1.1 Ceramic Building Material

By Susan Pringle

Introduction

1.1.1 The assemblage was recovered by hand excavation from a variety of contexts. The Fieldwork Event Aims which the analysis of this assemblage 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

1.1.2 All of the material has been scanned for the assessment using a binocular microscope. Ceramic building material has been divided by form, and fragments counted and weighed. The presence of distinctive fabric types has been noted, but no analytical work has been carried out on the fabrics from the site, as this task is more appropriately carried out in the analysis phase. Other information recorded includes the presence of combing, tally or signature marks, the presence or absence of glaze, and any complete dimensions.

Quantification

1.1.3 The entire assemblage comprising 4.449 kg and was assessed (2.732 kg from ARC PHL97 and 1.717 kg from ARC NBR98).

Roman building material

1.1.4 The Roman tile assemblage is very small, with only 3.54 kg of securely identified tile (2.58 kg from ARC PHL97 and 0.96 kg from ARC NBR98). Types represented are brick, roof tile (tegula and imbrex) and box flue tile. Such small quantities suggest that the material was not in primary destruction deposits, but was either residual, or had been dumped on the site as rubbish. Re-use as cobbles or for make-up or post-packing is also a possibility. No complete tiles, or complete dimensions, were noted.

Roman tile fabrics

1.1.5 Although detailed fabric work has not been carried out on the material from ARC PHL97 and ARC NBR98, the following distinctive fabrics were noted:

1. A hard, red fabric with some inclusions of medium quartz sand, and medium moulding sand. This is similar to the most abundant tile fabric from London (MoL fabric group 2815), much of which was probably produced at kilns in the Brockley Hill on Watling Street to the north of London (ARC PHL97 and ARC NBR98).

2. A red fabric speckled with fine black iron-oxide inclusions; fine black-speckled moulding sand. Similar to, but possibly slightly finer and harder than, MoL fabric 3060, which is thought to come from kilns at Radlett, Hertfordshire. It is, however, likely that similar clays were exploited by other tileries, and some of this production may have a Kentish source (ARC PHL97 and ARC NBR98).

3. A yellowish-white, clean fabric with moderate inclusions of colourless or rose quartz, similar to Mol fabric 2454 and CAT fabric 8. This is identical to tiles produced at the tile kiln at the Eccles villa north of Maidstone (ARC NBR98).

4. A fairly soft, fine, orange fabric, with fine moulding sand (ARC PHL97 and ARC NBR98).

5. A range of orange-brown fabrics, with varying amounts of quartz and iron-rich inclusions; some have cream silt or calcareous clay inclusions (ARC PHL97).

Post-Roman building material

1.1.6 Post-Roman material from the southern part of the site (ARC PHL97) comprised three fragments of peg or plain tile, of which two were in a red fabric with fine moulding sand (MoL fabric 2276). The third fragment was in an orange fabric with cream silty streaks and orange-brown and fine black inclusions. None was glazed, nor were any complete tiles, or complete dimensions, noted. Dating of this tile type is difficult, as peg tiles have changed little since the 13th century, but the absence of glaze suggests that these are unlikely to be earlier than *c.* AD 1400. A further two fragments of peg or plain tile were recovered from the northern part of the site (ARC NBR98), of which one was in a silty, sandy fabric speckled with fine black iron oxides, and the other was in an orange, slightly micaceous fabric with fine moulding sand (near MoL fabric 2276). Neither was glazed, nor were any complete tiles, or complete dimensions, noted. Dating of this tile type is difficult, as peg tiles have changed little since the 13th century, but the absence of glaze suggests that these are unlikely to be earlier than *c.* AD 1400.

1.1.7 In addition, two fragments of brick in a sandy red fabric were recorded from the northern part of the site (ARC NBR98); this is similar to MoL fabric 3046 which has a date range of *c.* 1450 to *c.* 1700. One piece was over-fired.

Provenance

1.1.8 The post-Roman material from the southern part of the site (ARC PHL97) comes from two contexts only, (1003) and (1007).

1.1.9 The post-Roman brick and tile from the northern part of the site (ARC NBR98) comes from two contexts only, (10059) and (10290).

1.1.10 There are no good groups of ceramic building material, and the assemblage is very small and likely to be residual, so it is of little potential value. The tile fabrics may provide evidence of the distribution of the products of identifiable kilns.

Conservation

1.1.11 The condition of the material is fairly abraded, but there is no risk to its preservation. Further analysis may be needed on some of the material, so it should not be placed in long term storage until this has been carried out. There are no special requirements for long term storage, other than the use of robust packaging materials and a dry environment.

1.1.12 After full recording and quantification the majority of the material can be discarded. The following should be retained: samples of all the fabrics; tiles with distinctive markings, such as combing, tally marks, signature marks or stamps; the quantity retained is likely to be equivalent to between 10% and 20% of the assemblage.

Comparative material

1.1.13 The tile fabrics should be compared with the Canterbury Archaeological Trust's tile fabric type series, which could provide information on their sources and date ranges. Comparison with material from other Roman sites in north Kent would be informative, and one fabric is identical to tile produced at the Eccles villa, north of Maidstone. Some of the fabrics occur in London, which suggests that they may be travelling some distance.

Potential for further work

1.1.14 The tile fabrics provide evidence for the sources of the building materials used in the Roman and post-Roman periods, but the very small quantities present suggest that the material is unlikely to derive from structures associated with the cemetery.

Recommended future work

1.1.15 Comparison of the fabrics with those in the Canterbury Archaeological Trust and Museum of London type series, and describe fabrics.

1.1.16 Quantification (sort material by fabric and form and count and weigh each group; computerise data). The assessment data will be used as far as possible, but the groups will need proper quantification. Select material for illustration, if appropriate.

1.1.17 Further consideration could be given to the stratigraphic contexts from which the material derives, should more detailed stratigraphic analysis suggest significant concentrations in the material.

Table 1.6: Counts and weights for each tile type (securely identified material only)

Form	Count	Weight (grammes)
ARC PHL97		
Brick	9	1353
Tegula	4	988
Combed box flue	1	29
Imbrex	1	22
Tegula/ brick	1	191
Total	*16*	*2583*
ARC NBR98		
Brick	1	333
Tegula	4	502
Imbrex	2	102
Tile	2	23
Total	*9*	*960*

Table 1.7: Quantification of ceramic building materials by count and weight.

Context	Count	Weight (g)	Type	Period	Early date	Late date	Comments
ARC PHL97							
5	1	29	Flue	RO	43	400	Combed; brownish red fabric, sandy and iron rich with a quartzite pebble inclusion
5	1	22	Imb	RO	43	400	Fabric similar to MoL 2815 group
5	1	1	Tile	?			Orange red fabric
9	1	7	Tile	RO	43	400	Fine sandy orange fabric.
207	1	133	Brick	RO	43	400	Fine, sandy orange fabric; 36-40mm thick.
207	1	191	Tegula?	RO	43	400	Very worn teg or brick, reused upside down as flooring? Orange brown, fine-med sand, small silty and iron-rich incls.
209	7	963	Brick	RO	43	400	Some frags conjoin. Red sandy fabrics (nr orange/brown), fine moulding sand. 30-35mm thick. 1 reduced surface - hearth?
209	2	637	Tegula	RO	43	400	Red fabric nr orange/brown. Some fine-med sand, small iron-rich incls. Other siltier, more fine mica.
227	1	18	Tile	RO	43	400	Tegula or box flue, or possibly peg tile. Orange brown sandy fabrics, fine oxides.
592	1	165	Tegula	RO	43	400	Brownish, some qtz. Abraded.
1003	2	81	Peg tile	MD ; PM	1450?	1800	Fabric close to MoL 2276 (earlier type).
1003	1	16	Tile	RO?			Small abraded lump, sandy iron-rich fabric. Fired clay?
1007	1	17	Peg tile	MD ; PM	1450?	1800	Orange & cream marly streaks, orange-brown and black speckly incls.
1007	1	9	Tile				May be peg tile, but flake.
1419	1	186	Tegula	RO	43	400	Red fabric = Mol 3006; worn base, reused upside down.
1423	1	257	Brick	RO	43	400	Red fabric with fine black speckle and fine moulding sand, CAT fabric 10?; fine moulding sand. 39mm thick.
ARC NBR98							
10004	1	333	Brick	RO	43	400	Hard red fabric, reduced core (=MoL fabric 3006); 35-38mm thick
10059	2	564	Brick	PM	1450?	1700?	Red sandy fabric, 1 overfired
10059	1	71	Peg tile	PM	1450?	1700?	Sandy and silty with black iron oxides
10150	2	23	Tile	RO	43	400	Fine sandy red, abraded
10290	1	56	Peg tile	MD ; PM			Fine orange, some mica, fine sand
10373	3	443	Tegula	RO	43	400	2 conjoin (?recent break). Orange sandy and Eccles type (CAT fabric 8)
10373	2	102	Imbrex	RO	43	400	Conjoin; fine orange fabric
10373	4	5	Tile				Scraps
10436	1	7	Tile				Flake, could be Roman or post-

Context	Count	Weight (g)	Type	Period	Early date	Late date	Comments
							Roman
10511	1	3	Stone				Crumb of yellow sandstone
10631	1	59	Tegula	RO	43	400	Orange-red fabric, black iron oxide speckle, fine moulding sand, CAT fabric 10?
10804	30	54	Pot?				<139> odd fabric, lots of voids ?vessel with leached shell temper?
11234	1	6	Stone				Grey phyllitic slate, 4-5mm thick. Roofing?
11322	1	3	Stone				Scrap ?puddingstone - iron-rich conglomerate
11753	2	125	Stone				Iron-rich conglomerate, rubble

Table 1.8: Waterloo Connection (ARC NBR98): counts and weights for each post-Roman tile type (securely identified material only)

Form	Count	Weight (grammes)
Brick	2	564
Peg tile	2	127
Total	4	691