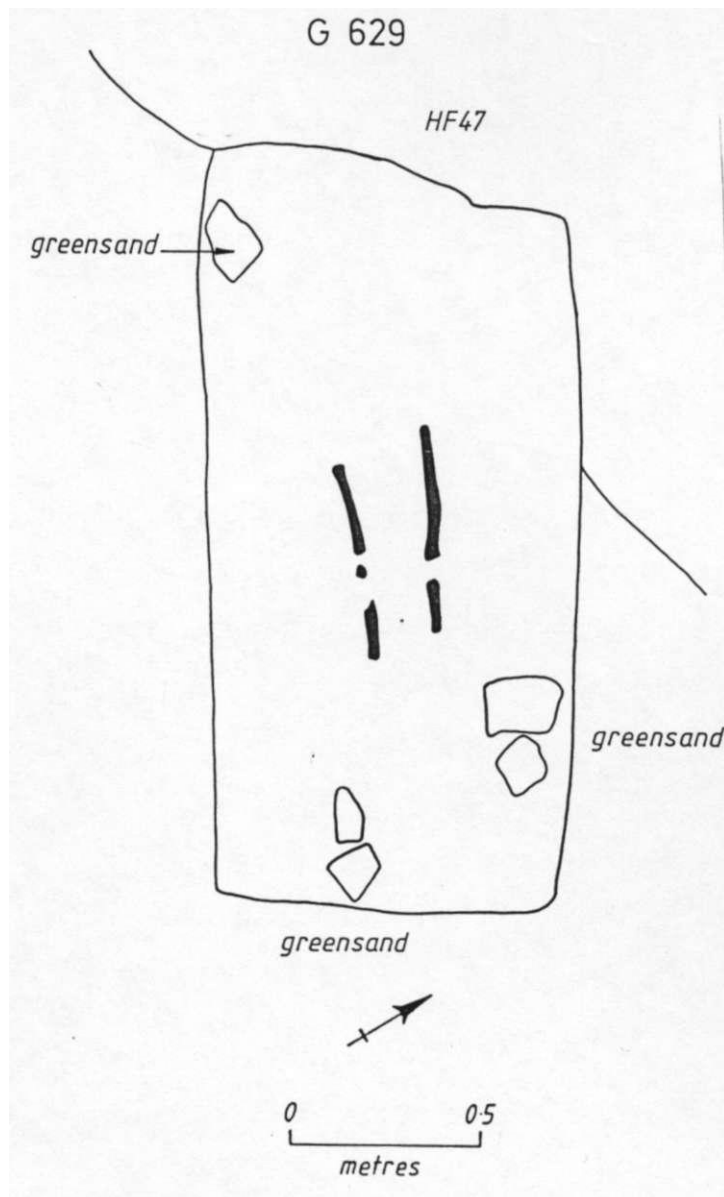
Grave 626 E-W (head to W). Cuts Period 1 G624. G633. Isolated grave. Timber coffin, no nails recovered. Adult. sex uncertain. Skeleton supine. Only skull and some fragments of lone bones survive. Bones in poor condition.



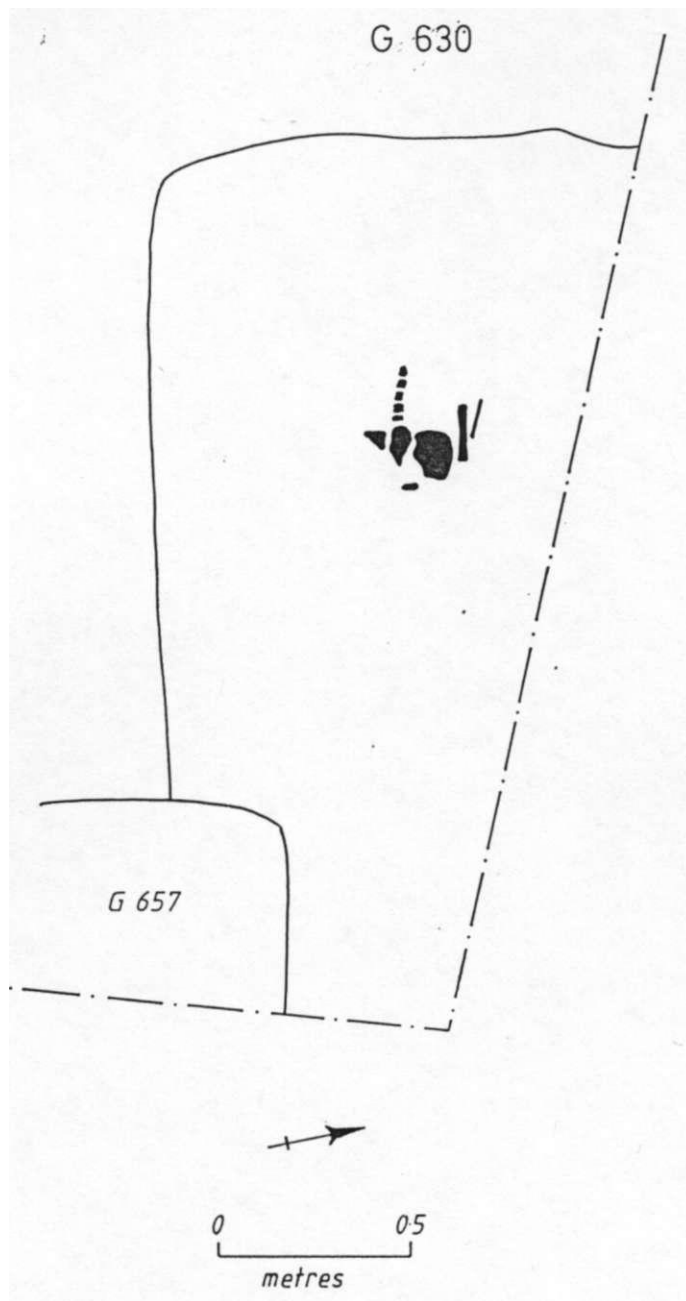
Grave 627 E-W (head to W). Relationship to G631 uncertain. Nailed timber coffin (timber stain not planned). Child, aged 7 to 8 years. Skeleton supine. Surviving bones very badly preserved.



Grave 628 E-W (head to W). Cuts Period 2 G637. Cut by modern pit complex HF30. Nailed timber coffin (timber stain not planned). Adult male. Skeleton supine. Surviving bone in very bad condition. Iron key lay across left clavicle and ribs.

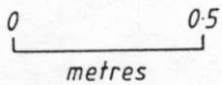


Grave 629 E-W (head to W). Cuts Period 1 G634. Isolated grave. Cut and partly destroyed by modern ditch HF47. Probably no coffin (no coffin stain or nails located). Blocks of greensand lay at three corners of grave. one at SW. two at SE. two at NE. NW corner. cut by HF47. may have contained similar stone(s). Adult. sex uncertain. Leg bones only survive, poorly preserved.



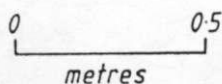
Grave 630 E-W (head to W). Cuts Period 2 G673. Cut by Period 2 G657. modern sand pit HF50. Very deep grave, disturbed by vandals. No timber stain or nails located. Adult, sex uncertain. Skull, mandible, and part of right scapula only lifted. Some ot

G 631

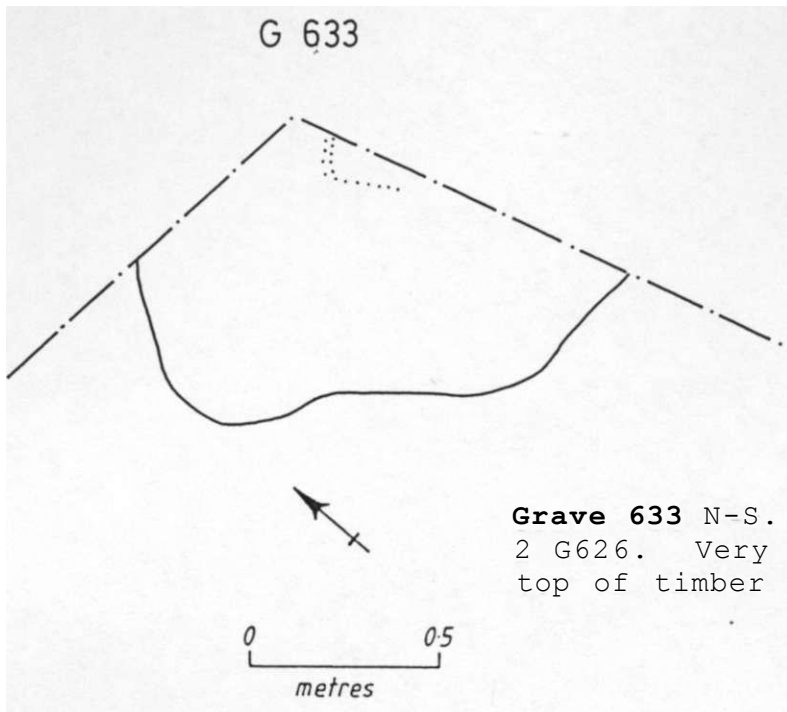


Grave 631 E-W (head to W). Overlies Period 1 G651. Period 2 G639. G643. Cut by post-Roman features HF44/HF45. Relationship to G627 uncertain. Nailed timber coffin (timber stain not located). Child, aged 10 to 11 years. Skeleton supine. Bones well preserved.

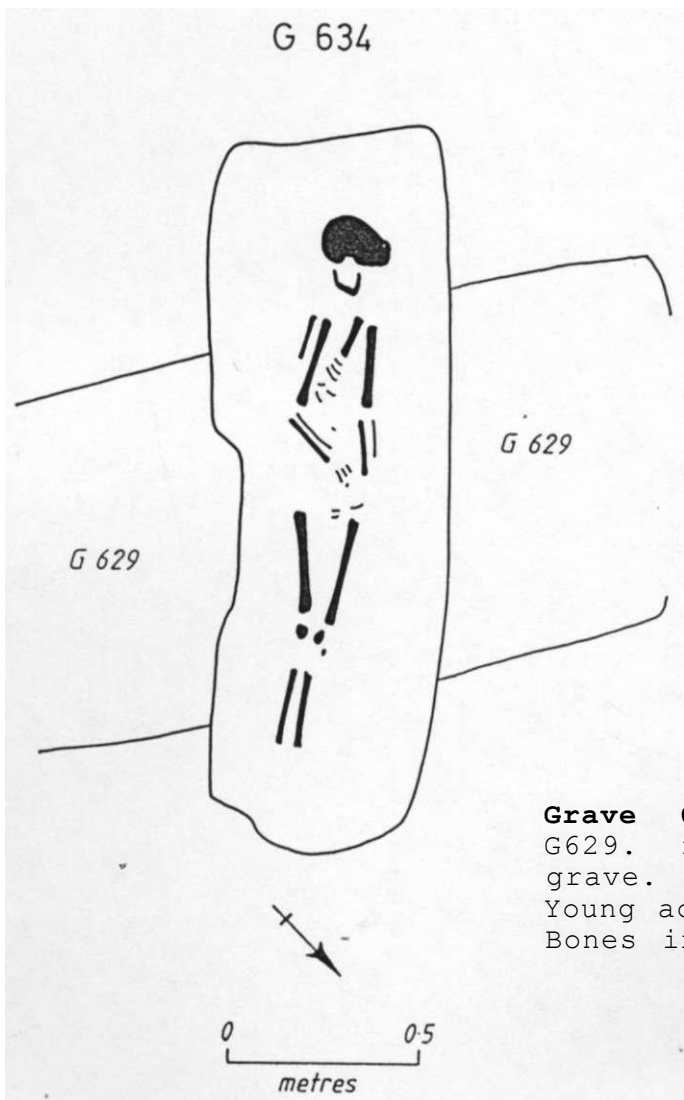
G 632



Grave 632 E-W (head to W). Relationship to Period 2 G640 uncertain. Very shallow grave. Nailed timber coffin (no timber stain located). Child, aged 6 to 7 years. Bones in fair condition.



Grave 633 N-S. Isolated grave. Cut by Period 2 G626. Very deep grave. excavated only to top of timber coffin.



Grave 634 N-S (head to S). Cut by Period 2 G629. modern ditch HF47. Poorly-preserved grave. No nails or timber stain located. Young adult. sex uncertain. Skeleton supine. Bones in fair condition.

G 635



HF30
pit complex



Grave 635 E-W (head to W). Cuts Period 2 G646. G648. Seals Period 2 G645. Cut and E end removed by modern pit complex HF30. Nailed timber coffin (timber stain not located). Elderly male. Skeleton supine. Surviving bones in good condition.

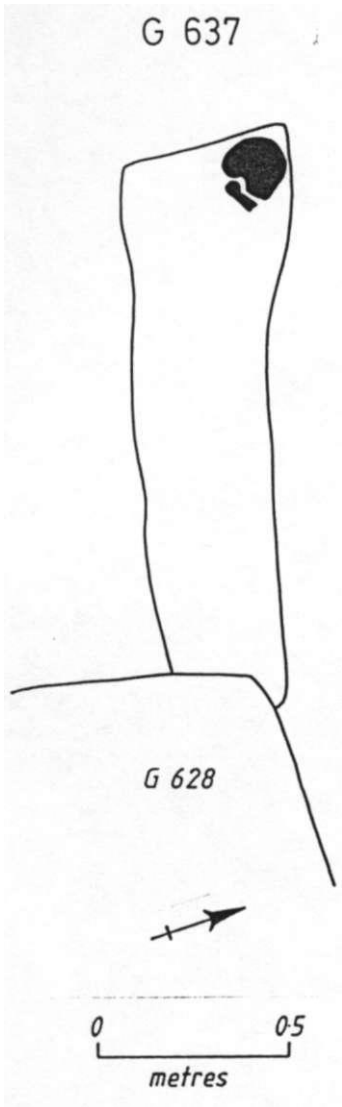
G 636



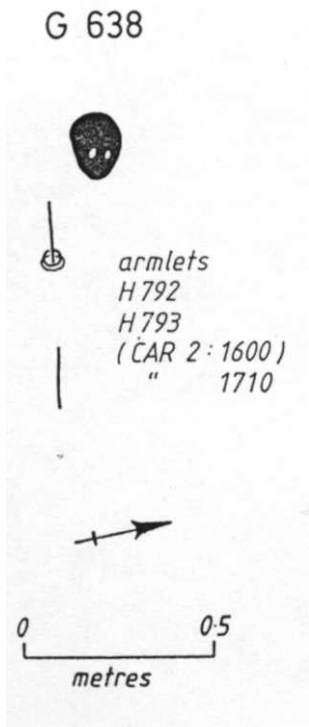
G 646



Grave 636 E-W. Cut and largely destroyed by Period 2 G646. Timber coffin (timber stain not planned. no nails located). No skeletal material.

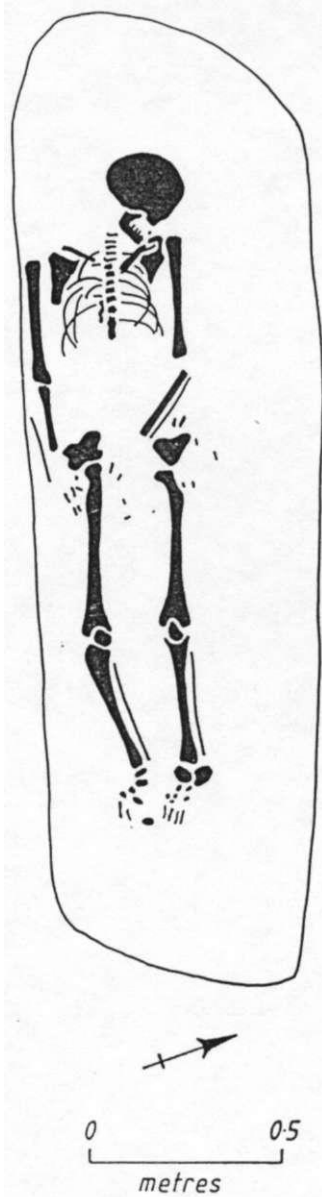


Grave 637 E-W (head to W). Cut by Period 2 G628. post-Roman pit HF49. No timber stain or nails recovered. Older child. Skull only survives.

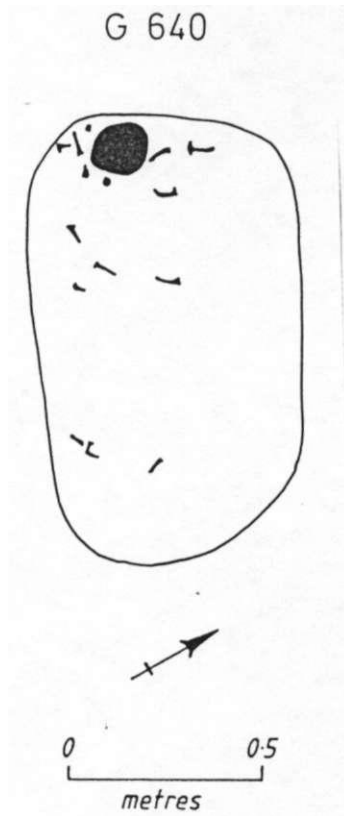


Grave 638 E-w (head to W). Probably seals Period 2 G649. Sealed by Period 2 oven HF27. Cut by post-Roman pit HF46. Very shallow grave with no clear edges. Nailed timber coffin (not planned). Child. aged 13 to 14 years. Skeleton supine. Surviving bones in very poor condition. Two copper-alloy armlets on right arm.

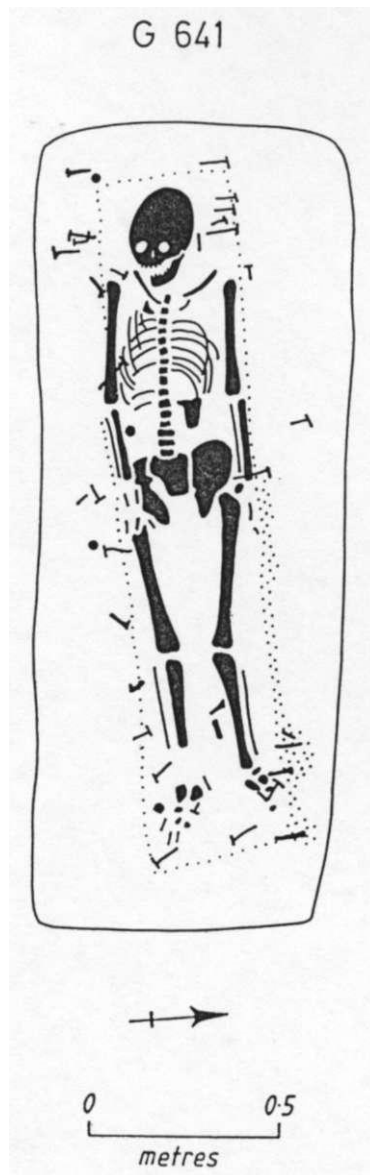
G 639



Grave 639 E-W (head to W). Cuts Period 2 G611. Directly overlies Period 2 G643. Overlain by Period 2 G631. Probably nailed timber coffin (timber stain not planned, nails not illustrated as mingled with those of G643). Young adult male. Skeleton supine. Surviving bones in good condition. Hand bones mingled with those of G643 and

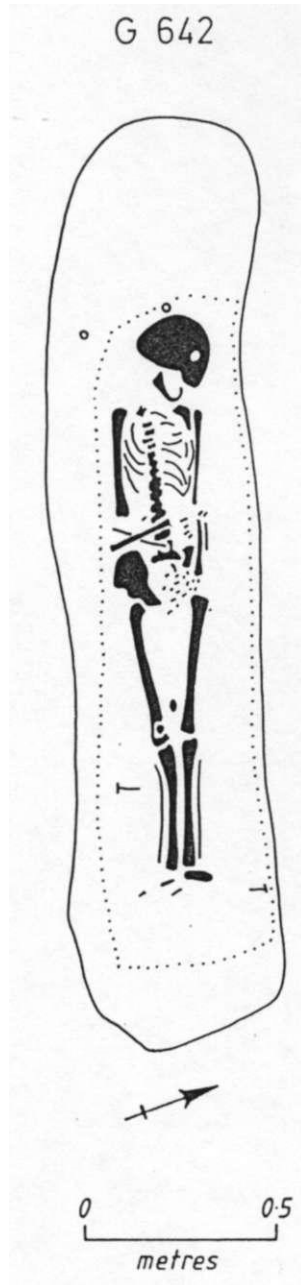


Grave 640 E-W (head to W). Relationship to Period 2 G632 uncertain. Nailed timber coffin (timber stain not located). Child, aged 3 to 6 years. Skull only survives. in poor condition.

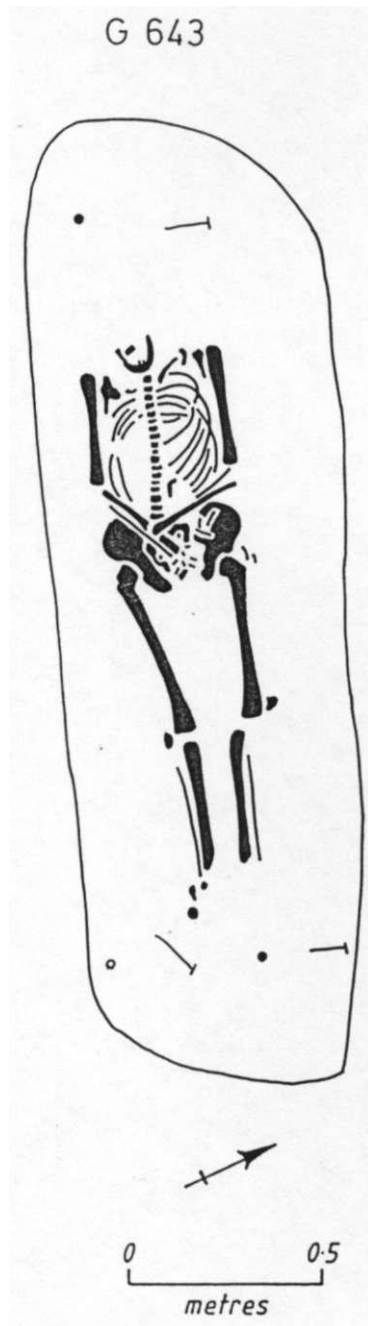


Grave 641 E-W (head to w). Cuts Period 2 G652. Sealed by Period 2 oven HF27. Cut by post-Roman pit HF&9. Nailed timber coffin. Young adult male. Skeleton supine. Bones in fair condition.

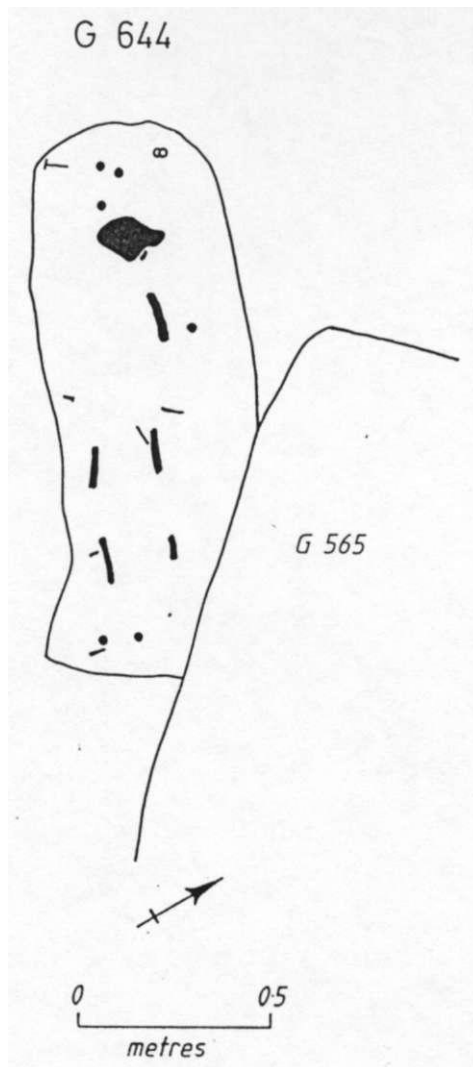
G 642



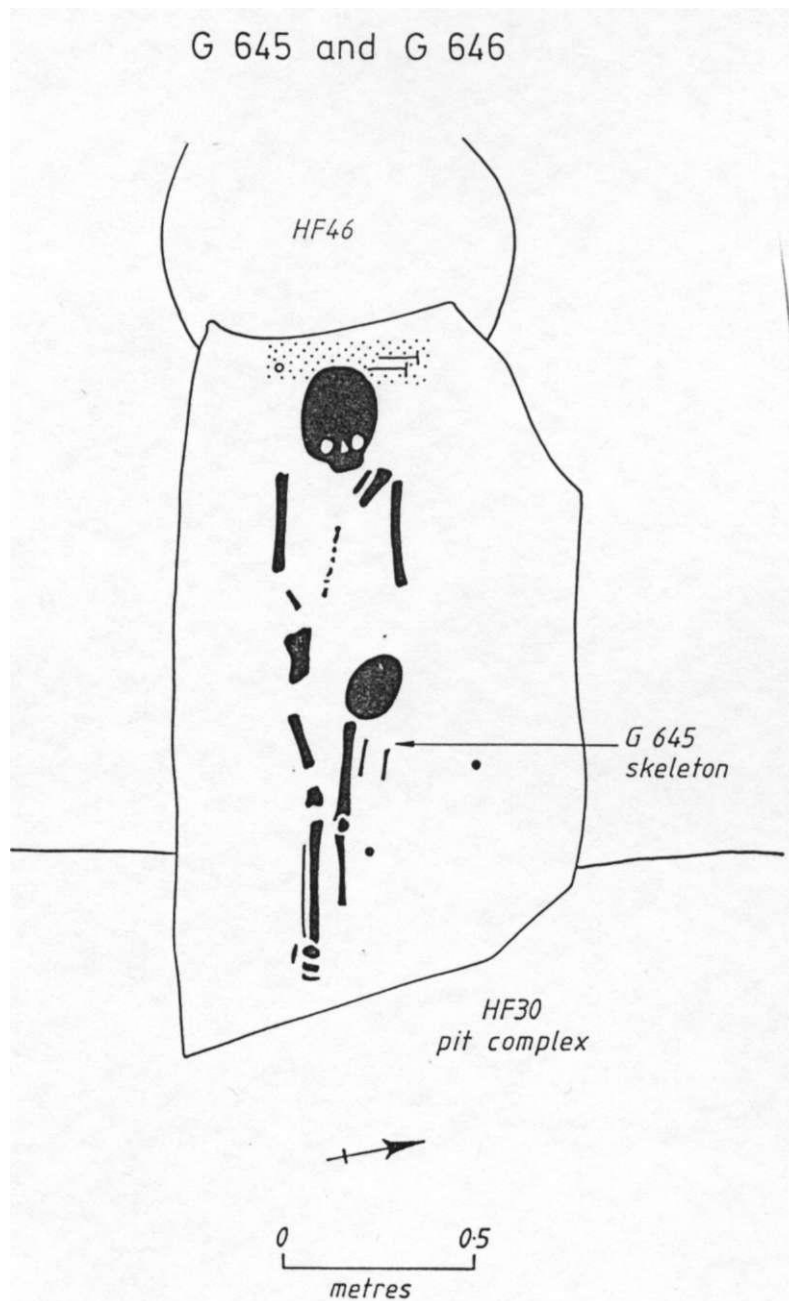
Grave 642 E-W (head to W). isolated grave. Nailed timber coffin (timber stain not located). Child. aged 13 to 14 years. Skeleton supine. Bones in good condition.



Grave 643 E-W (head to W). Cuts Period 1 G651. Period 2 G611. Directly overlain by Period 2 G639. and overlain by Period 2 G631. Nailed timber coffin (timber stain not located. nails mingled with those of G643). Elderly male. Skeleton supine. Bones in good condition, but skull missing. probably removed on interment of G639.

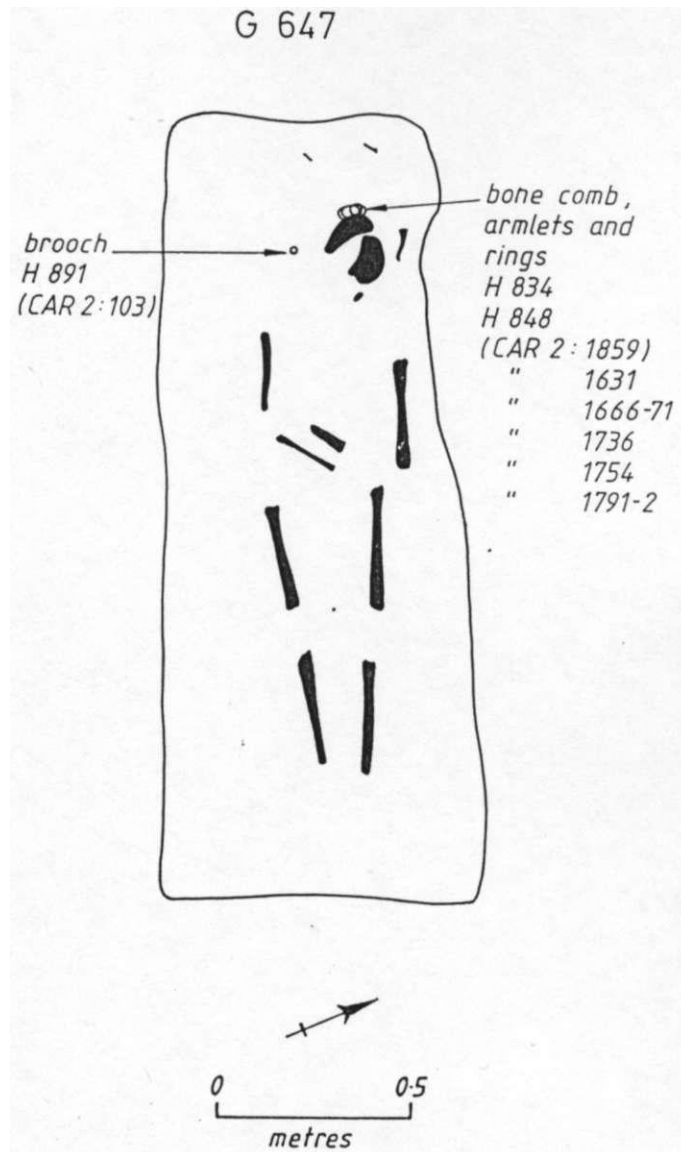


Grave 644 E-W (head to W). Probably cuts Period 1 G686. Cut by Period 2 G565. Nailed timber coffin (timber stain not located). Child. aged 8 to 10 years. Skeleton supine. Surviving bones in very poor condition.

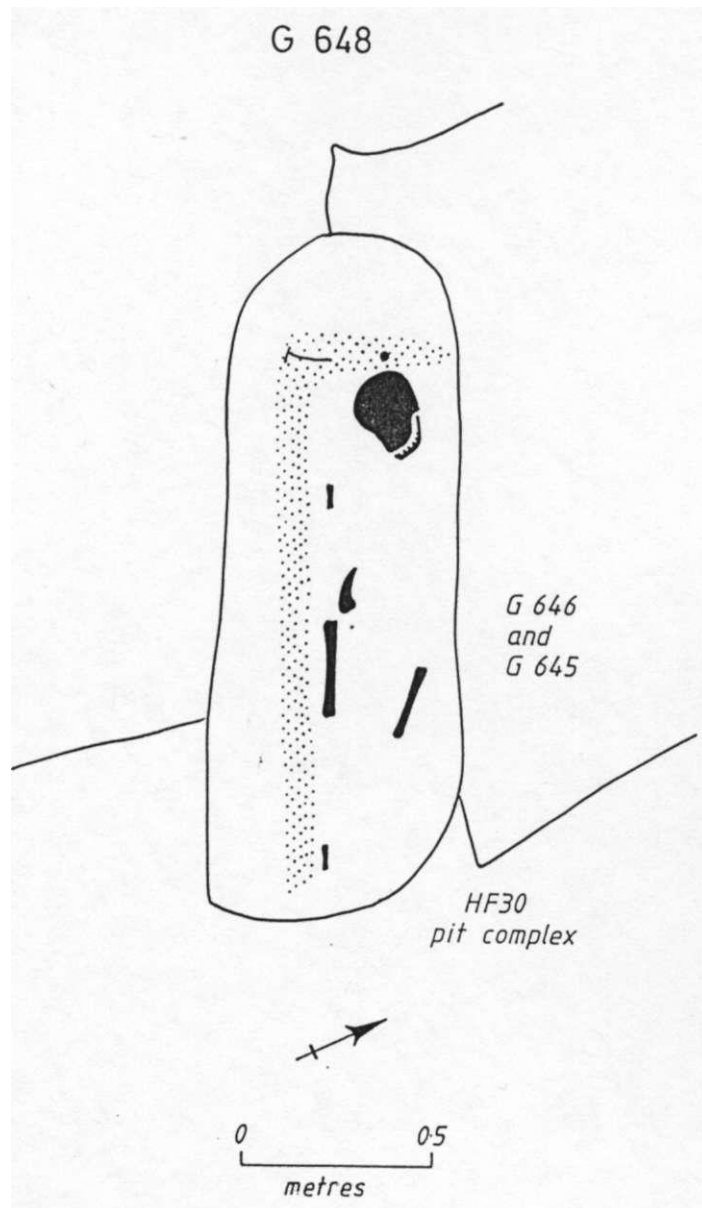


Grave 645 E-W (head to W). Sealed by Period 2 G635. Buried within same coffin as G646. Child. aged 3 to 4 years. Skeleton supine. Skull, some teeth, and small fragment of left arm only remain. Skull lay on left hand of G646.

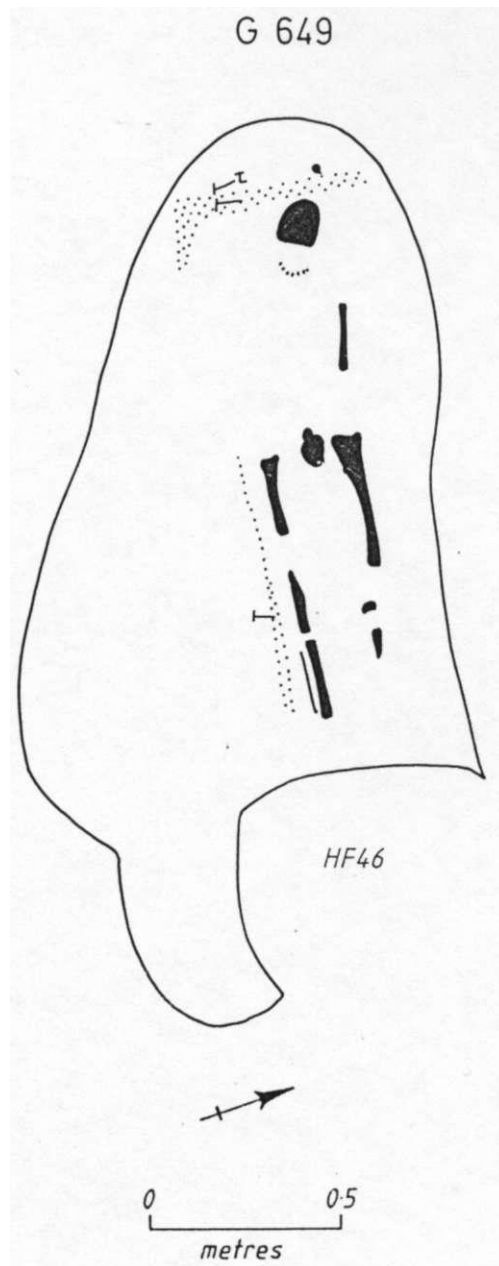
Grave 646 E-W (head to W). Cuts Period 2 G636. Sealed by Period 2 G635. Cut by Period 2 G648. post-Roman pits HFR6. HF48. modern pit complex HF30. Nailed timber coffin also containing G645. Middle-aged female. Skeleton supine. Surviving bones in poor condition, apart from skull. Skull of G645 lay on left hand of G646.



Grave 647 E-W (head to W). Cuts Period 1 G687. Period 2 G661. G676. Nailed timber coffin (timber stain not planned). Adult, sex uncertain. Skeleton supine. Bones in poor condition. Silver penannular brooch lay on right shoulder. Group of armlets (copper-alloy and iron) and finger-ring (copper-alloy), all linked together. and two more finger-rings (white metal) and antler comb lay close against top of skull inside coffin.

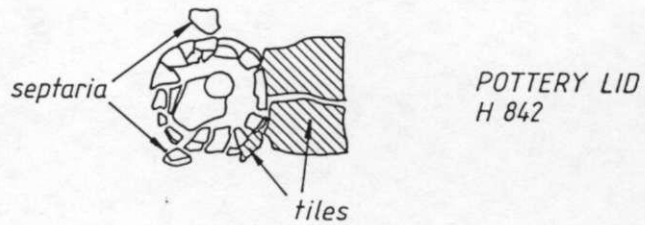
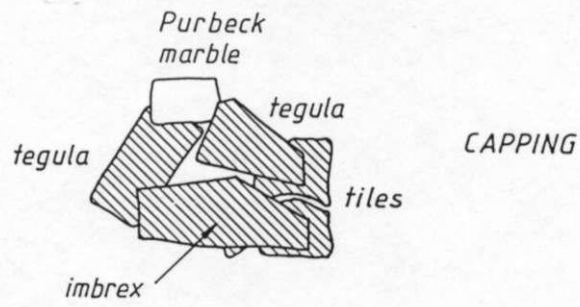


Grave 648 E-W (head to W). Cuts Period 2 G646. Cut by Period 2 G635. Nailed timber coffin. Stain of coffin noted as reddish brown. see G635. Age and sex uncertain. Skeleton supine. Only skull, part of right pelvis. and fragments of femora survive, all in poor condition.

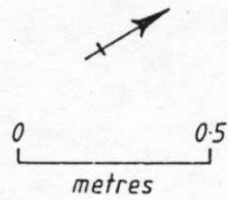


Grave 649 E-W (head to w). Probably sealed by Period 2 G638. Sealed by Period 2 oven HF27. Cut by post-Roman pit HF46. Nailed timber coffin. Aged 18 to 20 years. sex uncertain. Skeleton supine. Surviving bones in poor condition.

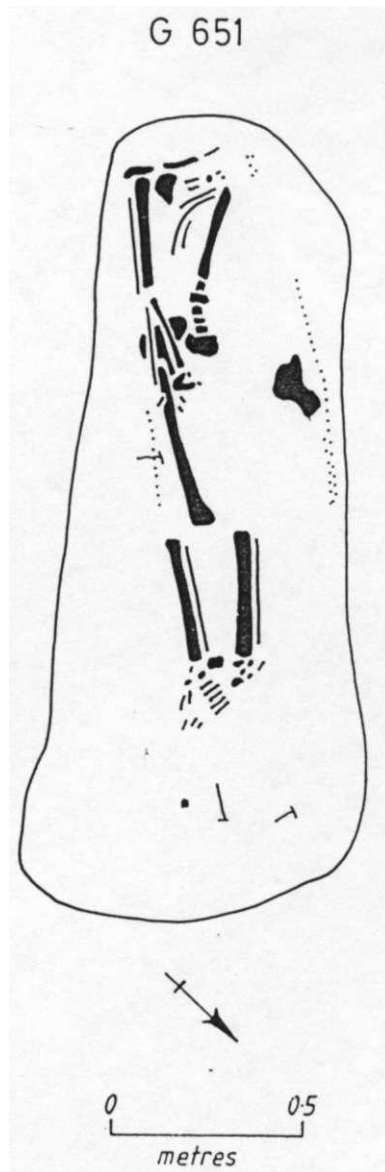
G 650
CREMATION



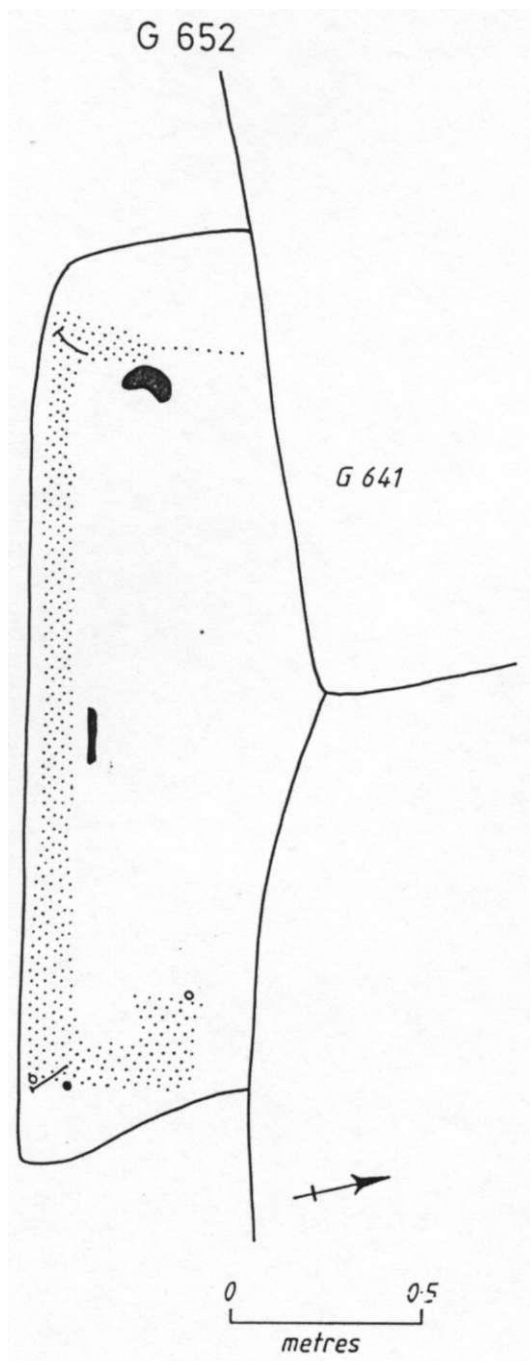
CREMATION
VESSEL
H 849
H 864-8



Grave 650 Period 1. Cut by Period 2 HF60. pit for timber vault (G677/G680). Cremation in large coarse grey ware jar, covered with coarse grey ware lid and capped with tiles and worked stone. Child.

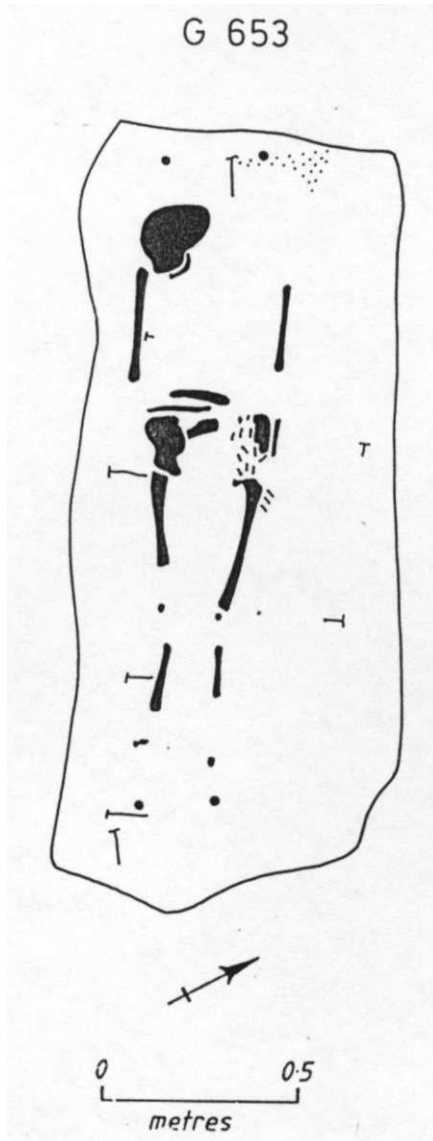


Grave 651 N-S (head to S). Cut by Period 2 G643. Below (probably cut by) Period 2 G611. G622. G631. Nailed timber coffin. Adult, sex uncertain. Skeleton supine. Surviving bones in good condition. Skull missing, removed by later activity.



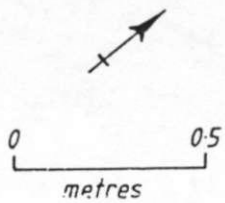
Grave 652 E-W (head to W). Cut by Period 2 G641. oven HF27. post-Roman pits HF48. HF49. Nailed timber coffin. Age and sex uncertain. Only one fragment of skull and one fragment of right femur survive, in poor condition.

G 653



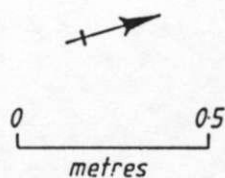
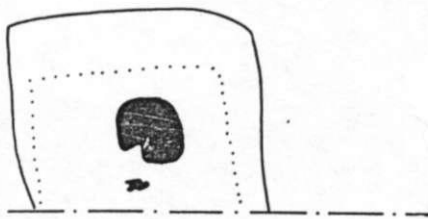
Grave 653 E-W (head to W). Cuts Period 1 G686. Cut by Period 2 G580. G656. and probably G579. Nailed timber coffin. Adult female. Skeleton supine. Bones fairly well preserved.

G 656



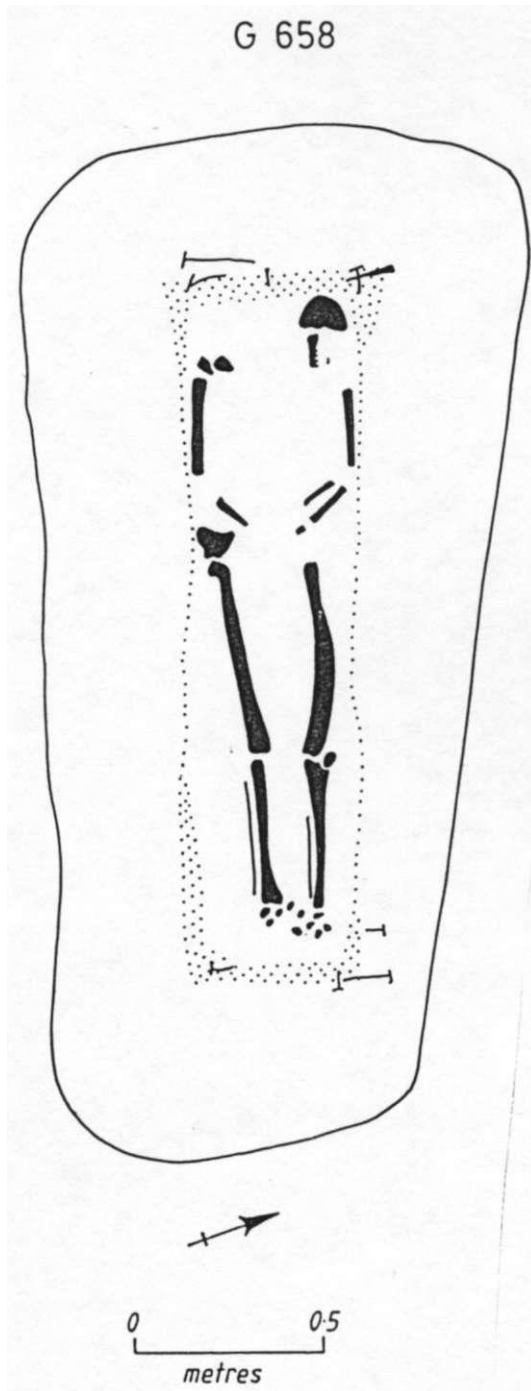
Grave 656 E-W (head to W). Cuts Period 2 G653. Relationship to Period 2 G670 uncertain. No timber stain located, fragments of coffin nails found but not in situ. Middle-aged male. Skeleton supine. Bones in fair condition.

G 657



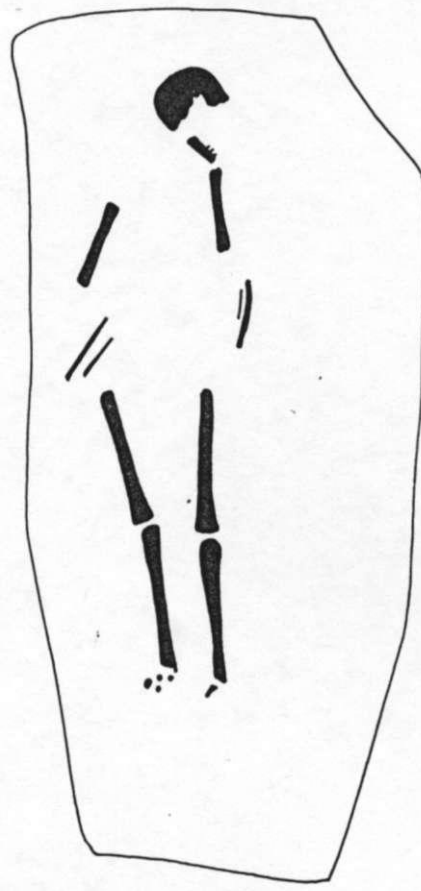
Grave 657 E-W (head to W). Cuts Period 2 G630. Cut by modern sand-pit HF50. Timber coffin (no nails recovered). W end only excavated. Elderly adult. sex uncertain. Skull only recovered, in poor condition.

G 658



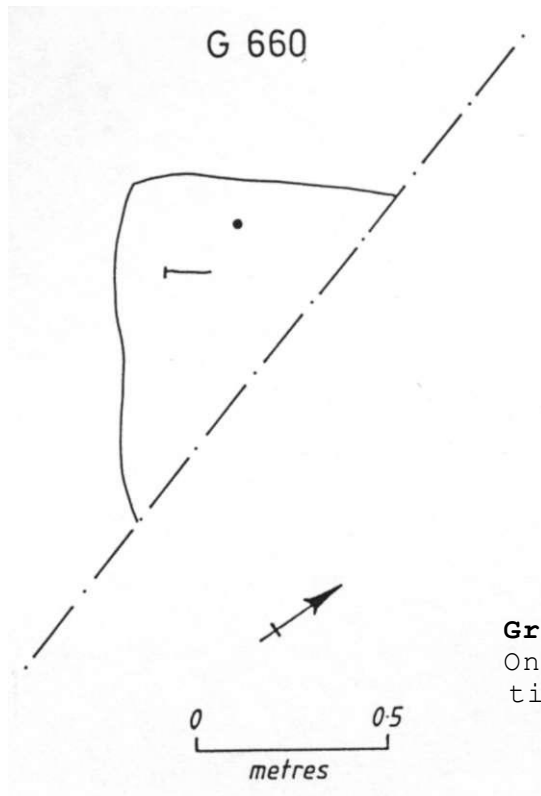
Grave 658 E-W (head to W). Cuts Period 1 N-S ditch HF31. Period 2 G685. Cut by Period 2 G567. Nailed timber coffin. Elderly male. Skeleton supine. Surviving bones in poor condition.

G 659

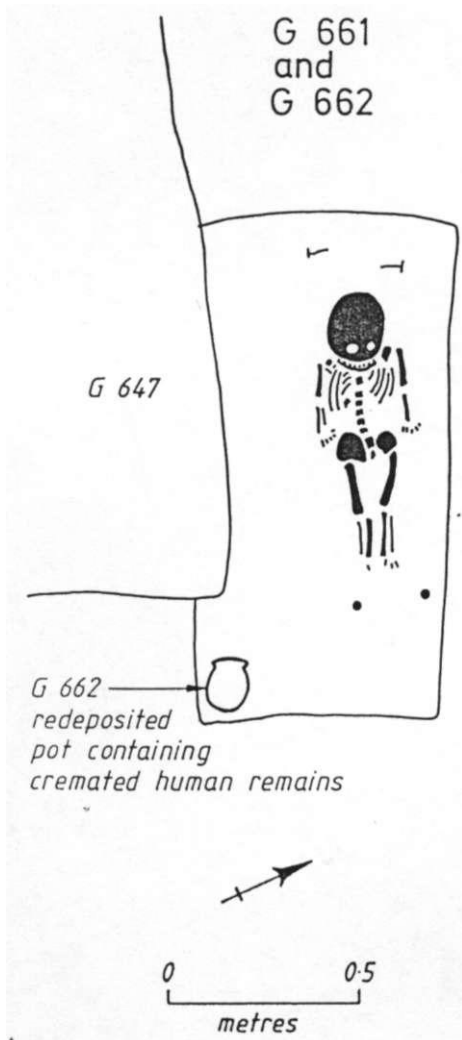


0 0.5
metres

Grave 659 E-W (head to W). Cuts Period 1 G678. Period 2 G670. G675. Nailed timber coffin (timber stain not clear. nails not illustrated). Middle-aged male. Skeleton supine. Surviving bones in poor condition.

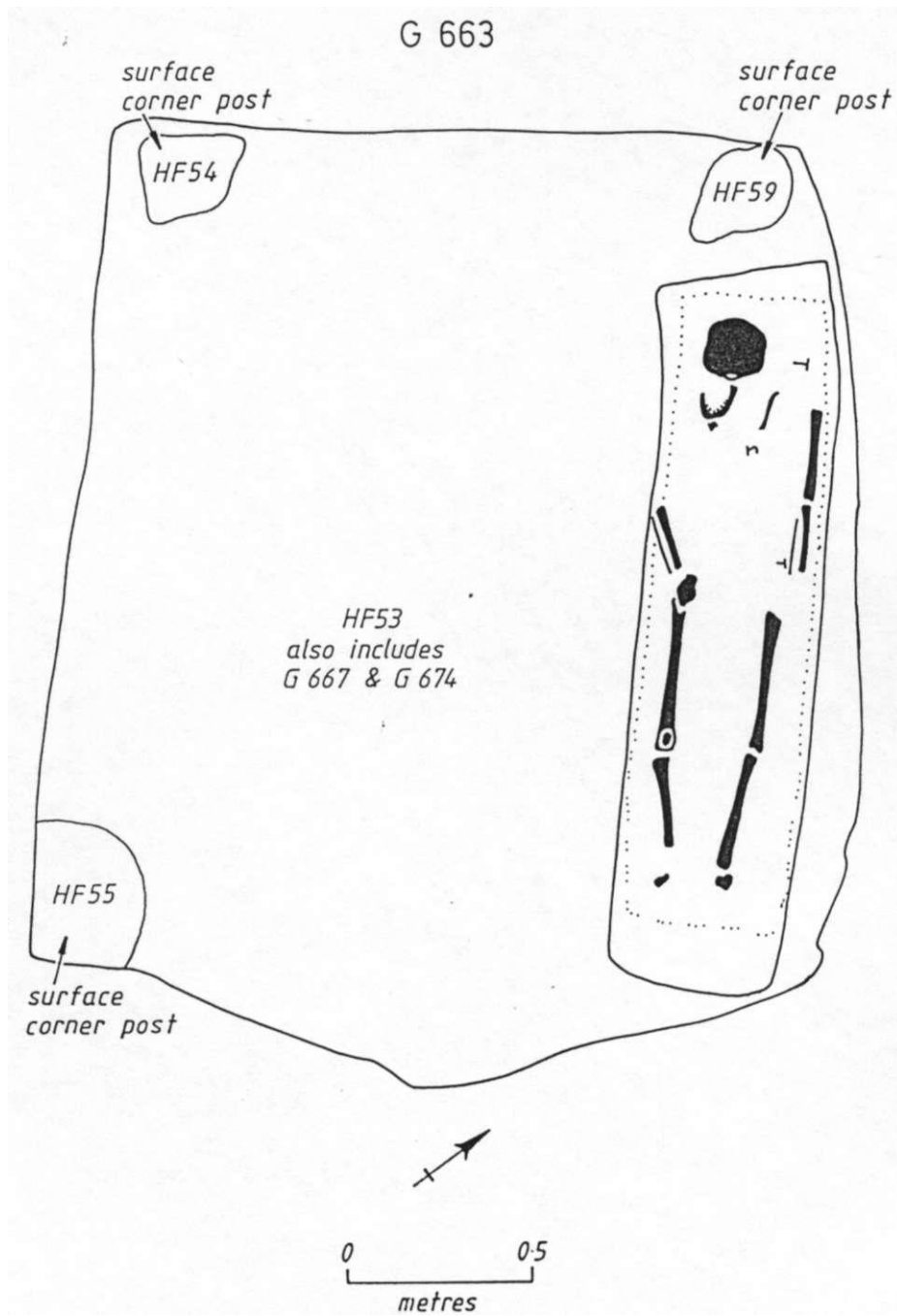


Grave 660 E-W. Isolated grave (edge of site). Only extreme SW corner excavated. Nailed timber coffin (timber stain not planned).

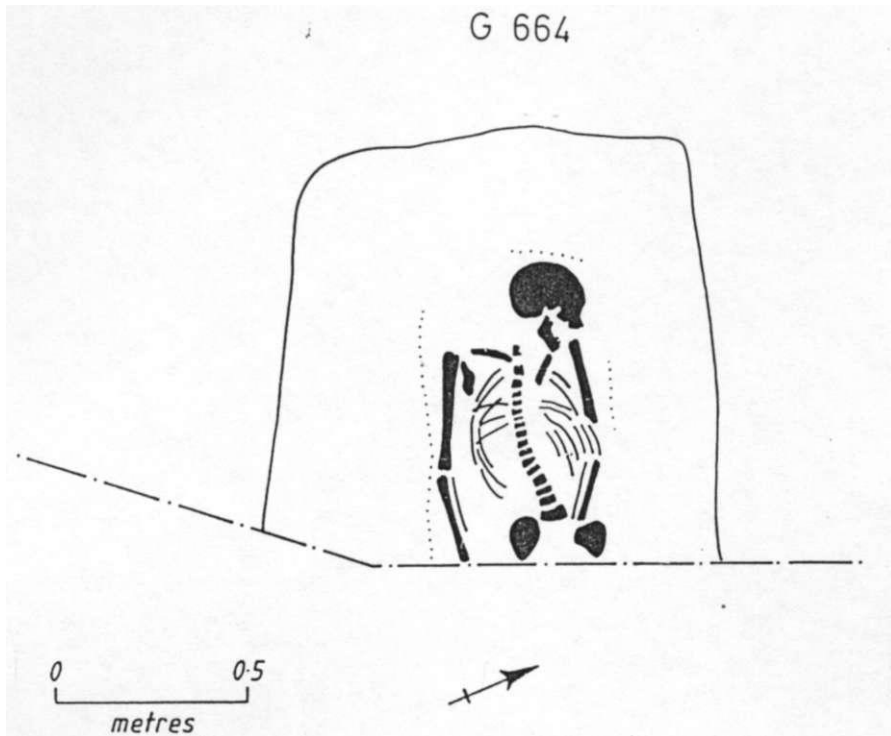


Grave 661 E-W (head to W). Cut by Period 2 G647. Contained redeposited cremation pot G662. Nailed timber coffin (timber stain not illustrated). Child. aged 1 year. Skeleton supine. Bones in good condition.

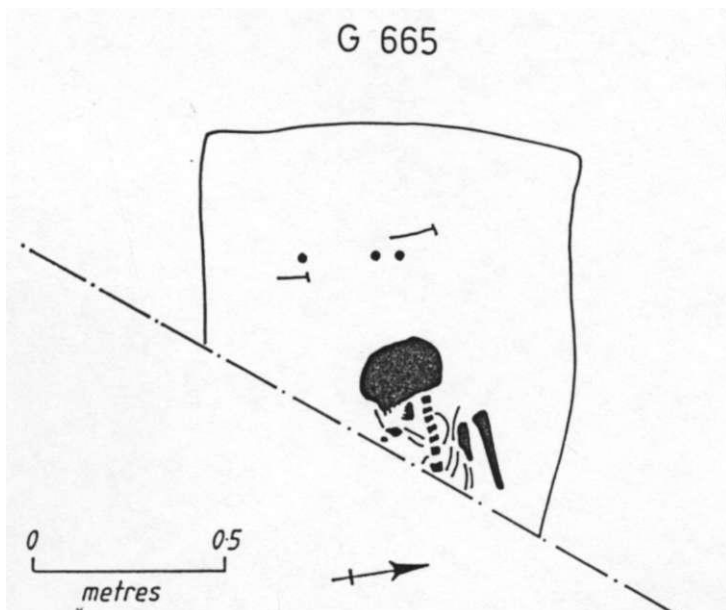
Grave 662 Cremation. redeposited in fill of Period 2 G661. Contained In incomplete coarse grey ware jar. CAM 270. Adult ?male.



Grave 663 E-W (head to W). Latest of three burials (G663/G667/G674) within large isolated Period 2 grave pit HF53. Cuts layer sealing G667 and G674. Nailed timber coffin. Elderly adult. sex uncertain. Skeleton supine. Surviving bones in fair condition.

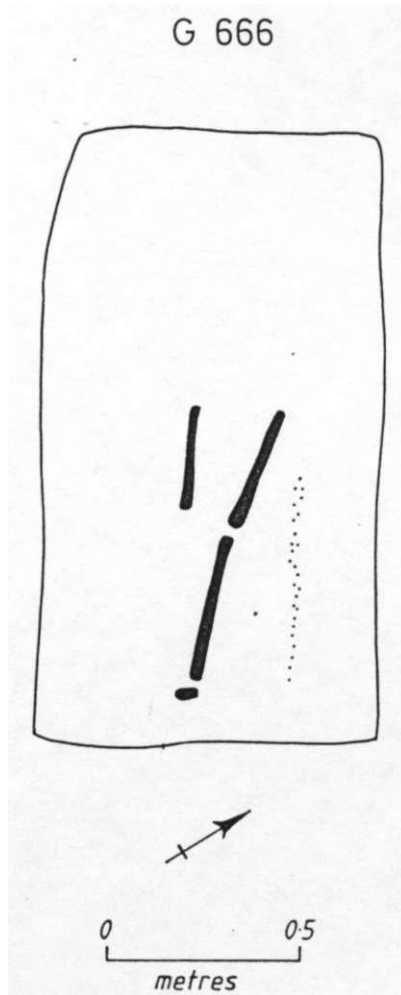


Grave 664 E-W (head to W). Isolated grave (edge of site). w end only excavated. Timber coffin (no nails recovered). Middle-aged male. Skeleton supine. Bones in good condition.

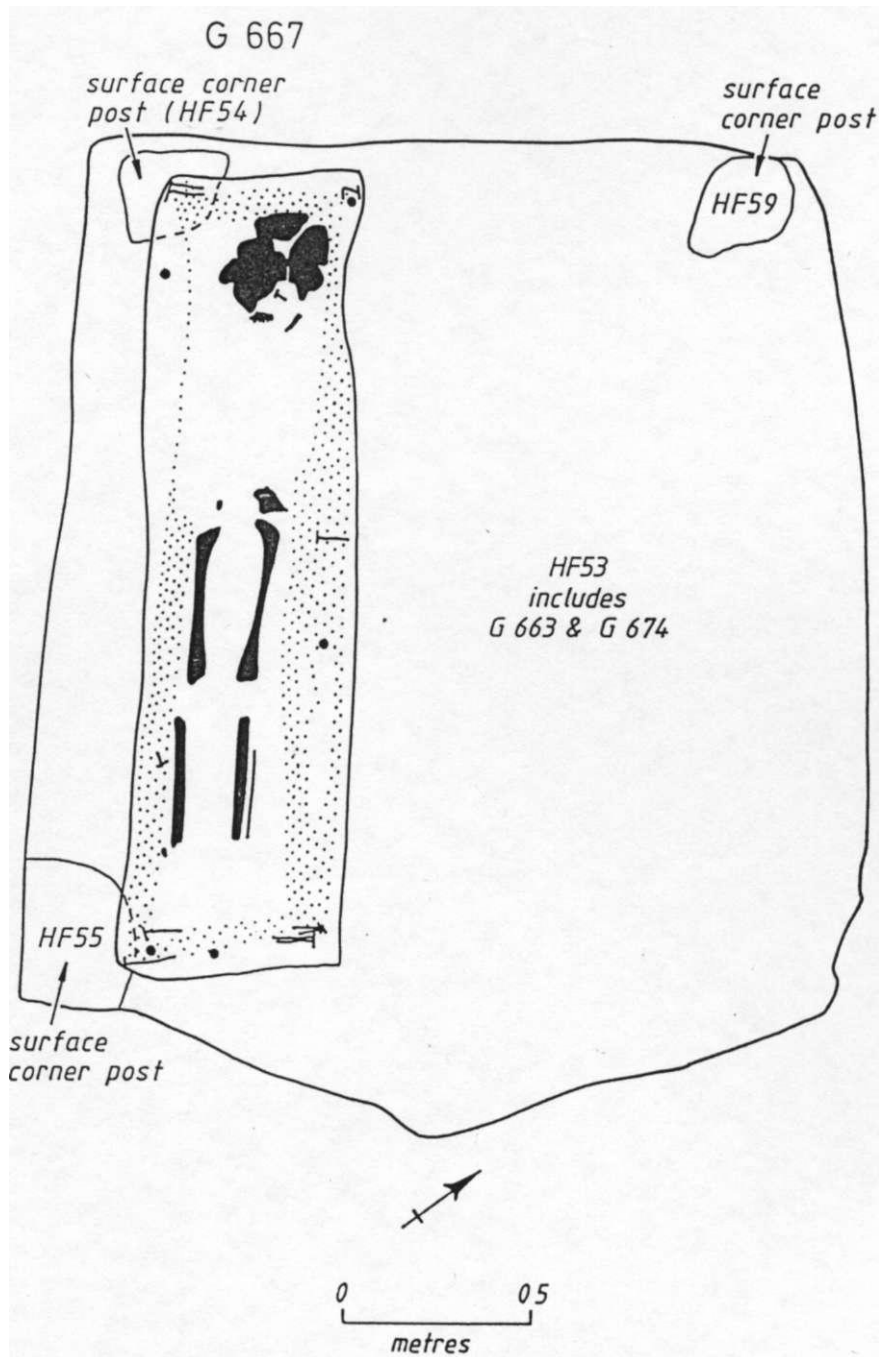


Grave 665 E-W (head to W). Cut by Period 2 G546. w end only excavated. Nailed timber coffin (timber stain not located). Middle-aged female. Skeleton supine. Bones in good condition.

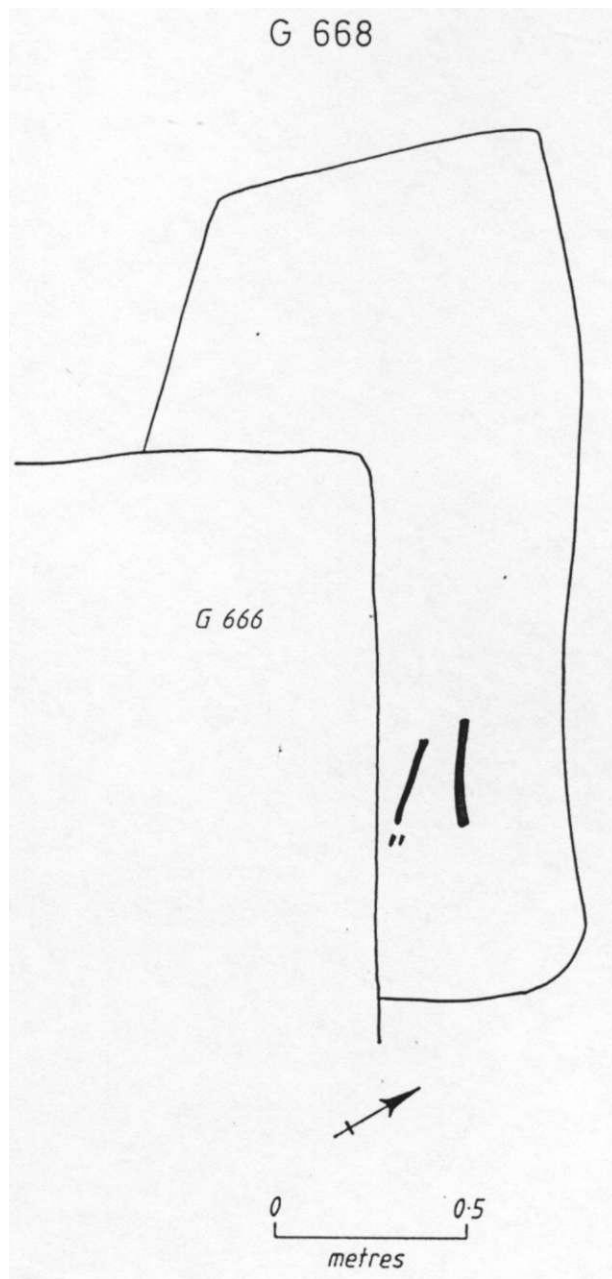
G 666



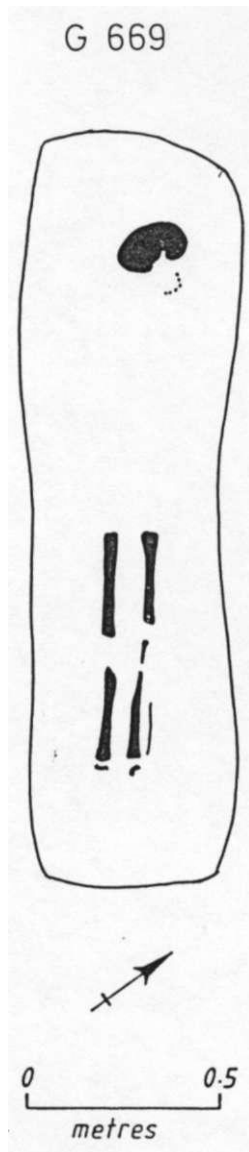
Grave 666 E-W (head to W). Cuts Period 2 G668. Timber coffin (no nails recovered). Adult. sex uncertain. Fragments of leg long bones only survive, in poor condition.



Grave 667 E-W (head to W). Intermediate of three burials (G663/G667/G674) within large isolated Period 2 grave pit HF53. Cuts G674. Layer sealing G667 and G674 cut by G663. Nailed timber coffin. Adolescent, aged 17 to 18 years. Skeleton supine. Surviving bones not well preserved. HF53 enlarged from single grave pit for G674 to final size. capable of taking G667 and third burial G663. when G667 interred. At three corners of enlarged pit Postholes were cut which probably held timber uprights used for surface grave markers. No sign of similar Posthole at NE corner. which may be damaged, though fourth marker post not strictly necessary.

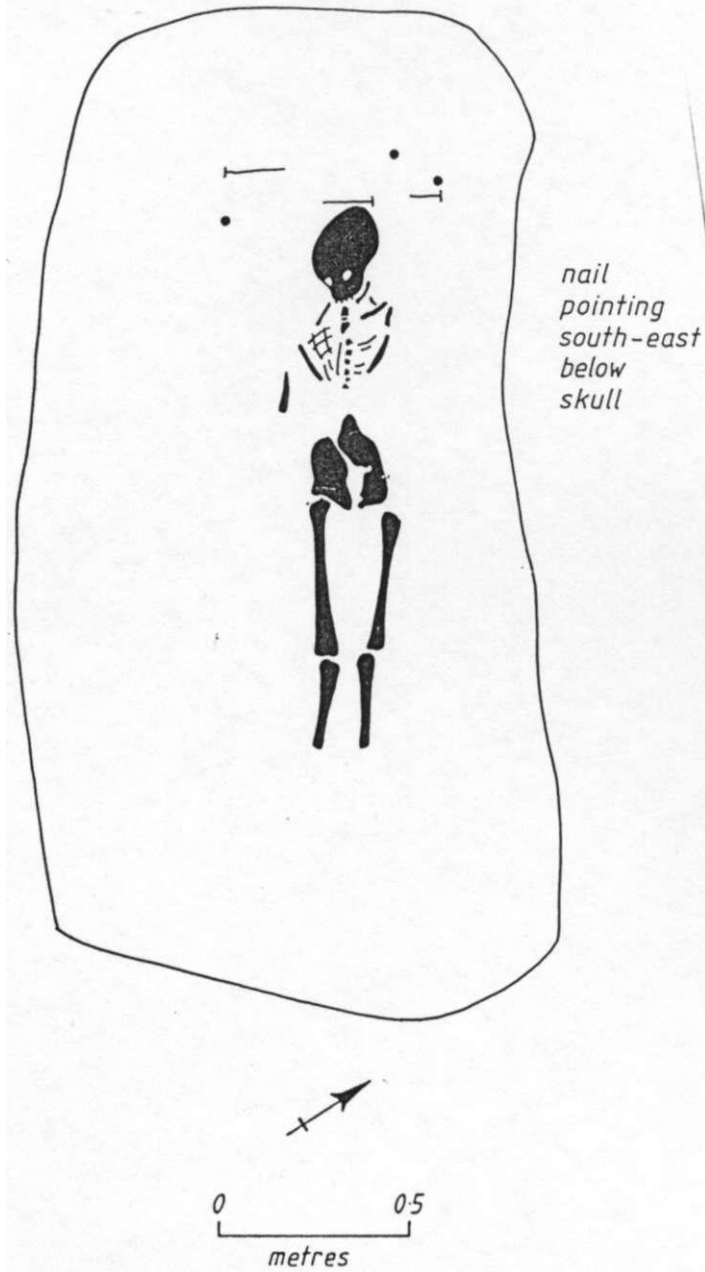


Grave 668 E-W (head to W). Cut by Period 2 G 666. No timber stain or nails located. adult. sex uncertain. Fragments of some leg bones only survive, in very poor condition.



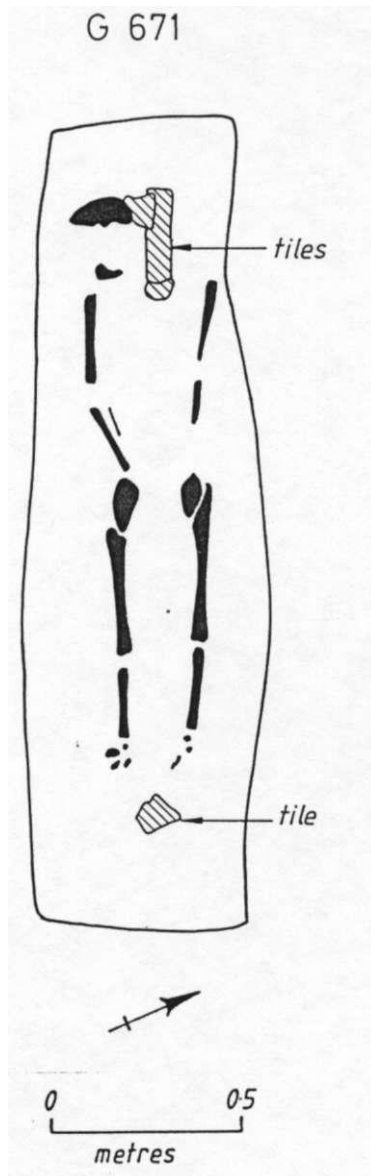
Grave 669 E-W (head to W). Cuts Period 2 G670. No timber stain or nails located. Age and sex uncertain. Skeleton supine. Skull, leg long bones, and ankle bones only survive, in poor condition.

G 670

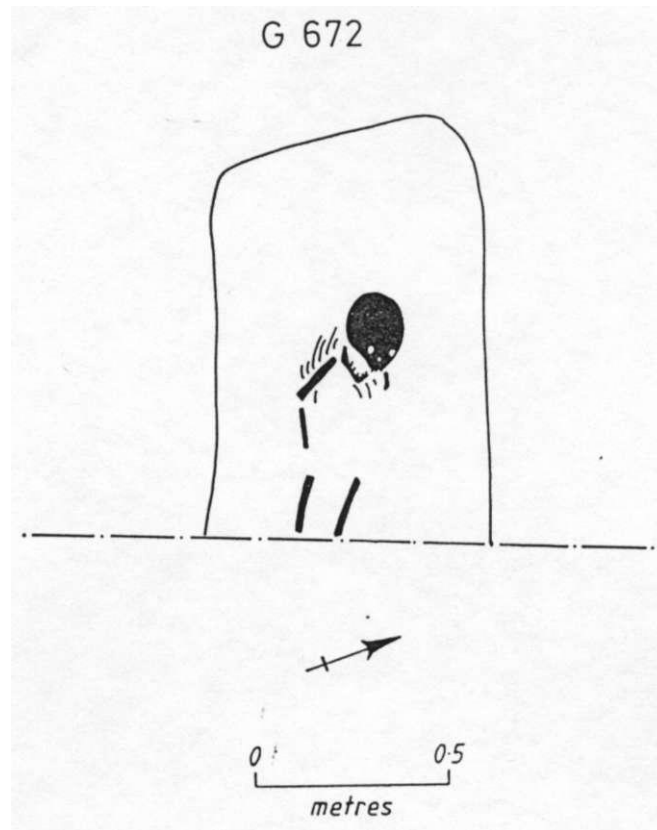


Grave 670 E-W (head to W). Cuts Period 1 G678. Cut by Period 2 G659. G669. Relationship to Period 2 G656 uncertain. Nailed timber coffin (timber stain not illustrated). Middle-aged female. Skeleton supine. Surviving bones in good condition.

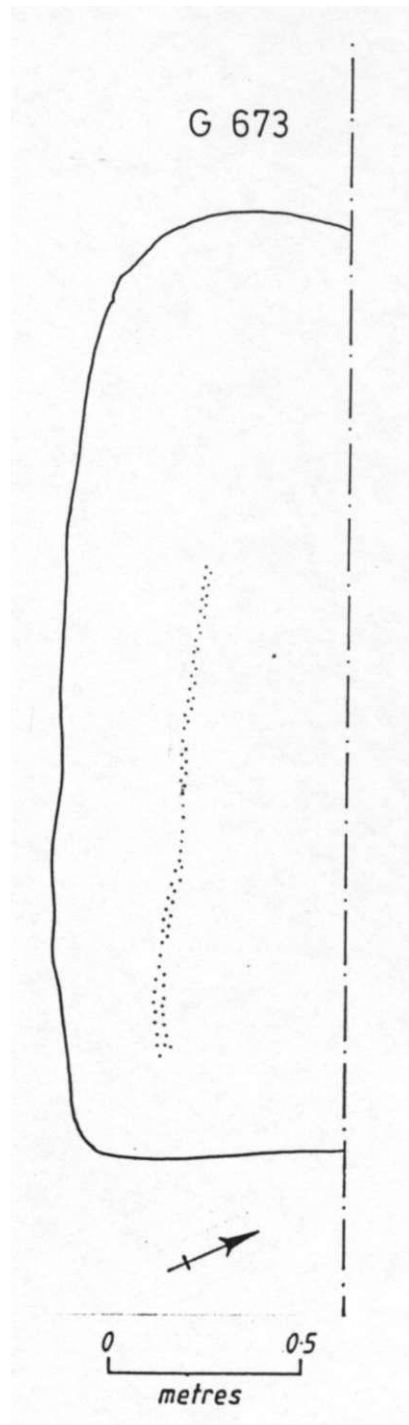
G 671



Grave 671 E-W (head to W). Isolated grave. Nailed timber coffin. Elderly female. Skeleton supine. Bones in poor condition.



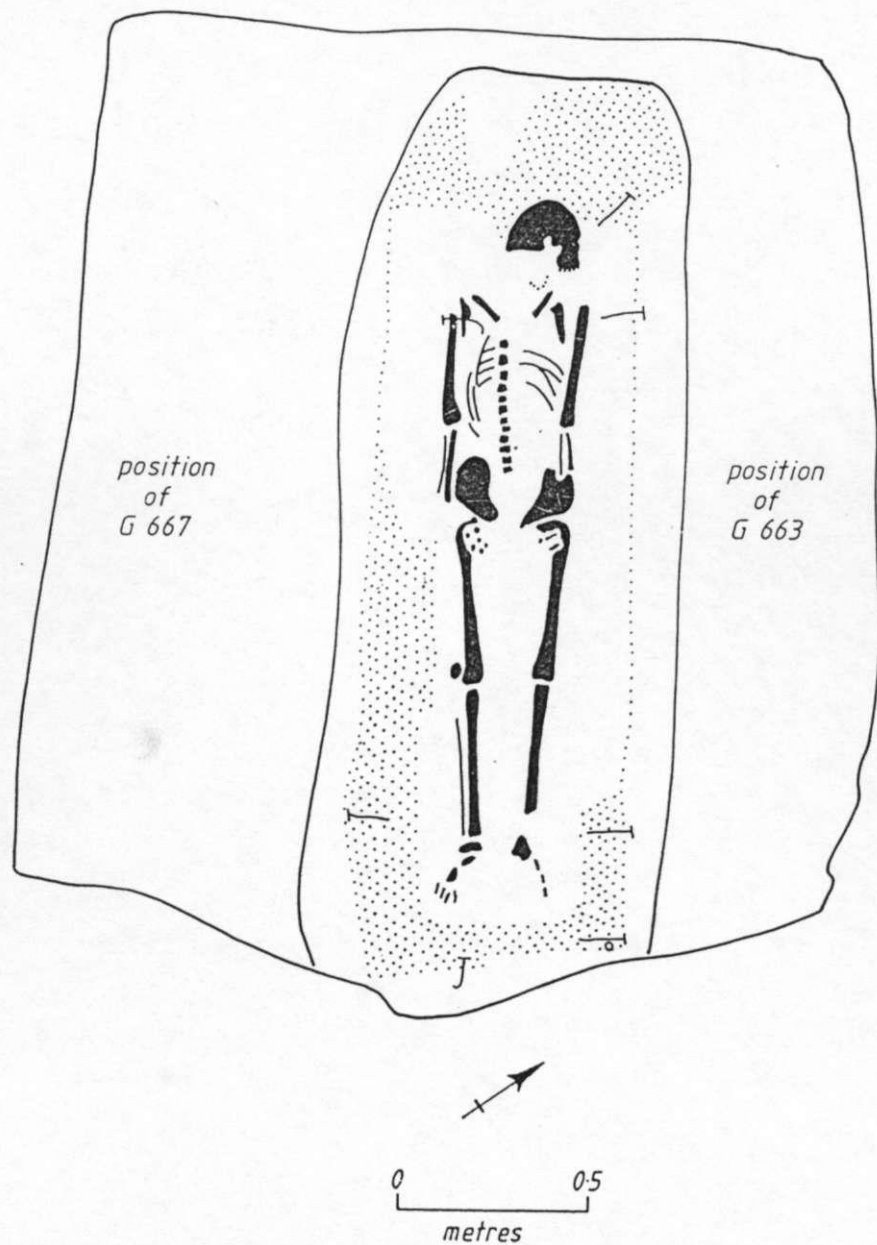
Grave 672 E-W (head to W). ?Isolated grave. Relationship to Period 2 G562 uncertain. Cut by modern pit HF34. Nailed timber coffin (timber stain and nails not planned). E end not excavated. Child. aged 6 to 7 years. Skeleton supine. Bones well preserved.



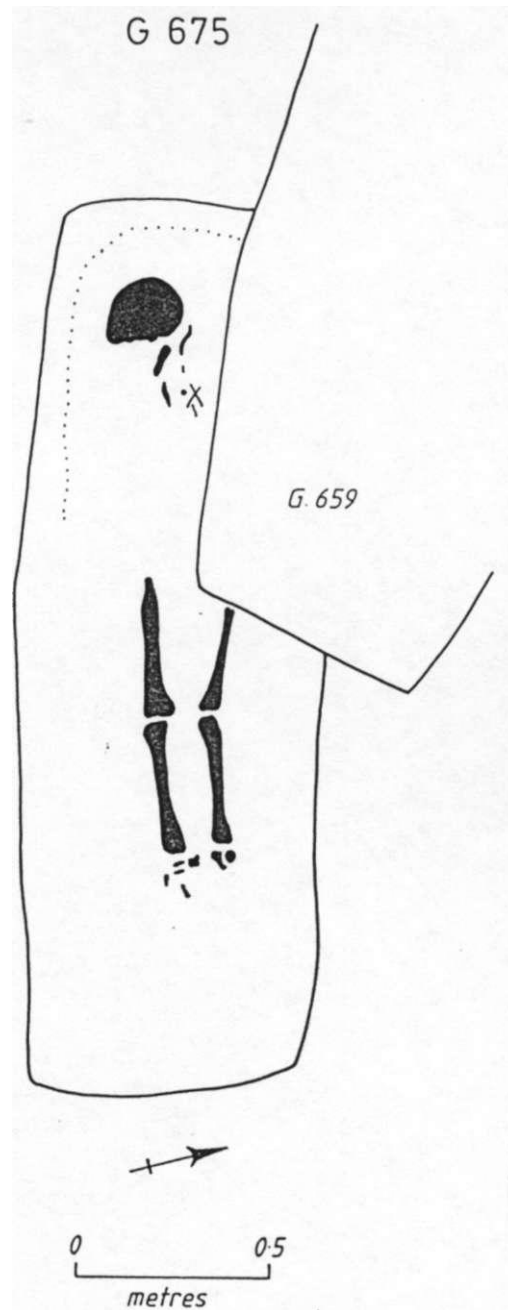
Grave 673 E-W. Cut by Period 2 G630, modern sand pit HF50. Very deep grave, top of timber coffin only located (no nails found). Grave length. 2.48 m. indicates adult.

G 674

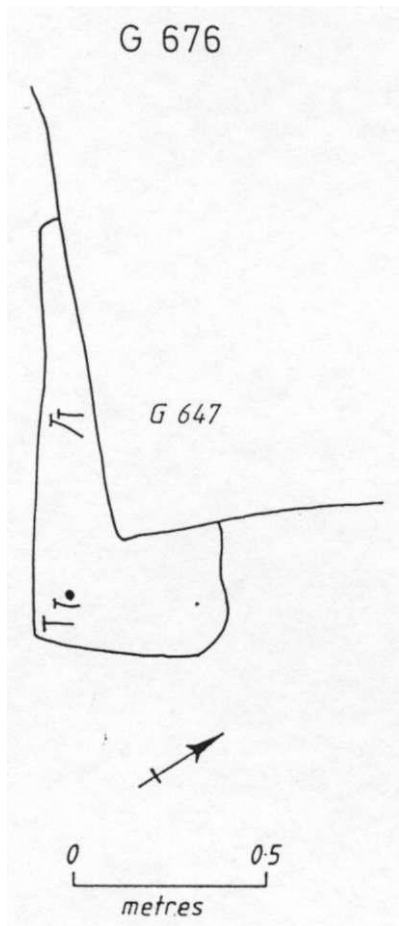
G 674 in HF53



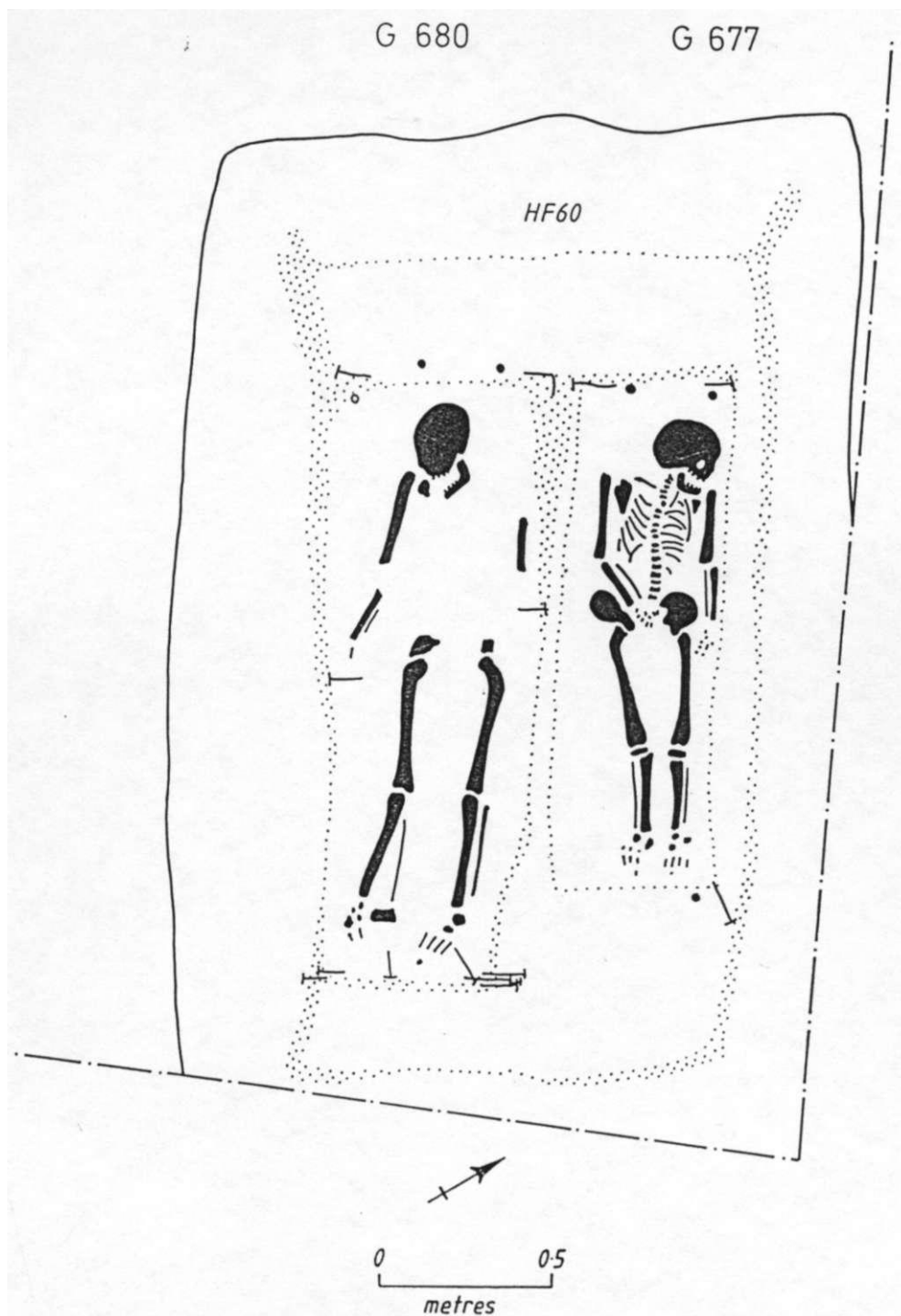
Grave 674 E-W (head to W). Earliest of three burials (G663/G667/G674) within large isolated Period 2 grave pit HF53. Cut by G663. G667. Nailed timber coffin. Timber stain very wide in places. up to **0.36** m. Elderly adult. sex uncertain. Skeleton supine. Bones in fair condition.



Grave 675 E-W (head to W). Cuts Period 1 G678. Cut by Period 2 G659. Shallow grave, partly removed by G659. Timber coffin (no nails recovered). Adult. sex uncertain. Skeleton supine. Surviving bones in poor condition.

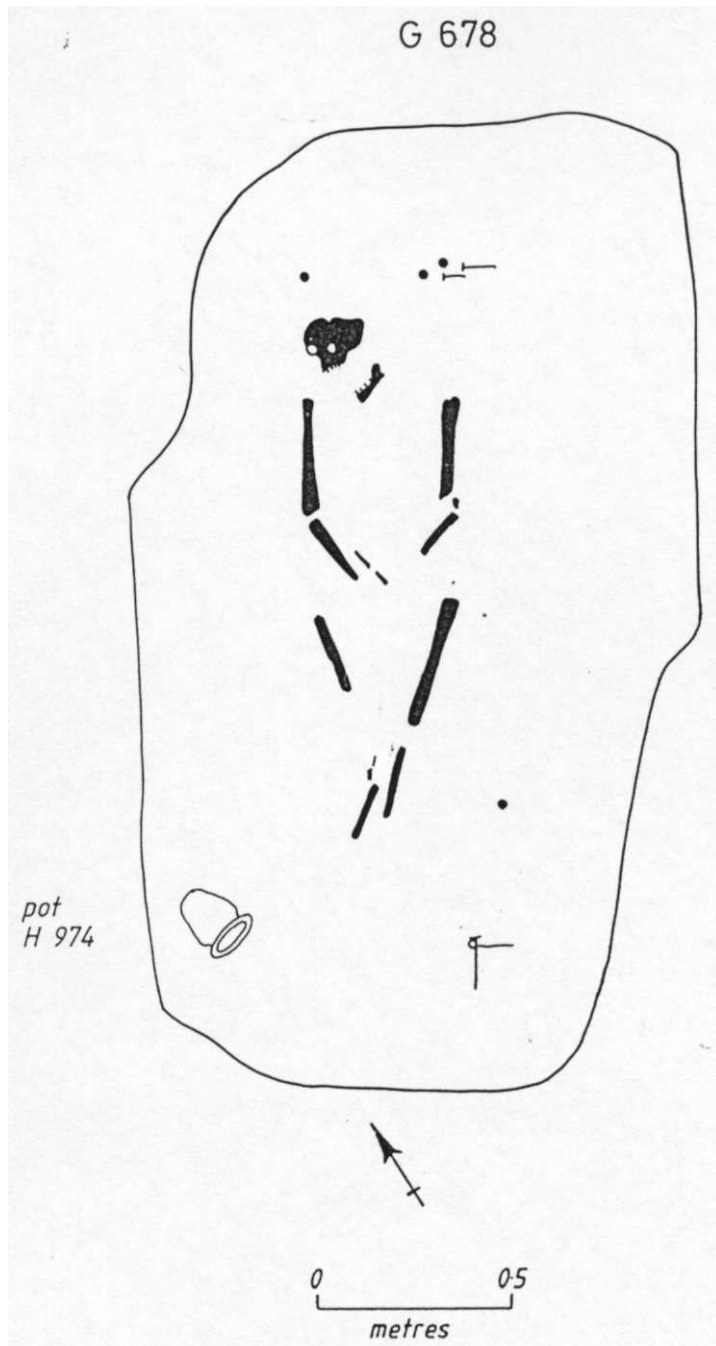


Grave 676 E-W. Cuts Period 1 G687. Cut by Period 2 G647. Nailed timber coffin (no timber stain located). Grave dimensions, length 1.1 m. width 0.48 m. indicate child. No skeletal material remains.

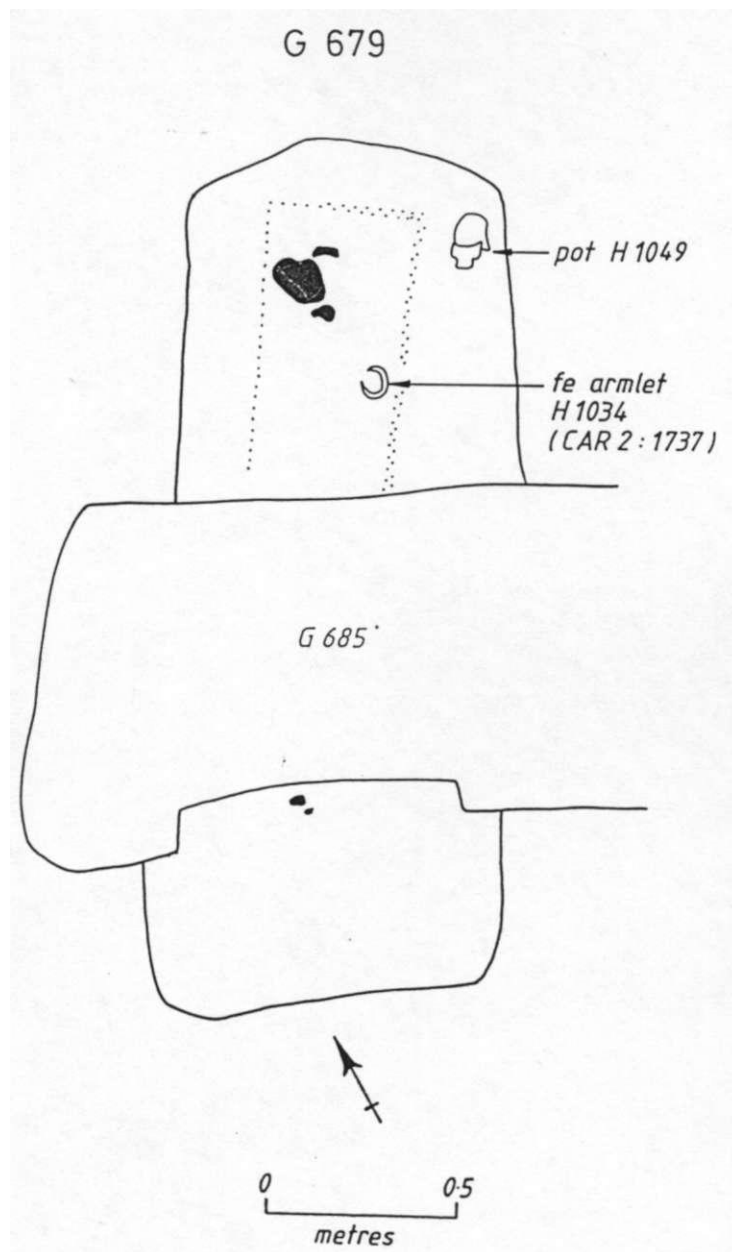


Grave 677 E-W (head to W). Within Period 2 timber vault HF60 with G680. both probably deposited at one interment. HF60 cuts Period 1 cremation G650. Nailed timber coffin. Child. aged 11 to 12 years. Skeleton supine. Bones in good condition.

Grave 680 E-W (head to W). Within Period 2 timber vault HF60 with G677. both probably deposited at one interment. HF60 cuts Period 1 cremation G650. Nailed timber coffin. Middle-aged male. Skeleton supine. Bones in poor condition.



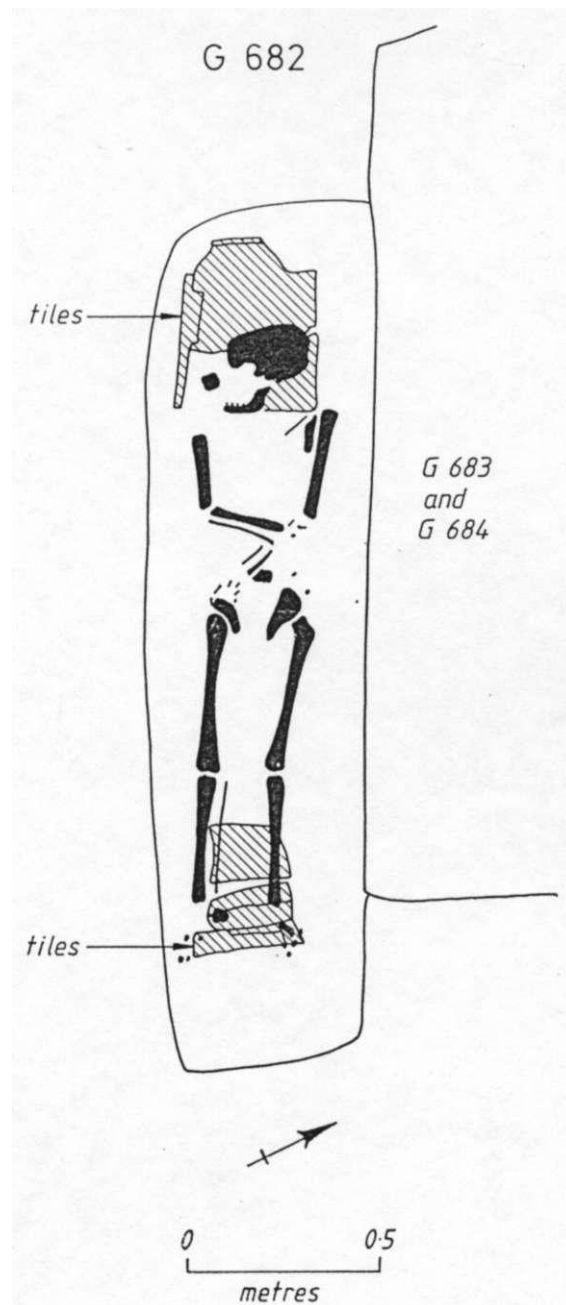
Grave 678 N-S (head to N). Cut by Period 2 G659. G670. G675. Nailed timber coffin. Timber stain not planned. Elderly adult, sex uncertain. Skeleton supine. Surviving bones in very poor condition. Outside coffin in SW corner of grave lay black burnished ware (BB1) jar. In grave fill above jar lay base of redeposited grey ware jar. probably cremation vessel. Fragments of burnt bone (no identification) scattered throughout fill of G678.



Grave 679 N-S (head to N). Cuts Period 1 N-S ditch HF31. Cut by Period 2 G685. Nailed timber coffin (nails not illustrated). Adult, sex uncertain. Only skull and one foot bone survive. Inside coffin close to E side, possibly on or immediately adjacent to left arm, was an iron armlet. Outside coffin in NE corner was a rouletted beaker of Nene Valley colour-coated ware.

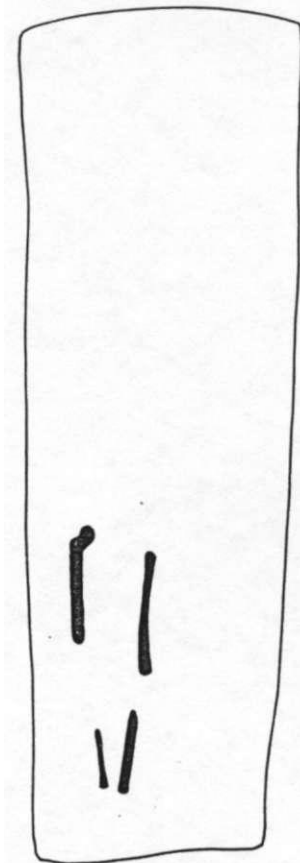


Grave 681 E-W (head to W). Cuts Period 2 G682. G683. No edges found for grave or coffin. no nails recovered. Child, aged 4 to 5 years. Skeleton supine. Bones in poor condition.



Grave 682 E-W (head to W). Cuts Period 1 G687. Cut by Period 2 G681. G683. G684. No timber stain or nails recovered. but tegulae covered head and feet. Young adult male. Skeleton supine. Bones in good condition.

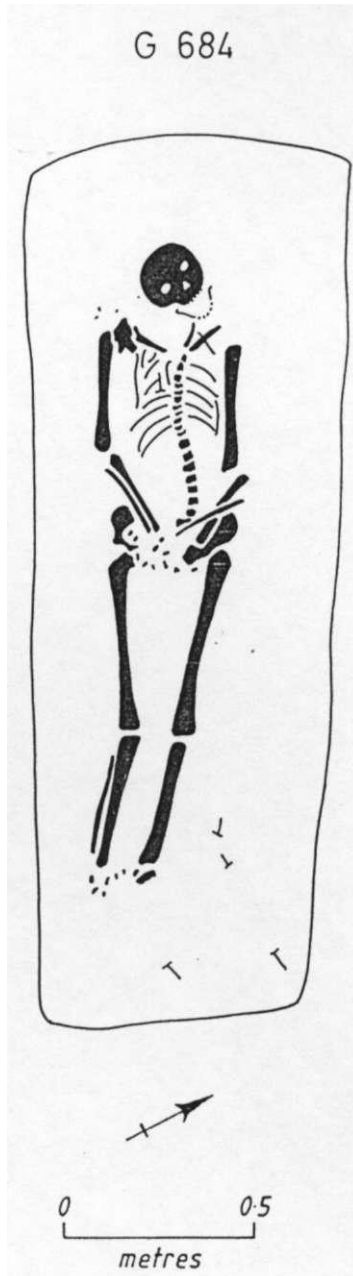
G 683 (above G 684)



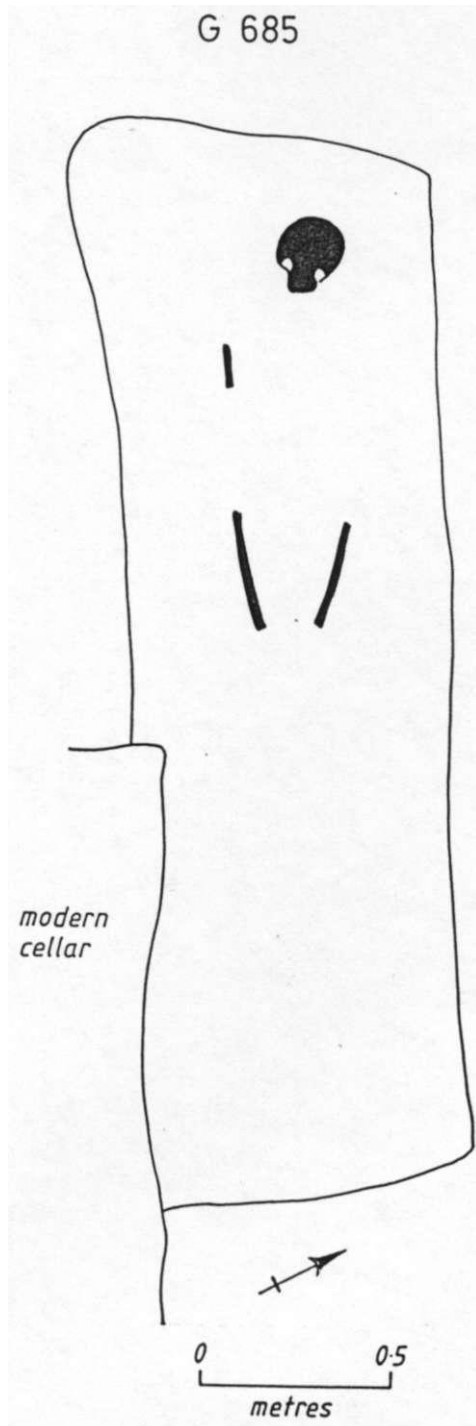
0 0.5
metres

Grave 683 E-W (head to W). Cuts Period 1 G687. Period 2 G682. Cuts and seals Period 2 G684. Cut by Period 2 G681. Probably nailed timber coffin (some nails originally thought to derive from G684 may belong to G683. timber stain not planned.) Adult. sex uncertain. Leg long bones only remain. in poor condition.

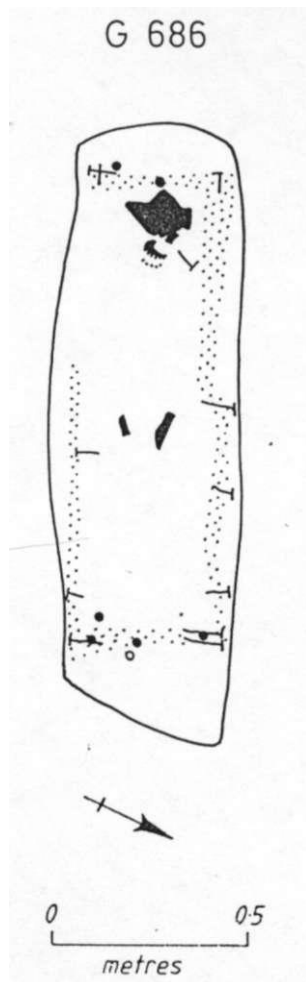
G 684



Grave 684 E-w (head to W). Cuts Period 1 G687. Period 2 G682. Cut and sealed by Period 2 0683. Nailed timber coffin (timber stain not illustrated). Elderly male. Skeleton supine. Bones in good condition.

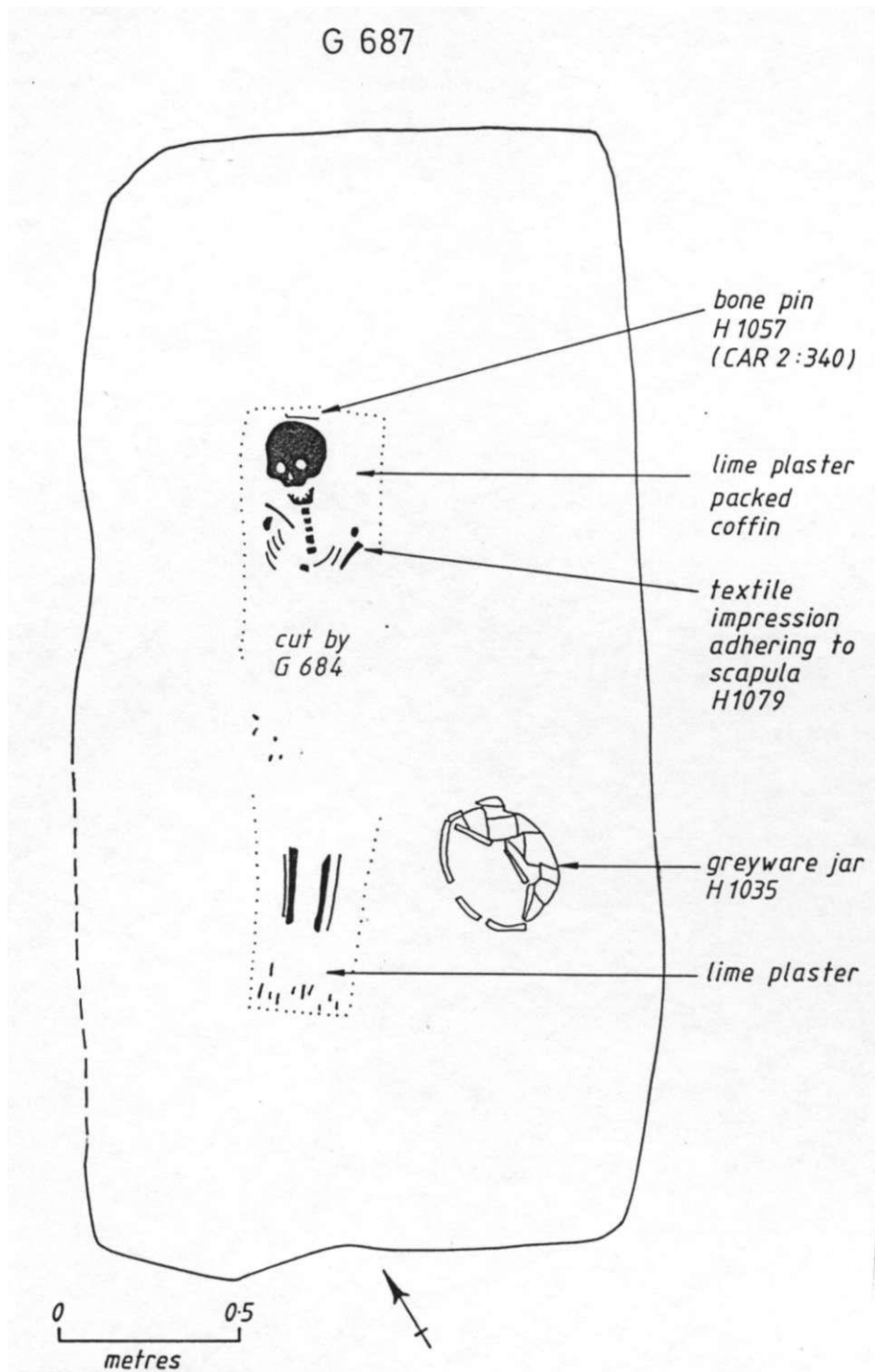


Grave 685 E-W (head to W). Cuts Period 1 G679. N-S ditch HF31. Period 2 G688. Cut by Period 2 G658. No timber stain or nails recorded. Young adult. sex uncertain. Skeleton supine. Skull. right humerus. and femora only survive, in very poor condition.

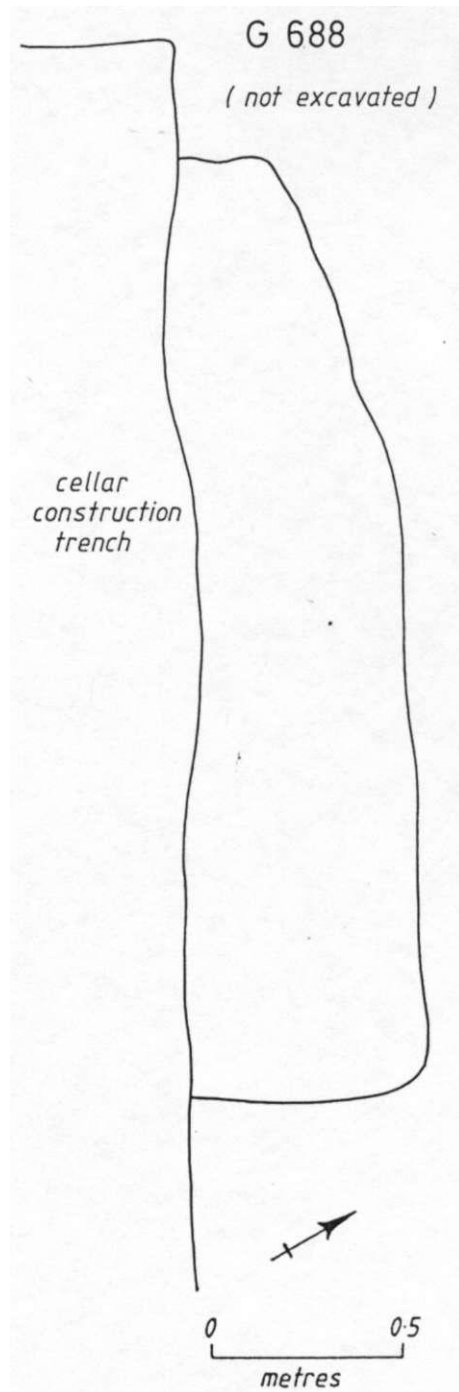


Grave 686 N-S (head to S). Isolated grave. Cut by Period 2 G565. G653. Probably cut by Period 2 G644. Relationship to Period 2 G580 uncertain. Nailed timber coffin. Child, aged 3 to 4 years. Skeleton supine. Skull and femora fragments only survive.

G 687

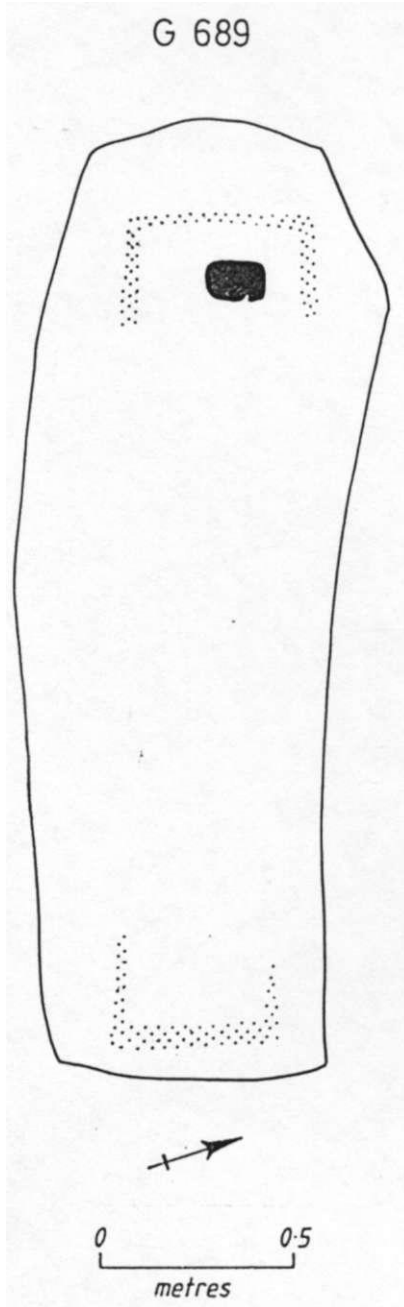


Grave 687 N-S (head to N). Cuts Period 1 G693. Cut by Period 2 G552. G567. G647. G676. G682. G683. G684. Very large grave pit. nailed timber coffin deposited on W side. Base of coffin covered with layer of lime plaster. Young adult female. Skeleton supine. Surviving bones in good condition. Bone hairpin lay inside coffin by skull. Textile Impression in plaster close to scapula. Outside coffin lay bowl/jar of coarse grey ware. CAM 307. coated inside with thick layer of plaster.

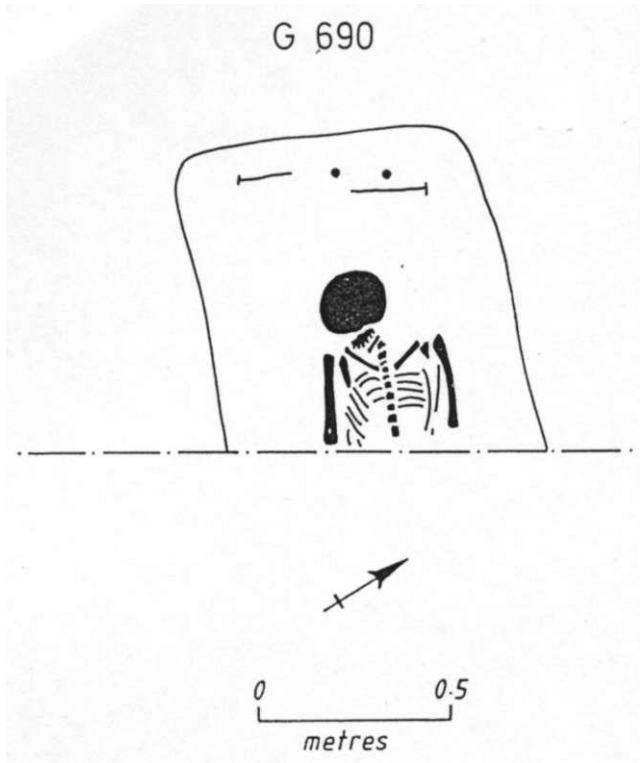


Grave 688 E-W (head to W). Cut by Period 2 G550. G685. and modern cellar. Grave not excavated (very deep). but skull due out by intruders and left in bottom of G685. Adult, sex uncertain. No coffin located.

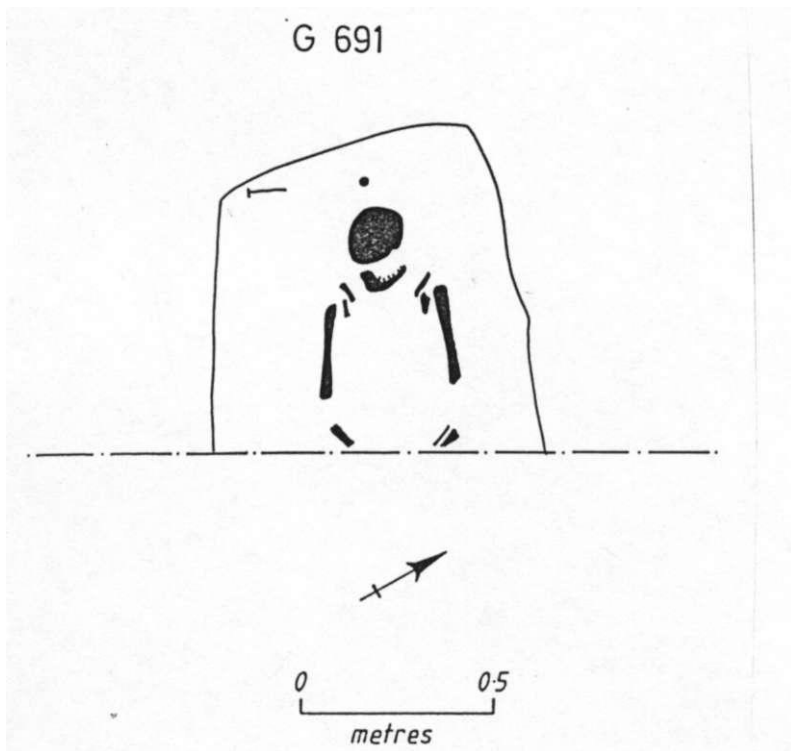
G 689



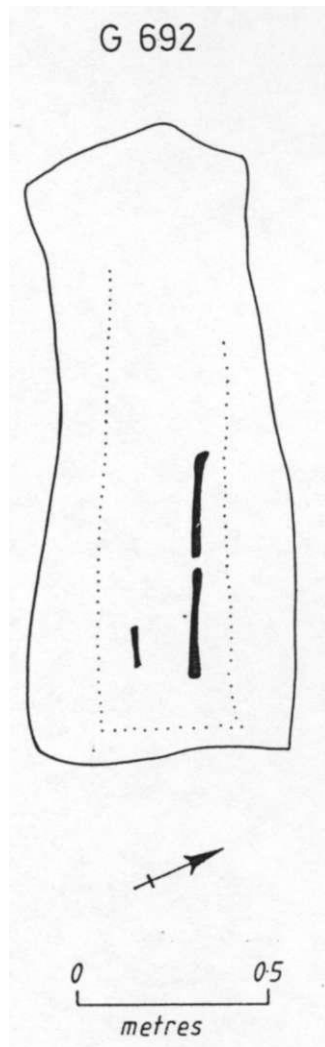
Grave 689 E-W (head to W). Isolated grave. Nailed timber coffin (nails not plotted). Only ends of coffin remained. Age and sex uncertain. Skull only survives. in poor condition.



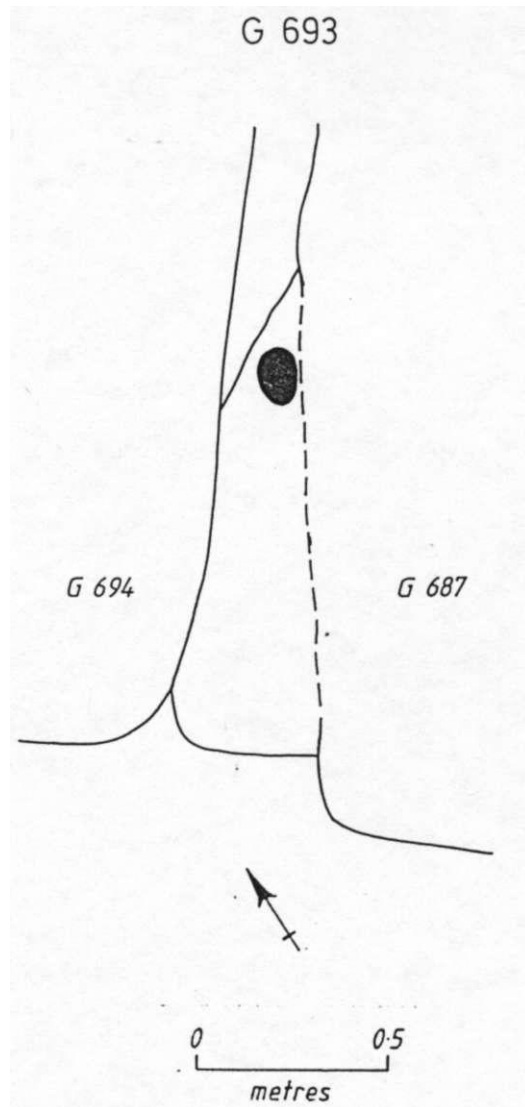
Grave 690 E-W (head to W). Cuts Period 1 N-S HF31. Period 2 G691. E half not excavated. Nailed timber coffin. Elderly female. Skeleton supine. Bones in good condition.



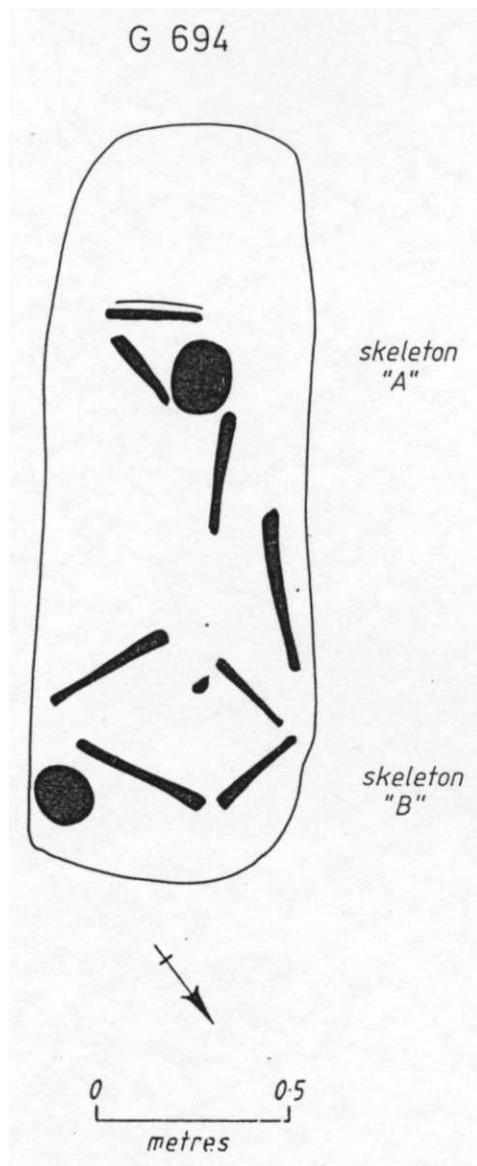
Grave 691 E-W (head to W). Cuts Period 1 N-S ditch HF31. Cut by Period 2 G690. E half not excavated. Nailed timber coffin (timber stain not illustrated). Elderly female. Skeleton supine. Bones in poor condition.



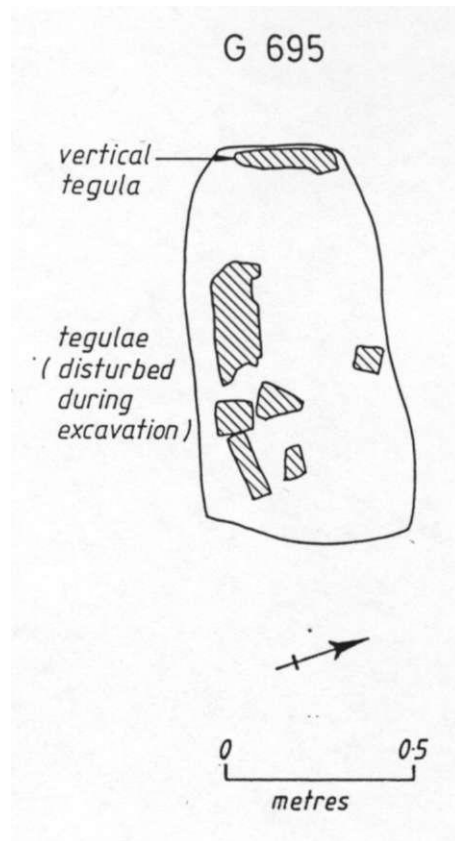
Grave 692 E-W (head to W). Isolated grave. Timber coffin (no nails recorded). Fragments of leg bones only remained. but did not survive lifting.



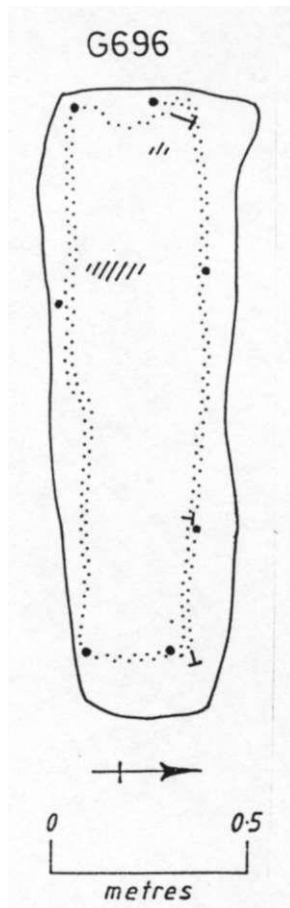
Grave 693 N-S (head to N). Cut by Period 1 G687. Possibly cut by Period 1 G694. No coffin located. Fill including skeleton collapsed into G687 before bones planned. Adult female. Skeleton supine (evidence from site photo). Bones in good condition. Grave goods thought on excavation to belong to G687. locations within G693 therefore not certain. but apparently in SW corner: very corroded pewter dish. small incised terra sigillata cup. Dragendorff Form 41. fragmented glass bowl of uncertain form, fragmented glass flask.



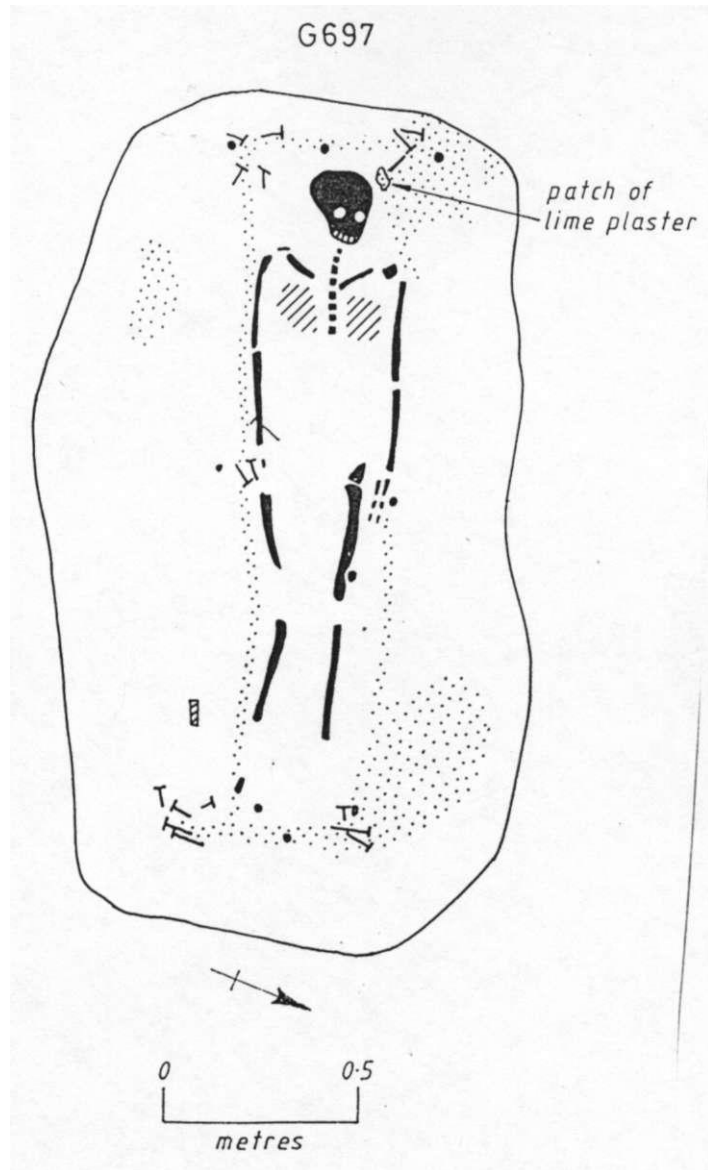
Grave 694 N-S (head to S). Possibly cuts Period 1 G693. Two interments within one grave cut. No coffins. G694a: head to S. adult. sex uncertain. supine, limbs flexed, right hand behind head. left leg bent upwards. G694b: second adult skull at N end of grave (?redeposited. though not from G693). Surviving bones in very poor condition.



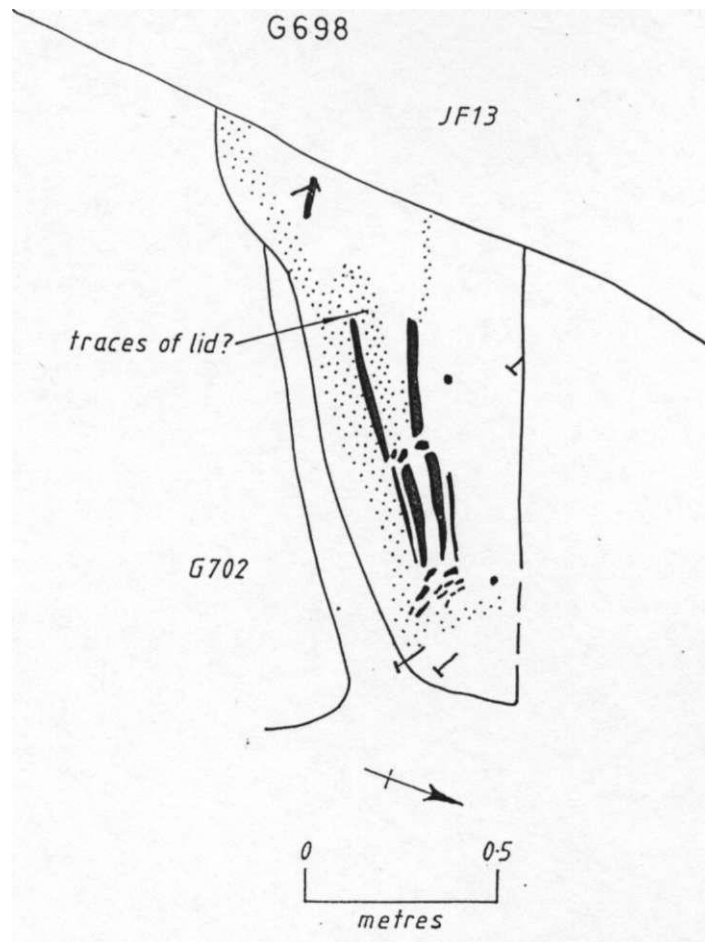
Grave 695 E-W (head to W). Cuts Period 2 G258. G284. Shallow grave. 1.04 m long. 0.52 m wide. Fragment of tegula placed vertically at W end. Rest of grave contains randomly placed tile fragments which may represent one or more tegulae. broken and disturbed by modern activity. Possibly tile burial similar to adjacent G254. No skeletal material. Grave size indicates infant or small child.



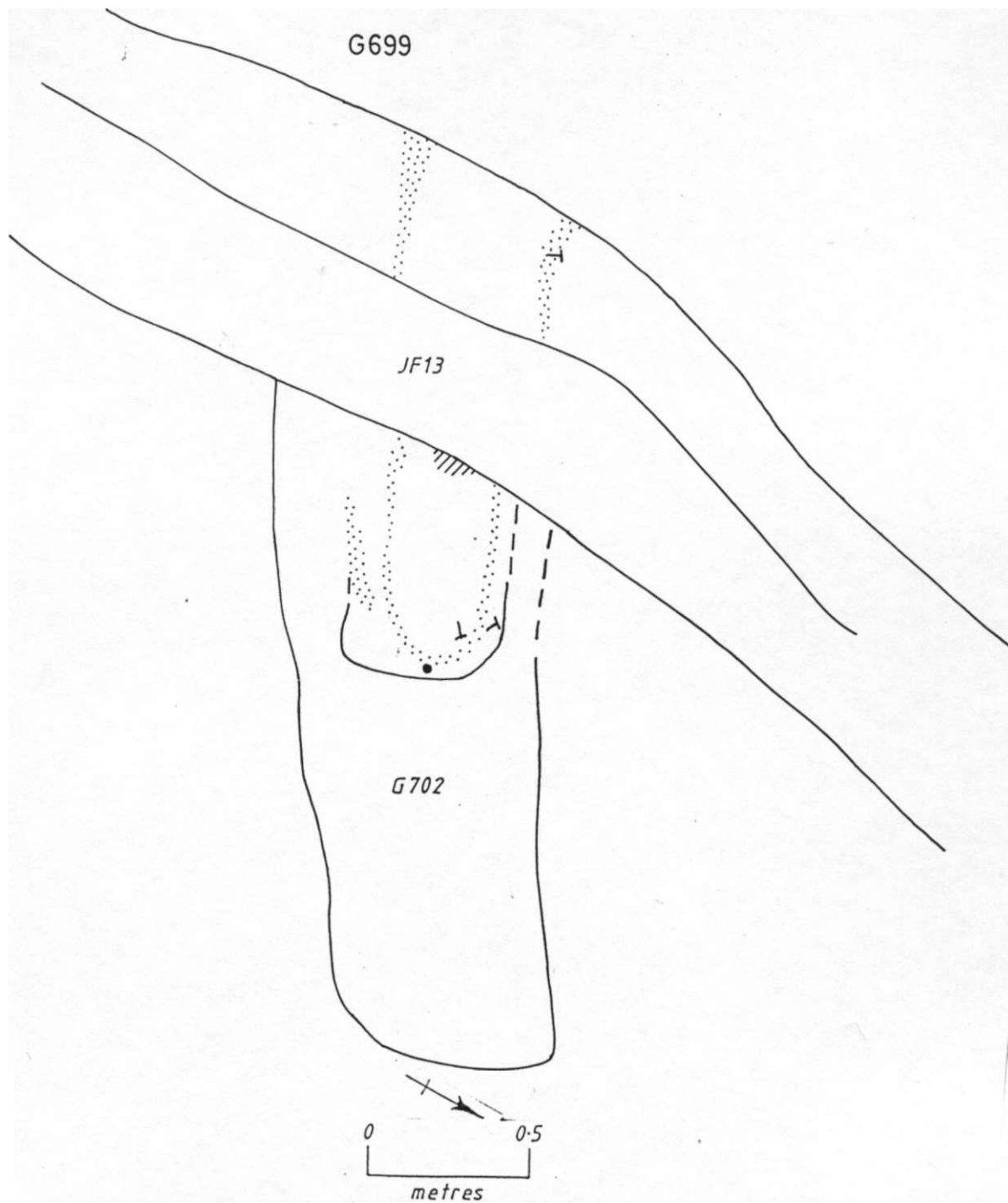
Grave 696 E-W (head to W). Relationship with Period 2 G459 uncertain. Nailed timber coffin. length 1.44 m. width 0.34 m. No skeletal material. but some staining from ?skull. Coffin size suggests child.



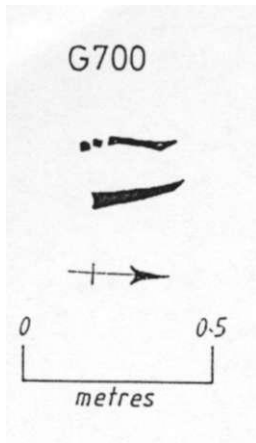
Grave 697 E-W (head to W). Isolated grave. Cut by modern pipe trench JF13. Nailed timber coffin, with possible traces on bottom beneath head and shoulders of lime plaster deposit. Young adult male. Skeleton supine. Surviving bones well preserved.



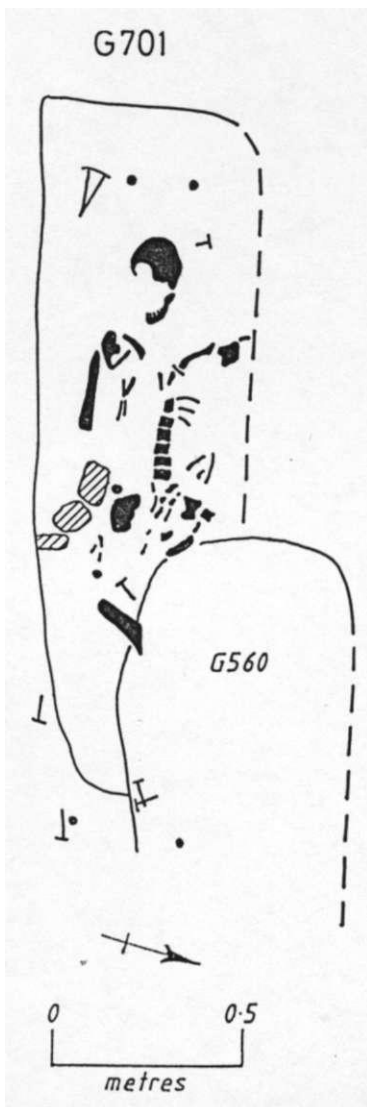
Grave 698 E-W (head to W). Cuts Period 2 G702, G708. Cut and partly destroyed by modern pipe trench JF13. Nailed timber coffin. Adult. sex uncertain. Skeleton supine. Surviving bones in fair condition.



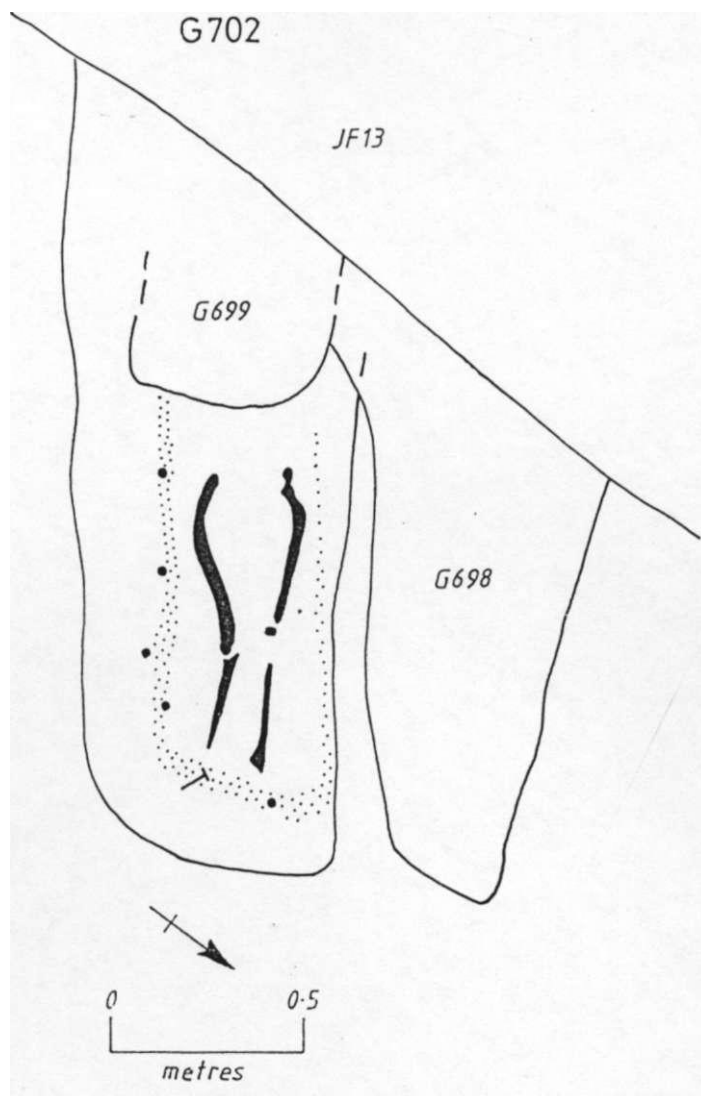
Grave 699 E-W. Cuts Period 2 G702. Cut by modern pipe trenches JF2. JF13. Nailed wooden coffin, length greater than 1.6 m. width 0.44 m. Only small fragments of bone, perhaps from vertebrae. Coffin size suggests adult.



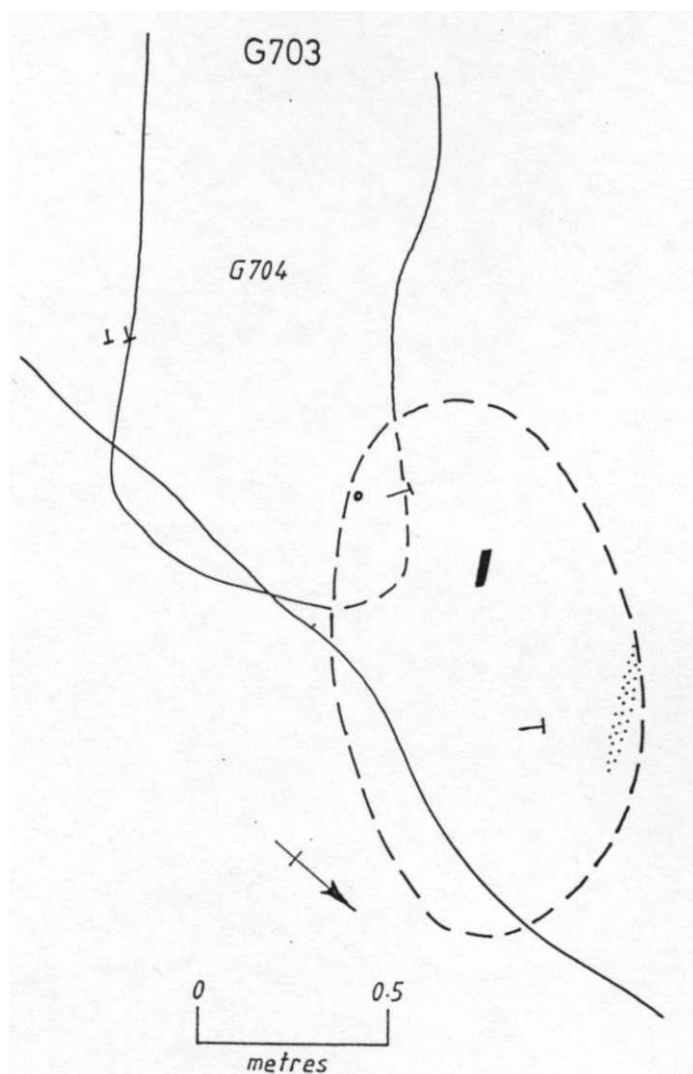
Grave 700 N-S (head to S). Isolated grave. Possibly nailed timber coffin (only one nail recovered. timber stain not located). Adult, sex uncertain. Leg long bone fragments only survive, in poor condition.



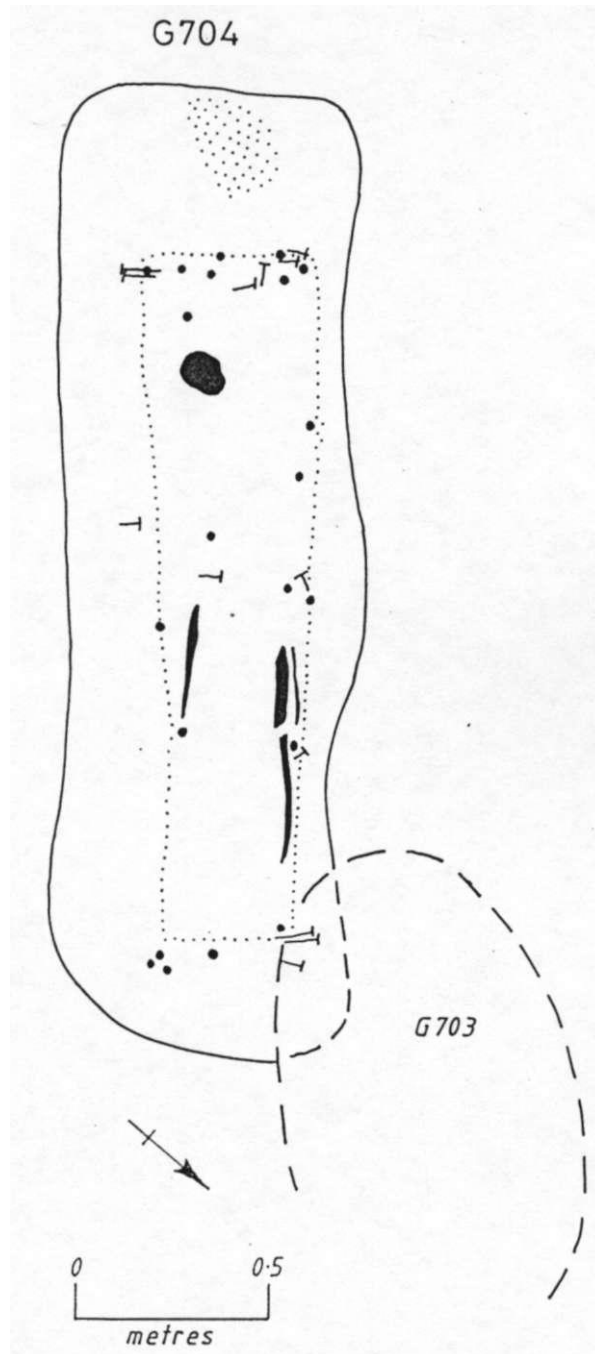
Grave 701 E-W (head to W). Possibly cut by Period 2 G560. Nailed timber coffin (timber stain not located). Middle-aged female. Skeleton supine. Surviving bones well preserved. Lower limbs disturbed and possibly redeposited.



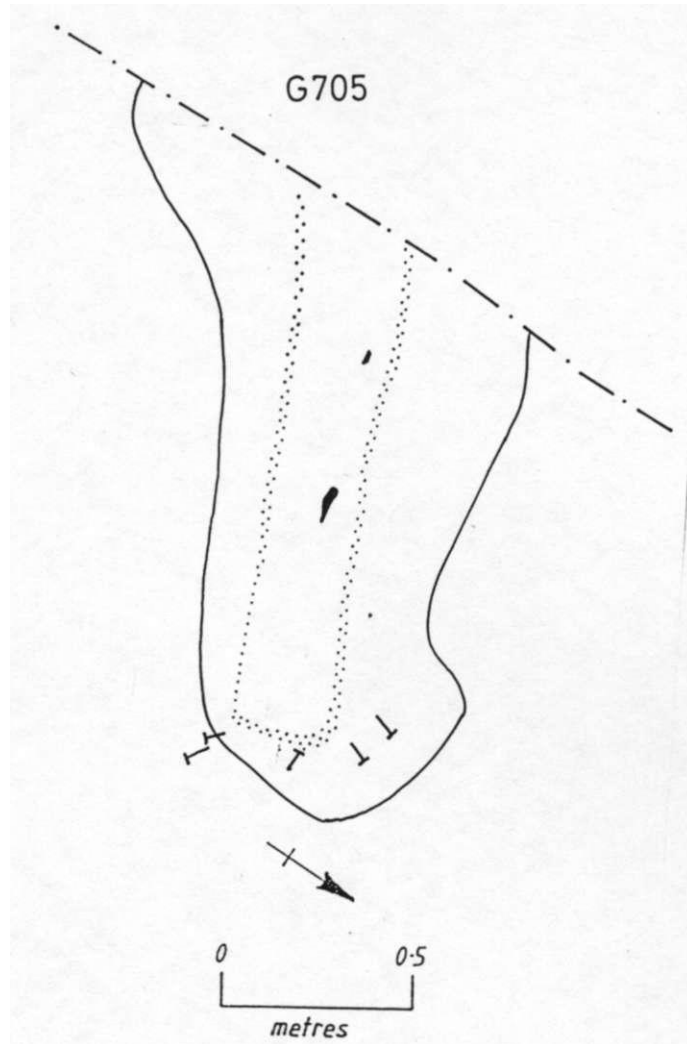
Grave 702 E-W (head to W). Cuts Period 2 G461. Cut by Period 2 G698. G699. modern features JF13. JF21. W end destroyed by later activity. Nailed timber coffin. Adult. sex uncertain. Skeleton supine. Part of pelvis and leg bones only survive. in fair condition.



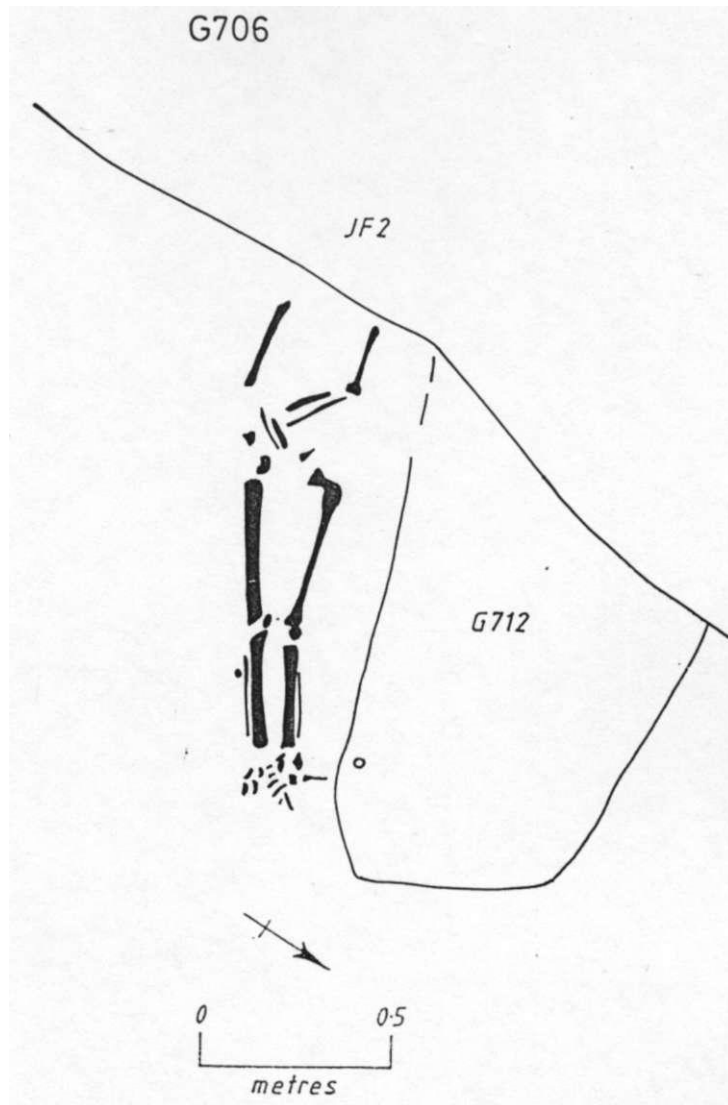
Grave 703 E-W. Cuts Period 2 G704. Cut by modern pipe trenches JF1. JF17. Grave cut not clear. but appears short and wide: maximum length 1.4 m. width 0.8 m. Nailed timber coffin. One fragment of bone only found.



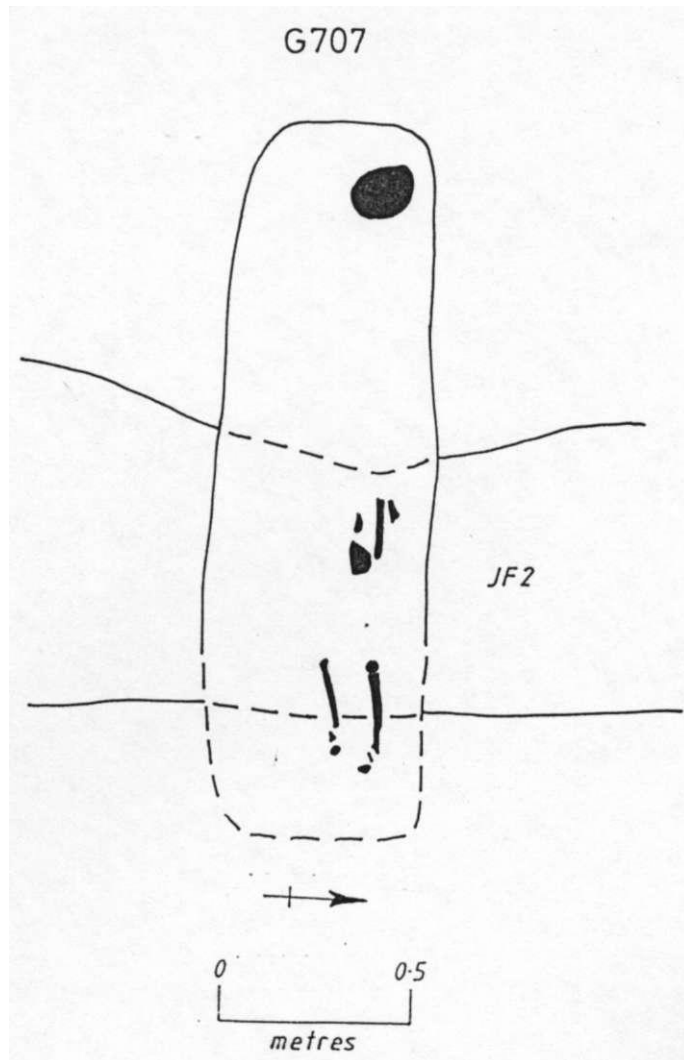
Grave 704 E-W (head to W). Cuts Period 2 G720. Cut by Period 2 G703. modern pipe trench JF1. Nailed timber coffin. Adult female. Skeleton supine. Surviving bones in poor condition.



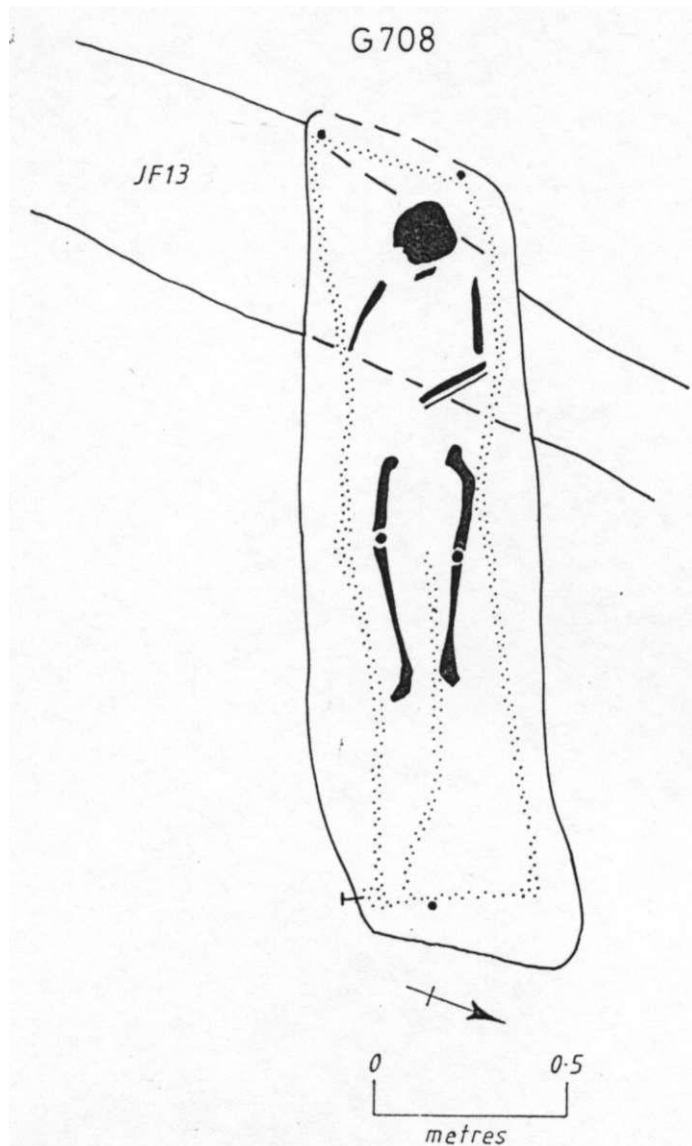
Grave 705 E-W. Cuts Period 2 G716. Cut by post-Roman pit JF25. W end not excavated. Nailed timber coffin, surviving length 1.4 m. width 0.3 m. Only two small fragments of bone survive. Coffin length indicates child.



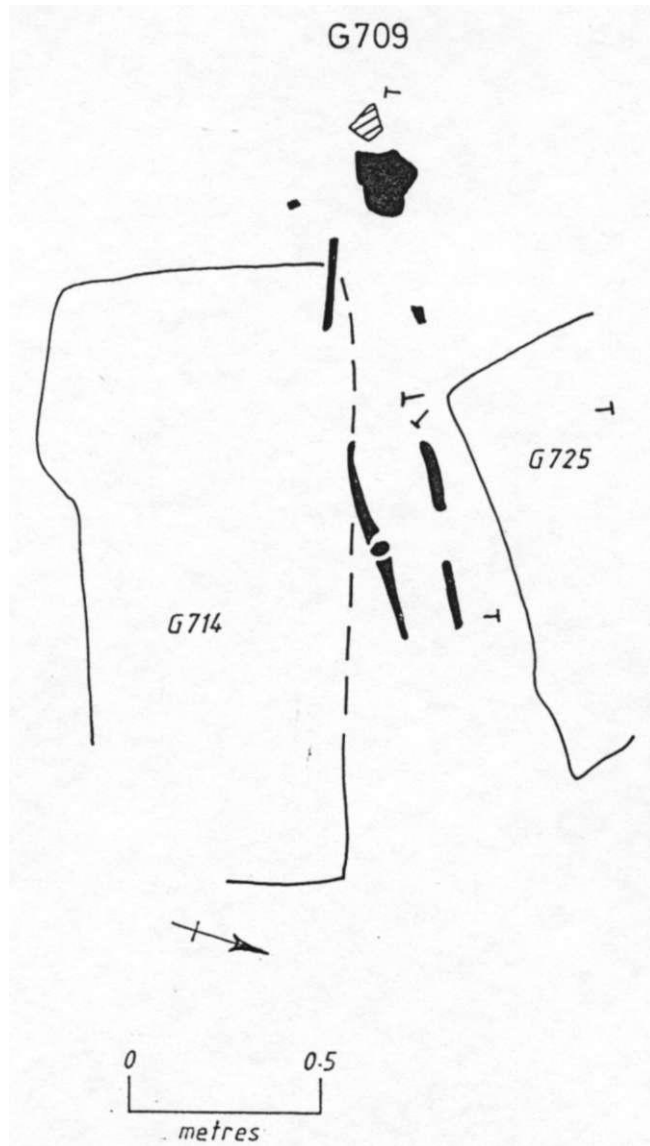
Grave 706 E-W (head to W). Relationship to G712 uncertain. Cut and partly destroyed by modern pipe trench JF2. Nailed coffin (timber stain not located). Adult male. Skeleton supine. Surviving bones well preserved.



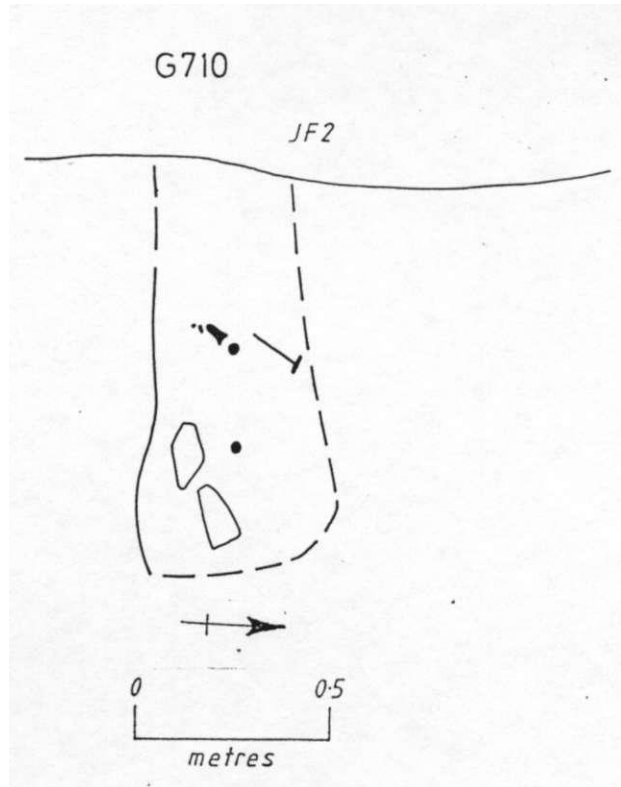
Grave 707 E-W (head to W). Isolated grave. Cut by modern pipe trench JF2. Nailed timber coffin (one nail only recovered). Adult female. Skeleton supine. Surviving bones in poor condition.



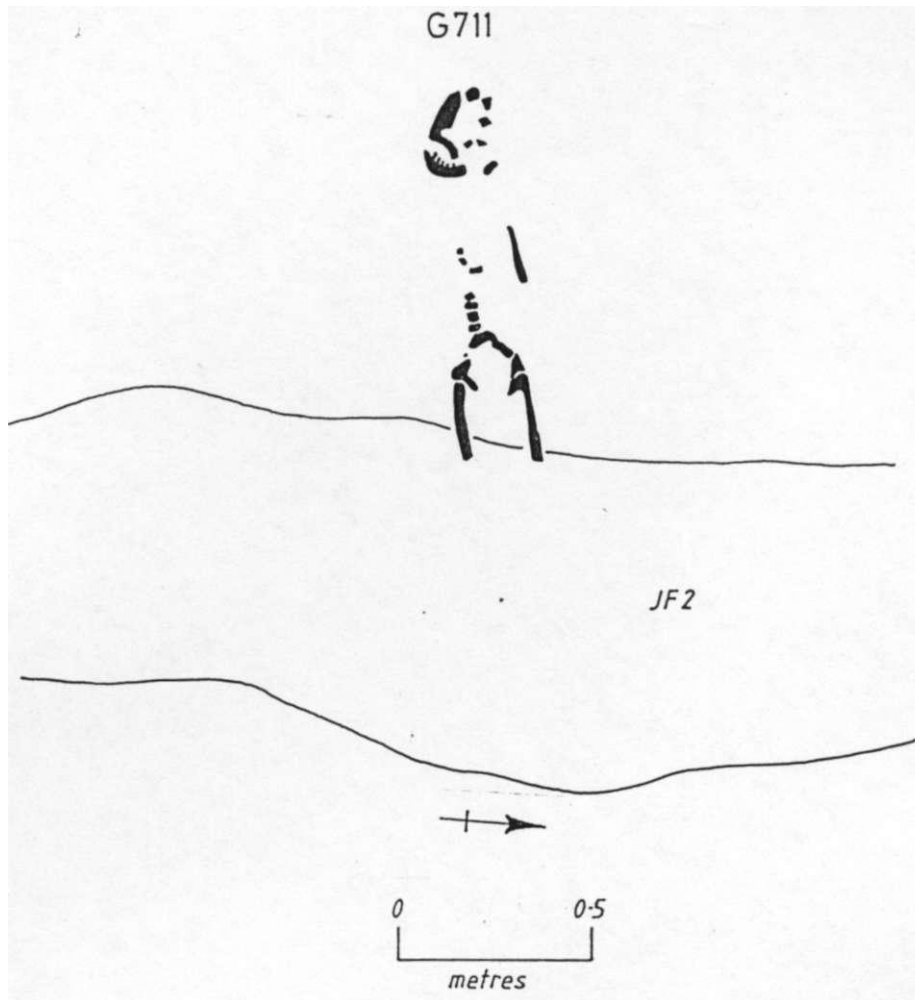
Grave 708 E-W (head to W). Cut by Period 2 **G698**. modern pipe trench JF13. Possibly cut by Period 2 **G736**. Nailed timber coffin. Middle-aged male. Skeleton supine. Skull and long bones remain, fairly well preserved.



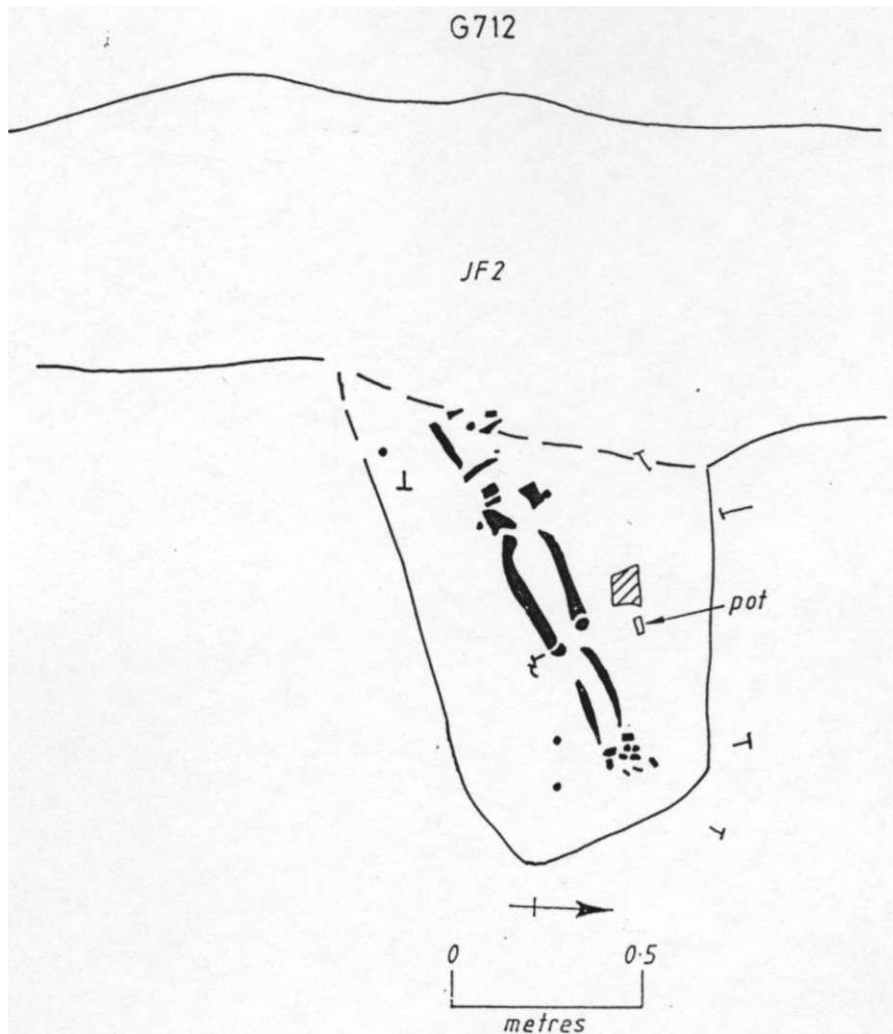
Grave 709 E-W (head to W). Probably cuts Period 2 G714. G725. Nailed timber coffin (timber stain not located). Adult. sex uncertain. Skeleton supine. Skull and some long bones only remain, in poor condition.



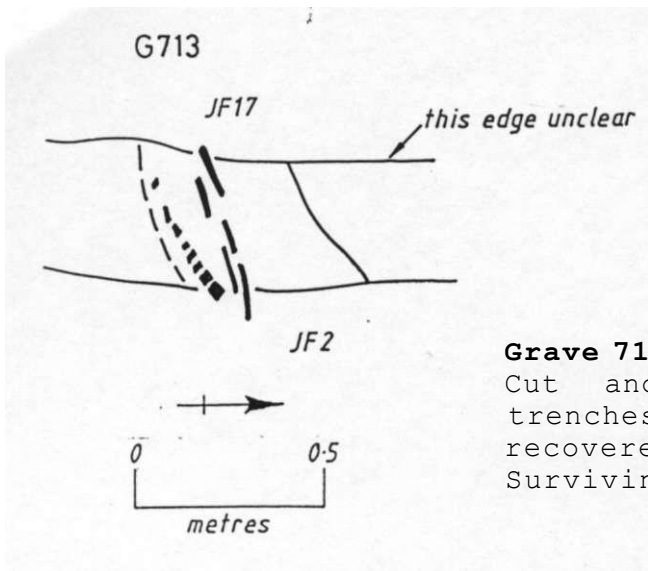
Grave 710 E-W (head to W). Isolated grave. Cut and partly destroyed by modern pipe trenches JF2. JF17. Mailed timber coffin (nails collapsed into JF17. timber stain not located). Adult female. Part of right femur and tibia only remain, in good condition.



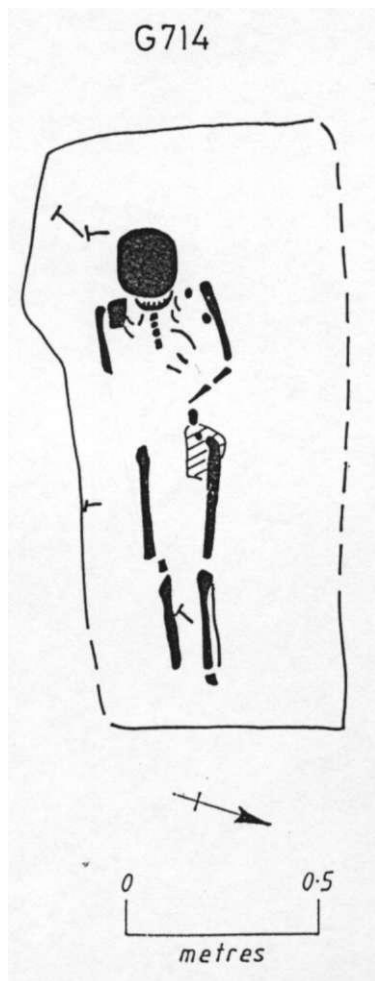
Grave 711 E-W (head to w). Relationship to G712 uncertain. Cut by modern pipe trench JF2. Nailed timber coffin (timber stain not located). Adult female. Skeleton supine. Surviving bones in poor condition.



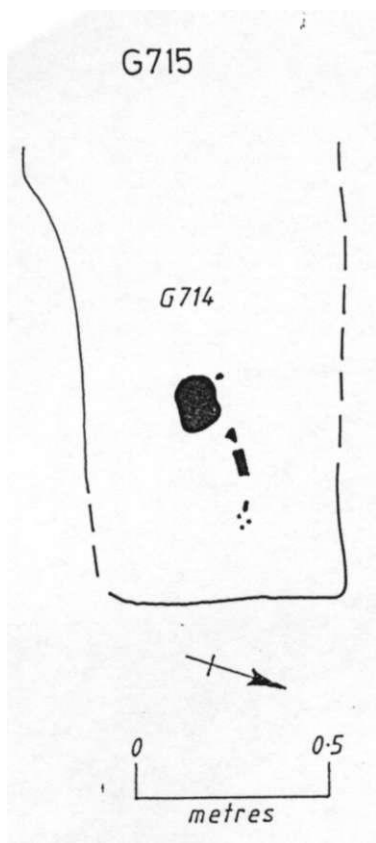
Grave 712 E-W (head to W). Relationships to G706 and G711 uncertain. Cut and partly destroyed by modern pipe trench JF2. Nailed timber coffin (timber stain not located). Adult male. Skeleton supine. Surviving bones well preserved.



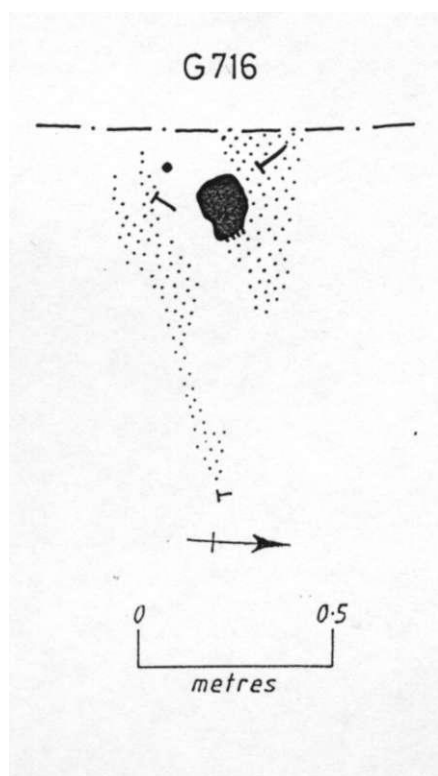
Grave 713 E-W (head to W). Isolated grave. Cut and largely destroyed by modern pipe trenches JF2. JF17. No timber stain or nails recovered. Adult male. Skeleton supine. Surviving bones in good condition.



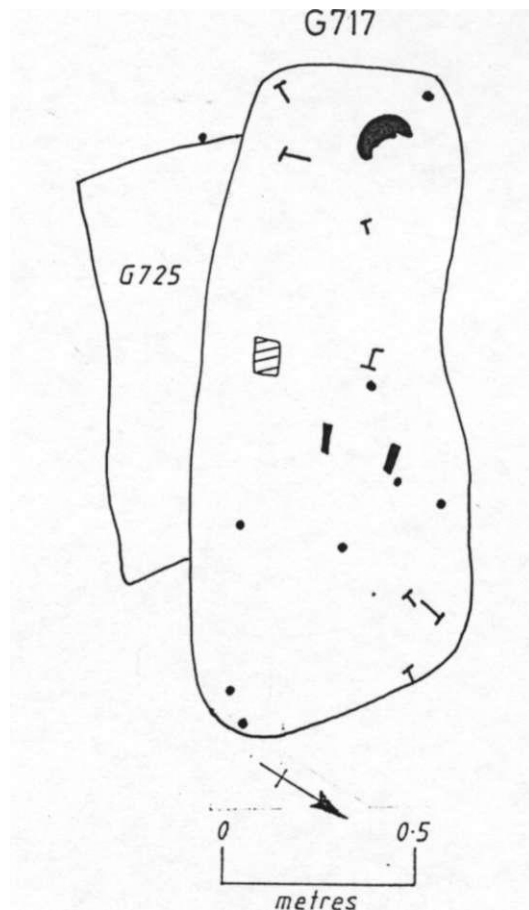
Grave 714 E-W (head to W). Probably cut by Period 2 G709. G715. Nailed timber coffin (timber stain not located). Child, aged 12 to 13 years. Skeleton supine. Surviving bones in fair condition.



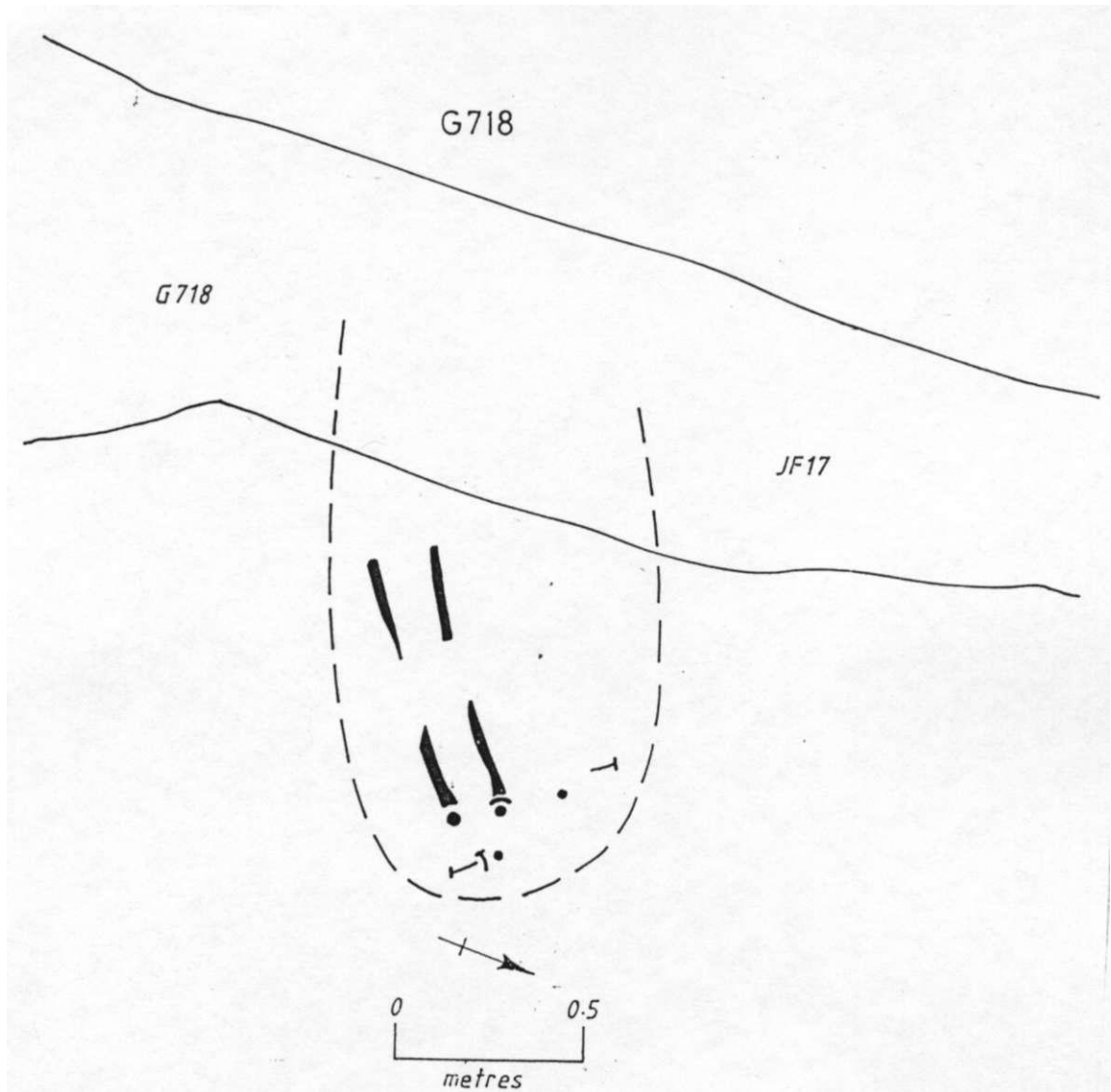
Grave 715 E-W (head to W). Probably cuts Period 2 G714. Possibly a group of redeposited bones. No clear grave cut. timber stain or nails recovered. Child, aged 11 to 13 years. Skeleton supine. Skull and some upper limb bones only remain. in good condition.



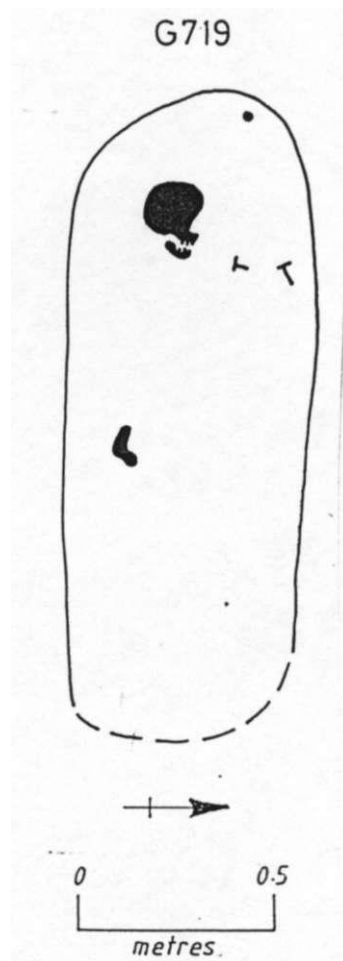
Grave 716 E-W (head to W). Cuts Period 2 G730. Cut by Period 2 G705. Nailed timber coffin. E end not located. Child, aged 8 to 9 years. Skeleton supine. Skull only remains, in fair condition.



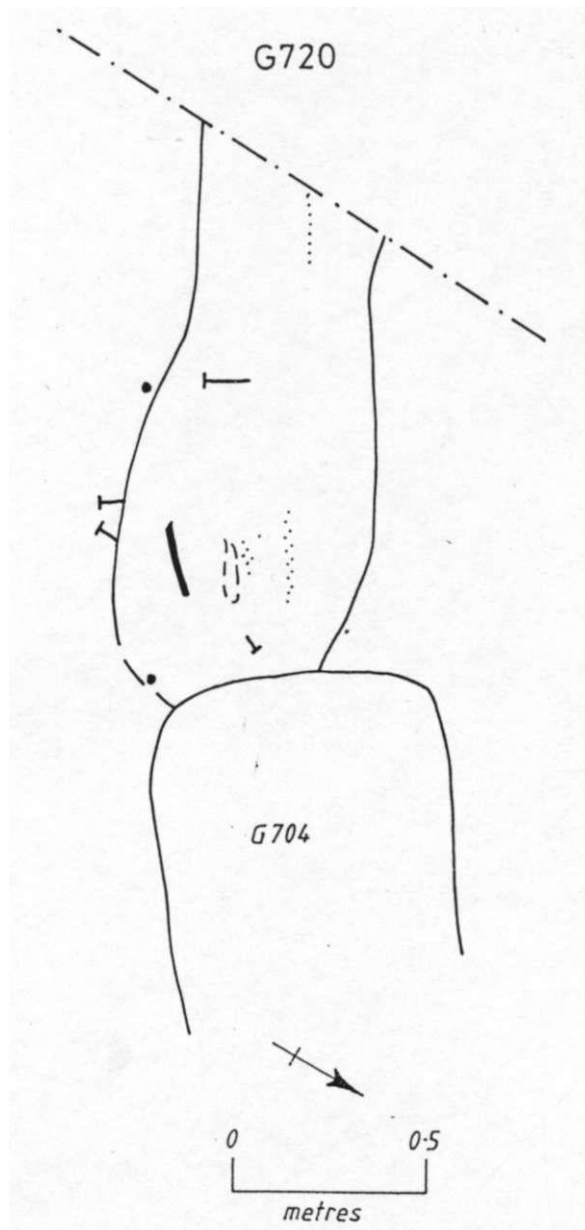
Grave 717 E-W (head to W). Cuts Period 2 G725. Nailed timber coffin (timber stain not located). Adult male. Skeleton supine. Skull and fragments of femora only remain. in poor condition.



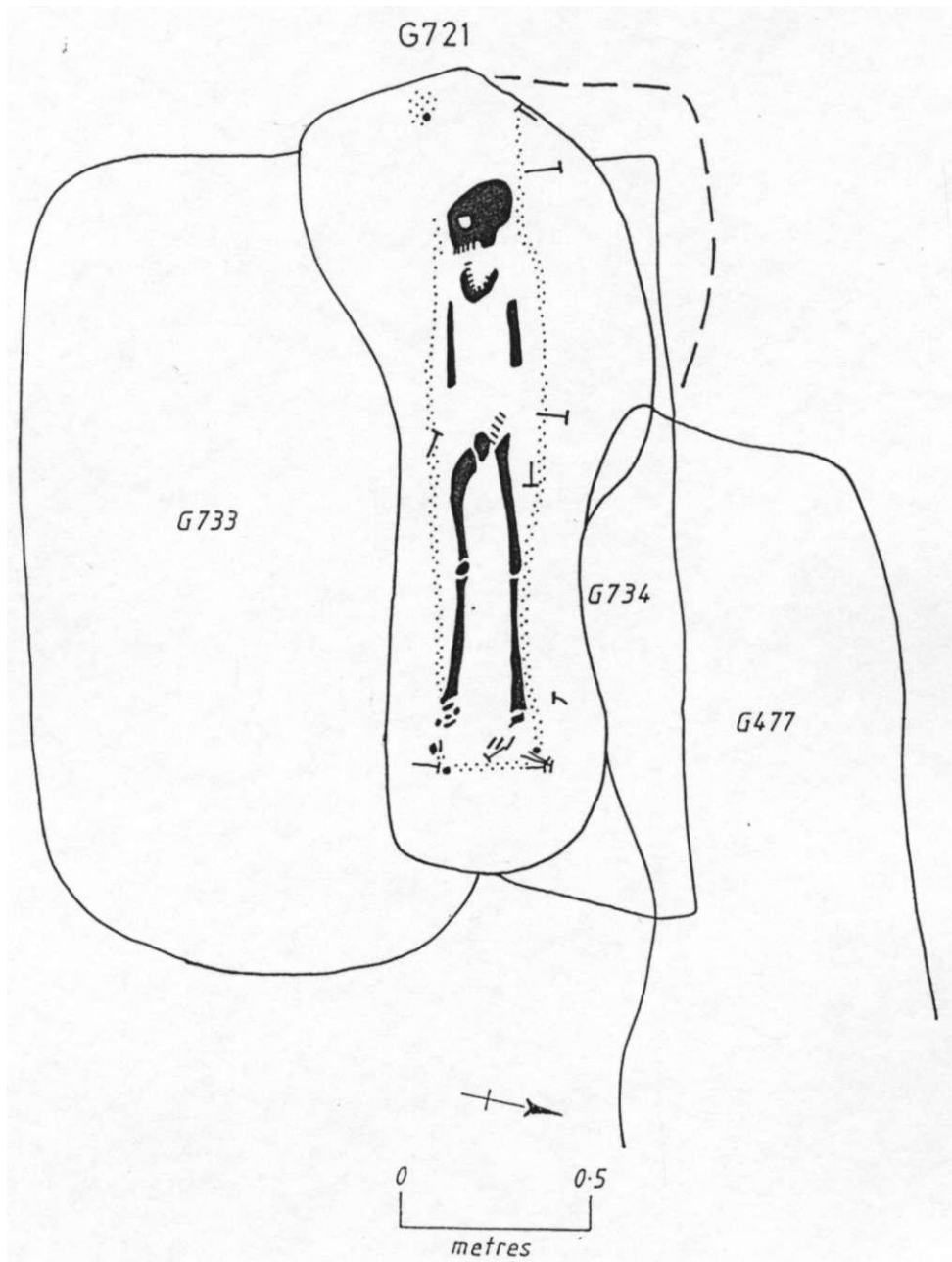
Grave 718 E-W (head to W). Isolated grave. Cut and partly destroyed by modern pipe trench JF17. Nailed timber coffin (timber stain not located). Adult. sex uncertain. Skeleton supine. Lower limbs only remain, in fair condition.



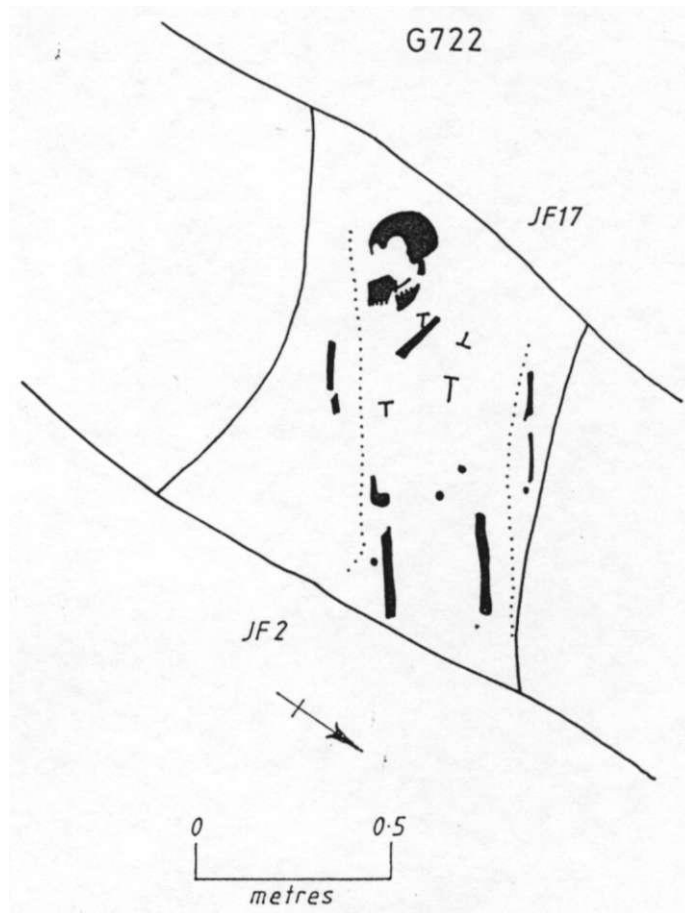
Grave 719 E-W (head to W). Isolated grave. Cut by modern pipe trench JF2. Nailed timber coffin (timber stain not located). Adult female. Skeleton supine. Skull and part of pelvis only survive, in poor condition.



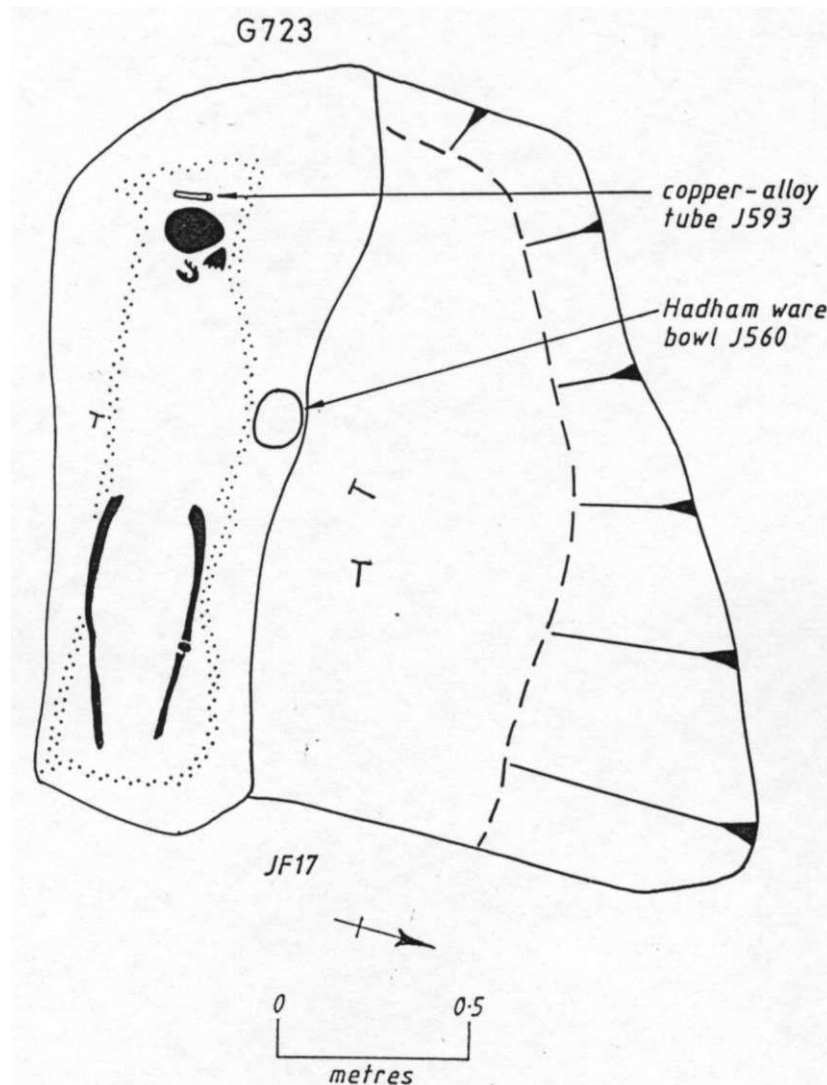
Grave 720 E-w (head to W). Cuts Period 2 G730. Cut by Period 2 G704. Nailed timber coffin. W end not excavated. Adult. sex uncertain. One tibia fragment only remains, in poor condition.



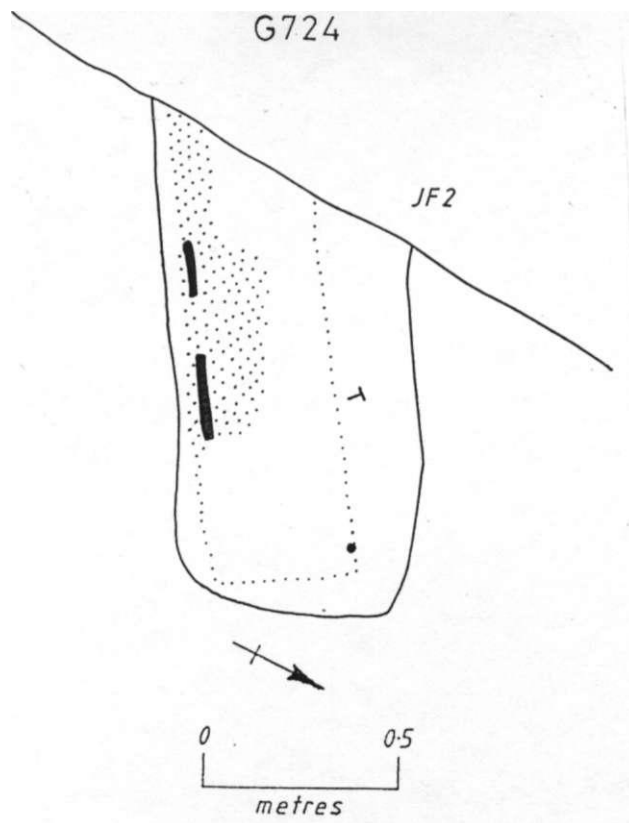
Grave 721 E-W (head to W). Cuts Period 2 G733. Cuts and seals Period 2 G734. Possibly cut by Period 2 G477. G503. Nailed timber coffin. Adult female. Skeleton supine. Surviving bones in good condition.



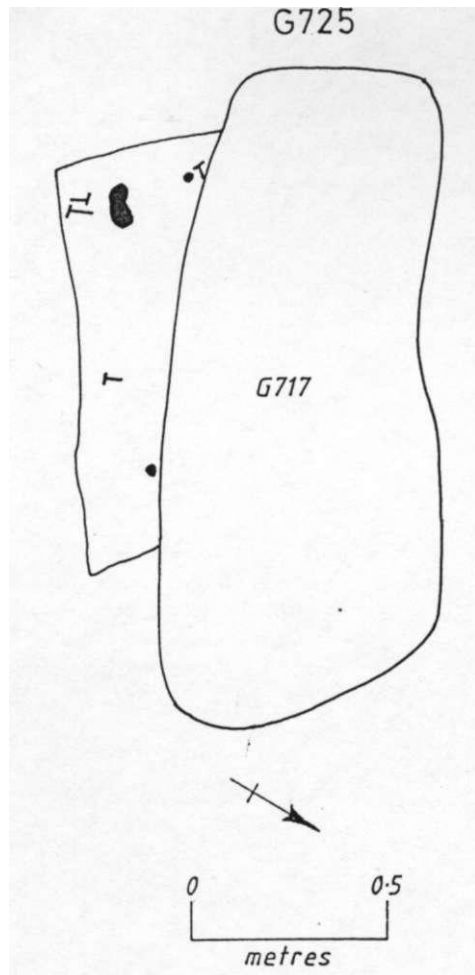
Grave 722 E-w (head to W). Cuts Period 2 G727. Cut and partly destroyed by modern pipe trenches JF2, JF17. Nailed timber coffin. Middle-aged. sex uncertain. Surviving bones in poor condition. Several fragments of tile and one of septaria were found in the upper grave fill at W end (not planned). Possibly surface markers.



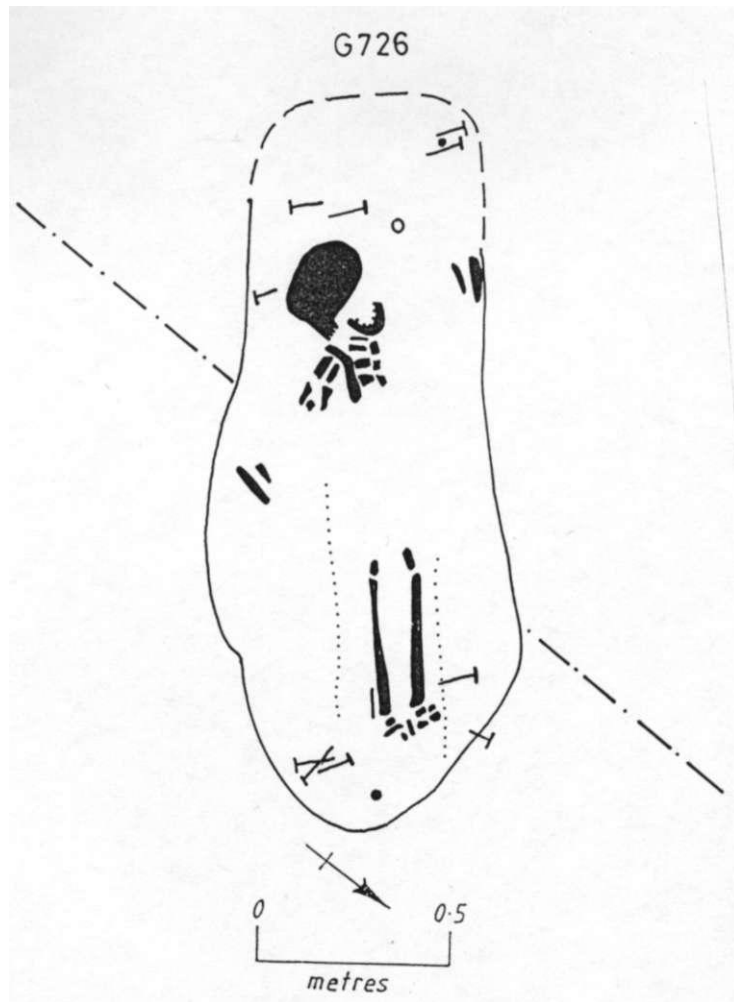
Grave 723 E-W (head to W). Isolated grave. Cut by modern features JF1. JF17. JF26. Nailed timber coffin (only two nails recovered). Adult female. Skeleton supine. Skull and leg bones only survive, in fair condition. Tubular copper-alloy object lay inside coffin close to top of skull. and Hadham ware bowl lay outside coffin about halfway down N side.



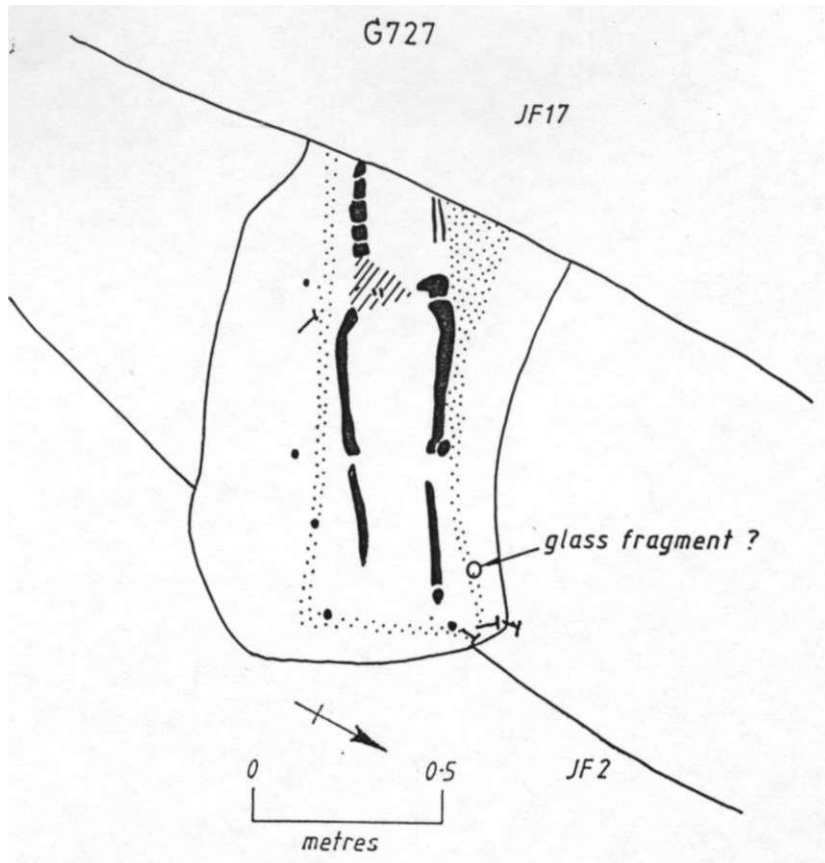
Grave 724 E-W (head to W). Isolated grave. Cut and partly destroyed by modern pipe trench JP2. Nailed timber coffin. length greater than 1.28 m. width 0.36 m. Age and sex uncertain. Only fragments of leg bone survive, in very poor condition. Coffin length indicates older child.



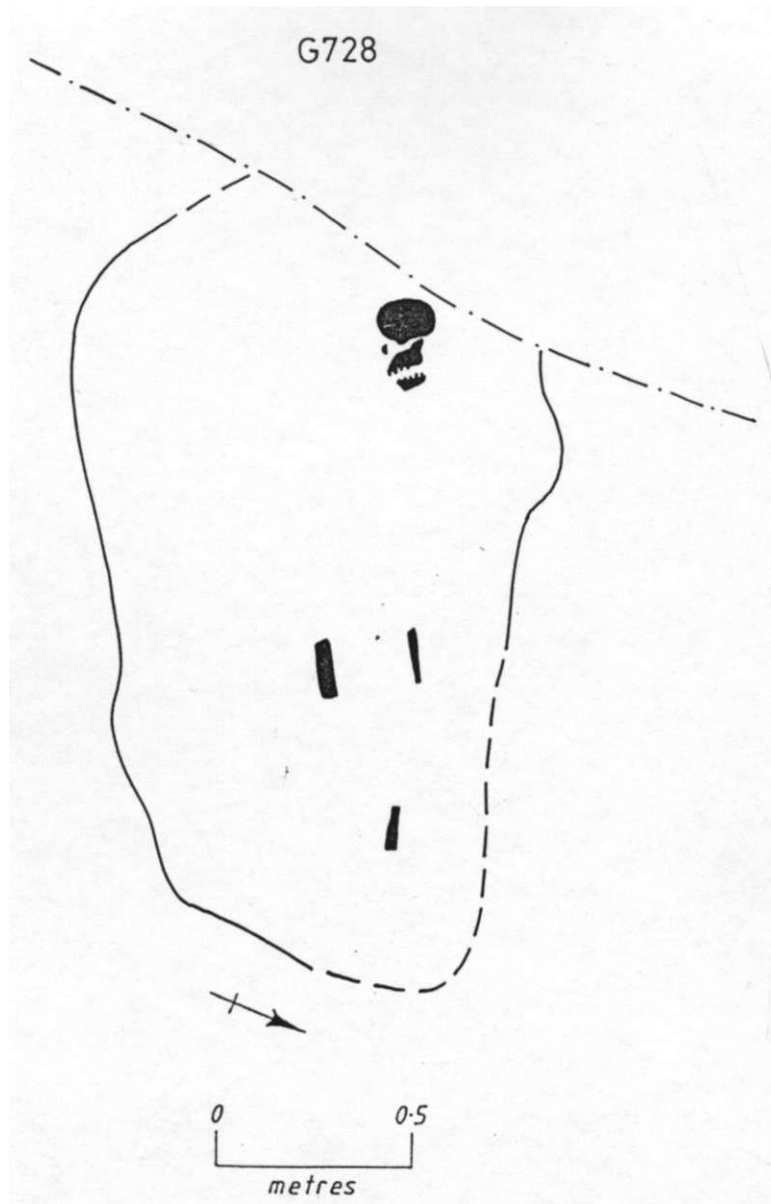
Grave 725 E-W (head to W). Cut by Period 2 G717. Possibly cut by G709. Nailed coffin (timber stain not located). Child, aged 2-1/2 to 3-years. Only skull fragments survive, in poor condition.



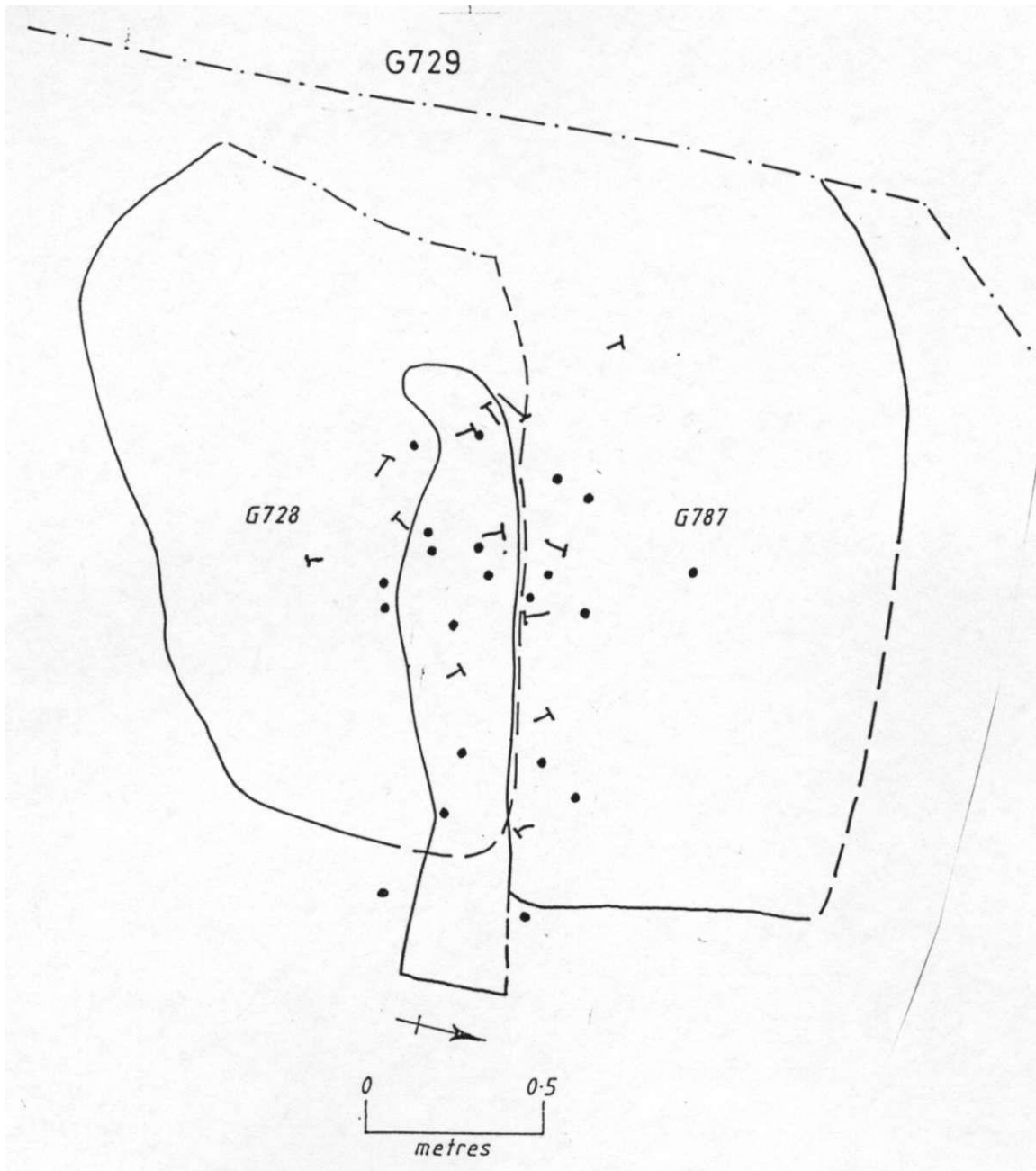
Grave 726 E-W (head to W). Isolated grave (edge of site). W end disturbed. Nailed timber coffin. Adult female. Skeleton supine. Surviving bones in fair condition.



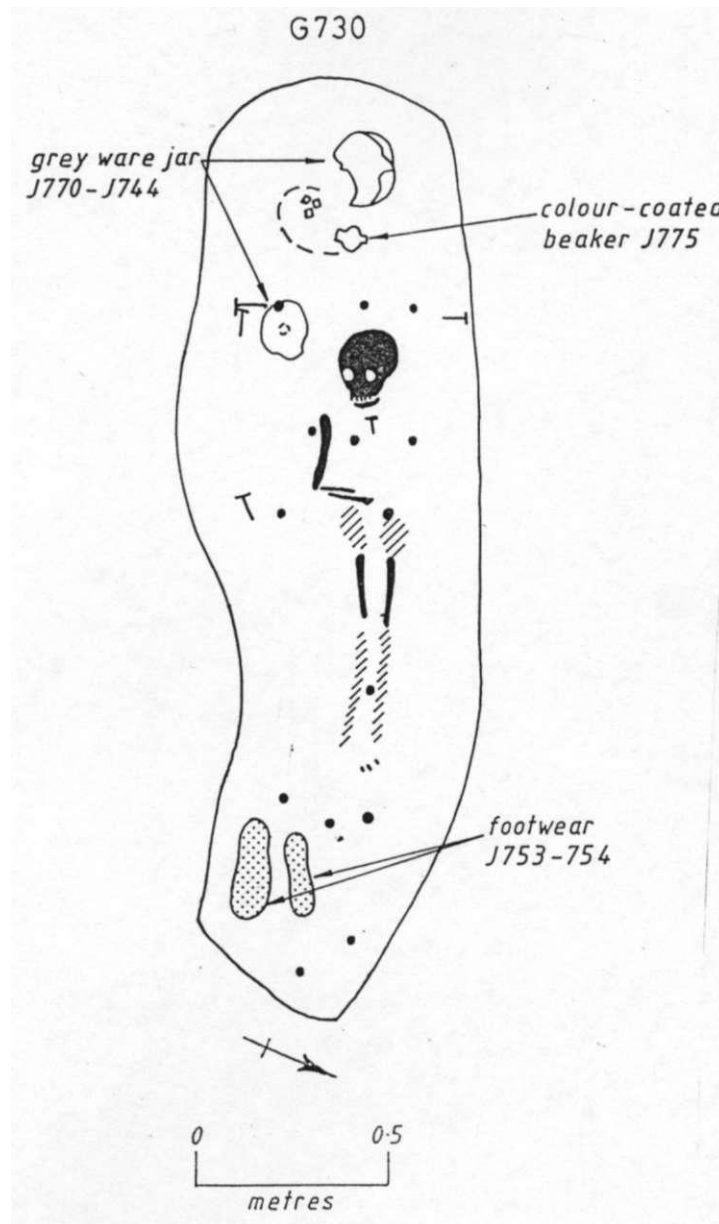
Grave 727 E-W (head to W). Cut by Period 2 G722. modern pipe trenches JF2. JF17. W end destroyed by JF17. Nailed timber coffin. Elderly female. Skeleton supine. Surviving bones in fair condition.



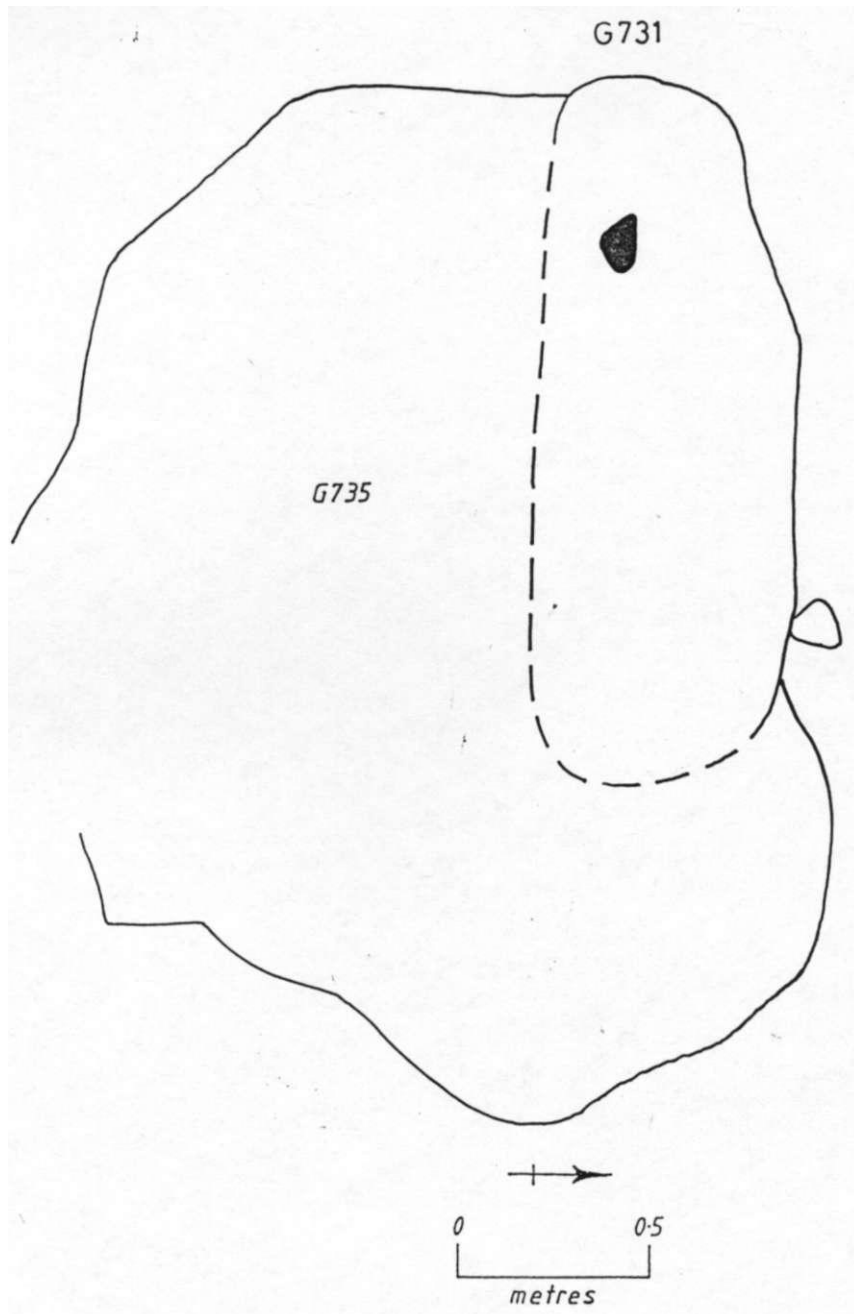
Grave 728 E-W (head to W). Possibly cuts Period 2 G729. Nailed timber coffin (nails and timber stain not plotted). Some nails allocated to G729 may belong with G728. Adult, sex uncertain. Skeleton supine. Only skull and fragments of leg long bones survive, in poor condition.



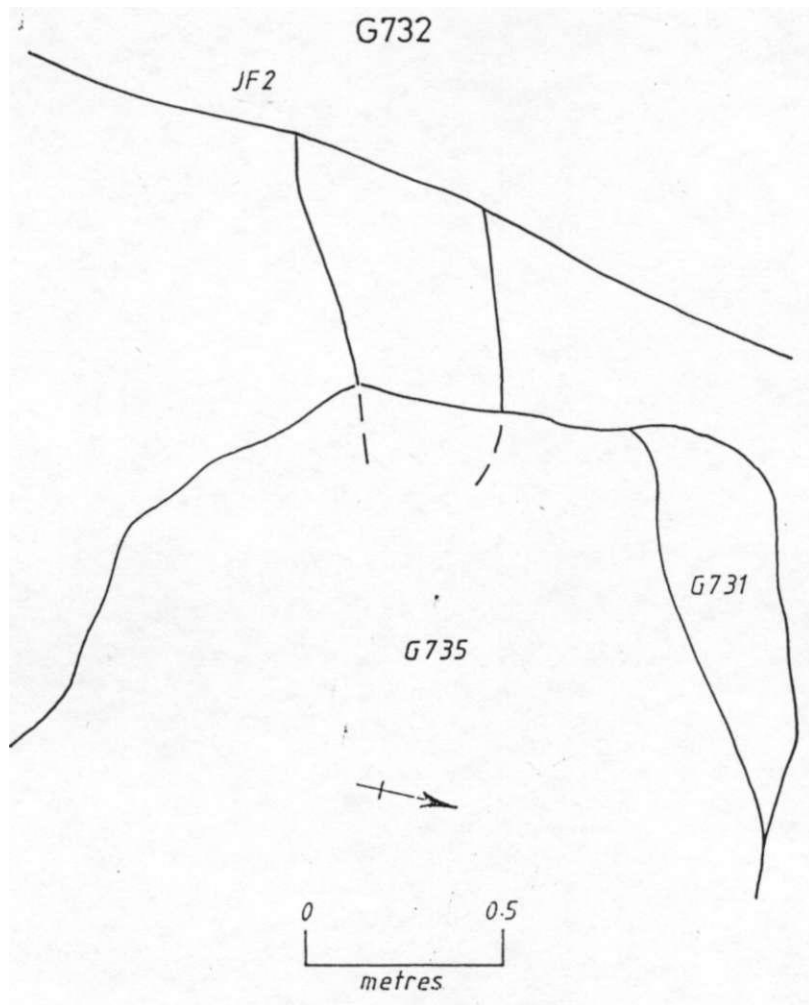
Grave 729 Probably an E-W Inhumation. Possibly cuts Period 2 G737. Possibly cut by Period 2 G728. Many nails were recovered but no definite timber stain located. No skeletal material.



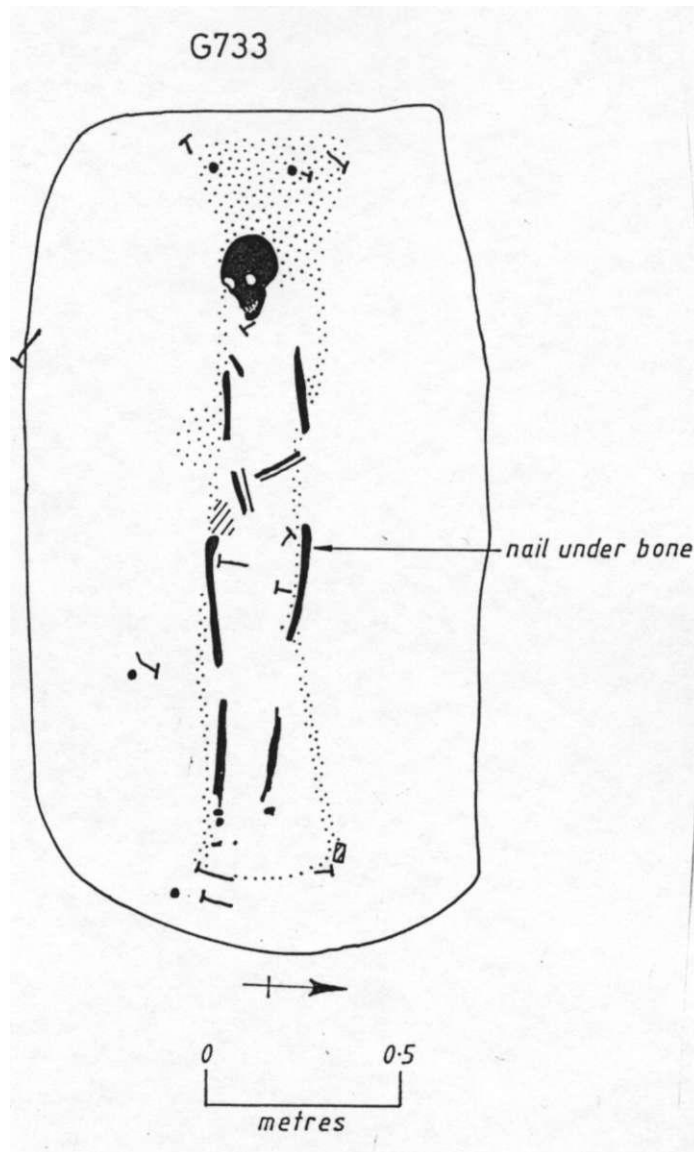
Grave 730 E-W (head to W). Cut by Period 2 G716. G720. modern pipe trench JF1. Nailed timber coffin. Adult female. Skeleton supine. Bones in fair condition. In SE corner of coffin lay pair of hobnailed shoes. Outside coffin at W end lay small beaker of Nene Valley colour-coated ware with white painted decoration. and a fragmented inverted coarse grey ware jar. CAM 268.



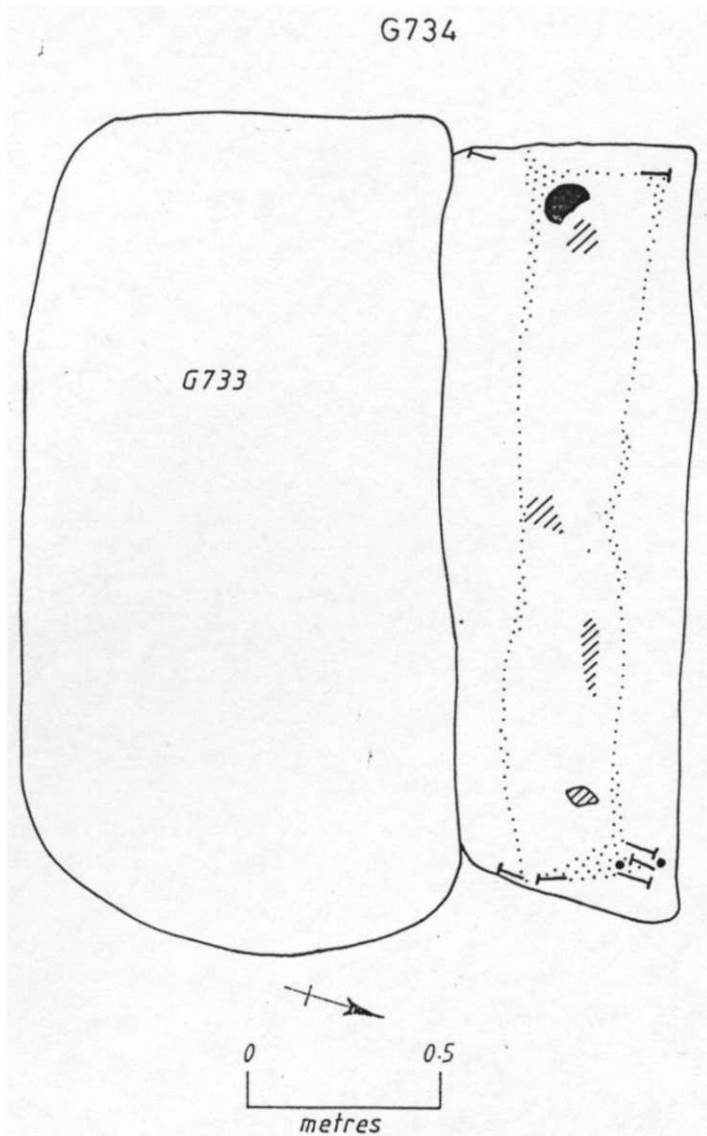
Grave 731 E-W (head to W). Cuts Period 2 G735. Possibly nailed timber coffin (few nails recovered. no timber stain located). Child, aged 12 to 13 years. Only fragments of skull and jaw survive, and some vertebrae, all poorly preserved.



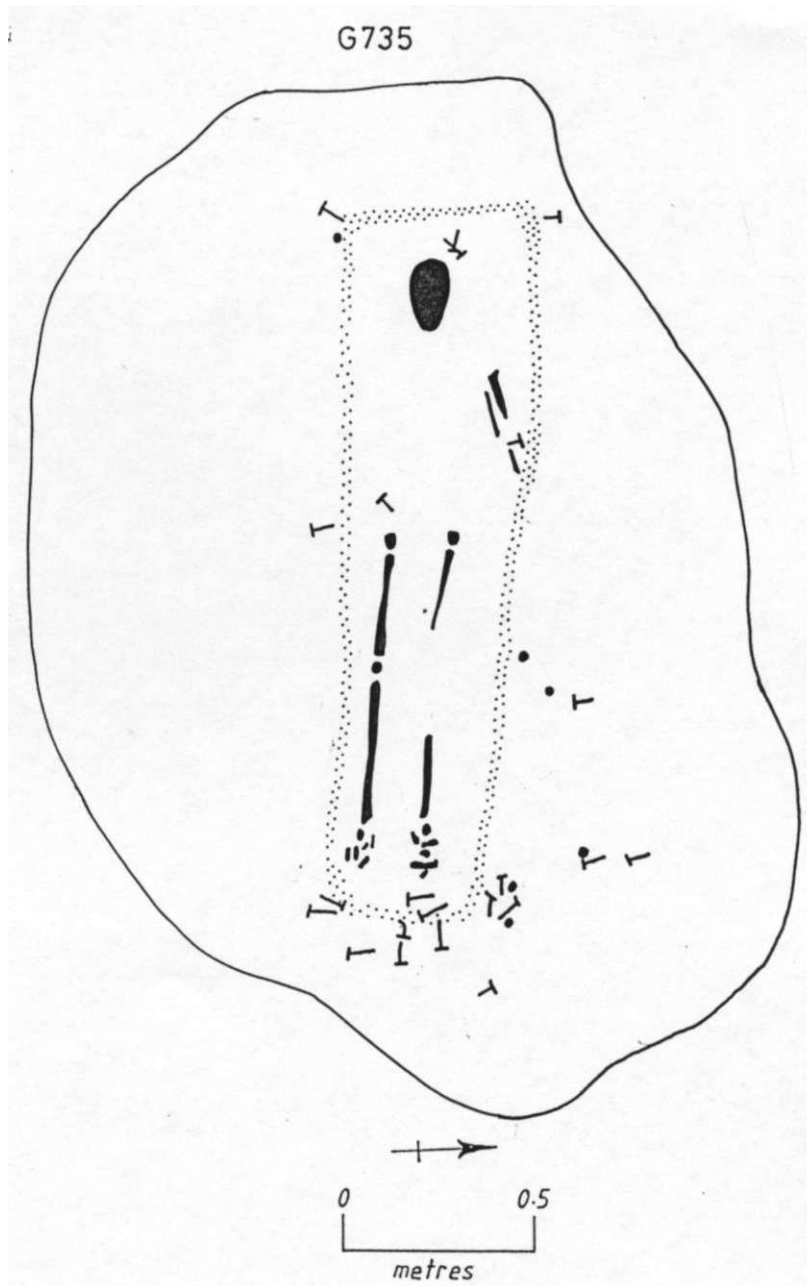
Grave 732 Possibly cuts Period 2 G735. Cut by modern pipe trench JF2. Only extreme E end of feature remained . possibly an E-W inhumation or a pit. One nail recovered, no timber stain located. No skeletal material.



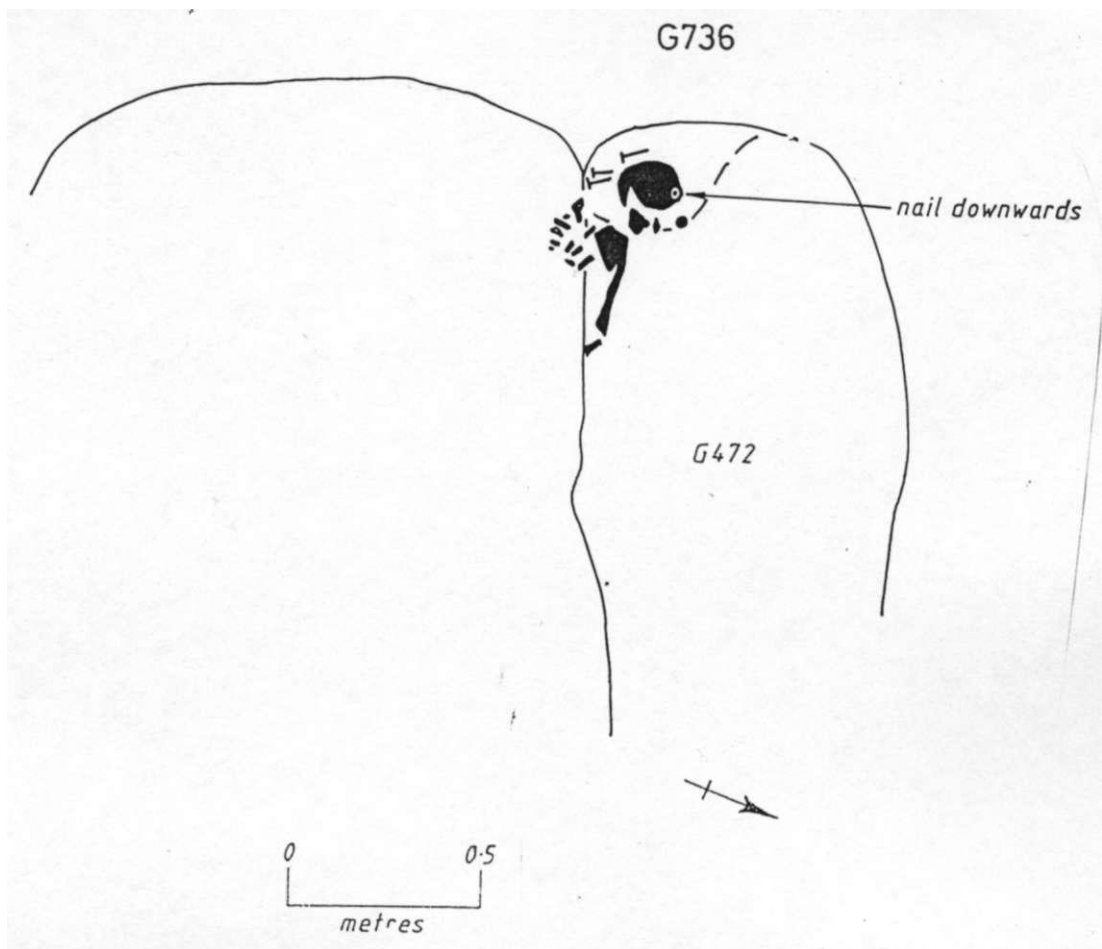
Grave 733 E-W (head to W). Cuts Period 2 G734. Cut by Period 2 G462. G721. Nailed timber coffin. Large patch of timber stain at W end. possibly collapsed short side. Adult female. Skeleton supine. Surviving bones in fair condition.



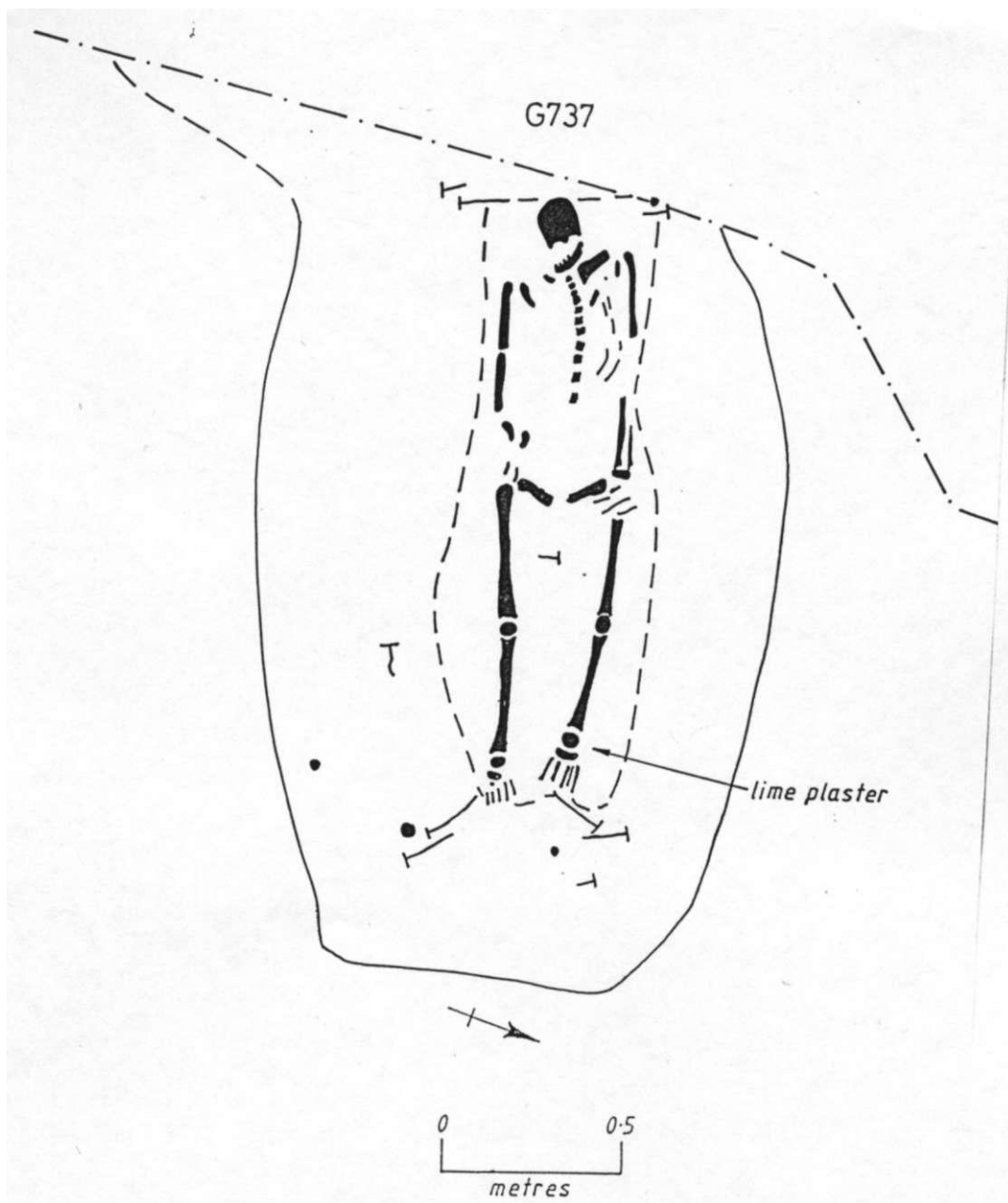
Grave 734 E-W (head to W). Cut by Period 2 G477. G733. Cut and sealed by Period 2 G721. Nailed timber coffin. Adult. sex uncertain. Skeleton supine. Surviving bone fragments in poor condition.



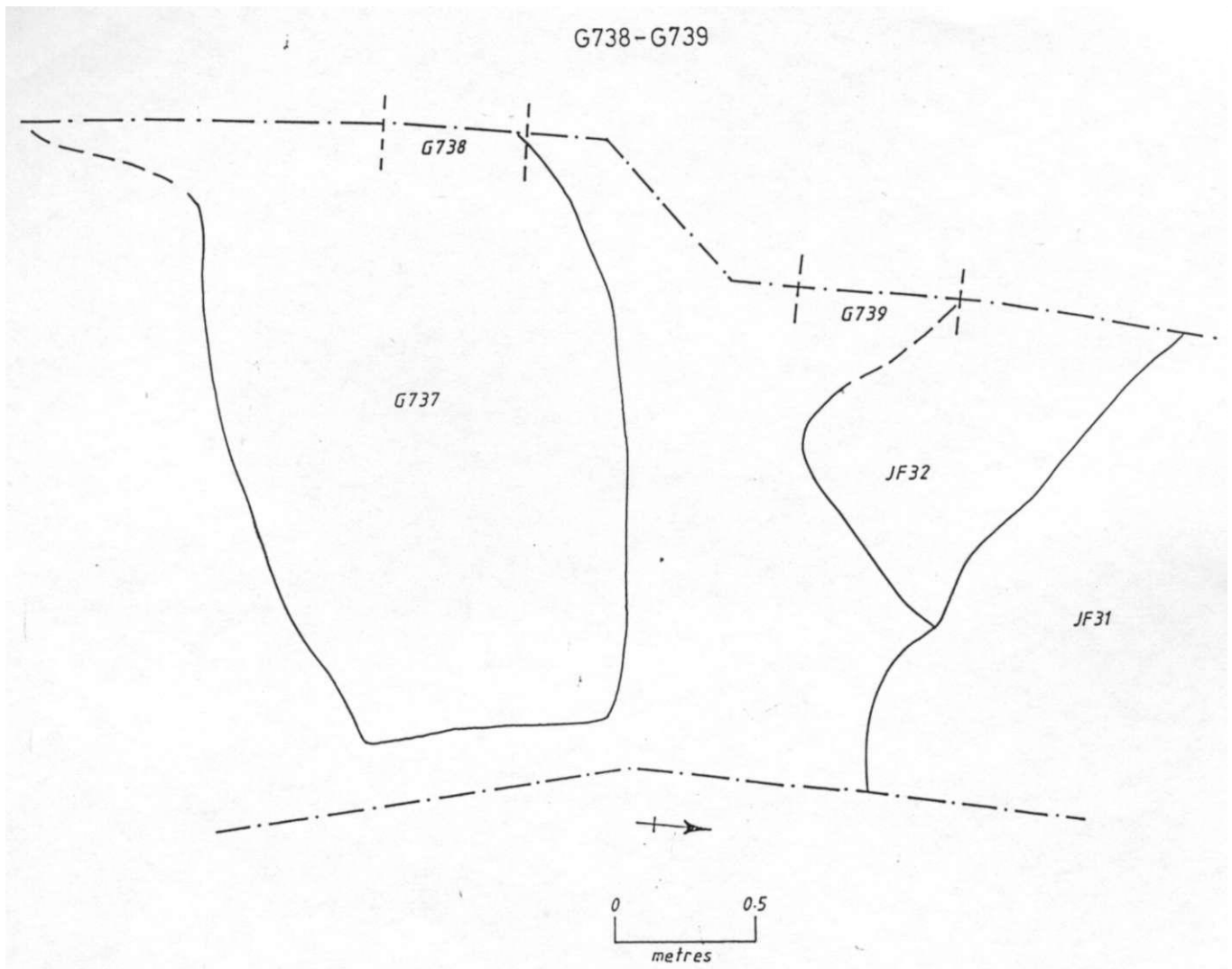
Grave 735 E-W (head to W). Cut by Period 2 G731. Possibly cut by Period 2 G732. Nailed timber coffin. Adult male. Skeleton supine. Surviving bones in fair condition.



Grave 736 E-W (head to W). Possibly cuts Period 2 G708. Cut by Period 2 G461. G462. Possibly cut by Period 2 G472. Grave cut not clear. mostly destroyed by later graves. Nailed timber coffin. Adult male. Skull fragments only survived in situ. Other bones (including long bones and part of pelvis) redeposited by W edge of G472. All bones in fair condition.



Grave 737 E-W (head to W). Possibly cuts Period 2 G739. Cut by Period 2 G738. Possibly cut by Period 2 G729. Nailed timber coffin. Layer of lime plaster deposit on bottom of coffin beneath bones, and also partly over right femur. Elderly female. Skeleton supine. Surviving bones well preserved.



Grave 738 E-W. Cuts Period 2 G737. Not excavated. E end exposed in section. Nailed timber coffin (no timber stain located). No skeletal material.

Grave 739 E-W (head to w). Cut by post-Roman pit JF32. Possibly cut by Period 2 G737. post-Roman pit JF31. Not excavated. W end exposed in section. Most of grave destroyed by post-medieval activity. Nailed timber coffin (no timber stain located). Adult female. Skull fragments. in fair condition, exposed in section.

Grave 740 E-W (head to W). Watching brief. Sealed by modern cellar floor. Not planned, position not accurately plotted. Coffin not detectable. Adult male. Surviving bones in poor condition. many stained black in patches.

Grave 741 E-W (head to W). Watching brief. Sealed by modern cellar floor. W half of grave disturbed by contractors. Nailed timber coffin. Adult female. Skeleton supine. Surviving bones well preserved. Leg bones displaced and mingled with other adult female bones from other disturbed grave(s).