CERAMIC BUILDING MATERIAL, FIRED CLAY AND DAUB

MOLAS: 330 Zone 1

The building material assemblage is 41g, comprising 1g of stone, 10g of Roman tile, 10g of fired ceramic, 5g of possible post-medieval brick and 15g of unidentified ceramic. The Roman tile came from the kiln site at Eccles in north-west Kent (ARC 330 98) and was dated AD 50-80. The building material from ARC WHR 99 comprised fragment of pebble made of light grey coloured fine siltstone and a fragment of possible post-medieval brick .

MOLAS: 330 Zone 2

The total weight of building material scanned for the assessment is 6.16kg, including 5.05kg of daub, 0.09kg of tile, and 1.02kg of stone. Daub accounts for 67% of the assemblage from ARC SSR 99 by weight (2.25kg), with tile comprising 2.7% (0.09kg), and stone 30.4% (1.02kg). The assemblage from ARC 330 98 consists entirely of daub (2.8kg), from a single, unstratified, context.

Building materials were recorded from 15 contexts of which four are large, four medium and seven small; of these, one context contains datable material, of Roman date (ARC SSR 99, sg 118).

ROMAN TILE

The Roman tile fabric is similar to examples of the 2815 group from London. This group comprises red-firing fabrics made from London clays, with varying quantities of quartz sand, and occasional red iron-rich and/or white calcareous inclusions. The tile fabric in ARC SSR 99 [29] contains some medium to coarse quartz grains and sparse white calcareous inclusions. The tile itself, from sg 118, is abraded and could be a tegula or a brick, although the former is more likely.

DAUB

The daub assemblages from both ARC SSR 99 and ARC 330 98 are of interest. ARC SSR 99 produced 2.25kg of daub from 12 contexts, ten of which have early Roman spot dates. Much of the daub was made from a fine, sandy, slightly micaceous, orange-firing clay, but other types were also noted. Seven of the contexts contain samples taken from ovens or hearths, and appear to represent early Roman domestic or industrial activity. Several samples contain fragments of a ‘skin’, *c* 10-20mm thick, of compressed, fairly coarse, clay granules. Probable wattle impressions were noted on the daub in context [35] (sg 114), which suggests that it is from a wattle and daub structure, possibly a house or hut.

STONE

A single fragment of stone was examined from ARC SSR 99, sgp115, which has an early Roman spot date. It has not been securely identified, but resembles a laminated, fairly

fine-grained, puddingstone. It is 35-40mm thick, and its function is uncertain; it may have been used for paving, or could be a fragment of artefact such as a hone, quern or rubbing stone.

MOLAS: 330 Zone 3

The total weight of ceramic building material scanned for the assessment is 72.81 kilogrammes, including 55.85 kilogrammes of daub and fired clay and 11.42 kilogrammes of stone, probably not all of which was building stone, was examined. Ceramic building material accounts for 45.3% of the assemblage by weight (9.3 kilogrammes) at ARC HRD 99, 9.8% of the assemblage (1.96 kilogrammes) at ARC WNB 98, and 14% (4.49 kilogrammes) at ARC 330 98. Fired clay and daub account for 86.6% of the assemblage by weight (17.29 kilogrammes) at ARC WNB 98, 85.9%(27.74 kilogrammes) at ARC 330 98 and 52.7% (10.82 kilogrammes) at ARC HRD 99. The remainder of the material is an assortment of scraps of stone of various types, amounting to 3.6% of the assemblage (0.72 kilogrammes) at ARC WNB 98, 2% (0.42 kilogrammes) at ARC HRD 99, and 0.1% (0.02 kilogrammes) at ARC 330 98, where 0.2% of the assemblage consisted of lime mortar (0.05 kilogrammes).

ROMAN

Roman ceramic building material was recorded from all the sites, although quantities are small. Details of the assemblages are set out below.

ARC HRD 99: count and weight of Roman tile types

Form	Number of fragments	Count as % of total	Weight (grammes)	Weight as % of total
Brick	21	19	3545	38.1
Voussoir	31	28	3130	33.7
Tegula	16	15	1305	14
Flue tile	11	10	730	7.9
Unidentified tile	23	21	390	4.2
Imbrex	6	6	180	1.9
Tessera	1	1	20	0.2
Total	109	100	9300	100

ARC WNB 98: count and weight of Roman tile types

Form	Number of fragments	Count as % of total	Weight (grammes)	Weight as % of total
Imbrex	8	36	645	32.9
Brick	3	14	630	32.1
Tegula	8	36	545	27.8
Voussoir	1	5	100	5.1
Unidentified tile	2	9	40	2
Total	22	100	1960	99.9

ARC 330 98: count and weight of Roman tile types

Form	Number of fragments	Count as % of total	Weight (grammes)	Weight as % of total
Brick	3	43	350	80.5
Imbrex	1	14	25	5.8
Tegula	1	14	25	5.8
Unidentified tile	2	29	35	8.1
Total	7	100	435	100.2

POST-ROMAN

Post-Roman material was noted from only one site, ARC 330 98, where it formed 12.6% of the assemblage by weight (4.055 kilogrammes). The forms present are set out in the table below.

ARC HRD 99: count and weight of post-Roman tile types

Form	Number of fragments	Weight (grammes)
Brick	17	3200
Peg tile	24	715
Curved tile (ridge or hip)	3	115
Unidentified tile	2	25
Total	46	4055

FIRED CLAY AND DAUB

All three sites produced fired clay and daub. The largest assemblage (27.74 kilogrammes) is from ARC 330 98, with 15.985 kilogrammes from ARC WNB 98, and 10.82 kilogrammes from ARC HRD 99.

The fired clay and daub assemblages have several features of interest. The material from ARC WNB 98 and ARC 330 98 probably contains small fragments of prehistoric loomweight, as a number of fragmentary examples have been found on the sites. Both sites also have several types of daub in a range of fabric types, including a light orange to light brown clay with frequent inclusions of white chalk which has been given the provisional fabric code WNB2. A single fragment of keyed daub walling came from context 1072, subgroup 59, ARC WNB 98. Wattle and lath impressions were noted on some of the daub, and it is likely that both Iron Age and Roman occupation is represented. The patterns of smoothing and burning on daub from all three sites suggest the presence of possible briquetage or moulds, and there is clear evidence of kiln or hearth linings.

MOLAS: 330 Zone 4

The assemblage size from ARC CRS 98 is fairly small, just 280g, of which 250g is daub, 20g rooftile, 5g as unidentified fired ceramic. There are 28,793g of building material from ARC 330 98, mainly daub, with 1380g of peg roofing tile, 18,360g of brick, 310g of

Roman roofing tile and 50g of stone rubble. From the chainage (CH) sites are 685g of mainly peg roofing tile with a small quantity, 20g, of post-medieval brick.

DAUB

The daub from contexts ARC CRS 98 [4] and ARC 330 98 [691] is mainly grey or partially grey in colour indicating that it has been subject to heat. It is somewhat unusual in being made with large flint inclusions (up to 13mm across). The probable daub from contexts ARC 330 98 [373], [458] (Pit [374],), and [1187] (Pit [1174) is very unusual in containing crushed fragments of chalk up to 5mm across (fabric type CRS1). The probable daub in context [529] (Pit 537,) is characterised by organic impressions in the clay matrix.

There is a curved fragment of building material with a smoke blackened inner surface (context [1182], Pit [1172]). This may be daub or it could be an underfired corner of a Roman box flue tile in fabric group 2815 (type 3006). A fragment of abraded fired ceramic in context [455] looks Roman although there is no definite proof. Definite Roman tile was recovered from contexts [536] (imbrex), [538], [688], and [1210] (tegula).

MEDIEVAL

The only definite medieval peg tile is from CH 43+000 and has a glazed upper surface. All the other peg tile is probably late-medieval or, more likely, post-medieval in date. A number of bricks were recovered from the brick kiln [720], (contexts [464], [691], [717]) . These measure 224-232 mm in length, 108-112 mm in breadth by 48-56 mm in thickness. It is not possible to accurately date bricks based on size by they were associated with pottery dated 1740-1780 in context [691], which would suggest a mid-late 18th century date. Some have indented borders in their top edges, which is normally a feature of pre-Great Fire of 1666 brickwork in London. However, there is no reason why the use of the mould base to flatten down the brick edges (which is the cause of these marks) could not have persisted in a Kent brickyard long after 1666.

WALL TILE

The small fragment of wall tile (context ARC CRS 98 [15]) is probably Victorian in date or later. The base is smoothed off whilst the top surface is decorated with a pale yellow glaze. The tile is 8 mm thick and is made with a red clay fabric containing common very small quartz and calcium carbonate inclusions (up to 0.2mm). It appears to be machine-made, although this is not absolutely certain.

MOLAS: 330 Zone 5

The total assemblage size is very small, just 2.065kg of which 1.225kg is daub from nine contexts. All is of prehistoric date, with most associated with late Bronze Age pottery (contexts [142], [172], [176], [178] and [221]).

One piece of daub has a rounded hole 18mm in diameter cut into it, ten pieces have a curved, smooth surface and one has a rounded shape. Wattle impressions are visible on a number of pieces.

MOLAS: 330 Zone 6

The total weight of ceramic building material scanned for the assessment is 5.085 kilogrammes, of which 4.79 kilograms is daub, 0.285 kilogrammes is securely identified Roman tile and 0.01 kilogrammes is abraded tile, thought to be of Roman date. Roman material was noted in two contexts, [213] and [242], both otherwise undated.

ROMAN BUILDING MATERIAL

The Roman tile assemblage is very small, with only 0.285 kilogrammes of securely identified tile. Types represented are tegula and imbrex. Such small quantities suggest that the material is not in primary destruction deposits, but is either residual, or has been dumped on the site as rubbish. No complete tiles, or complete dimensions, were noted.

Roman tile counts and weights for each tile type (securely identified material only)

Form	Count	Weight (grammes)
Tegula	1	260
Imbrex	1	25
Total	2	285

Both tiles were in similar red-firing fabrics of the type, made from London clays, which is commonly found in London (2815 group). Both have medium-grade moulding sand.

DAUB

Daub was present in three contexts, two of which ([342] and [383]) have Early to Middle Iron Age pottery dates and the third of which [105] is undated. The quantities are set out below.

The daub assemblage by subgroup, context, count and weight in grammes.

Subgroup	Context	Count	Weight (grammes)
64	342	29	2910
64	383	52	1870
185	105	1	10

The daub assemblage from context [342] is of interest. Many of the fragments have one smoothed surface, and clear impressions of interwoven wattle on the other surface, indicating that they are the remains of a wattle and daub structure, probably a hut or house. The daub itself is orange-firing with a light brown skin on the smoothed (?external) surfaces, although much of it is reduced showing that it was burnt in anaerobic conditions.

Small fragments of a second type of daub or fired clay were noted in subgroups 64 and 185; this is a pale orange-firing sandy clay with white limy streaks and coarse calcareous inclusions. In contexts [105] and [342], these include fragments with a columnar structure which is probably gypsum. These also occur in samples of natural taken from the site.

MOLAS: Parsonage Farm

All the building material from the site, a total of 239.605 kg was examined. Ceramic building material accounts for 99% of the assemblage, and building stone, daub or fired clay and painted wall plaster for the remaining 1%. A single fragment of moulded stone (registered find <60>) was also examined. The amounts and weights of each type are set out in table below.

Quantification of the materials assessed, by count and weight

Material	Number of fragments	Count as % of total	Weight (g)	Weight as % of total
Roman CBM	1	0	10	0
Medieval CBM	2904	95	230145	96.1
Post-medieval CBM	60	2	7060	3
Stone	12	0	1150	0.5
Daub/fired clay	26	1	630	0.3
Painted wall plaster	52	2	610	0.3
Total	3054	100	239595	100.2

A total of 120 contexts contain building material, of which 83 are small, fourteen medium, eight large and fifteen very large. The majority of the identifiable material is of medieval date, although one context ([310]) contains probable Roman tile, two contexts ([749] and [763]) contain material of early post-medieval date and four ([311], [312], [709] and [746]) contain 19th or 20th century material. Six contexts, which contain only daub or stone, are undated.

ROMAN

This period is represented by a single fragment of very abraded tile. The fabric is fine-textured and light brown with common, very fine, dark red and sparse, coarse, calcareous inclusions. It is not unlike fabric PFM8, so there is an element of doubt over the dating.

MEDIEVAL

Medieval ceramic building material accounts for 96.1% of the assemblage by weight. The tile forms present are set out below. It should be noted that hip and other curved tiles are probably under-represented, as small fragments cannot always be differentiated from peg tiles.

Medieval tile types, by count and weight

Form	Number of fragments	Count as % of total	Weight (g)	Weight as % of total
Peg tile	2769	95	218405	94.9
Curved tile	60	2	4985	2.2
Unknown	30	1	420	0.2
Hip tile	25	1	2880	1.3
Ridge tile	19	1	3375	1.5
Floor tile	1	0	80	0
Total	2904	100	230145	100.1

POST-MEDIEVAL

The post-medieval assemblage consists entirely of bricks. Two provisional fabrics were identified, as well as Museum of London fabric type 3033, one of the red 'Tudor' brick fabrics commonly used in London.

DAUB

Daub was recorded from four contexts; the twenty-six fragments have a total weight of 0.63 kg. Most are abraded pieces of fine white-firing clay or daub (context 361) or sandy orange-firing daub (contexts 382 and 394); from context 1148 comes a fragment of kiln-lining, lump of textured daub which appears to be iron-rich clay mixed with white marly clay, and including a burnt flint.

WALL PLASTER

Plain white wall plaster comes from two contexts. From context 307 there are over 50 mainly small fragments of plain white plaster on a fine, sandy, mortar backing, and from context 585 a single fragment of smooth, but not really flat, plaster, probably unpainted, on sandy lime mortar with large inclusions of white lime.

STONE

A small amount of building stone was noted. Medium-grained laminated sandstone and ferruginous sandstone are present, as well as a variety of other sandstones which are likely to have been used as building rubble, and possibly roofing slate. A fragment of shelly limestone is present; the source is not known, but may be the Bethersden area a few miles south of the site, from where coarse shelly limestones are known to have been quarried in the medieval period and later.

MOULDED STONE

A single fragment of moulded stone was noted in context 788 <60>. This is in a cream-coloured detrital limestone which strongly resembles Caen Stone, and is probably part of a larger moulding, such as a door arch. It is likely to date from the 13th century or early 14th century, but this should be confirmed during analysis.

CBM

A small quantity of ceramic building material, 3.17 kg, from chainage sites, ARC 430/ 85+100 – 85 + 350/99, was scanned. This consisted of medieval and post-medieval roofing tile and post-medieval brick, and the forms and fabrics noted were consistent with those from ARC PFM 98.

CAT: ARC MSH 98

Only a small assemblage, of poor quality, fired clay was recovered from the excavation. Most if not all of this material probably represents burnt daub from wattle and daub structures. The daub retrieved from the excavation consists of 357 fragments, weighing a total of 6.620kg. This includes 122 fragments (2.615kg), which have features such as flat surfaces and wattle impressions. The remaining material (including all the daub retrieved from the samples) amounts to 235 fragments (4.005kg). This was abraded and had no diagnostic features.

CAT: ARC WGC 98

The daub retrieved from the excavation consists of 157 fragments weighing a total of 1.590kg. This includes 34 fragments weighing 515g that have features such as flat surfaces and wattle impressions. The remaining material (excluding the daub retrieved from the soil samples) amounts to 123 fragments weighing 1.075 kg. This material is abraded and has no diagnostic features. The daub retrieved from the soil samples weighing 1.211kg is also abraded and has no diagnostic features.

WESSEX: HOL 99

CBM

A total of 60 pieces (2,265g) of ceramic building material was recovered. These all comprise fragments of post-medieval brick and roof tile.

Trench	Feature	Context	Count	Weight	Type	Spot date	Comments
3524TT	Gully 352403	352404	1	2	roof tile	Post-med	
3597TT	Topsoil	359701	5	500	Brick	Post-med	

3597TT	Topsoil	359701	2	33	roof tile	Post-med	
3597TT	Subsoil	359702	1	21	Brick	Post-med	
3611TT	Layer	361104	9	70	roof tile	Med/post-med	some handmade
3611TT	Layer	361104	1	20	brick	Post-med	
3611TT	Ditch 361105	361106	1	150	brick	Post-med	
3532TT	Land drain 353205	353205	11	469	brick/tile	Post-med	
	Unstratified	unstrat	27	890	roof tile	Med/post-med	some handmade
	Lynchet 2044	2045	2	110	roof tile	Post-med	
		TOTAL	**60**	**2265**			

FIRED CLAY

A total of 78 pieces (154g) of fired clay was recovered. This category consists entirely of small, abraded and featureless fragments, of uncertain origin. All but one tiny fragment was found associated with the probable Romano-British cremation-related deposits (3596TT).

Trench	Feature	Context	Count	Weight	Spot date	Comments
3528TT	Gully 352812	352811	1	2	RB	
3596TT	Pit 359606	359607	60	92	RB?	Extracted from sample 20
3596TT	Pit 359609	359608	17	60	RB?	Extracted from sample 21
		TOTAL	**78**	**154**		

WESSEX: LSF99

CBM

The ceramic building material recovered includes fragments of roof tile, brick, field drain and possible floor tile. The bricks, field drains, floor tiles and some of the roof tiles are likely to be of post-medieval date, although some more irregular fragments of roof tile in a softer, coarser fabric could be of medieval date.

Quantification: A total of 68, weighing 3812.
From: Little Stock Farm Excavation (ARC LSF99), Little Stock Farm Evaluation (ARC LSF98) & Park Wood Cottage Evaluation (ARC PWC99).

FIRED CLAY

A small quantity of fired clay was recovered; this comprises mainly small, featureless and undiagnostic fragments of uncertain date and origin; a few fragments have possible wattle impressions and are likely to be of structural origin. One fragment may possibly derive from a spindle-whorl. On the basis of associated pottery, the date range for these fragments is likely to fall in the later prehistoric period.

Quantification: A total of 85, weighing 542.

From: Little Stock Farm Excavation (ARC LSF99), Little Stock Farm Evaluation (ARC LSF98) & Park Wood Cottage Evaluation (ARC PWC99).

WESSEX: SALTWOOD

CBM

A total of 111 fragments of ceramic building material (CBM) (weighing 4.527kg) was recovered, including 53 fragments of Romano-British date (weighing 3.683kg) and 58 of medieval/ post-medieval date (weighing 0.844kg). The majority of the ceramic building material (88 framents) was recovered to the west of Stone Farm Bridleway. A number of these fragments are identifiable as Romano-British, and include *tegula* and *imbrex* roof tiles, and two tesserae; the remainder comprise medieval roof tile and post-medieval brick fragments. A further 23 fragments were recovered to the east of Stone Farm Bridleway, consisting entirely of roof tile of medieval or early post-medieval date.

FIRED CLAY

The total fired clay assemblage retrieved from Saltwood consisted of 954 fragments weighing 15.198kg. The discarded material (including all the fragments retrieved from soil samples), amounting to 667 fragments weighing 7.037kg, was abraded and had no diagnostic features. Thus, the retained assemblage includes 287 fragments (8.031kg) displaying features such as flat surfaces and wattle impressions.

WESSEX: SWR 99

CBM

Of the 38 fragments (333g) of ceramic building material recovered, 19 are roof tile fragments in soft, fine heavily abraded fabrics; all are from handmade tiles and although not particularly diagnostic, could, on the grounds of fabric and manufacture, be dated to the medieval period. There are three small fragments of brick, probably post-medieval, and the remaining 16 fragments are undiagnostic, and could be either of medieval or post-medieval date.

FIRED CLAY

The small quantity of fired clay (10 pieces, 75g) recovered comprises small, abraded fragments which are of uncertain date and origin, occurring predominantly, but not exclusively, in contexts containing early prehistoric pottery.