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The late prehistoric pottery from White Horse Stone, Pilgrim's Way, Boarley Farm and Boarley Farm West, Boxley, Kent

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1 INTRODUCTION

A total of 7094 sherds, weighing 98,806 g, was recorded from the five interventions (Table 1). In addition, pottery recovered from the sieving of soil samples selected for the recovery of environmental evidence at White Horse Stone (*c* 800 sherds) was not examined but remains available for future research in the archive. A small quantity of middle Bronze Age pottery was recovered from several features, and a single pit contained late Bronze Age pottery of ninth century BC type. Otherwise, the remaining material is a mixture of early/middle Iron Age types which could date from as early as the end of the early Iron Age (6th century BC) through to the beginning of the middle Iron Age (4th/3rd century BC), or later. Radiocarbon dates from the site are consistent with this chronology. Because of the infelicities of the calibration curve in the early first millennium BC they suggesting a wide overall date range of 800-90 cal BC. With Bayesian modelling, however, a more precise estimate of 610-340 cal BC can be made, although the end date of this range may be unrealistically early.

Table 1: Quantities of pottery by site and period

Site Name/Code	**No. sherds**	**Weight (g)**	**Mean sherd weight**
White Horse Stone/ARC WHS98			
Middle Bronze Age	168	1293	7.7
Late Bronze Age	97	1239	12.8
Early/Middle Iron Age	6655	95562	14.4
Total	6920	98094	14.2
Pilgrims Way/ARC PIL98			
Middle Bronze Age	99	446	4.5
Early/Middle Iron Age	55	131	2.4
Total	154	577	3.7
East of Boarley Farm/ARC BFE99			
Early/Middle Iron Age	9	58	6.4
West of Boarley Farm/ARC BFW98			
Middle/Late Bronze Age	2	19	9.5
Boarley Farm/ARC 420 58+200, 59+000, 59+300 98/9			
Early/Middle Iron Age	9	58	6.4
TOTAL	**7094**	**98806**	

Later prehistoric pottery was recovered from ditches, graves, gullies, hollows, layers, lynchets, pits, postholes, postpipes, surfaces and tree-throw holes at White Horse Stone (Table 2), and from 17 features including pits, ditch cuts, postholes and tree-throw holes as well as several layers at Pilgrims Way, one layer at East of Boarley Farm, one feature and one layer at West of Boarley Farm, and two features including a pit and one layer at Boarley Farm.

Table 2: Quantification of pottery by feature type at White Horse Stone

Feature Type	No. sherds	Weight (g)
Cut	13	75
Crem. Pit	175	4815
Ditch	229	1569
Grave	16	130
Gully	9	68
Hollow	2	9
Layer	176	1577
Lynchet	282	1668
Other	64	620
Pit	4814	79669
Pit/Posthole	4	45
Posthole	957	5504
Postpipe	120	1683
Skeleton	3	14
Surface	13	85
Tree throw	20	435

The overall condition of the pottery is very good in the White Horse Stone assemblage, with a relatively high mean sherd weight for later prehistoric pottery assemblages at 14.2 g, but less good for the other locations. There is little or no post-deposition abrasion visible on the sherds and the presence of surface treatment on the vast majority supports this comment. However, there are only two vessels in the entire White Horse Stone assemblage, one cup (Fig. 16, No. 138; 50% of vessel present) and one small bowl (Fig. 6, No. 11; 50% of vessel present), which have unbroken total profiles, and only two vessels with reconstructable total profiles from joining sherds, one from cremation pit 6132 (Fig. 12, No. 64) and the other from pit 4561 (Fig. 11, No. 58). All the remaining sherds represent only parts of fragmented vessels; there are no complete vessels.

The pottery was analysed and recorded using the methodology designed for the route-wide scheme in accordance with the recommendations set out by the Prehistoric Ceramics Research Group (PCRG 1995; 1997).

2 FABRICS

A total of 50 fabric types, within 24 fabric groups, has been defined (Tables 3-4; Fig. 1). A fabric type consists of an alpha code with the dominant inclusion as the first letter and any more minor but significant inclusions as second and third letters as required, which is a development beyond the accepted guidelines (PCRG 1995; 1997). This modification of the methodology provided a convenient format for dealing with large assemblages analysed by multiple specialists; four ceramicists analysed this assemblage. This experimental coding system was reasonably successful but the approach would benefit in future from a more

rigorous system for the second and third letter coding based on systematic ranking of the relative density of minor inclusions.

Table 3: Quantification of fabrics

Fabric type	**No. sherds**	**% sherds**		**Weight (g)**	**% weight**	
Calcareous-gritted						
C1	6	0.1		59	0.1	
C2	6	0.1		108	0.1	
sub-total			0.2%			0.2%
Flint-tempered						
F1	1006	14.5		24759	25.2	
F2	677	9.8		7841	8.0	
F3	159	2.3		1375	1.4	
F4	12	0.2		113	0.1	
F5	20	0.3		171	0.2	
F6	2	0.0		16	0.0	
F99	115	1.7		476	0.5	
sub-total			28.8%			35.4%
Flint-tempered, calcareous						
FC1	15	0.2		271	0.3	
Flint and grog-tempered						
FG1	7	0.1		93	0.1	
Flint-tempered, iron oxide-bearing						
FI1	260	3.8		4080	4.2	
FI2	56	0.8		753	0.8	
FI3	2	0.0		19	0.0	
sub-total			4.6%			4.9%
Flint-tempered, sandy						
FQ1	397	5.7		7516	7.7	
FQ2	406	5.9		5369	5.5	
FQ3	292	4.2		10252	10.5	
FQ4	26	0.4		424	0.4	
FQ5	44	0.6		594	0.6	
FQ99	222	3.2		1143	1.2	
sub-total			20.0%			25.8%
Flint-tempered, shell-bearing						
FS1	28	0.4		141	0.1	
Flint and organic-tempered						
FV1	108	1.6		2261	2.3	
FV2	51	0.7		550	0.6	
sub-total			2.3%			2.9%
Flint and organic-tempered, iron oxide-bearing						
FVI1	6	0.1		81	0.1	
Grog-tempered						
G1	8	0.1		54	0.1	
G99	2	0.0		19	0.0	
sub-total			0.1%			0.1%
Grog and flint-tempered						
GF1	15	0.2		31	0.0	
Grog-tempered or clay pellet-rich, sandy						
GQ1	41	0.6		1050	1.1	
Iron oxide-bearing						

Fabric type	**No. sherds**	**% sherds**		**Weight (g)**	**% weight**	
I1	13	0.2		109	0.1	
I2	16	0.2		146	0.1	
I3	30	0.4		262	0.3	
sub-total			0.9%			0.5%
Quartzite-gritted						
QZ1	14	0.2		211	0.2	
Sandy (with and without glauconite)						
Q1	42	0.6		138	0.1	
Q2	122	1.8		1135	1.2	
Q3	105	1.5		630	0.6	
Q5	750	10.8		7283	7.4	
Q99	90	1.3		116	0.1	
sub-total			16.0%			9.5%
Sandy, calcareous						
QC1	74	1.1		528	0.5	
Sandy, flint-tempered						
QF1	574	8.3		6777	6.9	
QF2	213	3.1		2064	2.1	
QF3	199	2.9		2388	2.4	
QF99	8	0.1		42	+	
sub-total			14.4%			11.5%
Sandy, flint and shell-bearing						
QFS1	91	1.3		1059	1.1	
QFS2	14	0.2		103	0.1	
sub-total			1.5%			1.2%
Sandy, iron oxide-bearing						
QI1	57	0.8		413	0.4	
Sandy, shell-bearing						
QS1	55	0.8		356	0.4	
QS2	49	0.7		393	0.4	
QS3	48	0.7		788	0.8	
QS4	2	+		17	+	
sub-total			2.2%			1.6%
Shell-tempered/Shell-bearing						
S1	159	2.3		2169	2.2	
S2	99	1.4		1005	1.0	
sub-total			3.7%			3.2%
Shell and iron oxide-bearing						
SI1	16	0.2		60	0.1	
Organic-tempered (briquetage)						
V1	7	0.1		37	0.0	
V2	69	1.0		199	0.2	
sub-total			1.1%			0.2%
Organic and flint-tempered						
VF1	15	0.2		47	+	
TOTAL	6920			98094		

Table 4: Components of consolidated fabric group 'clusters'

Cluster Name	**Fabric Groups**
Calcareous	C
Flint-tempered	F/FC/FG/FI/FS/FV/FVI
Flint-tempered with sand	FQ/QF
Grog-tempered	G/GF/GQ
Iron oxide	I/IV
Quartzite	QZ
Sandy	Q/QC/QFS/QI/QS
Shelly	S/SI
Organic-tempered	V (briquetage)/VF

This is a large number of fabrics to discuss and correlate to forms, surface treatments and decoration. It is possible, however, to consolidate the fabric groups into Fabric Group Clusters based on the principal inclusions (Table 4) and re-arrange them into Clay Matrix Groups based on the main variations amongst the clay matrices (Table 5) in order to examine general trends within the assemblage in terms of chronological variation regarding technology and social behaviour. Description of a clay matrix as 'silty' means that the quartz grains present measure less than 0.1 mm across and therefore are not normally visible at x10 power microscopy but are visible in thin section using a polarizing microscope, as can be observed for example in the thin section of fabric type F2 (database record PRN 1008, body sherd from an unoxidised, thin-walled bowl) which has a moderate amount (10-15%) of subangular quartz grains measuring about 0.08 mm or less across. In addition, the presence of rare (1-2%) quartz grains up to 0.5 mm across (i.e. medium-grained sand) is virtually invisible when processing large quantities of pottery and not likely to have been particularly significant to the potters in terms of the technological capabilities of the clays selected; however, sensitive fingering of clays could have suggested to the potters that a particular clay did have quartz in the matrix which was very fine-grained and these rare, larger fragments signalled the presence of finer quartz in the matrix background. This type of silty clay matrix is significantly different from the sandy clay matrices of FQ and QF fabrics where a significant quantity of the sand-sized grade of inclusions is actually visible during normal pottery analysis and recording.

Table 5: Distribution of fabrics by clay matrix type

Silty	**Sandy**	**Iron oxide & sandy**	**Glauconitic sandy**	**Shelly**
C1	FG1	FI1	FQ1	FS1
C2	FQ2	FI2	FQ3	QFS2
F1	FQ4	FI3	FVI1	QS2
F2	FQ5	FV2	GQ1	QS3
F3	FV1	I1	Q5	S1
F4	QZ1	I2	QF2	SI1

Silty	Sandy	Iron oxide & sandy	Glauconitic sandy	Shelly
F5	Q1	I3	QF3	
F6	Q2		QFS1	
FC1	Q3		QS1	
G1	QC1			
GF1	QF1			
QS4	QI1			
S2	V1			
V2				
VF1				

Glauconite can be difficult to see in hand specimen and also at x10 power. Therefore, descriptions of fabrics will indicate a range of glauconite present which can be seen using these methods; however, in thin section it is possible to appreciate that there can be a greater density of glauconite. Unoxidised firing conditions of pottery may affect a worker's abilities to confidently identify the presence of glauconite in hand specimen due to its glassy appearance transmitting the colour of the clay matrix of the fabric (Morris 1995), which results in the unavoidable reduction in apparent frequency of glauconite-bearing fabrics in all aspects of quantification of the White Horse Stone fabrics. Therefore, the representation of glauconite-bearing fabrics in this report must be appreciated as the minimum observable information. The use of the term 'sandy' to define a group of similar fabric recipes loosely indicates those fabrics with quantities of quartz sand as well as those fabrics with quantities of mainly glauconite with some quartz sand, and variations in between, because the impression in hand specimen is similar with rounded to subrounded grains of these materials in the clay matrix creating a 'sandy' effect. Frequently in this report, the clay matrices may be specifically differentiated between 'quartz sandy' and 'glauconitic sandy'.

The two most popular *clay matrix* groups are the silty group (30.8% by count; 36.8% by weight; 27.8% and 35.1% respectively if the middle Bronze Age fabrics are removed) and the glauconitic sandy group (29.5% by count, 32.8% by weight). However, the sandy without glauconite group (28.2% by count, 23.4% by weight) is not far different in popularity. Only the iron oxide-bearing clay matrix group is very infrequent (6.1% by count and weight). There is a possibility that this fabric is not local in origin which would explain this difference, and the same could be the case for many of the fabrics with fragments of shell in the matrix. There may actually be five *clay matrix* groups if those fabrics which have shell in them (S2 in the silty group; QFS1, QS2, QS3, S1 and SI1 in the sandy group) are separated out, leaving those shell-bearing fabrics with glauconitic sand in that group since Gault clays can have shell in them. Together, these would amount to 6.6% by count and 5.6% by weight.

These fabric types and clay matrix groups were undoubtedly visually different to the users of the pots. The glauconite-rich fabrics in particular, if not burnished, have a subtle pale grey-green tinge to them, while the iron oxide-rich fabrics are spotted with dull, dark red to red-brown inclusions. The shell-bearing fabrics of course have thin streaks of white visible while the flint-tempered vessels have chunky chips of white-grey, calcined rock where they still can be seen on the exterior surface. The pot users would have known which source had been used to make the vessels and, coupled with subtleties in the vessel forms, which potter had made them. This observation has an impact on subsequent discussion further below.

Fabric types with the numerical code '99' found in the database are used to indicate that for various reasons it is not possible to determine exactly which fabric type a sherd or sherds belongs to but the presence of flint (F99), grog (G99) or quartz (Q99) has been observed. The asterisk symbol (*) at the end of a fabric type definition indicates that a thin section was made from one sample of the fabric, and this has assisted the definition presented. The White Horse Stone fabrics reference collection of one or more sherds selected to represent each fabric type is available in the archive, and the thin sections are curated at the University of Southampton (School of Humanities –Archaeology).

2.1 Fabrics Discussion

The White Horse Stone assemblage is dominated by *flint-tempered fabrics* (39.7% by count, 69.6% by weight; Table 3; Fig. 1), and these may have silty clay matrices (F1-F6; FC1; FS1), sandy clay matrices (FG1, FQ2, FQ4, FQ5, FV1), glauconitic sandy clay matrices (FQ1, FQ3, FVI1), or iron oxide-rich and silty clay matrices (FI1, FI1, FI3, FV2). The same is true for West and East of Boarley Farm, Boarley Farm and Pilgrims Way (Tables 6-7).

Table 6: Middle and middle-late Bronze Age pottery from Boarley Farm and Pilgrims Way

	Middle Bronze Age										**M/LBA**	
Fabric	**GF1**		**F3**		**F4**		**F5**		**F6**		**F1**	
Quantity (sherd count, weight)	Ct	Wt	Ct	Wt	Ct	Wt	Ct	Wt	Ct	Wt	Ct	Wt
West of Boarley Farm/ARC BFW98	-	-	1	4	-	-	-	-	-	-	1	15
Pilgrims Way/ARC PIL 98	33	116	42	205	10	21	4	37	10	67	-	-

Table 7: Early-middle Iron Age pottery from Boarley Farm and Pilgrims Way

Fabric Type	**East of Boarley Farm/ ARC BFE99**		**Boarley Farm/ ARC 420 58+200, 59+000, 59+300**		**Pilgrims Way/ ARC PIL98**	
	Count	Weight	Count	Weight	Count	Weight
F1	-	-	7	11	-	-
F99	-	-	-	-	14	6
FG1	-	-	-	-	-	-
FG3	-	-	-	-	2	21

Fabric Type	East of Boarley Farm/ ARC BFE99		Boarley Farm/ ARC 420 58+200, 59+000, 59+300		Pilgrims Way/ ARC PIL98	
FI2	-	-	-	-	2	9
FI3	-	-	-	-	1	2
FQ2	-	-	4	10	-	-
FQ4	-	-	2	3	1	1
FQ99	-	-	-	-	1	2
FS1	-	-	-	-	21	57
G3	-	-	-	-	1	1
Q5	-	-	2	5	1	1
Q99	-	-	1	1	-	-
QF1	2	13	11	28	1	1
QF2	7	45	-	-	-	-
QF3	-	-	-	-	2	3
QFS2	-	-	-	-	1	1
QI1	-	-	-	-	1	5
QS1	-	-	-	-	1	1
QS3	-	-	-	-	1	6
QZ1	-	-	-	-	1	2
S2	-	-	-	-	3	12
Total	*9*	*58*	*27*	*58*	*55*	*131*

All of the flint used as temper had been burnt and crushed into angular fragments, unless otherwise stated. Variation in the flint temper may range from commonly coarse (F4) to fine (F5) and from moderately coarse (F1) to fine (F2), for example. The flint-tempered fabrics can have other inclusions with them in lesser quantities including calcareous matter (FC1), shell (FS1), or organic matter/linear voids (FV1). Although there is a clear set of size classes for sediment studies which is used to categorise grains (PCRG 1995, appendix 7), there is no suitable equivalent for classifying the pieces of temper in pottery. Therefore, this report will not attempt to 'classify' an individual fabric type into 'coarse ware', 'intermediate' or 'fine ware', as this would be extremely subjective and serve no purpose. In addition, the coding system established to accommodate these challenges (PCRG 1997, 27-8, fig. 2) is unfortunately cumbersome to use in the text of a report and also tends to give the effect that the same coded fabric in two different assemblages is actually the same fabric, thus completely unintentionally implying specialist production and trade of vessels in this fabric. However, the terms 'coarser' and 'finer' may be used to give a general feel to the comparison of fabrics. For example, fabric type F1 is much coarser than fabric type F5 simply in terms of the size of the inclusions, despite the quantity of inclusions being greater in F5 than F1. The overall effect, however, is that F1 is a coarser type of ware than F5.

This fabric group cluster also includes a major part of the fabric groups of *flint-tempered, sandy/sandy, flint-tempered fabrics* which are a cluster in their own right (FQ/QF). It is important to emphasise that there are no absolutely clear divisions amongst these; the fabric codes simply provide an emphasis of apparently more flint than quartz or apparently

more quartz than flint. These, too, may be separated into those with a dominance of glauconite (FQ1, FQ3, QF2, QF3) and those without glauconite pellets (FQ2, QF1).

The next most popular range of fabrics is those which are *sandy* in nature (36% by count, 24.7% by weight; Table 3) (Q1, Q2, Q3) including the fabric which is rich with glauconite sand (Q5). These sandy fabrics may also have smaller quantities of other inclusions such as calcareous matter (QC1), both flint and shell (QFS2), iron oxides (QI1) and just shell (QS2, QS3). These sandy fabrics were even more popular if the quartz and flint-tempered fabrics mentioned above (QF group) are considered with them.

The single most popular individual fabrics by count are F1 (14.5%), Q5 (10.8%), F2 (9.8%) and QF1 (8.3%). The most popular fabrics by weight are F1 (25.2%), FQ3 (10.5%), F2 (8%) and Q5 (7.4%).

Shell-bearing fabrics (3.9% by count, 3.3% by weight) are a very distinctive group with large pieces of shell visible (S1, S2), and there is a rare variation on this with some modest pieces of *shell and iron oxides* (SI1). It is most likely that the shell in these fabrics is actually naturally-occurring in the clay matrix, rather than added as temper, but this requires further research and clay sampling. The *iron oxide* fabrics (0.9% by count, 0.5% by weight) are another very distinctive range displaying rounded inclusions of altered iron compounds as the main clastic component (I1, I2, I3). *Grog-tempered* fabrics are not particularly common amongst the pottery from White Horse Stone (0.9% by count, 1.2% by weight). There are three variations of grog-tempering: silty (G1), glauconitic sandy (GQ1) and grog and flint-tempered (GF1). There are two types of *organic-tempered* fabrics – those which were used in salt production procedures (V1, V2) and one type used to make pottery which may not be later prehistoric (VF1). At least 1.1% of the assemblage is 'briquetage', ceramic containers used to dry and transport salt crystals. The rare occurrences of the *quartzite* fabric (QZ1; 0.2%) may well be under-represented in the frequency tables and charts. This fabric is basically sandy in nature but close inspection at x10 power binocular microscopy reveals that the inclusions are more angular in nature than is normal for White Horse Stone fabrics and the rare presence of actual pieces of quartzite confirm that this is not a typical sandy fabric type.

The small assemblage recovered from East of Boarley Farm consists entirely of sandy and flint-tempered fabrics while that from Boarley Farm has sandy fabrics, flint-tempered, sandy fabrics and sandy, flint-tempered fabrics (Table 7). The range and frequency of fabrics from Pilgrims Way is most similar to the White Horse Stone assemblage, including the presence of shell-bearing/shell-tempered sherds despite there being less than 100 sherds in the assemblage.

2.2 Geology and resource procurement

In order to be able to discuss whether the pottery found on a settlement was made locally or acquired through trading mechanisms, it is necessary to have definitions of the terms 'local' and 'non-local' and also an understanding of how these definitions may have had meaning in the past. In this respect, the use of an ethnographic-derived model for the manufacture of pottery through a study of raw material resource procurement procedures by potters in circumstances which are relatively similar to those of the past communities being explored archaeologically would be welcomed – at least as a starting-point for discussion of the patterns observed in the pottery assemblage being studied. Such a model has been presented by Professor Dean Arnold (1981; 1985). He discovered that 84% of potters, whose activities are described within the ethnographic literature and through his own observations of community potters in Mexico, obtained their potting clays from within 7 km of their villages, and 97% were willing to travel up to 10 km to acquire special tempers if necessary. However, the majority of potters actually dug their clays and obtained temper from sources within 1 km of their communities, the preferred territory of exploitation (Arnold 1985, 50-4). Arnold's model, appropriate for use by later prehistoric pottery specialists because the majority of communities he studied were of sedentary agriculturalists, has been applied for over a decade to site and regional studies of pottery production and distribution in southern Britain (Knight 1992; Morris 1991; 1994a; 1994b; 1995; 1996; 2000; Morris and Woodward 2003). Its main weakness is in the lack of recognition of the effects of topographical variability and access to sources which could expand or reduce this zone. A GIS-version of Arnold's model would be extremely useful to help pottery specialists better understand the physicality of transporting clays from source locations to settlements.

In order to begin to find out which of the pottery fabrics defined in this report for White Horse Stone were likely to have been locally made and which were probably not locally made but acquired through some form of trade, such as exchange of commodities, gift-giving, or exchange of persons for marriage, it is necessary to examine the nature of the geological deposits in the immediate area and wider region with regard to what has been identified in the pottery fabrics. The main inclusions are (1) flint, which was burnt, crushed and added as temper, (2) quartz sand, quartz silt, glauconite and quartz sand, and iron oxides which were all naturally-occurring in clay, (3) shell which may be been crushed and added as temper or may have been naturally-occurring in clay. Minor inclusions are (4) quartzite, (5) organic matter, and (6) calcareous matter.

White Horse Stone was located on Clay-with-flints with underlying Middle Chalk (Geological Survey Sheet 272; URS 2001, 1-2). Clay-with-flint can be quite variable with ironstone of Lower Greensand, Eocene and Pliocene origins, and soft sandstone and hard

quartzitic 'sarsens' may be found in it and the deposit 'often approximates to a brickearth, . . . where it rests on outliers of Thanet Sand' (Dines *et al* 1954, 104). Brickearth is well-known as a major source for the production of bricks, and therefore it is possible that this variation of the geological deposit could have been the source for the majority of the pottery utilised at White Horse Stone. However, it is important to determine whether this potential resource was sandy in nature or silty, as these two types of clay matrices are quite different in their ceramic engineering capabilities; sand-sized grains providing greater porosity in clays used to make handmade pots fired in uncontrolled atmospheres (bonfires). Therefore, there is clay available immediately in the area of the settlement and also around the area of the settlement as Clay-with-flints above Middle Chalk is found widely in the North Downs of Kent. The Middle Chalk would have provided abundant flint nodules suitable for burning and crushing to make temper. The presence of ironstone suggests that the iron oxide-rich fabric group may also have been local wares, and the minor quartzite fabric could have been a local product as well.

However, it is necessary to go slightly further afield to find a source for the glauconite-rich sandy clay fabrics. The best candidate for these fabrics is the Gault clay, and it is extremely interesting that Gault clay was also known to have been used to make bricks in the Chatham region (Burham) (Dines *et al* 1954, 148). In addition, glauconitic sand is also found in the Lower Greensand levels of the Folkestone Beds where exposed. These two types of possible sources are both found local to the site at White Horse Stone; Gault clay is located 3 km to the south-west on the east side of the Medway while both Gault clay and Folkestone Beds are found 6 km to the south-west on the west side of the Medway at Snodland. Folkestone Beds are also known to be rich, not only with glauconitic sands but also ironstone (Dines *et al* 1954, 18). It is most likely that the fabrics containing degraded iron oxides were also derived from the Gault (Prof D Peacock, pers comm.). What is intriguing about the locations of these strata of Gault and Folkestone Beds on either side of the Medway is that they undoubtedly would have been visible to the site occupants due to the elevated position of White Horse Stone overlooking the Medway valley. The choice of raw materials may be dependent upon the 'meaning' of a source or sources, such as the acquisition of clays and tempers from specific landscapes (Hamilton 2002, 39). Were the potters choosing these sources not only for their potting characteristics but also for their social group's claim to these lands?

Other sources for sand-bearing clay include the Thanet Beds sands with occasional clay layers, and these are often known to be glauconitic or ferruginous (Dines *et al* 1954, 74-80), thus providing another possible source for several of the clay matrices. Thanet Beds, mentioned above, are found in the eroded valleys associated with Clay-with-flints over Middle Chalk, as well as significant deposits located between 6-7 km both to the north-west beyond the Medway and to the north-east around Gillingham. However, the frequency of

glauconite in the clay is not detailed, so it is not known if it is as frequent as that found in the White Horse Stone fabrics. There are many other sources of glauconitic sands outside the local procurement zone, such as the Woolwich Beds and the London Clay and Basement Bed; the latter has 'nearly pure glauconite sand' and the former is 'speckled with glauconite' (Dines *et al* 1954, 83).

There is one particular fabric group, shell-bearing, which cannot have been made from clays local to White Horse Stone if the shell is shown to be fossiliferous (i.e. geological) rather than fresh. Assuming that all of the shell in the different fabric types is geological, the most likely source for these fabrics is one in the vicinity of Woolwich Beds (Dines *et al* 1954, 82). Dr. John Cooper suggested that the Black Shelly Clays geological stratum could be the source for the shell in the fabrics of the later prehistoric pottery from a later Iron Age enclosure at Farningham Hill in the Darent river valley, west Kent (Cooper, referred to in Couldrey 1984, 42). Shell-bearing fabrics were the most common fabric group in the Farningham assemblage, and this is not surprising because Woolwich Beds are found in numerous locations from 0.5 km to the north of the site and beyond along the North Downs, and therefore can be interpreted as a local resource to the Farningham potters. However, the nearest source of Woolwich Beds to White Horse Stone is in the Upchurch area 10 km to the north-east or 10 km to the north-west across the Medway and west of Rochester – both outside the likely local procurement zone for White Horse Stone potters. This distance is correlated to the infrequency of shell-bearing pottery in the White Horse Stone assemblage where it represents only 6.1% of the assemblage (Table 3; Fig. 1) compared to that at Farningham where it represented 40% of the assemblage (Couldrey 1984, table D). The use of shell-bearing fabrics is common in this part of the North Downs during the Iron Age, and will be discussed further in the later prehistoric pottery scheme-wide synthesis. Fossiliferous shell can be found in glauconitic sandy clays, and therefore fabrics QFS1 and QS1 are not included in this quantification (Table 5).

2.2.1 Resources, technology, and trade

The major use of crushed, burnt flint as temper and the presence of three primary clay matrices (silt, glauconitic sand, and quartz sand) are therefore not surprising based on a study of the local geology. What is surprising, however, is that so many different clays were being used. Why not simply have one good source that all potters used – why should there be such variation of primary clay sources? Who were the potters who made the White Horse Stone pottery? And, if there are perfectly good pots made from these local fabrics, why acquire shell-bearing pots? It is worth considering that the selection of specific resources in the landscape for the making of pottery may be expressions of identity – in this case the identity of potters and their families through several generations. The transmission of the knowledge

and experience of pot-making from mother to daughter or woman to daughter-in-law is laden with tradition and expectations. There is little evidence at present to suggest that the level of pottery production in Kent was anything other than household production for household use (cf. Peacock 1982, 8). Only the shell-tempered wares and possibly the iron oxide-bearing fabrics could be interpreted as household production for exchange, similar to much of the pottery production and distribution in south-central and western England (Morris 1994a, fig. 3). Therefore, it is worth considering that the different clay matrices of both the flint-tempered group and the sandy group with flint temper are family specific pots; each clay matrix representing a different family, with the shell fabrics and iron oxide fabrics representing possible immigrant families or non-local families accepted by the main White Horse Stone families. If it is possible to demonstrate that the shell fabrics, the iron oxide fabrics and each of the main clay matrix groups were specific to an area of the excavated site, for example, then there might be some merit in this interpretation. This was investigated and it has been demonstrated that the shelly fabric sherds were mainly deposited in the northwest zone of the excavated area and the glauconitic sandy fabric predominantly derives from the central pit complex (Area 18) (C Hayden, pers comm.). However, iron oxide fabric sherds are found more evenly distributed across the site. It may be that those pots provided a common but necessary function for all families or their rarity made them special to everyone, but at least one of these fabrics was produced during the late Bronze Age, and that it may simply be that they became a decreasingly important matrix choice amongst the early/middle Iron Age potters. What is certain, however, is that during this period pots needed to look like particular shapes and the majority were expected to have some amount of crushed, burnt flint or sand to be acceptable for use by the people located at White Horse Stone.

The presence of organic matter, not only organic-temper (FV1) but also rare or sparse organic matter, in the White Horse Stone fabrics is worth emphasizing. It is not possible to be absolutely sure if the less frequent occurrence of organic matter was always naturally-occurring in the original clay matrices or added as a minor temper to aid fabric porosity. It is important also to remember that the presence of small amounts of organic matter may be culturally determined, rather than naturally-occurring. The presence of organic matter in later Bronze Age pottery in Kent has been reported by Macpherson-Grant (1994, 253) and Raymond (2003, 36); both authors believed that this was deliberately added to flint-tempered wares and Raymond in particular notes that this is also an Essex phenomenon (Brown 1995, fabric F; Barrett and Bond 1988, 27). Similarly, it is curious that grog temper is also found in one predominantly flint-tempered fabric in the White Horse Stone assemblage (FG1) and flint was added to a predominantly grog-tempered fabric (GF1) as well. The significance of these particular fabrics will be discussed further within the later prehistoric pottery scheme-wide synthesis.

2.3 Middle Bronze Age

Two fabric groups were used to make Deverel-Rimbury, middle Bronze Age pottery in the White Horse Stone assemblage: flint-tempered and grog-and-flint-tempered. Within the former, there are three fabric types (F3, F4, and F5) and only one in the latter (GF1). All of these fabrics have silty clay matrices. The flint-tempered types are very coarse in texture with poorly-sorted, common, relatively large inclusions (F3), distinctively intermediate in texture with well-sorted, moderate to common, relatively medium-sized flint (F4), and extremely fine in texture with very well-sorted, moderate, relatively very small-sized flint (F5). Fabrics F3 and F4 were used to make bucket urn/jars and fabrics F4 and F5 for globular urn/jars. The grog-and-flint-tempered fabric was only recovered as undiagnostic sherds, but elsewhere along the route of the Channel Tunnel Rail Link (Tutt Hill; Saltwood Tunnel) this type of fabric had been used to make middle Bronze Age Deverel-Rimbury urn/jars and transitional late-middle Bronze Age to late Bronze Age vessels. This is discussed further in the later prehistoric pottery scheme-wide synthesis. Sherds in these middle Bronze Age fabrics were found in 14 features, or colluvial layers (Table 8).

Table 8: Occurrences of middle Bronze Age fabrics (quantification by sherd count and weight)

		Fabric Types											
FEATURE	**CONTEXT**	**F3**		**F4**		**F5**		**F6**		**GF1**		**G99**	
		Ct	**Wt**	**Ct**	**Wt**	**Ct**	**Wt**	**Ct**	**Wt**	**Ct**	**Wt**	**Ct**	**Wt**
Middle Bronze Age features													
Ditch 4014	4016	5	65	-	-	-	-	-	-	-	-	-	-
	4017	48	143	-	-	-	-	-	-	-	-	-	-
	4018	-	-	-	-	-	-	-	-	-	-	5	4
Ditch 4048	4042	3	21	2	30	1	1	-	-	-	-	-	-
	4044	12	84	1	42	-	-	-	-	-	-	-	-
Ditch 4082	4095	7	116	-	-	-	-	-	-	-	-	-	-
	4096	38	442	-	-	-	-	1	9	-	-	-	-
	4097	19	202	-	-	-	-	-	-	-	-	-	-
	4100	1	4	-	-	-	-	-	-	-	-	-	-
Hollow 7142	7143	-	-	-	-	1	7	-	-	1	2	-	-
Posthole 4035	4036	1	2	-	-	-	-	-	-	-	-	-	-
Middle-Late Bronze Age transition features													
Pit 7038	7039	-	-	-	-	1	7	-	-	-	-	-	-
Pit 7069	7070	1	4	3	10	-	-	-	-	14	29	-	-
Late Bronze Age feature													
Pit 5421	5426	-	-	-	-	10	93	-	-	-	-	-	-
	5449	-	-	-	-	4	23	-	-	-	-	-	-
Post-Bronze Age features (redeposited)													
Layer	4144	1	3	-	-	-	-	-	-	-	-	-	-
Layer	4145	-	-	1	9	-	-	-	-	-	-	-	-
Lynchet 4180	4182	-	-	-	-	1	5	-	-	-	-	-	-
Pit 7009	7079	-	-	-	-	1	10	-	-	-	-	-	-
Pit 7130	7128	2	24	4	17	-	-	-	-	-	-	-	-

		Fabric Types											
FEATURE	CONTEXT	F3		F4		F5		F6		GF1		G99	
		Ct	Wt	Ct	Wt	Ct	Wt	Ct	Wt	Ct	Wt	Ct	Wt
Posthole 4054	4055	-	-	1	5	-	-	-	-	-	-	-	-

2.4 Middle/Late Bronze Age Transition

One feature is unusual; pit 7069 is dominated by middle Bronze Age fabrics (18 sherds, 43 g, fabrics F3, F4, GF1) including the lug handle from a globular urn/jar (Fig. 16, No. 127), but there is nearly the same amount of pottery in later or non-specific fabrics (16 sherds, 40 g, fabrics F1, FS1, I3, F99, Table 9). If the grog-and-flint fabric had derived from a transitional form, then the later pottery would have been dominant in this feature. One of the F1 sherds is a sharply, obtuse-angle shoulder sherd which would not be out of place in a late Bronze Age assemblage. Therefore, there is a possibility that this feature may represent a transition from the end of the middle Bronze Age into the beginning of the late Bronze Age and should be considered a transitional middle-late Bronze Age assemblage. Normally transitional assemblages are represented by form types which are less distinctively Deverel-Rimbury in style; the profiles tend to be closer in type to hooked rim ovoid jars of the late Bronze Age or are simply thinner-walled, vertical profiles (Morris, forthcoming). Some of the assemblage, deposited in the same ditches at Shrubsoles Hill (Isle of Sheppey) as Deverel-Rimbury globular urn/jars, is transitional in type (Raymond 2003, 34, fig. 15, 5, 8-10) and was compared to pottery recovered from Mucking North Ring (Barrett and Bond 1988, fig. 21, 22).

Table 9: Occurrences of middle/late Bronze Age and late Bronze Age fabrics (quantification by sherd count and weight)

		Fabric Types															
FEATURE	CONTEXT	F1		FI1		FQ1		FQ2		FQ5		I3		FS1		F99	
		Ct	Wt	Ct	Wt	Ct	Wt	Ct	Wt	Ct	Wt	Ct	Wt	Ct	Wt	Ct	Wt
Middle-Late Bronze Age transition features																	
Pit 7038	7039	1	7	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pit 7069	7070	8	37	-	-	-	-	-	-	-	-	2	1	1	1	-	-
Late Bronze Age feature																	
Pit 5421	5422	-	-	-	-	1	1	4	37	3	23	-	-	-	-	-	-
	5423	-	-	-	-	-	-	-	-	-	-	6	77	-	-	-	-
	5426	-	-	-	-	2	8	-	-	29	402	-	-	-	-	-	-
	5447	-	-	-	-	-	-	-	-			-	-	-	-	4	3
	5449	20	254	3	218	-	-	-	-	12	169	-	-	-	-	1	1

Pit 7038 contained only two sherds; one rim sherd from an ovoid cooking pot (R6) which can date from the late Bronze Age to the Iron Age in fabric F1 and a body sherd in middle and late Bronze Age fabric F5. Therefore, these vessels may also have been middle-

late Bronze Age in date. One of the more common vessel forms associated with this transitional ceramic phase is the ovoid jar (Morris, forthcoming).

In addition, pit 5421 contained an obtuse-angle shouldered vessel with an everted rim which was burnished on the exterior and very thin-walled (Fig. 6, No. 9). This late Bronze Age jar form was made from the finest of middle Bronze Age fabrics (F5). This is a very special occurrence of a middle Bronze Age fabric being used, presumably continuously, throughout the late Bronze Age period until at least the 9th century BC.

2.5 Late Bronze Age

Several fabric types are classified as plain assemblage phase of the late Bronze Age in origin due to their occurrence with forms and decoration which are dated elsewhere to the 10th/9th century BC or later. These fabrics are F1, FI1, FQ1, FQ5, I3 and, of course, F5 (as described above) which were recovered from several contexts within pit 5421 (Table 9). A radiocarbon date on Maloideae charcoal from one of the lower fills of pit 5421, where it was associated with a large group of pottery, gave a result which is consistent with this chronology: 1130-890 cal BC (NZA-22006: 2804±40 BP). The form types, described below, include two bowls and three jars (Fig. 6, Nos 8-12). One of the fabrics is quite coarse in texture (F1), two are intermediate (FI1, FQ5) and two are very fine (I3, F5) based on the sizes, sorting and density of inclusions relative to each other. There is a single finger-tip decorated body sherd (Fig. 6, No. 13) made from fabric FQ1 in this feature. In addition, there are body sherds from two other fabrics (FQ2, FS1). Six of these late Bronze Age fabric types (F1, FI1, FQ1, FQ2, FS1 and I3) were still being used in the next ceramic period at the site.

2.6 Early/Middle Iron Age

The vast majority of fabric types identified in the assemblage were associated with vessel forms, decoration and surface treatments dated to the early/middle Iron Age (Tables 3 and 13).

One of the problems of the White Horse Stone pottery, and of much of the other later prehistoric pottery in the Channel Tunnel Rail Link project, is determining when exactly the majority of identified fabrics started to be made. Two fabric types from this site were utilised in the late Bronze Age as well as the early/middle Iron Age (F1 and FI1). Many fabrics which first appeared in the early/middle Iron Age phase at White Horse Stone but it is uncertain whether they were also made during the decorated phase of the late Bronze Age and early Iron Age periods (8th-6th century BC) simply because occupation of this date was not identified at this site. At Monkton Court Farm (Macpherson-Grant 1994), the same fabric groups were identified for pottery dated to the decorated phase of the late Bronze Age (9th-7th century BC). These included flint-tempered, flint-and-grog-tempered, flint-and-organic-

tempered, flint-tempered with iron oxides, sandy, sandy with flint and sandy with grog temper groups. Therefore, there is every reason to believe that such fabric groups could have been in use in the late Bronze Age in this part of Kent as well.

2.7 Fabric Descriptions

2.7.1 Calcareous-gritted group (not obviously shell-bearing)

C1 moderate (10-15%), well-sorted, sub-angular, grey, glistening, polycrystalline calcareous inclusions which may be limestone, ≤1 mm; rare (1%) iron oxide inclusions, ≤0.3 mm; sparse (7%), elongated organic inclusions, ≤5 mm; clay matrix laminated and silty; fracture harsh (*).

C2 moderate (10-15%), moderately-sorted, rounded chalk, ≤3 mm; sparse to moderate (7-10%), elongated organic voids, <4 mm; may have sparse (3-5%) grog, ≤2 mm; rare (1%) flint detritus; rare (1%), rounded quartz, ≤0.3 mm; clay matrix laminated and silty; fracture smooth (grog requires petrological confirmation).

2.7.2 Flint-tempered group

F1 moderate to common (10-20%), poorly-sorted flint, majority ≤4 mm, with occasional pieces between 5-17 mm and silt-sized flecks of flint or flint dust usually visible; rare to sparse (1-3%) calcareous inclusions may be present, ≤0.5 mm; rare to sparse (≤5%) linear organic vesicles, ≤2 mm; rare (1%), rounded iron oxides, ≤0.3mm; very rare (<1%), rounded quartz grains, ≤0.5 mm; clay matrix dense and silty; fracture hackly (*).

F2 moderate to common (10-20%), well-sorted flint, ≤2 mm, with occasional pieces up to 4mm; rare (1-2%), subangular to rounded quartz, ≤ 0.5 mm; rare (1-2%), rounded red iron oxides, ≤0.3 mm; calcareous and organic inclusions may also be present; clay matrix very dense and very silty; fracture smoother than F1 but still hackly (*).

F3 common (25%), poorly-sorted flint, ≤9 mm, but majority ≤4 mm; clay matrix dense, rather layered and micaceous, and may be silty; fracture very hackly.

F4 common to very common (20-30%, and occasionally 40%), moderately to well-sorted flint, ≤3 mm; clay matrix dense, layered and micaceous, and may be silty; fracture harsh to hackly.

F5 common (20-25%), well-sorted flint, ≤2 mm; clay matrix dense, micaceous and silty; fracture fairly smooth.

F6 moderate (10-15%), poorly-sorted flint, ≤3 mm; rare to sparse (1-3%) angular grog, <2 mm, with flint visible in it; rare (1%) rounded iron oxides, <1 mm; clay matrix dense, silty and laminated; fracture hackly (grog requires confirmation by petrological analysis).

2.7.3 Flint-tempered, calcareous group

FC1 common (20%), moderately-sorted, both very fine flint dust and flint, ≤5 mm, in equal amounts; rare (1-2%) rounded flint detritus, ≤7 mm; sparse (7%) sub-rounded chalk, ≤5 mm; rare (1%), sub-rounded quartz, ≤0.5 mm; clay matrix layered or loosely-structured, and silty; fracture fairly smooth or irregular.

2.7.4 Flint and grog-tempered group

FG1 moderate to common (15-20%) poorly-sorted flint, ≤5 mm with occasional examples up to 6mm; sparse to moderate (7-10%) grog, ≤3 mm, bearing common (20-25%) rounded

glauconite up to 0.5 mm and sparse (7%) subrounded to subangular quartz up to 0.1 mm; sparse (3-5%) rounded iron oxides; sparse (3-7%), angular to subangular quartz, ≤0.5 mm; clay matrix dense and sandy; fracture hackly (*).

2.7.5 Flint-tempered, iron oxide-bearing group

FI1 moderate to common (15-20%), well-sorted flint, ≤2 mm; moderate (10%), rounded iron oxides, ≤2 mm; clay matrix dense and silty; fracture harsh (*).

FI2 moderate (10-15%), moderately-sorted flint, ≤4 mm; moderate (10%), rounded iron oxides, ≤3 mm in size; rare (1%) rounded quartz, ≤0.5 mm; clay matrix layered, dense, silty and micaceous; fracture hackly (*).

FI3 moderate (15%), very well-sorted flint, ≤1 mm and occasionally ≤2 mm; common (20-25%), rounded iron oxides, ≤2 mm and occasionally ≤4 mm; clay matrix layered and silty; fracture fairly smooth.

2.7.6 Flint-tempered, sandy group

FQ1 moderate (10-15%), moderately to poorly-sorted flint, majority ≤3 mm with occasional larger inclusions and some very fine flint dust; moderate (10-15%) or more, well-sorted, rounded glauconite, ≤0.6 mm; rare (3%), sub-rounded to sub-angular quartz, ≤0.5 mm; clay matrix dense; fracture hackly (*).

FQ2 moderate (10-15%), moderately to poorly-sorted flint, majority ≤3 mm with occasional larger inclusions and some very fine flint dust; sparse to moderate (7-10%) rounded quartz grains, ≤1 mm; clay matrix sandy; fracture irregular.

FQ3 sparse to moderate (7-15%), poorly sorted flint, ≤7.0 mm, majority ≤3 mm; common to abundant (25-40%), well-sorted to very well-sorted rounded glauconite, ≤0.6 mm; sparse to moderate (7-10%), well-sorted, sub-angular to sub-rounded quartz, ≤1 mm; clay matrix dense; fracture hackly (*).

FQ4 common (20-25%), well-sorted flint, ≤3 mm, but majority ≤2 mm; sparse (5-7%), sub-rounded to rounded quartz, ≤0.3 mm, and when oxidised appears to have moderate (15%), well-sorted, rounded iron oxides, ≤0.5 mm; sparse to moderate (7-10%), elongated voids with organic impressions, ≤4 mm; clay matrix dense and slightly sandy; fracture hackly.

FQ5 common (20-25%), well-sorted flint, ≤3 mm, but majority ≤2 mm; moderate (10-15%), sub-rounded to rounded quartz, ≤1 mm; clay matrix dense and sandy; fracture hackly and laminated.

2.7.7 Flint-tempered, shell-bearing group

FS1 sparse to moderate (5-10%) moderately-sorted flint, ≤3 mm; sparse to moderate (7-10%) shell, ≤8 mm; rare (2%), sub-rounded to rounded quartz, ≤1 mm; rare to sparse (1-3%), rounded iron oxides, ≤3 mm; clay matrix dense and silty; fracture hackly and laminated.

2.7.8 Flint and organic-tempered group

FV1 moderate (10%), moderately-sorted flint, ≤4 mm; moderate to common (10-20%), black organic matter and/or linear voids, ≤4 mm long; rare to sparse (1-3%), rounded iron oxides, ≤3 mm; very common to abundant (30-40%), very well-sorted, subangular quartz, ≤0.15 mm; rare (1%) calcareous matter, ≤2 mm; clay matrix dense and surprisingly sandy; fracture hackly (*).

FV2 moderate (10%) moderately-sorted flint, ≤3 mm; moderate (10-15%) linear organic matter, ≤5 mm; sparse to moderate (7-10%), poorly-sorted, subangular to subrounded iron oxides, ≤3 mm; clay matrix very dense; fracture hackly and laminated.

2.7.9 Flint and organic-tempered, iron oxide-bearing group

FVI1 moderate (10%), moderately-sorted flint, ≤4 mm; sparse (7%) linear voids, ≤6 mm in length, in which impressions of vegetable matter are visible; common (20-25%), well-sorted, rounded glauconite, ≤0.3 mm; sparse (5-7%) sub-angular to sub-rounded quartz, ≤0.5 mm; sparse (5-7%), rounded iron oxides, ≤2 mm; clay matrix irregular; fracture hackly.

2.7.10 Grog-tempered group

G1 very common to abundant (30-40%), moderately-sorted, angular to sub-angular grog, ≤3 mm; sparse (5%), rounded iron oxides, ≤1 mm; clay matrix soapy, silty and dense; fracture very hackly; fabric of grog silty (*).

2.7.11 Grog and flint-tempered group

GF1 very common to abundant (30-40%), poorly-sorted, angular grog, ≤4 mm; moderate (10%), poorly-sorted flint, ≤4 mm; clay matrix dense, silty and micaceous; fracture hackly .

2.7.12 Grog-tempered or clay pellet-rich, sandy group

GQ1 common (25%), well-sorted, angular to subrounded grog or clay pellets, ≤0.5 mm, and rare (1%) bigger pieces, ≤2 mm; moderate to common (10-25%), rounded glauconite, ≤0.5 mm; sparse (7%), rounded to subrounded quartz, ≤1 mm; rare (1-2%) flint, ≤3 mm; clay matrix sandy; fracture hackly; fabric of 'grog' or clay pellets has glauconite (*).

2.7.13 Iron oxide-bearing group

I1 common to very common (20-30%), rounded red iron oxides, ≤2 mm; clay matrix dense (not sandy or silty); fracture irregular to smooth.

I2 moderate to common (15-20%), rounded iron oxides, ≤2 mm; rare (1-2%), well-sorted flint, ≤1 mm; rare to sparse (1-3%), glassy, rounded glauconite, <0.3 mm; clay matrix dense and silty; fracture fairly smooth.

I3 moderate (10%), rounded iron oxides ≤2 mm; sparse (5%) well-sorted flint, ≤0.5 mm; rare to sparse (1-3%) fine quartz; clay matrix dense; fracture fairly smooth.

2.7.14 Quartzite-gritted group

QZ1 very common to abundant (30-40%) well-sorted, angular to subrounded quartz (disintegrating quartzite), ≤0.6 mm; rare (1%), angular quartzite, ≤2 mm; rare (1-2%) calcareous matter, <3 mm; may contain sparse (3-5%), rounded iron oxides; clay matrix very dense and sandy; fracture harsh (*).

2.7.15 Sandy group

Q1 moderate to common (15-25%), rounded to subrounded, moderately-sorted quartz, ≤1.5 mm with the majority <0.8 mm; rare (1-2%) large to very large flint, 1-6 mm; clay matrix sandy; fracture irregular.

Q2 common to very common (20-30%), well-sorted, sub-angular to sub-rounded quartz, ≤0.5 mm, occasionally ≤1 mm; rare to sparse (2-5%) angular flint, ≤1 mm; possibly clay pellets, ≤2 mm; clay matrix dense and sandy; fracture irregular.

Q3 common (25%) well-sorted, subangular to subrounded quartz, ≤0.3 mm; rare (≤1%) fine flint may be present; clay matrix dense and sandy; fracture fairly smooth (very similar to Q2) (*).

Q4 (code not used).

Q5 common to abundant (20-40%), well-sorted, rounded glauconite, ≤0.5 mm; sparse to moderate (7-10%), moderately sorted, sub-angular to sub-rounded quartz, ≤0.5 mm; rare to sparse (1-3%) flint; rare (1%) calcareous inclusions; clay matrix dense and sandy; fracture irregular.

2.7.16 Sandy, calcareous group

QC1 common to very common (25-30%), well-sorted, subangular to subrounded quartz, ≤0.3 mm; sparse (3-5%), subangular to subrounded calcareous inclusions, which may be chalk or shell, ≤4 mm; rare (1-2%) rounded to subrounded clay pellets, <0.8 mm; rare to sparse (1-3%), rounded iron oxides, <1 mm; rare (1-%) organic matter or linear voids; clay matrix dense and sandy; fracture irregular to smooth (very similar to QS2) (*)

2.7.17 Sandy, flint-tempered group

QF1 common (25-30%) very well-sorted, angular to subrounded quartz, majority fine sand to silt-grade ≤0.1 mm with rare (1-2%), much larger, rounded to subrounded grains from 0.5-1 mm; rare to sparse (<7%), moderately to poorly-sorted flint, ≤5 mm; may have rare to sparse (1-3%) organic voids, ≤5 mm in length; rare to sparse (1-5%) angular calcareous inclusions, usually identifiable as shell, ≤4 mm; rare to sparse (1-5%), subrounded to rounded iron oxides, ≤2 mm; clay matrix dense; fracture smooth to irregular (*).

QF2 sparse to moderate (5-10%), well-sorted, subangular to subrounded quartz, ≤1 mm; moderate to common (15-20%), very well-sorted, rounded glauconite, ≤0.5 mm; sparse to moderate (7-10%) well-sorted flint, ≤2 mm; clay matrix dense and sandy; fracture irregular to hackly (*).

QF3 common to very common (25-30%), very well-sorted, subrounded to rounded glauconite, ≤0.6 mm; sparse (3%), well-sorted, subrounded to rounded quartz, ≤1.5 mm; moderate (10-15%), moderately-sorted flint, ≤2 mm; sparse (3-5%), rounded iron oxides, ≤3 mm; clay matrix dense and sandy; fracture harsh (similar to Q5 but with more flint; similar to QF2 but more glauconite) (*).

2.7.18 Sandy, flint and shell-bearing group

QFS1 sparse to moderate (7-10%), well-sorted, subangular to subrounded quartz, ≤1 mm; moderate to common (15-20%), very well-sorted, rounded glauconite, ≤0.5 mm; sparse (5-7%), well-sorted flint, ≤1.0 mm; sparse (5-7%) shell; clay matrix dense and sandy; fracture irregular (similar to QF2 with addition of sparse shell).

QFS2 sparse (7%), well-sorted, rounded quartz, ≤1 mm; moderate (10-15%), poorly-sorted, angular shell, ≤6 mm; sparse (7%), moderately-sorted flint, ≤3 mm; rare to sparse (2-5%), rounded iron oxides, ≤2 mm; clay matrix dense and sandy; fracture hackly and laminated.

2.7.19 Sandy, iron oxide-bearing group

QI1 common (20%) well-sorted, sub-angular to sub-rounded quartz, ≤0.2 mm, with rare (<1%) ≤1 mm grains; moderate (10-15%), rounded iron oxides, ≤0.3 mm; can have rare (1-2%) flint, ≤0.5 mm; clay matrix dense and sandy; fracture fairly smooth.

2.7.20 Sandy, shell-bearing group

QS1 common (20-25%), moderately-sorted, subrounded to rounded quartz, ≤1 mm; sparse to moderate (5-10%), subangular shell, ≤1 mm; moderate (10%), rounded glauconite, ≤0.6 mm; rare (1-2%), rounded, probable clay pellets, ≤3 mm; clay matrix very sandy; fracture irregular.

QS2 moderate (10-15%), moderately-sorted, quartz, ≤1.5 mm, and sparse (3-5%) very large, sub-rounded to rounded quartz 'pebbles', 2-5 mm, probably detritus; sparse (5%), moderately-sorted, angular shell, ≤2 mm; rare to sparse (1-5%), rounded iron oxides, ≤2 mm; rare (1%) organic matter or elongated voids; may contain clay matrix dense and sandy; fracture irregular.

QS3 common (20-25%) glauconite, ≤0.3 mm; sparse to moderate (7-10%), well-sorted, subrounded quartz ≤1 mm; sparse (5-7%), moderately-sorted, angular to subangular shell, ≤4 mm; clay matrix sandy; fracture irregular.

QS4 rare (1%), rounded quartz, <1 mm and very common (30%) fine sand to silt-sized quartz, <0.2 mm; rare to sparse (1-3%) subangular shell, <5 mm; clay matrix silty; fracture fine.

2.7.21 Shell-bearing group

S1 moderate to common (10-20%), poorly-sorted shell, ≤5 mm; moderate (10-15%), moderately-sorted, subrounded to rounded quartz, majority ≤0.5 mm with rare grains up to 1.2 mm; rare (1-2%) rounded iron oxides, ≤2 mm: can have rare (1-2%), moderately-sorted flint, ≤3 mm; clay matrix sandy; fracture laminated to irregular (*).

S2 moderate to common (10-20%), very poorly-sorted, angular crushed shell, ≤10 mm; rare (1-3%) subrounded to rounded quartz, 0.3 mm; clay matrix dense and silty; fracture smooth and laminated.

2.7.22 Shell and iron oxide-bearing group

SI1 sparse (7%), moderately-sorted, subangular shell, ≤3 mm; sparse (5-7%), rounded iron oxides, ≤2 mm; sparse (3-5%) rounded to subrounded quartz, ≤1 mm; clay matrix dense and slightly sandy; fracture fairly smooth.

2.7.23 Organic-tempered group (briquetage)

V1 (briquetage) common to very common (20-30%) voids, both linear and rounded, ≤5 mm (distinctive round voids rod-shaped); moderate (10-15%), moderately-sorted subangular to subrounded quartz, <0.5 mm (medium-grained or finer); sparse (3-7%), moderately-sorted flint, ≤2 mm; clay matrix sandy and porous; fracture irregularly hackly (can be both softly-fired or quite hard and harsh to touch).

V2 (briquetage) sparse (7%) linear organic voids, ≤6 mm; moderate (10-15%) silt-sized quartz and sparse (5%) rounded to sub-rounded quartz, ≤0.25 mm; rare (1%) flint, <4 mm; clay matrix very silty and fine; fracture fairly smooth.

2.7.24 Organic and flint-tempered group

VF1 very common to abundant (30-40%), linear voids and actual pieces of organic matter which are both flat and tubular, ≤6 mm in length; moderate (10%), poorly-sorted, flint, ≤3 mm; sparse (3%) iron oxides, ≤2 mm; clay matrix dense and laminated; fracture very hackly (unusual fabric; may not be prehistoric but post-Roman).

3 VESSEL FORMS

There are three main vessel form groups, based on rim and profile combinations, within this large, later prehistoric pottery assemblage. These are the jar group (R1-R18), the neutral

profile group (R20-R26) and the bowl group (R30-R57). In addition, bases (B1-B5), shoulder sherds (A1-A3), and a single handle type (H) were also defined. In the database accompanying this report, decorated (D) and plain sherds (P) are also defined by code.

3.1 Jars (closed or restricted-access form)

Jars are defined here as closed, or restricted access, vessels. There are 18 jar types defined for this assemblage. The majority of types are shouldered jars with distinctive neck zones and amongst these there are four variations of obtuse-angle shouldered jar (R7, R13, R15, R16) and two round-shouldered types (R3, R10). The remaining forms are jars without distinctive neck zones which can be called ovoid in profile (R1, R2, R6, R8) or barrel-shaped (R12). One form is a slack profile with distinctive neck zone (R18). All other form types are fragmentary classifications such as examples, broken at the neck zone, of short rimmed vessels (R9, R17) or longer rimmed vessels (R4, R5). One quite fragmented, generally flared profile type (R11) is classified as a jar simply because of the absence of interior burnishing which would have allowed it to be considered a bowl type (R54). All of these jar types are forms typical of the first millennium BC; there are no examples of Middle Bronze Age vessels amongst the jar types.

R1 neckless jar with flat-topped rim folded outwards and high, rounded-shoulder profile narrowing to flat base (Fig. 11, No. 59, Fig. 12, No. 61, Fig. 13, No. 75, Fig. 14, No. 104).

R2 neckless, ovoid jar with bevelled rim (Fig. 9, No. 38, Fig. 13, Nos 73-4, Fig. 15, Nos 116, 120, Fig. 16, No. 129)

R3 round-shouldered, necked jar with short upright neck and flat-topped rim; maximum length of neck zone 25 mm (see R4 for longer neck type) (Fig. 7, No. 15, Fig. 8, No. 24, Fig. 9, Nos 31-4, Fig. 10, Nos 47-9, Fig. 11, No. 60, Fig. 13, No. 72, Fig. 14, Nos 90-1, Fig. 15, No. 119).

R4 upright or slightly flared, long-neck on shouldered jar; minimum length of neck zone greater than 25 mm (Fig. 8, No. 23, Fig. 14, No. 94, Fig. 16, No. 130, Fig. 17, No. 155).

R5 flat-top to everted rim on long-necked jar with uncertain profile; may or may not have had shoulder zone (Fig. 16, No. 131).

R6 neckless, ovoid jar with rounded rim (Fig. 16, No. 128).

R7 flat-topped rim with internal and external overhanging protrusions on medium-length necked, shouldered jar (Fig. 10, No. 51, Fig. 14, No. 97).

R8 neckless, ovoid jar but with expanded zone suggestive of a shouldered profile; rim may be bevelled or rounded (Fig. 13, No. 76, Fig 15, No. 117).

R9 medium to long-length, flared rim on necked jar of uncertain profile; length of rim, $\leq$30 mm (Fig. 13, No. 82).

R10 short, upright, rounded rim on tightly rounded, high-shouldered, necked jar/bowl; single example same height as rim diameter (Fig. 11, No. 58).

R11 flat-topped rim with internal lip from vessel with uncertain profile; possibly from a swan-neck jar (Fig. 16, No. 132).

R12 necked jar with barrel-profile and short, upright rim (Fig. 15, No. 115).

R13 obtuse-angle, shouldered jar with short to medium-length (15-40 mm) neck and upright rim (Fig. 7, Nos 16 and 22).

R14 upright rim, necked jar with slight but distinctive shoulder, tapered profile and flat base (Fig. 6, No. 12).

R15 sharply obtuse-angle, shouldered jar with long (40-60 mm) upper half of vessel to neck zone and short, flared rim (Fig. 6, No. 9).

R16 obtuse-angle, shouldered jar with extremely long (100 mm), inward-turned neck and short, upright rim (Fig. 13, No. 70).

R17 any type of flat-topped rim which has broken at the neck to body join of a jar with uncertain profile; examples likely to have originated from R3 jars but cannot be proven (Fig. 7, No. 21, Fig. 8, No. 29, Fig. 13, Nos 80, 86, Fig. 14, Nos 92, 101, 107, Fig. 15, No. 121).

R18 necked jar with slack-profile; jar version of bowl type R23 (Fig. 7, No. 18, Fig. 13, Nos 77-79, 81, Fig. 15, Nos 110, 118, Fig. 16 No. 133, Fig. 17, Nos 153 and 158).

3.2 Neutral-profile vessels (open access forms with straight profiles)

Neutral forms are simply straight-walled or nearly straight-walled profile vessels which have an open access as a result. It may be appropriate to consider these to be simply variations on bowls, but this assemblage appeared to have a distinctive number of neutral examples and these are chronologically specific. The making and using of neutral forms at specific times in prehistory has not been studied as a cultural message. Two types (R25 and R26) are middle Bronze Age, and the remainder are early/middle or middle Iron Age forms. The very small vessel type (R24) may have been a practice piece, the work of an apprentice, or made for a child.

R20 conical, straight-walled vessel/bowl (Fig. 8, No. 30, Fig. 9, Nos 35, 37, Fig. 15, No. 122, Fig. 16, Nos 134-136).

R21 vertical wall to slightly bulging profile vessel (Fig. 9, No. 39, Fig. 10, No. 54).

R22 saucepan pot (Fig. 12, No. 62, Fig. 14, Nos 88, 99).

R23 necked open form with slack-profile; neutral version of jar type R18 and bowl type R46 (Fig. 16, No. 137).

R24 cup, apprentice's piece, or child's toy; open vessel with less than 750 cc capacity (Fig. 16, No. 138)

R25 bucket urn/jar with distinctive incurve to rim (Fig. 6, Nos 1-3 and 5-6).

R26 bucket urn/jar with upright effect to rim (Fig. 6, No. 4).

3.3 Bowls (open-access forms)

The majority of bowl types display shouldered profiles with distinctive neck zones, just like the majority of jar types, but this restriction did not prevent access to the interior zones of these forms because the types are very shallow in profile and/or were burnished on the interior. These include carinated (R30), obtuse-angled (R42, R52, R53) and round-shouldered/bodied (R33, R37, R38, R47, R55) types. There is one strongly shouldered type which is simply bipartite (R34) and one which has a high, rounded shoulder (R40), both of which do not have neck zones and may be considered hybrids between necked bowls and ovoid types. The neckless, ovoid type of bowl with its smoothly curved, egg-like profile, which is again similar to many jar types described above, has a shallow profile or low centre of gravity in relation to rim diameter and is usually burnished on the interior, making these types typical open forms, or bowls (R35, R39, R56). There are five flared-profile types, one with a neck (R36), two without necks (R31, R54) which may also have been used as lids, and two with flat rims (R48, R49). A flat-rimmed, hemispherical bowl type was elaborated with raised, rather than applied, horns, creating an effect similar to post-Medieval chafing dishes (R50). One type is the bowl variant of jar type R12, a barrel-profile, necked form (R46). The remaining types are fragments of rims from necked bowls with uncertain body profiles (R32, R41, R44, R45, R51). Most examples of one type (R43) belong in this category having been broken at the neck join, but several of these very long-rimmed bowls retained evidence of profile, with either obtuse-angled or acute-angled shoulders; none of them, however, was round-bodied as all round-profile bowls had shorter rims (R38, R47). All of these bowl types are forms typical of the mid-first millennium BC with one exception; R53 is a late Bronze Age short rimmed, obtuse-angled bowl which was found in a pit with a round-bodied bowl type of similar date which appears to have had a flared rim (Fig. 6, No. 8). There are no examples of Middle Bronze Age vessels amongst the bowls. Consolidation of this large range of bowl types would be possible, but the overall summary would undoubtedly still indicate that there are about twice as many bowl types as jar types.

R30 carinated, obtuse-angled bowl with short upright to slightly everted rim (Fig.12, Nos 63-66, Fig. 14, Nos 95 and 100).

R31 conical bowl or lid (Fig. 10, No. 52, Fig. 12, No. 67, Fig. 14, No. 105).

R32 medium to long-neck, flared and pointed rim on bowl with uncertain profile (Fig. 8, No. 28, Fig. 14, No. 89, Fig. 15, No. 112).

R33 short, upright and rounded rim on necked bowl with which may or may not have round-bodied profile (Fig. 9, No. 41, Fig. 12, No.71).

R34 obtuse-angle, shouldered/carinated bowl with short upper half of vessel and bevelled rim, lipped both internally and externally (Fig. 8, No. 25, Fig. 9, No. 40, Fig. 14, No. 93).

R35 ovoid, convex-profile bowl with nearly beaded rim; bowl version of jar type R1 (Fig. 9, No. 42, Fig. 10, No. 50).

R36 conical-profile, shouldered bowl with everted, rolled-over rim (Fig. 9, No. 44).

R37 softly round-shouldered, necked bowl with short, everted rim (Fig. 16, No. 139).

R38 medium-long (up to 50 mm), rounded rim on necked, tightly round-bodied bowl; body shape significantly different from R47 for classification but concept identical (Fig. 7, No. 20, Fig. 17, No. 154).

R39 high, round-shouldered bowl with tapered lower profile and bevelled, incurved rim (Fig. 8, No. 26).

R40 high, round-shouldered bowl with incurved rim and uncertain lower profile (Fig. 13, No. 69).

R41 upright necked bowl with everted rim (Fig. 14, No. 106).

R42 medium-length (25-40 mm long), flared, rounded to pointed rim on well-sprung, softly obtuse-angle, shouldered bowl (Fig. 13, No. 83).

R43 long (40-80 mm), flared, rounded rim on bowl usually with uncertain profile but three examples with A1 profile and one example A2 profile (Fig. 7, No. 17, Fig. 8, No. 27, Fig. 14, Nos 98, 103, 108-9, Fig. 15, No. 123, Fig. 16, Nos 140-143).

R44 short, flared, rounded rim on necked bowl of uncertain profile (Fig. 13, No. 68).

R45 bevelled rim probably from a hemispherical bowl (Fig. 17, No. 159).

R46 flat-topped rim on necked, convex-profile, barrel-shaped bowl; bowl version of jar type R12 (Fig. 16, No. 144).

R47 medium-long (up to 50 mm), rounded rim on necked, pronounced, round-bodied bowl; body shape significantly different from R38 for classification but concept identical (Fig. 15, No. 111).

R48 conical bowl with wedge-like, flat-topped rim (Fig. 16, No. 145).

R49 conical bowl with simple flat-topped rim (Fig. 16, No. 146).

R50 horned or crenellated bowl (Hurtrelle, *et al* 1989) (Fig. 16, No. 147).

R51 flat-topped rim on flared-profile bowl (Fig. 10, No. 53).

R52 medium-long (30-50 mm), flat-topped rim on obtuse-angle, shouldered bowl (Fig. 7, No. 19, Fig. 15, Nos 113-114).

R53 obtuse angle, shouldered bowl with upright rim finishing with outward flaring, pointed lip and flat base (Fig. 6, No. 11).

R54 possible lid or shallow-profile, conical bowl with internally thickened, flat-topped rim (Fig. 17, No. 148).

R55 softly round-shouldered bowl with short, upright to flaring neck, flat-topped rim and tapered lower profile (Fig. 11, No. 55, Fig. 17, Nos 149, 152).

R56 squat, hemispherical bowl with incurved, rounded rim similar in profile to R6 and flat base (Fig. 13, No. 84).

3.4 Bases

There are five different types of bases.

B1 flat base (Fig. 10, No. 51, Fig. 11, No. 58, Fig. 12 Nos 61, 64, 66, Fig. 13, Nos 84, 87, Fig. 16, No. 142, Fig. 17, No. 156).

B2 expanded, flared, flat base (Fig. 8, No. 25).

B3 footring base (Fig. 9, No. 43, Fig. 13, No. 85).

B4 omphalos base (Fig. 14, No. 96).

B5 pedestal base (Fig. 13, Nos 68, 83, Fig. 17, Nos 150-151).

3.5 Shoulder or angled sherds

There are three different types of shouldered or angled sherds in the assemblage.

A1 obtuse angle shoulder (Fig. 9, No. 45, Fig. 11, No. 56, Fig. 13, No. 83, Fig. 15, Nos 123-125, Fig. 16, No. 142).

A2 acute angle shoulder (Fig. 9, No. 46, Fig. 13, No. 85, Fig. 16, No. 143).

A3 round-profile shoulder or round-profile girth (Fig. 6, No. 8, Fig 17, No. 157).

3.6 Handles

There is only one handle present in the assemblage, a small, perforated lug attachment of a type normally found on middle Bronze Age globular urn/jars.

H nose-like, horizontally perforated, applied lug handle (Fig. 16, No. 127).

3.7 Decorated sherds without other features

D all decorated sherds which do not join other rims, bases or shouldered sherds (Fig. 6, Nos 7, 13, Fig. 9, No. 36).

3.8 Plain sherds without other features

P all plain sherds which do not join other rims, bases, shouldered or decorated sherds (Fig. 10, No. 57, Fig 14, No. 102, Fig. 15, No. 126).

3.9 Middle Bronze Age

The vessel forms which can be dated to the middle Bronze Age are two variants of Deverel-Rimbury bucket urn/jars, types R25 and R26. In addition, the only type of handle identified in the entire assemblage (Fig. 16, No. 127) originated from a Deverel-Rimbury globular urn/jar based on both form and fabric (F5). Bucket urns have been found previously in Kent at Shrubsoles Hill, Isle of Sheppey (Raymond 2004, fig. 1.15) and Coldharbour Lane, Gravesend (Barclay 1994, 387-9, fig. 9, 3, 6-7), as well as on several sites along Section 1 of the Channel Tunnel Rail Link. Several globular urns were also found at Shrubsoles (Raymond 2004, fig. 1.15, 6-7, 16). In the wider, south-east region, bucket and globular urn/jars have been recovered at Mile Oak and Downsview, Brighton, East Sussex (Hamilton 2002b, figs 2.29-2.32; 2002c, fig. 7.27-7.29), in Essex (Brown 1995a; 1995b, figs 61-2;1996, 26, fig. 2), Surrey (Needham 1987, fig. 5.8, 7-8) and Middlesex (Barrett 1973). The majority of radiocarbon dates associated with Deverel-Rimbury vessels lie within the 15th to 12th centuries cal BC (Needham 1996), as do those from the White Horse Stone and Pilgrim's Way sites: 1520-1310 cal BC (ditch 4025, NZA-21326: 3151±35) and 1430-1260 (posthole 571, NZA-21840: 3079±30).

At least 34 middle Bronze Age vessels were identified in the White Horse Stone assemblage and 18 in the Pilgrims Way assemblage; all were found in settlement or landscape contexts rather than funerary deposits (Fig. 6, Nos 1-7; Tables 10-11).

Table 10: Contexts of middle Bronze Age vessels, White Horse Stone

		Form Types					
FEATURE	**CONTEXT**	**R25**	**R26**	**H**	**B2**	**B99**	**P**
Middle Bronze Age features							
Ditch 4014	4016	2					
	4017					1	
	4017						1
Ditch 4048	4042	1					3 (1-globular urn/jar)
	4044		1				2
Ditch 4082	4095	1					
	4096	1			1 *		1 + ; 1 # ; 2
	4097				*		+ ;
	4100						# ;
Hollow 7142	7143						2 (1-globular urn/jar)
Posthole 4035	4036						1
Middle-Late Bronze Age transition features							
Pit 7038	7039						1 (globular urn/jar)
Pit 7069	7070			1			4
Post-Bronze Age features (redeposited)							
Layer	4144						1
Layer	4145						1
Lynchet 4180	4182						1 (globular urn/jar)
Pit 7009	7079						1 (globular urn/jar)
Pit 7130	7128						2 - 4

		Form Types					
FEATURE	**CONTEXT**	**R25**	**R26**	**H**	**B2**	**B99**	**P**
Posthole 4054	4055						1

Table 11: Contexts of middle Bronze Age vessels, Pilgrims Way

Feature/context	**Middle Bronze Age Forms**				
	R25	**B1**	**D**	**P**	**Comments**
Pit 329/330				1	
Pit 331/332				1	
Pit 740/742				1	
Posthole 354/355				1	
Posthole 399/400	1			2	
Posthole 527/528				1	
Posthole 571/573		1			globular urn/jar
Treethrow 611/607				1	
Treethrow 868/869		1		1	one = globular urn/jar
Treethrow 931/932			2		two different urn/jars
-/113				1	
-/131				1	
-/207				1	
Layer/ 857				1	probably globular urn/jar

3.10 Late Bronze Age

One feature, pit 5421, contained several vessels (Fig. 6, Nos 8-13), including two bowls and sherds from four different jars (Table 12), which may date to approximately the 9th century BC (see above). The presence of two decorated vessels in this feature which contains sherds from approximately 12 vessels would not be unexpected in a late Bronze Age assemblage of this date, lying at the chronological junction between the plain and decorated phases of the period (Barrett 1980; Cunliffe 2004).

Table 12: Vessel forms in middle-late and late Bronze Age features

		Form Types						
FEATURE	**CONTEXT**	**R6**	**R13**	**R14**	**R15**	**R53**	**A1**	**A3**
Middle-Late Bronze Age transition features								
Pit 7009	7079	-	-	-	-	-	-	1
Pit 7038	7039	1	-	-	-	-	-	-
Pit 7069	7070	-	-	-	-	-	1	-
Late Bronze Age feature								
Pit 5421	5423	-	-	-	-	-	-	1
	5426	-	1	-	1	-	-	-
	5449	-	-	1	-	1	-	-

The two bowl forms are very different in profile. One is missing its rim but the globe-like, necked body form, which probably had a flaring rim, is quite distinctive (Fig. 6, No. 8). Round-bodied bowls, in particular those with flaring rims, are found in late Bronze Age assemblages of 9th century BC date in Surrey, as at Weston Wood (Russell 1989, Form 11) and Runnymede (Longley 1991, fig. 88, P178), but these are invariably undecorated. A 9th

century BC date has also been suggested for a similar globular-profile bowl found at Yapton in west Sussex (Hamilton 1987, fig. 4, 1 and 8).

In contrast is the undecorated shouldered bowl with gracefully curving upright rim (Fig. 6, No. 11), a more common late Bronze Age bowl type. Similar examples have been recovered at Highstead (Macpherson-Grant 1991, 40, Period 1) and Minnis Bay, Birchington (Worsfold 1943, fig. 6, 1-2 and 4) in Kent, and at Runnymede (Longley 1991, fig. 78, P28 and 102, P614), Leigh Hill (Needham 1987, fig. 5.12, 10), Kingston Warren (Field and Needham 1986, fig. 3, 9), and Queen Mary's Hospital, Carshalton (Adkins and Needham 1985, fig. 7, 86) in Surrey. This bowl form continued to be used during the decorated phase of the late Bronze Age/early Iron Age period in Kent, as at Monkton Court Farm where the main ceramic assemblage is most likely to date from *c* 850/800-700 BC (Macpherson-Grant 1994, 280-1, fig. 5, 1), and in Surrey, as at Westcroft Farm, Carshalton (Macpherson-Grant 2002, fig. 9, 7). The three jars with shouldered profiles in this pit, types R13-R15 (Fig. 6, Nos 9-10 and 12), find parallels with jars at Runnymede (Longley 1991, fig. 76, P7, fig. 78, P15, P35, and fig. 80, P51), Green Lane (Elsdon 1982, fig. 6, 31), Queen Mary's Hospital, Carshalton (Adkins and Needham 1985, fig. 5, 12) and Kingston Hill (Field and Needham 1986, fig. 3, 15) in Surrey.

The use of finger-tip impressed decoration is common during the first half of the first millennium BC. The single example in this pit (Fig. 6, No. 13) is, unfortunately, not associated with a particular type of jar.

Table 12 also shows the frequency of late Bronze Age vessel types present for features which may belong to the transition from the middle to late Bronze Age. Only pit 7038 contains a rim sherd from an undecorated, ovoid jar with rounded incurving rim (R6). This vessel type is extremely similar to many examples of bucket urn/jars, and may be interpreted as a development from that type. It was a simple, presumably very practical, multi-purpose closed form used throughout the late Bronze Age and into the Iron Age.

3.11 Early/Middle Iron Age

Radiocarbon dating is, unfortunately of little help in refining the chronology of the early/middle Iron Age ceramics.

In particular it provides only limited information concerning whether there are two sub-phases to this ceramic phase; one which is early/middle Iron Age in date from approximately the 6th to 4th centuries BC and one which could be early in the middle Iron Age from approximately the 4th to 2nd centuries BC. The former may be represented by jars and bowls with distinctive, shouldered profiles and the latter by the introduction of types which are quite slack-profiled. Only one radiocarbon date with useful ceramic associations - for the carbonised grain found inside the large R1 jar in cremation pit 6132 (Fig. 12, No. 61) - spans

the period from the 5th to 2nd centuries BC. However, this vessel type and the four examples of bowl type R30 found with it are curiously rare forms within the White Horse Stone assemblage (Table 13). It may be that this deposit is genuinely late, since all but the most imprecise of the other radiocarbon dates fall in the 8th-5th centuries. However, some of the assemblages associated with the earlier dates contain potentially late forms.

3.11.1 Jars

The most common jar type in the White Horse Stone assemblage has a high, rounded-shoulder or slightly angled-shoulder profile with a short upright rim that is very frequently decorated with a finger-smearing or cabling effect on top and occasionally also with finger-tip impressions along the shoulder (R3; Table 13). Types R4 and R5 may be longer rim versions of type R3, and type R17 is likely to represent additional examples of R3 vessels broken at the neck zone. This jar form is found on early/middle Iron Age sites in Kent, such as south of Canterbury (Macpherson-Grant 1980, fig. 5, 15; fig. 6, 23 and fig. 19, 133, 135-138). It is one of the most frequent vessel types in the large assemblage at Brooklands, Weybridge, Surrey (Hanworth and Tomalin 1977, figs 14-24), and also occurs at Fox Hall Farm, Southend in Essex (Ecclestone 1995, fig. 8, 6-7, 9-10). The type is very common on North Downs sites discovered in the Channel Tunnel Rail Link project as well as in northern France (Blancquaert and Bostyn 1998, fig. 6, 5-1 to 5-3), and this will be discussed further in the later prehistoric pottery scheme-wide review. There are some examples of R3 vessels which may well have derived from bowls, however, due to their height being significantly less than their rim diameter.

Two other shouldered jars are much less common in the assemblage, with only seven examples of R7 and one of R16. Nevertheless, similar examples have been found at Site 1, Barham Down, south of Canterbury (Macpherson-Grant 1980, fig. 5, 10) and St Richard's Road, Upper Deal (Parfitt 1985, fig. 7, 39). No parallels have been found for the rather unusual jar type R10; it may simply be a variation of type R3 or an apprentice potter's first attempt. Jar type R1 was also recovered at Highstead (Macpherson-Grant 1991, 42, upper right corner vessel) and St. Richard's Road, Upper Deal (Parfitt 1985, fig. 7, 37). Other early/middle Iron Age types include the flared or everted rim, necked jar type R9 which has been found at Brooklands (Hanworth and Tomalin 1977, fig. 16, 67).

There are three different types of ovoid, neckless, convex-profile jars in the White Horse Stone assemblage: R2, R6 and R8. R8 has a slight bulge or thickening to the profile where a shoulder would have been. The ovoid jar is a very long-lived, later prehistoric vessel type and can date from the late Bronze Age through to the middle Iron Age. Examples are well-known from Kent (Barclay 1994, fig. 10, 8; Macpherson-Grant 1980, fig. 6, 20), Essex (Brown 1995b, fig. 64, 65; Ecclestone 1995, fig. 8, 4) and Surrey (Hanworth and Tomalin

1977, fig.15, 39 and 41, fig. 16, 57, fig. 19, 144, fig. 20, 158, 168, and fig. 22, 194; Elsdon 1982, fig. 5, 11-24; Russell 1989, fig. 11, types 1-2, and fig. 12, type 9).

Jar type 1, which is quite rare in the assemblage but has an impressive example from cremation pit 6132 (Fig. 12, No. 61), can be compared to an example from Phase I.3 Early Iron Age activity at North Shoebury across the Thames in Essex (Brown 1995b fig. 67, 121) and is a slightly less carinated version of a large vessel from the Champagne region of northern France (Stead and Rigby 1999, vessel no. 2669). The White Horse Stone jar contained a deposit of charred cereal grains dated to 490-160 cal BC.

There are 11 slack-profile jars (R18) in the assemblage, while the barrel-profile, necked jar (R12) is only represented once; both of these types are common middle Iron Age vessel forms in southern England (e.g. Couldrey 1984, fig. 15, 39-40, 16, 49 and 51; Macpherson-Grant 1980, fig. 6, 27-30; Macpherson-Grant 1991, 42, lower right vessel).

3.11.2 Neutrals

The straight-sided, neutral-profile form (R22), known as the 'saucepan pot' in central southern England, was made in Kent from about the 4th century BC onwards. In central southern England, 'saucepan pots' were deposited from the 4th to mid-1st century BC at Danebury (form PB1; ceramic phases 6-7) while the 'saucepan-pot' types PA1-PA3, which may be prototypes of the PB1 form, were made from the 5th to 3rd century BC (ceramic phases 3-6; Brown 2000, 90, figs 3.36-3.38). The first examples excavated in Kent were probably ones found at Site 1, Barham Down, south of Canterbury (Macpherson-Grant 1980, fig. 7, 37 and 39), and subsequently examples were recognised at Bigberry hillfort in association with flint-tempered and grog-tempered jars (Thompson 1983, figs 10, 37 and 11, 65) and at Farningham Hill in association with both handmade and wheelthrown jars (Couldrey 1984, fig. 15, 28). The only decorated example is the Farningham one. Many saucepan pots, both decorated and undecorated, were recovered from the same deposits as the R3-style jars discussed above at Brooklands in Surrey (Hanworth and Tomalin 1977, fig. 16, 83, fig. 17, 108-109, fig. 19, 147, fig. 23, 212 and fig. 24, 224). Nine saucepan pots were identified in the White Horse Stone assemblage (Table 13), and also at several other sites along the route of the Channel Tunnel Rail Link. At White Horse Stone, these vessels were found in association with all the major early/middle Iron Age vessel types including R2 and R3 jars and R34, R38 and R43 bowls, as well as with vessel types R1, R30 and R31 in cremation pit 6132, in association with charred grain dated to 490-160 cal BC. Therefore, the presence of saucepan pots on sites of early/middle and middle/late Iron Age date in Kent is to be expected in future.

Other neutral profile vessels are the conical or flared form, R20, with similar examples recovered at Highstead (Macpherson-Grant 1991, 42, middle right side vessels) and

Brooklands (Hanworth and Tomalin 1977, fig. 17, 97-98), and type R21, which appears to be unique to White Horse Stone. The slightly necked example, R23, is not that dissimilar to the jar type R18 above but this is a separate type because its burnished interior indicates a more open form. There are no other examples in Kent of little open forms similar to White Horse Stone type R24.

3.11.3 Bowls

Strongly carinated bowls with very short, everted or flared rims (R30) are traditionally dated to the 5th to 4th century BC as at Danebury, Hampshire (Brown 2000, fig. 3.29, BA2.1, ceramic phase 3-4). This date range is the same for an example from Brooklands in Surrey (Hanworth and Tomalin 1977, fig. 17, 84) and at Highstead (Macpherson-Grant 1991, 42, lower left vessel) and St. Richard's Road, Upper Deal (Parfitt 1985, fig. 6, 21 and 25) in Kent. At White Horse Stone there is a radiocarbon date of 490-160 cal BC for four of these bowls found in cremation pit 6132 which accommodates the Hampshire date range for this type and also allows for its use to have continued well into the middle Iron Age. In the Champagne area of northern France, this vessel type is recognised as a high-shouldered biconical carinated form of Late Tene I date (Stead and Rigby 1999, vessel nos 2778, 2793). It is important to point out that this bowl type is not the same as the tripartite, carinated bowl form (Darmsden-Linton style) dated to the first half of the 7th century BC at Lofts Farm (Brown 1988, fig.16, 55-61), to the early Iron Age at North Shoebury (Brown 1995b, fig. 65, 81-2) in Essex or as at St. Richard's Road, Upper Deal (Parfitt 1985, fig. 6, 26). Type R30 bowls post-date this period and are not at all common in southern Britain, nor at White Horse Stone.

Other shouldered bowls (R42, R43) appear to be variations of round-bodied bowls with medium and long rim to neck zones (R38, R47) which were undoubtedly inspired by contact with the Continent in the area of Le Nord/Pas-de-Calais where many examples of both types from numerous excavations have been published (Hurtrelle, *et al* 1989). Identical forms were found at Barham Down (Macpherson-Grant 1980, fig. 7, 48-9), Bigberry hillfort (Thompson 1983, fig. 10, 19) and Highstead (Macpherson-Grant 1991, 42, mid-page vessel). Similar British variations have been found in Hampshire (cf. Brown 2000; fig. 3.29, BA2.2-BA2.3, ceramic phase 3-4, 5th to 4th century BC) and Essex (Brown 1988, fig. 16, 62; Wilkinson 1988, fig. 68, Rectory Road no. 5; Sealey 1996, fig. 2, 13).

Bowl type R31 has a simple, up-curving shape which could also have been redeployed as a lid. A most extraordinary, similar example which can only have been a lid was recovered at Barham Down (Macpherson-Grant 1980, fig. 5, 11). The opposite to these, the out-curving or everted rim bowl (R32), is a very common type in southern England. The flaring bowl (R36) is quite distinctive, but similar examples were not identified.

One of the most unusual bowl types in the White Horse Stone assemblage is the large shouldered bowl with expanded, flat-topped rim and burnished interior (R34). There are no immediately obvious parallels for this type, but shouldered bowls without the flattened rim have been found in Kent, as at Barham Down (Macpherson-Grant 1980, fig. 7, 44). Types R33, R35 and R40 are variations of incurving bowls, with rounded rims, which become more extreme with the higher code number; less and less globular-shaped, more and more shouldered in profile. Several examples were found at Brooklands, Weybridge (Hanworth and Tomalin 1977). There are two ovoid-profile bowl types (R39, R56); the former was found at Coquelles (Pas-de-Calais) (Blancquaert and Bostyn 1998, fig. 5, 2A-8) and the latter at Highstead (Macpherson-Grant 1991, 42, lower left vessel). The barrel or slack-profile bowl has many parallel examples in the Brooklands assemblage (Hanworth and Tomalin 1977, fig.15, 33, fig. 18, 110 and fig. 20, 161).

However, the most extraordinary type amongst these vessels must be the 'horned' bowl (R50). Its vessel profile appears to be similar to the flared bowl types (R48, R54) but astonishingly the additional horned-effect is actually integral to the vessel rather than attached. Currently, this vessel form is only found in the area of Le Nord/Pas-de-Calais in contexts dated to the second Iron Age, 475-50 BC (Hurtrelle *et al* 1989, 25-7, Photo 3, fig. 5, 12 and 37, fig. 4, 4), and at White Horse Stone in Kent. Therefore, there are very strong cultural connections between this site, Highstead and the Continent through the distinctive bowl types which they have in common.

3.11.4 Bases

Omphalos, footring and pedestal bases were found on the same sites as presented above, such as at Barham Down (Macpherson-Grant 1980, fig. 4, 8, fig. 5, 13, fig. 6, 21), Bigberry hillfort (Thompson 1983, fig. 10, 11 and 19), St Richards Road, Upper Deal (Parfitt 1985, fig. 3, 5), Fox Hall Farm, Chelmsford (Ecclestone 1995, fig. 9, 15 and 17) and North Shoebury (Brown 1995b, fig. 65, 90, 92, fig. 66, 106 – Phase I.3, early Iron Age) in Britain and in northern France (Hurtrelle, *et a*l 1989; Blancquaert and Bostyn 1998; Stead and Rigby 1999, vessel nos. 2659, 2692, 2768, 2776, 2793 and 2826).

3.11.5 Discussion

It seems that there is a surprisingly low number of different jar types (rather than total numbers of jars) within this early/middle Iron Age assemblage, particularly when compared to the large number of bowl types; there are 18 jar forms compared to 27 bowl types, plus the five neutral forms which could be considered as special bowls, giving 32 open forms, nearly twice as many as closed forms. Even though this subjective classification system can undoubtedly be criticised and consolidated or expanded, there is still a clear overall impression that there are more open forms than closed forms. This suggests several

possibilities: (1) that greater uniformity was expected in the manufacture of closed forms, but more flexibility amongst open forms; variety can enter the repertoire of potters making bowls but not jars; (2) that jars were made by a limited number of potters for the White Horse Stone community but many more potters made bowls and therefore subtle variations are more likely; (3) that the roles performed by closed forms within the subsistence and social arenas were more limited or straight-forward while those of open forms were more varied; or (4) that the frequency of use required by the open forms (particularly bowls), with their likely roles as eating and drinking vessels, was greater than that for closed forms used for cooking and storage. This last idea will be discussed further below in relation to vessel size.

Table 13 presents the number of records for form types as part of the correlation of forms and fabrics and summarises the number of examples for each form. There are 162 records for closed jar types (48%) and 177 records for open bowl and neutral types (52%). This is a very important aspect of the White Horse Stone early/middle Iron Age material, since jars normally dominate Iron Age assemblages. There is only one other sizeable assemblage of first millennium BC date in Britain which parallels this phenomenon. By stratigraphical Zone 7 at the late Bronze Age/early Iron Age midden site of Potterne in Wiltshire, there is an equal percentage of jars and bowls and this ratio changes to approximately 40:60 by the last stratigraphically secure level of Zone 4 (Lawson 2000, fig. 46). This deposit had three possible interpretations which should not be seen as mutually exclusive: 'that it was a specialised settlement involved in cattle-rearing; that it played some kind of 'central place' function, acting as a centre visited by people who lived elsewhere; or that it was a periodic gathering place for otherwise dispersed communities which came together there for part of the year' (Lawson, Powell and Thomas 2000, 271). At least the last two interpretations could be applied to the White Horse Stone settlement and its remarkable pottery assemblage.

In addition, Table 13 shows that there are correlations between some fabric and vessel types. Some fabrics are used more often for jars than bowls (F1, FQ1-FQ3, S1-2), while others are used more often for bowls (F2, Q2, Q5, QF1-QF3). This is not surprising since the fabrics used for jars are coarser in texture than those fabrics usually selected to make bowls which are generally finer in texture. Coarser fabrics are more suitable for use with cooking vessels and storage jars in order to withstand repeated heating or provide the strength to support thicker vessel walls and mechanical shock, while finer fabrics are normally used to make serving vessels used in eating and drinking activities, in particular those more suitable for receipt of surface treatments such as burnishing.

Table 13: Correlation (vessel count) of fabrics with vessel types

	JAR FORMS																NEUTRAL FORMS					***Overall***
Fabric	R1	R2	R3	R4	R5	R6	R7	R8	R9	R10	R11	R12	R13	R16	R17	R18	R20	R21	R22	R23	R24	***total***
C1																						***1***
C2																						***1***
F1	4	4	9	1	6	1	1		1	1					3		3	2			1	***91***
F2			2		2		1						1		2		1		2			***59***
F3																						***4***
F5															1							***2***
F99					1	1										1						***5***
FC1								1														***2***
FI1		1	2				1								2					1		***29***
FI2			1	1	2										1							***7***
FQ1			5		1		1				2				2							***31***
FQ2	2	2	3	1	2	1	2	2				1			8	3		1				***47***
FQ3			4	1				1							2		1					***25***
FQ4																1						***1***
FQ5													1									***1***
FQ99															1							***2***
FS1																						***1***
FV1					1											2	1	1				***15***
FV2								1														***1***
G1																						***1***
G2																						***2***
GQ1																						***4***
I1						1																***2***
I2																						***2***
I3																						***1***
Q1																						***1***
Q2					1								1						1			***16***
Q3			2																			***5***
Q5		1	1		1										2	1			2	1		***64***
Q99																						***1***
QC1															1	1						***8***
QF1	1	1	2		3	3									4	3	1		1			***70***
QF2		1			2										2				3			***23***
QF3		1	1											1	2							***25***
QF99															1							***3***
QFS1			2																			***6***
QI1			1			1																***8***
QS1																						***6***
QS2															1							***2***
QS3																						***4***
QZ1		1													1							***5***
S1			1	1		1																***7***
S2					1				1							1						***4***
SI1															1							***1***
V2																	2					***4***
TOTAL	*7*	*12*	*36*	*5*	*23*	*9*	*6*	*5*	*2*	*1*	*2*	*1*	*3*	*1*	*37*	*13*	*9*	*4*	*9*	*2*	*1*	***600***

	BOWL FORMS																											*Overall total*
Fabric	**R30**	**R31**	**R32**	**R33**	**R34**	**R35**	**R36**	**R37**	**R38**	**R39**	**R40**	**R41**	**R42**	**R43**	**R44**	**R45**	**R46**	**R47**	**R48**	**R49**	**R50**	**R51**	**R52**	**R53**	**R54**	**R55**	**R56**	**R99**	
C1																													***1***
C2								1																					***1***
F1					7											1						1				1		6	***91***
F2	4	2	4			4			1				1	2		1		2				1				1		9	***59***
F3																													***4***
F5																												1	***2***
F99																												2	***5***
FC1																										1			***2***
FI1	1										2			1								2		2	1			2	***29***
FI2									1																			1	***7***
FQ1							1							1									1					2	***31***
FQ2							1																2					2	***47***
FQ3														1													2	1	***25***
FQ4																													***1***
FQ5																													***1***
FQ99																													***2***
FS1																					1								***1***
FV1																													***15***
FV2																													***1***
G1																												1	***1***
G2			1																							1			***2***
GQ1			1																										***4***
I1																													***2***
I2														1															***2***
I3																													***1***
Q1	1																												***1***
Q2			1	3						1					1			1											***16***
Q3				1									1																***5***
Q5		1	3	3		1			4					9	1			1	1	2								10	***64***
Q99												1																	***1***

	BOWL FORMS																											*Overall total*
Fabric	**R30**	**R31**	**R32**	**R33**	**R34**	**R35**	**R36**	**R37**	**R38**	**R39**	**R40**	**R41**	**R42**	**R43**	**R44**	**R45**	**R46**	**R47**	**R48**	**R49**	**R50**	**R51**	**R52**	**R53**	**R54**	**R55**	**R56**	**R99**	
QC1														1				1										1	***8***
QF1	2	3	9		1				1		1		1	2			1	2		1			2	1				9	***70***
QF2			4											2			1											2	***23***
QF3									2			1		6						1						1		2	***25***
QF99																												1	***3***
QFS1														1								1						1	***6***
QI1			1											1								1							***8***
QS1											1			1														2	***6***
QS2																												1	***2***
QS3																				1									***4***
QZ1																													***5***
S1																												1	*7*
S2																												1	***4***
SI1																													***1***
V2																												1	***4***
TOTAL	***8***	***6***	***24***	*7*	***8***	***5***	***2***	***1***	***9***	***1***	***4***	***2***	***3***	***29***	***2***	***2***	***2***	*7*	***1***	***5***	***1***	***6***	***5***	***3***	***1***	***5***	***2***	***59***	***600***

	BASE FORMS						*Overall total*
Fabric	**B1**	**B2**	**B3**	**B4**	**B5**	**B99**	
C1		1					***1***
C2							***1***
F1	24	4	1			9	***91***
F2	4		4			8	***59***
F3	1	2				1	***4***
F5							***2***
F99							***5***
FC1							***2***
FI1	3				2	6	***29***
FI2							***7***
FQ1	10	1				4	***31***
FQ2	4	3				7	***47***
FQ3	8					4	***25***
FQ4							***1***
FQ5							***1***
FQ99	1						***2***
FS1							***1***
FV1	8					2	***15***
FV2							***1***
G1							***1***
G2							***2***
GQ1	1					2	***4***
I1	1						***2***
I2	1						***2***
I3		1					***1***
Q1							***1***
Q2	2		2		1	1	***16***
Q3					1		***5***
Q5	4	2	1	1		11	***64***
Q99							***1***
QC1			1			2	***8***
QF1	7	1	2		1	4	***70***
QF2	1		1			4	***23***
QF3	2		1	1		3	***25***
QF99	1						***3***
QFS1						1	***6***
QI1	1					2	***8***
QS1	1					1	***6***
QS2							***2***
QS3	1	1				1	***4***
QZ1					1	2	***5***
S1						3	***7***
S2							***4***
SI1							***1***
V2						1	***4***
TOTAL	***86***	***16***	***13***	***2***	***6***	***79***	***600***

4 SURFACE TREATMENT

4.1 Middle Bronze Age

There is very little surface treatment on the middle Bronze Age pottery from White Horse Stone or Pilgrims Way. Wiping with the hands or a cloth was used on vessels which could be identified as actual or probable urn/jars while burnishing on the exterior was used on sherds in fabric F5 interpreted as deriving from globular urn/jars.

4.2 Late Bronze Age

The single late Bronze Age feature at White Horse Stone, pit 5421, contained approximately 12 vessels and amongst these two bowls displayed burnishing on both surfaces (Barrett 1980, Class IV) and three jars was burnished on the exterior (Barrett 1980, Class II). The other seven vessels in this feature were probably all Class I jars. None of the jars had finger-wiping which is often found on late Bronze Age pottery in southern Britain. Other sherds from vessels in late Bronze Age fabrics did not display specific surface treatments.

4.3 Early/Middle Iron Age

One of the most remarkable aspects of early/middle Iron Age pottery in Kent is the overwhelming presence of dramatic surface treatments on many sherds and the contrasting infrequency of decoration. The range of surface treatments (Table 14) includes burnishing (BU-database code), application of slip or red-finished (SL), five types of rustication (including roughening (RG), additional clay in bold relief (AC), combing (CB), scratching (SR) and areas or zones of finger-nail (FN) and finger-tip (FT) impressions rather than single rows of impressions), obvious finger-wiping with the shape of the finger visible (FWP), wiping by hand or cloth (WP), broad band of wiping (WDS) and additional extra flint chips on the underside of bases (EF).

Table 14: Surface treatment

Type	Number of records	% of records
burnished	1445	41.4
slip (red-finished)	26	0.7
roughened	458	13.1
additional clay in relief	135	3.9
combed	13	0.4
scratched	7	0.2
finger-wiped	44	1.3
cloth-wiped	668	19.1
broadly wiped	6	0.2
basal flints	18	0.5
no surface treatment	671	19.2
TOTAL	*3491*	

Nearly every type of surface treatment was found to have been associated with nearly every other technique at least once. For example, there are vessels which have two zones of burnishing on the exterior, towards the top of the vessel and at the bottom of the vessel, but in the middle of the pot there is a zone where one or another form of rustication was applied (Fig. 17, No. 157). Combing can be found with burnishing, and red-finish/slip is always found with burnishing. There may be vessels which are only rusticated with both zones of roughening and areas of additional clay blobs or bowls with roughening, additional clay and burnishing on the interior.

The use of *burnishing* on the exterior of jars and the interior, and often the exterior, of bowls is the most popular surface treatment in the early/middle Iron Age White Horse Stone assemblage, with nearly 42% of records having burnishing present. It is also present on two vessels (a jar and a bowl) from Pilgrims Way, on three bowls from Boarley Farm, and on the three bowls out of four vessels recovered from East of Boarley Farm. Burnishing on bowls can be found on extraordinarily fine, thin-walled bowls which are fired to a black colour or on the interior of thick-walled bowls with other surface treatments on the exterior. There are very few records of *applied slip* on the vessels from White Horse Stone but amongst these there are possibly as many as 25 examples of red-finished or red-slipped vessels, a total of 130 sherds; a small but significant number of sherds amongst such a large assemblage (1.9% by number of sherds; less than 1% by number of records) (Fig. 13, No. 85, Fig. 15, Nos 123-4 and Fig. 17, No. 150). One of the few early/middle Iron Age vessels from East of Boarley Farm, a carinated bowl (layer 1030; R45; A1 – not illustrated), has traces of red-finish on the upper exterior surface. Red-finished pottery, normally haematite-coated, is present on many other sites in east Kent (Macpherson-Grant 1991, 43; Middleton 1995, fig. 18.1, table 18.1), and a single vessel was also found at in an early/middle Iron Age pit at Cuxton, another Channel Tunnel Rail Link later prehistoric site located on the west side of the Medway. Burnishing and the application of slip are common techniques used in central southern Britain during the first millennium BC.

Rustication is a distinctive surface treatment used on later prehistoric pottery mainly in two regions of Britain. The most famous, known as ‘scored ware’, is found on later prehistoric sites dating from the 6th century BC in eastern England (Elsdon 1992), and consists of variations on the depth of surface scratching and random or patterned effects on the body of jars. In Kent, several different forms of rustication were employed and can be appreciated as a visually significant stylistic trait during the early/middle Iron Age period, part of ‘a distinctive cultural package’ which first appears in the early Iron Age (Macpherson-Grant 1992, 291, figs 7 and 8). Combing, for example, is present in the assemblages from Bigberry (Thompson 1983, plate 31, c), Farmingham Hill (Couldrey 1984, fig. 16, 59), and Ebbsfleet (Macpherson-Grant 1992, fig. 6, 15). Two examples of the 13 combing occurrences

in the White Horse Stone assemblage are illustrated (Fig. 11, No. 57 and Fig. 14, No. 102). This technique is also found in northern France, for example at Fréthun (Blancquaert and Bostyn 1998, fig. 11, 10.17, 10.19 and fig. 13, 43.3), and as demonstrated in the Morel Collection (Stead and Rigby 1999, vessel nos 2656, 2726, 2784, 2639, 2674 and 2641). Deliberate roughening of the exterior surface is the most common version of rustication in the White Horse Stone assemblage with 458 records including on saucepan pots (13.1%; Fig. 12, No. 62, Fig 16, No. 135). Scratching is a deep but irregular version of combing, and there are seven vessels with this effect. However, there is one more technique of rustication which is very visually impressive – the application of extra slurry and irregular fragments or blobs of clay onto the surface of vessels creating an extraordinary, three-dimensional effect to zones on the pots or sometimes all over the exterior vessel body (Fig. 8, No. 23, Fig. 9, No. 39, Fig. 10, Nos 47-8, 54, Fig. 11, Nos 55, 57-58, 60, Fig. 13, Nos 70, 73, and Fig. 17, No. 157), a form of encrustation. Nowhere else in Britain was this specific technique utilised during later prehistory; only in Kent, as at Highstead (Macpherson-Grant 1991, 42, upper left and upper right vessels) and Ebbsfleet (Macpherson-Grant 1992, 291-2, fig 6, 11-13). There are 135 records of this technique in the White Horse Stone assemblage (4%). Another version of rustication is the technique of numerous, finger-nail impressions in an area of a vessel, rather than a single row or line on the vessel. Finger-nail and finger-tip rustication (Fig. 15, No. 126, Fig. 17, No. 152) could be interpreted as a form of decoration, but in the light of so many other roughening techniques identified in the White Horse Stone assemblage it is most likely that this area or zonal effect is actually surface treatment. Other examples of randomly applied finger-nail rustication were found at North Shoebury (Essex), also in the early Iron Age period phase I.3 (Brown 1995b, fig. 66, 114, 116, 118 and 120), while more orderly rows of deep finger-tip impressions are known from the Champagne area of northern France (Stead and Rigby 1999, vessel nos 2630, 2637 and 2860). In summary, about 18% of the White Horse Stone assemblage has some form of rusticated surface treatment.

Rustication is undoubtedly a form of stylistic surface treatment rather than a functional application because it is found on all sizes of vessels and all thicknesses of vessels. If it had only been found on large vessels, then it could have been interpreted as a functional response by providing an anti-slippage effect to the vessels. However, if that had been the case one might have wondered why the technique was not used on all large vessels in Britain particularly as it is so simple to apply. Instead, it is clearly 'a style statement' for the early/middle Iron Age of Kent and therefore belongs amongst the best examples of style zones in the area where virtually none appeared to exist (Cunliffe 1991, figs 4.4 and 4.6).

Wiping is a well-known surface treatment which characterises nearly 20% of the White Horse Stone assemblage but specific *finger-wiping,* where the width or partial width of several fingers is visible as shallow or deep grooves, is much rarer (1.3% of records; e.g. Fig.

8, No. 26, Fig. 9, No. 35; Plate 1). Illustrations of vessels from several sites in Essex and north Kent suggest that finger-wiping is not uncommon elsewhere. There are also a few vessels from White Horse Stone which display a rather distinctive technique of wide strokes of surface scraping on the lower vessel exterior (Fig 9, No. 38) which is probably a variation of wiping but could be considered a form of sculpted rustication.

The *addition of crushed, calcined flint to the undersides of bases* is a characteristic of late Bronze Age pottery in southern Britain, and Kent is no exception; it is found on bases of late Bronze Age/early Iron Age date (Macpherson-Grant 1991, 39 and 41; 1992, fig. 5). However, there are 18 records of this occurrence in the White Horse Stone early/middle Iron Age assemblage, which indicates that the technique continued in use a little longer. Amongst these examples there are three from bowls with interior burnishing.

5 DECORATION, SIGNATURES AND IDENTITY

5.1 Middle Bronze Age

Four bucket urn/jars recovered at White Horse Stone were decorated (Fig. 6, Nos 3-5 and 7). One has a typical form of applied cordon which is otherwise undecorated, one has what appears to be an applied cordon but may be part of the vessel wall and is decorated with finger-tip impressions on it and also with slashes on the top of the rim, a third has slashes on the rim, and the fourth has finger-nail or tip impressions just around the exterior of the rim. These are all common forms of decoration on Deverel-Rimbury style bucket urn/jars.

None of the middle Bronze Age pottery from Pilgrims Way displays decoration, but the vessels are extremely fragmented and few sherds were recovered.

5.2 Late Bronze Age

Two of the vessels in White Horse Stone pit 5421 were decorated; one is a bowl with incised decoration (Fig. 6, No. 8) and one from a jar which has finger-tip impressions in the area which might have been the shoulder location (Fig. 6, No. 13). The incised decoration, consisting of three horizontal, parallel lines with short convergent diagonal lines along the central line, located at the neck of the bowl, is reminiscent of ears of grain between ploughed rows and can be paralleled on a late Bronze Age/early Iron Age vessel from Petters Sports Field, Egham, Surrey (O'Connell 1986, fig. 55, 246). Finger-tip impressions on or near the shoulder zone of jars are extremely common in the late Bronze Age period.

5.3 Early/Middle Iron Age

There are five different types of decoration deployed on the early/middle Iron Age White Horse Stone assemblage but only 64 vessels were decorated; six with finger-nail impressions, 31 with finger-tip impressions, 22 with finger-pinched or smeared 'cabling', four with incised

technique, and one with a single tooled line. If there are between 1000-3000 vessels represented in the White Horse Stone assemblage, this would mean that only 2-6% of the assemblage is decorated with well-recognised motifs found elsewhere in southern England. This contrasts significantly with the more common use of the regionally specific range of rusticated surface treatments in the collection.

None of the vessels recovered from East of Boarley Farm, Boarley Farm or Pilgrims Way was decorated.

The *finger-nail impressions* in single rows are located in three places: a single row around the upper part of the vessel below the rim (Fig. 7, No. 18), one row somewhere on the vessel body, and four examples around the top of vessel rims (Fig. 14, No. 97, Fig. 17, No. 149), rather than in areas or zones as a surface treatment (see above). *Finger-tip impressions* appear mainly as a single row along the shoulder of jars (Fig. 7, No. 22, Fig. 11, No. 56 and Fig. 15, No. 125) or as a single row around the top of the rim. There is one example of a jar with single rows of finger-tip decoration on both the rim and neck (Fig. 14, No. 107). Another jar (Fig. 9, No. 38) has a row of finger-tip impressions around the vessel at the beginning of its widest part. Quite closely related to finger-tip impressions is *finger-pinched or smeared cabling*, which occurs only on the top of rims. This technique is found on jars (Fig. 8, No. 24, Fig 9, No. 31, Fig. 13, No. 72, Fig. 14, No. 91), straight-walled pots (Fig. 8, No. 30, Fig. 9, No. 35, Fig. 10, No. 54) and bowls (Fig. 8, No. 25). Finger-nail/tip impressions and finger-smeared cabling are common types of decoration throughout south-east England, particularly in Kent and Essex during the early and middle Iron Age.

There are only four examples of *incised* decoration in the assemblage, which is significant with regard to determining the date of the majority of the White Horse Stone assemblage. Two small abraded sherds from different vessels display geometric incised designs (Fig. 17, Nos 160-161), both of which derived from the lynchet. One is from a possible bowl made from a glauconitic sandy clay matrix with added flint temper and the other from a jar which is flint-tempered with a sandy clay matrix. These examples are typical of geometric motifs which are regularly dated to the decorated phase of the later Bronze Age (Barrett 1980), principally the 9th century BC phase of the later Bronze Age (Longley 1991, fig. 84, P104-P106), and later into the early Iron Age (8th to 7th centuries) as the Early All Cannings Cross style (Earliest Iron Age) in Wiltshire (Cunliffe 1991, 64-5, fig. A:2, 2-4; Lawson 2000, fig. 104-106), and from the 6th to 3rd century in other areas (Cunliffe 1991, fig. A:4, 10-11, A:6, 7-8). The motif has been found at Highstead (Period 2) and Monkton Court Farm in Kent, dated to the late Bronze Age/early Iron Age (*c* 850/750-600 BC) (Macpherson-Grant 1994, 249, fig. 20). In addition there is a long-necked, carinated bowl with parallel incised lines around the join of the neck and shoulder (Fig. 15, No. 123) from a feature which contains another bowl with red-finished surface treatment, a shouldered jar with

finger-tip impressed decoration and the body sherd of another jar with finger-tipped rustication (Fig. 15, Nos 124-6) which suggests that this may be one of the earliest of the early/middle Iron Age deposits on the site, and possibly 6th century BC in date in view of the absence of more common round-shouldered jars and bowls. There is also a single incised body sherd from a different feature. It is interesting that three out of these four vessels were in the same fabric, QF1.

Only one sherd displayed tooled decoration, made from simply pressing an already burnished surface further into the wall of the pot without actually breaking the surface of the exterior using a wide tool; there are no sharp or ragged edges to tooled decoration. This example from White Horse Stone consists of a single line only (not illustrated).

5.4 Signatures, Identity and Style

There are several examples of vessels which appear to have unusual versions of what normally would be considered decoration but which are 'incomplete' (Fig. 11, No. 60 and Fig. 16, No. 129). The technique in these cases is a personal one – the use of the potter's thumb or other finger to make the impressions. It is worth considering whether these slightly odd versions of decoration, and possibly even the more complete versions for that matter, are actually 'signatures' as described by Tomalin (1995) in his study of early Bronze Age urns. Is decoration using the potter's hand as an instrument actually a signature by the potter rather than 'decoration'? Is it possible that the numerous finger-nail and finger-tip impressions in rows in the middle Bronze Age and in areas or zones amongst early/middle Iron Age pottery, interpreted above as a type of rustication surface treatment, are also a form of signature (eg Fig. 17, No. 152)? Tomalin suggests that, within a world of manufacturing expectations and conformity, potter's signatures are an expression of personal rather than group identity.

These very individual 'finger-prints' are a potential source of information about the people and their societies in later prehistoric Britain. Wallaert-Pêtre (1999) has shown how much can be learned about the nature of societies from investigations of the handedness of potters, while the potential for determining who were the saltmakers in Britain has been suggested from studying the impressions of fingers on hand-squeezed pedestals associated with salt production (Morris 2001). There is a huge, untapped resource of information available about later prehistoric identity in these apparently very personal marks.

But what about the general 'style' of pottery between the middle Bronze Age and early/middle Iron Age? The middle Bronze Age pottery would be identifiable anywhere in south-central England as belonging to the widely established Deverel-Rimbury tradition with bucket and globular urn/jars, and the late Bronze Age vessels are recognisable shapes and general types with the exception of the bowl decorated at its neck (Fig. 6, No. 8) which may be unique in the country. In contrast, the early/middle Iron Age pottery is undoubtedly a sub-

regional style zone of the nature first discussed by Cunliffe (1974; 1991) but not identified at that time due to a lack of significant publications of assemblages from Kent. This pottery style can now be recognised primarily by the presence of: (1) many types of rustication and finger-wiping surface treatment on jars and some bowls in association with (2) softly-shouldered jars with upright rims often decorated with finger-pinched cabling on the top of the rim, (3) distinctively long-necked, highly burnished, usually black or dark grey-brown, undecorated round-bodied bowls, (4) undecorated saucepan pots executed in both coarser and finer finishing techniques, and (5) a small proportion of red-slipped vessels which may be jars or bowls. The proportion of red-slip is in the region of 1-2% in an assemblage; therefore it is necessary to secure at least 100 sherds before the presence of such sherds can be expected. If this style is correctly defined and supported by the future publication of the large assemblage from Highstead (Macpherson-Grant and Couldrey, forthcoming), then the style zone is likely to stretch from the Medway River valley to the east coast at Deal, north to southern Essex and presumably south to Dover. This size of area is similar to many of those illustrated by Cunliffe for the same period (1991, fig. 4.4 and 4.6). The recognition of this style zone is emphasised by the absence of several of these forms at sites to the west of the Medway valley within the route of the Channel Tunnel Rail Link and elsewhere as well as by the presence of the softly-shouldered jars with finger-pinched cabling on the top of the rim. This aspect will be discussed further in the route-wide synthesis.

What is curious, however, is that the style of intensive finger-tip impressions in areas or zones on some early/middle Iron Age pottery is surprisingly reminiscent of the Ardleigh sub-regional style of middle Bronze Age Deverel-Rimbury pottery in Essex (Brown 1995a, fig. 12.3-12.4). There must be something significant about the message being relayed to observers and users of these vessels – a message which needs to be focused upon in future ceramic research about decoration, surface treatment and style during the second and first millennia BC in southern Britain.

It is possible to recognise individual potters amongst the more distinctive vessels in this assemblage. For example, the small numbers of carinated, short-necked, everted rim, burnished bowls (R30) were all made from the same fabric (F2) and there are only two general sizes amongst the six measurable examples of these handmade types: 220-260 mm and 320 mm (Table 15). However, there are also examples such as Fig. 16, Nos 140 and 141 which are classic examples of the same vessel type (R43) but which were clearly made by different potters using different clay resources (QF1; QF2), making slightly different shoulder effects on the bowls (A1; A2) and creating slightly different vessel sizes (160 mm; 200 mm) but with quite similar capacities (2.4 litres; 2.8 litres), and presumably functions, in mind when making them.

6 VESSEL SIZES AND FREQUENCIES

In addition to the unusual and visually impressive, rusticated surface treatment on so many vessels, the sizes of the White Horse Stone pots are equally significant compared to other Iron Age assemblages in Britain. Figure 2 shows the number of measurable rims in the White Horse Stone assemblage; rims, from handmade vessels, with less than 5% present cannot be used to determine diameter. Table 15 presents the frequency of rim form types by 2 cm divisions. Figures 3a and b show the number of measurable examples of closed form rims (jars) and open form rims (bowls and neutrals) respectively by 2 cm divisions. To begin with, it is striking that there are similar numbers of the two major vessel classes which are measurable (closed/jars – 86; open bowls – 83 and neutrals – 13), which makes it possible to compare open to closed forms with confidence. The greatest peaks in both graphs centre in the middle, on the 20-26 cm range of rim diameters, with a considerably smaller peak at around 14-18 cm and long tails to the right up to 40 cm. Therefore, the size ranges of open form and closed form vessels follow the same trend. If it is accepted that vessels which measure between 10-18 cm could be used by individuals for their own food consumption or for modest quantities of food cooking (small), with the range from 20-28 cm representing vessels which could be used for family or small group food consumption (medium), and those from 30-38 cm for larger group food consumption or for storage (large), then the majority of measurable vessels in the White Horse Stone assemblage lie within the medium-size range. There are also some very large (40 cm) and very small (8 cm) vessels in both general classes which may have had special functions on the basis of their rarity.

Table 15: Correlation of rim diameter sizes (cm) with vessel types

Rim	**Rim Diameter Sizes**																
Type	**v. Small**	**Small**					**Medium**					**Large**					**v. Large**
	8	10	12	14	16	18	20	22	24	26	28	30	32	34	36	38	40
JARS																	
R1							1		1	1				1			1
R2				1		2	1	1	1			1					
R3			1	1	1		4	4	2	1	2			2	3		3
R4								1				1		1			
R5					1		2	3				1			1		
R6				1	1	2											
R7		1					1										
R8				1				1	2				1				
R9					1			1									
R10												1					
R12												1					
R13							1	1							1		
R16									1								
R17				1	2	1	1	2	3	2		1	1				
R18			1		2	1			1	1							
total	*0*	*1*	*2*	*5*	*8*	*6*	*11*	*14*	*11*	*5*	*2*	*6*	*2*	*4*	*5*	*0*	*4*

Rim	**Rim Diameter Sizes**																
Type	**v. Small**	**Small**					**Medium**					**Large**					**v. Large**
	8	10	12	14	16	18	20	22	24	26	28	30	32	34	36	38	40
NEUTRAL POTS																	
R20						1			1		2	1					
R21									1								1
R22				1	1		2						1	1			
R24	1																
total	*1*	*0*	*0*	*1*	*1*	*1*	*2*	*0*	*2*	*0*	*2*	*1*	*1*	*1*	*0*	*0*	*1*
BOWLS																	
R30							1	1	3				1				
R31			1		1			1	1								
R32			1	2				1	2						1		
R33			1	1	1	1		1									
R34							1						1				1
R35			1	2													
R36									1								
R37						1											
R38				1		1	3		1								
R39										1							
R40			1				1										
R41		1							1								
R42				1			1			1							
R43					6	1	6	3	3	1	1						
R44				1		1											
R45						1											
R47				2				2	1								
R49						2											
R51									2	2			1				
R52								1	1								
R55											1						
R56							1										
Total	*0*	*1*	*5*	*10*	*8*	*8*	*14*	*10*	*16*	*5*	*2*	*0*	*3*	*0*	*1*	*0*	*1*

This relative pattern contrasts considerably with rim diameter data from several other large assemblages. The rim diameters data from Cadbury Castle in Somerset (Woodward 2000, fig. 107), Danebury in Hampshire (Brown, L 1995, fig. 25), Spratsgate Lane in Gloucestershire (www.arch.soton.ac.uk/Research/CAAA/ceramic/use_wear.htm) and others (Woodward and Blinkhorn 1997, fig. 1) are consistent amongst themselves with their peaks well within the small range, usually between 12-16 cm, and in particular there is a relatively large proportion of vessels less than 12 cm in diameter. Therefore, the White Horse Stone vessels, both open and closed forms, have diameters on average 10 cm larger than other early/middle Iron Age assemblages in Britain where the data has been presented graphically, with very few examples less than 12 cm in size and eight vessels greater than 30 cm.

The possibility that this size phenomenon is part of a regional style complex was tested by examining the only other assemblage of similar date from a site located in south-eastern England with published information. The rim diameters from Phase 2 at Little Waltham in

Essex (Drury 19, figs 42-48, nos. 5-189) were measured and the data are presented in Figure 4. The diameters of 108 rims could be calculated. The majority of vessels are small to medium in size with the peak of frequency at 18 cm. This is slightly larger in size than the rest of the country. It will be important in future to compare the early/middle Iron Age White Horse Stone rim diameters to those from Highstead, when it is published, and from Northern France and Belgium to establish whether this is a Kentish regional phenomenon, one specific to White Horse Stone alone or a trans-Manche characteristic.

This information, coupled with the overall presence of equal numbers of jars and bowls at White Horse Stone as discussed previously, clearly indicates that the manufacture of and/or selection of vessels for use and deposition at this site is very different from the behaviour in other parts of the country. There are several possible interpretations for this; for example, (1) early/middle Iron Age groups in Kent may have preferred to make larger pots, and therefore big pots were a mark of identity for them; (2) the social groups living at White Horse Stone (and possibly in Kent generally, but the data are not yet available) had a different family structure or larger families than those elsewhere at this time and they needed larger pots more often; or (3) early/middle Iron Age potters in Kent made the same sizes and quantities of pots as elsewhere in Britain but at White Horse Stone only a selection of vessels was deposited. The last characteristic could suggest that this was not a normal settlement site for sedentary agriculturalists but perhaps a special place for major events requiring feasting. Such events, like annual planting and harvesting celebrations, cremation funerals or the distribution of newly made iron objects, could have utilised substantial quantities of food cooked in the settlements and brought to the site for eating and drinking in large groups.

7 EVIDENCE OF USE AND REPAIR

Another extraordinary characteristic of the early/middle Iron Age phase of the White Horse Stone assemblage is the *infrequency* of visible evidence of use; soot, burnt residues and abrasion from use are all present amongst the small groups of middle and late Bronze Age pottery but nothing like that relative frequency is evident for the later material. The types of evidence present include *soot* on the exterior surface, *burnt residue* on the interior surface, *abrasion* on the interior only from scraping with a tool from cleaning or stirring during cooking, *limescale* on the interior and *pitting* out of calcareous fabric inclusions on the interior only. Interior pitting is caused by the presence of acidic material held inside the vessel dissolving the calcareous fabric inclusions and weakening the interior surface resulting in specific holes where the inclusions are no longer present. Interior abrasion may also be caused by this acidic effect upon non-calcareous inclusion-bearing fabrics.

None of the later prehistoric vessels from any of the five sites has been repaired. However, there is an unusual piece of possible re-use in the form of a post-breakage, trimmed

pedestal base (Fig. 17, No. 151). The trimming effect appears to have been uniformly applied to the entire base circumference, as deliberately chipped notches, and may have been performed using a metal tool. It is possible that this altered form was used as a lid. This is not the only example from Channel Tunnel Rail Link assemblages and will be discussed in the scheme-wide later prehistoric pottery synthesis. There are no examples of repaired vessels amongst the five assemblages.

Table 16 presents the data relating to evidence of use in the White Horse Stone assemblage. There are single middle Bronze Age vessels displaying abrasion on the interior (Fig. 16, No. 127), burnt residue on the interior of a fabric F4 urn/jar, and two urn/jars with soot on the exterior (eg Fig. 6, No. 1). Pilgrims Way produced two examples of middle Bronze Age vessels which had been used as cooking pots, and no examples of use amongst the later pottery. Late Bronze Age pit 5421 contained one jar which is abraded on the interior (Fig. 6, No. 9), one which has burnt residue on the interior (not illustrated), and one which has soot on the exterior (Fig. 6, No. 12).

Table 16: Quantification of usewear

Type of Usewear	**Number of sherds**	**Number of records**	**Number of vessels**
Middle Bronze Age			
interior abrasion	2	2	1
burnt residue	1	1	1
soot	5	3	2
% Middle Bronze Age assemblage	*4.7*	*13.0*	
Late Bronze Age			
interior abrasion	2	1	1
burnt residue	1	1	1
soot	4	2	1
% Late Bronze Age assemblage	*4.9*	*10.0*	
Early/middle Iron Age			
interior abrasion	46	18	12
limescale	6	4	4
interior pitting	11	6	6
burnt residue	42	25	23
soot	22	15	9
% Early/middle Iron Age assemblage	*1.8*	*1.9*	

There are 68 records of usewear data from sherds of early/middle Iron Age date from White Horse Stone, about 127 sherds from approximately 54 vessels. This represents approximately 1.8% of the White Horse Stone assemblage. This seems to be a relatively low proportion for this very large and varied collection of pottery recovered and curated under modern conditions of finds management. There are several possible interpretations for this low proportion; for example (1) there were post-deposition processes at work over two millennia which dissolved the soot, burnt residues and limescale from nearly all vessels; (2) the settlers processed their food in ways different from the rest of southern Britain and also in

ways different from people who lived on the site during the middle and late Bronze Age periods; or (3) the activities which took place at White Horse Stone during the early/middle Iron Age did not include the processing of food; instead much of the food and drink had already been prepared for eating before being carried to the site and had remained in the vessels for only a short time. The latter suggestion is supported by the absence of any saddle or rotary querns, or even broken fragments of these food processing artefacts, from this pottery-rich site. For an assemblage with 7000 sherds of pottery recovered from hundreds of pits, it would not be inappropriate to expect that at least one quern, or a fragment from one, would have been recovered based on the relative frequency of sherds to querns at other sites of the same period. This will be explored further in the later prehistoric pottery scheme-wide synthesis.

The White Horse Stone assemblage would be highly appropriate for an investigation into the use of what appears to be an unusual assemblage by the application of absorbed lipid residue analysis choosing both jars (e.g. Fig. 7, No. 18) and bowls (for example, PRN 2436, A3 profile black and shiny bowl with burnt 'goop' residue on interior surface from grave 2296; not illustrated) with visible evidence, and also a complete set of the best examples to represent the form type series aiming to link form to function.

8 BRIQUETAGE

There are 76 sherds (236 g) of ceramic containers (briquetage) made from organic-tempered fabrics and used to evaporate brine in the production of salt. These sherds are part of a wide range of other ceramic objects found on coastal salt production sites in Kent and elsewhere (Miles 1975; Barford 1982; Morris 2001). Their presence approximately 10 km from the current coastline of north Kent at the mouth of the River Medway shows that salt had been traded inland to White Horse Stone in these containers. There are two different fabrics amongst this material (V1, V2) indicating that at least two containers had been transported this distance, and it is likely from subtle differences in detail amongst the sherds such as wall thickness, firing conditions and use that more than two vessels were represented. This is supported by the presence of two rim sherds from different vessels in the same fabric which had been recovered from different features (Fig. 15, No. 122, Fig. 16, No. 134). Excavations along the route of the Channel Tunnel Rail Link revealed several later prehistoric sites with briquetage from well-stratified deposits, three with evidence for production and three for consumption of salt. These will be discussed further in the later prehistoric pottery synthesis.

9 DEPOSITION, FEASTING AND SPECIAL EVENTS

A considerable amount of effort has been spent attempting to demonstrate that there is variation in the deposition of the pottery across the site in respect of the associations of vessel

form and fabric types and other materials (C. Hayden, pers comm.). However, the result has shown that there is a curious uniformity within the early/middle Iron Age assemblage and associations, a uniformity created by the homogeneity of deposition, for the most part. There are always some jar sherds and some bowl sherds deposited in each feature with at least 50 sherds and 500 g of pottery in it, for example (Table 17). Examination of the detailed fabric data presented in Table 20 for those 30 key groups reveals that while there is an enormous uniformity in deposition of sherds by fabric type (the same fabrics again and again), there is also variability in the proportions of these types. It seems that each of these features had held parts of a considerable number of vessels, often represented simply by single plain body sherds or a few sherds.

Table 17: Assemblages with a minimum of 50 sherds and 500 g of pottery

Feature number	Count of sherds	Weight of sherds	Mean sherd weight
2075	124	1651	13.3
2130	53	965	18.2
2155	341	10699	31.4
2184	221	2492	11.3
2211	102	6474	63.5
2214	89	1260	14.2
2260	296	5018	17.0
2277	78	1770	22.7
2339	57	562	9.9
4067	310	3582	11.6
4082	66	773	11.7
4120	70	1350	19.3
4177	156	945	6.1
4180	126	723	5.7
4320	67	1007	15.0
4329	79	970	12.3
4423	116	1431	12.3
4430	72	857	11.9
4434	92	703	7.6
4477	146	1681	11.5
4507	248	2830	11.4
4531	179	2244	12.5
4561	145	5676	39.1
5421	99	1309	13.2
6101	91	1800	19.8
6109	142	2298	16.2
6110	232	4822	20.8
6132	175	4815	27.5
7009	122	1642	13.5
7011	101	1338	13.2
8037	111	1154	10.4
8079	102	1594	15.6

Site-wide investigation of depositional patterns (pp. 00-00*) did reveal that the deposition of shell-bearing fabrics is focused on the north-west area of the site. This

information could be used to support the preliminary suggestion that family groups occupying this part of the site preferred specific clay sources for their pots, and that this is most likely an indication of land ownership or access to resources based on kinship. A second possible interpretation is that the pots made from these fabrics were traded to White Horse Stone occupants because of their contents and that the activities associated with those contents were concentrated in that part of the site. In addition, glauconitic sandy fabrics are relatively most common in Area 21, where there are also relatively more bowls than jars. These are not, however, independent patterns, as bowls are commonly made from glauconitic sandy fabrics. This is the area where cremation pit 6132 and metalworking pits 7009 and 7011 were located. There was a possibility that the presence of more bowls and a greater frequency of glauconitic sandy fabric sherds could have signalled a later area of activity on the site but this could not be supported or disproved due to the broad date range resulting from radiocarbon dating of materials in these features. If this was an area of at least some significant pyrotechnical activities in the form of ironworking and the burning of human remains, it could be that bowls were required in greater numbers here than elsewhere for quenching fires and metal objects during smithing, and drinking beer or water to quench a blacksmith's thirst or participating in the ceremonies accompanying the dead into the underworld. A second feature, pit 4507 (Fig. 14, Nos 96-109), has the four types of vessels also found in pit 6132 (R1, R22, R30, R31), in addition to others, and it is located in this same outlying part of the site, Area 21.

There appears to be a greater frequency of the large and largest vessel sizes amongst the Area 8-9 pits, although large vessels are found elsewhere. In all areas, large deposits of pottery often occur with large deposits of animal bone, with charred plant remains having been deposited beneath the pot- and bone-rich layers in pits (C. Hayden, pers comm.). If the deposits of plant remains are offerings to the gods with charring being deliberately conducted to liberate the spirits of the plants for consumption by underworld gods, then the deposits of broken pots and fragments of animal bones may represent fragments of the feasting celebrations conducted to celebrate the success of the harvest. Fragmentation of the pots and the bones could provide useful memories of these events as souvenirs for the celebrators when they return to their own settlements elsewhere in the area or different houses across the site.

One of the most striking aspects about the deposits in pits, in addition to the layering and structured deposition of associated materials established by Hayden elsewhere in this site report (pp. 00-00*), is the extreme variation in the amount of sherds deposited in some of them. Table 18 presents the number and weight of sherds for each pit and a method for representing the general trends amongst these frequencies as Sherd Frequency Groups (category 1, less than 25 sherds; category 2, 25-49 sherds, etc.) and Weight Category Groups (category 1, less than 500 g; category 2, 500-999 g, etc.), with all of the divisions listed in the table itself. This method made it possible to cluster the huge number of pits into equivalent

categories for visual presentation (Figures 5a and 5b). A great number of pits have small amounts of pottery in them, a number of pits have either slightly more or significantly more pottery, and most importantly there are four pits which have much more pottery by number of sherds than any of others (pits 4067, 4507, 4531, 6110) and five pits which have much more pottery by weight (2155, 2211, 4067, 4561, 6110). All of the featured sherds from these pits are illustrated. Two of the pits are represented in both Category Groups; there is thus a total of seven unusually rich pits at the White Horse Stone site.

Table 18: Quantities of pottery from pits

PIT	Weight	Count	Mean sherd weight	Sherd frequency classification	Sherd frequency group	Weight range classification	Weight range group
4316	40	1	40.0	<25	1	<500	1
4325	7	1	7.0	<25	1	<500	1
4350	4	1	4.0	<25	1	<500	1
4365	13	1	13.0	<25	1	<500	1
4367	5	1	5.0	<25	1	<500	1
4390	8	1	8.0	<25	1	<500	1
4399	3	1	3.0	<25	1	<500	1
4403	4	1	4.0	<25	1	<500	1
4459	10	1	10.0	<25	1	<500	1
4554	5	1	5.0	<25	1	<500	1
4564	6	1	6.0	<25	1	<500	1
4566	6	1	6.0	<25	1	<500	1
4570	12	1	12.0	<25	1	<500	1
4605	16	1	16.0	<25	1	<500	1
4613	8	1	8.0	<25	1	<500	1
4633	28	1	28.0	<25	1	<500	1
4702	11	1	11.0	<25	1	<500	1
4704	2	1	2.0	<25	1	<500	1
4706	7	1	7.0	<25	1	<500	1
6129	7	1	7.0	<25	1	<500	1
6134	4	1	4.0	<25	1	<500	1
6154	8	1	8.0	<25	1	<500	1
7000	1	1	1.0	<25	1	<500	1
8086	3	1	3.0	<25	1	<500	1
4083	10	2	5.0	<25	1	<500	1
4347	14	2	7.0	<25	1	<500	1
4359	9	2	4.5	<25	1	<500	1
4387	16	2	8.0	<25	1	<500	1
4615	15	2	7.5	<25	1	<500	1
6156	3	2	1.5	<25	1	<500	1
7017	90	2	45.0	<25	1	<500	1
7027	15	2	7.5	<25	1	<500	1
7038	24	2	12.0	<25	1	<500	1
7099	38	2	19.0	<25	1	<500	1
4087	12	3	4.0	<25	1	<500	1
4175	30	3	10.0	<25	1	<500	1
4355	17	3	5.7	<25	1	<500	1
4357	145	3	48.3	<25	1	<500	1
4413	9	3	3.0	<25	1	<500	1

PIT	Weight	Count	Mean sherd weight	Sherd frequency classification	Sherd frequency group	Weight range classification	Weight range group
4586	8	3	2.7	<25	1	<500	1
7029	62	3	20.7	<25	1	<500	1
7053	25	3	8.3	<25	1	<500	1
4438	34	4	8.5	<25	1	<500	1
4481	31	4	7.8	<25	1	<500	1
4639	18	4	4.5	<25	1	<500	1
7205	27	4	6.8	<25	1	<500	1
4401	65	5	13.0	<25	1	<500	1
4602	48	5	9.6	<25	1	<500	1
4694	47	6	7.8	<25	1	<500	1
7149	9	6	1.5	<25	1	<500	1
2244	16	7	2.3	<25	1	<500	1
4426	60	7	8.6	<25	1	<500	1
4574	25	7	3.6	<25	1	<500	1
4334	121	8	15.1	<25	1	<500	1
4085	74	9	8.2	<25	1	<500	1
4436	196	9	21.8	<25	1	<500	1
6171	72	9	8.0	<25	1	<500	1
2171	185	10	18.5	<25	1	<500	1
4343	93	10	9.3	<25	1	<500	1
4484	71	10	7.1	<25	1	<500	1
4070	51	11	4.6	<25	1	<500	1
2283	291	12	24.3	<25	1	<500	1
4385	194	12	16.2	<25	1	<500	1
4288	198	13	15.2	<25	1	<500	1
7019	45	13	3.5	<25	1	<500	1
8045	137	13	10.5	<25	1	<500	1
4295	145	14	10.4	<25	1	<500	1
4441	357	14	25.5	<25	1	<500	1
4546	139	14	9.9	<25	1	<500	1
8043	154	14	11.0	<25	1	<500	1
4445	310	15	20.7	<25	1	<500	1
8025	151	15	10.1	<25	1	<500	1
2227	210	17	12.4	<25	1	<500	1
2276	646	17	38.0	<25	1	500-999	2
4533	239	17	14.1	<25	1	<500	1
4544	205	17	12.1	<25	1	<500	1
4333	176	18	9.8	<25	1	<500	1
8012	191	18	10.6	<25	1	<500	1
2325	127	19	6.7	<25	1	<500	1
4114	362	19	19.1	<25	1	<500	1
4323	446	19	23.5	<25	1	<500	1
4173	493	20	24.7	<25	1	<500	1
2119	607	21	28.9	<25	1	500-999	2
4107	308	22	14.0	<25	1	<500	1
4511	473	22	21.5	<25	1	<500	1
4580	97	22	4.4	<25	1	<500	1
4526	258	27	9.6	25-49	2	<500	1
8073	94	28	3.4	25-49	2	<500	1
7069	83	34	2.4	25-49	2	<500	1
7130	973	35	27.8	25-49	2	500-999	2
8068	412	37	11.1	25-49	2	<500	1

PIT	Weight	Count	Mean sherd weight	Sherd frequency classification	Sherd frequency group	Weight range classification	Weight range group
6059	351	39	9.0	25-49	2	<500	1
4280	161	45	3.6	25-49	2	<500	1
2130	965	53	18.2	50-74	3	500-999	2
2339	562	57	9.9	50-74	3	500-999	2
4303	339	61	5.6	50-74	3	<500	1
2107	492	64	7.7	50-74	3	<500	1
4320	1007	67	15.0	50-74	3	1000-1499	3
4120	1350	70	19.3	50-74	3	1000-1499	3
4430	857	72	11.9	50-74	3	500-999	2
2277	1770	78	22.7	75-99	4	1000-1499	3
4329	970	79	12.3	75-99	4	500-999	2
2214	1260	89	14.2	75-99	4	1000-1499	3
6101	1800	91	19.8	75-99	4	1500-1999	4
4434	703	92	7.6	75-99	4	500-999	2
5421	1309	99	13.2	75-99	4	1000-1499	3
7011	1338	101	13.2	100-124	5	1000-1499	3
2211	6474	102	63.5	100-124	5	6000-6499	13
8079	1594	102	15.6	100-124	5	1500-1999	4
2184	1246	111	11.2	100-124	5	1000-1499	3
8037	1154	111	10.4	100-124	5	1000-1499	3
7009	1642	122	13.5	100-124	5	1500-1999	4
2075	1651	124	13.3	100-124	5	1500-1999	4
6109	2298	142	16.2	125-149	6	2000-2499	5
4561	5676	145	39.1	125-149	6	5500-5999	12
4477	1681	146	11.5	125-149	6	1500-1999	4
2260	2509	148	17.0	125-149	6	2500-2999	6
2155	5350	171	31.3	150-174	7	5000-5499	11
4531	2244	179	12.5	175-199	8	2000-2499	5
6110	4392	207	21.2	200-224	9	4000-4499	9
4507	2830	248	11.4	225-249	10	2500-2999	6
4067	3582	310	11.6	300-324	13	3500-3999	8
Grand Total	79693	4816	16.5				

Is it possible to suggest that these very large quantities of pottery, in their own right, are special deposits resulting from events beyond the normal daily lives of the occupiers of the White Horse Stone site? None of the pottery from these pits could be considered to have been specially laid into these pits as whole vessels, or even as parts representing total profiles, or deposited in fragmented form in association with skulls of large animals such as horse or red deer as at Westcroft Road, Carshalton, Surrey (Proctor 2002), or with the cremated remains of several human individuals as at Beechbrook Wood (URS 2003); any evidence of such behaviour would have easily elicited an interpretation as a structured or special deposit. Instead it is necessary to consider the possibility that the deposits in these seven pits, or rather the behaviour which created these deposits, was equally significant due to the unusual numbers of sherds or weight of sherds. Over 25 vessels are represented in each of these pits. Such deposits could have derived from curated middens on the site or resulted from special

events of consumption requiring quantities of food in containers for transporting, serving and eating from in a community-wide context. Hill (1995) has suggested that this type of event, as a result of a rite of passage or unusual environmental event which may threaten the well-being of the community, happens approximately every 10 years and can be recognised in the archaeological record. These seven pits, excavated in an area which represents only part of the entire site, could represent a century of special events and the feasting that accompanied them.

Feasting can be recognised archaeologically as 'an unusual meal to mark an unusual occasion' (Dietler and Hayden 2001, 3-4), one which 'is not eaten solely for subsistence' (Clarke 2001, 145). Feasts provide an arena where social relations can be negotiated formally in the maintenance of community alliances in order to secure access to resources, labour and security (Hayden 2001, 26). The recognition that feasts may be special events which brought groups together in the past to 'reinforce the solidarity of the wider community' (Hingley 1990, 100) provides an interpretative framework for the array of clay matrix groups within the White Horse Stone pottery assemblage which have been identified – it is highly likely that these pottery groups are specific to social groups at different locations in the landscape around the site or represent trading partners within the wider region. A major feasting event, every 10 years or so, could have gathered these groups together to reaffirm their allegiances and social networks. Such events would have provided an opportunity for the exchange of commodities, such as salt and metalwork, as well as reinforced relationships through the exchange of the most important resource, marriage partners. White Horse Stone is not an enclosed settlement nor is it a hillfort. Therefore, the maintenance of access to resources, whether commodities or people, and of safety from attack and the securing of grain and seed corn would have been significant concerns of this community; the hosting of feasting events could have been the mechanism for the wider reproduction of this society (Hill 1995, 82). The infrequent, pottery-rich pits discovered during excavation may be the evidence for these events.

There are undoubtedly more tests to run on this later prehistoric pottery database, and the availability of the database to all interested researchers is a main aim of this project. However, a few features stand out despite these comments.

Pit 4303 contained the largest number of briquetage sherds from any feature on the site (36 sherds, 130 g) and a collection of pottery (Fig. 15, Nos 122-6), some of which had been severely affected by association with what must have been a significant quantity of salt prior to deposition or by direct contact within the pit. The affected potsherds are in very poor condition with discolouration due to the salt and degradation with extreme flaking of surfaces and splitting of the sherd walls. Flaking surfaces and split sherds are not at all common amongst the rest of the White Horse Stone assemblage, which is otherwise in good condition. This feature, therefore, may be considered a special deposit at this site. The pottery vessels include one long-neck, carinated bowl, sherds from a second carinated bowl and a shouldered

jar with finger-tip impressions along the shoulder, and it is worth considering whether this combination of types could be one of the earliest deposits of the third ceramic phase at the site. This is discussed below.

There are a number of features, primarily postholes and pits, which had re-fired or burnt potsherds in them (Table 19). In postpipe 4423, there were three pots; two of them fused including one bowl (Fig. 16, No. 142) and two jars. There is an identical type and size of bowl (R43; medium-sized) in exactly the same condition from posthole 4544 but in a different fabric (F2). Many of the sherds in this re-fired condition are quite bloated and twisted while others are simply 'overfired'. It may be that the former pots had been left inside structures which had burned down as has been suggested elsewhere (Morris 1992), a situation not unlike the extremely high temperature firing of a kiln with updraft flue, while the latter types were simply bonfiring errors.

Table 19: Occurrences of burnt or refired pottery

Feature	**Form Types Affected**					**Fabric Types**
	Jars	**Neutrals**	**Bowls**	**Bases**	**Shoulders**	**Bodysherds**
layer 4007						F99
layer 4160						Q5, Q99, F99
layer 9003						FQ2
other 9054						FQ1
posthole 2073	R6		R32, R51	B1		
posthole 2167						QF3
posthole 2392						Q5
posthole 2430	R2, R11				A3	Q5, FQ1, QF2
posthole 2440			R32		A1	Q5, Q99
posthole 2466						Q99
posthole 2470						FQ1
posthole 2510						Q99
posthole 2512					A1 (A3)	
posthole 2552						FQ3
posthole 4052	R17					
posthole 4129						QF1
posthole 4139		R23				
posthole 4498				B1		
posthole 4544			R47			
postpipe 4423	R18			B1		
postpipe 4500	R18					F99
pit 2130						F1
pit 2155	R99					Q5, FQ3
pit 2184						QF1, FQ1
pit 2211	R3					
pit 2260				B1		F2, F99
pit 2276						Q5
pit 2277	R3					QF99
pit 4067						Q5
pit 4288					A3	Q5
pit 4320						Q99
pit 4329						Q5,FI1

Feature	Form Types Affected					Fabric Types
	Jars	Neutrals	Bowls	Bases	Shoulders	Bodysherds
pit 4333						Q5
pit 4334						F1
pit 4357						FQ2, FQ3
pit 4419						Q5, Q99, F99
pit 4426						Q5, FQ2
pit 4507						Q5, QF2
pit 4526					A1	QF99, FQ99
pit 4531	R17, R99					Q5, QF1
pit 4544			*R47	B99		
pit 4546			*R47		A1	
pit 4574						F1
pit 6110						Q5
pit 8037						Q5
pit 8079						Q5, QF3
tree hole 2254						F99

Cremation pit 6132 contained large parts of five vessels and small fragments of two others (Fig. 12, Nos 61-67). This pit is special because it is contained a cremation and a large quantity of charred cereal grain along with the vessels and several iron objects. Three of the vessels, all the same type of bowl, had been selected and most likely carefully deposited along with the large storage jar of 350 mm diameter and approximately 400 mm height containing the grain, and part of a rather rustic saucepan pot. Two other vessels, a bowl or lid and another bowl of the same type are represented by a few fragments and may have become incorporated into the burial deposit less deliberately. The large jar, the saucepan pot, the bowl/lid and two of the R30 bowls are completely irregularly fired throughout, possibly due to having been refired or at least affected by heating in a different atmospheric condition than their original firing. This suggests that they may have been very close to the cremation pyre, if not actually in it. The other two R30 bowls were not affected in this way and are completely unoxidised. The big storage jar, which contained charred cereal grains (Fig. 12, No. 61), has a capacity of approximately 32 litres, while the bowls include one large example (Fig. 12, No. 65) of about 8.5 litres and three medium-sized ones of between 3.8-4.2 litres each. There is a fragment from a vessel, which could be a bowl or a lid, and the small saucepan pot was capable of holding approximately 2.1 litres of food. Altogether this would have been a considerable amount of food. Whether the food was actually deposited in the grave can only be surmised, as the vessels could simply represent food consumed at the cremation event. Only the charred grain in the storage jar suggests these vessels were likely to have held food and drink for the dead person's passage into the next world or for the appeasement of the gods. It is interesting to note that bowls recovered from other pits, such as pit 8079, have 2-litre capacities (Fig. 13, Nos 83-84), and are similar to the saucepan pot in size (ie small

diameter vessels). The capacities of vessels of this period will be explored further in the scheme-wide synthesis of the later prehistoric pottery.

In addition, there is a noticeable variation in deposition with regard to the range of fabrics identified within features. Often it is very apparent that a feature is dominated by fabrics from one of the clay matrix groups in particular. The number of sherds by fabric type is presented for ten key groups, described below, and other features rich with pottery (Table 20). This pattern may be indicating that a particular family group was depositing its ceramics into a feature, rather than that pits were utilised by more than one group.

Finally, contemporaneity of deposition events can be suggested for at least four pairs of features because the sherds are similar in physical size, suggesting that they are not the result of disturbance, trample or redeposition. Pits 4544 and 4546 share sherds from the same R47 bowl in fabric F2, pit 6129 and gully 6162 share the same A3 bowl in fabric FI3, postpipe 4423 shares sherds from the same fabric Q5 vessel as pit 4426, and pits 2155 and 2211 share the same R21 pot (Fig. 9, No. 39, Fig. 10, No. 54). Whether or not these were contemporary deposition events, at least the source of the infilling of these features was the same.

Table 20: Summary of pottery data from key assemblages

Feature	**Fabric Type**																
	C1	**F1**	**F2**	**F99**	**FC1**	**FG1**	**FI1**	**FI2**	**FQ1**	**FQ2**	**FQ3**	**FQ4**	**FQ99**	**FS1**	**FV1**	**FV2**	**FVI1**
Illustrated Key Groups																	
Cremation pit 6132		2633	1474						14								
		54.7%	*30.6%*						*0.3%*								
Pit 2155		5016	590						1452	11	2858						
		46.9%	*5.5%*						*13.6%*	*0.1%*	*26.7%*						
Pit 2211		1017	54						2524	15	2835				12		
		15.7%	*0.8%*						*39.0%*	*0.2%*	*43.8%*				*0.2%*		
Pit 2260		2556	178	24					739	74	1371						
		50.9%	*3.5%*	*0.5%*					*14.7%*	*1.5%*	*27.3%*						
Pit 4067		512	621		22				53		72				8		
		14.3%	*17.3%*	*0.0%*	*0.6%*				*1.5%*		*2.0%*				*0.2%*		
Pit 4507		398	265				242	30	111		24						
		14.1%	*9.4%*				*8.6%*	*1.1%*	*3.9%*		*0.8%*						
Pit 4531		361	13						30	542			5				
		16.1%	*0.6%*						*1.3%*	*24.2%*			*0.2%*				
Pit 4561		3628	110							16	628						
		63.9%	*1.9%*							*0.3%*	*11.1%*						
Pit 6110		667	30				11	131	17	1347	124		151		682		
		13.8%	*0.6%*				*0.2%*	*2.7%*	*0.4%*	*27.9%*	*2.6%*		*3.1%*		*14.1%*		
Pit 8079		162			9		301		77	175	21					8	41
Other Key Groups																	
Pit 2075		394	255						187						32	41	
		23.9%	*15.4%*						*11.3%*						*1.9%*	*2.5%*	
Pit 2130	14	677	89						24								
	1.5%	*70.2%*	*9.2%*						*2.5%*								
Pit 2184		320	54	15			24		147	169	25				1065	379	14
		12.8%	*2.2%*	*0.6%*			*1.0%*		*5.9%*	*6.8%*	*1.0%*				*42.7%*	*15.2%*	*0.6%*
Pit 2214		550	178						7	22	30						
		43.7%	*14.1%*						*0.6%*	*1.7%*	*2.4%*						

Feature																	
																Fabric Type	
	C1	**F1**	**F2**	**F99**	**FC1**	**FG1**	**FI1**	**FI2**	**FQ1**	**FQ2**	**FQ3**	**FQ4**	**FQ99**	**FS1**	**FV1**	**FV2**	**FVI1**
Pit 2277		537	169	12			4		173	335	372						
		30.3%	*9.5%*	*0.7%*			*0.2%*		*9.8%*	*18.9%*	*21.0%*						
Pit 2339		36	63				57		22	58	128				12		
		6.4%	*11.2%*				*10.1%*		*3.9%*	*10.3%*	*22.8%*				*2.1%*		
Pit 4120		715	69							85	114						
		53.0%	*5.1%*							*6.3%*	*8.4%*						
Lynchet 4177			51						50	73	82		549		1		
			5.4%						*5.3%*	*7.7%*	*8.7%*		*58.1%*		*0.1%*		
Lynchet 4180		12	24						51	30	10		401				
		1.7%	*3.3%*						*7.1%*	*4.2%*	*1.4%*		*55.8%*				
Pit 4320		251	200						69	122	56						
		24.9%	*19.9%*						*6.9%*	*12.1%*	*5.6%*						
Pit 4329		79	161				175		11	166							
		8.1%	*16.6%*				*18.0%*		*1.1%*	*17.1%*							
Postpipe 4423		7	18	20			174			27							
		0.5%	*1.3%*	*1.4%*			*12.2%*			*1.9%*							
Pit 4430		248	65							148	82		31				
		28.9%	*7.6%*							*17.3%*	*9.6%*		*3.6%*				
Pit 4434		51	63	6			190		16	6	1						
		7.3%	*9.0%*	*0.9%*			*27.0%*		*2.3%*	*0.9%*	*0.1%*						
Pit 4477		480					210	118	19		152				6		
		28.6%					*12.5%*	*7.0%*	*1.1%*		*9.0%*				*0.4%*		
Pit 6101		706	73		195		76	51		58							
		39.2%	*4.1%*		*10.8%*		*4.2%*	*2.8%*		*3.2%*							
Pit 6109		196	400				250	43	43	26	33				98		
		8.5%	*17.4%*				*10.9%*	*1.9%*	*1.9%*	*1.1%*	*1.4%*				*4.3%*		
Pit 7009		55	146	6		93	55	32	70	354	42	41		8	14	20	
		3.4%	*8.9%*	*0.4%*		*5.7%*	*3.4%*	*2.0%*	*4.3%*	*21.7%*	*2.6%*	*2.5%*		*0.5%*	*0.9%*	*1.2%*	
Pit 7011		84	82				125	40	185	46	34	123		6			7
		6.3%	*6.1%*				*9.3%*	*3.0%*	*13.8%*	*3.4%*	*2.5%*	*9.2%*		*0.4%*			*0.5%*
Pit 8037		16	25				102		7	2					19		
		1.4%	*2.2%*				*8.8%*		*0.6%*	*0.2%*					*1.6%*		

(Table 20 continued)

Feature	G1	G99	GQ1	I1	I2	I3	Q1	Q2	Q3	Q5	Q99	QC1	QF1	QF2	QF3	QF99	QZ1	QFS1	QFS2	QI1	QS1
Illustrated Key Groups							138	17					517					22			
Cremation pit 6132							*2.9%*	*0.4%*					*10.7%*					*0.5%*			
			31					50	14	508			122	16	18						
Pit 2155			*0.3%*					*0.5%*	*0.1%*	*4.7%*			*1.1%*	*0.1%*	*0.2%*						
									2	2			5							4	
Pit 2211									*0.0%*	*0.0%*			*0.1%*							*0.1%*	
								45		1	6		98	1						3	
Pit 2260								*0.9%*		*0.0%*	*0.1%*		*2.0%*	*0.0%*						*0.1%*	
	31	17	25	1	5	38		70		1316		114	25	205	74						10
Pit 4067	*0.9%*	*0.5 %*	*0.7%*	*0.0%*	*0.1%*	*1.1%*		*2.0%*		*36.7%*		*3.2%*	*0.7%*	*5.7%*	*2.1%*						*0.3%*
				5	18	8		88		133		61	249	49	137			11		6	61
Pit 4507				*0.2%*	*0.6%*	*0.3%*		*3.1%*	*0.0%*	*4.7%*		*2.2%*	*8.8%*	*1.7%*	*4.8%*			*0.4%*		*0.2%*	*2.2%*
								25		92		38	578		34	4				3	
Pit 4531								*1.1%*		*4.1%*		*1.7%*	*25.8%*		*1.5%*	*0.2%*				*0.1%*	
			945	31	37					76			72		19		48	10			2
Pit 4561			*16.6%*	*0.5%*	*0.7%*					*1.3%*			*1.3%*		*0.3%*		*0.8%*	*0.2%*			*0.0%*
						46		346		36			455	51	638		29			29	12
Pit 6110						*1.0%*		*7.2%*		*0.7%*			*9.4%*	*1.1%*	*13.2%*		*0.6%*			*0.6%*	*0.2%*
									358	4		5	347	5	55					6	
Pit 8079																					
Other Key Groups	18												642	67							15
Pit 2075	*1.1%*												*38.9%*	*4.1%*							*0.9%*
							6			5			138		12						
Pit 2130							*0.6%*			*0.5%*			*14.3%*		*1.2%*						
								34	25	41	1		146	9	22						
Pit 2184								*1.4%*	*1.0%*	*1.6%*	*0.0%*		*5.9%*	*0.4%*	*0.9%*						
				7				231		38		3	180								
Pit 2214				*0.6%*				*18.3%*		*3.0%*		*0.2%*	*14.3%*								
										10			137			7		14			
Pit 2277										*0.6%*			*7.7%*			*0.4%*		*0.8%*			

Feature	G1	G99	GQ1	I1	I2	I3	Q1	Q2	Q3	Q5	Q99	QC1	QF1	QF2	QF3	QF99	QZ1	QFS1	QFS2	QI1	QS1
										11			71	55				35			
Pit 2339										*2.0%*			*12.6%*	*9.8%*				*6.2%*			
				5						27				119				125		6	85
Pit 4120				*0.4%*						*2.0%*				*8.8%*				*9.3%*		*0.4%*	*6.3%*
				9				2		67			45	1						15	
Lynchet 4177				*1.0%*				*0.2%*		*7.1%*			*4.8%*	*0.1%*						*1.6%*	
										120			28					1	17		
Lynchet 4180										*16.7%*			*3.9%*					*0.1%*	*2.4%*		
										153	6			2	93			43			
Pit 4320										*15.2%*	*0.6%*			*0.2%*	*9.2%*			*4.3%*			
				5						47			29		227					16	
Pit 4329				*0.5%*						*4.8%*			*3.0%*		*23.4%*					*1.6%*	
										1170	2		4								
Postpipe 4423										*81.8%*	*0.1%*		*0.3%*								
										23			165		12				12		
Pit 4430										*2.7%*			*19.3%*		*1.4%*				*1.4%*		
					9			35		12	6		26		21			75		20	
Pit 4434					*1.3%*			*5.0%*		*1.7%*	*0.9%*		*3.7%*		*3.0%*			*10.7%*		*2.8%*	
										261				83	37			129			78
Pit 4477										*15.5%*				*4.9%*	*2.2%*			*7.7%*			*4.6%*
			5							235	6	4		56	126			1			
Pit 6101			*0.3%*							*13.1%*	*0.3%*	*0.2%*		*3.1%*	*7.0%*			*0.1%*			
					27				11	160		49	119	153	166			23		73	
Pit 6109					*1.2%*				*0.5%*	*7.0%*		*2.1%*	*5.2%*	*6.7%*	*7.2%*			*1.0%*		*3.2%*	
						15				92			216	212	126				5		20
Pit 7009						*0.9%*				*5.6%*			*13.2%*	*13.0%*	*7.7%*				*0.3%*		*1.2%*
									13	36			253	38	44				30	53	1
Pit 7011									*1.0%*	*2.7%*			*18.9%*	*2.8%*	*3.3%*				*2.2%*	*4.0%*	*0.1%*
			42	6					7	105			8		92					46	
Pit 8037			*3.6%*	*0.5%*					*0.6%*	*9.1%*			*0.7%*		*8.0%*					*4.0%*	

(Table 20 continued)

Feature								**Total**	**No. of**
	QS2	**QS3**	**S1**	**S2**	**SI1**	**V1**	**V2**	**Weight**	**fabrics**
Illustrated Key Groups									
Cremation pit 6132								**4815**	**7**
Pit 2155						13		**10699**	**13**
						0.1%			
Pit 2211				4				**6474**	**11**
				0.1%					
Pit 2260			13	9				**5018**	**14**
			0.3%	*0.2%*					
Pit 4067			363					**3582**	**20**
			10.1%						
Pit 4507	169	12	741		12			**2830**	**22**
	6.0%	*0.4%*	*26.2%*		*0.4%*				
Pit 4531	10	23		484			2	**2244**	**16**
	0.4%	*1.0%*		*21.6%*			*0.1%*		
Pit 4561		38				15	1	**5676**	**16**
		0.7%				*0.3%*	*0.0%*		
Pit 6110				20				**4822**	**19**
				0.4%					
Pit 8079			20					**1594**	**16**
Other Key Groups									
Pit 2075								**1651**	**9**
Pit 2130								**965**	**8**
Pit 2184						2		**2492**	**18**
						0.1%			
Pit 2214				14				**1260**	**11**
				1.1%					
Pit 2277								**1770**	**11**
Pit 2339			14					**562**	**12**
			2.5%						
Pit 4120								**1350**	**10**
Lynchet 4177								**945**	**12**
Lynchet 4180			11	13				**718**	**12**
			1.5%	*1.8%*					
Pit 4320				12				**1007**	**11**
				1.2%					
Pit 4329				54				**970**	**11**
				5.6%					
Postpipe 4423				9				**1431**	**9**
				0.6%					
Pit 4430	6			65				**857**	**11**
	0.7%			*7.6%*					
Pit 4434			166					**703**	**16**
			23.6%						

Feature								Total	No. of
	QS2	QS3	S1	S2	SI1	V1	V2	Weight	fabrics
Pit 4477	50	16	5	7	30			**1681**	**16**
	3.0%	*1.0%*	*0.3%*	*0.4%*	*1.8%*				
Pit 6101			208					**1800**	**14**
			11.6%						
Pit 6109			428					**2298**	**18**
			18.6%						
Pit 7009	10							**1632**	**21**
	0.6%								
Pit 7011		25		104	9			**1338**	**21**
		1.9%		*7.8%*	*0.7%*				
Pit 8037	93	539	45					**1154**	**16**
	8.1%	*46.7%*	*3.9%*						

10 CERAMIC PHASING – KEY GROUPS

10.1 Middle Bronze Age (ceramic phase 1)

There is a total of 167 sherds (1284 g) of middle Bronze Age pottery in the White Horse Stone assemblage (examples of middle Bronze Age pottery identified amongst the earlier prehistoric pottery assemblage after radiocarbon dating of specific features are not included in this total). This pottery is characterised by three distinctively different types of flint-tempered, silty clay matrix fabrics used to make Deverel-Rimbury style bucket urns/jars and globular urn/jars (Fig. 6, Nos 1-7 and Fig 16, No. 127). The pottery was found in three ditch cuts, one lynchet, two layers, four pits, and two postholes (Tables 8 and 11). However, only five of these features are filled with middle Bronze Age pottery only and therefore likely to represent activity solely of this period, ceramic phase 1. The remaining middle Bronze Age pottery was redeposited in later features with the exception of two described in the following section.

Middle Bronze Age pottery was recovered at Pilgrims Way, consisting of all the same fabrics as identified at White Horse Stone, one bucket urn/jar and sherds from two urn/jars decorated with finger-tip impressions on horizontal applied cordons (Tables 6 and 12). In addition, a single sherd in fabric F3 was recovered at West of Boarley Farm.

The White Horse Stone and Pilgrims Way middle Bronze Age pottery consists of vessels discarded after use in settlement activities other than funerary rites. Three of the urn/jars had been used as cooking pots, based on the presence of soot on the exterior of two from ditches 4014 and 4048 and a burnt deposit on the interior of a third vessel from pit 7130 at White Horse Stone, and one vessel which had been scraped on its interior surface (abraded) from pit 7069. Two cooking vessels were recovered from postholes 354 and 399 at Pilgrims Way. What is missing from a typical middle Bronze Age repertoire are any examples of large storage vessels or barrel urn/jars, however these are very small assemblages and barrel urn/jars are the least frequent types in most Deverel-Rimbury assemblages in southern England.

10.2 Middle to Late Bronze Age Transition

There is the possibility that activity occurred at White Horse Stone which could be described as transitional between the classic Deverel-Rimbury middle Bronze Age and the late Bronze Age. The pottery from this linking period will have some characteristics which belong to the preceding phase and others which are more typical of the following phase. These may be actual vessels with a mixture of characteristics (hybrid middle/late Bronze Age) or features containing sherds of the two different ceramic phases. The latter is the case for this site. There are two features which have both typical middle Bronze Age pottery as well as body sherds of late Bronze Age fabrics. These features are pits 7038 and 7069 (Tables 8 and 9). It could be argued that this middle Bronze Age pottery is simply redeposited in late Bronze Age features, that the middle Bronze Age pottery was curated and continued to have been used during the late Bronze Age period or that both types were made and used concurrently. This uncertainty prevents these two features from providing the basis for a separate ceramic phase. Other sites along the route of the Channel Tunnel Rail Link do have actual hybrid vessels, which are discussed further in the scheme-wide review of the later prehistoric pottery.

A single sherd of F1 pottery was recovered from West of Boarley Farm. In the light of the only other later prehistoric pottery from that location being identified as middle Bronze Age in date, it is likely that this sherd may represent the middle to late Bronze Age transition period or later activity in that location.

10.3 Late Bronze Age (ceramic phase 2)

There is a total of 97 sherds (1256 g) of late Bronze Age pottery in the White Horse Stone assemblage. This pottery derives from four features, pits 5421 (Fig. 6, Nos 8-13), 7038 and 7069 (Table 9). Seven defined fabric types are dated to this period primarily by association with late Bronze Age form types and associated fabrics in pit 5421. Pits 7038 and 7069 may be features containing some pottery of a transitional period linking the middle and late Bronze Age (see immediately above) but that from pit 5421 is undeniably late Bronze Age in character. It contains flint-tempered, sandy clay matrix fabrics in association with a flint-tempered and shelly fabric, a major flint-tempered, silty clay matrix fabric and a flint-tempered, iron oxide clay matrix fabric. This range of material deposited within one feature, presumably at the same time, is extremely important in order to establish the types of fabrics which belong to both this late Bronze Age ceramic phase and also which types of fabrics were being made and used prior to the subsequent decorated period of the late Bronze Age/earliest Iron Age ceramic phase which is not represented within the White Horse Stone assemblage. This one pit provides us with at least seven fabrics, which if they also occurred in the early/middle Iron Age ceramic phase, would demonstrate a 400-year period of continuity of

ceramic tradition in this area. Five of the fabrics did continue to be used in the early/middle Iron Age period.

Amongst these three features containing late Bronze Age pottery, pit 5421 contained recognisable vessel forms, including two very different types of bowls and two different types of jars, as well as eight other possible vessels represented by sherds alone (Table 12). If the classification scheme proposed by Barrett as characterising this ceramic phase in lowland England (1980) is adopted here in its general sense, there are approximately seven Class I coarse ware jars, three Class II fine ware jars, two Class IV fine ware bowls and no examples of Classes III coarse ware bowls or Class V cups. The terms 'coarse ware' and 'fine ware' are recognised here solely on the absence or presence of burnished surface treatment to these vessels rather than any definition of coarser or finer fabrics. Barrett does not define these terms, and therefore a regional methodology for doing so is still required in order for comparisons amongst assemblages to be reliable. Two of the Class I vessels were used as cooking pots, and one of the Class II jars had been abraded on the interior probably by scraping during or after use.

This ceramic phase may be contemporary with Highstead Period 1 and is earlier in date than Monkton Court Farm (Macpherson-Grant 1994), but most likely occurred after the late Bronze Age plain assemblage phase of activity at both Coldharbour Road (Barclay 1994) and Shrubsoles Hill (Raymond 2003).

10.4 Early/Middle Iron Age (ceramic phase 3)

Sixteen of the jar types (R1-13 and R16-18), five of the neutral open forms including the 'cup' (R20-24), and 26 of the bowl types (R30-52 and R54-56) belong to this ceramic period. Amongst the jars there are infrequent examples of obtuse-angle, shouldered types (R7, R13 and R16), many more common examples of round-shouldered jars (R1, R3 and R10), a few ovoid jars (R2, R6 and R8), rare examples of everted rim jars (R9), a single flat rim jar (R11), one example of a barrel-profile jar (R12) and slack-profile jars (R18). The neutral open forms are most distinguished by the presence of saucepan pots (R22), a few examples of conical bowls (R20) which also include two different briquetage salt drying containers (R20.1), and other featureless profile types (R21 and R23) including a single cup (R24). The bowls include carinated examples with short, flared rims (R30), round-shouldered and angle-shouldered bowls with all lengths of neck (R33-34, R37-40, R42-43, R47, R52 and R55-56), globular-like bowls (R33), flat-rimmed bowls (R48) including one example with raised steps (R50), a barrel-profile bowl, and possible slack-profile bowls (R46), with other fragments of bowls which are challenging to define. Bases include simple flat (B1), expanded flat (B2), footring bases (B3), omphalos examples (B4) and pedestal bases (B5). Few examples are decorated but those which are tend to have finger-tip impressions on the shoulder zone or finger-

smearing to create a cable effect on the rim. A great many of the vessels are burnished, including jars, bowls and neutral forms, but the most visually significant surface treatments which characterise this ceramic period are the various forms of rustication including roughening, combing, scratching and the application of extra clay dots and/or three-dimensional slurry peaks and swirls on the exterior of vessels and deep finger-wiping grooves.

Ten key groups from the richest pits have been illustrated (Figs 6-15) to provide a summary of the form and fabric types and associations which represent this ceramic phase. Details of these associations and examples of others are provided (Table 21). Some of these pit groups are richer with pottery than others; some have more jars than bowls and others have more bowls than jars. Pit 6132 was special because it contained a cremation, a large quantity of charred cereal grain and seven vessels comprising one jar, five bowls or four bowls and a lid, and one saucepan pot, in association with iron tools, a whetstone and a ring-headed pin. It is notable that the four similar bowls in this feature are of quite a rare type; there are only four other examples in the assemblage, and these are medium and large in size. Most of the remaining bowls are of a quite different form with medium to long necks with rounded or slighted angled profiles. The rarer type (R30) has an extremely short rim to neck join and an extremely sharp profile. Most features contain round-shouldered jars and the more common bowl forms with sprinklings of individual other types. However, pit 4507 (Fig. 14, Nos 96-109) has similarities to the range from cremation pit 6132 with one example each of an ovoid jar (R1), saucepan pot (R22) and carinated, short rim bowl (R30).

Table 21: Form and fabric associations of key groups

Feature	**JARS**																**NEUTRALS**					**BOWLS**			
	R1	**R2**	**R3**	**R4**	**R5**	**R6**	**R7**	**R8**	**R9**	**R10**	**R11**	**R12**	**R13**	**R16**	**R17**	**R18**	**R20**	**R21**	**R22**	**R23**	**R24**	**R30**	**R31**	**R32**	**R33**
Illustrated Key Groups																									
Cremation pit 6132	2																		1			5	1		
Pit 2155		1	4	1	2										1		4	1						3	1
Pit 2211			5				1											1					1		
Pit 2260			3	1	2														1			1		2	
Pit 4067			1	1									2		1	1								1	
Pit 4507	1				1		1								2				1			1	1		
Pit 4531		2	1					1				1			4	2								1	
Pit 4561	1		2							1															
Pit 6110	1	2	2					1	1					1	5	4									1
Pit 8079															1										
Other Key Groups																									
Pit 2075					1	1		1									1					1	1	1	
Pit 2130		1																			1			1	
Pit 2184			3		1						1					2	1	1						1	2
Pit 2214		1																						1	1
Pit 2277			1												1										
Pit 2339					1														1					1	
Pit 4120		1						1											1						
Feature																									
Pit 4320	1		1												1										1
Pit 4329							1								1										
Postpipe 4423					2																				
Pit 4430	1		1				1																		
Pit 4434			1		1																				
Pit 4477					3		1																		
Pit 6101								1											1						

Feature	JARS																NEUTRALS					BOWLS			
	R1	R2	R3	R4	R5	R6	R7	R8	R9	R10	R11	R12	R13	R16	R17	R18	R20	R21	R22	R23	R24	R30	R31	R32	R33
Pit 6109			1						1						2								1	1	
Pit 7009				1											1	2									
Pit 7011															4										
Pit 8037															2										

(Table 20 continued…..)

		BOWLS																					BASES					Sherd	Sherd
R34	R35	R36	R37	R38	R39	R40	R41	R42	R43	R44	R45	R46	R47	R48	R49	R50	R51	R52	R53	R54	R55	R56	B1	B2	B3	B4	B5	Count	Weight
																							1		1	1		**175**	**4815**
3	2	1			2				1														4		1			**341**	**10699**
	1																1						5					**102**	**6474**
1																							6		1			**296**	**5018**
				1					1									1					3	1	1			**310**	**3582**
				1			1		3														4			1		**248**	**2830**
	1												1					2					5					**179**	**2244**
																					1		2					**145**	**5676**
						1				1							1						3	2			1	**232**	**4822**
								1														1	3		1		1	**102**	**1594**
											1												2					**124**	**1651**
																												53	**965**
										1													5		1			**221**	**2492**
								1															2		1			**89**	**1260**
																							1	1				**78**	**1770**
																							3			1	1	**57**	**562**
																									1			**70**	**1350**
																							1	1				**156**	**945**

		BOWLS																					BASES					Sherd	Sherd
R34	R35	R36	R37	R38	R39	R40	R41	R42	R43	R44	R45	R46	R47	R48	R49	R50	R51	R52	R53	R54	R55	R56	B1	B2	B3	B4	B5	Count	Weight
													1										3					126	723
																								1				67	1007
									4						1													79	970
							1		1														1					116	1431
															1			1					1					72	857
																	1											92	703
									3								2											146	1681
4									2												1							91	1800
				1					2												2		1					142	2298
				1																			2	2				122	1642
									1		1													2				101	1338
									1		1													2				111	1154

The period represented by this ceramic phase is actually quite a long one; it may last from the very end of the 6th century through to the 2nd century based on several factors. There are a few sherds with incised decoration associated with jar types (vessels burnished on the exterior only); they included two recovered from sections through the lynchet (Fig. 17, Nos 160-1) and a third from posthole 3366, as well as the salt-affected carinated bowl from pit 4303 (Fig. 15, No. 123). This technique, and geometric rather than curvilinear designs, are characterised in the Wessex region as belonging to the Early/Late All Cannings Cross phase dated to the 8th to 7th century BC and later in the All Cannings Cross-Meon Hill phase dated to the 6th to 4th century BC (Cunliffe 1991, 64-5, 71-2, figs A:2 and A:6), with revised dates of 5th to 3rd century BC for the latter (Cunliffe 1995, 17-18), and similar examples have been recovered at Monkton Court Farm and Highstead (Macpherson-Grant 1994, figs 5 and 20), as well as at St. Richard's Road, Upper Deal (Parfitt 1985, fig. 6, 26). In addition, there are several examples of classic shouldered jars with finger-tip impressions along the shoulder, vessels which can also be contemporary with the Early/Late All Cannings Cross phase. However, the majority were found in association with jar and bowl types which are normally dated to the 5th to 3rd century BC in Kent (Macpherson-Grant 1992) and in Wessex (Cunliffe 1991, 71-2, fig. A:6; Brown 2000, 121-2), including carinated bowls with long rim/necks, round-bodied bowls, round-shouldered jars with upright rims, slack-profile jars and jars with pedestal bases. One feature in particular, pit 4303, has two carinated bowls, rather than round-bodied bowls, and one finger-tip impressed shouldered jar. The pit is unusual because of the amount of briquetage it also contained and the affect of salt on the condition of the vessels. The length of neck on the most complete carinated bowl suggests that this vessel belongs to the end of the carinated bowl phase, the 6th to 5th century BC rather than later in the 5th to 3rd century BC when round-bodied bowls are more common (Cunliffe 1991, 71-2). If this is a valid argument, then this pit deposit could be one of the earliest in this ceramic phase (cp 3.1).

At the opposite end of this ceramic continuum, there are a few features which produce slack-profile jars (R12, R18) and bowls (R46). This absence of shoulders to these vessels belongs to a very 'quiet' phase of the Iron Age pottery repertoire, elsewhere recognised as Wessex ceramic phases 4-5 which are dated from the 4th to 2nd century BC, and are typified by neutral profile saucepan pots as well as simple necked forms 'which are distinguished by their relative lack of sophistication of shape and absence of decoration' (Brown 2000, 122). Features containing one or more of these vessels may, therefore, provide an indication of the end date for this phase of occupation at White Horse Stone (cp 3.3), with all the other features belonging to the main activity (cp 3.2).

One particularly interesting example of a possible cp 3.3 feature, pit 7009, was originally investigated in some detail. This pit contained the largest amount of ironworking slag on the site, and examples of R4, R17, R18, and R38 vessels (Fig. 17, Nos 153-158; Table

21). One of the two R18 vessels is particularly interesting not only for its slack-profile but also for the rarity of its fabric (FQ4) in the White Horse Stone assemblage (0.4%). The combination of the vessel form and infrequency of the fabric type suggest that this fabric and form herald a new 'ceramic phase'. However, the radiocarbon dates from this feature and metalworking pit 7011 do not support such an interpretation, both falling in the same range as most of the other dates at White Horse Stone: 790-390 (NZA-21958: 2394±25) and 770-400 (NZA-21841: 2438±30).

This metalworking feature, and others containing similar debris but no pottery, were found in the same part of the site as cremation pit 6132. The radiocarbon determination for the charred grain from cremation pit 6132, which contained a collection of iron tools, a whetstone and a ring-headed pin, as well as four burnished carinated bowls, a large softly-shouldered, storage jar, a rather coarsely-made saucepan pot and a possible lid for the jar, is 490-160 cal BC at 95% confidence. Therefore, this ceramic phase may belong to the 3rd century BC or the early part of the 2nd century BC in Kent. Given the unusual nature of this deposit, a cremation with an impressive array of pottery vessels and metalwork, it would not be out of place to suggest that it is a terminal deposit for the use of this site, an event of closure (cf. Ladle and Woodward 2003) at some time during the end of the early Iron Age and the beginning of the middle Iron Age; an event which required special vessels, in an area where special, fire-related, transforming activities had taken place in the past.

Therefore, there is no strong evidence to indicate that there were significant ceramic changes at the site during this long period of the early/middle Iron Age transition. The range of pottery recovered may have been available at any time from the 5th to 2nd centuries. However, there might be some indication that particular vessels were associated with special events; these appear to be different due to their rarity in the assemblage.

At East of Boarley Farm, there is only one layer containing later prehistoric pottery (1030). Seven sherds derive from a red-slipped and burnished, carinated bowl (R45), one from a shouldered jar (R7) and two from other bowl. The presence of slip on the carinated bowl and the association with a shouldered jar suggest that this deposit could have belonged to the earlier part of this ceramic phase as well. The Iron Age pottery from Pilgrims Way comprises a great array of fabric types and clay matrices and the few vessel forms recovered would fit comfortably within the main part of this ceramic phase (cp 3.2), as would the 27 body sherds from 12 different vessels identified at Boarley Farm.

11 DISCUSSION

A limited amount of middle Bronze Age settlement activity took place at White Horse Stone and at Pilgrims Way. Neither area was the location of funerary deposits but both are likely to have witnessed typical domestic behaviour on the basis of the presence of the two major types

of urn/jars at this time, bucket and globular, as well as the presence of usewear evidence on both types, sometime between the 1500-1200 BC. Little can be said about the extremely limited amount of late Bronze Age activity at White Horse Stone except to suggest that there may be more evidence of this period, thought to be about 9th century BC in date, in the area.

The excavated area at White Horse Stone was mainly the scene of what appear to be very specific activities of the early/middle Iron Age period from the very end of the 6th century into the 2nd century BC, based on more than one radiocarbon assay. Unfortunately, the pottery vessels associated with one of these dates, recovered from cremation pit 6132, are not the most common forms in the assemblage. In particular there are more examples of bowl type R30 in this pit than from the rest of the site suggesting that these bowls may have been selected or manufactured specifically for this funerary activity and are therefore non-representative of the associated settlement(s). This would make the radiocarbon date inappropriate for applying as a general date for the majority of the pottery from White Horse Stone and other sites, in particular if this event had been used to symbolise the termination of the use of this site.

The early/middle Iron Age pottery is contemporary with Brooklands, Weybridge in Surrey with regard to the jars and some bowls in particular but not the distinctive bowl types R38, R42, R43 and R47 which currently appear to be focused primarily in Kent. It is important, however, to remember that Brooklands was also an ironworking site like White Horse Stone (Hanworth and Tomalin 1977, 15-21, figs 11-12, table 5). It is possible to suggest that there was a style zone linking the jar and bowl forms across the North Downs from Brooklands at the River Wey to the Isle of Thanet. Brooklands was also an open site, like White Horse Stone, rather than a hillfort where it might be expected that metalworking was centralised for production and distribution control. It is possible that White Horse Stone was a special activities focus for important periodic social occasions including the production and distribution of iron. A great deal of pottery, including what seem to be equal amounts of open, bowl form vessels and closed form jars, was deposited at the site. These vessels were much larger than normal, suggesting that different eating groups were constituted at this site; big pots for communal consumption of both food and drink. The fabrics they were made of suggest that different family groups may have produced them, and that outsiders may have visited at least to trade if not to stay in the area. There are only minimal amounts of soot on or burnt food in the pots suggesting that some of the food was cooked elsewhere and brought to this location for celebrations, in the larger vessels.

In contrast to these particular activities, there is little evidence for several ordinary domestic activities such as numerous clay weights and whorls for textile production or bone tools for sewing cloth or leatherworking; the only spindle whorls (two) were found in a male inhumation burial. There only a few fragments of possible querns for food processing. The

only iron objects are a few personal tools deposited with a cremation. Where are the iron objects as evidence of ordinary farming practices and woodworking?

Who were these people? Were they different family groups represented in the archaeological record by the major variations in clay matrices from different landscapes? Were there three major family groups and two minor ones? Or were there three groups and significant trading contacts with two other groups including the trading of pots and possibly people (iron oxide group; shelly matrices)? What adds to this is that the 'horned' bowl with its crenellated rim (Fig. 16, No. 147) was made from a flint-tempered, shell-bearing fabric (FS1) and is therefore most likely a traded pot or a vessel from a non-local group visiting the site. There are only 28 sherds (141 g) of this fabric type in the assemblage, and 21 of these (109 g) were from this bowl in pit 4349. The other features where this fabric was identified are postholes 6004 and 6218 and pit 7069.

Were the four or five families coming together annually to celebrate the harvest season with feasting? Food was brought in storage containers, jars of various types and sizes, food which had already been cooked or preserved (except for living animals to be killed and roasted on site) to avoid delays in preparation at the site of the feast. The recognition of the significance of feasting has become an important interpretative possibility for the early first millennium BC (McOmish 1996; Lawson, Powell and Thomas 2000; Cunliffe 2004).

12 CATALOGUE OF ILLUSTRATED POTTERY

(PRN, Pottery Record Number in database)

Middle Bronze Age (Fig. 6)

1. Urn/jar; R25. Fabric F3; soot on exterior; PRN 2785, context 4016, ditch cut 4014.
2. Urn/jar; R25; Fabric F3; PRN 2786, context 4016, ditch cut 4014.
3. Urn/jar; R25; Fabric F4; horizontal row of finger-nail impressions at rim exterior edge; PRN 2796, context 4042, ditch cut 4048.
4. Urn/jar; R26; Fabric F3; parallel, short, slashed lines of decoration along top of rim; PRN 2804, context 4044, ditch cut 4048.
5. Urn/jar; R25; Fabric F3; parallel, short, slashed lines along top of rim, single row of finger-tip impressions around upper girth of vessel; PRN 2903, context 4095, ditch cut 4082.
6. Urn/jar; R25; Fabric F3; PRN 2912, context 4096, ditch cut 4082.
7. Decorated sherd from urn/jar; D; Fabric F3; applied cordon at girth; PRN 2914, context 4096, ditch cut 4082.

Late Bronze Age (Fig. 6)

Pit 5421 (Fig. 6)

8. Decorated sherds from round-profile, necked bowl; A3; Fabric I3; burnished both surfaces; incised parallel, horizontal lines at neck with fingernail or incised chevron-like feathers along middle line; PRNs 1540 and 1542, context 5423.
9. Carinated jar; R15; Fabric F5; burnished exterior, wiped interior; abraded interior; PRNs 1543 and 1545, context 5426.
10. Round-shouldered jar; R13; Fabric FQ5; poor condition and spalling on surfaces so possibly refired or burnt; PRN 1553, context 5426.
11. Shouldered bowl; R53; Fabric FI1; burnished both surfaces; PRNs 1567-8, context 5449 (pot 5451).
12. Upright rim, shouldered jar; R14; Fabric F1; soot on lower vessel exterior; PRNs 1569-72, context 5449 (pot 5450).
13. Decorated vessel; D; Fabric FQ1; finger-tip impression; PRN 1550, context 5426.

Early/Middle Iron Age (Figs 7-17)

Pit 4067 (Fig. 7)

14. Bowl; A1; Fabric Q5; burnished both surfaces; PRN 1404, context 4050.
15. Round-shouldered jar; R3; Fabric S1; roughened exterior; burnt residue on upper interior; PRN 1370-1, context 4050.
16. Thin-walled, shouldered jar; R13; Fabric F2; PRNs 1377-8 and 1426, contexts 4050-1.
17. Long-necked bowl; R43; Fabric Q5; burnished both surfaces; PRNs 1385-6 context 4050.
18. Slack-profile jar; R18; Fabric Q5; burnished exterior; row of finger-nail impressions below rim; soot on upper exterior; PRNs 1400-2, context 4050.
19. Bowl; R52; Fabric FQ1; burnished interior; PRN 1403, context 4050.
20. Long-necked, round-bodied bowl; R38; Fabric Q5; burnished both surfaces; PRNs 1414-5, context 4050.
21. Upright rim jar; R17; Fabric QC1; PRN 1417, context 4050.
22. Shouldered jar; R13, Fabric Q2; finger-tip impressions along shoulder; PRNs 1474-5, context 4051.

Pit 2155 (Figs 8 and 9)

23. Upright rim jar; R4; Fabric QF1; applied clay and roughened exterior; PRN 1132, context 2103.

24. Upright rim, round-shouldered jar; R3; Fabric FQ1; finger-pressed cabling on top of rim; finger-wiped exterior; PRNs 1134 and 2007, contexts 2103-4.
25. Shouldered bowl with expanded base; R34, B2; Fabric F1; finger-pressed cabling on top of rim; burnished interior, finger-wiped exterior; 'keying-in hole' on base; PRNs 1141 and 2002-3, contexts 2103-4.
26. High, round-shouldered bowl; R39; Fabric FQ3; roughened lower exterior, burnished interior; PRNs 1164 and 2004-5, contexts 2103-4.
27. Long-necked bowl; R43; Fabric Q5; burnished both surfaces; PRN 1167, context 2103.
28. Flared rim bowl; R32; Fabric Q5; burnished both surfaces; PRN 1168, context 2103.
29. Upright rim jar; R17; Fabric F2; PRN 1189, context 2103.
30. Conical, straight-walled pot; R20; Fabric F2; finger-pressed cabling on top of rim; PRN 1209, context 2103.
31. Upright rim, round-shouldered jar; R3; Fabric F1; finger-pressed cabling on top of rim; PRN 1210, context 2103.
32. Upright rim, round-shouldered jar; R3; Fabric F1; PRN 1212, context 2103.
33. Upright rim, round-shouldered jar; R3; Fabric F1; PRN 1213, context 2103.
34. Upright rim, round-shouldered jar; R3; Fabric F1; PRN 1214, context 2103.
35. Conical, straight-walled pot; R20; Fabric F1; diagonal finger-wiping exterior, horizontal wiped (same fabric and surface treatment as No. 38 below) and burnished interior; finger-pressed cabling on top of rim; soot on upper vessel exterior; PRNs 1215 and 2000, contexts 2103-4.
36. Decorated sherd; D; Fabric F1; finger-tip impressions; PRN 1222, context 2103.
37. Conical, straight-walled pot; R20; Fabric F1; PRN 1225, context 2103.
38. Ovoid jar; R2; Fabric F1; finger-tip impressions; wide-scraped exterior; horizontal wiped interior (same fabric and surface treatment as No. 35 above); PRN 2001, context 2104.
39. Straight-walled vessel; R21; Fabric F1; applied clay rustication (in slurry medium) exterior; PRN 2006, context 2104 (joins PRN 2310, pit 2211 below).
40. Shouldered bowl; R34; Fabric QF1; possible burnished interior; PRN 2008, context 2104.
41. Globular bowl; R33; Fabric Q3; burnished both surfaces; PRN 2009, context 2104.
42. Ovoid bowl; R35; Fabric F2; burnished both surfaces; PRNs 1208 and 2010, contexts 2103-4.
43. Footring base; B3; Fabric F2; burnished both surfaces; PRN 2011, context 2104.
44. Conical-profile, shouldered bowl; R36; Fabric FQ1; PRN 2053, context 2106.
45. Obtuse-angle, shoulder sherd; A1; Fabric F2; burnished both surfaces; PRN 2013, context 2104.
46. Acute-angle, shoulder sherd; A2; Fabric F2; burnished both surfaces; PRN 2015, context 2104.

Pit 2211 (Fig. 10)

47. Upright rim, round-shouldered jar; R3; Fabric FQ1; applied clay rustication exterior; PRNs 2264-6 and 2305, contexts 2210 and 2212.
48. Upright rim, round-shouldered jar; R3; Fabric FQ3; applied clay rustication exterior; PRNs 2267-8 and 2306, contexts 2210 and 2212.
49. Upright rim, round-shouldered jar; R3; Fabric F1; PRN 2276, context 2210.
50. Ovoid bowl; R35; Fabric F2; burnished both surfaces; PRN 2281, context 2210.
51. Shouldered jar with flat base; R7, B1; Fabric F1; burnished exterior; PRNs 2302-4, context 2212.
52. Hemispherical bowl or lid; R31; Fabric QF1; burnished both surfaces; PRN 2307, context 2212.
53. Flared rim bowl; R51; Fabric F2; burnished both surfaces; PRN 2308, context 2212.
54. Straight-walled vessel; R21; Fabric F1; finger-pressed cabling on top of rim; applied clay rustication (in slurry medium); PRN 2310, context 2212 (joins PRN 2006, pit 2155 above, drawn together).

Pit 4561(?cesspit) (Fig. 11)

55. Upright rim bowl; R55; Fabric G2; applied clay rustication exterior, burnished upper interior, smoothed lower interior; PRNs 3604-5, context 4562.
56. Decorated, shouldered jar; A1; Fabric F1; finger-tip impressions along shoulder; roughened exterior; burnt residue on interior; PRN 3612, context 4562.
57. Jar; P; Fabric F2; applied clay on exterior roughened with combing; blistered, cracked and bloated; possible cess present on surfaces; PRN 3614, context 4562.
58. Tightly rounded, high-shouldered jar with flat base; R10, B1; Fabric F1; applied clay rustication exterior (flaking-off due to wet application to leather-hard surface), burnished interior rim zone only; slight blistering, bloating and twisting in rim area; possible cess present on surfaces; PRN 3656-3658, context 4562.
59. Round-shouldered, neckless jar; R1; Fabric F1; burnished upper exterior, roughened lower exterior; thick layer of probable cess on interior; PRN 3659, context 4562.
60. Upright rim, round-shoulder jar; R3; Fabric FQ3; sponge-effect applied clay rustication lower exterior, wiped interior; incomplete line of finger-tip impressions along shoulder (possible 'signature'); PRN 3660, context 4562.

Cremation pit 6132 (Fig. 12)

61. Round-shouldered, ovoid jar with tapered profile and flat base; R1, B1; Fabric F1; roughened with applied clay on lower vessel exterior; irregularly fired throughout; PRN 1001, context 6100.
62. Saucepan pot; R22; Fabric F2; roughened exterior; irregularly fired throughout; PRN 1002, context 6100.
63. Carinated bowl; R30; Fabric F2; burnished both surfaces; unoxidised throughout; PRNs 1006/1010, contexts 6100/6137.
64. Carinated bowl, with slightly raised or recessed base; R30, B4; Fabric F2; burnished both surfaces; irregularly fired throughout; PRN 1008, context 6100.
65. Carinated bowl; R30; Fabric F2; burnished on both surfaces; irregularly fired throughout; PRN 1011, context 6137.
66. Carinated bowl with flat base (not illustrated); R30, B1; Fabric Q1; burnished both surfaces; unoxidised throughout; PRN 1012, context 6138.
67. Flared-profile bowl or lid; R31; Fabric QF1; irregularly fired throughout; PRN 1004, context 6100.

Pit 6110 (Fig. 13)

68. Short-rim, round-bodied necked bowl with associated pedestal base; R44, B5; Fabric Q2; burnished both surfaces; PRN 3710-3712, context 6126.
69. High-shouldered bowl; R40; Fabric QS1; burnished both surfaces; PRN 3714, context 6126.
70. Shouldered jar/bowl with upright rim; R16; Fabric QF3; burnished upper interior and exterior, roughened lower interior and exterior; PRN 3718, context 6126.
71. Globular bowl; R33; Fabric Q2; burnished both surfaces; PRN 3724, context 6126.
72. Upright rim, round-shouldered jar; R3; Fabric FI2; finger-pressed cabling on top of rim; finger-wiped lower exterior; PRN 3725, context 6126.
73. Ovoid jar; R2; Fabric QF1; applied clay rustication exterior; PRN 3727, context 6126.
74. Ovoid jar; R2; Fabric QZ1; PRN 3728, context 6126.
75. Round-shouldered ovoid jar; R1; Fabric FQ2; burnished exterior; PRN 3737, context 6126.
76. Ovoid jar; R8; Fabric FQ2; PRN 3739, context 6126.
77. Upright rim, slack-profile jar; R18; Fabric QF1; PRN 3738, context 6126.
78. Upright rim, slack-profile jar; R18; Fabric QF1; PRN 3755, context 6126.
79. Upright rim, slack-profile jar; R18; Fabric G3; PRN 3756, context 6126.
80. Upright rim jar; R17; Fabric FQ2; PRN 3757, context 6126.
81. Upright rim, slack-profile jar; R18; Fabric FQ2; PRN 3758, context 6126.
82. Flared rim, necked jar; R9; Fabric S2; PRN 3762, context 6126.

Pit 8079 (Fig. 13)

83. Long-necked, shouldered bowl with pedestal base; R42, A1, B5; Fabric Q3; burnished both surfaces; imprint of leaf/fern; PRNs 4449-54, context 8076.
84. Squat, hemispherical bowl with flat base; R56, B1; Fabric FI1; brushed lower exterior, burnished upper exterior, burnished interior; PRNs 4456-4461, context 8076.
85. Carinated bowl with footring base; A2, B3; Fabric QF1; red-slipped above carination, burnished both surfaces; PRNs 4463-4464, context 8076.
86. Upright rim jar; R17; Fabric QF2; burnished upper exterior and upper interior; PRN 4467, context 8076.
87. Shallow, flat base; B1; Fabric FQ1; PRN 4468, context 8076.

Pit 2260 (Fig. 14)

88. Saucepan pot; R22; Fabric Q2; burnished on exterior and top of rim; PRN 1279, context 2261.
89. Flared rim bowl; R32; Fabric QF1; burnished both surfaces; PRNs 1294-5, context 2261.
90. Upright rim, round-shouldered jar; R3; Fabric FQ3; PRN 1301, context 2261.
91. Upright rim, round-shouldered jar; R3; Fabric F1; finger-pressed cabling on top of rim; wiped lower exterior; possibly abraded interior; PRN 1313, context 2661.
92. Upright rim jar; R17; Fabric FQ1; PRN 1315, context 2261.
93. Shouldered bowl with incurved rim; R34; Fabric F1; burnished both surfaces; PRN 1337, context 2261.
94. Upright rim, round-shouldered jar; R4; Fabric FQ2; PRN 2547, context 2263.
95. Carinated bowl with short rim; R30; Fabric F2; burnished both surfaces; PRN 2548, context 2263.

Pit 4507 (Fig. 14)

96. Fragment of omphalos base; B4; Fabric QF3; burnished both surfaces; abraded underside from use; PRN 4221, context 4508.
97. Shouldered jar; R7; Fabric F2; finger-nail impressions on top of rim; PRN 4228, context 4508.
98. Long-necked bowl; R43; Fabric I2; burnished both surfaces; PRN 4229, 4508.
99. Saucepan pot; R22; Fabric QF2; PRN 4230, context 4508.
100. Carinated bowl; R30; Fabric FI1; burnished both surfaces; possibly refired; PRN 4235, context 4508.
101. Upright rim jar; R17; Fabric SI1; PRN 4231, context 4508.
102. Surface treated sherd; P; Fabric FQ1; deep, narrow, horizontal combing; PRN 4236, context 4508.
103. Long-necked bowl; R43; Fabric QF3; burnished both surfaces; PRN 4239, context 4508.
104. Ovoid jar; R1; Fabric FQ1; PRN 4240, context 4508.
105. Hemispherical bowl or lid; R31; Fabric Q5; burnished both surfaces; PRN 4241, context 4508.
106. Flared rim bowl; R41; Fabric QF3; burnished both surfaces; PRN 4248, context 4508.
107. Upright rim jar; R17; Fabric QS2; finger-nail impressions on both neck and top of rim; PRN 4294, context 4510.
108. Long-necked bowl; R43; Fabric QF2; burnished both surfaces; PRN 4303, context 4510.
109. Long-necked bowl; R43; Fabric QS1; burnished both surfaces; PRN 4316, context 4518.

Pit 4531 (Fig. 15)

110. Slack-profile jar; R18; Fabric S2; roughened at neck to body zone; PRN 3502-3, context 4532.
111. Round-bodied bowl; R47; Fabric QC1; burnished both surfaces; PRN 3505, context 4532.
112. Everted rim, necked bowl; R32; Fabric QF1; burnished both surfaces; PRN 3506, context 4532.
113. Thick-walled, long-necked bowl; R52; Fabric QF1; burnished both surfaces; PRN 3507, context 4532.

114. Long-necked bowl; R52; Fabric FQ2; burnished both surfaces; PRN 3508, context 4532.
115. Barrel-shaped jar with bead-like rim; R12; Fabric FQ2; roughened exterior; PRN 3534, context 4532.
116. Ovoid jar with bevelled rim; R2; Fabric FQ2; roughened exterior; PRN 3535, context 4532.
117. Ovoid jar; R8; Fabric FQ2; PRN 3536, context 4532.
118. Slack-profile jar; R18; Fabric FQ2; roughened on exterior; PRN 3537, context 4532.
119. Upright rim, shouldered jar; R3; Fabric QF1; roughened lower vessel exterior; PRN 3538, context 4532.
120. Ovoid jar with bevelled rim; R2; Fabric Q5; PRN 3539, context 4532.
121. Upright rim jar; R17; Fabric QF1; PRN 3545, context 4532.

Pit 4303 (Fig. 15)

122. Briquetage container rim; R20.1; Fabric V2; PRN 3157, context 4301.
123. Long-neck, carinated bowl; R43, A1; Fabric QF1; red-slipped and burnished both surfaces; pair of horizontal, incised, parallel lines at lower neck location; severely affected by salt on interior; PRNs 3162-5, context 4301.
124. Carinated bowl; A1; Fabric Q3; red-slipped on exterior, burnished on both surfaces; PRN 3166, context 4301.
125. Shouldered jar; A1; Fabric FQ2; finger-tip impressions on shoulder; PRN 3167, context 4301.
126. Rusticated sherd; P; Fabric FQ2; finger-tip impressions randomly on exterior; PRN 3168, context 4301.

Other features/vessels (Figs 16 and 17)

127. Perforated lug handle from a globular urn/jar; H; Fabric F4; wall sherd abraded on interior; PRNs 3922-3, context 7070, pit 7069.
128. Ovoid jar; R6; Fabric F1; soot on exterior; PRN3912, context 7039, pit 7038.
129. Ovoid jar; R2; Fabric FQ2; finger-tip impressions as 'signature'; PRN 2949, context 4115, pit 4120.
130. Long-necked, shouldered jar; R4; Fabric S1; PRN 1507, context 4276, pit 4436.
131. Extremely long-necked jar; R5; Fabric FQ2; burnt deposit on upper vessel interior; PRN 3594, context 4537, pit 4533.
132. Expanded rim jar; R11; Fabric FQ1; PRN 2336, context 2185, pit 2184.
133. Slack-profile jar; R18; Fabric F99; refired or overfired condition; thick cess on interior and broken edges; PRNs 4324-5, context 4502.
134. Briquetage container rim; R20.1; Fabric V2; PRN 1520, context 4278, pit 4280.
135. Saucepan pot; R22; Fabric F1; roughened exterior and burnished interior; PRN 1650, 6102, pit 6101.
136. Saucepan pot; R22; Fabric QF2; burnished both surfaces; PRN 2507, context 2342, pit 2339.
137. Upright, rounded rim, straight-profile pot, possibly saucepan pot; R23; Fabric Q5; burnished both surfaces; PRN 2080, context 2108, pit 2107.
138. Cup, child's toy or apprentice's piece; R24; Fabric F1; PRN 2163, context 2121, pit 2130.
139. Softly shouldered, necked bowl with slightly everted rim; R37; Fabric C2; burnished interior, roughened with combing technique lower exterior; PRN 1502, context 4276, pit 4436.
140. Long-necked, shouldered bowl; R43, A1; Fabric QF1; burnished both surfaces; PRN 3870, context 7012, pit 7011.
141. Long-necked, sharply, shouldered bowl; R43, A2; Fabric QF2; burnished both surfaces; PRN 4514, context 9001, layer.
142. Long-necked shouldered bowl with flat base; R43, A1, B1; Fabric Q5, glauconite pellets vaporised; slipped exterior, burnished both surfaces; condition refired, bloated, twisted, distorted and fused; PRNs 3372-7 (or 3371-6), context 4425, postpipe 4423.

143. Softly shouldered or round-bodied bowl; A1/A3; Fabric Q5; burnished both surfaces; PRN 3606, context 4562, pit 4561 (?cesspit) (see also Nos 55-60 above).
144. Barrel-profile, beaded rim bowl; R46; Fabric QF2; burnished both surfaces; PRN 2417, context 2224, pit 2227.
145. Conical bowl with flat rim; R48; Fabric Q5; burnished both surfaces; PRN 3224, context 4321, pit 4323.
146. Flat-topped, flared bowl; R49; Fabric Q5; burnished both surfaces; PRN 3274, context 4326, pit 4329.
147. Horned bowl; R50; Fabric FS1; burnished interior; PRN 3314, context 4348, pit 4349.
148. Possible lid; R54; Fabric FI1; burnished interior; PRN 1589, context 6046, posthole 6048.
149. Upright rim, shouldered bowl; R55; Fabric F1; burnished interior and top of rim; finger-nail impressions on top of rim; PRN 3595, context 4537, pit 4533.
150. Pedestal base; B5; Fabric QF1; red-finish/slip exterior and burnished both surfaces; PRN 2505, context 2342, pit 2339.
151. Altered, pedestal base; B5; Fabric QZ1; burnished on interior and exterior; complete diameter pedestal base which has been evenly chipped around the major circumference; PRN 3897, context 7018, posthole 7017.
152. Upright rim, shouldered bowl; R55; Fabric FC1; finger-nail impressions as surface treatment; PRNs 1661-2, context 6103, pit 6101.
153. Slack-profile jar; R18; Fabric FQ4; PRN 3942, context 7071, pit 7009.
154. Round-bodied, long-necked bowl; R38; Fabric Q5; burnished both surfaces; PRN 3958, context 7079, pit 7009.
155. Shouldered jar; R4; Fabric FI2; PRN 3966, context 7079, pit 7009.
156. Very shallow-profile bowl; B1; Fabric QF3; burnished both surfaces; PRN 3967, context 7080, pit 7009.
157. Body sherds of round-shouldered/profile bowl; A3; Fabric QF2; alternating bands of burnish upper vessel and lower vessel with applied clay zone beneath shoulder, burnished interior; PRNs 3947, 3962, 3979, 3990, 3998, contexts 7013, 7079-80, 7138-9, pit 7009.
158. Slack-profile jar; R18; Fabric FQ2; PRN 3859, context 7010, pit 7009.
159. Bevelled rim, hemispherical bowl; R45; Fabric F2; burnished both surfaces; PRN 1071, context 2076, pit 2075.
160. Decorated sherd; D; Fabric QF1; burnished exterior; incised parallel lines; PRN 3077, context 4179, lynchet cutting 4177.
161. Decorated sherd; D; Fabric FQ2; possibly burnished interior; incised parallel lines; PRN 3120, context 4182, lynchet cutting 4180.

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