

APPENDIX 1 - METALWORK

1.1 Metalwork

by Hilary Cool

Introduction

- 1.1.1 This assessment deals with copper alloy and lead objects, and ironwork (excluding coffin nails which were recovered from a variety of contexts, but mostly from burials).
- 1.1.2 The Fieldwork Event Aims that the material can be expected to contribute to are as follows:
- Fieldwork Event Aim 1: To establish the origins and decline of the Roman settlement.
 - Fieldwork Event Aim 2: To recover the plan and a dated occupation sequence for all phases of that section of the Roman settlement (including the rural-urban fringe and immediate hinterland) affected by the CTRL, to further the understanding of the extent and character of the core Roman settlement, its interaction with its immediate environs, and changes through time.
 - Fieldwork Event Aim 3: To recover artefact assemblages (especially pottery) to elucidate the sequence of site development; provide information on trade and exchange within the local, regional and international economy, and the status and economy of the settlement.
 - Fieldwork Event Aim 4: To determine the origins and decline of urban functions within the settlement.
 - Fieldwork Event Aim 7: To establish the chronology of the cemetery.
 - Fieldwork Event Aim 8: To establish the spatial development of the cemetery as far as possible within the area of investigation.
 - Fieldwork Event Aim 9: To establish if spatial variations exist within the cemetery in relation to burial practice.
 - Fieldwork Event Aim 11: To establish the nature and distribution of structural features located within the cemetery.
 - Fieldwork Event Aim 12: To identify ancillary features associated with a specific burial practice.
 - Fieldwork Event Aim 13: To establish the nature and date of occupation pre-dating the cemetery.
 - Fieldwork Event Aim 14: To determine the nature of activity and land utilisation, other than that directly forming part of the cemetery, associated with the Roman town of Springhead.

Methodology

- 1.1.3 The ironwork was selected and identified from an inspection of the X-radiographs. The copper alloy was assessed by inspecting the object (with inspection of the appropriate X-radiograph where appropriate). The lead was assessed by inspecting the object.
- 1.1.4 A basic archive catalogue following the guidelines set out by the Roman Finds Group and Finds Research Group (RFG & FRG 1993) was entered into an Excel spreadsheet. This records context, small find number (if assigned), material, count, simple name and brief description of the items. This data is summarised in Table 4.7.

- 1.1.5 The description of the brooches follow the nomenclature of Hattatt for the bow brooches (see for example Hattatt 1989, figs 154-230), and Fowler (1960) for the penannular brooch.
- 1.1.6 It should be noted that under count, the number entered for the hobnails is not always precise. Where large numbers (more than 50) have been assigned a single small find number, these have merely been quantified as 50+ or 100+, and precise quantification will be attempted at the analysis stage when the objects themselves are to hand. (Nails and hobnails were quantified and assessed separately from other classes of metalwork, see Appendix 4.2, below).
- 1.1.7 Basic context information and the pottery spot dating has been taken into consideration.

Quantification

- 1.1.8 The assemblage comprises 1683 objects (925 from ARC PHL97 and 758 from ARC NBR98). This total includes 90 objects recovered during sieving.
- 1.1.9 The metalwork under consideration here is summarised according to material in Table 4.1. As the assemblage is dominated by hobnails, these have been included as a separate category.
- 1.1.10 The metalwork is considered in more detail according to the generally accepted functional categories established by Crummy (1983). The range of items is limited, but the bias seems to be a direct result of what was being placed on the pyre and with the burials, rather than being the result of bias produced by excavating technique. The small fragments of copper alloy sheet recovered as part of the sieving programme suggest good recovery of small fragments.
- 1.1.11 As may be seen from Table 4.2, the personal ornaments and equipment category is dominated by hobnails from shoes. In only four cases are the hobnails corroded together preserving part of the nailing pattern (hobnail groups in Table 4.6). In the absence of substantial preservation of the nailing patterns it will not be possible to date them more closely within the Roman period.
- 1.1.12 Brooches and brooch fragments are relatively common, but as tabulated the brooches include fragments from the same grave which may prove to come from the same brooch after conservation. The most numerous brooch type is the Colchester Derivatives with a minimum of eight examples (ARC PHL97 sf 165, 1838; ARC NBR98 sf 928, 930-2, 1057, 1117, 1350, 1923-4). There are also four Nauheim Derivatives (ARC PHL97 sf 163, 1201; ARC NBR98 sf 958 and 1425) and a possible Hod Hill brooch (ARC NBR98 sf 1321). All of these would have been in use mainly in the mid to later 1st century with the Colchester Derivative brooches continuing in use into the 2nd century. There is one enamelled umbo brooch (ARC NBR98 sf 1204) of the 2nd century. A second umbonate brooch (ARC NBR98 sf 1951) will need investigative conservation before it can be more closely identified. The penannular brooch (ARC NBR98 sf 10126) is of a type that is not closely dated within the Roman period
- 1.1.13 The bracelets will all need investigative conservation before close identifications can be made. At present no examples of the very common late 3rd to 4th century types have been recognised. All appear to belong to types that were in use during the 2nd and 3rd centuries as well as the 4th. They include cable, torc-twisted, expanding and penannular bracelets.

- 1.1.14 Other personal ornaments are rarer. There is one rare finger ring form of possible 2nd-century date which will need extensive investigative conservation before a precise identification can be made (ARC PHL97 sf 1334). The other finger ring is a late Roman form (ARC NBR98 sf 677). The third finger ring is modern (ARC NBR98 sf 10 from the topsoil). One pin head is not closely dated within the Roman period (ARC NBR 98 sf 926), the other (ARC NBR98 sf 13) is of late Saxon date. The necklace fastener is presumably late 2nd to early 3rd century date given the date of the beads it was associated with (see Appendix 3).
- 1.1.15 The only item of toilet equipment in the assemblage is a fragmentary mirror from an inhumation (ARC PHL97 sf 874).
- 1.1.16 The only tools are knife blades. There is one certain identification (ARC NBR98 sf 45) from the topsoil which may be of Roman date. There may also be a blade fragment from a cremation (ARC NBR98 sf 1159) though this will need investigative conservation to confirm the identification.
- 1.1.17 The fasteners and fittings are summarised in Table 4.3. The box fittings include multiple fragments from a box decorated with lion-headed studs (ARC PHL97 sf 332) and an isolated lion-headed stud (ARC PHL97 sf 1815) both from cremations. This type of stud is current during the late 1st and 2nd centuries. The other copper alloy fittings are less closely dateable within the Roman period. The iron fittings are probably associated with coffin construction (see Appendix 4.2).
- 1.1.18 The other items recovered are summarised in Table 4.7. The items identified simply as objects will need investigative conservation before they can be identified. Items such as the bell and the terminal (possibly from the lid of a small metal vessel) can be identified as Roman but not closely dated within that period. The other items are not independently dateable.

Provenance

- 1.1.19 Table 4.5 tabulates the metal items under consideration according to whether they were found in a particular grave. As can be seen by comparing Table 4.5 with Table 4.1, a high proportion (97.5%) was associated with graves, with relatively little being found in other contexts or in the topsoil.
- 1.1.20 The majority of the metalwork cannot be closely dated within the Roman period. Where a close date is possible it belongs to the 1st to 2nd centuries, and there is only one item (ARC NBR98 sf 677) that would conventionally be dated to the 3rd to 4th centuries. One interesting find from the topsoil (ARC NBR98 sf 13) indicates late Saxon activity in the vicinity as it is a dress pin of 8th to 9th century date.
- 1.1.21 It was not considered appropriate as part of the assessment to examine the precise contexts in detail to establish whether items associated with particular graves were deliberate inclusions such as grave goods, parts of the grave furniture etc., or just accidental inclusions in the fill. Some idea of the scale of the 'accidental inclusion' category may be gained by examining the numbers of hobnails in the graves. If there are less than 10 then accidental inclusion might be concluded. More than 50 certainly indicate the deposition of shoes in the grave or on the pyre. For numbers between 10 and 49 the status is less clear-cut but probably inclines towards the deliberate deposition of shoes. As can be seen from Table 4.6 over two-thirds of the graves with hobnails have them in sufficient numbers to suggest deliberate deposition. Therefore,

though some of the metalwork items found in the graves may be accidental inclusions, a high proportion are likely to be deliberate deposits associated with the funeral ritual.

Conservation

- 1.1.22 Full details of the needs for long term storage are itemised. Approximately 45 items have been selected for further conservation input to aid final analysis. The amount of input that will be required varies from air abrading selected areas on ironwork items (to establish details), to lightly cleaning surface soil from some copper alloy items (to aid illustration). The investigation of some areas where organic traces have been preserved by mineral replacement will also be needed. The precise work done will be decided after consultation with the conservator. None of this work should conflict with long term storage. The small find numbers of the selected items are as given below.
- ARC PHL 97 2, 3, 8, 163, 165, 305, 874, 1092, 1334, 1753, 1805, 1815
 - ARC NBR 98 150, 262, 442, 677, 678, 681, 687, 767, 827, 829, 892, 926, 927, 930, 931, 932, 958, 1117, 1119, 1159, 1180, 1204, 1212, 1213, 1321, 1350, 1425, 1923, 1924, 1951, sample 221 and one item from context 10597
- 1.1.23 There are a very few items in the assemblage such as ARC NBR98 sf 10 and 11 that are obviously modern. These could be discarded but the rest of the assemblage should be retained.

Comparative material

- 1.1.24 A moderately large metalwork assemblage has been published from the excavations at Springhead (eg Penn 1958, 1960, 1963). Elsewhere in the region good metalwork assemblages have been published from Canterbury (see for example Blockley *et al* 1995) and Lullingstone (Meates 1987). The material from the CTRL excavations at Thurnham Roman villa will also provide useful comparanda, especially in the case of the brooches. All of these are non-sepulchral assemblages, but will be useful in helping to set this material in its local context.
- 1.1.25 On a national level Philpott's survey of Roman burial practice (1991) will be invaluable in providing a general background to grave furnishings.
- 1.1.26 To fully understand the grave furnishings associated with the cremation burials it will be necessary to compare the metalwork assemblage to assemblages from similar burials where the cremations have been processed under modern conditions, which guarantees full retrieval of pyre goods etc. There are at present relatively few of these published, but examples that do fulfil these conditions include a small cemetery at Each End Ash, Kent (Hicks 1998), the Eastern Cemetery, London (Barber and Bowsher 2000) and at Caerleon (Evans and Maynard 1997). It will also be possible to draw on information from the cremation cemetery at Brougham, Cumbria which is currently being worked upon by the author.
- 1.1.27 Earlier excavations where the cremations have not been processed by wet sieving will be of less value as comparanda, but it is likely that some useful information can be gained from sites such as Ospringe (Whiting 1921, 1923, 1925, 1926; Whiting *et al* 1931).
- 1.1.28 Several less common burial rites include the use of boxes decorated with lion-headed studs and the placing of bracelets with 2nd century cremation burials. For the former the study by Borrill (1981) will form the starting point. For the

latter isolated occurrences at sites such as Verulamium (Davey 1935) and Godmanchester (Taylor 1997) will need to be considered.

Potential for further work

- 1.1.29 The assemblage has the potential to address all of the Fieldwork Event Aims listed above (1.1.2).
- 1.1.30 The metalwork will be of limited value in helping to establish the chronology of the cemetery as relatively few items are closely dated. It does have a moderate potential, however. There is dateable metalwork in some graves which do not contain dateable pottery (290, 1123, 1340, 10595, 10741, 10824, 11008, 11330, 11502, 12046). In grave 10595 there is a late Roman finger ring whereas the pottery is late 2nd to early 3rd century, and so a later date might be suggested for it.
- 1.1.31 The range and number of finds recorded should help establish spatial variations within the cemetery and the identification of ancillary features associated with specific burial practices. There are, for example, 30 graves where shoes are likely to have been deliberately placed and 16 graves with brooches. Among the cremation burials there are both burnt and unburnt items. Uncommon burial rites such as *in situ* or *bustum* burial have also been identified. When the metalwork is studied in conjunction with all of the other contents of the graves, interesting spatial and other patterns may well emerge.
- 1.1.32 There are currently relatively few early to mid Roman cemeteries that have been excavated and published under modern conditions which guarantees full recovery of all the material. The publication of this cemetery including the metalwork component will thus be of national value, and will undoubtedly contribute to any future national synthesis.
- 1.1.33 It is very noticeable that the brooches from the cemetery are in the main 1st-century forms even when they are occurring with 2nd-century pottery (see for example sub-group 11584). In considering the Thurnham brooches it was suggested that a pattern *may* be emerging that suggests Kentish brooch use might have a slightly different chronology to the generally accepted one. It is possible that this can also be demonstrated at this cemetery. The brooches certainly have the potential to contribute to a regional study of brooch use in Kent.
- 1.1.34 Bracelets were found with two cremations (sub groups 57 and 11240). It is unusual to find bracelets in cremations as this was not a common ornament before the 4th century. Quite often when bracelets are placed with cremation burials they are also accompanied by other items which might suggest some form of ritual based in religious belief was being followed. The bracelets in these two cremations might thus have the potential to cast light on the beliefs of the deceased (or their relatives).
- 1.1.35 In order to fully extract the potential outlined above the following steps will be necessary.
- 1.1.36 The items detailed in 4.8 - 4.18 will be catalogued (approximately 50-60 items depending on how many of the brooch fragments are found to belong to the same brooch - see 4.12) The hobnails will be tabulated. The material should be catalogued according to grave group in association with items of other materials where appropriate (the glass beads and the metal necklace fastener

from sub-group 10522 for example) This work will be carried out after the investigative conservation has been completed.

- 1.1.37 A brief typological discussion placing the material in a chronological and regional/national context will be written.
- 1.1.38 The metalwork evidence will be integrated with other kinds of artefactual and stratigraphic data, to produce an overview of each grave group. This characterisation of differing burial rites will be used to contribute to a detailed understanding of the practice of burial throughout the period of use of the cemetery, and to an enhanced understanding of the organisation and development of the cemetery through time.
- 1.1.39 Material will be selected for illustration. It is anticipated that 35 line drawings will be required, together with a drawing of the box ARC PHL97 sf 332 which has several elements.

Bibliography

Abbreviations

RFG & FRG 1993 Roman Find Group and Finds Research Group AD 700-1700, 1993. The guidelines for the preparation of site archives and assessments for all finds other than fired clay vessels.

References

Barber, B and Bowsher, D, 2000 *The Eastern Cemetery of Roman London. Excavations 1983-1990*. MOLAS Monograph **4**, London

Borrill, H, 1981 Casket burials, in *Skeleton Green: a late Iron Age and Romano-British site*, Britannia Monograph **2**, London, 304-21

Blockley, K, Blockley, M, Blockley, P, Frere, S S and Stow, S, 1995 *Excavations in the Marlowe car park and surrounding areas*, Archaeology of Canterbury **5**, Canterbury

Crummy, N, 1983 *The Roman small finds from excavations in Colchester 1971-9*, Colchester Archaeol Rep **2**, Colchester

Davey, N, 1935 The Romano-British cemetery at St Stevens near Verulamium, *Trans St Albans and Hertfordshire Architectural and Archaeological Soc*, 243-75

Evans, E and Maynard, D J, 1997 Caerleon Lodge Hill cemetery: the Abbeyfield site 1992', *Britannia* **28**, 168-243

Fowler, E, 1960 The origins and development of the penannular brooch in Europe, *Proc Prehist Soc* **26**, 149-77

Hattatt, R, 1989 *Ancient brooches and other artefacts*, Oxford

Hicks, A, 1998 Excavations at Each End, Ash, 1992 *Arch Cant* **128**, 91-172

Meates, G W 1987 *The Roman villa at Lullingstone, Kent. Volume II the wall paintings and finds*, Kent Archaeol Soc Monograph **3**, Maidstone

Penn, W S, 1958 The Romano-British settlement at Springhead. Excavation of the Bakery, site A, *Arch Cant* **71**, 53-105

- Penn, W S, 1960 The Romano-British settlement at Springhead. Excavation of Temple I, Site C 1, *Arch Cant* **72**, 1-61
- Penn, W S, 1963 Springhead: Temples II and V, *Arch Cant* **77**, 110-132
- Philpott, R, 1991 *Burial Practices in Roman Britain. A survey of grave treatment and furnishing AD 43-410*, BAR Brit Ser **219**, Oxford
- Taylor, A, 1997 A Roman child burial with animal figurines and pottery from Godmanchester, Cambridgeshire, *Britannia* **28**, 386-393
- Whiting, W, 1921 A Roman cemetery discovered at Ospringe in 1920 *Arch Cant* **35**, 1-16
- Whiting, W, 1923 A Roman cemetery discovered at Ospringe in 1920 *Arch Cant* **36**, 65-80
- Whiting, W, 1925 The Roman cemeteries at Ospringe. Description of the finds continued, *Arch Cant* **37**, 83-96
- Whiting, W, 1926 The Roman cemeteries at Ospringe. Description of the finds concluded, *Arch Cant* **38**, 123-151
- Whiting, W, Hawley, W and May, T, 1931 *Report on the excavation of the Roman cemetery at Ospringe, Kent*. RRCSAL **8**, Oxford

1.2 Coffin nails, coffin fittings and hobnails

by Valerie Diez

Introduction

- 1.2.1 A large assemblage of coffin nails and coffin fittings was recovered from the cemetery by hand excavation and processing of soil samples. The locations of nails recovered by hand excavation were recorded in order to allow detailed study of burial practices as reflected by coffin and casket construction.
- 1.2.2 The Fieldwork Event Aims to which the analysis of the assemblage might be expected to contribute are as follows:
- Fieldwork Event Aim 7: To establish the chronology of the cemetery.
 - Fieldwork Event Aim 8: To establish the spatial development of the cemetery as far as possible within the area of investigation.
 - Fieldwork Event Aim 9: To establish if spatial variations exist within the cemetery in relation to burial practice.
 - Fieldwork Event Aim 11: To establish the nature and distribution of structural features located within the cemetery.
 - Fieldwork Event Aim 12: To identify ancillary features associated with a specific burial practice.
 - Fieldwork Event Aim 13: To establish the nature and date of occupation pre-dating the cemetery.
 - Fieldwork Event Aim 14: To determine the nature of activity and land utilisation, other than that directly forming part of the cemetery, associated with the Roman town of Springhead.
- 1.2.3 This assessment included axonometric reconstruction of selected coffins in order to evaluate the potential for further work.

Methodology

- 1.2.4 All the examples selected for reconstruction comprised at least 20 nails. Other aspects considered were coffin fittings, coffin stains, direction of the nails and the direction of any surviving wood grain.
- 1.2.5 During excavation, each nail was given an individual small find number and was three dimensionally recorded.

Quantification

- 1.2.6 In total, 3652 nails and 726 hobnails were recovered. The general quantification of coffin nails and hobnails appears in Table 4.1.
- 1.2.7 A total of 44 graves contained coffins and the number of nails varied from 20-59. Coffin fittings were recovered from 14 contexts. With the exception of a bracket and a fitting they were all confined to the southern portion of the cemetery.

Assessment of coffin fittings

- 1.2.8 Numbers of nails ranged from single examples up to a maximum of 41 nails. There appear to be clusters of nail numbers around the low 20s and the mid 30s, possibly reflecting differing constructional techniques. It is often possible to determine coffin dimensions and in some cases the coffin corners are defined by clusters of nails (eg. 1088 and 10162); coffin stains are also present graves

(eg. 1088 and 10862). Determining depth is slightly less straightforward and requires a large number of nails. Furthermore coffins would have collapse as they decayed leading to the movement of nails.

- 1.2.9 Many of the nails exhibit clear evidence of wood grain in the corrosion product. Future detailed examination of the nails in conjunction with the detailed three-dimensional recording will allow timber thicknesses, coffin types/dimensions and constructional details to be identified.
- 1.2.10 The field records demonstrate that both rectangular and tapering wooden coffins were used. In a significant number of examples nails pointing downwards (i.e. lid nails) have been recorded. Lid nails have only rarely been recorded elsewhere, for example at Lankhills, Winchester (Clarke 1979).
- 1.2.11 In several instances the timber of the coffins survived as a shadow. There are also at least two examples where the dimensions of the coffin (2.5 x 0.55 m) and the nail configuration suggests that there was a separate compartment at one end of the coffin for grave goods, similar to an example excavated at Kelvedon in Essex (Rodwell 1988). Two coffins may also have contained boxes that housed grave goods.
- 1.2.12 Apart from coffin nails, there are very few structural fittings. Up to six of the coffins may have had corner brackets, although no significant numbers have been found in any single grave, suggesting that they may have been used sparingly to strengthen coffins rather than as a primary construction method.

Pilot study for detailed analysis of grave furniture

- 1.2.13 Coffin dimensions of the sample assessed in detail appear in Table 4.2. The dimensions are quite variable, but these examples all seem likely to be the burials of adults.
- 1.2.14 Some evidence for the methods of construction has been recovered. Some of the coffins were made from planks. It is not possible however to determine how many. They were generally nailed along the whole length of the base, except in grave 1088, where all the nails tend to concentrate mainly in the corners. This may suggest the use of other means of joining, such as wooden pegging.
- 1.2.15 Evidence for lids was not present in any of the graves analysed for this assessment. If the lids were not secured to the sides of the coffins with nails, wood stains would be the only evidence of a lid ever being present.
- 1.2.16 Some of the inhumations contain some goods, mainly pottery vessels. They seem to be located both in and outside the coffin. Grave 1225 contained one pot, apparently located next to the feet of the body, as a cluster of hobnails were found directly above the vessel. Grave 10162 contained a vessel which had been placed inside the coffin. Grave 1088 contained two pots which had been placed outside the coffin at one end.

Potential for further work

- 1.2.17 The presence or absence of coffins may correlate with the presence or absence of other objects and features, and shed light on chronological variation, status and beliefs of individuals and groups, and aspects of burial ritual through time. Studies of casket and coffin construction would be addressed as follows.

- 1.2.18 In a limited number of cases, three-dimensional plotting of coffin and casket linked finds (eg nails, fittings) would be undertaken, and the data would be presented as an axonometric drawing. A pilot study has been carried out for a selection of graves and an example axonometric drawing produced (Figure 6). This suggests that there is potential for elements of coffin construction to be determined, although the number of graves with sufficient nails is relatively limited.
- 1.2.19 In these cases and in others, evidence of casket and coffin construction would then be integrated with the detailed analysis of individual grave groups (finds, bone evidence, grave construction, environmental/animal bone etc). This would allow the identification of groups of similar burials, for the purposes of spatial and chronological analysis of distribution. It has been noted at assessment stage that the great majority of coffin fittings are restricted to graves in the southern area of the cemetery; there is likely to be a reason for this.

*Table 4.1: Summary of metalwork from the Waterloo connection excavations. (Note * : this figure includes an estimate of 400 from 5 groups, see section 2.4, also four groups corroded together and not separately itemised)*

	ARC PHL97	ARC NBR98	<i>Total</i>
Composite items	3	1	4
Copper alloy	14	45	59
Lead alloy	2	2	4
Hobnails	891	*693	1584
Other iron items	11	17	28
<i>Total</i>	921	758	1679

Table 4.2: Personal ornaments and equipment made of metal tabulated by type of context

	Cremation	Inhumation	Other	<i>Total</i>
Hobnails	452	1112	16	1580
Hobnail Groups	2	1	1	4
Brooch	12	12	6	30
Bracelet	4	6	-	10
Finger ring	-	2	1	3
Pin	1	-	1	2
Necklace fastener	-	1	-	1
<i>Total</i>	471	1134	25	1630

Table 4.3: Fasteners and fittings made of metal tabulated by type of context

	Cremation	Inhumation	Other	<i>Total</i>
Box fittings	2	1	1	4
Iron Bracket	-	3	1	4
Iron Double-spiked loops	-	4	-	4
<i>Total</i>	2	8	2	12

Table 4:4: Miscellaneous items made of metal tabulated by type of context

	Cremation	Inhumation	Other	<i>Total</i>
Bell	1	-	-	<i>1</i>
Hook	-	1	-	<i>1</i>
Ring	2	3	2	<i>7</i>
Terminal	-	-	1	<i>1</i>
Object	2	2	2	<i>6</i>
Miscellaneous fragments	2	8	8	<i>18</i>
<i>Total</i>	<i>7</i>	<i>14</i>	<i>13</i>	<i>34</i>

Table 4.5: Items associated with particular graves

	ARC PHL97	ARC NBR98	<i>Total</i>
Cremation	215	266	481
Inhumation	699	458	1157
<i>Total</i>	914	724	1638

Table 4.6: Number of hobnails per grave

<i>Number</i>	Cremation	Inhumation	<i>Total</i>
Less than 10 hobnails	5	9	14
10-49 hobnails	7	5	12
More than 50 hobnails	5	10	15
Hobnail Groups	1	1	2
<i>Total</i>	18	25	43

Table 4.7: All metalwork by context

Context	Special number	Material	Count	Period	Early Date	Late Date	Simple name	Description
ARC PHL 97								
2	305	Copper alloy	1				Box fitting	Sheet fragments, one with punched square frame, ? Lock plate
58	2	Copper alloy	1	RO			Bracelet	Torc-twisted, 5 frags
58	3	Copper alloy	1	RO			Bell	Complete with MPO in loop and ? Interior
64	Sample 3	Iron	1	RO			Hobnail	
66	4	Iron	12	RO			Hobnail	
79	1886	Iron	42	RO			Hobnail	
138	1844	Iron	2	RO			Hobnail	
138	Sample 24	Iron	2	RO			Hobnail	
140	8	Copper alloy	1	RO			Box fitting	Drop handle retaining double spiked loops
140	1892	Iron	39	RO			Hobnail	
155	27	Iron	1	RO			Hobnail	
155	28	Iron	1	RO			Hobnail	
155	29	Iron	1	RO			Hobnail	
155	30	Iron	1	RO			Hobnail	
155	31	Iron	1	RO			Hobnail	
155	32	Iron	1	RO			Hobnail	
155	33	Iron	1	RO			Hobnail	
155	34	Iron	1	RO			Hobnail	
155	35	Iron	1	RO			Hobnail	
155	36	Iron	1	RO			Hobnail	
155	37	Iron	1	RO			Hobnail	
155	39	Iron	1	RO			Hobnail	
155	48	Iron	1	RO			Hobnail	
155	49	Iron	1	RO			Hobnail	
155	50	Iron	1	RO			Hobnail	
155	52	Iron	1	RO			Hobnail	
156	20	Iron	1				Plate	Square
156	133	Iron	1				plate	
156	165	Copper alloy	1	RO	Mid 1stC	2ndC	Brooch	Colchester Derivative
181	1896	Iron	12	RO			Hobnail	
205	1883	Iron	1	RO			Hobnail	
206	140	Iron	1				plate	
206	141	Lead					fragment	
239	163	Copper alloy	1	C1			brooch	Nauheim Derivative, possibly with white metal
292	332	Composite	1	RO	Late 1stC	2ndC	Box fitting	7 lion-headed studs, probably composite with ? Lead interior; cu sheet including lock plate fragments, iron fittings
406	263	Iron	1				hook	
638	1815	Composite	1	RO	Late 1stC	2ndC	Stud	Lion-headed
638	1878	Copper alloy	1				Sheet	many small fragments
647	417	Iron	1				double-spiked loop	
671	379	Lead	1				Sheet	2 fragments, 1 with thickened edge

Context	Special number	Material	Count	Period	Early Date	Late Date	Simple name	Description
682	409	Iron	1				object	
697	453	Iron	79	RO			Hobnail	
699	565	Iron	1	RO			Hobnail	
715	729	Iron	4	RO			Hobnail	
729	715	Iron	1	RO			Hobnail	
753	634	Iron	4	RO			Hobnail	
753	636	Iron	1	RO			Hobnail	
778	1838 + s	Copper alloy	1	RO	Mid 1stC	2ndC	Brooch	Colchester derivative?, fragment burnt
786	646	Iron	24	RO			Hobnail	
786	647	Iron	8	RO			Hobnail	
797	1840	Iron	38	RO			Hobnail	
801	1861	Iron	3	RO			Hobnail	
838	632	Iron	2	RO			Hobnail	
861	670	Iron	1	RO			Hobnail	
861	672	Iron	2	RO			Hobnail	
861	673	Iron	2	RO			Hobnail	
861	674	Iron	1	RO			Hobnail	
861	705	Iron	1	RO			Hobnail	
861	707	Iron	1	RO			Hobnail	
861	708	Iron	1	RO			Hobnail	
861	709	Iron	1	RO			Hobnail	
861	710	Iron	1	RO			Hobnail	
861	711	Iron	1	RO			Hobnail	
861	712	Iron	1	RO			Hobnail	
861	713	Iron	2	RO			Hobnail	
861	714	Iron	1	RO			Hobnail	
861	715	Iron	1	RO			Hobnail	
861	871	Iron	2	RO			Hobnail	
893	874	Copper alloy	1	RO			Mirror	2 fragment
963	1334	Composite	1	RO			Finger ring?	Glass oval bezel, ? Multi-strand hoop; 2ndC
968	1823 + s	Copper alloy	1				Sheet	Fragment
1013	1283	Iron	4	RO			Hobnail	
1013	1284	Iron	1	RO			Hobnail	
1013	1287	Iron	1	RO			Hobnail	
1013	1289	Iron	1	RO			Hobnail	
1013	1319	Iron	1	RO			hobnail	
1013	1320	Iron	1	RO			Hobnail	
1013	1321	Iron	1	RO			hobnail	
1013	1322	Iron	1	RO			hobnail	
1013	1323	Iron	2	RO			Hobnail	
1013	1331	Iron	1	RO			Hobnail	
1013	1332	Iron	1	RO			Hobnail	
1013	1333	Iron	1	RO			hobnail	
1013	1345	Iron	1	RO			hobnail	
1013	1405	Iron	1	RO			Hobnail	
1013	1406	Iron	1	RO			Hobnail	
1013	1407	Iron	1	RO			Hobnail	
1013	1409	Iron	1	RO			Hobnail	
1013	1410	Iron	1	RO			Hobnail	
1013	1411	Iron	1	RO			Hobnail	

Context	Special number	Material	Count	Period	Early Date	Late Date	Simple name	Description
1013	1412	Iron	1	RO			Hobnail	
1013	1413	Iron	1	RO			Hobnail	
1013	1414	Iron	1	RO			Hobnail	
1013	1415	Iron	1	RO			Hobnail	
1013	1416	Iron	1	RO			Hobnail	
1013	1417	Iron	1	RO			Hobnail	
1013	1832	Iron	6	RO			Hobnail	
1013	1852	Iron	4	RO			Hobnail	
1013	1876	Iron	29	RO			Hobnail	
1013	sample 328	Iron	11	RO			Hobnail	
1027	1202	Iron	100+	RO			Hobnail	
1027	1203	Iron	100+	RO			Hobnail	
1044	1092	Copper alloy	1	LIA; RO	1stC	2ndC	Bracelet	Wide segment, upper face decorated ? + MPO
1057	1126	Iron	28	RO			Hobnail	
1057	1127	Iron	17	RO			Hobnail	
1086	1201	Copper alloy	1	LIA; RO			Brooch	Nauheim Derivative, possible MPO ; 1stC
1125	1247	Copper alloy	1	LIA; RO	1stC	2ndC	brooch	spring & pin fragment
1125	1839	Copper alloy	1	LIA; RO	1stC	2ndC	Brooch	spring fragment
1138	1330	Iron	2	RO			Hobnail	
1172	1579	Iron	1				double-spiked loop	
1195	1436	Iron	2	RO			Hobnail	
1195	1454	Iron	1	RO			Hobnail	
1197	1432	Iron	1	RO			Hobnail	
1197	1433	Iron	1	RO			Hobnail	
1197	1434	Iron	1	RO			Hobnail	
1197	1435	Iron	1	RO			Hobnail	
1197	1437	Iron	1	RO			Hobnail	
1197	1438	Iron	1	RO			Hobnail	
1197	1439	Iron	1	RO			Hobnail	
1197	1440	Iron	3	RO			Hobnail	
1197	1441	Iron	1	RO			Hobnail	
1197	1442	Iron	2	RO			Hobnail	
1197	1443	Iron	1	RO			Hobnail	
1197	1444	Iron	1	RO			Hobnail	
1197	1445	Iron	1	RO			Hobnail	
1197	1446	Iron	1	RO			Hobnail	
1197	1447	Iron	1	RO			Hobnail	
1197	1448	Iron	1	RO			Hobnail	
1197	1449	Iron	1	RO			Hobnail	
1197	1450	Iron	1	RO			Hobnail	
1197	1451	Iron	1	RO			Hobnail	
1197	1452	Iron	1	RO			Hobnail	
1197	1453	Iron	1	RO			Hobnail	
1197	1455	Iron	2	RO			Hobnail	
1197	1467	Iron	1	RO			Hobnail	
1197	1468	Iron	1	RO			Hobnail	
1197	1469	Iron	1	RO			Hobnail	
1197	1470	Iron	1	RO			Hobnail	
1197	1471	Iron	1	RO			Hobnail	

Context	Special number	Material	Count	Period	Early Date	Late Date	Simple name	Description
1197	1472	Iron	1	RO			Hobnail	
1197	1473	Iron	1	RO			Hobnail	
1197	1474	Iron	1	RO			Hobnail	
1197	1475	Iron	1	RO			Hobnail	
1197	1476	Iron	1	RO			Hobnail	
1197	1477	Iron	1	RO			Hobnail	
1197	1479	Iron	1	RO			Hobnail	
1197	1480	Iron	1	RO			Hobnail	
1197	1481	Iron	1	RO			Hobnail	
1197	1482	Iron	1	RO			Hobnail	
1197	1483	Iron	2	RO			Hobnail	
1197	1484	Iron	1	RO			Hobnail	
1197	1485	Iron	2	RO			Hobnail	
1197	1486	Iron	1	RO			Hobnail	
1197	1487	Iron	1	RO			Hobnail	
1197	1487	Iron	1	RO			Hobnail	
1197	1488	Iron	1	RO			Hobnail	
1197	1489	Iron	1	RO			Hobnail	
1197	1490	Iron	1	RO			Hobnail	
1197	1491	Iron	1	RO			Hobnail	
1197	1492	Iron	1	RO			Hobnail	
1197	1493	Iron	1	RO			Hobnail	
1197	1494	Iron	1	RO			Hobnail	
1197	1495	Iron	1	RO			Hobnail	
1197	1496	Iron	1	RO			Hobnail	
1197	1497	Iron	1	RO			Hobnail	
1197	1498	Iron	1	RO			Hobnail	
1197	1499	Iron	1	RO			Hobnail	
1197	1501	Iron	1	RO			Hobnail	
1197	1502	Iron	2	RO			hobnail	
1209	1466	Iron	18	RO			Hobnail	
1223	1553	Iron	1				bracket?	
1266	1753	Iron	1				Object	might be 2 nails shanks
1266	1780	Iron	1				double-spiked loop	tip of one leg broken
1290	1805	Iron	1				object	
1344	1723	Iron	100+	RO			Hobnail	
1374	1747	Iron	42	RO			Hobnail	
1375	1748	Iron	31	RO			Hobnail	
ARC NBR 98								
10001	1	Cu	1				Terminal	Cast. Hour-glass? Lid
10001	3	Cu	1				Plate	Crumpled
10001	10	Cu	1	MO			Finger ring	Rect claw bezel with glass setting
10001	11	Cu	1	MO			Fitting	Circular disc with multiple shanks
10001	13	Cu	1	MD	8thC	9thC	Pin	Faceted cube head with ring & dot.
10001	21	Cu	1				Fragment	Cast
10001	29	Cu	1				Block	Rectangular
10001	45	Iron	1	RO			knife	Majority of blade
10001	48	Cu	1				Multi-perforate disc	Folded, fragmentary

Context	Special number	Material	Count	Period	Early Date	Late Date	Simple name	Description
10003	442	Cu	1	RO	Mid 1stC	2ndC	Brooch	Colchester derivative; 5 fragments
10004	52	Iron	1	RO			Hobnail	
10004	75	Iron	1	RO			Hobnail	
10004	85	Iron	1	RO			Hobnail	
10004	103	Iron	1	RO			Hobnail	
10004	110	Iron	1	RO			Hobnail	
10004	113	Iron	1	RO			Hobnail	
10004	137	Iron	1	RO			Hobnail	
10004	150	Cu	1	RO	Mid 1stC	2ndC	Brooch	Colchester derivative; reeded bow
10004	169	Cu	1	RO	Mid 1stC	2ndC	Brooch	Bow; Colchester derivative lower bow ?
10004	188	Iron	1	RO			Group Hobnail	
10004	208	Iron	1	RO			Hobnail	
10004	352	Iron	4	RO			Hobnail	
10032	114	Iron	1				Bracket?	
10043	119	Cu	1	RO			Bracelet	D-sectioned; 4 frags; exterior much corroded
10091	164	Cu	1	LIA; RO			Brooch	Nauheim Derivative, ribbon bow; 3 frags.; 1stC
10107	173	Iron	1	RO			Group Hobnail	
10116	292	Cu	1				Fragment	Heavily cooroded
10126	262	Cu	1	RO			Brooch	Penannular; miniature; Fowler C
10268	372	Iron	40	RO			Hobnail	
10268	373	Iron	60	RO			Hobnail	
10417	458	Iron	1	RO			Hobnail	
10428	510	Iron	1				bar	
10469	Sample 68	Iron	1	RO			Hobnail	
10511	539	Iron	1	RO			Hobnail	
10511	546	Iron	1	RO			Hobnail	
10511	547	Iron	1	RO			Hobnail	
10511	555	Iron	1	RO			Hobnail	
10511	560	Iron	1	RO			Hobnail	
10511	561	Iron	1	RO			Hobnail	
10511	563	Iron	1	RO			Hobnail	
10511	Sample 47.1	Iron	1	RO			Hobnail	
10511	Sample 47.2	Iron	1	RO			Hobnail	
10511	Sample 47.3	Iron	1	RO			Hobnail	
10511	Sample 47.4	Iron	4	RO			Hobnail	
10511	Sample 47.5	Iron	5	RO			Hobnail	
10521	677	Cu+	1	RO	3rdC	4thC	Finger ring	Scalloped shoulder; 4 frag, moulded blue intaglio
10521	678	Cu	1	RO			Bracelet	Cable twist; 3 frags + chips + ? Minerally replace organic cf 681
10521	679	Cu	1	RO			Bracelet?	D-sectioned, broken ends
10521	681	Cu	1	RO			Bracelet	Cable twist; 3 frags + chips + ? Minerally replace organic. Cf 678
10521	687	Cu	1	RO			Necklace fastener	6 fragments; twisted wire
10564	69	Iron	38	RO			Hobnail	

Context	Special number	Material	Count	Period	Early Date	Late Date	Simple name	Description
10564	691	Iron	1	RO			Hobnail	
10564	693	Iron	1	RO			Hobnail	
10564	697	Iron	1	RO			Hobnail	
10564	701	Iron	1	RO			Hobnail	
10564	718	Iron	1	RO			Hobnail	
10564	724	Iron	1	RO			Hobnail	
10564	725	Iron	1	RO			Hobnail	
10564	731	Iron	1	RO			Hobnail	
10564	732	Iron	1	RO			Hobnail	
10564	Sample 69	Iron	23	RO			Hobnail	
10597	827	Iron	1				Object	
10597	829	Cu	1	LIA; RO	1stC	2ndC	Brooch	Bow brooch, 5 fragments, melted
10597	Sample 100	Iron	3	RO			Hobnail	
10597	Sample 98	Iron	7	RO			Hobnail	
10597	Sample 98.2	Iron	1	RO			Hobnail	
10597		Iron	1				Ring	
10608	767	Cu	1				Sheet	6 fragments; ?surface treatment
10682	893	Iron	24	RO			Hobnail	
10684	884	Iron	32	RO			Hobnail	
10713	891	Iron	1	RO			Hobnail	
10713	892	Iron	1				Ring	
10739	926	Cu	1				Pin	hair pin or stud head
10739	927	Cu	1	LIA; RO	1stC	2ndC	Brooch?	? Melted fragment part of 930
10739	928	Cu	1	LIA; RO	1stC	2ndC	Brooch	Spring fragments, cf 927; 930
10739	929	Cu	1				Fragment	Melted
10739	930	Cu	1	RO	Mid 1stC	2ndC	Brooch	?Colchester derivative; melted
10739	931	Cu	1	LIA; RO	1stC	2ndC	Brooch	Spring fragments, cf 927; 930
10739	932	Cu	1	LIA; RO	1stC	2ndC	Brooch	Spring fragments, cf 927; 930
10831	958	Cu	1	LIA; RO			Brooch	Nauheim Derivative, ribbon bow; complete; 1stC
10844	970	Iron	47	RO			Hobnail	
10844	Sample 148	Iron	1	RO			Hobnail	
10844	Sample 148	Iron	6	RO			Hobnail	
10844	Sample 149	Iron	3	RO			Hobnail	
10847	967	Iron	1	RO			Hobnail	
10853	978	Iron	10	RO			Hobnail	
10864	985	Iron	26	RO			Hobnail	
10884	982	Iron	24	RO			Hobnail	
10902	Sample 340	Iron	2	RO			Hobnail	
10957	Sample 187	Cu	1	RO			Brooch	pin fragment
10959	1072	Cu	1	RO			Brooch?	pin fragment
10962	1074	Iron	1	RO			Hobnail	
10981	1057	Cu	1	RO	Mid 1stC	2ndC	Brooch	Colchester Derivative, pin broken
11010	1117	Cu	1	RO	Mid 1stC	2ndC	Brooch	Colchester Derivative; heat affected 2 fragments. Cf s221
11010	Sample 221	Cu	1	LIA; RO	1stC	2ndC	Brooch	Spring & heavily corroded fragment
11043	1119	Iron	1				bar	
11071	1159	Iron	1				blade	or bar
11168	1228	Iron	27	RO			Hobnail	
11168	1229	Iron	16	RO			Hobnail	
11176	1180	Iron	1				ring	Oval

Context	Special number	Material	Count	Period	Early Date	Late Date	Simple name	Description
11187	1234	Iron	1				Ring	
11187	1327	Iron	1				Ring	2 frags.
11212	1204	Cu	1	RO	Late 1stC	2ndC	Brooch	Enamelled umbonate, central part
11220	Sample 268	Iron	1	RO			Hobnail	
11240	1212	Iron	1	RO			bracelet	9 fragment, probably expanding
11240	1213	Iron	1	RO			bracelet	8 fragments no obvious details
11240	1214	Cu	1	RO			Bracelet	Penannular; 5 fragments; ridged terminals
11240	1215	Cu	1				Ring	Oval-sectioned
11310	Sample 281	Iron	1	RO			Hobnail	
11311	Sample 296	Iron	2	RO			Hobnail	
11324	1244	Iron	1				Bracket?	part of sf 1245
11324	1245	Iron	1				Bracket?	part of sf 1244
11374	Sample 307	Iron	1	RO			Hobnail	
11374	Sample 307	Iron	1	RO			Hobnail	
11374	Sample 308	Iron	1	RO			Hobnail	
11384	1275	Iron	1	RO			Hobnail	
11391	Sample 321	Iron	2	RO			Hobnail	
11391	1290	Iron	2	RO			Group Hobnail	
11414	Sample 331	Iron	1	RO			Hobnail	
11480	1321	Cu	1	RO	Mid 1stC	Late 1stC	Brooch	Hod Hill? 3 fragments
11505	1350	Cu	1	RO	Mid 1stC	2ndC	Brooch	Colchester Derivative; pin missing
11565	1352	Iron	1				double spike loop	or handle
11572	1392	Iron	49	RO			Hobnail	
11609	1389	Cu	1	RO			Bracelet	oval-sectioned; 2 fragments no terminals
11612	1821	Iron	50	RO			Hobnail	
11612	1822	Iron	50	RO			Hobnail	
11657	1484	Cu	1				Sheet	3 tiny fragment
11690	1425	Cu	1	LIA; RO			Brooch	Nauheim Derivative; foot & pin missing; 1stC
11875	1435	Iron	1				Ring	
12039	1956	Lead	1				Sheet	Fragment
12039	1957	Lead	1				Sheet	Fragment
12048	1951	Cu	1	RO	Late 1stC	2ndC	Brooch	Umbonate, not enamelled
12132	1923	Cu	1	RO	Mid 1stC	2ndC	Brooch	Colchester Derivative; pin missing; pair to 1924
12132	1924	Cu	1	RO	Mid 1stC	2ndC	Brooch	Colchester Derivative; hinged pin; pair to 1923; (bone to osteologist)
12167	2007	Iron	94				Hobnail	

Table 4.8: Nails by context

Material	Count	Comments (description)
Fe	3652	Nails
Fe	726	Hobnails

Table 4.9: Coffin reconstruction data

Grave number	Length	Width	Depth
1088	1.80	0.75	0.32
1225	2	0.66	0.26
10162	1.80	0.38	?
10862	1.70	0.45	?